# SERVICE MANUAL     AG3E CHASSIS

| MODEL | COMMANDER DEST. | CHASSIS NO. | MODEL | COMMANDER DEST. CHASSIS NO. |
|-------|-----------------|-------------|-------|------------------------------|
| *KV-DR34M97* | RM-991 Hong Kong | SCC-U79B-A | | |



## TRINITRON ® COLOR TV

# SONY ®

# SPECIFICATIONS

| | | Note |
|---|---|---|
| **Power requirements** | 220-240V AC, 50/60 Hz | |
| **Power consumption (W)** | Indicated on the rear of the TV | |
| **Television system** | B/G, I, D/K, M | |
| **Color system** | PAL, PAL 60, SECAM, NTSC3.58, NTSC4.43 | |
| **Stereo/Bilingual system** | NICAM Stereo/Bilingual B/G, I; A2 Stereo/Bilingual B/G | |
| **Channel coverage** <br> **B/G** | VHF: E2 to E2 <br> UHF: E21 to E69 <br> CATV: S01 to S03, S1 to S41 | |
| **I** | UHF: B21 to B68 <br> CATV: S01 to S03, S1 to S41 | |
| **D/K** | VHF: C1 to C12, R1 to R12 <br> UHF: C13 to C57, R21 to R60 <br> CATV: S01 to S03, S1 to S41, Z1 to Z39 | |
| **M** | VHF: A2 to A13 <br> UHF: A14 to A79 <br> CATV: A-8 to A-2, A to W+4, W+6 to W+84 | |
| ⊤⊤**(Antenna)** | 75-ohm external terminal | |
| **Audio output (Speaker)** | 6W + 6W | |
| **3D WOOFER** | 15W | |
| **Number of terminal** <br> ⊙ **Video** | Input: 4     Output: 1     Phone jacks; 1 Vp-p, 75 ohms | |
| ♪ **Audio** | Input: 4     Output: 1     Phone jacks; 500 mVrms | |
| ⊸☐ **(S Video)** | Input : 2     Y: 1 Vp-p, 75 ohms unbalanced, sync negative C: 0.286 Vp-p, 75 ohms | |
| ⊸⋯ **(Component Video)** | Input : 1     Phono jacks: Y: 1 Vp-p, 75 ohms sync negative $P_B/C_B$: 0.7 Vp-p, 75 ohms $P_R/C_R$: 0.7 Vp-p, 75 ohms Audio: 500mVrms | |
| ⌒ **(Headphone)** | Output: 1     Stereo minijack | |
| **Picture tube** | 34 in | |
| **Tube size (cm)** | 86 | Measured diagonally |
| **Screen size (cm)** | 80 | Measured diagonally |
| **Dimension (w/h/d,mm)** | $894 \times 690 \times 569$ | |
| **Mass (kg)** | 85 | |

Design and specifications are subject to change without notice.

**CAUTION**

**SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.**

**SAFETY-RELATED COMPONENT WARNING!!**

**COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.**

# TABLE OF CONTENTS

# SELF DIAGNOSTIC FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER lamp will automatically begin to flash.
The number of times the lamp flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER lamp flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

## 1.   DIAGNOSTIC TEST INDICATORS

When an error occurs, the STANDBY/TIMER lamp will flash a number of times to indicate the possible cause of the problem. If there is more than one error, the lamp will identify the first of the problem areas.

Result for all of the following diagnostic items are displayed on screen. No error has occured if the screen displays a "0".

| Diagnostic Item Description | No. of times STANDBY/TIMER lamp flashes | Self-diagnostic display/Diagnostic result | Probable Cause Location | Detected Symptoms |
|---|---|---|---|---|
| • Power does not turn on | Does not light | — | • Power cord is not plugged in. <br> • Fuse is burned out F1601 (F1 Board) | • Power does not come on. <br> • No power is supplied to the TV. <br> • AC power supply is faulty. |
| • +B overcurrent (OCP) | 2 times | 002:000 or 002:001~255 | • H.OUT Q6807 is shorted. <br> • H.IN Q6810 is shorted. Q6802 shorted. | • Power does not come on. <br> • Load on power line is shorted. |
| • +B overvoltage (OVP) | 3 times | 003:000 or 003:001~255 | • PH6602 faulty. D6644 faulty, R6651 open. <br> • 10.5V is not supplied. (D board) | • Power does not come on. |
| • Vertical deflection failure | 4 times | 004:000 or 004:001~255 | • V.OUT IC6800 faulty D6816 faulty D6817 faulty D6824 faulty R6852 open R6851 open (D board) | • Vertical deflection pulse is stopped. <br> • Vertical size is too small. <br> • Vertical deflection stopped. |
| • White balance failure (no PICTURE) | 5 times | 005:000 or 005:001~255 | • G2 is improperly adjusted. (Note 2) <br> • CRT problem. <br> • Video OUT IC9001, 9002, 9003 are faulty. (C board) <br> • IC8306 (A board) and IC4301 (A board) are faulty. | • No raster is generated. <br> • CRT cathode current detection reference pulse output is small. |
| • Horizontal deflection failure | 6 times | 006:000 or 006:001~225 | • C6831 is open circuit. PS6606 open, PS6605 open. (D board) | • H pulse output is too high. |
| • Micro reset | — | 101:00 or 101:001~225 | • CRT Discharge (C Board) <br> • Static discharge <br> • External noise | • Power is shut down shortly, after this return back to normal. <br> • Detect Micro latch up. |

Note 1:  Refer to screen (G2) Adjustment in section 5-5 of this manual.

## 2. DISPLAY OF STANDBY/TIMER LIGHT FLASH COUNT
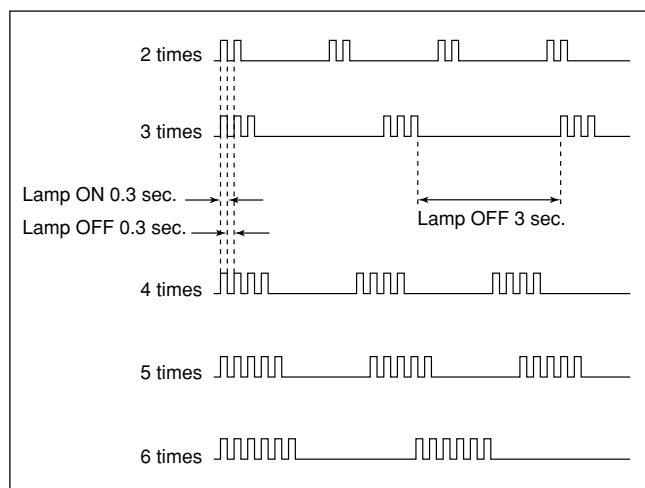


| Diagnostic Item | Flash Count* |
|---|---|
| +B overcurrent | 2 times |
| +B overvoltage | 3 times |
| V deflection stop | 4 times |
| White balance failure | 5 times |
| Horizontal Deflection Failure | 6 times |

\* One flash count is not used for self-diagnostic.



STANDBY/SLEEP lamp
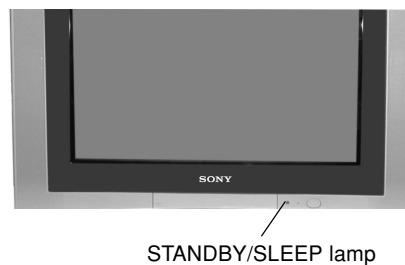
## 3. STOPPING THE STANDBY/TIMER FLASH

Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/TIMER lamp from flashing.

## 4. SELF-DIAGNOSTIC SCREEN DISPLAY

For errors with symptoms such as "power sometimes shuts off" or "screen sometimes goes off" that cannot be confirmed, it is possible to bring up past occurances of failure for confirmation on the screen:

**[To Bring Up Screen Test]**

In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:

Screen display ➡ channel 5 ➡ Sound volume - ➡ Power ON
⇧

Note that this differs from entering the service mode (mode volume +).

**Self-Diagnosis screen display**
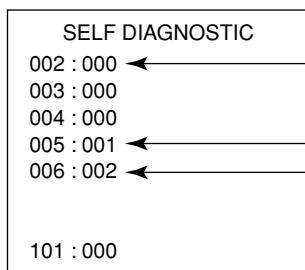
```
    SELF DIAGNOSTIC
002 : 000  ◄────────────── Numeral "0" means that no fault has been detected.
003 : 000
004 : 000
005 : 001  ◄────────────── Numeral "1" means a fault has been detected.
006 : 002  ◄────────────── Numeral "2" means two faults have been detected.


101 : 000
```

– 5 –

## 5. HANDLING OF SELF-DIAGNOSTIC SCREEN DISPLAY

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to "0".

Unless the result display is cleared to "0", the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

**[Clearing the result display]**
To clear the result display to "0", press buttons on the remote commander sequentially as shown below when the diagnostic screen is being displayed.

Channel ⑧ ➡ 0

**[Quitting Self-diagnostic screen]**
To quit the entire self-diagnostic screen, turn off the power switch on the remote commander or the main unit.

## 6. SELF-DIAGNOSTIC CIRCUIT
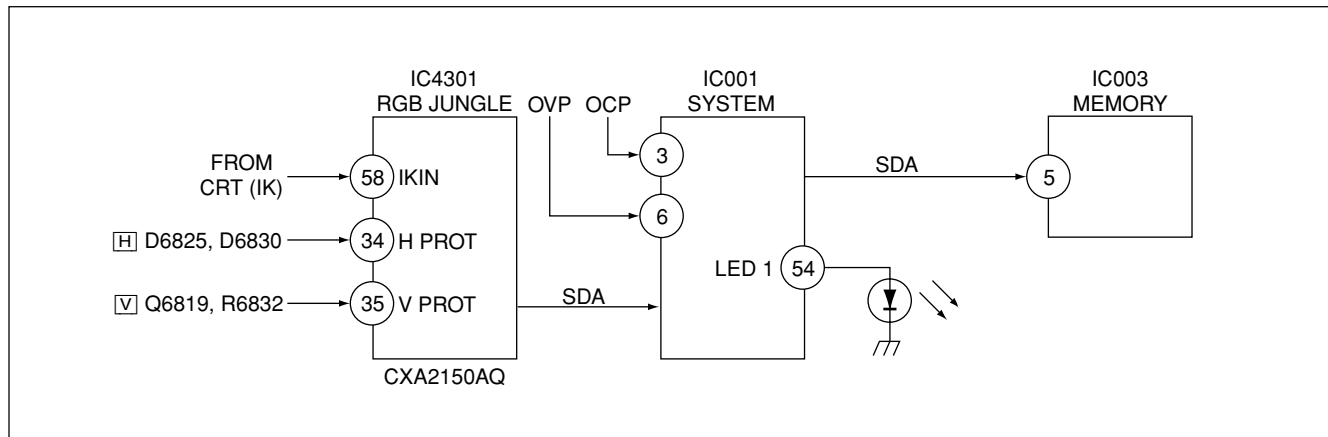


| +B overcurrent (OCP) | Occurs when an overcurrent on the +B(135) line is detected by Q6610 and Q6609. If Q6610 and Q6609 go to ON, the voltage to the pin3 of IC001 go to UP. The unit will automatically turn off. |

| +B overvoltage (OVP) | Occurs when an overvoltage on the +B(135) line is detected by D6635 and Q6611. If Q6611 go to ON, the voltage to pin6 of IC001 go to UP. The unit will automatically turn off. |

| Vertical deflection failure | Occurs when an absence of the vertical deflection pulse is detected by Q6819 and R6832. Shut down the power supply. |

| White balance failure | If the RGB levels do not balance or become low level within 5 seconds. This error will be detected by IC4301. TV will stay on, but there will be no picture. |

| High voltage protector of Horizontal Deflection | Occurs when an overvoltage of horizontal pulse is detected by D6809 and IC6801. If the voltage of anode D6830, Q6800 and D6825 goes to High, the voltage to pin34 of IC4301 go to UP. The unit will automatically turn off. |

# SECTION 1
# DISASSEMBLY

## 1-1. REAR COVER REMOVAL



② Rear cover

① Sixteen screws
(+BVTP 4 × 16)
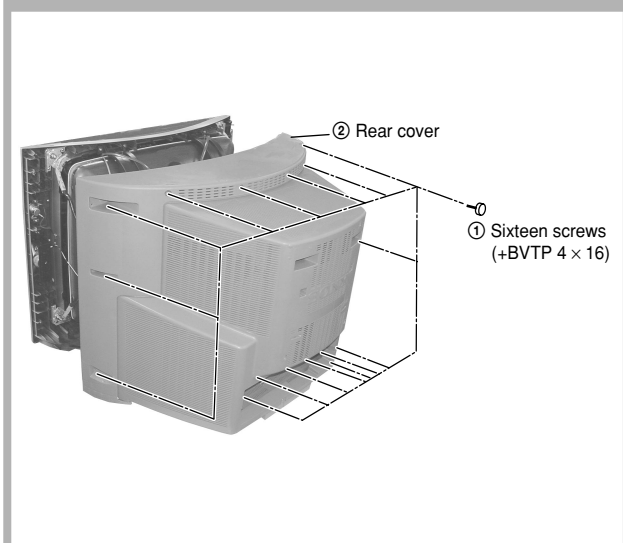
## 1-2. 3D SPEAKER BOX REMOVAL



① Two screws
(TP + TWH 4 × 25)

② 3D Speaker
box assy

## 1-3. SPEAKER REMOVAL



① Two screws
(+BVTP 4 × 16)

② Two screws
(Washer Head)
(+P4x16)

③ Two screws
(+BVTP 4 × 16)
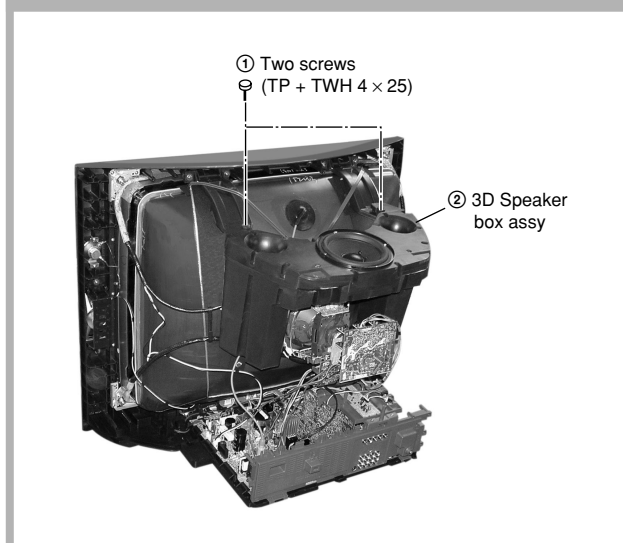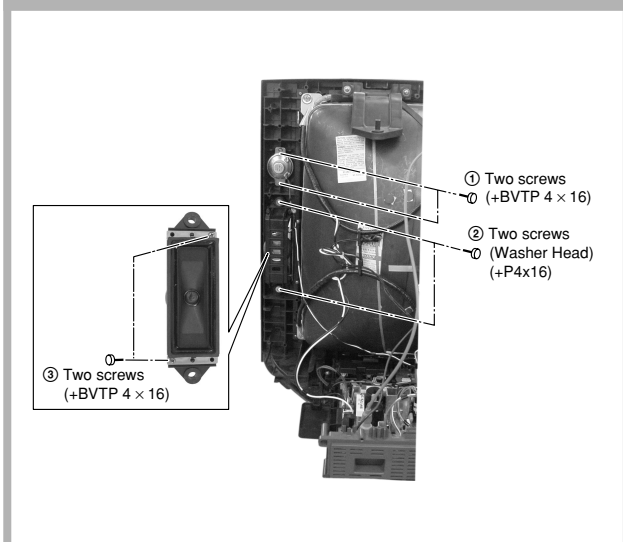
## 1-4. CHASSIS ASSY REMOVAL
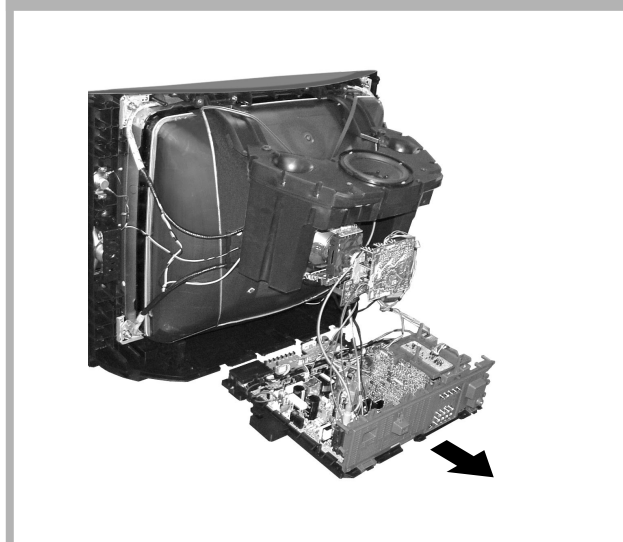


## 1-5. DH BOARD REMOVAL



① Two hooks

② DH Board
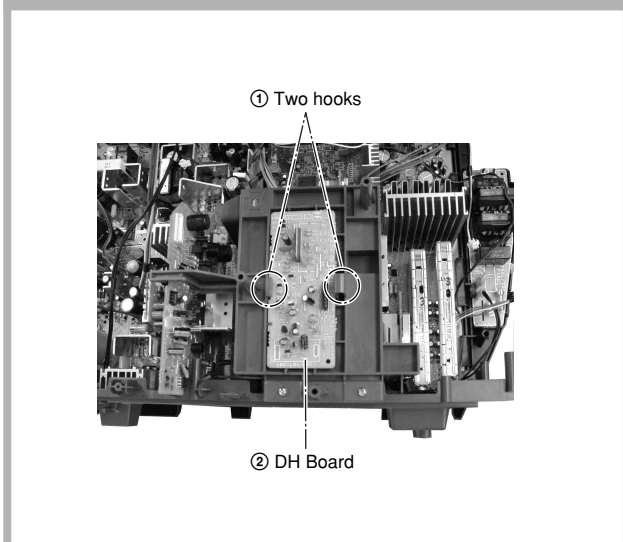
## 1-6. SERVICE POSITION
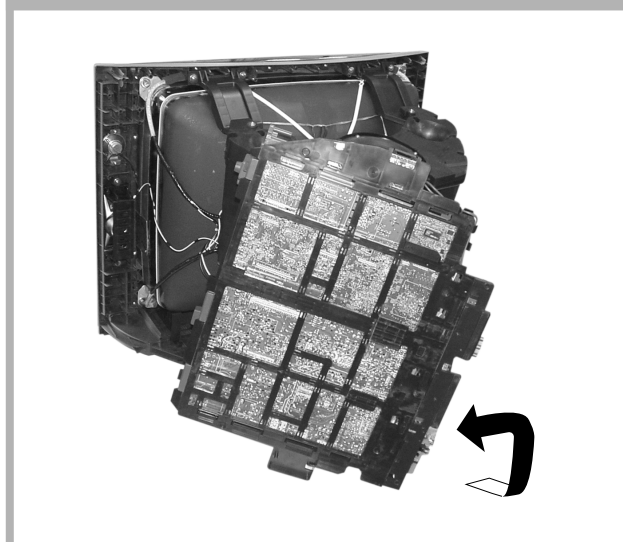
## 1-7. SERVICE POSITION ON TV STAND

Note: 1) Remove the Rear Cover (refer 1-1)
 - unscrew all 14 screws fixed on the Rear Cover. Hold the top of the TV Cabinet; lift the Rear Cover slightly upwards to release the Rear Cover foot from the TV Stand and slide it backwards from the TV Cabinet.
 2) Remove the 3D Speaker Box (refer 1-2)
 3) Release the Lead Assy Speaker (left side)
 4) Lift up the chassis and place it in the Service Position as shown:-

Caution: 1) In Service Position, make sure all the TV connections are connected correctly before turning on the TV set.
 2) The TV on the TV Stand without Rear Cover is unstable. As such be careful not to push the TV foward or backward

Use a non elastic and non conductive string to tie the main bracket to the woofer bracket

Place the front of the main bracket on to the foot of the TV Cabinet
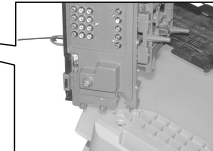
Place the Terminal Bracket edge into the hole on the TV Stand foot

## 1-8. TERMINAL BRACKET REMOVAL

③ One screw (+BVTP 3 × 12)

③ One screw (+BVTP 3 × 12)

⑤ Terminal bracket

② Two screws (+BVTP 3 × 12)

① One screw (+BVTP 4 × 16)

④ Two hooks
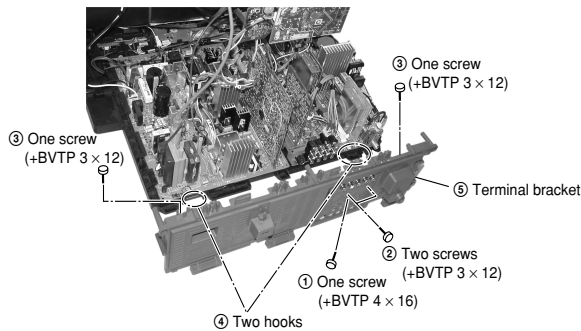
## 1-9. B3 AND D5 BOARDS REMOVAL

Note: Access to the B3 board is possible after removal of the shiledcase. Remove the shiledcase by removing 2 screws +BVTP 3x16

② D5 Board

④ B3 Board

① Two clips

③ Two clips
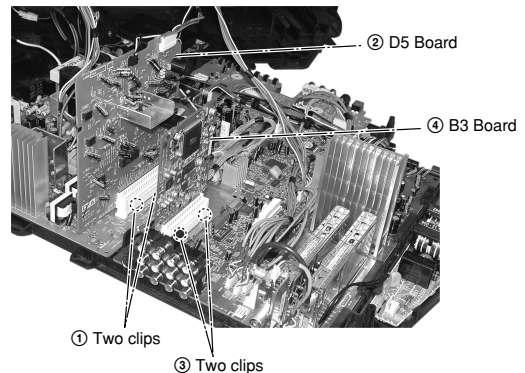
## 1-10. F1 BOARD REMOVAL

② F1 Board

① Two hooks
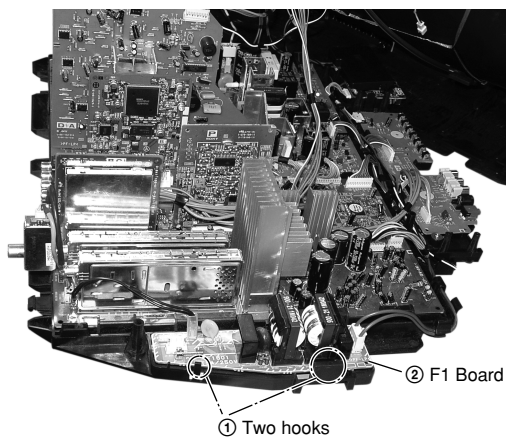
## 1-11 . BC1 AND P BOARDS REMOVAL

④ V2 Board (not used for this model)

② BC1 Board

⑥ P Board

⑤ One clip

③ Two clips

① One clip
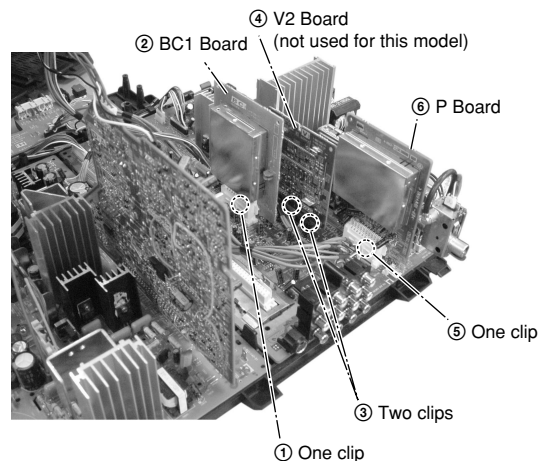
## 1-12. H1 AND H2 BOARDS REMOVAL

② H1 Board
① Five hooks
⑤ H2 Board
③ Three hooks
④ Cover, H
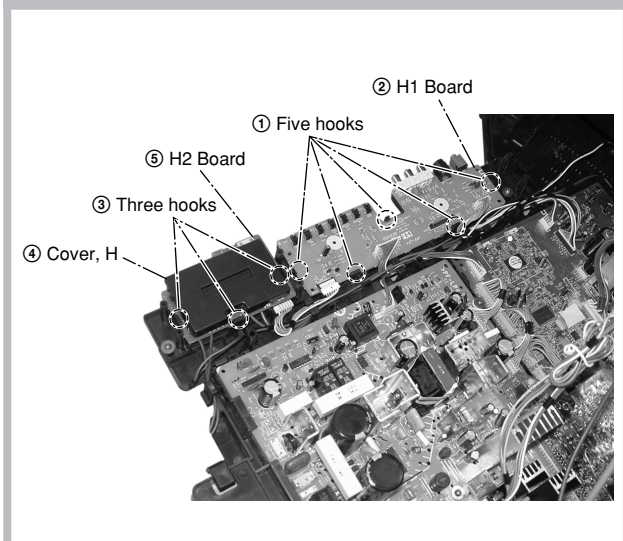
## 1-13. A AND D BOARDS REMOVAL

② Three screws
(3 × 12)(+) BVTP
⑤ One screw
(3 × 12)(+)(BVTP)
③ Four hooks
④ A Board
① Five connectors
⑤ One screw
(3 × 12)(+)(BVTP)
⑦ D Board
⑥ Four hooks
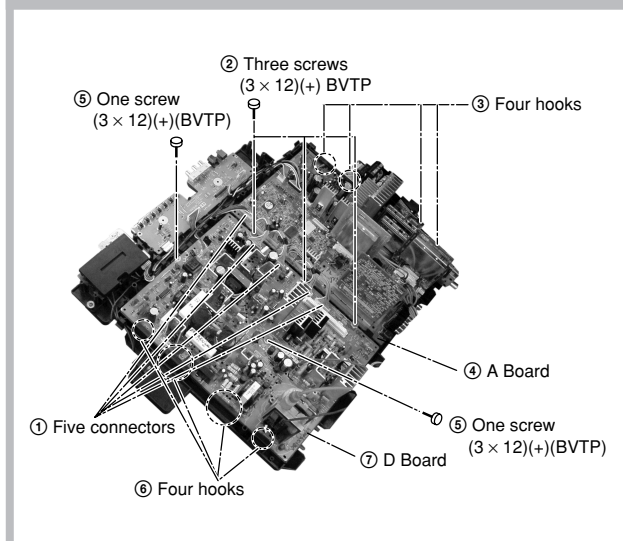
## 1-14. PICTURE TUBE REMOVAL

**Note:**
• Please make sure the TV set is not in standing position before removing necessary CRT support located on bottom right and left.
• When removing the Nut Locking: first make sure to hold the Nut special CRT with a spanner while opening the Nut Locking using a torque driver. Then proceed to remove the Nut special CRT using a torque driver.
1) Place the TV set with the CRT face down on a cushion (jig).
2) Removal the Rear Cover.
3) Removal the 3D Box.
4) Unplug all interconnecting leads from the Deflection Yoke, Neck Assy, Degaussing Coils and CRT grounding strap.

⑲ Nut special CRT (4)

⑬ Band, DGC(1) Removal (only top-side)
⑤ Anode Cap Removal
⑪ Bracket Woofer(2) Removal
⑰ Earth Coating Assy(2) Removal
⑱ Nut, Locking (4)
⑭ Holder, DGC(2) Removal
⑦ Loosen the Neck Assembly fixing screw and remove
⑮ DGC(2) Removal
⑥ C Board Removal
⑯ Spring Tension(2) Removal
⑫ Supports, CRT(2) Removal
⑨ Loosen the Deflection Yoke fixing screw and remove
⑩ Chassis Assy Removal
⑧ VM Board Removal

## • REMOVAL OF ANODE-CAP

**Note:**
• After removing the anode, short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.

• **REMOVING PROCEDURES**
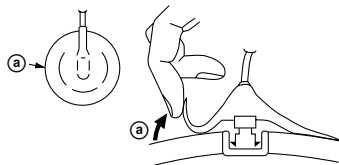
① **Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.**
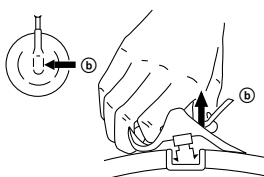
② **Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.**
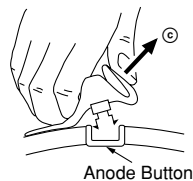
Anode Button

③ **When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ.**

• **HOW TO HANDLE AN ANODE-CAP**

① **Do not damage the surface of anode-caps with sharp shaped objects.**
② **Do not press the rubber too hard so as not to damage the inside of anode-cap.**
**A metal fitting called the shatter-hook terminal is built into the rubber.**
③ **Do not turn the foot of rubber over too hard.**
**The shatter-hook terminal will stick out or damage the rubber.**
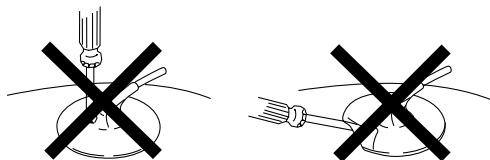
# SECTION 2
# SERVICE JIG

## 2-1. JIGS REQUIRED FOR SERVICING

| REF NO. | DESCRIPTION | QUANTITY | PART NO. | REMARK |
|---|---|---|---|---|
| J-1 | TOOL(20P),SERVICE | 1 | 3-702-763-01 | For A to BC1 board extension |
| | | 1 | | For A to P board extension |
| J-2 | TOOL(40P),SERVICE | 1 | 3-702-764-01 | For A to B3 board extension |
| J-3 | TOOL(50P-A),SERVICE | 1 | 3-702-765-01 | For D to D5 board extension |
| J-4 | TOOL(7PX2),SERVICE | 1 | 3-702-775-01 | For A to V2 board extension (not used for this model) |

**J-1**

**J-2**

**J-3**

**J-4**
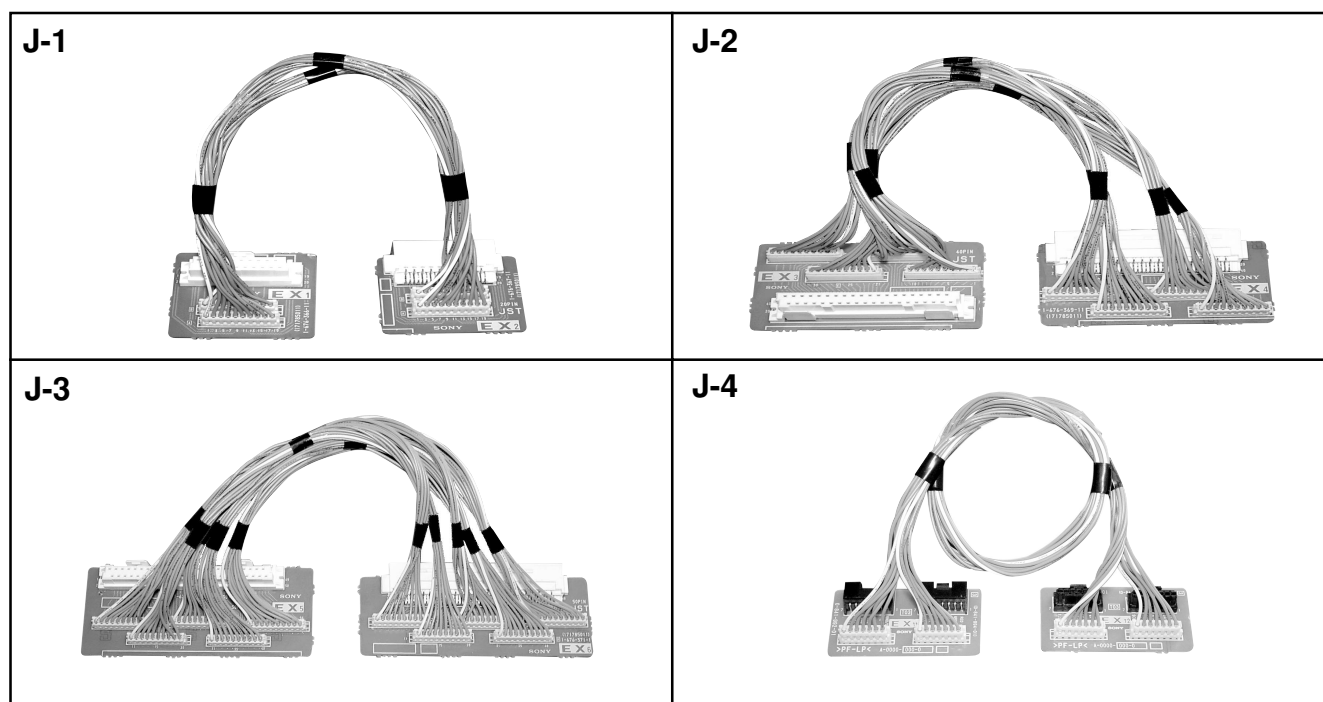
# SECTION 3
# CIRCUIT BOARDS LOCATION

C Board

H2 Board

VM Board

D Board

H1 Board

D5 Board

BC1 Board

B3 Board

J Board

V2 Board (not used for this model)

A Board

F1 Board

P Board

DH Board
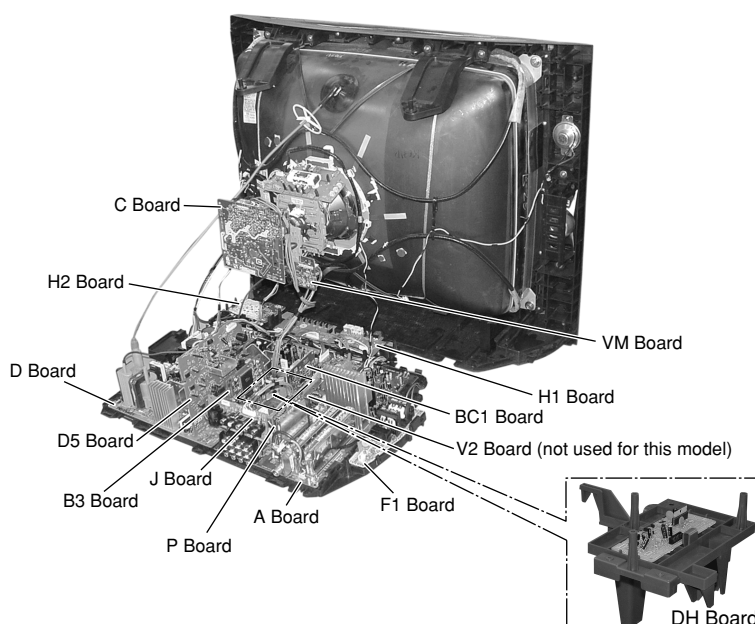
# SECTION 4
# ADVANCE OPERATION

## 4-1. "RESET" FUNCTION

### 1. Purpose

If a customer faces some setting problem that cannot be solved, using the "RESET" function some items will be reset to its original setting (shipping condition)

### 2. How to Operate

There are 2 ways to access to the "RESET" Function:-
      a) By pressing "RESET" button on the Remote Commander.
      b) By pressing "MENU" button on the Front Key Input and hold it down for 5 seconds.

### 3. Subsequent of Operation

Sequential to the resetting operation (either methods being used in No. 2), TV set would shut down once and automatically turn on again. The power-off duration is expected to be about 500msec. An OSD message, "RESET" tentatively will be displayed for 10 sec after IK status gets stable.
As a result, some items will be reset to an initial condition (shipment condition) wheareas some other remains at the last selection by user.

Items that remains at the last selection by user

| Program No., PIC rotation, OSD Language, Fine tuning, TV System, Skip |
| --- |

Reset Items

| Video input | RF | Antenna sensitivity | HIGH* |
| --- | --- | --- | --- |
| Volume | 30 | Stereo mode | STEREO/NICAM* |
| DRC-MF | DRC1250 | Bilingual mode | MAIN* |
| Picture mode | DYNAMIC | High-deviation mode | AUTO* |
| Sound mode | DYNAMIC | Child lock | OFF* |
| Surround mode | OFF | Wide mode | OFF |
| Color system(video) | AUTO | Game mode | OFF |
| Multi picture(PIP) | OFF | Teletext mode | OFF |
| PIP position | Bottom-right | Sleep timer | OFF |
| OSD recall | OFF | Wake-up timer | OFF |
| Intelligent volume | OFF | Sound muting | OFF |
| ECO mode | OFF | 3DNR | ON |
| Color system(RF) | AUTO* | | |

*= only when in RF mode

# SECTION 5
# SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switches should be set as follows unless otherwise noted:

PICTURE control .......................................................... normal
BRIGHTNESS control ................................................. normal

Perform the adjustments in the following order :
1. Beam Landing
2. Convergence
3. Focus
4. White Balance

**Note :** Test Equipment Required.
1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

---

**Preparation :**
- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

## 5-1. BEAM LANDING

1. Input a white signal with the pattern generator.
   Contrast ⎫
   Brightness ⎭ normal

2. Position neck assy as shown in Fig 5-1.

3. Set the pattern generator raster signal to a green raster.

4. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side. (See Figures 5-1 through 5-3.)

5. Move the deflection yoke forward and adjust so that the entire screen is green. (See Figure 5-2.)

6. Switch the raster signal to blue, then to red and verify the condition.

7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws and DY spacers.

8. If the beam does not land correctly in all the corners, use a magnet to adjust it.
   (See Figure 5-4.)



**Fig. 5-2**



**Fig. 5-3**



Align the edge of the neck assy with the edge of the G3 grid.

Neck assy

G1  G2  G3

**Fig. 5-1**



Purity control corrects this area.

Disk magnets or rotatable disk magnets correct these areas (a-d).

Deflection yoke positioning corrects these areas.
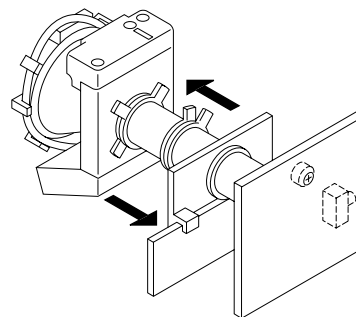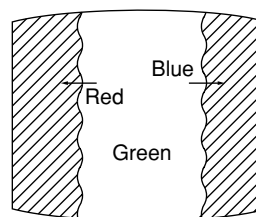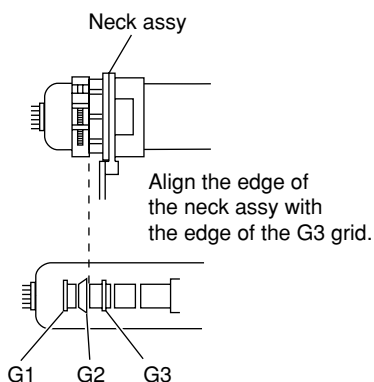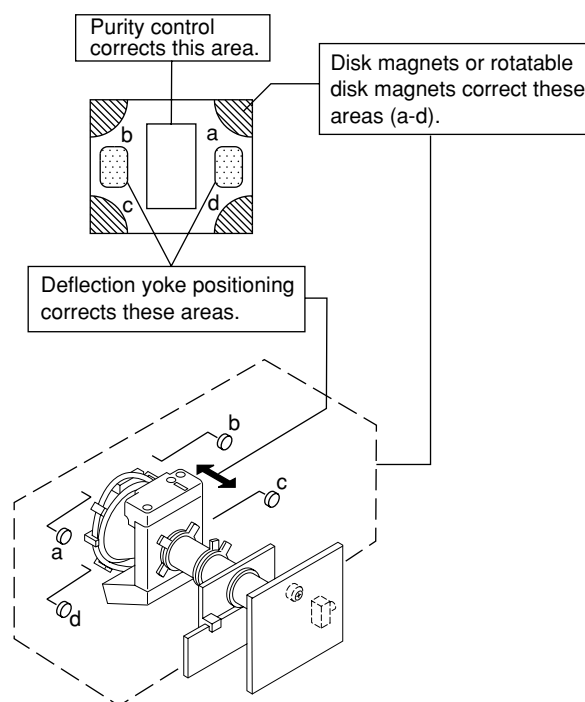
**Fig. 5-4**

## 5-2. CONVERGENCE ADJUSTMENT

**Preparation :**
- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Receive cross hatch/dot pattern and set picture mode to "STANDARD".

**(1) Horizontal and Vertical Static Convergence**
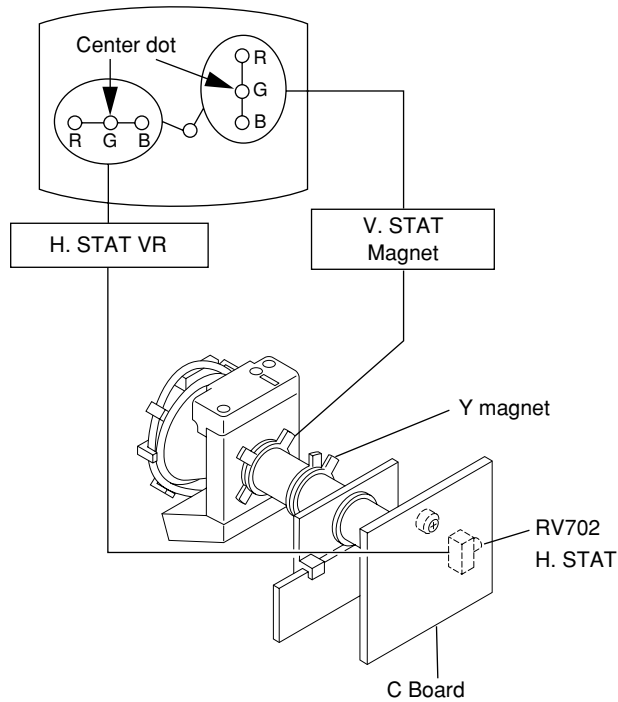


① V. STAT
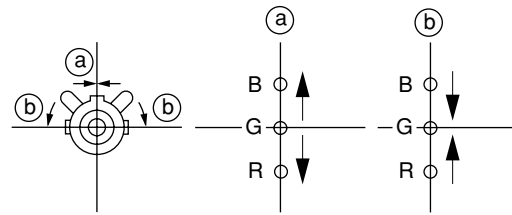


② H. STAT VR
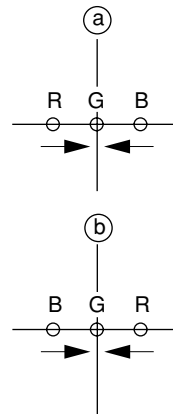


③
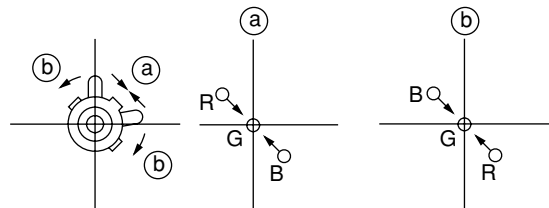


1. (Moving horizontally), adjust the H.STAT control so that the red, green and blue dots are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.
3. Adjust Horizontal Trapezoid with "GEO 11 HTR" in Service Mode to make H-Trapezoid distortion best.
4. If the H.STAT variable resistor cannot bring the red, green and blue dots together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other, so be sure to perform adjustments while tracking.)
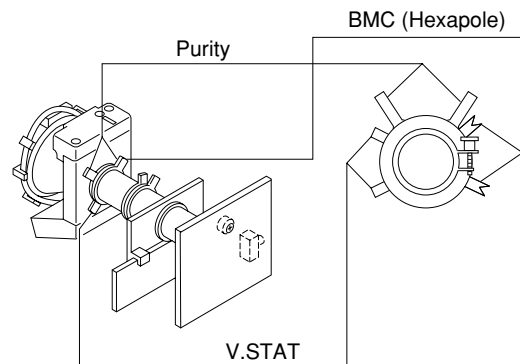
④ BMC (Hexapole) Magnet.

If the red, green and blue dots are not balanced or aligned, then use the BMC magnet to adjust in the manner described below.
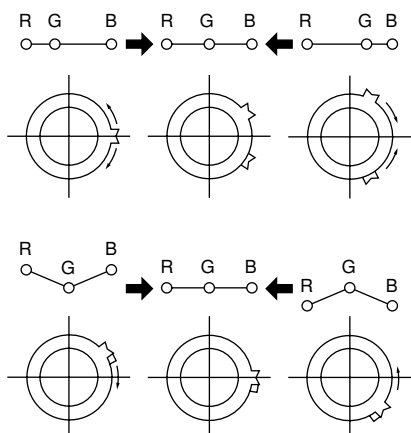


⑤ Y separation axis correction magnet adjustment.

1. Receive the cross-hatch signal and adjust [PICTURE] to [MIN] and [BRIGHTNESS] to [STANDARD] .

2. Adjust the Y separation axis correction magnet on the neck assembly so that the horizontal lines at the top and bottom of the screen are straight.
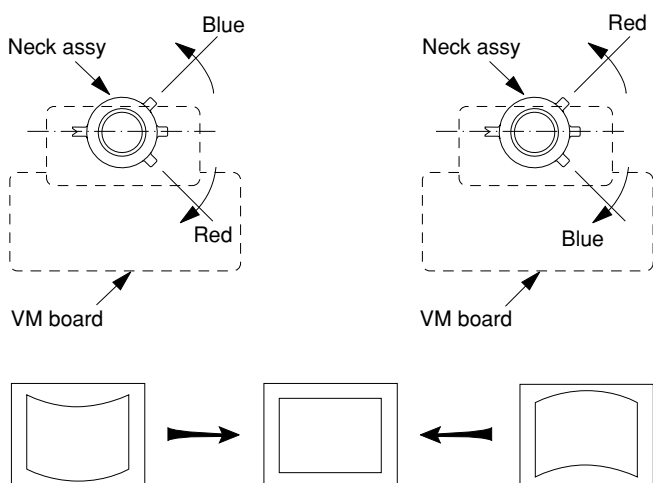


**Note**

1. The Red and Blue magnets should be equally far from the horizontal center line.

2. Do not separate the Red and Blue magnets too far. (Less than 8 mm)

**(2) Dynamic Convergence Adjustment**
**Preparation:**
• Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence
• Set the PICTURE and BRIGHTNESS to normal.

**1. Adjust TLH. (TLH convergence piece)**
① Receive the dot/hatch pattern signal and adjust picture quality by the menu.
② Correct horizontal mis-convergence of red and blue of both sides on the X axis.

When red is outside insert TLH convergence piece to right side (TLH +) views from DY neck. And when blue is outside, insert it to left side (TLH –) and take both sides.
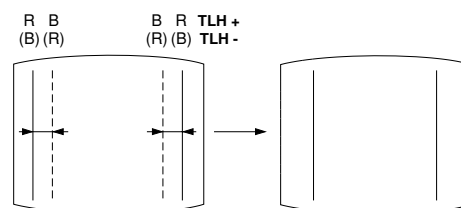


**2. Adjust XCV core.**
To able to become balance of XCV on the X axis well.
**3. Adjust V-TILT.**
Correct the vertical mis-convergence of red and blue of vertically sides on the Y axis.
**4. Adjust YCH.**
Adjust horizontal mis-convergence of red and blue of vertically sides on the Y axis. Mentioned above steps 2 to 4 are adjusting respectively perform minuteness tracking.
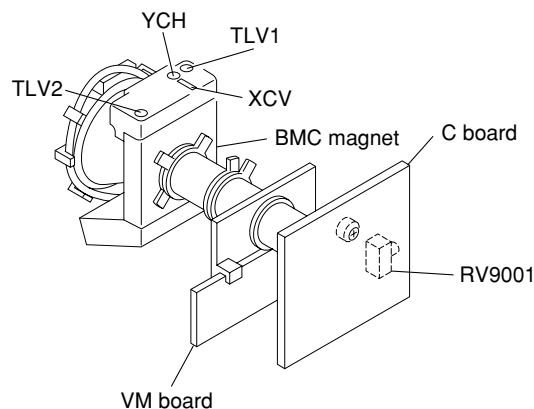


**(3) Screen-corner Convergence**

**Fix a Permalloy assy corresponding to the misconverged areas.**

Permalloy assembly
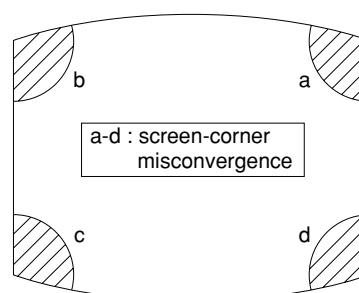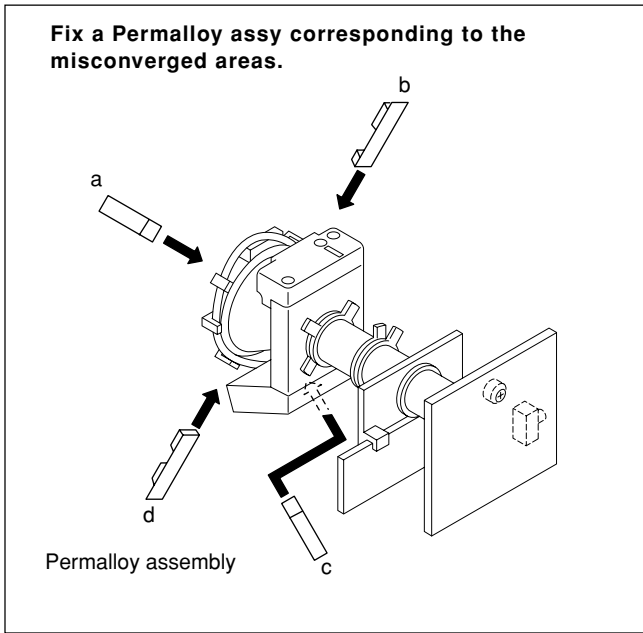
## 5-3. FOCUS ADJUSTMENT

**Note**

Focus adjustment should be completed before W/B adjustment.

(1) Receive digital monoscope pattern.
(2) Set "A/V CONTROL" to "STANDARD".
(3) Adjust FOCUS VR so that the center of the screen becomes just focus.
(4) Change the receiving signal to white pattern and blue back.
(5) Confirm MAGENTA RING is not noticeable. In case MAGENTA RING is obvious, adjust FOCUS VR to balance between MAGENTA RING and FOCUS adjustment.

Lead Assy, Focus

Focus

Screen
(No Function)

**FLYBACK TRANSFORMER (T6803)**
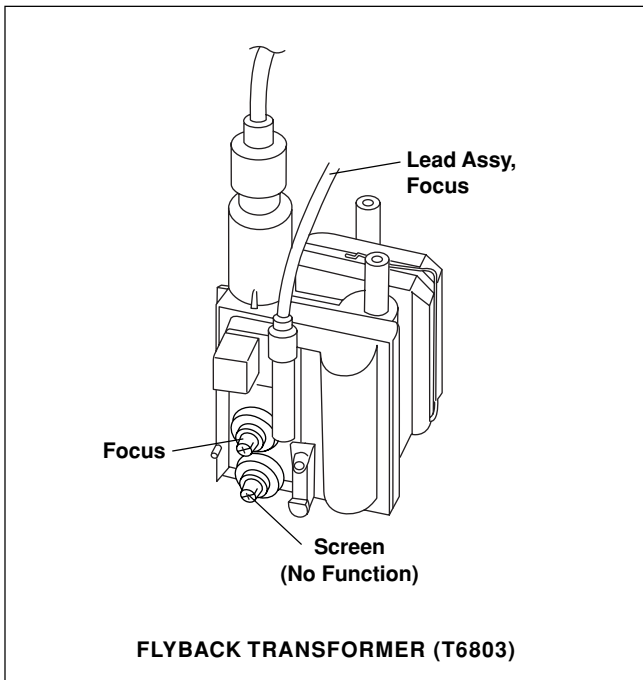
## 5-4. NECK ASSY TWIST ADJUSTMENT

(1) Receive dot/hatch pattern DRC-MF, DRC1250, DYNAMIC.
(2) Turn FOCUS VR fully counter-clockwise.
(3) Confirm the dot shape at the screen center. (Fig. 5-4)
(4) Resume FOCUS VR.

**Note**

In case of turning NECK ASSY, loosen the screw 3 turns. Do not move the position.

OK

Turn NECK ASSY clockwise.

Turn NECK ASSY counter clockwise.
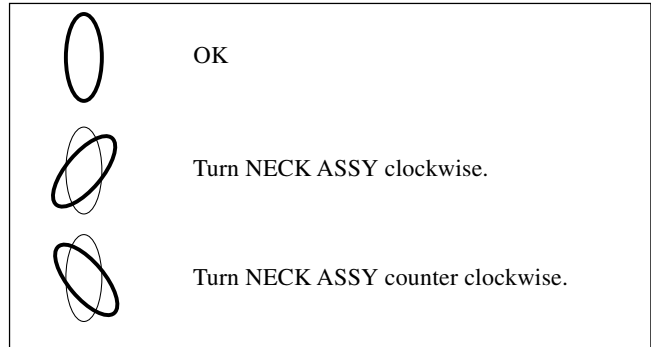
**Fig. 5-4**

## 5-5. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENT

### 1. G2 (SCREEN) ADJUSTMENT

1) Set the PICTURE and BRIGHTNESS to normal.
2) Put to VIDEO input mode without signals.
3) Connect R, G and B of the C board cathode to the oscilloscope.
4) Adjust BRIGHTNESS to obtain the cathode voltage to the value below.
5) Whilst watching the picture, adjust the screen VR [RV9002] located on the C board to the point just before the retrace lines disappear (to the point before cut-off)

170 V ± 2 (VDC)

0 V
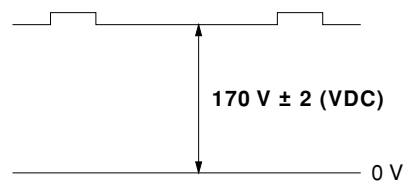
### 2. WHITE BALANCE ADJUSTMENT

1) Set to Service Mode (Refer Section 6-1: ADJUSTMENTS WITH COMMANDER).
2) Input white raster signal.
3) Set the following condition.
   PICTURE minimum, BRIGHTNESS 50%
4) Select GCT (WHB 08) and BCT (WHB 09) with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
5) Set the PICTURE to maximum.
6) Select GDR (WHB 05) and BDR (WHB 06) with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
7) Write into the memory by pressing [MUTING] then [0].

# SECTION 6
# CIRCUIT ADJUSTMENTS

## 6-1. ADJUSTMENTS WITH COMMANDER

Service adjustments to this model can be performed using the supplied Remote Commander RM-991.

### a. ENTERING SERVICE MODE

With the unit on standby

$$\rightarrow \boxed{\text{DISPLAY}} \rightarrow \boxed{5} \rightarrow \boxed{\text{VOL (+)}} \rightarrow \boxed{\text{POWER}}$$

The screen display is :

Device Name — GEO
Item No — 00
Item Name — VSZ
Data — 29
Marking of new NVM — ■
Mode — SERVICE 50

```
GEO    00      VSZ      29    ■   SERVICE  50
0     044Q    0.8M      59        FF   0   000A
      08       1        001       27E
```

3D NR S/N detection — 08
3D NR mode — 1
Suffix No (OEM Code)
H count of SYNC detection — 001
Software version
V count of SYNC detection — 27E
Total Power-On time (hours)
PAL,SECAM:50 NTSC :60
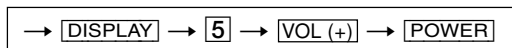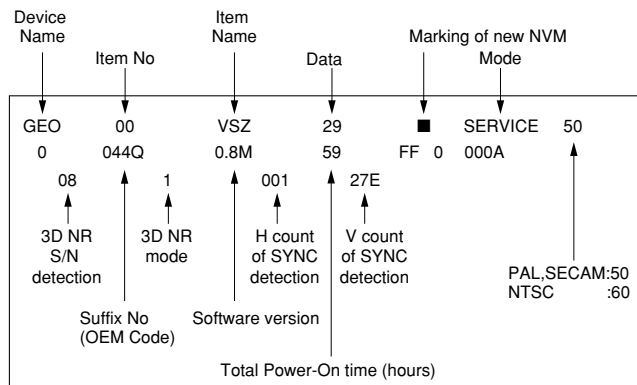
### b. CANCELLATION OF SERVICE MODE

Set the standby condition (Press $\boxed{\text{POWER}}$ button on the commander), then press $\boxed{\text{POWER}}$ button again, hereupon it becomes TV mode.

### c. METHOD OF WRITE INTO MEMORY

1) Set to Service Mode.
2) Press $\boxed{1}$ (UP) and $\boxed{4}$ (DOWN), to select the adjustment item Name.
3) Press $\boxed{3}$ or $\boxed{6}$ to raise/lower the data value.
4) Press $\boxed{\text{MUTING}}$ button to indicate WRITE on the screen.
5) Press $\boxed{0}$ button to write into memory.

### d. OTHER FUNCTION VIA REMOTE COMMANDER

| | |
|---|---|
| $\boxed{7}$, $\boxed{0}$ | All the data becomes the values in memory. |
| $\boxed{8}$, $\boxed{0}$ | All goes to the standard state. |
| $\boxed{5}$, $\boxed{0}$ | Service data initialization (Be sure not to use usually.) |
| $\boxed{\text{DISPLAY}}$, $\boxed{0}$ | Write 50Hz adjustment data to 60Hz, or vice versa. |
| $\boxed{2}$, $\boxed{0}$ | Copy and write all data. |
| $\boxed{\text{Cursor +/–}}$ | Skip category (device) to category (device) |

example :  GEO    00      VSZ
                    ↕
              DAC    00      HCT

### e. MEMORY WRITE CONFIRMATION METHOD

1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
2) Turn the power switch ON and set to Service Mode.
3) Call the adjusted items again to confirm adjustments were made.

## 6-2. ADJUSTMENT METHOD

Item Number 00 of device GEO

This explanation uses V-size as an example.

1. Select "GEO 00 VSZ" with the $\boxed{1}$ and $\boxed{4}$ buttons.
2. Raise/lower the data with the $\boxed{3}$ and $\boxed{6}$ buttons.
3. Select the optimum state. (The standard is 1F for PAL reception.)
4. Press $\boxed{\text{MUTING}}$ button to indicate WRITE on screen. (The display from SERVICE (green display) to WRITE (green display).
5. Execute the writing with the $\boxed{0}$ button. (The WRITE display changes to red color while executing and then back to SERVICE (green display).
6. The WRITE execution is completed.

Example on screen display :-

```
GEO    00    VSZ    29  ■  SERVICE  50     ── GREEN
0     044Q  0.8M    59     FF   0    000A   Adjusted with 3
      08     1      001    27E              and 6 buttons.
```

```
GEO    00    VSZ    1F  ■  WRITE    50     ── GREEN
0     044Q  0.8M    59     FF   0    000A
      08     1      001    27E
```
Write with $\boxed{\text{MUTING}}$
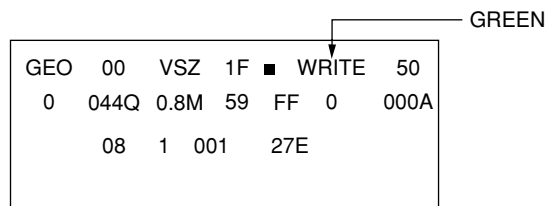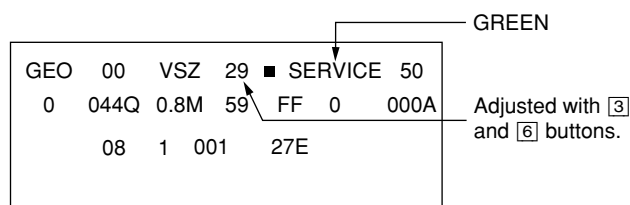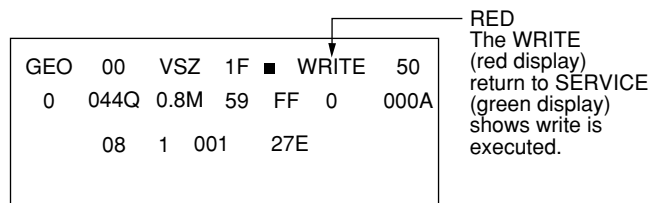
```
GEO    00    VSZ    1F  ■  WRITE    50     ── RED
0     044Q  0.8M    59     FF   0    000A   The WRITE
      08     1      001    27E              (red display)
                                            return to SERVICE
                                            (green display)
                                            shows write is
                                            executed.
```
Write executed with $\boxed{0}$

Use the same method for all Items.

**Note** : 1. In [WRITE], the data for all items are written into memory together.
2. For adjustment items that have different standard data between 50Hz or 60Hz, be sure to use the respective input signal after adjustment.

## Adjustment Item Table

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | 50NC | 60NC | 50VC | 60VC | PROG50 NC | PROG60 NC | PROG50 VC | PROG60 VC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GEO | 00 | VSZ | 21 | 3F | V Size | 50/60*VC/NC | CXA2150AQ | 23 | 26 | 24 | 26 | | | | |
| | 01 | VPS | 27 | 3F | V position | 50/60*VC/NC | | 25 | 22 | 27 | 24 | | | | |
| | 02 | VLN | 5 | 0F | V Linearity | 50/60*VC/NC | | 07 | 08 | 07 | 08 | | | | |
| | 03 | SCO | 0A | 0F | S Correction | 50/60*VC/NC | | 09 | 0A | 09 | 0A | | | | |
| | 04 | HSZ | 1E | 3F | H Size | 50/60*VC/NC | | 21 | 1B | 21 | 1C | | | | |
| | 05 | HPS | 2F | 3F | H Position | 50/60/DVDProg 50/DVDProg 60*VC/NC | | 1A | 11 | 19 | 10 | 1A | 1A | 09 | 09 |
| | 06 | PAP | 28 | 3F | Pin Amp | 50/60*VC/NC | | 15 | 19 | 18 | 1B | | | | |
| | 07 | UPN | 25 | 3F | Upper Corner Pin | 50/60*VC/NC | | 25 | 26 | 27 | 28 | | | | |
| | 08 | LPN | 23 | 3F | Lower Corner Pin | 50/60*VC/NC | | 22 | 27 | 22 | 28 | | | | |
| | 09 | UCG | 0 | 3 | Most Upper Corner Pin Adjustment | 50/60*VC/NC | | 01 | 01 | 03 | 01 | | | | |
| | 0A | LCG | 1 | 3 | Most Lower Corner Pin Adjustment | 50/60*VC/NC | | 01 | 02 | 00 | 02 | | | | |
| | 0B | UCP | 2 | 3 | Most Upper Corner Pin Correction Position Setting | 50/60*VC/NC | | 02 | 02 | 02 | 02 | | | | |
| | 0C | LCP | 2 | 3 | Most Lower Corner Pin Correction Position Setting | 50/60*VC/NC | | 03 | 02 | 02 | 02 | | | | |
| | 0D | POL | 0 | 1 | Most Upper/Lower Pin Polarity | 50/60*VC/NC | | 00 | 00 | 00 | 00 | | | | |
| | 0E | PPH | 24 | 3F | V Trapezoid Adjustment | FF/R4/PR*50/60*VC/NC | | 20 | 19 | 21 | 1B | | | | |
| | 0F | AGL | 0A | 0F | AFC Angle | 50/60*VC/NC | | 1D | 1D | 21 | 22 | | | | |
| | 10 | BOW | 6 | 0F | AFC Bow | 50/60*VC/NC | | 18 | 18 | 19 | 18 | | | | |
| | 11 | HTR | 0F | 1F | V SawO Wave Saw Level Gain Control | FF/R4/PR*50/60*VC/NC | | 00 | 00 | 00 | 00 | | | | |
| | 12 | MPD | 4 | 0F | MP Para Wave DC Bias Control | FF/R4/PR*50/60*VC/NC | | 07 | 07 | 07 | 07 | | | | |
| | 13 | MPA | 0E | 0F | MP Para Wave Gain Control | FF/R4/PR*50/60*VC/NC | | 05 | 05 | 05 | 05 | | | | |
| | 14 | PBP | 1F | 3F | H Cent Para Wave Saw Level Gain Control | FF/R4/PR*50/60*VC/NC | | 27 | 27 | 23 | 25 | | | | |
| | 15 | PBA | 0F | 1F | H Cent Para Wave Gain Control | FF/R4/PR*50/60*VC/NC | | 0A | 0B | 0B | 0C | | | | |
| | 16 | HBS | 1 | 1 | H Blk ON/OFF SW | FF/R4/PR*50/60*VC/NC | | 01 | 01 | 01 | 01 | | | | |
| | 17 | HBL | 37 | 3F | Left H Blk Position Control | 50/60/DVDProg 50/DVDProg 60*VC/NC | | 19 | 25 | 19 | 25 | 1E | 29 | 1E | 29 |
| | 18 | HBR | 2C | 3F | Right H Blk Position Control | 50/60/DVDProg 50/DVDProg 60*VC/NC | | 28 | 29 | 28 | 29 | 2D | 2E | 2D | 2E |
| | 19 | PCP | 0 | 7 | Pin Amp HV Distortion Correction Setting | FF/R4/PR*50/60*VC/NC | | 00 | 00 | 00 | 00 | | | | |
| | 1A | ACP | 1 | 7 | H Position HV Distortion Correction Setting | FF/R4/PR*50/60*VC/NC | | 00 | 00 | 00 | 00 | | | | |
| | 1B | VCP | 8 | 3 | Vertical HV Distortion Correction Setting | 50/60*VC/NC | | 0C | 0C | 0C | 0C | | | | |
| | 1C | HCP | 2 | 3 | H Size HV Distortion Correction Setting | 50/60*VC/NC | | 07 | 07 | 07 | 07 | | | | |
| | 1D | USC | 0 | 1 | Ref Pulse Jump Mode ON/OFF | FF/R4/PR*50/60*VC/NC | | 00 | 00 | 01 | 01 | | | | |
| | 1E | VAS | 2F | 3F | V Aspect Control | 50/60*VC/NC | | 2F | 2F | 30 | 30 | | | | |
| | 1F | VSC | 1F | 3F | V Scroll Control | 50/60*VC/NC | | 1F | 1F | 1E | 1F | | | | |
| | 20 | VBU | 7 | 1 | V Blk Top Position Control | FF/R4/PR*50/60*VC/NC | | 04 | 09 | 0E | 0C | | | | |
| | 21 | VBL | 7 | 1 | V Blk Bottom Position Control | FF/R4/PR*50/60*VC/NC | | 00 | 09 | 0C | 0F | | | | |
| | 22 | AKB | 0F | 1F | AKB Bch Ref Pulse Timing Setting | 50/60*VC/NC | | 1C | 0F | 1C | 17 | | | | |
| | 23 | VDS | 1 | 1 | Bch REF Pulse Jump ON/OFF Sw | FF/R4/PR*50/60*VC/NC | | 00 | 00 | 00 | 00 | | | | |
| | 24 | RST | 0 | 1 | Retrace Of V Drive Start Position Setting | FF/R4/PR*50/60*VC/NC | | 00 | 00 | 00 | 00 | | | | |
| | 25 | CPY | 0 | 1 | Copy the GEO data to all 50/60Hz NVM area | | | | | | | | | | |

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | Common | 50 | 60 | EcoOnNC | EcoOffNC | EcoOnVC | EcoOffVC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAC | 00 | HCT | 33 | 7F | H Center | 50/60Hz | CXA1875 | | 4A | 4A | | | | |
| | 01 | HLN | 27 | 3F | H Linearity | 50/60Hz | | | 39 | 39 | | | | |
| | 02 | QDH | 1F | 3F | DF Phase | 50/60Hz | | | 83 | 83 | | | | |
| | 03 | HTS | BB | FF | H Trapezoid Start Data Setting | no table | | C9 | | | | | | |
| | 04 | HTO | 0E | FF | H Trapezoid Offset Data Setting | no table | | 0E | | | | | | |
| | 05 | NSS | 7F | FF | NS Start Data | no table | | 7E | | | | | | |
| | 06 | NSO | 09 | FF | NS Offset Data | no table | | 09 | | | | | | |
| | 07 | ABC | 0 | FF | ABL D/A Control | ECO on/off*VC/NC | | | | | 00 | 00 | 00 | 00 |
| | 08 | CPY | 0 | 1 | Copy the DAC data to all 50/60Hz NVM area | | | | | | | | | |

| 0TVG Common | No | Name | Initial | Range | Function | Table & Note | Device Name | Common |
|---|---|---|---|---|---|---|---|---|
| WHB | 00 | YOS | 7 | 0F | DC Offset Canceller for Y signal | | CXA2150AQ | 07 |
| | 01 | UOS | 1F | 3F | DC Offset Canceller for Cb1 | | | 1F |
| | 02 | VOS | 1F | 3F | DC Offset Canceller for Cr1 | | | 1F |
| | 03 | SBR | 1F | 3F | Sub Brightness Control | | | 19 |
| | 04 | RDR | 29 | 3F | R Drive | | | 29 |
| | 05 | GDR | 24 | 3F | G Drive | | | 24 |
| | 06 | BDR | 25 | 3F | B Drive | | | 25 |
| | 07 | RCT | 29 | 3F | R Cutoff | | | 29 |
| | 08 | GCT | 10 | 3F | G Cutoff | | | 10 |
| | 09 | BCT | 25 | 3F | B Cutoff | | | 10 |
| | 0A | SBO | 20 | 3F | Sub Brightess Offset | Picture Mode except Dynamic | | 1C |
| | 0B | RDO | 1F | 3F | R Drive Offset | Picture Mode except Dynamic | | 1F |
| | 0C | GDO | 19 | 3F | G Drive Offset | Picture Mode except Dynamic | | 19 |
| | 0D | BDO | 1B | 3F | B Drive Offset | Picture Mode except Dynamic | | 1A |
| | 0E | RCO | 1F | 3F | R Cutoff Offset | Picture Mode except Dynamic | | 1F |
| | 0F | GCO | 29 | 3F | G Cutoff Offset | Picture Mode except Dynamic | | 2A |
| | 10 | BCO | 1A | 3F | B Cutoff Offset | Picture Mode except Dynamic | | 1D |

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | EcoOnNC | EcoOffNC | EcoOnVC | EcoOffVC | 50 | 60 | Dynamic | Standard-/Drama | Hi-Fine/-Soft | Personal |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAJ | 00 | PIC | 3F | 3F | Picture Control | Picture Mode except Personal | CXA2150AQ | | | | | | | 3B | 33 | 28 | |
| | 01 | BRT | 1F | 3F | Brightness Control | Picture Mode except Personal | | | | | | | | 23 | 1F | 1B | |
| | 02 | COL | 27 | 3F | Color Control | Picture Mode except Personal | | | | | | | | 2C | 1F | 1F | |
| | 03 | HUE | 1F | 3F | Hue Control | Picture Mode except Personal | | | | | | | | 1F | 1F | 1F | |
| | 04 | SHP | 24 | 3F | Sharpness Control | Picture Mode except Personal | | | | | | | | 22 | 1F | 1D | |
| | 05 | VML | 3 | 3 | VM Level | Picture Mode | | | | | | | | 03 | 03 | 01 | 03 |
| | 06 | DYC | 1 | 1 | Dynamic Color on/off | Picture Mode | | | | | | | | 01 | 01 | 00 | 01 |
| | 07 | WBS | 0 | 0 | WB Switch | Picture Mode | | | | | | | | 00 | 00 | 00 | 00 |
| | 08 | CAX | 2 | 3 | Color Matrix Specification | 50/60Hz | | | | | | 01 | 03 | | | | |
| | 09 | GMA | 3 | 3 | Gamma Correction | Picture Mode | | | | | | | | 02 | 01 | 00 | 01 |
| | 0A | DCT | 1 | 3 | DC Transmission Control | Picture Mode | | | | | | | | 02 | 02 | 01 | 02 |
| | 0B | DPL | 1 | 3 | Auto Pedestal Level Control | Picture Mode | | | | | | | | 02 | 02 | 00 | 02 |
| | 0C | ABM | 0 | 3 | ABL Mode Control | Picture Mode | | | | | | | | 01 | 00 | 00 | 00 |
| | 0D | ABT | 0 | 3 | ABL Current detection Vth Control | ECO on/off*VC/NC | | 05 | 00 | 0C | 07 | | | | | | |

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | Common | EcoOnNC | EcoOffNC | EcoOnVC | EcoOffVC | 50TV | 50Video | 50DVD | 60TV | 60Video | 60DVD | DVDPR-OG50 | DVDPR-OG60 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAJ | 0E | CLO | 9 | 0F | Color Offset | 50/60*TV/Video/DVDProg50/60 | CXA2150AQ | | | | | | 06 | 08 | | 09 | 09 | | 04 | 04 |
| | 0F | CLW | 3 | 7 | Color Step Width to the Change of S/N | | | 03 | | | | | | | | | | | | |
| | 10 | HUO | 9 | 0F | Hue Offset | 50/60*TV/Video/DVDProg50/60 | | | | | | | 05 | 03 | | 07 | 06 | | 04 | 05 |
| | 11 | SHO | 7 | 1F | Sharpness Offset | 50/60*TV/Video/DVDProg50/60 | | | | | | | 10 | 12 | 09 | 0C | 0F | 09 | 1A | 1A |
| | 12 | SHW | 1 | 7 | Sharpness Step Width to the Change of S/N | | | 01 | | | | | | | | | | | | |
| | 13 | BRO | 7 | 0F | Brightness Offset | ECO on/off*VC/NC | | | 07 | 07 | 07 | 07 | | | | | | | | |

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | Common | DVD PROG | 50NC | 60NC | 50VC | 60VC | DRC 100 NC | DRC 100 VC | DRC 120 NC | DRC 120 VC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JGL | 00 | PON | 1 | 1 | RGB and AKB Reference Pulse Output On/Off | | CXA2150AQ | 01 | | | | | | | | | |
| | 01 | RGB | 7 | 7 | RGB Output Selection | | | 07 | | | | | | | | | |
| | 02 | AGG | 0 | 3 | Aging Mode Selection | | | 00 | | | | | | | | | |
| | 03 | BBT | 3 | 3 | RGB Bottom Limitter Control | | | 03 | | | | | | | | | |
| | 04 | LML | 0 | 3 | RGB Amplitude Limitter Control | | | 00 | | | | | | | | | |
| | 05 | PAB | 0F | 0F | DC Level for Peak ABL | | | 0F | | | | | | | | | |
| | 06 | SAB | 0 | 3 | S ABL gain Setting | 50/60/DVDProg50/DVDProg60*VC/NC | | | | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| | 07 | SCO | 7 | 0F | Sub Picture Control | | | 07 | | | | | | | | | |
| | 08 | LV2 | 5 | 0F | RGB Level for RGB2 | | | 05 | | | | | | | | | |
| | 09 | GML | 0 | 1 | Gamma Differential Correction ON/OFF | | | 00 | 00 | | | | | | | | |

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | Common | 50TV | 50Video | 50DVD | 60TV | 60Video | 60DVD | Dynamic | Standard-/Drama | Hi-Fine/-Soft | Personal |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JGL | 0A | SYS | 2 | 3 | Signal Band Selection | 50/60*TV/Video/DVD | CXA2150AQ | | 01 | 02 | 02 | 02 | 02 | 02 | | | | |
| | 0B | SF0 | 1 | 1 | Sharpness f0 Setting | 50/60*TV/Video/DVD | | | 01 | 01 | 01 | 01 | 01 | 01 | | | | |
| | 0C | SF1 | 3 | 3 | High f0 Sharpness Gain Control | 50/60*TV/Video/DVD | | | 03 | 03 | 03 | 03 | 03 | 03 | | | | |
| | 0D | CDS | 0 | 3 | Sharpness Gain Control in High Color Saturation | | | 00 | | | | | | | | | | |
| | 0E | CDF | 0 | 1 | SHP CD ON/OFF | | | 00 | | | | | | | | | | |
| | 0F | PRO | 3 | 3 | Pre/Over-Shoot Ratio Control | 50/60*TV/Video/DVD | | | 03 | 03 | 03 | 03 | 03 | 03 | | | | |
| | 10 | LTI | 3 | 3 | Luminance Transient Improvement | Picture Mode | | | | | | | | | 03 | 02 | 00 | 00 |

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | Common | DVD PROG | Dynamic | Standard-/Drama | Hi-Fine/-Soft | Personal | Dyna bsw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JGL | 11 | LTM | 0 | 3 | LTI Mode Setting | | CXA2150AQ | 00 | | | | | | |
| | 12 | CTI | 0 | 3 | Chrominance Transient Improvement | Picture Mode | | | | 00 | 00 | 00 | 00 | |
| | 13 | CTM | 0 | 3 | CTI Mode Setting | | | 00 | | | | | | |
| | 14 | VDL | 3 | 3 | VM OUT Phase Control | | | 03 | | | | | | |
| | 15 | VCR | 0 | 3 | VM OUT Coring Level Setting | | | 00 | | | | | | |
| | 16 | VFO | 0 | 3 | VM OUT F0 Setting | | | 00 | | | | | | |
| | 17 | VLM | 0 | 3 | VM OUT Limiter Level Setting | | | 00 | | | | | | |
| | 18 | AFC | 1 | 3 | AFC Loop Gain Control | Common/DVD Progressive | | 02 | 01 | | | | | |

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | Common | TV | Video |
|---|---|---|---|---|---|---|---|---|---|---|
| DRC | 00 | MOD | 0 | 3 | DRC Mode (For Evaluation Only) 00 - Normal, 01 - Forced 1250i, 02 - Forced Progressive, 03 - Forced Simple Progressive | | | | | |

| TVG | Functionality | | Initial | Range | Function | Table & Note | Device Name | Initial Value (detailed) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Category | No | Name | | | | | | Common | TV | Video |
| PIP | 00 | PRO | 0 | 1 | Progressive Scan Mode Enable | | SDA9489X | 00 | | |
| | 01 | RED | 0 | 1 | Read Double Mode | | | 00 | | |
| | 02 | FEI | 0 | 3 | Field Select | | | 00 | | |
| | 03 | HPS | 33 | FF | Horizontal Picture Position | | | 33 | | |
| | 04 | VPS | 1B | FF | Vertical Picture Position | | | 1B | | |
| | 05 | HFP | 8 | 0F | Horizontal Fine Positioning | | | 08 | | |
| | 06 | VFP | 0 | 0F | Vertical Fine Positioning | | | 00 | | |
| | 07 | DIS | 0 | 3 | Display Standard | | | 00 | | |
| | 08 | HOS | 0 | 3 | Horizontal Size | | | 00 | | |
| | 09 | VES | 0 | 3 | Vertical Size | | | 00 | | |
| | 0A | FPS | 0 | 3 | Force Parent Standard | | | 00 | | |
| | 0B | HZM | 0 | 7 | Horizontal Zoom | | | 00 | | |
| | 0C | VSP | 1 | 1 | Vertical Sync Pulse Noise Reduction | | | 01 | | |
| | 0D | VDL | 0 | 1F | Vertical Sync Pulse Delay | | | 00 | | |
| | 0E | FRH | 5 | 7 | Frame Width Horizontal | | | 05 | | |
| | 0F | FWV | 2 | 3 | Frame Width Vertical | | | 02 | | |
| | 10 | VRD | 0 | 1 | Reduction | | | 00 | | |
| | 11 | VBK | 0 | 1 | Vertical Blanking | | | 00 | | |
| | 12 | DLY | 1 | F | Select Delay | | | 01 | | |
| | 13 | PCR | 0 | 1 | Position Correction | | | 00 | | |
| | 14 | AGM | 3 | 3 | AGC Mode | | | 03 | | |
| | 15 | AGC | 9 | F | Automatic Gain Control Value | | | 09 | | |
| | 16 | CVB | 0 | 3 | CVBS Select | | | 00 | | |
| | 17 | CPD | 1 | 3 | CLAMPING Duration | | | 01 | | |
| | 18 | CPT | 1 | 3 | CLAMPING Pulse Start | | | 01 | | |
| | 19 | LUM | 0 | 3 | Luminance Offset | | | 00 | | |
| | 1A | PLL | 0 | 3 | Insert PLL Time constant | TV/Video | | | 00 | 00 |
| | 1B | YCD | 8 | F | Y/C Delay | | | 08 | | |
| | 1C | NSR | 0 | 3 | Nosie Reduction for inset Pll | TV/Video | | | 02 | 00 |
| | 1D | LSP | 0 | 1 | Standard Identification Speed | | | 00 | | |
| | 1E | KIL | 2 | 3 | Color Killer Treshold | | | 02 | | |
| | 1F | BGP | 1 | 1 | Burst Gate Position | | | 01 | | |

| TVG | Functionality | | Initial | Range | Function | Table & Note | Device Name | Initial Value (detailed) | | |
|-----|------|------|---------|-------|----------|--------------|-------------|--------|----|-------|
| Category | No | Name | | | | | | Common | TV | Video |
| PIP | 20 | SEC | 1 | 1 | SECAM Identification level | | | 01 | | |
| | 21 | DEM | 1 | 3 | Deemphase Selection | | | 01 | | |
| | 22 | CMA | 0 | 3 | Chroma Bandwith | | | 00 | | |
| | 23 | IFC | 2 | 3 | IF Compensation Filter | | | 02 | | |
| | 24 | HUE | 0 | 1F | Hue | | | 00 | | |
| | 25 | SCA | 6 | 1F | Color Subcarrier Adjustment | | | 06 | | |
| | 26 | CON | 0 | F | Contrast Adjustment | | | 05 | | |
| | 27 | BLR | 0 | F | Blanking Level Red Channel | | | 00 | | |
| | 28 | BRT | 0 | F | Brightness Adjustment | | | 00 | | |
| | 29 | BLG | 0 | F | Blanking Level Green Channel | | | 00 | | |
| | 2A | BIR | 0 | 1 | Blanking Inversion Red Channel | | | 00 | | |
| | 2B | BIB | 0 | 1 | Blanking Inversion Blue Channel | | | 00 | | |
| | 2C | BLB | 0 | F | Blanking Level Blue Channel | | | 00 | | |
| | 2D | INT | 0 | 1 | Refresh Intervall | | | 00 | | |
| | 2E | PKR | 85 | FF | Peak Level Red Channel | | | 85 | | |
| | 2F | PKG | 85 | FF | Peak Level Green Channel | | | 85 | | |
| | 30 | PKB | 85 | FF | Peak Level Blue Channel | | | 85 | | |
| | 31 | FRY | 9 | F | Frame Color Y | | | 09 | | |
| | 32 | OUT | 1 | 1 | Output Format | | | 01 | | |
| | 33 | FRU | 0 | F | Frame Color U | | | 00 | | |
| | 34 | FRV | 0 | F | Frame Color V | | | 00 | | |
| | 35 | SAT | 7 | F | Color Saturation Adjustment | | | 07 | | |
| | 36 | YPK | 3 | 7 | Y Peak Adjustment | | | 03 | | |
| | 37 | YCO | 0 | F | Y Coring Enable | | | 00 | | |
| | 38 | PAL | 3 | 3 | PAL ID Level | | | 03 | | |
| | 39 | POV | 0 | 7 | Position Offset Vertical | | | 00 | | |
| | 3A | POH | 0 | 1F | Position Offset Horizontal | | | 00 | | |
| | 3B | VSH | 0 | 1F | Vertical Shrink | | | 00 | | |
| | 3C | HSH | 0 | 1F | H Shrink | | | 00 | | |
| | 3D | CPL | 1 | 3 | CLAMPING Pulse Length | | | 01 | | |

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | Common | TV | Video | 50TV | 50Video | 50DVD | 60TV | 60Video | 60DVD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| YCT | 00 | TNT | 20 | 3F | Tint Adjustment for NTSC | TV/Video | CXA2163AQ | | 20 | 1F | | | | | | |
| | 01 | PNG | 1 | 1 | PAL/NTSC Gate Width | | | 01 | | | | | | | | |
| | 02 | PNI | 0 | 1 | PAL/NTSC Sensitivity SW | | | 00 | | | | | | | | |
| | 03 | SCL | 5 | 0F | Sub Color Control | 50/60*TV/Video | | | | | 05 | 05 | | 05 | 06 | |
| | 04 | SCT | 7 | 0F | Sub Contrast Control | 50/60*TV/Video | | | | | 07 | 07 | | 07 | 07 | |
| | 05 | SF0 | 2 | 3 | Sharpness Center Ferquency Changing | | | 02 | | | | | | | | |
| | 06 | SEQ | 3 | 3 | Sharpness Equalizer Characteristic | | | 03 | | | | | | | | |
| | 07 | SHG | 7 | 0F | Sharpness Gain Control | 50/60*TV/Video/DVD | | | | | 04 | 06 | 06 | 05 | 08 | 05 |
| | 08 | YOL | 1F | 3F | Y-Output Level Control | | | 1E | | | | | | | | |
| | 09 | BSP | 0 | 3 | Black Stretch Start Point Changing | | | 00 | | | | | | | | |
| | 0A | COL | 10 | 3F | Cb/Cr Output Level Control | | | 13 | | | | | | | | |
| | 0B | DCR | 0 | 3 | DC Restoration Ratio Adjustment | | | 00 | | | | | | | | |
| | 0C | BF0 | 1 | 3 | BPF/TQF F0 Adjustment | | | 01 | | | | | | | | |
| | 0D | BFQ | 2 | 3 | BPF/TQF Q Adjustment | | | 02 | | | | | | | | |
| | 0E | FSW | 1 | 1 | BPF/TQF Switch | | | 01 | | | | | | | | |
| | 0F | SDT | 1 | 1 | SECAM Double Trap Switch | | | 01 | | | | | | | | |
| | 10 | LPF | 1 | 1 | Y/Cb/Cr LPF Switch | | | 01 | | | | | | | | |

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | Common | Multi Comb | 3DComb | S-Input | Others | Video | DVD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| YCT | 11 | YDL | 6 | 0F | Y-DL Time Adjustment | 2Dcomb/3Dcomb/S-input/others | | | 06 | 06 | 06 | 06 | | |
| | 12 | BO1 | 7 | 0F | Cb Offset1 Adjustment (main route) | | | 07 | | | | | | |
| | 13 | RO1 | 7 | 0F | Cr Offset1 Adjustment | | | 07 | | | | | | |
| | 14 | CDF | 0 | 7 | V Count Down Frequency Switch | forced 50Hz for no signal | | 00 | | | | | | |
| | 15 | CDM | 0 | 3 | V Count Down Judge Switch | | | 00 | | | | | | |
| | 16 | AFC | 0 | 3 | AFC Sensitivity Switch | (TV/)Video/DVD | | | | | | | 00 | 00 |
| | 17 | MVM | 1 | 1 | Macrovision Mask + AFC Mask | | | 01 | | | | | | |
| | 18 | SRY | 7 | 0F | SECAM R-Y Black Adjustment | | | 07 | | | | | | |
| | 19 | SBY | 1 | 0F | SECAM B-Y Black Adjustment | | | 01 | | | | | | |
| | 1A | BEL | 2 | 3 | SECAM BELL/HPF Switching | | | 02 | | | | | | |
| | 1B | BLF | 0 | 1 | BELL f0 Adjustment | | | 00 | | | | | | |
| | 1C | SVI | 0 | 1 | SECAM V-ID Switch | | | 00 | | | | | | |
| | 1D | SGP | 0 | 3 | SECAM Gate Position Adjustment | | | 00 | | | | | | |
| | 1E | SID | 1 | 1 | SECAM Sensitivity Switch | except SECAM | | 01 | | | | | | |
| | 1F | SIH | 0 | 1 | SECAM Inhibition Switch | | | 00 | | | | | | |
| | 20 | STP | 0 | 1 | Y Black Level Setup for PAL Plus | | | 00 | | | | | | |
| | 21 | 3NR | 1 | 1 | 3D NR Operation On/Off | | | 01 | | | | | | |
| | 22 | BW6 | 1 | 1 | 3D NR for 60Hz Non-Bust Signal On/Off | | | 01 | | | | | | |
| | 23 | WSH | 0 | 3 | Sharpness Gain Step for Noise Reduction | | | 00 | | | | | | |
| | 24 | WCO | 0 | 3 | Cb/Cr Output Level Step for Noise Reduction | | | 00 | | | | | | |

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | Common |
|---|---|---|---|---|---|---|---|---|
| SYN | 00 | MAT | 1 | 3 | Select Type of Matrix Conversion | | CXA2151 | 00 |
| | 01 | VFR | 1 | 1 | Select Frequency of Dummy Sync Output | | | 01 |
| | 02 | VTC | 3 | 3 | Sets the V Sync Separation Time Constant | | | 03 |
| | 03 | HWD | 0 | 3 | Sets the SELH_OUT Output Pulse Width | | | 00 |
| | 04 | HSL | 0 | 1 | Sets the Sync Separation Method | | | 00 |
| | 05 | HTC | 0 | 1 | Sets the H Sync Separation Time Constant of YG IN input | | | 00 |
| | 06 | HMA | 1 | 1 | Sets Whether or not to add Hsync Within Vsync at SELH OUT | | | 01 |
| | 07 | MAC | 1 | 1 | Switch for Eliminating the Macrovision signal of the 525P Signal | | | 01 |
| | 08 | GSL | 1 | 3 | Selects the Gain or Mute of the Signal Output to SELCR OUT | | | 01 |
| | 09 | CBG | 7 | 0F | SELCB OUT Gain Control | | | 07 |
| | 0A | CRG | 7 | 0F | SELCR OUT Gain Control | | | 07 |
| | 0B | YG | 7 | 0F | SELY OUT Gain Control | | | 07 |
| | 0C | HFR | 1 | 3 | Select the Frequency of the Dummy Sync Output to SELH OUT | | | 01 |

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | Common | Dynamic | Standard/-Drama | Hi-Fine/-Soft | Dyna bsw | Drama bsw | Soft bsw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AP2 | 00 | BBS | 3 | 0F | Bass Boost Setting | | NJW1139 | 03 | | | | | | |
| | 01 | BCB | 0 | 1 | Boost/Cut Sub-Bass | | | 00 | | | | | | |
| | 02 | SBS | 0 | 3 | Sub-Bass Setting | | | 00 | | | | | | |
| | 03 | BCT | 0 | 1 | Boost/Cut Sub-Treble | | | 00 | | | | | | |
| | 04 | STS | 0 | 3 | Sub-Treble Setting | | | 00 | | | | | | |
| | 05 | AGL | 0 | 3 | AGC Level Setting | | | 00 | | | | | | |
| | 06 | BSW | 0 | 1 | Bass Boost Switch | | | 00 | | | | | | |
| | 07 | BAS | 14 | 1F | Bass Sound mode Control | S. Mode but personal with BBS ON/OFF | | | 14 | 10 | 10 | 12 | 01 | 01 |
| | 08 | TRE | 16 | 1F | Treble Sound mode Control | S. Mode but personal with BBS ON/OFF | | | 16 | 16 | 10 | 16 | 16 | 10 |
| | 09 | BBE | 48 | FF | BBE Sound mode Control | S. Mode but personal with BBS ON/OFF | | | 48 | 3A | 00 | 48 | 3A | 00 |

| TVG | Functionality | | Initial | Range | Function | Table & Note | Device Name | Common |
|---|---|---|---|---|---|---|---|---|
| Category | No | Name | | | | | | |
| MSP | 00 | WST | 15 | FF | W/G Stereo Threshold | | MSP3415D | 15 |
| | 01 | WBT | EC | FF | W/G Bilingual Threshold | | | EC |
| | 02 | WLL | 5 | FF | W/G Monaural Threshold | | | 05 |
| | 03 | WAC | 1 | 0F | W/G Agreement Count | | | 01 |
| | 04 | WDL | 30 | FF | W/G Search Delay | | | 30 |
| | 05 | NDL | 20 | FF | NICAM Search Delay | | | 20 |
| | 06 | SDL | 10 | FF | Stereo Status Read Delay | | | 10 |
| | 07 | AGC | 1 | 1 | AGC Switch Auto/Constant | | | 01 |
| | 08 | REL | 28 | 3F | AGC Gain at Constant Mode | | | 28 |
| | 09 | CRM | 0 | 1 | Carrier Muting On/Off | | | 00 |
| | 0A | ACO | 1 | 1 | Audio Clock Out On/Off | | | 01 |
| | 0B | FP | 1B | 7F | FM Prescale for Non-M System | | | 1B |
| | 0C | FPM | 32 | 7F | FM Prescale for M system | | | 32 |
| | 0D | FH | 36 | 7F | FM prescale for HDEV | | | 36 |
| | 0E | FHM | 65 | 7F | FM prescale for HDEV and M | | | 65 |
| | 0F | WGP | 1C | 7F | W/G Prescale | | | 1C |
| | 10 | NIP | 7F | 7F | NICAM Prescale | | | 7F |
| | 11 | ERR | 50 | FF | Auto FM Switch Threshold | | | 50 |

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | Common | Dynamic | Standard-/Drama | Hi-Fine/-Soft | Personal |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LTI | 00 | LDH | 1 | 1 | Histogram segment Selection | | TDA9178 | 01 | | | | |
| | 01 | CFS | 1 | 1 | Contour Filter Selection | | | 01 | | | | |
| | 02 | WLB | 0 | 1 | Letterbox Window Switch | | | 00 | | | | |
| | 03 | VDC | 1 | 1 | Video Dependent Coring | Picture Mode | | | 01 | 01 | 01 | 01 |
| | 04 | DEM | 0 | 1 | Demonstration Mode | | | 00 | | | | |
| | 05 | CDP | 4 | 07 | Luminance Delay | | | 04 | | | | |
| | 06 | OSP | 0 | 1 | Overrule Smart Peaking | | | 00 | | | | |
| | 07 | WPO | 0 | 1 | White Point Stretch Off | | | 00 | | | | |
| | 08 | DSK | 0 | 1 | Skin Tone Switch | Picture Mode | | | 00 | 00 | 00 | 00 |
| | 09 | ASK | 0 | 1 | Skin Tone Angle Selection | | | 00 | | | | |
| | 0A | WSK | 0 | 1 | Skin Tone Width Selection | | | 00 | | | | |
| | 0B | SSK | 0 | 1 | Skin Tone Size Selection | | | 00 | | | | |
| | 0C | DGR | 1 | 1 | Green Enhancement Switch | Picture Mode | | | 01 | 01 | 00 | 01 |
| | 0D | DGT | 7 | 7 | Threshold of Green Enhancement Switch | | | 07 | | | | |
| | 0E | GGR | 0 | 1 | Green Enhancement Gain | | | 00 | | | | |
| | 0F | WGR | 0 | 1 | Green Enhancement Width | | | 00 | | | | |
| | 10 | SGR | 0 | 1 | Green Enhancement Size | | | 00 | | | | |
| | 11 | DBL | 0 | 1 | Blue Stretch Switch | | | 00 | | | | |
| | 12 | GBL | 0 | 1 | Blue Stretch Gain Selection | | | 00 | | | | |
| | 13 | SBL | 0 | 1 | Blue Stretch Size Selection | | | 00 | | | | |
| | 14 | CDS | 1 | 1 | Color Dependent Sharpness | Picture Mode | | | 01 | 01 | 00 | 01 |
| | 15 | CST | 7 | 7 | Threshold of Color Dependent Sharpness | | | 07 | | | | |
| | 16 | CTI | 1 | 1 | Color Transient Improvement | Picture Mode | | | 01 | 01 | 00 | 00 |
| | 17 | BON | 0 | 1 | Black Offset Compensation | Picture Mode | | | 00 | 00 | 00 | 00 |
| | 18 | BTD | 0 | 3F | Adaptive Black Stretch | Picture Mode | | | 00 | 00 | 00 | 00 |
| | 19 | NLD | 15 | 3F | Non-Linearity Amplifier | Picture Mode | | | 15 | 15 | 00 | 15 |

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | Common | TV | Video | Dynamic | Standard-/Drama | Hi-Fine/-Soft | Personal |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LTI | 1A | NLW | 7 | 7 | Step Width of Non-Linearity Amplifier | | | 07 | | | | | | |
| | 1B | VGD | 1F | 3F | Variable Gamma | Picture Mode | | | | | 22 | 1F | 1F | 1F |
| | 1C | VGW | 0 | 7 | Step Width of Variable Gamma | | | 00 | | | | | | |
| | 1D | PKD | 3F | 3F | Peaking Amplitude | Picture Mode | | | | | 3F | 30 | 0E | 30 |
| | 1E | PKW | 8 | 0F | Step Width of Peaking Amplitude | | | 08 | | | | | | |
| | 1F | SPD | 0 | 3F | Steepness Correction | Picture Mode | | | | | 00 | 00 | 00 | 00 |
| | 20 | CRD | 1B | 3F | Coring Level | Picture Mode | | | | | 16 | 16 | 00 | 16 |
| | 21 | CRW | 9 | 0F | Step Width of Coring Level | | | 06 | | | | | | |
| | 22 | CRO | 6 | 0F | Coring Level Offset for Video Mode | | | 01 | | | | | | |
| | 23 | LWD | 1F | 3F | Line Width Correction | | | 1F | | | | | | |
| | 24 | SNM | 0 | 7 | S/N Mode Under Unreliable S/N Condition | | | 00 | | | | | | |
| | 25 | SNC | 3 | 0F | S/N Ratio Average Counter | TV/Video | | | 03 | 03 | | | | |
| | 26 | FMC | 2 | 0F | Feature Mode Matching Counter | | | 02 | | | | | | |

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | Common | TV | Video | NRmode0 | NRmode1 | NRmode2 | NRmode3 | Dynamic | Standard-/Drama | Hi-Fine/-Soft | Personal |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3CM | 00 | NRM | 0 | 3 | Noise Reduction Operation Mode | | UPD64083 | 00 | | | | | | | | | | |
| | 01 | YCO | 0E | 0F | Y/C Signal Output Selection | | | 0D | | | | | | | | | | |
| | 02 | SYC | 1 | 3 | System Clock Selection | | | 01 | | | | | | | | | | |
| | 03 | STD | 0 | 3 | Standard/Non-Standard Operation Selection | | | 00 | | | | | | | | | | |
| | 04 | MSS | 0 | 3 | Inter-Frame/Inter-Line Operation Selection | | | 00 | | | | | | | | | | |
| | 05 | KIL | 3 | 3 | Killer/Non-Killer Operation Selection | | | 03 | | | | | | | | | | |
| | 06 | ECS | 1 | 3 | External C-Sync Input Selection | | | 01 | | | | | | | | | | |
| | 07 | CPP | 2 | 3 | ADC Input Level & Clump Pulse Width Selection | | | 00 | | | | | | | | | | |
| | 08 | HDP | 5 | 7 | Horizontal Phase Adjustment | | | 05 | | | | | | | | | | |
| | 09 | CDL | 4 | 7 | C-Signal Delay Adjustment | | | 04 | | | | | | | | | | |
| | 0A | DYC | 2 | 0F | DY Delection Coring Level Adjustment | NR Mode (0-3) | | | | | 02 | 02 | 02 | 04 | | | | |
| | 0B | DYG | 0A | 0F | DY Delection Gain Ajustment | NR Mode (0-3) | | | | | 0A | 0A | 0A | 0A | | | | |
| | 0C | DCC | 5 | 0F | DC Detection Coring Level Adjustment | NR Mode (0-3) | | | | | 05 | 03 | 03 | 05 | | | | |
| | 0D | DCG | 5 | 0F | DC Detection Gain Adjustment | NR Mode (0-3) | | | | | 05 | 0A | 0A | 05 | | | | |
| | 0E | YNR | 1 | 0F | YNR Non-Linear Filter Setup | | | 01 | | | | | | | | | | |
| | 0F | CNR | 1 | 0F | CNR Non-Linear Filter Setup | | | 01 | | | | | | | | | | |
| | 10 | WSC | 1 | 3 | Noise Detectin Coring Adjustment | | | 01 | | | | | | | | | | |
| | 11 | VTH | 1 | 3 | Hysteresis Selection for H-Sync Non-Standard | TV/Video | | | 01 | 01 | | | | | | | | |
| | 12 | VTR | 1 | 3 | Sensitivity Selection for H-Sync Non-Standard | TV/Video | | | 01 | 01 | | | | | | | | |
| | 13 | LDR | 2 | 3 | Sensitivity Selection for Frame-Sync Non-Standard | TV/Video | | | 02 | 01 | | | | | | | | |
| | 14 | VAP | 3 | 7 | Gain Adjustment for Vertical Shape Correction | Picture Mode | | | | | | | | | 03 | 00 | 00 | 00 |
| | 15 | VAI | 0C | 1F | Vanishing Adjustment for Vertical Shape Correction | Picture Mode | | | | | | | | | 0C | 00 | 00 | 00 |
| | 16 | YPF | 3 | 3 | Center Frequency Selection for Y-Peaking BPF | Picture Mode | | | | | | | | | 03 | 03 | 03 | 03 |
| | 17 | YPG | 8 | 0F | Gain Adjustment for Y-Peaking BPF | Picture Mode | | | | | | | | | 08 | 08 | 08 | 08 |
| | 18 | VSE | 0A | 0F | Line Comb Filter Setup | | | 0A | | | | | | | | | | |
| | 19 | CCN | 0 | 1 | C-Signal Split Filter Switch | | | 00 | | | | | | | | | | |
| | 1A | COS | 0 | 1 | C-Signal Dealy Switch at Nosie Reduction | | | 00 | | | | | | | | | | |
| | 1B | SDC | 0 | 1 | DC Detection Sensitivity Switch | | | 00 | | | | | | | | | | |
| | 1C | SDY | 1 | 1 | DY Detection Lower-Level Sensitivity Switch | | | 01 | | | | | | | | | | |
| | 1D | YHC | 0 | 3 | Y-Signal Higher-Level Coring Selection | Picture Mode | | | | | | | | | 00 | 00 | 00 | 00 |
| | 1E | YHG | 0 | 1 | Y-Signal Higher-Lever Gain Switch | Picture Mode | | | | | | | | | 00 | 00 | 00 | 00 |
| | 1F | SHT | 0 | 0F | Non-Standard Detection & H/V Counter Test Bits | | | 00 | | | | | | | | | | |
| | 20 | CLK | 8 | 0F | Clock Test Bits | | | 08 | | | | | | | | | | |
| | 21 | PLL | 0D | 0F | PLL Filter Setup | | | 0D | | | | | | | | | | |
| | 22 | KRF | 3 | 0F | Killer Detection Reference Adjustment | | | 03 | | | | | | | | | | |
| | 23 | HSL | 0C | 0F | H-Sync Slice Level Adjustment | | | 0C | | | | | | | | | | |
| | 24 | VSL | 8 | 0F | V-Sync Slice Level Adjustment | | | 08 | | | | | | | | | | |
| | 25 | BPS | 4 | 0F | Internal Burst Gate Start Position Adjustment | | | 04 | | | | | | | | | | |
| | 26 | BPW | 0A | 0F | Internal Burst Gate Width Adjustment | | | 0A | | | | | | | | | | |
| | 27 | ADC | 3 | 3 | ADC Clock Delay Selection | | | 03 | | | | | | | | | | |
| | 28 | APD | 1 | 1 | ADC Power-Down Switch | | | 01 | | | | | | | | | | |
| | 29 | SPD | 2 | 3 | Memory Power-Down Switch | | | 00 | | | | | | | | | | |

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | Common | DVD PROG | 50 | 60 | TV | Video |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Initial Value (detailed) | | | | | |
| 2CM | 00 | FUN | 3 | 3 | Function | | TC90A69N | 03 | | | | | |
| | 01 | YCM | 0 | 3 | Y/C Separator | | | 00 | | | | | |
| | 02 | CNR | 0 | 3 | CNR K | | | 00 | | | | | |
| | 03 | LIM | 0 | 3 | CNR Limit | | | 00 | | | | | |
| | 04 | CPF | 0 | 1 | C-LPF | | | 00 | | | | | |
| | 05 | SLP | 0 | 1 | SelC-LPF | | | 00 | | | | | |
| | 06 | YFO | 0 | 1 | Y-P fo | TV/Video | | | | | | 00 | 00 |
| | 07 | YPG | 1 | 3 | Y-EQ Gain | TV/Video | | | | | | 00 | 02 |
| | 08 | YPL | 1 | 3 | Y-EQ/N.C Limit | TV/Video | | | | | | 00 | 00 |
| | 09 | CLP | 0 | 1 | Pds.Clip | | | 00 | | | | | |
| | 0A | YPF | 1 | 1 | Y-LPF | TV/Video | | | | | | 00 | 00 |
| | 0B | VEG | 3 | 7 | V-Emph Gain | | | 03 | | | | | |
| | 0C | VEN | 3 | 7 | V-Emph N.L | | | 03 | | | | | |
| | 0D | VEC | 2 | 3 | V-Emph Core | | | 02 | | | | | |

| Category | No | Name | Initial | Range | Function | Table & Note | Device Name | Common | DVD PROG | 50 | 60 | TV | Video | NR0, NTSC | NR0, others | NR1, NTSC | NR1, others | NR2, NTSC | NR2, others | NR3, NTSC | NR3, others |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3NR | 00 | WHC | 2F | 3F | PLL Divider Setting (PAL=47, NTSC=44) | 50/60 | TC9OA90F | | | 2F | 2C | | | | | | | | | | |
| | 01 | NIQ | 00 | 01 | U/V Input Polarity | | | 01 | | | | | | | | | | | | | |
| | 02 | CLW | 1E | 3F | A/D Clamp Pulse Width | 50/60 | | | | 0D | 0D | | | | | | | | | | |
| | 03 | CLP | 50 | FF | A/D Clamp Pulse Phase | 50/60 | | | | 50 | 50 | | | | | | | | | | |
| | 04 | YBW | 8A | FF | Y H Blanking Width | 50/60 | | | | 8A | 8A | | | | | | | | | | |
| | 05 | YBL | 00 | 0F | Y Blanking Level Adjustment | | | 00 | | | | | | | | | | | | | |
| | 06 | YBO | 00 | 01 | Internal Y H Blanking On/Off | | | 00 | | | | | | | | | | | | | |
| | 07 | MUT | 00 | 01 | Signal Output Muting | | | 00 | | | | | | | | | | | | | |
| | 08 | YBS | 28 | 7F | Y H Blanking Start Point | 50/60 | | | | 28 | 28 | | | | | | | | | | |
| | 09 | CBW | 8A | FF | U/V H Blanking Width | 50/60 | | | | 8A | 8A | | | | | | | | | | |
| | 0A | CBS | 28 | 7F | U/V H Blanking Start Point | 50/60 | | | | 28 | 28 | | | | | | | | | | |
| | 0B | CBO | 00 | 01 | Internal U/V H Blanking On/Off | | | 00 | | | | | | | | | | | | | |
| | 0C | VBL | 00 | 0F | V H Blanking Level Adjustment | | | 00 | | | | | | | | | | | | | |
| | 0D | UBL | 00 | 0F | U H Blanking Level Adjustment | | | 00 | | | | | | | | | | | | | |
| | 0E | CDL | 00 | 07 | U/V Output Delay | 50/60 | | | | 00 | 00 | | | | | | | | | | |
| | 0F | YDL | 00 | 07 | Y Output Delay | 50/60 | | | | 00 | 00 | | | | | | | | | | |
| | 10 | PVI | 00 | 01 | VD Input Polarity | | | 00 | | | | | | | | | | | | | |
| | 11 | PHI | 00 | 01 | HD Input Polarity | | | 00 | | | | | | | | | | | | | |
| | 12 | HDW | 10 | 3F | HD Pulse Width | | | 10 | | | | | | | | | | | | | |
| | 13 | PVO | 01 | 01 | VD Output Polarity | | | 00 | | | | | | | | | | | | | |
| | 14 | PHO | 01 | 01 | HD Output Polarity | | | 00 | | | | | | | | | | | | | |
| | 15 | HST | 1B | FF | HD Out Pulse Start Position | | | 30 | | | | | | | | | | | | | |
| | 16 | VDL | 00 | 0F | VD Out Pulse Start Position | | | 00 | | | | | | | | | | | | | |
| | 17 | VDW | 03 | 0F | VD Out Pulse Width | | | 03 | | | | | | | | | | | | | |
| | 18 | NDE | 00 | 0F | Noise Detection Point | | | 00 | | | | | | | | | | | | | |
| | 19 | NVP | 02 | 0F | Noise Detect Line | | | 02 | | | | | | | | | | | | | |
| | 1A | NDS | 02 | 03 | Noise Detection Sensitivity | | | 03 | | | | | | | | | | | | | |
| | 1B | HOF | 00 | 01 | H Reference Pulse On/Off (ON=0) | | | 00 | | | | | | | | | | | | | |
| | 1C | NDW | 09 | 0F | Noise Detect Gate Width | | | 09 | | | | | | | | | | | | | |
| | 1D | UOS | 00 | 07 | U Offset Level | | | 04 | | | | | | | | | | | | | |
| | 1E | POT | 00 | 03 | Output Port 0/1 Control | 50/60 | | | | 00 | 00 | | | | | | | | | | |
| | 1F | UVF | 00 | 01 | UV Frag Polarity | | | 00 | | | | | | | | | | | | | |
| | 20 | APC | 00 | 01 | AP Check polarity | | | 00 | | | | | | | | | | | | | |
| | 21 | DAP | 00 | 01 | DAC Power Save (ON=1) | | | 00 | | | | | | | | | | | | | |
| | 22 | YLV | 08 | 0F | Y NR Level | NR0/1/2/3*NTSC/others | | | | | | | | 00 | 00 | 0D | 0D | 0E | 0E | 08 | 08 |
| | 23 | YST | 00 | 01 | Y Standard Detection Off/On | | | 00 | | | | | | | | | | | | | |
| | 24 | YNT | 01 | 01 | Y NTSC Standard Detection | | | 01 | | | | | | | | | | | | | |
| | 25 | YPL | 01 | 01 | Y PAL Standard Detection | | | 01 | | | | | | | | | | | | | |
| | 26 | YMV | 00 | 01 | Y Moving Detection Filter (ON=0) | | | 00 | | | | | | | | | | | | | |

| TVG Category | No | Name | Initial | Range | Function | Table & Note | Device Name | Common | 50 | 60 | NR0, NTSC | NR0, others | NR1, NTSC | NR1, others | NR2, NTSC | NR2, others | NR3, NTSC | NR3, others |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3NR | 27 | YCR | 08 | 1F | Y Moving Detection Coring Level | NR0/1/2/3*NTSC/others | | | | | 00 | 00 | 07 | 07 | 0A | 0A | 00 | 00 |
| | 28 | VOS | 00 | 07 | V Offset Level | | | 04 | | | | | | | | | | |
| | 29 | YMG | 01 | 03 | Y Moving Detection Gain | NR0/1/2/3*NTSC/others | | | | | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| | 2A | YEG | 01 | 01 | Y Moving Detection On (ON=1) | | | 01 | | | | | | | | | | |
| | 2B | YEL | 06 | 0F | Y Edge Moving Detection Sensitivity | NR0/1/2/3*NTSC/others | | | | | 03 | 03 | 03 | 03 | 03 | 03 | 04 | 04 |
| | 2C | YLM | 06 | 7F | Y NR Feed Back Limit Level | NR0/1/2/3*NTSC/others | | | | | 00 | 00 | 04 | 04 | 08 | 08 | 03 | 03 |
| | 2D | CLV | 0A | 0F | C NR Level | NR0/1/2/3*NTSC/others | | | | | 00 | 00 | 09 | 09 | 0B | 0B | 08 | 08 |
| | 2E | CNT | 01 | 01 | Relate C NR to YSTDN | | | 01 | | | | | | | | | | |
| | 2F | CPL | 01 | 01 | Relate C NR to YSTDP | | | 01 | | | | | | | | | | |
| | 30 | CMG | 01 | 03 | C Moving Detection Gain | NR0/1/2/3*NTSC/others | | | | | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| | 31 | CCR | 03 | 1F | C Moving Detection Level | NR0/1/2/3*NTSC/others | | | | | 00 | 00 | 06 | 06 | 0C | 0C | 00 | 00 |
| | 32 | CLM | 06 | 7F | C NR Feed Back Limit Level | NR0/1/2/3*NTSC/others | | | | | 00 | 00 | 05 | 05 | 05 | 05 | 04 | 04 |
| | 33 | NVS | 14 | FF | NR Vertical Start Line | 50/60 | | | 14 | 14 | | | | | | | | |
| | 34 | NHS | 10 | 7F | NR Horizontal Start Position | 50/60 | | | 10 | 10 | | | | | | | | |
| | 35 | NVE | 90 | FF | NR Vertical end Line (offset:+100d) | 50/60 | | | F4 | F4 | | | | | | | | |
| | 36 | NHE | 4E | 7F | NR Horizontal end Position | 50/60 | | | 78 | 78 | | | | | | | | |
| | 37 | YNG | 01 | 03 | Y Coring Gain | 50/60 | | | 01 | 01 | | | | | | | | |
| | 38 | COR | 00 | 01 | Coring/Through (Coring=0) | 50/60 | | | 00 | 00 | | | | | | | | |
| | 39 | LPF | 00 | 01 | LPF On/Off (On=0) | | | 01 | | | | | | | | | | |
| | 3A | YLT | 06 | 0F | Y Coring Limit Level | 50/60 | | | 06 | 06 | | | | | | | | |
| | 3B | YNC | 08 | 0F | Y Coring Offset Level | NR0/1/2/3*NTSC/others | | | | | 08 | 08 | 0C | 0C | 0E | 0E | 08 | 08 |
| | 3C | YCO | 01 | 01 | Y Coring Off (On=1) | 50/60 | | | 00 | 00 | | | | | | | | |

| TVG | Functionality | | Initial | Range | Function | Table & Note | Device Name | Initial Value (detailed) | |
|---|---|---|---|---|---|---|---|---|---|
| Category | No | Name | | | | | | Common | DVD PROG |
| TXT | 00 | TXH | 2A | FF | Teletext Horizontal Position for Phiilips | | SAA5264 | 2A | |
| | 01 | TXV | 27 | 3F | Teletext Vertical Position for Philips | | | 27 | |
| | 02 | THD | 00 | 7F | Teletext H-Sync Active Edge Shift | | | 00 | |
| | 03 | TVD | 00 | 7F | Teletext V-Sync Active Edge Shift | | | 00 | |
| | 04 | HPL | 01 | 01 | Teletext H-Sync Polarity Configuration | | | 01 | |
| | 05 | VPL | 00 | 01 | Teletext V-Sync Polarity Configuration | | | 00 | |
| | 06 | FPL | 01 | 01 | Teletext Field Polarity Configuration | | | 01 | |
| | 07 | FMD | 00 | 03 | Teletext Fastext/TOP Force Mode | | | 00 | |
| | 08 | TBR | 08 | 0F | Teletext RGB Brightness | | | 08 | |
| | 09 | NOP | 01 | 0F | Teletext National Option Table Configuration | | | 01 | |
| | 0A | TCH | 01 | 03 | Teletext Twisted Character Set Configuration | | | 01 | |

| TVG | Functionality | | Initial | Range | Function | Table & Note | Device Name | Initial Value (detailed) | |
|---|---|---|---|---|---|---|---|---|---|
| Category | No | Name | | | | | | Common | DVD PROG |
| OPM | 00 | OSH | 12 | 3F | OSD H Position | TV/Video | CXP750096 | 12 | 0E |
| | 01 | FW1 | 0 | 3F | OSD ODD/EVEN Field Window Setup#1 | | | 00 | |
| | 02 | FW2 | 3 | 3F | OSD ODD/EVEN Field Window Setup#2 | | | 03 | |
| | 03 | COM | 0 | 03 | Comb Operation Selection | | | 00 | |
| | 04 | APC | 1 | 1 | APC Switch | | | 01 | |
| | 05 | TSY | 0 | 03 | TV System Selection Under Searching With Auto TV System | | | 00 | |
| | 06 | MUT | 0 | 1 | No Signal Mute | | | 00 | |
| | 07 | AFM | 1 | 1 | Auto FM Switch | | | 01 | |
| | 08 | TVO | 3 | 7 | V-Angle Correction to Picture Rotation | | | 03 | |
| | 09 | DBL | 0 | 1 | Disable Blueback Function | | | 00 | |
| | 0A | SSO | 1 | 3 | Speed CH Search Selection | | | 01 | |
| | 0B | TRP | 0 | 3F | MPEG/JPEG Noise Reduction for each input | | | 00 | |
| | 0C | SCH | 7F | 7F | CH Selection for Shipping Condition | NTSC Only | | 7F | |
| | 0D | SCA | 1 | 1 | Cable/Air Selection for Shipping Condition | NTSC Only | | 01 | |
| | 0E | VSN | 1 | 1 | Enable Noise Reduction in Video Mode | | | 01 | |
| | 0F | PSQ | 0 | 1 | Power Seq for Continuos Sircs Detection Spec | | | 00 | |
| | 10 | POR | 0 | 1 | Power On Reset Detection From YCT | | | 00 | |
| | 11 | RUC | 0F | 0F | RF Signal Change Counter after Unlocked | disable if set to 0Fh | | 0F | |
| | 12 | RLC | 0F | 0F | RF Signal Change Counter after locked | disable if set to 0Fh | | 0F | |
| | 13 | LBB | 0 | 1 | Lower Blue Back Intensity | | | 00 | |

| TVG | Functionality | | Initial | Range | Function | Table & Note | Device Name | Initial Value (detailed) | |
|---|---|---|---|---|---|---|---|---|---|
| Category | No | Name | | | | | | Common | DVD PROG |
| OPB | 00 | OP1 | E7 | FF | Optional Bits 1 (refer page 34) | | Option-Bits | FF | |
| | 01 | OP2 | 17 | FF | Optional Bits 2 (refer page 34) | | | 94 | |
| | 02 | OP3 | 00 | FF | Optional Bits 3 (refer page 34) | | | 00 | |

Abbreviation
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| VC | = | V-Compressed Mode | NC | = | Non-compressed Mode | ECO | = | Eco Mode |
| Sur | = | Surround | NR | = | Noise Reduction | FF | = | Flicker Free |
| R4 | = | Real 4 | PR | = | Progressive | | | |

**NOTE**

- ▨ shaded items are fixed data.
- ▨ no data.
- Standard data listed on the Adjustment Item Table are reference values, therefore it may be different for each model and for each mode.
- Note for Different Data: The data indicated in the initial colomn are the standard data values written on the microprocessor. Therefore, the data values of the modes are stored respectively in the memory. In case of a device replacement, adjustment by rewriting the data value is necessary for some items.

**OPTION NOTE**

| | | |
|---|---|---|
| COM | Comb Operation Selection | 00 = Auto |
| | | 01 = No comb, |
| | | 02 = Forced 2D comb, |
| | | 03 = Forced 3D comb, |
| TSY | TV System Selection for Auto TV System | 00 = B/G,  01 = I,  10 = D/K,  11 = M |
| SSO | Speed CH Search Selection | 00 = normal,  01 = 4 times,  10 = 6 times,  11 = 8 times |
| TRP | MPEG/JPEG Noise Reduction | |

| Input | – | – | TV | Video 1 | Video 2 | Video 3 | Video 4 | DVD |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**OP1 Items**

| Item | TOP | NICAM | HDEV | Thai Bil. | Sleep Mode | DVD Input | AV Input | | HEX |
|---|---|---|---|---|---|---|---|---|---|
| **KV-DR34M97** | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 6F |

**AV Input**  00 = no AV Input,  01 = 1 AV Input,  10 = 3 AV Input,  11 = 4 AV Input

**OP2 Items**

| Item | PiP Models | Korean Stereo | Vid NTSC3.58 | A-TV sys | US ST | Chinese | Arabic | Thai | HEX |
|---|---|---|---|---|---|---|---|---|---|
| **KV-DR34M97** | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 97 |

| | | | |
|---|---|---|---|
| PiP Models | PiP models | 0 = No PiP, | 1 = PiP |
| Korean Stereo* | Korean Stereo | 0 = disabled, | 1 = enabled |
| Video NTSC3.58* | Video Color System | 0 = Multi System, | 1 = Single System (NTSC3.58) |
| A-TVsys | Auto TV System in Auto Program | 0 = Disabled, 1 = enabled | |
| US ST* | USA Stereo | 0 = disabled, | 1 = enabled |

| OSD Language (Multi) | 000 = English only | 100 = English & Chinese |
|---|---|---|
| | 010 = English & Arabic | 110 = English, Chinese & Arabic |
| | 001 = English & Thai | 101 = English, Chinese & Thai |
| | 011 = English, Arabic & Thai | 111 = English, Chinese, Arabic & Thai |

| OSD Language (NTSC) | 000 = English only | 010 = English & Taiwanese |
|---|---|---|
| | 001 = English & Korean | 011 = English, Taiwanese & Korean |

**OP3 Items**

| Item | N/A | N/A | N/A | N/A | N/A | N/A | Initial menu | Forced 50/60 | HEX |
|---|---|---|---|---|---|---|---|---|---|
| **KV-DR34M97** | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 02 |

| | | | |
|---|---|---|---|
| Forced 50/60* | Forced to 50/60Hz during no signal condition | 0 = 60Hz,  1 = 50Hz | |
| Initial Menu | Activate initial setup or not | 0 = Not active | 1 = Active |

*APPLICABLE FOR NTSC MODELS ONLY

**NOTE**

| No. | Modes | Details | Entry Conditions |
|---|---|---|---|
| 1. | 50NC/60NC | Signal 50/60Hz Non-Compressed mode. | Input 50Hz(PAL)/60Hz(NTSC), wide mode OFF (TV/video mode) |
| 2. | 50VC/60VC | Signal 50/60Hz V-Compressed mode. | Input 50Hz(PAL)/60Hz(NTSC), wide mode ON (TV/Video mode) |
| 3. | ECO ON/OFF NC | Eco modeON/OFF Non-Compressed mode. | ECO mode ON/OFF, wide mode OFF |
| 4. | ECO ON/OFF VC | ECO mode ON/OFF V-Compressed mode. | ECO mode ON/OFF, wide mode ON |
| 5. | 50/60 DVD | Signal 50/60Hz Digital Video Disk | Input 50Hz(PAL)/60Hz(NTSC), DVD |
| 6. | Multi Comb | Multi Comb Filter | Input PAL, NTSC 3.58, Service mode category OPM 03 COM 01 (Multi Model only) |
| 7. | 3D Comb | 3 Dimensional Comb Filter | Input NTSC 3.58 only, Service mode category OPM 03 COM 02 (NTSC model only) |
| 8. | S-Input | S-Video Input | Connect S-Video Cable, video mode |
| 9. | NR0 | | 3D NR mode OFF |
| 10. | NR3 | | 3D NR mode ON and signal level is poor. |
| 11. | NR1 | | 3D NR mode ON and signal level is bad. |
| 12. | NR2 | | 3D NR mode ON and signal level is worst. |

## 6-3. PICTURE QUALITY ADJUSTMENTS

Adjustment condition
1.  Set to service mode.
2.  Set picture mode to HI-FINE.
3.  Set the following condition.

| ECO MODE | : | OFF |
| WIDE MODE | : | OFF |
| DRC-MF | : | DRC1250 |
| 3D-NR | : | ON |

Input signal : Video Color Bar
                     RF Color Bar

MEASUREMENT POINT

A board CN4301
①     R-OUT
⑤     B-OUT

CAUTION
After Adjustment, these adjustment parameters must be recovered to the original condition.

Original Condition

SAJ     00     PIC     28     HI-FINE

|          | 50 TV | 50 VIDEO | 60 TV | 60 VIDEO |
|----------|-------|----------|-------|----------|
| 0E CLO   | 06    | 08       | 09    | 09       |
| 1O HUO   | 05    | 03       | 07    | 06       |

### 6-3(1). DRIVE ADJUSTMENT (VIDEO MODE)

(i) SUB CONTRAST (PAL)

Input signal : PAL Color bar (100%) to Video

Picture : HI-FINE mode

Condition :     SAJ     00     PIC     3F
                    SAJ     02     COL     00
                    JGL     01     RGB     04
Adjusting parameter:
                    YCT     04  SCT

(ii) SUB CONTRAST (NTSC)
Input signal : NTSC Color Bar (75%) to Video
Picture : HI-FINE mode
Condition:     SAJ     00     PIC     3F
                           02     COL     00
                    JGL     01     RGB     04
Adjusting parameter :
                    YCT     04     SCT

### 6-3(2). DRIVE ADJUSTMENT (RF MODE)

(i) SUB CONTRAST (PAL)
Input signal : PAL Color bar (100%) to Video
Condition :     SAJ     00     PIC     3F
                    SAJ     02     COL     00
                    JGL     01     RGB     04

Adjusting parameter:
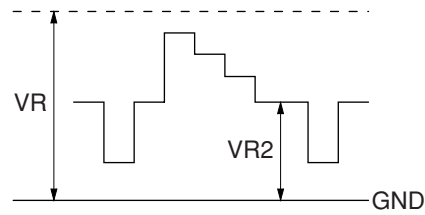                    YCT     04     SCT

(ii) NTSC (RF MODE)
Input signal : NTSC Color Bar (75%) to Video
Condition:     SAJ     00     PIC     3F
                    SAJ     02     COL     00
                    JGL     01     RGB     04
Adjusting parameter :
                    YCT     04     SCT



VR1 - VR2 = ΔVR = 2.35 ± 0.07 (Vp-p) (PAL)
(ΔVR = 1.85 ± 0.07 (Vp-p)-For NTSC)

## 6-4. SUB HUE/COL ADJUSTMENT

### 6-4(1). SUB HUE/SUB COL (VIDEO MODE)
Input signal : NTSC Color bar (75%)
Picture : HI-FINE mode
Condition :     SAJ     00     PIC     3F
                    SAJ     02     COL     1F
                    SAJ     10     HUO     05
                    SAJ     0E     CLO     04
Adjusting parameter:
                    YCT     03     SCL
                    YCT     00     TNT

### 6-4(2). SUB HUE/SUB COL (NTSC RF MODE)
Input signal : NTSC Color bar (75%)
Condition :     SAJ     00     PIC     3F
                    SAJ     02     COL     1F
                    SAJ     10     HUO     05
                    SAJ     0E     CLO     04
Adjusting parameter:
                    YCT     03     SCL
                    YCT     00     TNT



VB1 = VB4 ± 70 mV
VB2 = VB3 ± 70 mV

### 6-4(3). SUB COLOR ADJUSTMENT (PAL RF MODE)
        (Except NTSC models)
Input signal : RF PAL Color bar (100%)
Picture : HI-FINE mode
Condition :     SAJ     00     PIC     3F
                    SAJ     02     COL     1F
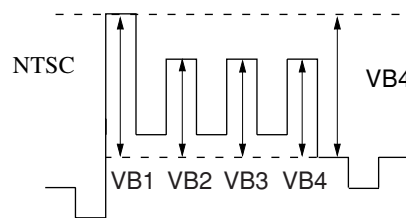                    SAJ     0E     CLO     04
                    SAJ     10     HUO     05
                    JGL     01     RGB     07
Adjusting parameter:
                    YCT     03     SCL
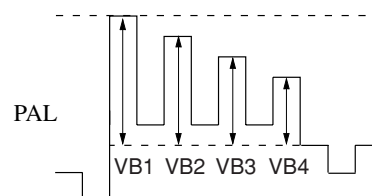


VB2 = VB3 = VB4

## 6-4(4). SUB COLOR ADJUSTMENT (PAL VIDEO MODE)

Input signal : PAL Color bar (100%)
Picture : HI-FINE mode

| Condition : | SAJ | 00 | PIC | 3F |
|---|---|---|---|---|
| | SAJ | 02 | COL | 1F |
| | SAJ | 0E | CLO | 04 |
| | SAJ | 10 | HUO | 05 |
| | JGL | 01 | RGB | 07 |

Adjustment parameter:

| YCT | 03 | SCL |
|---|---|---|

## 6-5.  DEFLECTION ADJUSTMENTS

### FOR DRC 1250 (50Hz) MODE

1. Set to Service Mode.
2. Input a PAL cross hatch/dot signal.
3. Set the following condition.
   Picture Mode to DYNAMIC, Picture Rotation to +/−0 and Eco Mode to OFF.
4. Set to DRC-MF1250 mode.
5. Using the 1 and 4 button, select category GEO (Service Mode).
6. Select and adjust the following items to obtain optimum image. Raise/lower the data using the 3 and 6 buttons.

Service Item

| GEO : | 00 | VSZ | V SIZE |
|---|---|---|---|
| | 01 | VPS | V POSITION |
| | 02 | VLN | V LINEARITY |
| | 03 | SCO | S CORRECTION |
| | 04 | HSZ | H SIZE |
| | 06 | PAP | PIN AMP |
| | 07 | UPN | UPPER CORNER PIN |
| | 08 | LPN | LOWER CORNER PIN CORRECTION POSITION SETTING |
| | 09 | UCG | MOST UPPER CORNER PIN ADJUSTMENT |
| | 0E | PPH | V TRAPEZOID ADJUSTMENT |
| | 0F | AGL | AFC ANGLE |
| | 10 | BOW | AFC BOW |
| | 11 | HTR | V SAW0 WAVE SAW LEVEL GAIN CONTROL |
| | 12 | MPD | MP PARA WAVE DC BIAS CONTROL |
| | 14 | PBP | H CENT PARA WAVE SAW LEVEL GAIN CONTROL |
| | 15 | PBA | H CENT PARA WAVE GAIN CONTROL |
| DAC : | 00 | HCT | H CENTER |
| | 01 | HLN | H LINEARITY |

7. Write into the memory by pressing MUTING then 0 on the remote commander.

### FOR WIDE MODE, DRC1250 (50Hz)

8. Adjust condition change to WIDE MODE : ON.
9. COPY (item FOR DRC 1250 (50Hz) MODE and adjust data for the following items.

Service Item

| GEO : | 00 | VSZ | V SIZE |
|---|---|---|---|
| | 01 | VPS | V POSITION |
| | 04 | HSZ | H SIZE |
| | 12 | MPD | MP PARA WAVE DC BIAS CONTROL |
| | 14 | PBP | H CENT PARA WAVE SAW LEVEL GAIN CONTROL |

10. Adjust V Blanking the following items.

Service Item

| GEO : | 1E | VAS | V ASPECT |
|---|---|---|---|
| | 1F | VSC | V SCROLL |

### FOR DRC 1250 (60Hz) MODE

11. Input 525/60Hz signal.
12. Set to DRC-MF : 1250
13. COPY (item for DRC 1250 (50Hz) mode and adjust data for the following items.

Service Item

| GEO : | 12 | MDP | MP PARA WAVE DC BIAS CONTROL |
|---|---|---|---|
| | 14 | PBP | H CENT PARA WAVE SAW LEVEL GAIN CONTROL |

14. Adjust the following items.

Service Item

| GEO : | 00 | VSZ | V SIZE |
|---|---|---|---|
| | 01 | VPS | V POSITION |
| | 02 | VLN | V LINEARITY |
| | 03 | SCO | S CORRECTION |
| | 04 | HSZ | H SIZE |
| | 05 | HPS | H POSITION |
| | 06 | PAP | PIN AMP |
| | 07 | UPN | UPPER CORNER PIN |
| | 08 | LPN | LOWER CORNER PIN |
| | 09 | UCG | MOST UPPER CORNER PIN ADJUSTMENT |
| | 0E | PPH | V TRAPEZOID ADJUSTMENT |
| | 0F | AGL | AFC ANGLE |
| | 10 | BOW | AFC BOW |
| | 11 | HTR | V SAWO WAVE SAW LEVEL GAIN CONTROL |
| | 15 | PBA | H CENT PARA WAVE GAIN CONTROL |

**FOR WIDE MODE, DRC 1250 (60Hz)**

15. Set to WIDE MODE : ON
16. Copy the DRC 1250 (60Hz) MODE and adjust the following items to obtain optimum image.
    Raise/lower the data with the ③ and ⑥ buttons.

| GEO | 00 | VSZ | V SIZE |
|-----|-----|-----|--------|
|     | 01 | VPS | V POSITION |
|     | 04 | HSZ | H SIZE |
|     | 12 | MPD | MP PARA WAVE DC BIAS CONTROL |
|     | 14 | PBP | H CENT PARA WAVE SAW LEVEL GAIN CONTROL |

17. Adjust V Blanking for the following items.

| GEO | 1E | VAS | V ASPECT |
|-----|-----|-----|----------|
|     | 1F | VSC | V SCROLL |

18. Adjust the following items.

    Service Item

| GEO : | 02 | VLN | V LINEARITY |
|-------|-----|-----|-------------|
|       | 03 | SCO | S CORRECTION |
|       | 05 | HPS | H POSITION |
|       | 06 | PAP | PIN AMP |
|       | 07 | UPN | UPPER CORNER PIN |
|       | 08 | LPN | LOWER CORNER PIN |
|       | 09 | UCG | MOST UPPER CORNER PIN ADJUSTMENT |
|       | 0E | PPH | V TRAPEZOID ADJUSTMENT |
|       | 0F | AGL | AFC ANGLE |
|       | 10 | BOW | AFC BOW |
|       | 11 | HTR | V SAWO WAVE SAW LEVEL GAIN CONTROL |
|       | 15 | PBA | H CENT PARA WAVE GAIN CONTROL |

19. Input a NTSC cross hatch/dot signal and repeat all above steps.

## 6-6. A BOARD ADJUSTMENT AFTER IC003 (MEMORY) REPLACEMENT

1. Enter to Service Mode.
2. Press commander buttons ⑤ and ⓪ (Data Initialize), and ② and ⓪ (Data Copy) to initialize the data.
3. Call each item number and check if the respective screen shows the normal picture.
   In cases where items are not well adjusted, rectify the items with fine adjustment.
   Write the data per each item number (MUTING + ⓪).
4. Select item numbers "OPB00" (OP1), "OPB01" (OP2) and respectively set the bit per model with command buttons ③ and ⑥.
5. Press commander buttons ⑧ and ⓪ (Test Normal) to return to the data that was set on the shipment from the factory. (This will also cancel Service Mode.)

## 6-7. PICTURE DISTORTION ADJUSTMENT (1)

Item Number 00 – 0B

GEO 0   VSZ (V SIZE)

GEO 1   VPS (V POSITION)

GEO 2   VLN (V LINEARITY)

GEO 3   SCO (VERTICAL S-Correction)

GEO 4   HSZ (H SIZE)

GEO 5   HPS (H POSITION)

GEO 6   PAP (PIN AMP)

GEO 07   UPN (UPPER CORNER PIN)
GEO 08   LPN (LOWER CORNER PIN)

GEO 9   TRZ (TRAPEZIUM)

GEO 0A   AGL (AFC.ANGLE)

GEO 0B   BOW (AFC.BOW)

## PICTURE DISTORTION ADJUSTMENT (2)

V SAWO WAVE SAW LEVEL GAIN CONTROL (GEO 11 HTR)

# SECTION 7
# DIAGRAMS

## 7-1. BLOCK DIAGRAM



A (1/3) ( RGB OUT, YCT, COMB FILTER,
VIDEO IN/OUT, COMPONENT I/F )

FROM AV-SW

R-SW L-SW

L IN — L OUT (1)(2) INa

R IN — R OUT (4)(3) INb (40)

IC1205
SW

OUTa (13)
OUTb (28)

IC1207
NJW1139
TONE + BBE + TRUSURROUND

(6) (7)
(2) (1)

IC1200
PRE-AMP

IC2200
HP-AMP

(3) (1)
(5) (7)

CN1193

| 1 | L SP |
| 4 | R SP |
| 6 | L HP |
| 7 | R HP |

} TO SPEAKER

} TO H1 BOARD
CN1932
(HEADPHONE JACK)

L/Ch1 IN (1) (L/Out) Ch1 (12)

R/Ch2 IN (5) (R/Out) Ch2 (7)

MIXER
Q1206

3D/Ch3 IN (2) (3D/Out) Ch3 (11)

| 1 | WOOFER SP |
| 2 | WOOFER SP |

TO WOOFER
BOX

IC1204
AMP

⚠ A (2/3) (AUDIO AMP, AUDIO IN/OUT)

CN1190
TO H1 BOARD

LED R | LED G | SIRCS | KEY 1 IN | KEY 2 IN
1 | 2 | 4 | 9 | 7

⚠ A (3/3) (MAIN MICON, TUVIF)

IC001
MAIN CONTROLLER

CN1160
DEGAUSS | 1

CN1161
+5V ST-BY | 5
+B OCP | 8

61 DEGAUSS        KEY 2 13
62 ST-BY          LED 1 54
6 OVP             LED 2 53
3 OCP             SIRCS 64
                  KEY 1 14

HP-SEL > 7 H SYNC     ATT SW 45
VP-SEL > 8 V SYNC     AGC MONITOR 16 — AGC
R 32 R               AFT 1 17 — AFT 1
G 33 G               AFT 2 18 — AFT 2
B 34 B               F MONO 23 — F MONO
YS    Q002    36 YS   ST 29 — ST
      BUFFER          MSP RESET (SAP) 30 — MSPR
Q001  37 YM           MUTE 31 — (X) → MUTE
INVERTER 35 I
IC002                 Q301, Q313
RESET IC 2   9 RESET  MUTE → STBY MUTE

CN1100
B INT | 2        19 B-INT
SDA | 3  < SDA   SDA1(NVM) 47  5 SDA
SCL | 4  < SCL   SCL1(NVM) 49  6 SCL
TO BUS CONTROLLER

                 SDA 0 48      IC003
                 SCL 0 50      EEPROM
                               (A0-A7)

SCL >
SDA >

R TV
L TV
TV
V6 (STV)

TU101
R OUT
L OUT
DET OUT          Q101 BUFFER
SDA — SDA
SCL — SCL
NC — F MONO
NC — MODE
NC (RESET) — MSPR
PLL-SW — ST
AFT OUT — AFT1
RF AGC — AGC
SDA
SCL

TU3301
DET OUT          Q3300 AMP
AFT OUT — AFT2
SDA
SCL

RF SIGNAL

RF SIGNAL

ANTENNA IN

1
SIGNAL
SPLITTER
CP1300

YS > G > R > B

KV-DR34M97
RM-991

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⚠ B3 (DIGITAL REALITY CREATION-MF, 3D NOISE REDUCTION)

IC602
16M BIT SDRAM

2.5V  3.3V

IC801
4M BIT SDRAM

IC601

DRC 1 CHIP
(CXD2095AQ)

DRC PROCESS

525i → 525p
525i → 1050i
625i → 625p
625i → 1250i

V

Y

Cr-Y

Cb-Y

LPF

Y

Cr-Y

Cb-Y

3DNR

IC802
(TC90A90F)

/NT PLL
27M

Y2

H OUT

Y      8

Cr-Y/Cb-Y
        8

13.5MHz

H

V

CKIN
27MHz

HREF

RPLLHD

HREF

54MHz
CLOCK

PLL
TLC2932I

IC603

PLL
TLC2933

IC504

5.0V

IIC BUS EXPANDER
(CXA1875)

IC604

Q901, Q907, FL901
BUFFER & FILTER

Q903, Q909, FL903
BUFFER & FILTER

Q902, Q908, FL902
BUFFER & FILTER

Y

Cr-Y

Cb-Y

IC505
LEVEL
CONVERTER

IC506
LEVEL
CONVERTER

CN502

| 9 | 8 | 37 | 31 | 35 | 33 | 39 | 10 | 14 | 12 |
|---|---|---|---|---|---|---|---|---|---|
| VP 100 OUT | HP 100 OUT | V-PULSE IN | Y-MAIN IN | V-MAIN IN | U-MAIN IN | H-PULSE IN | Y OUT | V OUT | U OUT |

AC IN
CN6604

TH601

CN6603
DGC 3
DGC 1

RY6601

DGC/CHK 2
DGC/CHK 1
CN6602

Q6601
RELAY
DRIVE

RY6603 RELAY

RY6602 RELAY

D6605
MAIN
RECT
DOUBLER

IC6608
COMPARATOR

Q6602
Q6604
Q6605
RELAY
DRIVE

IC6600
SWITCHING
CONTROLLER

Q6600 Switching transistor

Q6603 Switching transistor

T6602 PIT.

26V D6654

12.0V D6639

6.5V D6633

10.5V D6644

+BV D6631

FEEDBACK

Q6610 OCP

FEEDBACK

Q6608 SW

Q6100
STANBY
RECT

Q6100
Q6102
RCC

T6100

+7V D6323 → STANDBY

SWITCHING

STANDBY TRANS

D6108

CN6605
4 STANDBY
8 OCP

CN6606
8 DEGIAUSS

CN6806
HTR 11
AFC PIS 10
GND 9
H PROT 8
V PROT 7
GND 6
V COMP 5
PRE RGB 4
GND 3
HD 2
GND/HD-DC 1

CN6802
MP PARA 10
EW 9
GND 8
DF PARA 7
HC PARA 6
NS 5
V DRV – 4
V DRV + 3
VTIM/GND 2
ABL 1 1

CN6803
PROT 50
ABL 2 49
HD1 48
PRE RGB 47
HD2 46
H PROT 45
GND 44
V COMP 43
GND 42
GND 41
H PULSE 40
GND 39
GND 38
HD DC 37
9V 36
HD 35
M PIN 34
GND 33
GND 32
HTR 31
H CENT 30
DF PARA 29
5V 28
MP PARA 27
H LIN 26
HC PARA 25
NC 24
EW 23
VFB 22
GND 21
–15V 20
GND 19
12V 18
10.5V 18
10.5V 17
DF DRIVE 16
GND 15
15V PULSE 14
N/S 13
12V 12
GND 11
GND 10
SCL 9
SDA 8
NC 7
NC 6
135V 5
135V 4
NC 3
NC 2
PROT 1

V PROT
Q6819, Q6820

V. OUT
IC6800

PUMP UP
Q6801

H OUT DRIVE Q6806
HDT T6804
PIN OUT Q6808

H OUT DRIVE Q6805
HDT T6802
PIN OUT Q6807

H CLAMP Q6803, 4
T6800
H-C OUT Q6802

PROT Q6800

M.PIN CUT Q5803

H L IN OUT Q5810

V DET PROT Q6821

D6830

+135V

–15V RECT D6817 D6824

+15V RECT D6816

+200V RECT D6813

CN6803 34 M. PIN
M PIN OUT Q6809

CN6803 25 H L IN
H L IN OUT Q6810

+200V

–15V

+15V

T6803

DFT T6801
DF DAMP Q5821

CN6801
V+ 6
V– 5
4
3
2
H+ 1

V. DY
V. DY
H. DY
H. DY
H. DY
H. DY

DY

200V 1 TO C BOARD
H1 2 CN9002

→ TO PICTURE TUBE HV

FOCUS TO C BOARD J9001

G2 TO C BOARD CN9007

⚠ **D (POWER SUPPLY, DEFLECTION HV)**

HD
EW

⚠ D5(DEFLECTION CONTROL CIRCUIT)

CN6101
8P
WHT
: S-MICRO

| 8 | 9V |
| 7 | GND |
| 6 | N.C. |
| 5 | QP (–) |
| 4 | N.C. |
| 3 | QP (+) |
| 2 | N.C. |
| 1 | 135V |

CN6102
3P
BLK
: S-MICRO

| 3 | ROT COIL (+) |
| 2 | NC |
| 1 | NOT COIL (–) |

DQP DRIVE
Q6107
2SB1142-T

IC6501
LA6510 N/S-OUT

IC6205
CXA1875AM
DAC CONT

QPDV — VCC
QPAV — SCL
HCENT — SDA
HLIN — SAD 2
DFPH — SDA 1
QPPH — SDA 0
HTR — SW3
GND — SW2

IC6100
UPC-5023
DF/DQP
CONTROL

DFD, GND, HPIN, GND, OP6P, OP6M, OP6O, VCC1, DQPPOA, DQPVMA, DQPVM
ISEL, HSAW IN, HSAW, GND, DQPD, 9VD, VCC2, DQPHA, DFPHA, DQPAA, NC

Q6104
IRF1720-LF49
DQP (DC)
DRIVE

IC6401
LM393N
HD COMP

IC6201
LM393N
M. PIN CONP

H LIN, DRIVE
Q6213/Q6212
MSD601-RT1/
2PB709AR

H SIZE DETECT
Q6418/D6411
C6427

IC6402
UPC1898
HIP SYSTEM CONTROL

HD IN — VCC
SAW 1 — HD1 OUT
SAW 2 — HD2 OUT
SAW 3 — SS
FH SELECT — HD1 DELAY SET
VRFF — DUTY
HST — PROT REF
EW — DY
HS AMP OUT — PIN OUT
HS CONT — LIMIT TIME
CENT — +B SENSE
L IN PARA — PWMSAW
CENT OUT — MP PARA
L IN OUT — H PULSE
GND — MP OUT

PROT DETECT
Q6414/Q6415
2PB709AR/
MSD601-RT

HDI. DRIVE
Q6413/Q6412
MSD601-RT1/
2PB709AR

HDZ. DRIVE
Q6410/Q6409
MSD601-RT1/
2PB709AR

HZ00MING /PIN. CONTROL
Q6422/Q6423/Q6424
Q6425
Q6417/Q6419/Q6420
Q6421/others

H PIN DRIVE
Q6215/Q6216
MSD601-RT1/
2PB709AR

CN6100
50P

| 1 | PROT |
| 2 | NC |
| 3 | NC |
| 4 | 135V |
| 5 | 135V |
| 6 | NC |
| 7 | NC |
| 8 | SDA |
| 9 | SCL |
| 10 | GND |
| 11 | GND |
| 12 | 12V |
| 13 | N/S |
| 14 | 15V PULSE |
| 15 | GND |
| 16 | DF DRIVE |
| 17 | 10.5V |
| 18 | 10.5V |
| 19 | GND |
| 20 | –15V |
| 21 | GND |
| 22 | VFB |
| 23 | EW |
| 24 | NC |
| 25 | HC PARA |
| 26 | HL IN |
| 27 | MP PARA |
| 28 | 5V |
| 29 | DF PARA |
| 30 | H CENT |
| 31 | HTR |
| 32 | GND |
| 33 | GND |
| 34 | M PIN |
| 35 | HD |
| 36 | 9V |
| 37 | HD DC |
| 38 | GND |
| 39 | GND |
| 40 | H PULSE |
| 41 | GND |
| 42 | GND |
| 43 | V COMP |
| 44 | GND |
| 45 | H PROT |
| 46 | HD2 |
| 47 | PRE RGB |
| 48 | HD 1 |
| 49 | ABL (LARGE) |
| 50 | PROT |

## 7-2. SCHEMATIC DIAGRAMS

**Note:**

- All capacitors are in μF unless otherwise noted.
- All electrolytic capacitors are rated at 50V unless otherwise noted.
- All resistors are in ohms.
  kΩ = 1000Ω, MΩ = 1000kΩ
- Indication of resistance which does not have rating electrical power is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4W (CHIP: 1/10W)

- ⎓⎓⎓ : nonflammable resistor.
- △ : internal component.
- ☐ : panel designation or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B unless otherwise noted.
- **Readings are taken with a color-bar signal input.**
  **no mark : Common**
  **( ) : PAL**
  **[ ] : NTSC 3.58**
- **Readings are taken with a 10Ω digital multimeter.**
- **Voltage are dc with respect to ground unless otherwise noted.**
- **Voltage variations may be noted due to normal production tolerances.**
- **All voltages are in V.**
- **∗ : Cannot be measured.**
- **Circled numbers are waveform references.**
- **▬▬▬ : B + bus.**
- **▪ ▪ ▪ ▪ : B – bus.**
- **⇨ : signal path.**

**Reference information**

| | | |
|---|---|---|
| RESISTOR | : RN | METAL FILM |
| | : RC | SOLID |
| | : FPRD | NONFLAMMABLE CARBON |
| | : FUSE | NONFLAMMABLE FUSIBLE |
| | : RS | NONFLAMMABLE METAL OXIDE |
| | : RB | NONFLAMMABLE CEMENT |
| | : RW | NONFLAMMABLE WIREWOUND |
| | : ∗ | ADJUSTMENT RESISTOR |
| COIL | : LF-8L | MICRO INDUCTOR |
| CAPACITOR | : TA | TANTALUM |
| | : PS | STYROL |
| | : PP | POLYPROPYLENE |
| | : PT | MYLAR |
| | : MPS | METALIZED POLYESTER |
| | : MPP | METALIZED POLYPROPYLENE |
| | : ALB | BIPOLAR |
| | : ALT | HIGH TEMPERATURE |
| | : ALR | HIGH RIPPLE |

**Note: The component identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.**

(1) A Board Schematic Diagrams



A (1/2) (MICON, TUVIF 1&2, REGULATORS, RGB JUNGLE, YCT, AV SW, AUDIO AMP)
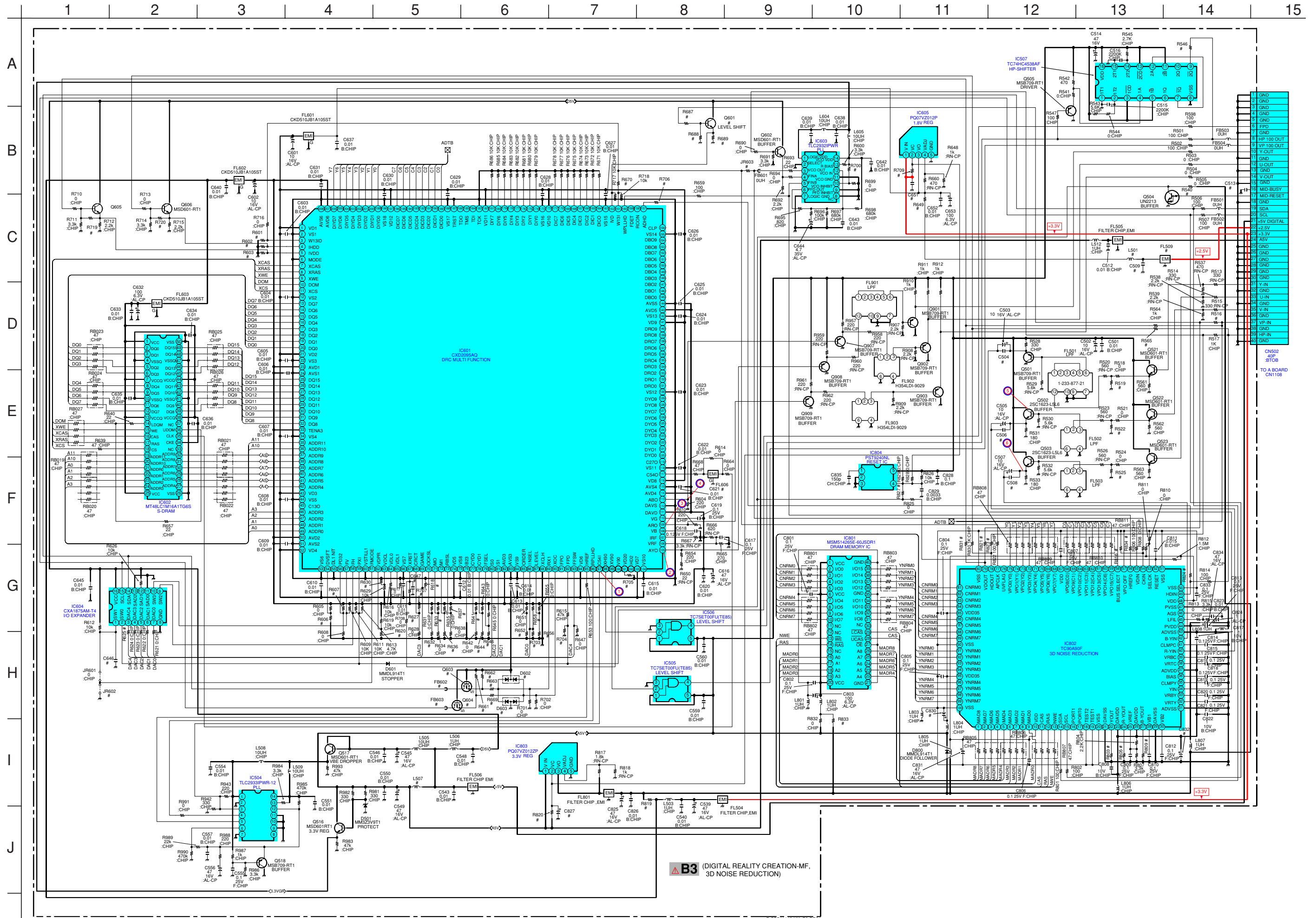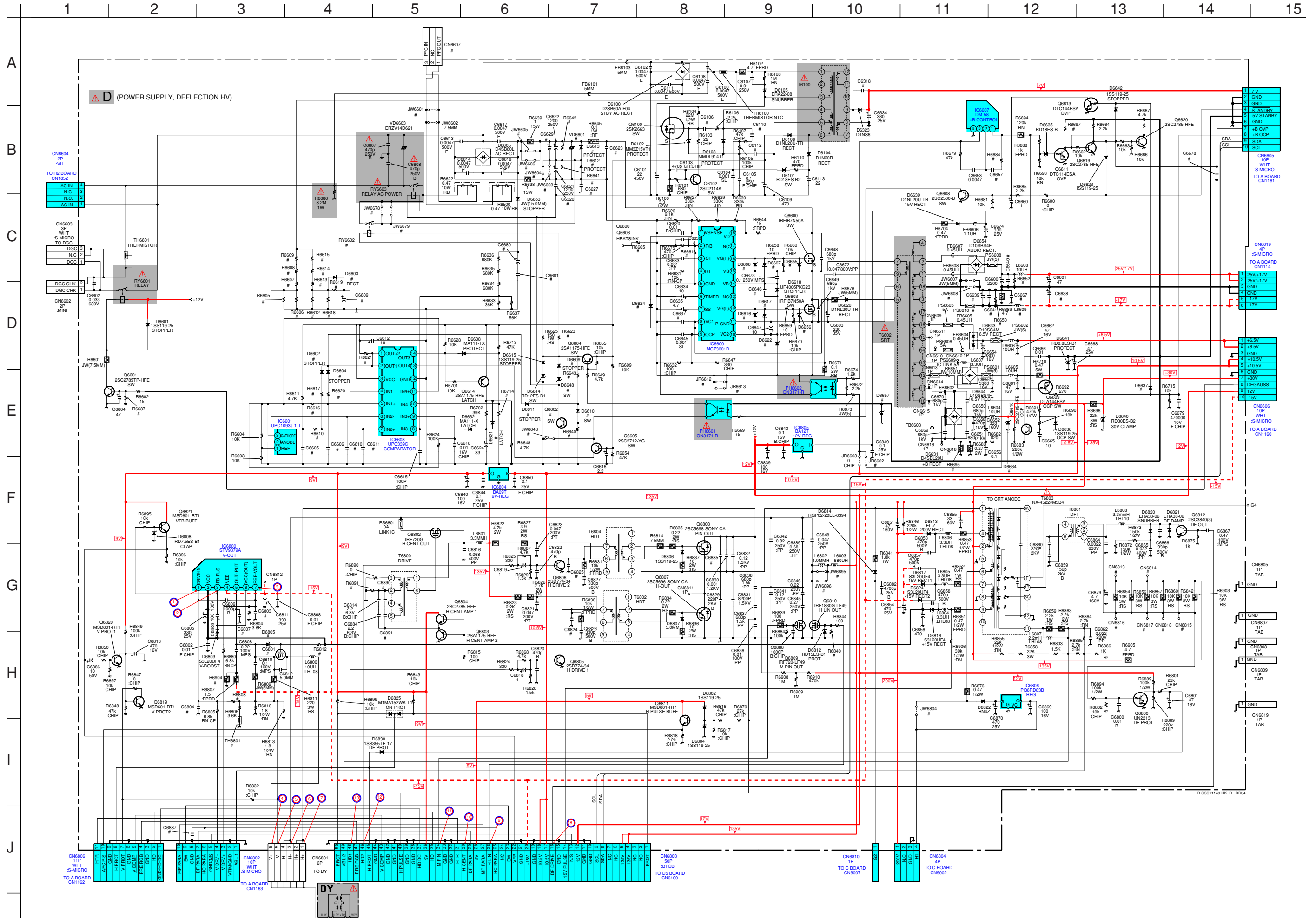
– 50 –                    – 51 –
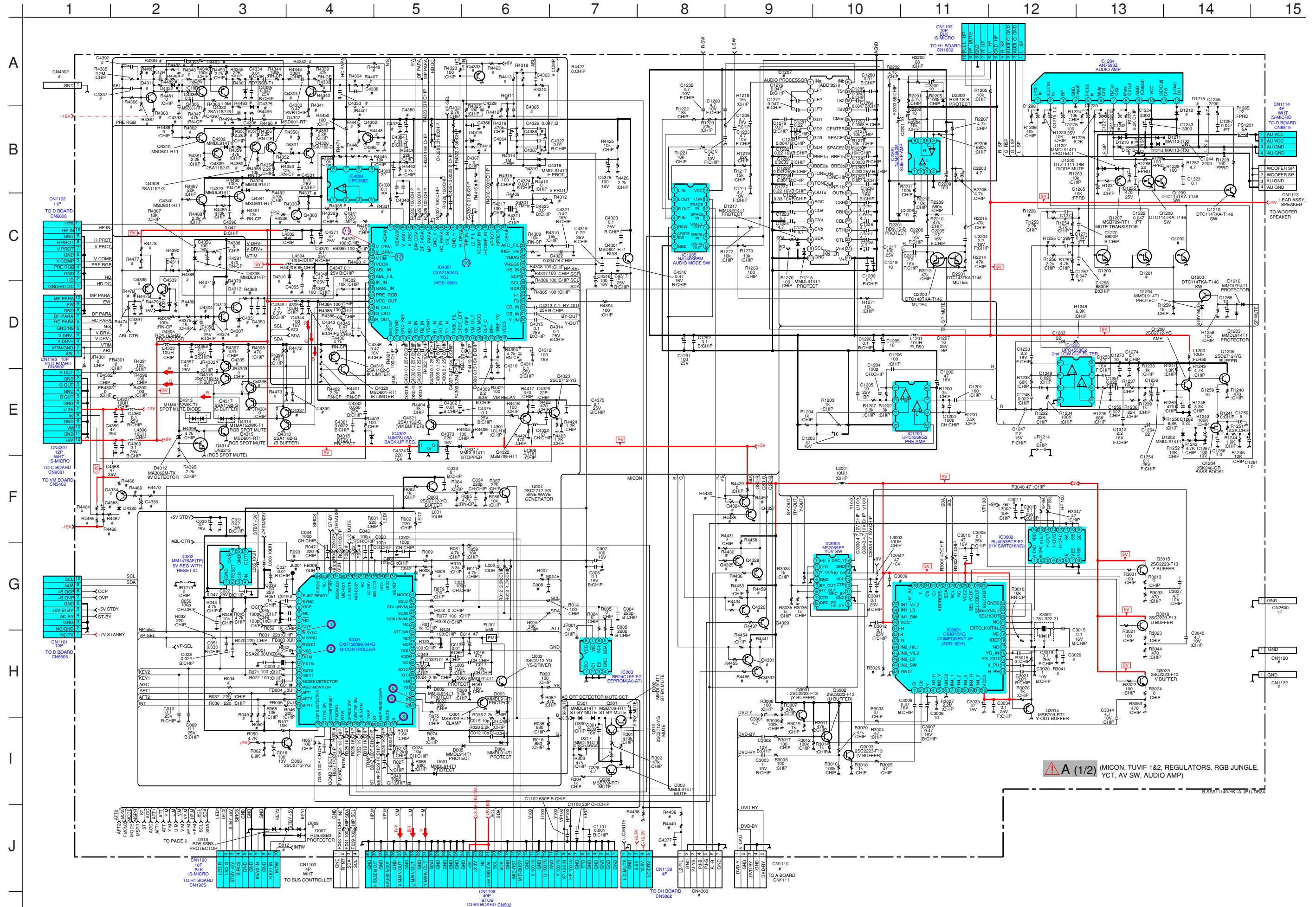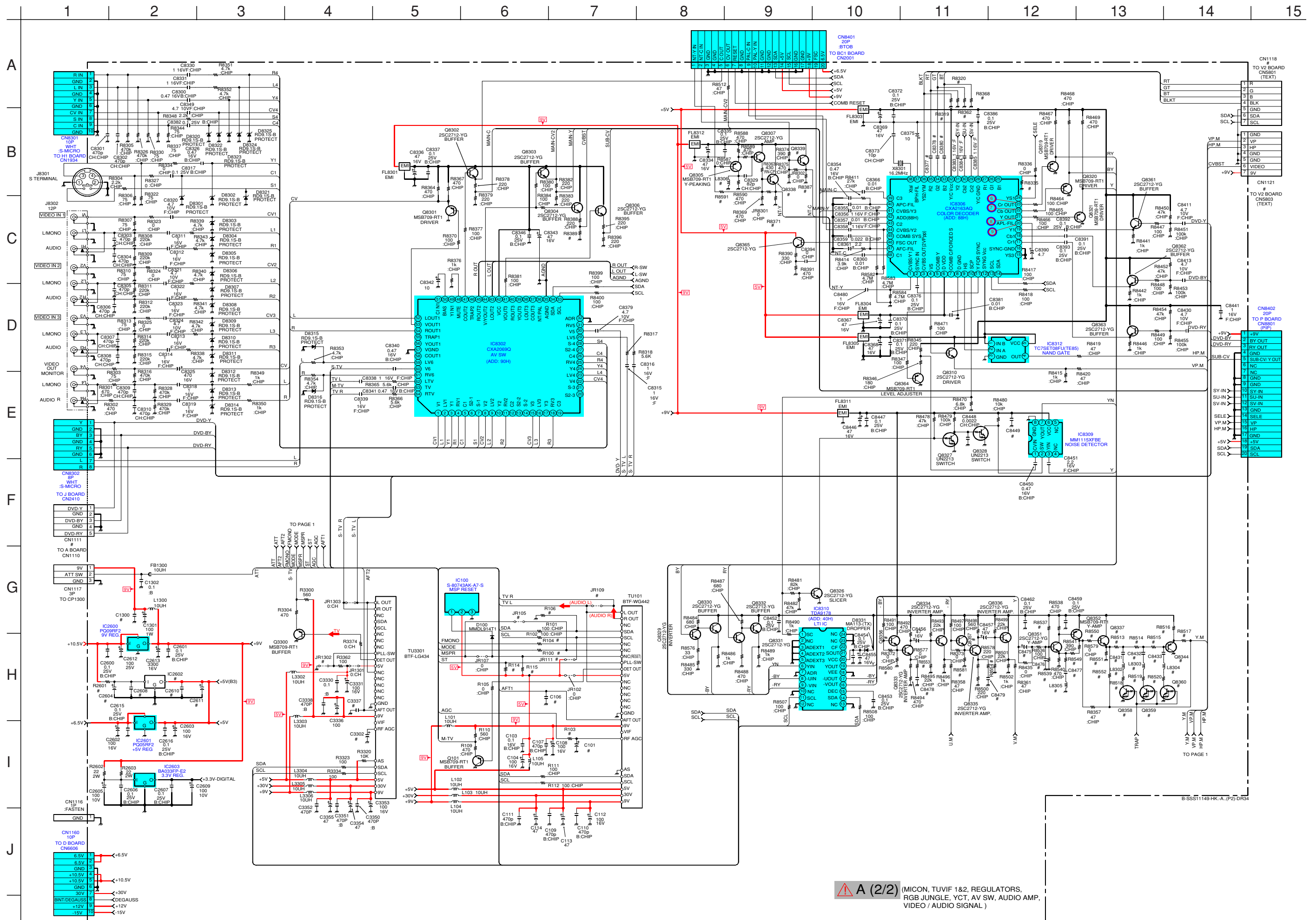
A (2/2) (MICRON, TUVIF 1&2, REGULATORS,
RGB JUNGLE, YCT, AV SW, AUDIO AMP,
VIDEO / AUDIO SIGNAL )

(2) B3 Board Schematic Diagram



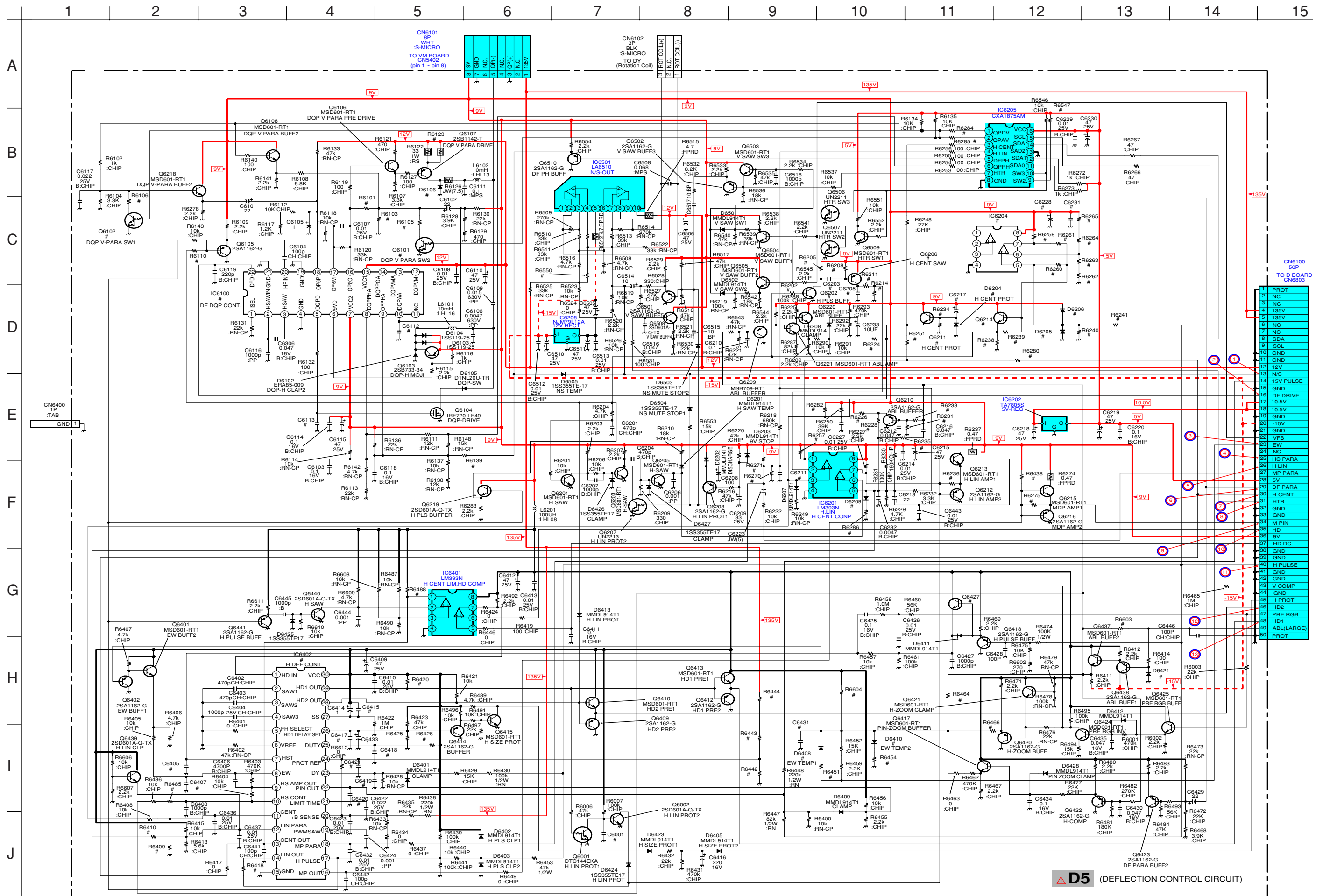B3 (DIGITAL REALITY CREATION-MF, 3D NOISE REDUCTION)

B-SSsT1149-HK-B3-DR34
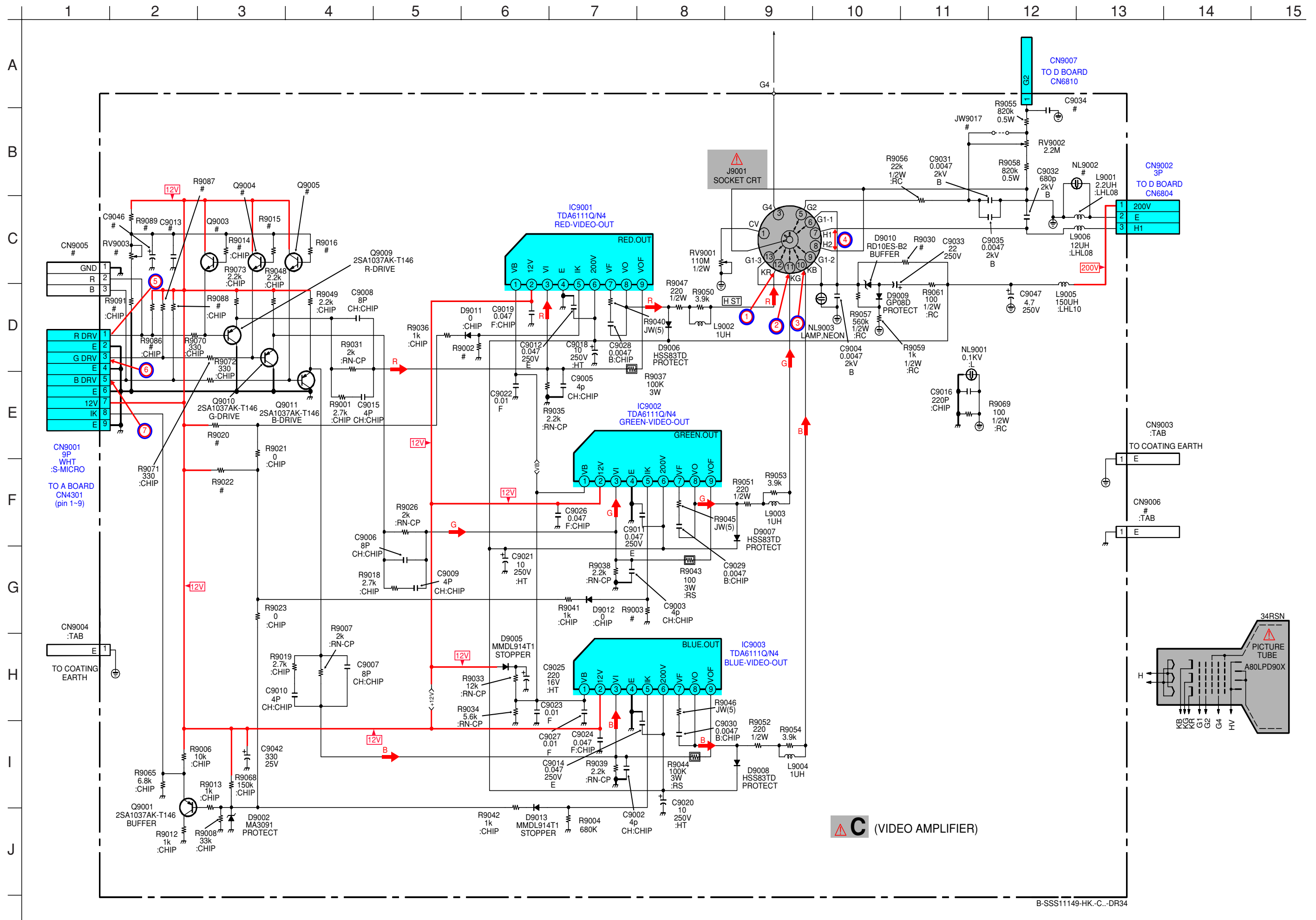
(3) D Board Schematic Diagram

(4) D5 Board Schematic Diagram



△D5 (DEFLECTION CONTROL CIRCUIT)

B-SSS11149-HK.-D5.-DR34

(5) C Board Schematic Diagram

(6) P Board Schematic Diagram

(7) BC1 Board Schematic Diagram
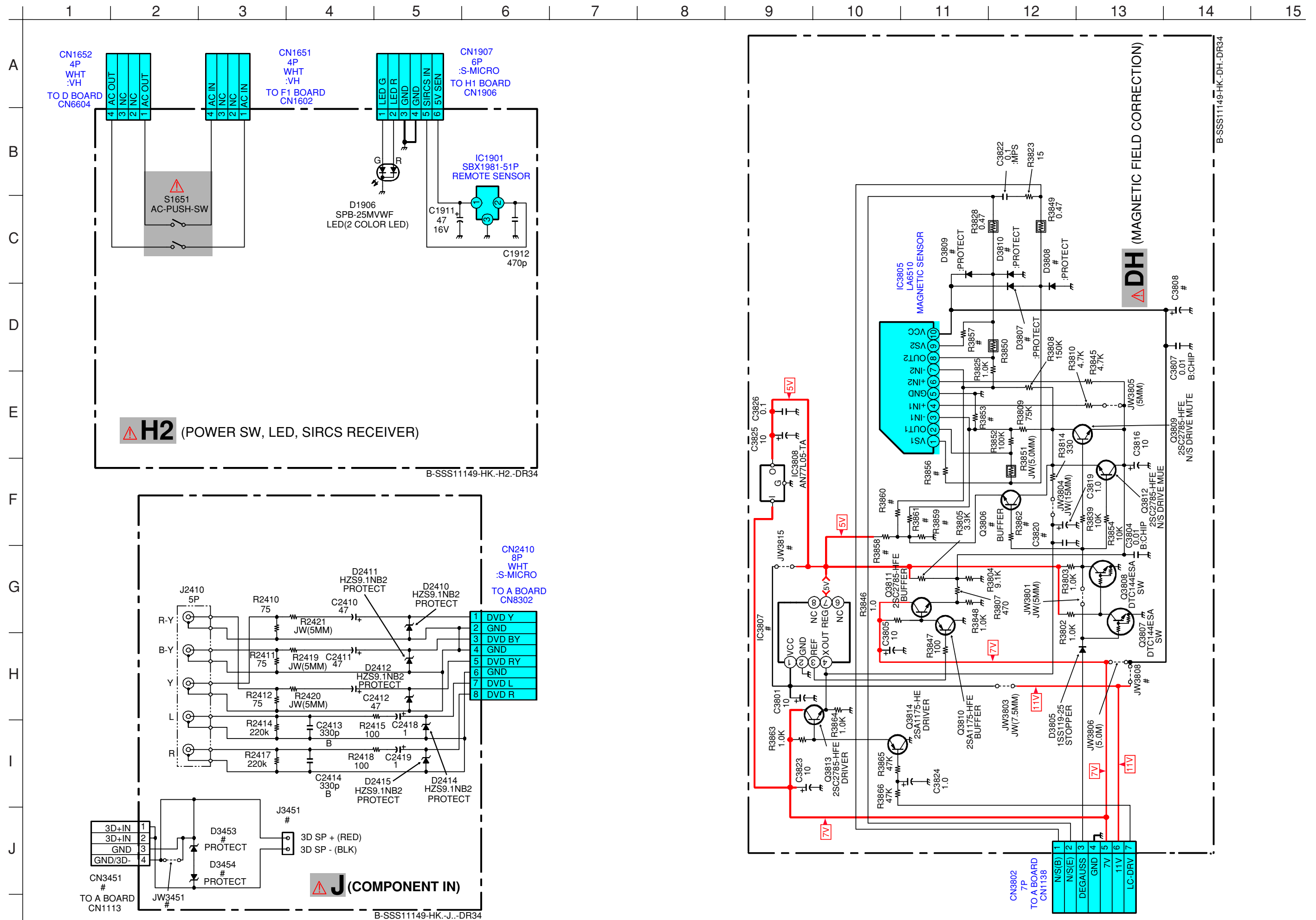
B-SSS11149-HK.-BC1-DR34

(8) H1 Board Schematic Diagram

CN1932
6P
WHT
:S-MICRO
TO A BOARD
CN1193
(pin 5~10)

CN1934
10P
BLK
:S-MICRO
TO A BOARD
CN8301

CN1905
10P
BLK
:S-MICRO
TO A BOARD
CN1190



⚠ **H1** (S-TERMINAL INPUT, AV INPUT, PRESET KEY, PHONE OUT)

B-SSS11149-HK.-H1.-DR34

CN1906
6P
:S-MICRO
TO H2 BOARD
CN1907

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(9) H2, DH and J Boards Schematic Diagrams

CN1652
4P
WHT
:VH
TO D BOARD
CN6604

4 AC OUT
3 NC
2 NC
1 AC OUT

CN1651
4P
WHT
:VH
TO F1 BOARD
CN1602

4 AC IN
3 NC
2 NC
1 AC IN

CN1907
6P
:S-MICRO
TO H1 BOARD
CN1906

1 LED G
2 LED R
3 GND
4 GND
5 SIRCS IN
6 5V SEN

S1651
AC-PUSH-SW

IC1901
SBX1981-51P
REMOTE SENSOR

D1906
SPB-25MVWF
LED(2 COLOR LED)

C1911
47
16V

C1912
470p

⚠ **H2** (POWER SW, LED, SIRCS RECEIVER)

B-SSS11149-HK.-H2.-DR34

J2410
5P

R-Y
B-Y
Y
L
R

R2410 75
R2421 JW(5MM)
C2410 47
D2411 HZS9.1NB2 PROTECT
D2410 HZS9.1NB2 PROTECT

R2411 75
R2419 JW(5MM)
C2411 47
D2412 HZS9.1NB2 PROTECT

R2412 75
R2420 JW(5MM)
C2412 47

R2414 220k
C2413 330p B
R2415 100
C2418 1

R2417 220k
C2414 330p B
R2418 100
C2419 1
D2415 HZS9.1NB2 PROTECT
D2414 HZS9.1NB2 PROTECT

CN2410
8P
WHT
:S-MICRO
TO A BOARD
CN8302

1 DVD Y
2 GND
3 DVD BY
4 GND
5 DVD RY
6 GND
7 DVD L
8 DVD R

3D+IN 1
3D+IN 2
GND 3
GND/3D- 4

D3453 # PROTECT
D3454 # PROTECT

J3451 #
3D SP + (RED)
3D SP - (BLK)

⚠ **J** (COMPONENT IN)

CN3451 #
TO A BOARD
CN1113

JW3451 #

B-SSS11149-HK.-J..-DR34

⚠ **DH** (MAGNETIC FIELD CORRECTION)

B-SSS11149-HK.-DH.-DR34

IC3805
LA6510
MAGNETIC SENSOR

C3822 0.1 :MPS
R3823 15

R3828 0.47
R3849 0.47

D3809 # :PROTECT
D3810 # :PROTECT
D3808 # :PROTECT

C3808 #

VCC
VS2
OUT2
-IN2
+IN2
GND
+IN1
-IN1
OUT1
VS1

R3857 #
R3850 #
D3807 :PROTECT
R3808 150K
R3810 4.7K
R3845 4.7K

C3807 0.01 B.CHIP

R3825 1.0K
R3809 75K
R3853 #

JW3805 (5MM)

R3852 100K
R3851 JW(5.0MM)
R3814 330

C3816 10

R3856 #

Q3809 2SC2785-HFE N/S DRIVE MUTE

5V
C3825 10
C3826 0.1

IC3808
AN77LU05-TA

JW3815

5V

R3860 #
R3861 #
R3859 #
R3805 3.3K
Q3806 BUFFER
R3862 #
C3820

JW3804 JW(15MM)
C3819

R3839 10K
R3854 10K
C3804 0.01 B.CHIP

Q3812 2SC2785-HFE N/S DRIVE MUE

5V

R3858 #
Q3811 2SC2785-HFE BUFFER

C3805 10

R3807 470
R3848 1.0K
R3804 9.1K

JW3801 JW(5MM)

R3803 1.0K
Q3808 DTC144ESA SW

IC3807 #

8 NC
1 VCC
2 GND
3 REF
5 XOUT

REG
9 NC
5V

Q3810 2SA1175-HFE BUFFER

R3847 100
R3802 1.0K

JW3803 JW(7.5MM)
D3805 1SS119-25 STOPPER
JW3806 (5.0M)

Q3807 DTC144ESA SW

7V

11V

C3801 10

Q3814 2SA1175-HE DRIVER

JW3808 #

R3863 1.0K
Q3864 R3864 1.0K

R3846 1.0

7V

C3823 10
Q3813 2SC2785-HFE DRIVER

R3865 47K

Q3866 47K

C3824 1.0

R3866 47K

C3824 1.0
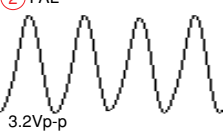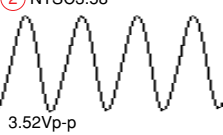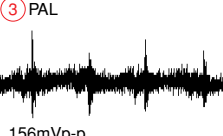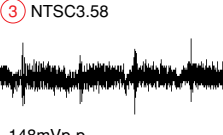
7V
11V

CN3802
7P
TO A BOARD
CN1138

1 N/S(B)
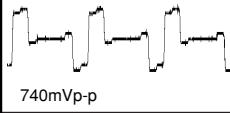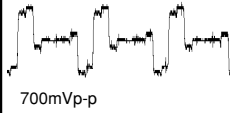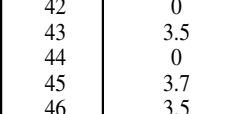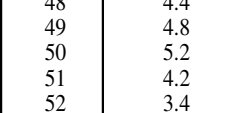2 N/S(E)
3 DEGAUSS
4 GND
5 7V
6 11V
7 LC-DRV

(10) F1 and VM Boards Schematic Diagrams

**F1** (AC LINE FILTER)

B-SSS11149-HK.-F1.-DR34

**VM** (VELOCITY MODULATION)

B-SSS11149-HK.-VM.-DR34

## 7-3. VOLTAGE LIST AND WAVEFORM

A BOARD VOLTAGE LIST AND WAVEFORM

| Ref | Pin No. | Voltage[v] |
|-----|---------|------------|
| IC001 | 1 | 4.9 |
| | 2 | 5.0 |
| | 3 | 0 |
| | 4 | 0 |
| | 5 | 0 |
| | 6 | 0 |
| | 7 | 0.4 |

① 5.2Vp-p

| Ref | Pin No. | Voltage[v] |
|-----|---------|------------|
| | 8 | 0 |
| | 9 | 4.9 |
| | 10 | 0 |
| | 11 | 2.3 |

② PAL 3.2Vp-p

② NTSC3.58 3.52Vp-p

| Ref | Pin No. | Voltage[v] |
|-----|---------|------------|
| | 12 | 2.3 |
| | 13 | 4.9 |
| | 14 | 4.9 |
| | 15 | 0.3 |
| | 16 | 0.2 |
| | 17 | (2.3)[2.7] |
| | 18 | 2.4 |
| | 19 | 4.9 |
| | 20 | 0 |
| | 21 | 4.9 |
| | 22 | 4.9 |
| | 23 | 0 |
| | 24 | 4.8 |
| | 25 | 0 |
| | 26 | 0 |
| | 27 | 4.9 |
| | 28 | 0 |
| | 29 | 4.7 |
| | 30 | 4.9 |
| | 31 | 4.5 |
| | 32 | 0 |

③ PAL 156mVp-p

③ NTSC3.58 148mVp-p

| Ref | Pin No. | Voltage[v] |
|-----|---------|------------|
| | 33 | 0 |

④ PAL 156mVp-p

④ NTSC3.58 148mVp-p

| Ref | Pin No. | Voltage[v] |
|-----|---------|------------|
| | 34 | 0 |

⑤ PAL 156mVp-p

⑤ NTSC3.58 168mVp-p

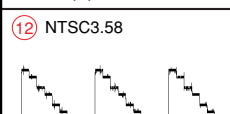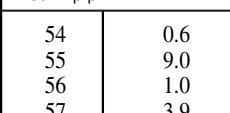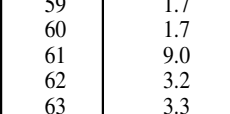| Ref | Pin No. | Voltage[v] |
|-----|---------|------------|
| | 35 | 4.9 |
| | 36 | 0 |
| | 37 | 0 |
| | 38 | 2.4 |
| | 39 | 2.4 |
| | 40 | 4.7 |
| | 41 | 4.9 |
| | 42 | 0 |
| | 43 | 0 |
| | 44 | 0 |
| | 45 | 0 |
| | 46 | 0 |
| | 47 | 4.9 |
| | 48 | 4.4 |
| | 49 | 4.9 |
| | 50 | 4.4 |
| | 51 | 0 |
| | 52 | 0 |
| | 53 | 0 |
| | 54 | 4.5 |
| | 55 | 0 |
| | 56 | 0 |
| | 57 | (0.3)[0.1] |
| | 58 | 0 |
| | 59 | 0 |
| | 60 | 0 |
| | 61 | 0 |
| | 62 | 4.4 |
| | 63 | 0 |
| | 64 | 4.8 |
| IC002 | 1 | 0 |
| | 2 | 4.9 |
| | 3 | 4.9 |
| | 4 | 7.1 |
| | 5 | 4.9 |
| | 6 | 0 |
| | 7 | 0.9 |
| IC003 | 1 | 0 |
| | 2 | 0 |
| | 3 | 0 |
| | 4 | 0 |
| | 5 | 4.9 |
| | 6 | 4.9 |
| | 7 | 0 |
| | 8 | 4.9 |

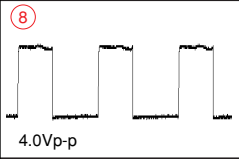| Ref | Pin No. | Voltage[v] |
|-----|---------|------------|
| IC100 | 1 | 4.9 |
| | 2 | 4.9 |
| | 3 | 0 |
| IC1200 | 1 | 4.5 |
| | 2 | 4.5 |
| | 3 | 4.5 |
| | 4 | 0 |
| | 5 | 4.5 |
| | 6 | 4.5 |
| | 7 | 4.5 |
| | 8 | 9.0 |
| IC1203 | 1 | 4.5 |
| | 2 | 4.5 |
| | 3 | 4.4 |
| | 4 | 0 |
| | 5 | 4.4 |
| | 6 | 4.5 |
| | 7 | 4.5 |
| | 8 | 9.0 |
| IC1204 | 1 | 0 |
| | 2 | 0 |
| | 3 | 28.0 |
| | 4 | 0 |
| | 5 | 0 |
| | 6 | 2.1 |
| | 7 | 13.7 |
| | 8 | 2.1 |
| | 9 | 0 |
| | 10 | 29.0 |
| | 11 | 13.7 |
| | 12 | 13.7 |
| IC1205 | 1 | 4.5 |
| | 2 | 4.5 |
| | 3 | 4.5 |
| | 4 | 4.5 |
| | 5 | 4.9 |
| | 6 | 0 |
| | 7 | 0 |
| | 8 | 4.5 |
| | 9 | 4.5 |
| | 10 | 4.5 |
| | 11 | 4.5 |
| | 12 | 0 |
| | 13 | 4.9 |
| | 14 | 9.0 |
| IC1207 | 1 | 4.5 |
| | 2 | 4.5 |
| | 3 | 4.5 |
| | 4 | 4.5 |
| | 5 | 4.5 |
| | 6 | 4.5 |
| | 7 | 4.5 |
| | 8 | 4.5 |
| | 9 | 4.5 |
| | 10 | 4.5 |
| | 11 | 4.5 |
| | 12 | 4.5 |
| | 13 | 4.5 |
| | 14 | 0.6 |
| | 15 | 1.5 |
| | 16 | 1.6 |
| | 17 | 1.7 |
| | 18 | 4.4 |
| | 19 | 4.5 |
| | 20 | 0 |
| | 21 | 9.0 |
| | 22 | 4.5 |
| | 23 | 0 |
| | 24 | 3.4 |
| | 25 | 3.4 |
| | 26 | 3.2 |
| | 27 | 0.6 |
| | 28 | 4.6 |

## A BOARD VOLTAGE LIST AND WAVEFORM

| Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|---|---|---|
|  | 29 | 4.6 |  | 42 | 2.3 |  | 36 | 0.8 |
|  | 30 | 4.5 |  | 43 | 2.3 |  | 37 | 2.9 |
|  | 31 | 4.6 |  | 44 | (1.9)[0] |  | 38 | 2.6 |
|  | 32 | 4.6 |  | 45 | 2.0 |  | 39 | 0.6 |
|  | 33 | 4.5 |  | 46 | (1.0)[0.7] |  | 40 | 2.8 |
|  | 34 | 4.5 |  | 47 | 2.5 |  |  |  |
|  | 35 | 4.5 |  | 48 | 0 |  |  |  |
|  | 36 | 4.5 | IC3002 | 1 | 0 |  |  |  |
|  | 37 | 4.5 |  | 2 | 0 |  |  |  |
|  | 38 | 4.5 |  | 3 | 0.3 |  |  |  |
|  | 39 | 4.5 |  | 4 | 0.3 |  |  |  |
|  | 40 | 4.5 |  | 5 | 0.3 |  |  |  |
| IC2200 | 1 | 4.5 |  | 6 | 0 |  |  |  |
|  | 2 | 4.5 |  | 7 | 0 |  |  |  |
|  | 3 | 4.4 |  | 8 | 0 |  | 41 | 0 |
|  | 4 | 0 |  | 9 | 4.9 |  | 42 | 0 |
|  | 5 | 4.3 |  | 10 | 4.9 |  | 43 | 3.5 |
|  | 6 | 4.4 |  | 11 | 4.9 |  | 44 | 0 |
|  | 7 | 4.5 |  | 12 | 0.3 |  | 45 | 3.7 |
|  | 8 | 9.0 |  | 13 | 0.3 |  | 46 | 3.5 |
| IC2600 | I | 10.7 |  | 14 | 0.3 |  | 47 | 3.8 |
|  | G | 0 |  | 15 | 0 |  | 48 | 4.4 |
|  | O | 9.0 |  | 16 | 9.0 |  | 49 | 4.8 |
| IC2601 | I | 6.3 | IC3003 | 1 | 0 |  | 50 | 5.2 |
|  | G | 0 |  | 2 | 0 |  | 51 | 4.2 |
|  | O | 5.0 |  | 3 | 3.2 |  | 52 | 3.4 |
| IC2602 | I | 9.5 |  | 4 | 0 |  |  |  |
|  | G | 0 |  | 5 | 3.2 |  |  |  |
|  | O | 4.9 |  | 6 | 0 |  |  |  |
| IC2603 | I | 5.8 |  | 7 | 0 |  |  |  |
|  | G | 0 |  | 8 | 4.6 |  |  |  |
|  | O | 3.3 |  | 9 | 4.6 |  |  |  |
| IC3001 | 1 | 2.8 |  | 10 | 0 |  |  |  |
|  | 2 | 2.8 |  | 11 | 4.6 |  |  |  |
|  | 3 | (2.7)[0] |  | 12 | 0 |  | 53 | 3.4 |
|  | 4 | 1.9 |  | 13 | 9.1 |  |  |  |
|  | 5 | 1.9 |  | 14 | 4.6 |  |  |  |
|  | 6 | 0 |  | 15 | 0 |  |  |  |
|  | 7 | (2.7)[2.3] |  | 16 | 0 |  |  |  |
|  | 8 | (2.7)[2.3] | IC4301 | 1 | 0 |  |  |  |
|  | 9 | (2.7)[2.3] |  | 2 | 0 |  |  |  |
|  | 10 | 1.9 |  | 3 | 0 |  | 54 | 0.6 |
|  | 11 | 1.9 |  | 4 | 3.1 |  | 55 | 9.0 |
|  | 12 | 5.0 |  | 5 | 3.1 |  | 56 | 1.0 |
|  | 13 | 4.0 |  | 6 | 3.1 |  | 57 | 3.9 |
|  | 14 | 4.0 |  | 7 | 0 |  | 58 | 4.4 |
|  | 15 | 2.9 |  | 8 | 3.5 |  | 59 | 1.7 |
|  | 16 | 2.7 |  | 9 | 3.5 |  | 60 | 1.7 |
|  | 17 | 0 |  | 10 | 3.5 |  | 61 | 9.0 |
|  | 18 | 1.0 |  | 11 | 0 |  | 62 | 3.2 |
|  | 19 | 0 |  | 12 | 0 |  | 63 | 3.3 |
|  | 20 | (2.9)[2.5] |  | 13 | 0 |  | 64 | 3.4 |
|  | 21 | 0 |  | 14 | 2.5 | IC4302 | I | 9.0 |
|  | 22 | 0.3 |  | 15 | 4.9 |  | G | 0 |
|  | 23 | 0 |  | 16 | 2.5 |  | O | 5.0 |
|  | 24 | 0 |  | 17 | 2.6 |  |  |  |
|  | 25 | 2.8 |  | 18 | 1.1 |  |  |  |
|  | 26 | 2.8 |  | 19 | 4.9 |  |  |  |
|  | 27 | 3.1 |  | 20 | 3.6 |  |  |  |
|  | 28 | 5.0 |  | 21 | 3.4 |  |  |  |
|  | 29 | 0 |  | 22 | 3.4 |  |  |  |
|  | 30 | 4.5 |  | 23 | 5.0 |  |  |  |
|  | 31 | 4.5 |  | 24 | 0 |  |  |  |
|  | 32 | 2.5 |  | 25 | 4.5 |  |  |  |
|  | 33 | 2.9 |  | 26 | 4.5 |  |  |  |
|  | 34 | 2.9 |  | 27 | 0.9 |  |  |  |
|  | 35 | 2.8 |  | 28 | 0.3 |  |  |  |
|  | 36 | 1.3 |  | 29 | 5.0 |  |  |  |
|  | 37 | 1.0 |  | 30 | 5.7 |  |  |  |
|  | 38 | 0.7 |  | 31 | 1.3 |  |  |  |
|  | 39 | 2.5 |  | 32 | 3.1 |  |  |  |
|  | 40 | 5.0 |  | 33 | 1.6 |  |  |  |
|  | 41 | 2.3 |  | 34 | 0 |  |  |  |
|  |  |  |  | 35 | 0.8 |  |  |  |

Waveforms (third column):
- ⑩ PAL — 740mVp-p
- ⑩ NTSC3.58 — 700mVp-p
- ⑪ PAL — 720mVp-p
- ⑪ NTSC3.58 — 660mVp-p
- ⑫ PAL — 1.140Vp-p
- ⑫ NTSC3.58 — 780mVp-p

# KV-DR34M97
**RM-991**

## A BOARD VOLTAGE LIST AND WAVEFORM

### IC4304 / IC8302

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| IC4304 | 1 | 0 |
| | 2 | 0.7 |
| | 3 | 0.8 |
| | 4 | 0 |
| | 5 | 0 |
| | 6 | 1.6 |
| | 7 | 0 |
| | 8 | 9.1 |
| IC8302 | 1 | 3.9 |
| | 2 | 4.4 |
| | 3 | 3.9 |
| | 4 | 4.4 |
| | 5 | 4.4 |
| | 6 | (1.1)[0.7] |
| | 7 | (0)[4.9] |
| | 8 | 3.9 |
| | 9 | 4.4 |
| | 10 | (5.1)[4.8] |
| | 11 | (0)[4.4] |
| | 12 | 4.4 |
| | 13 | (1.0)[0.7] |
| | 14 | 4.9 |
| | 15 | 3.9 |
| | 16 | 4.4 |
| | 17 | (5.0)[4.8] |
| | 18 | 4.4 |
| | 19 | 4.4 |
| | 20 | (1.0)[0.7] |
| | 21 | 4.9 |
| | 22 | 3.9 |
| | 23 | 4.4 |
| | 24 | 3.9 |
| | 25 | 4.4 |
| | 26 | 4.4 |
| | 27 | 0.6 |
| | 28 | 4.9 |
| | 29 | 4.4 |
| | 30 | 3.9 |
| | 31 | 4.4 |
| | 32 | 0 |
| | 33 | 4.4 |
| | 34 | 4.4 |
| | 35 | 0 |
| | 36 | 0 |
| | 37 | 4.4 |
| | 38 | 4.5 |
| | 39 | 3.8 |
| | 40 | 4.5 |
| | 41 | 4.6 |
| | 42 | 9.0 |
| | 43 | 4.5 |
| | 44 | 4.4 |
| | 45 | 4.5 |
| | 46 | 3.7 |
| | 47 | 4.4 |
| | 48 | 0 |
| | 49 | 4.9 |
| | 50 | 4.5 |
| | 51 | 4.4 |
| | 52 | 4.5 |
| | 53 | 4.5 |
| | 54 | 4.5 |
| | 55 | 3.8 |
| | 56 | 3.3 |
| | 57 | 0 |
| | 58 | 4.3 |
| | 59 | 4.4 |
| | 60 | 4.4 |
| | 61 | 4.5 |
| | 62 | 4.5 |
| | 63 | 4.4 |
| | 64 | 4.5 |

### IC8306

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| IC8306 | 1 | 2.2 |
| | 2 | 1.9 |
| | 3 | 1.4 |
| | 4 | 0.1 |
| | 5 | 2.8 |
| | 6 | 4.9 |
| | 7 | 2.5 |
| | 8 | 0 |
| | 9 | 0.3 |
| | 10 | 0.8 |
| | 11 | 2.3 |
| | 12 | 5.0 |
| | 13 | (4.5)[4.3] |
| | 14 | 4.5 |
| | 15 | 0 |
| | 16 | 0 |
| | 17 | 2.5 |
| | 18 | 2.5 |
| | 19 | 1.3 |
| | 20 | 2.3 |

⑨ PAL — 148mVp-p

⑨ NTSC3.58 — 140mVp-p

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| | 21 | 1.7 |

⑧ — 4.0Vp-p

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| | 22 | 1.8 |

⑦ — 1.64Vp-p

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| | 23 | 1.8 |

⑥ — 1.64Vp-p

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| | 24 | 0 |
| | 25 | 0.9 |
| | 26 | 0.9 |
| | 27 | (0.8)[1.0] |
| | 28 | 0 |
| | 29 | 2.5 |
| | 30 | 2.5 |
| | 31 | 1.7 |
| | 32 | 5.0 |
| | 33 | 2.5 |
| | 34 | 2.5 |
| | 35 | 2.5 |
| | 36 | 0 |
| | 37 | 1.1 |
| | 38 | 4.0 |
| | 39 | 1.7 |
| | 40 | 3.2 |

### IC8306 (cont.) / IC8309 / IC8310 / IC8312 / Q-series

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| | 41 | 2.3 |
| | 42 | 0 |
| | 43 | 1.7 |
| | 44 | 2.3 |
| | 45 | 4.5 |
| | 46 | 2.3 |
| | 47 | (0)[3.7] |
| | 48 | 1.7 |
| IC8309 | 1 | 3.0 |
| | 2 | 5.3 |
| | 3 | 2.7 |
| | 4 | 0 |
| | 5 | 0 |
| | 6 | 9.0 |
| | 7 | 2.1 |
| | 8 | 0 |
| IC8310 | 1 | 0.8 |
| | 2 | 0 |
| | 3 | 0 |
| | 4 | 0 |
| | 5 | 0 |
| | 6 | 2.1 |
| | 7 | 0 |
| | 8 | 5.0 |
| | 9 | 5.7 |
| | 10 | 0 |
| | 11 | 4.4 |
| | 12 | 0 |
| | 13 | 0 |
| | 14 | 4.5 |
| | 15 | 5.0 |
| | 16 | 2.7 |
| | 17 | 2.7 |
| | 18 | 0 |
| | 19 | 3.0 |
| | 20 | 8.3 |
| | 21 | 2.4 |
| | 22 | (1.1)[1.7] |
| | 23 | 0 |
| | 24 | 0 |
| IC8312 | 1 | 5.0 |
| | 2 | 0.3 |
| | 3 | 0 |
| | 4 | 0.3 |
| | 5 | 5.0 |
| Q001 | B | 4.9 |
| | C | 0 |
| | E | (0.3)[0.5] |
| Q002 | B | 0 |
| | C | 4.9 |
| | E | 0 |
| Q003 | B | 0.3 |
| | C | 4.9 |
| | E | 0.3 |
| Q004 | B | 0.1 |
| | C | 0 |
| | E | 0 |
| Q008 | B | 0.6 |
| | C | 0 |
| | E | 0 |
| Q101 | B | 2.5 |
| | C | 0 |
| | E | 3.1 |
| Q301 | B | 10.6 |
| | C | 0 |
| | E | (10.4)[10.6] |
| Q313 | B | 0 |
| | C | (10.4)[10.6] |
| | E | 0.3 |
| Q1203 | B | 2.2 |
| | C | 4.9 |
| | E | 1.5 |

## A BOARD VOLTAGE LIST AND WAVEFORM

| Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|---|---|---|
| Q1204 | G | 0 | Q4305 | B | 1.7 | Q8307 | B | 6.0 |
| | D | 0 | | C | 6.7 | | C | 9.0 |
| | S | 0 | | E | 1.2 | | E | 5.4 |
| Q1205 | B | 5.6 | Q4306 | B | 6.5 | Q8310 | B | 0.1 |
| | C | 9.0 | | C | 0 | | C | 5.0 |
| | E | 4.9 | | E | 7.1 | | E | 0.1 |
| Q1206 | B | 2.9 | Q4307 | B | 7.1 | Q8319 | B | 1.8 |
| | C | 5.6 | | C | 9.0 | | C | 0 |
| | E | 2.3 | | E | 6.4 | | E | 2.4 |
| Q1207 | B | 14.3 | Q4308 | B | 6.5 | Q8320 | B | 1.8 |
| | C | -0.3 | | C | 7.1 | | C | 0 |
| | E | 12.4 | | E | 7.2 | | E | 2.5 |
| Q1208 | B | -0.2 | Q4309 | B | 0 | Q8321 | B | 1.7 |
| | C | 13.6 | | C | 0 | | C | 0 |
| | E | 0 | | E | 0.7 | | E | 2.3 |
| Q1209 | B | -0.3 | Q4310 | B | -0.2 | Q8326 | B | 0.2 |
| | C | 13.7 | | C | 9.0 | | C | 3.4 |
| | E | 0 | | E | 0 | | E | 0 |
| Q1210 | B | -0.4 | Q4314 | B | 4.0 | Q8327 | B | 3.4 |
| | C | 13.7 | | C | 5.4 | | C | 0.2 |
| | E | 0 | | E | 4.0 | | E | 0 |
| Q2200 | B | 2.7 | Q4315 | B | 0.1 | Q8328 | B | 0.2 |
| | C | 0 | | C | (5.2)[5.4] | | C | 5.4 |
| | E | 0 | | E | 0 | | E | 0 |
| Q2201 | B | 2.7 | Q4316 | B | 3.4 | Q8329 | B | 2.5 |
| | C | 0 | | C | 0 | | C | 5.7 |
| | E | 0 | | E | 4.0 | | E | 1.8 |
| Q2305 | B | (2.2)[3.1] | Q4317 | B | 3.3 | Q8330 | B | 5.7 |
| | C | 4.9 | | C | 0 | | C | 9.0 |
| | E | (1.5)[2.4] | | E | 4.0 | | E | 5.0 |
| Q3001 | B | 2.4 | Q4318 | B | 3.3 | Q8331 | B | 2.5 |
| | C | 5.0 | | C | 0 | | C | 6.4 |
| | E | 1.7 | | E | 4.0 | | E | 1.8 |
| Q3002 | B | 2.4 | Q4319 | B | 4.2 | Q8332 | B | 6.4 |
| | C | 5.0 | | C | 0 | | C | 9.0 |
| | E | 1.7 | | E | 4.4 | | E | 5.7 |
| Q3003 | B | 2.4 | Q4320 | B | 2.2 | Q8333 | B | 2.7 |
| | C | 5.0 | | C | 9.0 | | C | 7.0 |
| | E | 1.7 | | E | 4.4 | | E | 2.0 |
| Q3004 | B | 2.4 | Q4321 | B | 2.5 | Q8334 | B | 4.3 |
| | C | 5.0 | | C | 0 | | C | 9.0 |
| | E | 1.8 | | E | 3.1 | | E | 3.7 |
| Q3005 | B | 3.4 | Q4322 | B | 3.3 | Q8335 | B | 2.7 |
| | C | 4.5 | | C | 4.0 | | C | 6.4 |
| | E | 2.9 | | E | 4.1 | | E | 2.1 |
| Q3014 | B | 2.9 | Q4323 | B | 4.0 | Q8336 | B | 4.3 |
| | C | 0 | | C | 9.0 | | C | 9.0 |
| | E | 3.5 | | E | 3.4 | | E | 3.7 |
| Q3300 | B | 3.7 | Q4330 | B | 6.7 | Q8351 | B | 3.1 |
| | C | 0 | | C | 0 | | C | 8.4 |
| | E | 4.3 | | E | 7.3 | | E | 2.5 |
| Q3015 | B | 3.0 | Q8301 | B | 4.5 | Q8352 | B | 8.4 |
| | C | 4.9 | | C | 0 | | C | (4)[3.8] |
| | E | 2.3 | | E | 5.2 | | E | 9.0 |
| Q3018 | B | 2.8 | Q8302 | B | 4.4 | Q8361 | B | 3.1 |
| | C | 4.9 | | C | 9.0 | | C | 5.0 |
| | E | 2.0 | | E | 3.8 | | E | 2.5 |
| Q3023 | B | 2.8 | Q8303 | B | 4.3 | Q8362 | B | 3.1 |
| | C | 4.9 | | C | 9.0 | | C | 5.0 |
| | E | 2.0 | | E | 3.7 | | E | 2.5 |
| Q3024 | B | 4.4 | Q8304 | B | 4.4 | Q8363 | B | 3.1 |
| | C | 0.1 | | C | 9.0 | | C | 5.0 |
| | E | 5.0 | | E | 3.8 | | E | 2.5 |
| Q3025 | B | 0.1 | Q8305 | B | 5.4 | Q8364 | B | (1.5)[1.3] |
| | C | 5.0 | | C | 3.0 | | C | 0 |
| | E | 0 | | E | 6.0 | | E | 1.9 |
| Q4301 | B | 5.7 | Q8306 | B | 4.6 | | | |
| | C | 9.0 | | C | 9.0 | | | |
| | E | 5.0 | | E | 4.0 | | | |

# KV-DR34M97
**RM-991**

## DH BOARD VOLTAGE LIST AND WAVEFORM

| Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|---|---|---|
| IC3807 | 1 | 10.6 | Q3806 | B | 0 | Q3811 | B | 6.3 |
|  | 2 | 0 |  | C | 1.9 |  | C | 6.3 |
|  | 3 | 6.6 |  | E | 0 |  | E | 5.6 |
|  | 4 | 1.9 | Q3807 | B | 1.4 | Q3812 | B | 1.4 |
|  | 6 | 0 |  | C | 0.4 |  | C | 4.9 |
|  | 7 | 1.4 |  | E | 0 |  | E | 1.9 |
|  | 8 | 0 | Q3808 | B | 0.4 | Q3813 | B | 2.5 |
| IC3805 | 1 | 5.0 |  | C | 1.4 |  | C | 6.3 |
|  | 2 | 5.0 |  | E | 0 |  | E | 1.9 |
|  | 3 | 3.2 | Q3809 | B | 1.4 | Q3814 | B | 1.9 |
|  | 4 | 4.9 |  | C | 1.9 |  | C | 0 |
|  | 5 | 0 |  | E | 4.9 |  | E | 2.5 |
|  | 6 | 4.9 | Q3810 | B | 6.5 |  |  |  |
|  | 7 | 4.9 |  | C | 0 |  |  |  |
|  | 8 | 4.9 |  | E | 6.3 |  |  |  |
|  | 9 | 4.9 |  |  |  |  |  |  |
|  | 10 | 6.3 |  |  |  |  |  |  |

## VM BOARD VOLTAGE LIST AND WAVEFORM

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| Q5400 | B | 1.5 |
|  | C | 8.4 |
|  | E | 0.9 |
| Q5401 | B | 1.6 |
|  | C | 5.0 |
|  | E | 1.0 |
| Q5402 | B | 7.0 |
|  | C | 8.9 |
|  | E | 6.3 |
| Q5403 | B | 6.3 |
|  | C | 8.9 |
|  | E | 6.0 |
| Q5404 | B | 5.0 |
|  | C | 0 |
|  | E | 5.6 |
| Q5405 | B | 5.6 |
|  | C | 0 |
|  | E | 6.0 |
| Q5406 | B | 134 |
|  | C | 68 |
|  | E | 135 |
| Q5407 | B | 1.3 |
|  | C | 68 |
|  | E | 0.8 |

## H1 BOARD VOLTAGE LIST AND WAVEFORM

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| Q1901 | B | 0.2 |
|  | C | 4.9 |
|  | E | 0.2 |
| Q1902 | B | (4.4)[0.1] |
|  | C | (1.9)[4.9] |
|  | E | (1.7)[0.1] |

## H2 BOARD VOLTAGE LIST AND WAVEFORM

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| IC1901 | 1 | 4.9 |
|  | 2 | (4.8)[4.5] |
|  | 3 | 0 |
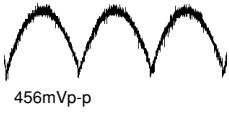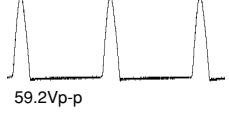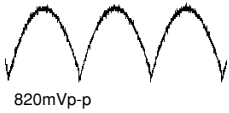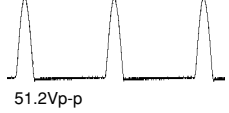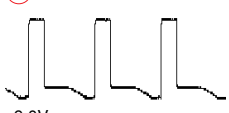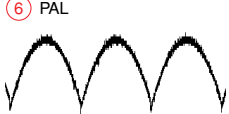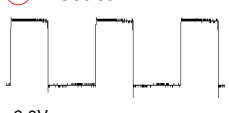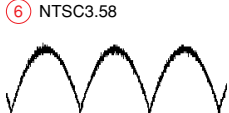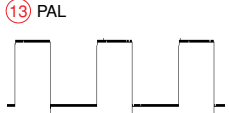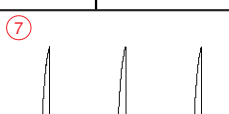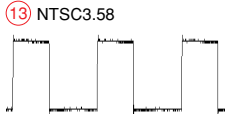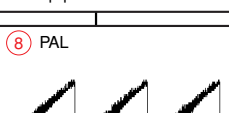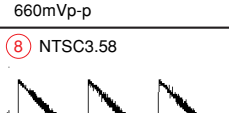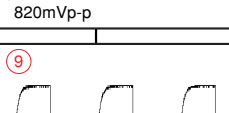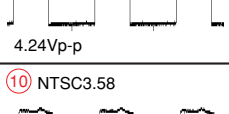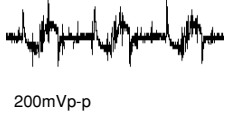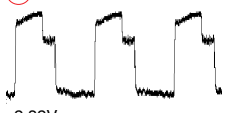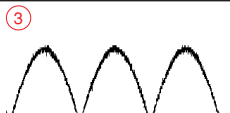
## P BOARD VOLTAGE LIST AND WAVEFORM

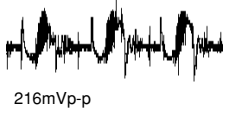| Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|
| IC8801 | 1 | 1.4 | Q8802 | B | 0.9 |
|  | 2 | (1.7)[1.4] |  | C | 0 |
|  | 3 | 0.2 |  | E | 1.6 |
|  | 4 | 0.1 | Q8803 | B | 0.7 |
|  | 5 | 4.4 |  | C | 0 |
|  | 6 | 4.4 |  | E | 1.4 |
|  | 7 | 3.3 | Q8804 | B | 4.7 |
|  | 8 | 0 |  | C | 0 |
|  | 9 | 0 |  | E | 4.9 |
|  | 10 | 0.8 | Q8805 | B | 1.9 |
|  | 11 | 0 |  | C | 0 |
|  | 12 | 0 |  | E | 2.6 |
|  | 13 | 0 | Q8806 | B | 0.3 |
|  | 14 | 0 |  | C | 3.3 |
|  | 15 | 0 |  | E | 0.3 |
|  | 16 | 0.7 | Q8807 | B | 0.1 |
|  | 17 | 0.3 |  | C | 3.3 |
|  | 18 | 0.7 |  | E | 0.1 |
|  | 19 | 3.3 | Q8808 | B | 2.5 |
|  | 20 | 0 |  | C | 0 |
|  | 21 | 3.3 |  | E | (1.6)[3.2] |
|  | 22 | 3.3 | Q8809 | B | 2.6 |
|  | 23 | 0 |  | C | 0 |
|  | 24 | 1.7 |  | E | 3.3 |
|  | 25 | 1.2 | Q8810 | B | 2.5 |
|  | 26 | 1.7 |  | C | 0 |
|  | 27 | 2.1 |  | E | 3.2 |
|  | 28 | 2.0 | Q8811 | B | 0.3 |
| IC8802 | I | 4.9 |  | C | 0 |
|  | G | 0 |  | E | 0.9 |
|  | O | 3.3 | Q8812 | B | -0.5 |
| Q8801 | B | 0.7 |  | C | 2.6 |
|  | C | 0 |  | E | 0 |
|  | E | 1.4 |  |  |  |

D5 BOARD VOLTAGE LIST AND WAVEFORM

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| IC6100 | 1 | 5.8 |
| | 2 | 2.7 |
| | 3 | 4.0 |
| | 4 | 0 |
| | 5 | 5.1 |
| | 6 | 6.3 |
| | 7 | 8.9 |
| | 8 | 5.0 |
| | 9 | 4.2 |
| | 10 | 2.7 |
| | 11 | 0 |
| | 12 | 0 |
| | 13 | 0 |
| | 14 | 1.9 |
| | 15 | 12.0 |
| | 16 | 9.2 |
| | 17 | 2.1 |
| | 18 | 2.1 |
| | 19 | 0 |
| | 20 | 4.7 |
| | 21 | 0 |
| | 22 | 1.0 |
| IC6201 | 1 | 0.1 |
| | 2 | 8.9 |
| | 3 | 1.5 |
| | 4 | 0 |
| | 5 | 2.4 |
| | 6 | 3.9 |
| | 7 | 2.1 |
| | 8 | 8.9 |
| IC6202 | I | 10.7 |
| | G | 0 |
| | O | 5.0 |
| IC6204 | 1 | (7.0)[6.6] |
| | 2 | 1.4 |
| | 3 | (2.4)[2.1] |
| | 4 | 0 |
| | 5 | 0.2 |
| | 6 | 1.8 |
| | 7 | 1.0 |
| | 8 | 8.9 |
| IC6205 | 1 | 5.0 |
| | 2 | 5.0 |
| | 3 | (3.0)[1.6] |
| | 4 | (0)[3.0] |
| | 5 | 2.4 |
| | 6 | 2.4 |
| | 7 | 3.8 |
| | 8 | 0 |
| | 9 | 2.8 |
| | 10 | 0 |
| | 11 | 5.0 |
| | 12 | 5.0 |
| | 13 | 0 |
| | 14 | 4.4 |
| | 15 | 4.4 |
| | 16 | 5.0 |
| IC6206 | I | -15 |
| | G | 0 |
| | O | -12 |
| IC6401 | 1 | 0 |
| | 2 | (2.2)[1.7] |
| | 3 | (2.2)[1.8] |
| | 4 | 0 |
| | 5 | 2.1 |
| | 6 | 2.8 |
| | 7 | 4.9 |
| | 8 | 8.9 |
| IC6402 | 1 | 4.9 |
| | 2 | 2.7 |
| | 3 | 3.4 |
| | 4 | 1.3 |

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| | 5 | 0 |
| | 6 | 3.1 |
| | 7 | 3.7 |
| | 8 | 3.7 |
| | 9 | 3.2 |
| | 10 | 3.1 |
| | 11 | (2.4)[2.0] |
| | 12 | 2.4 |
| | 13 | (1.2)[0.8] |
| | 14 | 1.2 |
| | 15 | 0 |
| | 16 | 3.5 |
| | 17 | 1.8 |
| | 18 | 3.7 |
| | 19 | 2.6 |
| | 20 | 5.4 |
| | 21 | 2.6 |
| | 22 | 1.0 |
| | 23 | 1.0 |
| | 24 | 5.4 |
| | 25 | 4.3 |
| | 26 | 3.9 |
| | 27 | 2.8 |
| | 28 | 3.9 |
| | 29 | 3.8 |
| | 30 | 8.9 |
| IC6501 | 1 | -0.5 |
| | 2 | -0.5 |
| | 3 | -1.8 |
| | 4 | -1.5 |
| | 5 | -15.8 |
| | 6 | -1.7 |
| | 7 | -2.0 |
| | 8 | -2.7 |
| | 9 | -2.8 |
| | 10 | 11.8 |
| Q6103 | B | 8.7 |
| | C | 2.8 |
| | E | 8.9 |
| Q6104 | G | 5.1 |
| | D | 25.8 |
| | S | 0 |
| Q6105 | B | 1.1 |
| | C | 0 |
| | E | 1.8 |
| Q6106 | B | 9.2 |
| | C | 10.8 |
| | E | 8.5 |
| Q6107 | B | 8.5 |
| | C | 1.0 |
| | E | 9.1 |
| Q6108 | B | 3.4 |
| | C | 8.9 |
| | E | 2.8 |
| Q6201 | B | 0.5 |
| | C | 4.9 |
| | E | 0 |
| Q6202 | B | -0.3 |
| | C | 6.5 |
| | E | 0 |
| Q6203 | B | -0.6 |
| | C | 2.4 |
| | E | 0 |
| Q6205 | B | 0 |
| | C | 3.8 |
| | E | 0 |
| Q6206 | B | 8.9 |
| | C | 2.7 |
| | E | 8.9 |
| Q6207 | B | -0.4 |
| | C | 2.4 |
| | E | 0 |

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| Q6208 | B | 9.0 |
| | C | (-0.5)[-0.1] |
| | E | 8.6 |
| Q6209 | B | 0 |
| | C | 0 |
| | E | (-5.4)[-4.3] |
| Q6210 | B | 0 |
| | C | 0 |
| | E | -5.4 |
| Q6212 | B | 1.0 |
| | C | 0 |
| | E | 1.4 |
| Q6213 | B | 1.0 |
| | C | 8.9 |
| | E | 1.4 |
| Q6215 | B | 3.5 |
| | C | 8.9 |
| | E | 3.6 |
| Q6216 | B | 3.5 |
| | C | 0 |
| | E | 3.6 |
| Q6218 | B | 2.6 |
| | C | 8.9 |
| | E | 2.0 |
| Q6401 | B | 4.4 |
| | C | 8.9 |
| | E | 3.8 |
| Q6402 | B | 3.8 |
| | C | 0 |
| | E | 4.4 |
| Q6409 | B | 3.9 |
| | C | 0 |
| | E | 4.0 |
| Q6410 | B | 3.9 |
| | C | 8.9 |
| | E | 4.0 |
| Q6412 | B | 3.8 |
| | C | 0 |
| | E | 3.9 |
| Q6413 | B | 3.8 |
| | C | 8.9 |
| | E | 3.9 |
| Q6414 | B | 3.9 |
| | C | 0 |
| | E | (4.4)[3.9] |
| Q6415 | B | 0.7 |
| | C | 0 |
| | E | 0 |
| Q6417 | B | 2.6 |
| | C | 8.9 |
| | E | 2.0 |
| Q6418 | B | 0.2 |
| | C | 0 |
| | E | 0.8 |
| Q6419 | B | 3.1 |
| | C | 8.9 |
| | E | 2.6 |
| Q6420 | B | 7.1 |
| | C | 0 |
| | E | 7.7 |
| Q6421 | B | 7.6 |
| | C | 8.9 |
| | E | 7.1 |
| Q6422 | B | 1.8 |
| | C | 0 |
| | E | 2.5 |
| Q6423 | B | 2.1 |
| | C | 0 |
| | E | 2.8 |

## D5 BOARD VOLTAGE LIST AND WAVEFORM

| Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|---|---|---|
| Q6424 | B | 1.2 | | ④ PAL | | | ⑪ PAL | |
| | C | 6.6 | | | | | | |
| | E | 0.7 | | 456mVp-p | | | 59.2Vp-p | |
| Q6425 | B | 1.6 | | ④ NTSC3.58 | | | ⑪ NTSC3.58 | |
| | C | 8.9 | | | | | | |
| | E | 1.1 | | 820mVp-p | | | 51.2Vp-p | |
| Q6437 | B | 2.6 | | ⑤ | | | ⑫ PAL | |
| | C | 8.9 | | | | | | |
| | E | 1.9 | | 9.0Vp-p | | | 8.8Vp-p | |
| Q6438 | B | 1.9 | | ⑥ PAL | | | ⑫ NTSC3.58 | |
| | C | -15 | | | | | | |
| | E | 2.5 | | 1.56Vp-p | | | 9.0Vp-p | |
| Q6501 | B | 4.3 | | ⑥ NTSC3.58 | | | ⑬ PAL | |
| | C | 8.9 | | | | | | |
| | E | 3.7 | | 1.6Vp-p | | | 8.6Vp-p | |
| Q6502 | B | 2.4 | | ⑦ | | | ⑬ NTSC3.58 | |
| | C | 0 | | | | | | |
| | E | 3.0 | | 7.2Vp-p | | | 8.8Vp-p | |
| Q6503 | B | 2.7 | | ⑧ PAL | | | | |
| | C | 8.9 | | | | | | |
| | E | 2.4 | | 660mVp-p | | | | |
| Q6504 | B | 0 | | ⑧ NTSC3.58 | | | | |
| | C | 8.3 | | | | | | |
| | E | 0 | | 820mVp-p | | | | |
| Q6505 | B | 0 | | ⑨ | | | | |
| | C | 8.9 | | | | | | |
| | E | 0 | | 9.0Vp-p | | | | |
| Q6506 | B | 0 | | ⑩ PAL | | | | |
| | C | 3.3 | | | | | | |
| | E | 0 | | 4.24Vp-p | | | | |
| Q6507 | B | 2.8 | | ⑩ NTSC3.58 | | | | |
| | C | 0 | | | | | | |
| | E | 0 | | 4.16Vp-p | | | | |
| Q6508 | B | 5.3 | | | | | | |
| | C | 4.7 | | | | | | |
| | E | 8.9 | | | | | | |
| | ① PAL | | | | | | | |
| | 216mVp-p | | | | | | | |
| | ① NTSC3.58 | | | | | | | |
| | 200mVp-p | | | | | | | |
| | ② | | | | | | | |
| | 2.32Vp-p | | | | | | | |
| | ③ | | | | | | | |
| | 880mVp-p | | | | | | | |
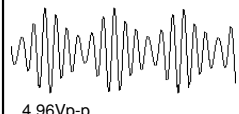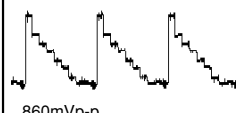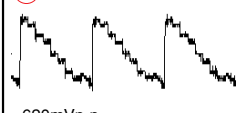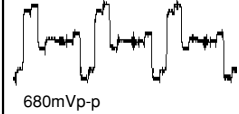
## C BOARD VOLTAGE LIST AND WAVEFORM

| Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|---|---|---|
| IC9001 | 1 | 3.5 | | KG | (159)[161] | | ⑤ PAL | |
| | 2 | 12 | | | | | | |
| | 3 | 3.4 | | ② PAL | | | 2.72Vp-p | |
| | 4 | 0 | | | | | ⑤ NTSC3.58 | |
| | 5 | 8.9 | | | | | | |
| | 6 | 201 | | 104Vp-p | | | | |
| | 7 | 107 | | ② NTSC3.58 | | | 3.20Vp-p | |
| | 8 | 161 | | | | | ⑥ PAL | |
| | 9 | 107 | | | | | | |
| IC9002 | 1 | 3.5 | | 120Vp-p | | | | |
| | 2 | 12 | | KR | (161)[159] | | 2.56Vp-p | |
| | 3 | 3.4 | | | | | ⑥ NTSC3.58 | |
| | 4 | 0 | | ① PAL | | | | |
| | 5 | (8.7)[8.5] | | | | | | |
| | 6 | 201 | | | | | 2.40Vp-p | |
| | 7 | (112)[116] | | 106Vp-p | | | ⑦ PAL | |
| | 8 | 159 | | ① NTSC3.58 | | | | |
| | 9 | (111)[116] | | | | | | |
| IC9003 | 1 | 3.5 | | | | | 3.92Vp-p | |
| | 2 | 12 | | 92Vp-p | | | ⑦ NTSC3.58 | |
| | 3 | 3.4 | | | | | | |
| | 4 | 0 | Q9001 | B | 8.2 | | | |
| | 5 | (9.4)[9.1] | | C | 0 | | | |
| | 6 | 201 | | E | 4.5 | | 4.08Vp-p | |
| | 7 | (112)[119] | Q9009 | B | 4.0 | | | |
| | 8 | (141)[146] | | C | 0 | | | |
| | 9 | (112)[118] | | E | 4.6 | | | |
| J9001 | G2 | 320 | Q9010 | B | 3.9 | | | |
| | H1 | 6.2 | | C | 0 | | | |
| | ④ | | | E | 4.6 | | | |
| | | | Q9011 | B | 3.9 | | | |
| | | | | C | 0 | | | |
| | 560mVp-p | | | E | 4.5 | | | |
| | H2 | 0 | | | | | | |
| | KB | (142)[149] | | | | | | |
| | ③ PAL | | | | | | | |
| | | | | | | | | |
| | 122Vp-p | | | | | | | |
| | ③ NTSC3.58 | | | | | | | |
| | | | | | | | | |
| | 116Vp-p | | | | | | | |

BC1 BOARD VOLTAGE LIST AND WAVEFORM

| Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|---|---|---|
| IC2001 | VCC | 5.0 | | 71 | 2.6 | Q2006 | B | 2.5 |
| | OUT | 2.5 | | 72 | 2.6 | | C | 8.9 |
| | GND | 0 | | 73 | 2.6 | | E | 1.9 |
| IC2004 | 1 | 0 | | 74 | 2.6 | Q2007 | B | 2.8 |
| | 2 | 0 | | 75 | 0 | | C | 5.7 |
| | 3 | 0 | | 76 | 4.1 | | E | 2.2 |
| | 4 | 0 | | 77 | 0 | Q2008 | B | 5.7 |
| | 5 | 0 | | 78 | 0 | | C | (8.9)[5.9] |
| | 6 | 0 | | 79 | 0 | | E | (5.0)[2.1] |
| | 7 | 0 | | 80 | 0 | Q2009 | B | 5.7 |
| | 8 | 0 | | 81 | 2.4 | | C | 8.9 |
| | 9 | 0 | | 82 | 0 | | E | 5.0 |
| | 10 | 0 | | 83 | 1.3 | Q2010 | B | 5.9 |
| | 11 | 3.4 | | 84 | 1.1 | | C | 8.9 |
| | 12 | 3.4 | | 85 | 1.0 | | E | 5.3 |
| | 13 | 0 | | 86 | 0 | Q2011 | B | 0.1 |
| | 14 | 0 | | 87 | 0 | | C | 4.1 |
| | 15 | 0 | | 88 | 0 | | E | 0 |
| | 16 | 0 | | 89 | 0.3 | Q2012 | B | 1.0 |
| | 17 | 0 | | 90 | 0.7 | | C | 0 |
| | 18 | 0 | | 91 | 0 | | E | 1.7 |
| | 19 | 0 | | 92 | 2.4 | Q2013 | B | 4.8 |
| | 20 | 1.1 | | 93 | 2.5 | | C | 0.5 |
| | 21 | 0 | | 94 | 0 | | E | 0.5 |
| | 22 | 0 | | 95 | 0 | Q2014 | B | 6.2 |
| | 23 | 1.1 | | 96 | 1.1 | | C | 8.9 |
| | 24 | 1.0 | | 97 | 0 | | E | 5.6 |
| | 25 | 1.1 | | 98 | 0 | Q2015 | B | 3.5 |
| | 26 | 1.1 | | 99 | 0 | | C | 4.8 |
| | 27 | 1.1 | | 100 | 2.5 | | E | (3.2)[3.6] |
| | 28 | 1.1 | IC2005 | VCC | 5.0 | Q2016 | B | 1.7 |
| | 29 | 0 | | OUT | 3.3 | | C | 8.9 |
| | 30 | 0 | | GND | 0 | | E | 1.1 |
| | 31 | 2.4 | IC2300 | 1 | 0 | Q2018 | B | 2.5 |
| | 32 | 2.4 | | 2 | 3.1 | | C | 0 |
| | 33 | 0 | | 3 | 0.5 | | E | 3.2 |
| | 34 | 0 | | 4 | 0 | Q2019 | B | (3.3)[3.6] |
| | 35 | 0 | | 5 | 0 | | C | 8.9 |
| | 36 | 0 | | 6 | 1.8 | | E | 2.7 |
| | 37 | 0 | | 7 | 2.1 | Q2300 | B | 0 |
| | 38 | 3.3 | | 8 | 0 | | C | 8.9 |
| | 39 | 0 | | 9 | 0 | | E | 0 |
| | 40 | 0 | | 10 | 0 | Q2301 | B | 2.5 |
| | 41 | 0 | | 11 | 4.9 | | C | 0 |
| | 42 | 0 | | 12 | 0 | | E | 3.1 |
| | 43 | 0 | | 13 | 5.0 | Q2302 | B | 3.0 |
| | 44 | 0 | | 14 | 0 | | C | 9.0 |
| | 45 | 2.4 | | 15 | 4.4 | | E | 2.4 |
| | 46 | 2.5 | | 16 | 4.4 | Q2303 | B | (2.6)[3.2] |
| | 47 | 2.5 | | 17 | 0 | | C | 8.3 |
| | 48 | 1.2 | | 18 | 0 | | E | (3.2)[2.6] |
| | 49 | 0 | | 19 | 2.5 | Q2304 | B | 8.3 |
| | 50 | 1.3 | | 20 | 5.0 | | C | 5.5 |
| | 51 | 0 | | 21 | 0 | | E | 9.0 |
| | 52 | 1.3 | | 22 | 3.6 | Q2305 | B | (2.6)[2.9] |
| | 53 | 2.4 | | 23 | 3.6 | | C | 9.0 |
| | 54 | 01 | | 24 | 3.4 | | E | 0 |
| | 55 | 0 | | 25 | 2.6 | Q2306 | B | 3.2 |
| | 56 | 0 | | 26 | 0 | | C | 8.3 |
| | 57 | 4.9 | | 27 | 3 | | E | (0)[2.5] |
| | 58 | 0 | | 28 | 1.1 | Q2307 | B | 4.9 |
| | 59 | 4.5 | Q2002 | B | 1.3 | | C | 9.0 |
| | 60 | 4.5 | | C | 0 | | E | 4.3 |
| | 61 | 0 | | E | 2.0 | Q2308 | B | 8.3 |
| | 62 | 0 | Q2003 | B | 1.3 | | C | 4.9 |
| | 63 | 0 | | C | 0 | | E | 9.0 |
| | 64 | 2.4 | | E | 2.0 | Q2309 | B | 5.7 |
| | 65 | 2.6 | Q2004 | B | 1.2 | | C | 8.9 |
| | 66 | 0 | | C | 0 | | E | 5.1 |
| | 67 | 0 | | E | 1.9 | | | |
| | 68 | 2.6 | Q2005 | B | 2.5 | | | |
| | 69 | 2.6 | | C | 8.9 | | | |
| | 70 | 2.6 | | E | 1.9 | | | |

## B3 BOARD VOLTAGE LIST AND WAVEFORM

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| IC504 | 1 | 4.2 |
| | 2 | 0 |
| | 3 | (0.8)[1.4] |
| | 4 | 3.3 |
| | 5 | 1.6 |
| | 6 | 2.1 |
| | 7 | 0 |
| | 8 | 0 |
| | 9 | 0 |
| | 10 | 0 |
| | 11 | 0 |
| | 12 | 2.2 |
| | 13 | 2.2 |
| | 14 | 4.2 |
| IC505 | 1 | 4.9 |
| | 2 | 3.2 |
| | 3 | 0 |
| | 4 | 0 |
| | 5 | 4.9 |
| IC506 | 1 | 4.9 |
| | 2 | 3.0 |
| | 3 | 0 |
| | 4 | 0.4 |
| | 5 | 4.9 |
| IC507 | 1 | 0 |
| | 2 | 3.6 |
| | 3 | 4.8 |
| | 4 | 1.0 |
| | 5 | 4.8 |
| | 6 | 1.4 |
| | 7 | 3.3 |
| | 8 | 0 |
| | 9 | 4.1 |
| | 10 | 0.7 |
| | 11 | 4.8 |
| | 12 | 3.3 |
| | 13 | 4.8 |
| | 14 | 4.2 |
| | 15 | 0 |
| | 16 | 4.8 |
| IC601 | 1 | 2.4 |
| | 2 | 0 |
| | 3 | 0 |
| | 4 | 0 |
| | 5 | 0 |
| | 6 | 0 |
| | 7 | 3.1 |
| | 8 | 3.1 |
| | 9 | 3.1 |
| | 10 | 0.5 |
| | 11 | 3.1 |
| | 12 | 0 |
| | 13 | 0.9 |
| | 14 | 1.3 |
| | 15 | 1.4 |
| | 16 | 1.3 |
| | 17 | 1.4 |
| | 18 | 1.4 |
| | 19 | 1.4 |
| | 20 | 1.5 |
| | 21 | 2.4 |
| | 22 | 0 |
| | 23 | 3.2 |
| | 24 | 0 |
| | 25 | 0.8 |
| | 26 | 1.3 |
| | 27 | 1.5 |
| | 28 | 1.5 |
| | 29 | 1.4 |
| | 30 | 1.5 |
| | 31 | 1.4 |
| | 32 | 1.6 |
| | 33 | 3.2 |

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| | 34 | 0 |
| | 35 | 0 |
| | 36 | 0 |
| | 37 | 0 |
| | 38 | 0 |
| | 39 | 0 |
| | 40 | 0 |
| | 41 | 0 |
| | 42 | 0 |
| | 43 | 2.4 |
| | 44 | 0 |
| | 45 | 1.6 |
| | 46 | 0 |
| | 47 | 0 |
| | 48 | 0 |
| | 49 | 0 |
| | 50 | 3.2 |
| | 51 | 0 |
| | 52 | 2.4 |
| | 53 | 0 |
| | 54 | 3.2 |
| | 55 | 0 |
| | 56 | 0 |
| | 57 | 3.2 |
| | 58 | 3.2 |
| | 59 | 3.1 |
| | 60 | 0 |
| | 61 | 0 |
| | 62 | 3.2 |
| | 63 | 3.2 |
| | 64 | 3.2 |
| | 65 | 0 |
| | 66 | 0 |
| | 67 | 3.2 |
| | 68 | 0 |
| | 69 | 0.4 |
| | 70 | 3.2 |
| | 71 | 0 |
| | 72 | 3.2 |
| | 73 | 0 |
| | 74 | 2.4 |
| | 75 | 0 |
| | 76 | 0 |
| | 77 | 0 |
| | 78 | 3.2 |
| | 79 | 3.2 |
| | 80 | 3.0 |
| | 81 | 0.4 |
| | 82 | 3.2 |
| | 83 | 0 |
| | 84 | 0 |
| | 85 | 3.2 |
| | 86 | 0.3 |
| | 87 | 3.2 |
| | 88 | 0 |
| | 89 | 0 |
| | 90 | 0 |
| | 91 | 1.5 |
| | 92 | 1.5 |
| | 93 | 0 |
| | 94 | 2.4 |
| | 95 | 1.5 |
| | 96 | 3.2 |

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| | 97 | 1.4 |

① PAL



4.96Vp-p

① NTSC3.58



4.48Vp-p

| Pin No. | Voltage[v] |
|---|---|
| 98 | 3.0 |
| 99 | 3.2 |
| 100 | 0 |
| 101 | 0 |
| 102 | 0 |
| 103 | 2.4 |
| 104 | 0 |
| 105 | 0.3 |

② PAL



860mVp-p

② NTSC3.58



620mVp-p

| Pin No. | Voltage[v] |
|---|---|
| 106 | 0.9 |
| 107 | 0.9 |
| 108 | 1.1 |
| 109 | 0.5 |

③ PAL



660mVp-p

③ NTSC3.58



680mVp-p

| Pin No. | Voltage[v] |
|---|---|
| 110 | 2.1 |
| 111 | 3.2 |
| 112 | 0 |
| 113 | 0.5 |

④ PAL



720mVp-p

④ NTSC3.58



640mVp-p

| Pin No. | Voltage[v] |
|---|---|
| 114 | 3.2 |
| 115 | 0 |
| 116 | 2.4 |
| 117 | 1.6 |
| 118 | 0 |
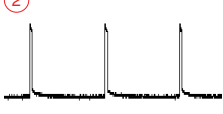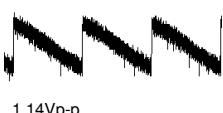
## B3 BOARD VOLTAGE LIST AND WAVEFORM

| Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|---|---|---|---|---|---|---|---|---|
| | 119 | 1.6 | | 192 | 0 | | 7 | 0 |
| | 120 | 1.3 | | 193 | 0 | | 8 | 0 |
| | 121 | 1.3 | | 194 | 0 | | 9 | 0 |
| | 122 | 1.3 | | 195 | 0 | | 10 | 0 |
| | 123 | 1.3 | | 196 | 0 | | 11 | 0 |
| | 124 | 1.2 | | 197 | 2.4 | | 12 | 1.4 |
| | 125 | 1.3 | | 198 | 0 | | 13 | 2.1 |
| | 126 | 1.7 | | 199 | 0 | | 14 | 3.3 |
| | 127 | 1.3 | | 200 | 0 | IC604 | 1 | 4.9 |
| | 128 | 1.2 | | 201 | 0 | | 2 | (0)[3.1] |
| | 129 | 0.3 | | 202 | 0 | | 3 | 0.4 |
| | 130 | 0 | | 203 | 0 | | 4 | 0.4 |
| | 131 | 1.3 | | 204 | 0 | | 5 | 3.0 |
| | 132 | 1.1 | | 205 | 0 | | 6 | 0.4 |
| | 133 | 1.4 | | 206 | 0 | | 7 | 0.4 |
| | 134 | 1.5 | | 207 | 3.2 | | 8 | 0 |
| | 135 | 1.8 | | 208 | 0 | | 9 | (3.2)[0] |
| | 136 | 1.5 | IC602 | 1 | 3.3 | | 10 | (3.2)[0] |
| | 137 | 1.5 | | 2 | 1.5 | | 11 | 0 |
| | 138 | 1.6 | | 3 | 1.5 | | 12 | 4.9 |
| | 139 | 1.2 | | 4 | 0 | | 13 | 0 |
| | 140 | 1.7 | | 5 | 1.1 | | 14 | 4.5 |
| | 141 | 2.4 | | 6 | 1.5 | | 15 | 4.4 |
| | 142 | 0 | | 7 | 3.3 | | 16 | 4.9 |
| | 143 | 3.2 | | 8 | 1.6 | IC605 | 1 | 2.3 |
| | 144 | 0 | | 9 | 1.5 | | 2 | 1.8 |
| | 145 | 1.3 | | 10 | 0 | | 3 | 1.8 |
| | 146 | 1.1 | | 11 | 1.1 | | 4 | * |
| | 147 | 1.3 | | 12 | (0.6)[1.0] | | 5 | 0 |
| | 148 | 1.3 | | 13 | 3.3 | IC801 | 1 | 4.8 |
| | 149 | 1.3 | | 14 | 0.5 | | 2 | * |
| | 150 | 1.2 | | 15 | 3.2 | | 3 | * |
| | 151 | 1.1 | | 16 | 3.2 | | 4 | * |
| | 152 | 1.3 | | 17 | 3.2 | | 5 | * |
| | 153 | 1.2 | | 18 | 3.2 | | 6 | 4.8 |
| | 154 | 1.9 | | 19 | 0 | | 7 | * |
| | 155 | 0 | | 20 | 0 | | 8 | * |
| | 156 | 0 | | 21 | 0 | | 9 | * |
| | 157 | 3.2 | | 22 | 0 | | 10 | * |
| | 158 | (1.5)[1.9] | | 23 | 0 | | 11 | * |
| | 159 | (0.6)[2.2] | | 24 | 0 | | 12 | * |
| | 160 | 1.3 | | 25 | 3.3 | | 13 | * |
| | 161 | 1.4 | | 26 | 0 | | 14 | * |
| | 162 | 0 | | 27 | 0 | | 15 | * |
| | 163 | 0 | | 28 | 0 | | 16 | * |
| | 164 | 1.3 | | 29 | 0 | | 17 | * |
| | 165 | 1.2 | | 30 | 0 | | 18 | * |
| | 166 | 1.4 | | 31 | 0 | | 19 | * |
| | 167 | 1.3 | | 32 | 0 | | 20 | 4.8 |
| | 168 | 1.2 | | 33 | 0 | | 21 | * |
| | 169 | 1.3 | | 34 | 3.3 | | 22 | * |
| | 170 | 1.1 | | 35 | 0 | | 23 | * |
| | 171 | 1.9 | | 36 | 0 | | 24 | * |
| | 172 | 2.4 | | 37 | 0 | | 25 | * |
| | 173 | 0 | | 38 | 3.3 | | 26 | * |
| | 174 | 1.6 | | 39 | 1.5 | | 27 | * |
| | 175 | 1.4 | | 40 | 1.5 | | 28 | * |
| | 176 | (1.4)[0.8] | | 41 | 0 | | 29 | * |
| | 177 | 1.5 | | 42 | 1.7 | | 30 | * |
| | 178 | 1.7 | | 43 | 1.6 | | 31 | * |
| | 179 | (1.5)[1.1] | | 44 | 3.2 | | 32 | * |
| | 180 | 1.3 | | 45 | 1.8 | | 33 | * |
| | 181 | 0.3 | | 46 | 1.6 | | 34 | * |
| | 182 | 2.4 | | 47 | 0 | | 35 | * |
| | 183 | 0 | | 48 | 1.5 | | 36 | * |
| | 184 | 3.2 | | 49 | 1.1 | | 37 | * |
| | 185 | 3.2 | | 50 | 0 | | 38 | * |
| | 186 | 0.7 | IC603 | 1 | 3.3 | | 39 | * |
| | 187 | 3.2 | | 2 | 0 | | 40 | * |
| | 188 | 0 | | 3 | 1.4 | IC802 | 1 | * |
| | 189 | 0 | | 4 | 0.2 | | 2 | * |
| | 190 | 0 | | 5 | 1.3 | | 3 | * |
| | 191 | 0 | | 6 | 1.4 | | 4 | * |

## B3 BOARD VOLTAGE LIST AND WAVEFORM

| Ref | Pin No. | Voltage[v] |
|---|---|---|
|  | 5 | * |
|  | 6 | * |
|  | 7 | * |
|  | 8 | 1.2 |
|  | 9 | 1.0 |
|  | 10 | 3.4 |
|  | 11 | * |
|  | 12 | * |
|  | 13 | * |
|  | 14 | * |
|  | 15 | * |
|  | 16 | 0 |
|  | 17 | 0 |
|  | 18 | 0 |
|  | 19 | 0 |
|  | 20 | 0 |
|  | 21 | 0 |
|  | 22 | 2.4 |
|  | 23 | 3.4 |
|  | 24 | 2.7 |
|  | 25 | 2.1 |
|  | 26 | 3.4 |
|  | 27 | 2.7 |
|  | 28 | 1.4 |
|  | 29 | 0 |
|  | 30 | 2.1 |
|  | 31 | 0 |
|  | 32 | 2.4 |
|  | 33 | 1.0 |
|  | 34 | 1.3 |
|  | 35 | 1.7 |
|  | 36 | 0.9 |
|  | 37 | 3.4 |
|  | 38 | 2.4 |
|  | 39 | 1.0 |
|  | 40 | 1.7 |
|  | 41 | 1.7 |
|  | 42 | (1.4)[1.7] |
|  | 43 | 0 |
|  | 44 | 3.4 |
|  | 45 | * |
|  | 46 | 0 |
|  | 47 | 0 |
|  | 48 | 3.4 |
|  | 49 | 0.3 |
|  | 50 | 0 |
|  | 51 | * |
|  | 52 | 3.0 |
|  | 53 | 3.4 |
|  | 54 | 1.6 |
|  | 55 | * |
|  | 56 | 1.6 |
|  | 57 | * |
|  | 58 | 0 |
|  | 59 | * |
|  | 60 | * |
|  | 61 | * |
|  | 62 | * |
|  | 63 | * |
|  | 64 | * |
|  | 65 | * |
|  | 66 | * |
|  | 67 | * |
|  | 68 | * |
|  | 69 | * |
|  | 70 | * |

| Ref | Pin No. | Voltage[v] |
|---|---|---|
|  | 71 | * |
|  | 72 | * |
|  | 73 | * |
|  | 74 | * |
|  | 75 | * |
|  | 76 | 1.7 |
|  | 77 | 1.7 |
|  | 78 | 0.2 |
|  | 79 | 0 |
|  | 80 | 0 |
|  | 81 | * |
|  | 82 | * |
|  | 83 | * |
|  | 84 | * |
|  | 85 | * |
|  | 86 | * |
|  | 87 | * |
|  | 88 | * |
|  | 89 | * |
|  | 90 | 0 |
|  | 91 | * |
|  | 92 | * |
|  | 93 | * |
|  | 94 | * |
|  | 95 | * |
|  | 96 | * |
|  | 97 | * |
|  | 98 | * |
|  | 99 | * |
|  | 100 | * |
| IC803 | 1 | 4.8 |
|  | 2 | 2.7 |
|  | 3 | 3.5 |
|  | 4 | 1.2 |
|  | 5 | 0 |
| IC804 | 1 | * |
|  | 2 | 0 |
|  | 3 | 0 |
|  | 4 | 2.7 |
|  | 5 | 4.8 |
| Q501 | B | 2.3 |
|  | C | 0 |
|  | E | 3.0 |
| Q502 | B | 2.7 |
|  | C | 4.9 |

⑤ PAL  
160mVp-p

| Ref | Pin No. | Voltage[v] |
|---|---|---|
|  | E | 2.0 |
| Q503 | B | 2.7 |
|  | C | 4.9 |
|  | E | 2.0 |

⑥  
940mVp-p

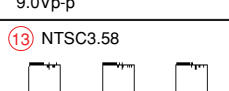| Ref | Pin No. | Voltage[v] |
|---|---|---|
| Q504 | B | 0 |
|  | C | 3 |
|  | E | 0 |
| Q505 | B | 0.3 |
|  | C | 0 |
|  | E | 1.0 |
| Q516 | B | 4.0 |
|  | C | 4.9 |
|  | E | 3.3 |
| Q517 | B | 4.9 |
|  | C | 4.9 |
|  | E | 4.2 |
| Q518 | B | 3.2 |
|  | C | 0 |
|  | E | 2.2 |
| Q521 | B | 3.2 |
|  | C | 4.9 |
|  | E | 2.6 |
| Q522 | B | 3.6 |
|  | C | 4.9 |
|  | E | 3.0 |
| Q523 | B | 3.7 |
|  | C | 4.9 |
|  | E | 3.0 |
| Q601 | B | 0.1 |
|  | C | 4.9 |
|  | E | 0 |
| Q602 | B | 0.3 |
|  | C | 4.9 |
|  | E | 0.2 |
| Q603 | G | 3.2 |
|  | D | * |
|  | S | * |
| Q604 | G | 3.2 |
|  | D | * |
|  | S | * |
| Q901 | B | 0.9 |
|  | C | 0 |
|  | E | 1.6 |
| Q902 | B | 1.1 |
|  | C | 0 |
|  | E | 1.8 |
| Q903 | B | 1.1 |
|  | C | 0 |
|  | E | 1.8 |
| Q907 | B | 0.5 |
|  | C | 0 |
|  | E | 1.2 |
| Q908 | B | 0.3 |
|  | C | 0 |
|  | E | 1.0 |
| Q909 | B | 0.5 |
|  | C | 0 |
|  | E | 1.2 |

## D BOARD VOLTAGE LIST AND WAVEFORM

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| IC6600 | 1 | 2.9 |
| | 2 | 1.8 |
| | 3 | 2.3 |
| | 4 | 2.5 |
| | 5 | 0 |
| | 6 | 0 |
| | 7 | 4.7 |
| | 8 | 17.8 |
| | 9 | 0 |
| | 10 | 10.6 |
| | 11 | 0 |
| | 12 | 4.9 |
| | 13 | 0 |
| | 14 | 138 |
| | 15 | 1.7 |
| | 16 | 129 |
| | 17 | 323 |
| | 18 | 321 |
| IC6601 | 1 | 9.8 |
| | 2 | 0 |
| | 3 | 2.4 |
| IC6607 | 1 | 134.1 |
| | 2 | 2.5 |
| | 3 | 8.1 |
| | 4 | 0 |
| IC6608 | 1 | 0 |
| | 2 | 0 |
| | 3 | 18.2 |
| | 4 | 6.3 |
| | 5 | 4.1 |
| | 6 | 6.4 |
| | 7 | 4.0 |
| | 8 | 2.8 |
| | 9 | 5.0 |
| | 10 | 17.7 |
| | 11 | 5.0 |
| | 12 | 0 |
| | 13 | 0.1 |
| | 14 | 17.8 |
| IC6800 | 1 | 1.2 |
| | ① 1.18Vp-p | |
| | 2 | 14 |
| | 3 | -14 |
| | ② 32Vp-p | |
| | 4 | -15 |
| | 5 | (0.2)[0] |
| | 6 | 14.6 |
| | 7 | 1.2 |
| | ③ PAL 980mVp-p | |
| | ③ NTSC3.58 1.14Vp-p | |

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| IC6804 | I | 10.3 |
| | G | 0 |
| | O | 9.0 |
| IC6805 | I | 13.3 |
| | G | 0 |
| | O | 12 |
| IC6806 | I | 8.3 |
| | G | 0 |
| | O | 6.3 |
| | VC | 2.2 |
| PH6601 | 1 | 78 |
| | 2 | 77.4 |
| | 3 | 4.0 |
| | 4 | 3.7 |
| PH6602 | 1 | 81.5 |
| | 2 | 80.7 |
| | 3 | 17.8 |
| | 4 | 16.0 |
| Q6100 | G | 0.9 |
| | D | * |
| | S | 0 |
| Q6102 | B | * |
| | C | * |
| | E | * |
| Q6600 | G | (107.8)[112] |
| | D | 269 |
| | S | 105.6 |
| Q6601 | B | 0 |
| | C | 12 |
| | E | 0 |
| Q6602 | B | 3.8 |
| | C | 13.8 |
| | E | 4.2 |
| Q6603 | G | -13.4 |
| | D | 0 |
| | S | -18.3 |
| Q6604 | B | 13.1 |
| | C | 13.8 |
| | E | 13.8 |
| Q6605 | B | 3.3 |
| | C | 4.0 |
| | E | 4.0 |
| Q6608 | B | 0.6 |
| | C | 0 |
| | E | 0 |
| Q6609 | B | 4.9 |
| | C | 0 |
| | E | 4.9 |
| Q6611 | B | 0.2 |
| | C | 3.5 |
| | E | 0 |
| Q6613 | B | 0 |
| | C | 0.6 |
| | E | 0 |
| Q6619 | B | 0.6 |
| | C | 0 |
| | E | 0 |
| Q6620 | B | 0 |
| | C | 3.6 |
| | E | 0 |
| Q6800 | B | 6.7 |
| | C | 0 |
| | E | 0 |
| Q6801 | G | 0 |
| | D | 11.9 |
| | S | 0 |
| Q6802 | G | 135 |
| | D | (206)[*] |
| | S | 135 |

| Ref | Pin No. | Voltage[v] |
|---|---|---|
| Q6803 | B | 1.2 |
| | C | 0 |
| | E | 1.5 |
| Q6804 | B | 1.2 |
| | C | 9.0 |
| | E | 1.5 |
| Q6805 | B | -0.5 |
| | C | 79 |
| | E | 0 |
| Q6806 | B | -0.5 |
| | C | 66 |
| | E | 0 |
| Q6807 | B | 0 |
| | C | * |
| | E | 0 |
| Q6808 | B | * |
| | C | * |
| | E | 0 |
| Q6809 | G | 3.4 |
| | D | (12.3)[10.3] |
| | S | 0 |
| Q6810 | G | 1.4 |
| | D | (*)[138] |
| | S | 0 |
| Q6811 | B | 0.3 |
| | C | 5.0 |
| | E | 0.6 |
| Q6812 | B | -0.4 |
| | C | * |
| | E | 0 |
| Q6819 | B | 0 |
| | C | 0.8 |
| | E | 0 |
| Q6820 | B | -0.1 |
| | C | 0 |
| | E | 0 |
| Q6821 | B | -0.4 |
| | C | 9.0 |
| | E | 0.3 |

D BOARD VOLTAGE LIST AND WAVEFORM

| Ref | Pin No. | Voltage[v] | Ref | Pin No. | Voltage[v] |
|-----|---------|------------|-----|---------|------------|
|  | ④ PAL<br>56.0Vp-p | | | ⑩ PAL<br>7.8Vp-p | |
|  | ④ NTSC3.58<br>58.4Vp-p | | | ⑩ NTSC3.58<br>7.4Vp-p | |
|  | ⑤ PAL<br>2.16Vp-p | | | ⑪ PAL<br>9.2Vp-p | |
|  | ⑤ NTSC3.58<br>1.76Vp-p | | | ⑪ NTSC3.58<br>9.0Vp-p | |
|  | ⑥ PAL<br>190Vp-p | | | ⑫<br>8.6Vp-p | |
|  | ⑥ NTSC3.58<br>208Vp-p | | | ⑬ PAL<br>9.0Vp-p | |
|  | ⑦ PAL<br>334Vp-p | | | ⑬ NTSC3.58<br>8.6Vp-p | |
|  | ⑦ NTSC3.58<br>322Vp-p | | | | |
|  | ⑧ PAL<br>2.8Vp-p | | | | |
|  | ⑧ NTSC3.58<br>2.48Vp-p | | | | |

## 7-4.  PRINTED WIRING BOARDS AND PARTS LOCATION

### PRINTED WIRING BOARDS

**A** [MICON, AUDIO AMP., TUVIF 1 & 2, REGULATORS, RGB JUNGLE, YCT, AV SW, VIDEO/AUDIO SIGNAL]

**– A board (Component Side) –**
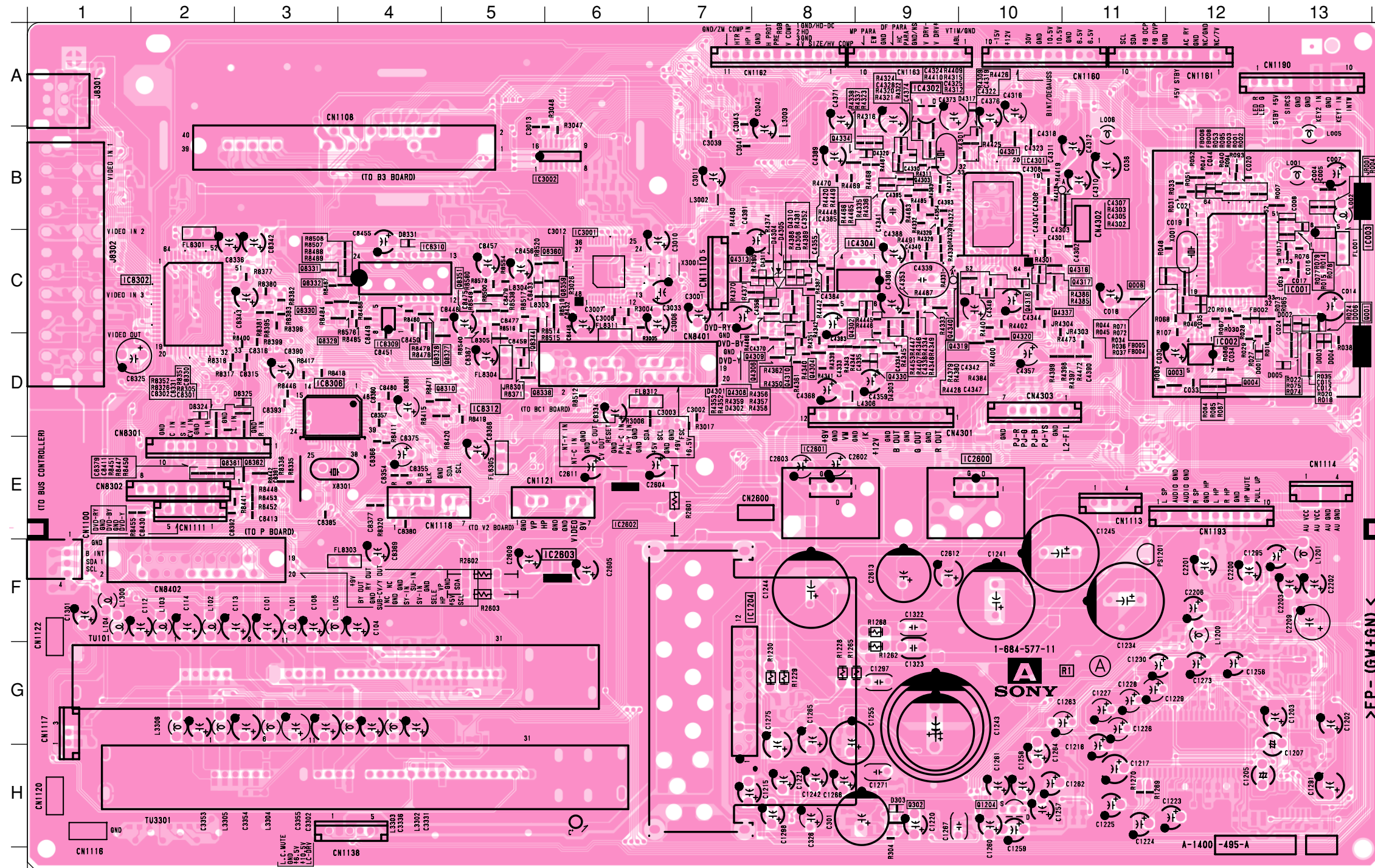


- ▨ : Pattern from the side which enables seeing.
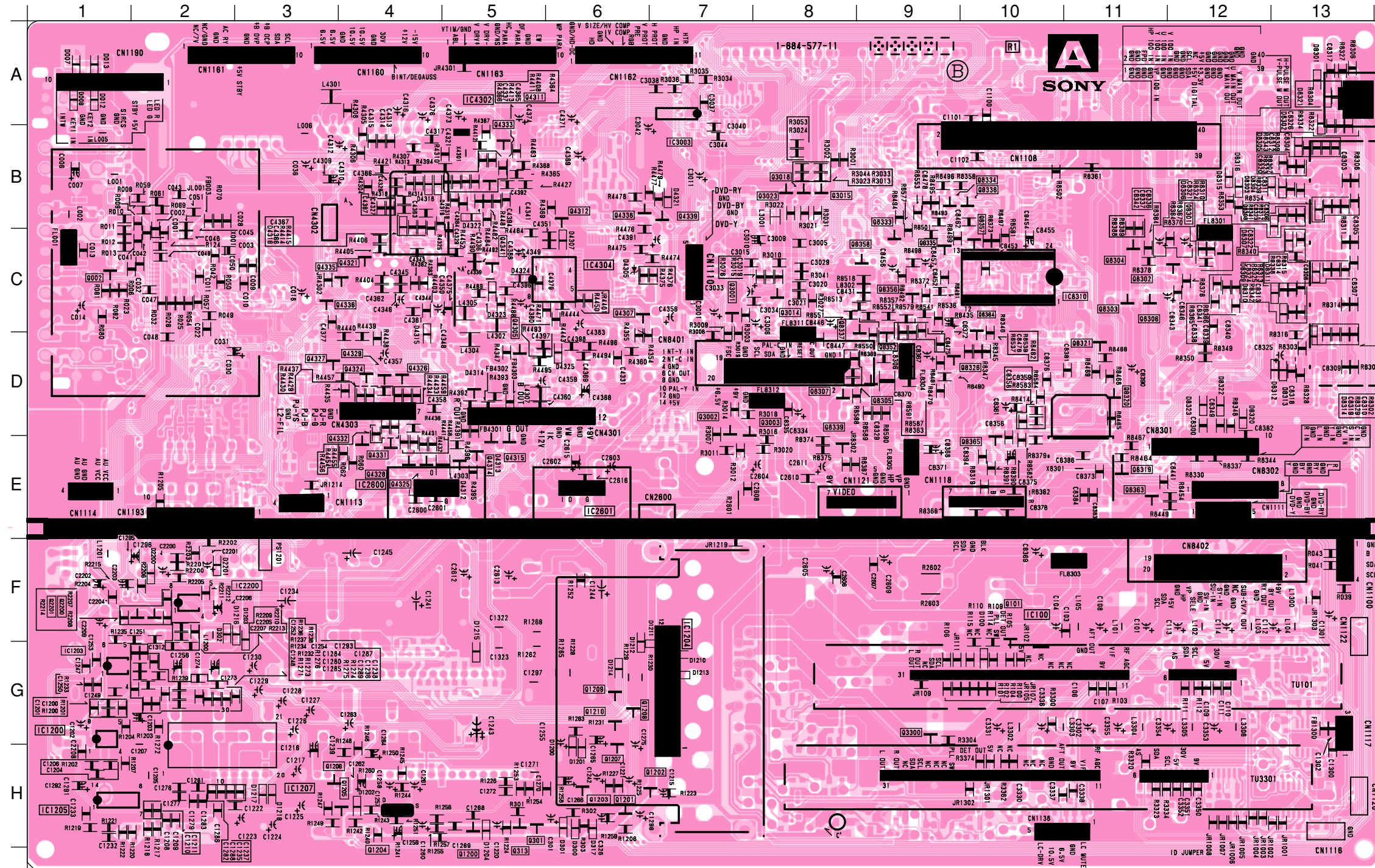- ▨ : Pattern from the rear side.

**A BOARD (Component Side)**

| IC | | Q8336 | B-10 |
|---|---|---|---|
| | | Q8337 | C-8 |
| IC100 | F-10 | Q8339 | D-8 |
| IC1200 | G-1 | Q8352 | D-9 |
| IC1203 | H-5 | Q8356 | C-9 |
| IC1204 | F-7 | Q8357 | C-9 |
| IC1205 | H-1 | Q8358 | C-9 |
| IC1207 | H-3 | Q8364 | C-10 |
| IC2200 | F-3 | Q8383 | E-11 |
| IC2600 | E-4 | Q8385 | E-10 |
| IC2601 | E-6 | | |
| IC3003 | B-7 | **DIODE** | |
| IC4302 | A-5 | D007 | A-1 |
| IC8310 | C-11 | D008 | A-1 |
| | | D012 | A-1 |
| **TRANSISTOR** | | D013 | A-1 |
| Q002 | C-1 | D300 | H-7 |
| Q101 | F-10 | D301 | H-7 |
| Q301 | H-5 | D302 | F-2 |
| Q313 | H-5 | D317 | H-7 |
| Q1200 | H-5 | D1200 | H-6 |
| Q1201 | H-6 | D1201 | H-6 |
| Q1202 | H-7 | D1203 | F-3 |
| Q1203 | H-6 | D1210 | G-7 |
| Q1204 | H-4 | D1211 | F-7 |
| Q1205 | H-4 | D1212 | G-6 |
| Q1207 | H-6 | D1213 | G-7 |
| Q1208 | G-6 | D1214 | G-6 |
| Q1210 | G-6 | D1215 | F-5 |
| Q2200 | F-1 | D1216 | F-2 |
| Q2201 | F-1 | D1217 | H-3 |
| Q3001 | C-7 | D1218 | H-3 |
| Q3002 | D-7 | D1219 | |
| Q3003 | D-8 | D2201 | F-2 |
| Q3014 | C-8 | D4305 | C-6 |
| Q3015 | B-8 | D4307 | C-6 |
| Q3018 | B-8 | D4312 | E-5 |
| Q3023 | B-8 | D4313 | E-5 |
| Q4305 | C-5 | D4314 | D-5 |
| Q4325 | E-4 | D4315 | D-3 |
| Q4326 | D-4 | D4316 | C-3 |
| Q4327 | D-3 | D4318 | E-5 |
| Q4328 | E-4 | D4321 | B-7 |
| Q4329 | D-4 | D4322 | B-5 |
| Q4331 | E-4 | D4323 | C-5 |
| Q4332 | E-3 | D4324 | C-5 |
| Q4333 | B-5 | D4325 | D-6 |
| Q4335 | C-3 | D8301 | A-13 |
| Q4336 | C-4 | D8302 | A-13 |
| Q4338 | B-6 | D8303 | B-12 |
| Q4339 | B-7 | D8304 | B-12 |
| Q4341 | C-5 | D8305 | B-12 |
| Q8300 | G-9 | D8306 | B-12 |
| Q8302 | C-11 | D8307 | C-12 |
| Q8303 | C-11 | D8308 | B-12 |
| Q8304 | C-11 | D8309 | C-12 |
| Q8305 | D-9 | D8310 | C-12 |
| Q8306 | C-11 | D8311 | C-12 |
| Q8307 | D-8 | D8312 | D-13 |
| Q8319 | E-11 | D8313 | D-13 |
| Q8320 | D-11 | D8314 | D-13 |
| Q8321 | D-11 | D8315 | B-12 |
| Q8328 | D-10 | D8320 | D-12 |
| Q8333 | B-9 | D8321 | A-13 |
| Q8334 | B-10 | D8322 | D-12 |
| Q8335 | C-9 | D8323 | D-12 |

## PRINTED WIRING BOARDS

**A** [MICON, AUDIO AMP., TUVIF 1 & 2, REGULATORS, RGB JUNGLE, YCT, AV SW, VIDEO/AUDIO SIGNAL]
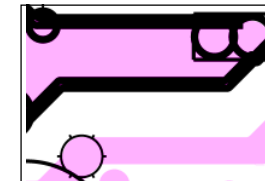
**– A board (Conductor Side) –**



1-684-577-11

SONY

- ▭ : Pattern from the side which enables seeing.
- ▭ : Pattern from the rear side.

**A BOARD (Conductor Side)**

| IC | | Q4330 | D-9 |
|---|---|---|---|
| | | Q4334 | B-8 |
| IC001 | C-13 | Q4337 | C-10 |
| IC002 | D-12 | Q4340 | C-9 |
| IC003 | C-13 | Q8310 | D-4 |
| IC1204 | F-7 | Q8327 | D-5 |
| IC2600 | E-10 | Q8328 | D-4 |
| IC2601 | E-8 | Q8329 | D-3 |
| IC2603 | F-6 | Q8330 | C-3 |
| IC2802 | E-6 | Q8331 | C-3 |
| IC3001 | C-6 | Q8332 | C-3 |
| IC3002 | B-5 | Q8338 | D-5 |
| IC4301 | B-10 | Q8344 | D-5 |
| IC4302 | A-9 | Q8351 | C-5 |
| IC4304 | C-8 | Q8359 | C-6 |
| IC8302 | C-1 | Q8360 | C-6 |
| IC8306 | D-3 | Q8361 | E-2 |
| IC8309 | D-4 | Q8362 | E-3 |
| IC8310 | C-4 | | |
| IC8312 | D-5 | **DIODE** | |
| | | D001 | D-12 |
| **TRANSISTOR** | | D002 | C-13 |
| | | D003 | D-13 |
| Q001 | C-13 | D004 | D-13 |
| Q003 | D-12 | D005 | D-13 |
| Q004 | D-12 | D006 | C-13 |
| Q008 | C-11 | D303 | H-9 |
| Q302 | H-9 | D4301 | D-7 |
| Q1204 | H-10 | D4302 | D-7 |
| Q4301 | B-10 | D4303 | D-9 |
| Q4302 | C-8 | D4304 | C-8 |
| Q4303 | B-9 | D4305 | C-8 |
| Q4304 | D-8 | D4308 | C-8 |
| Q4308 | D-7 | D4310 | B-8 |
| Q4309 | D-7 | D4311 | C-8 |
| Q4310 | D-8 | D4317 | A-10 |
| Q4313 | C-7 | D4320 | B-9 |
| Q4316 | C-11 | D8324 | D-2 |
| Q4317 | C-11 | D8325 | D-3 |
| Q4318 | C-10 | D8331 | C-4 |
| Q4320 | D-10 | | |

# PRINTED WIRING BOARDS

**D** [POWER SUPPLY, DEFLECTION HV]

**NOTE:**
The circuit indicated at left contains high voltage of over 1220 Vp-p. Please pay attention when inspecting or repairing it to prevent an electric shock.
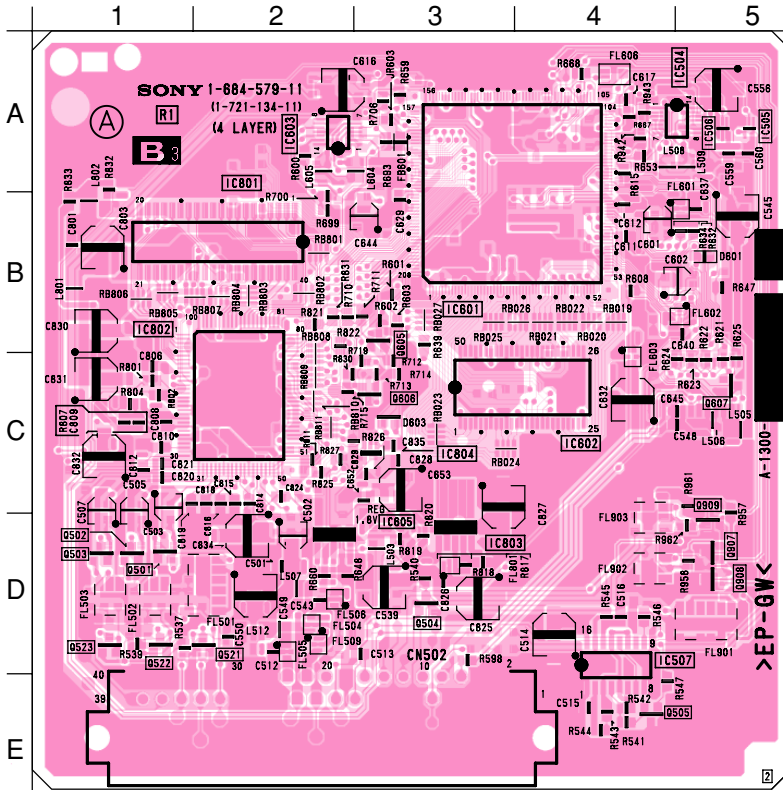
– D board –
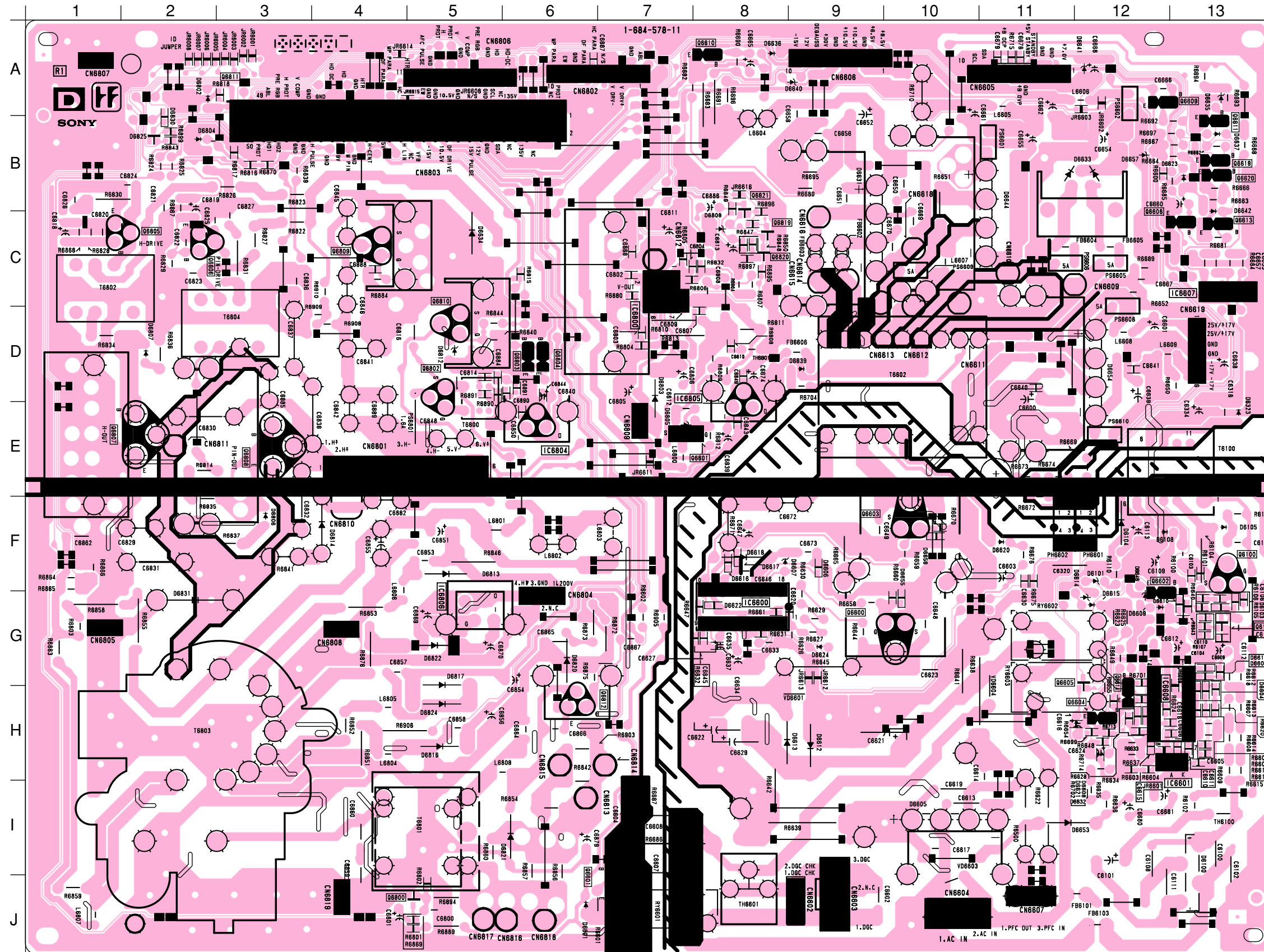
D BOARD

| IC | | | |
|---|---|---|---|
| IC6600 | G-8 | D6105 | F-13 |
| IC6607 | C-13 | D6108 | F-12 |
| IC6608 | H-12 | D6323 | E-13 |
| IC6661 | I-13 | D6601 | J-6 |
| IC6800 | D-7 | D6606 | F-9 |
| IC6804 | E-6 | D6607 | F-9 |
| IC6805 | D-7 | D6609 | G-12 |
| IC6806 | G-5 | D6612 | H-9 |
| | | D6613 | H-9 |
| **TRANSISTOR** | | D6614 | F-12 |
| | | D6615 | G-12 |
| Q6100 | F-13 | D6617 | F-8 |
| Q6102 | G-13 | D6618 | F-8 |
| Q6600 | G-9 | D6620 | F-11 |
| Q6601 | I-6 | D6622 | G-8 |
| Q6602 | F-12 | D6623 | B-13 |
| Q6603 | F-9 | D6624 | G-9 |
| Q6604 | H-12 | D6631 | B-9 |
| Q6605 | G-11 | D6633 | B-12 |
| Q6608 | B-12 | D6634 | C-5 |
| Q6609 | A-13 | D6635 | A-13 |
| Q6610 | A-8 | D6636 | A-8 |
| Q6611 | B-13 | D6637 | B-13 |
| Q6613 | C-13 | D6639 | D-9 |
| Q6614 | G-12 | D6640 | A-9 |
| Q6619 | B-13 | D6641 | A-12 |
| Q6620 | B-13 | D6644 | B-11 |
| Q6800 | J-4 | D6648 | F-12 |
| Q6801 | E-8 | D6653 | I-12 |
| Q6802 | D-5 | D6654 | D-12 |
| Q6803 | D-6 | D6655 | F-10 |
| Q6804 | D-6 | D6656 | F-10 |
| Q6805 | C-2 | D6657 | B-12 |
| Q6806 | C-2 | D6802 | A-2 |
| Q6807 | E-1 | D6803 | D-7 |
| Q6808 | E-3 | D6804 | B-2 |
| Q6809 | C-4 | D6805 | E-7 |
| Q6810 | C-5 | D6806 | F-3 |
| Q6811 | A-3 | D6807 | D-2 |
| Q6812 | H-7 | D6808 | C-8 |
| Q6819 | C-8 | D6810 | G-12 |
| Q6820 | C-8 | D6812 | D-5 |
| Q6821 | B-8 | D6813 | F-5 |
| | | D6816 | H-5 |
| **DIODE** | | D6817 | G-5 |
| | | D6820 | G-6 |
| D6100 | I-13 | D6821 | I-6 |
| D6101 | F-12 | D6822 | G-5 |
| D6102 | G-14 | D6824 | H-5 |
| D6104 | F-12 | D6825 | B-2 |
| | | D6830 | A-2 |
| | | D6831 | G-2 |

1-884-578-11

# KV-DR34M97
## RM-991

## PRINTED WIRING BOARDS

**B3** [DIGITAL REALITY CREATION-MF, 3D NOISE REDUCTION]

### – B3 board (Component Side) –



#### B3 board (Component Side)

| IC | | Q502 | D-1 |
|---|---|---|---|
| | | Q503 | D-1 |
| IC504 | A-5 | Q504 | D-3 |
| IC505 | A-5 | Q505 | E-5 |
| IC507 | D-5 | Q521 | D-2 |
| IC508 | A-5 | Q522 | D-1 |
| IC601 | B-3 | Q523 | D-1 |
| IC602 | C-4 | Q605 | B-3 |
| IC603 | A-2 | Q606 | C-3 |
| IC605 | D-3 | Q607 | C-5 |
| IC801 | A-2 | Q907 | D-5 |
| IC802 | B-1 | Q908 | D-5 |
| IC803 | D-3 | Q909 | D-5 |
| IC804 | C-3 | | |

| TRANSISTOR | | DIODE | |
|---|---|---|---|
| | | D601 | B-5 |
| Q501 | D-1 | D603 | C-3 |

### – B3 board (Conductor Side) –
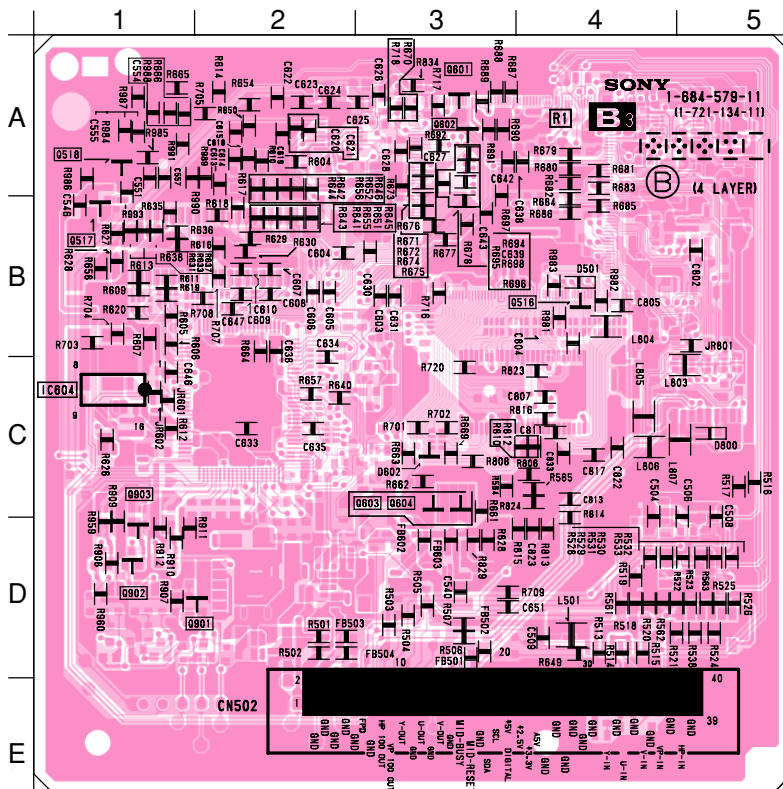


#### B3 board (Conductor Side)

| IC | |
|---|---|
| IC604 | C-1 |

| TRANSISTOR | |
|---|---|
| Q516 | B-4 |
| Q517 | B-1 |
| Q518 | A-1 |
| Q601 | A-3 |
| Q602 | A-3 |
| Q603 | C-3 |
| Q604 | C-3 |
| Q901 | D-2 |
| Q902 | D-1 |
| Q903 | C-1 |

| DIODE | |
|---|---|
| D501 | B-4 |
| D602 | C-3 |
| D800 | C-5 |

- ▭ : Pattern from the side which enables seeing.
- ▭ : Pattern from the rear side.
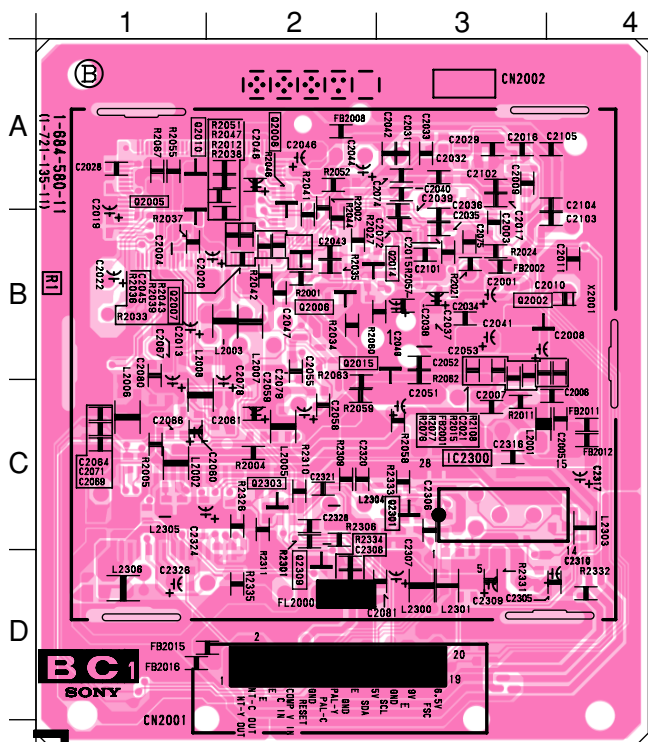
## BC1 [2D & 3D DIGITAL COMB]

### – BC1 board (Component Side) –
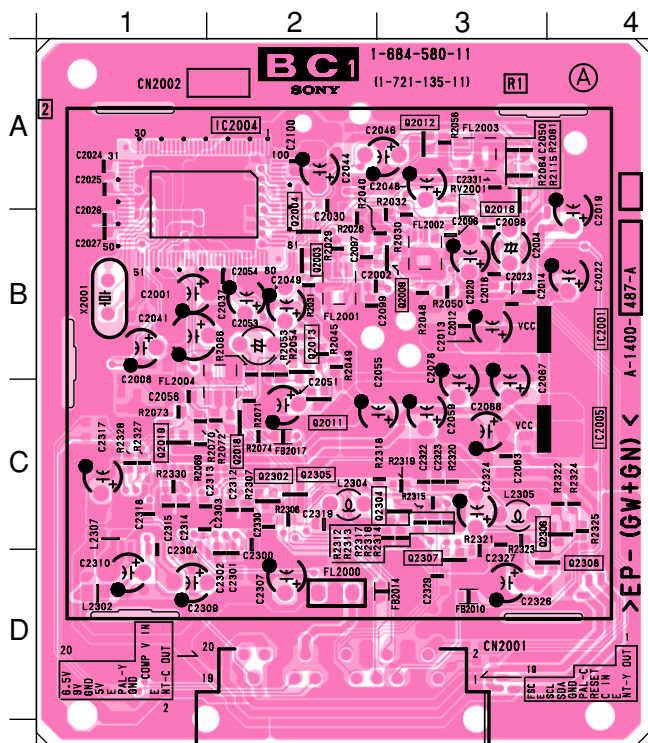


**BC1 board (Component Side)**

| IC | |
|---|---|
| IC2001 | B-4 |
| IC2004 | A-2 |
| IC2005 | C-4 |

| TRANSISTOR | |
|---|---|
| Q2003 | B-2 |
| Q2004 | B-2 |
| Q2009 | B-3 |
| Q2011 | C-2 |
| Q2012 | A-3 |
| Q2013 | B-2 |
| Q2016 | B-3 |
| Q2018 | C-2 |
| Q2019 | C-1 |
| Q2302 | C-2 |
| Q2304 | C-3 |
| Q2305 | C-2 |
| Q2306 | C-3 |
| Q2307 | D-3 |
| Q2308 | D-4 |

### – BC1 board (Conductor Side) –



**BC1 board (Conductor Side)**

| IC | |
|---|---|
| IC2300 | C-3 |

| TRANSISTOR | |
|---|---|
| Q2002 | B-3 |
| Q2005 | A-1 |
| Q2006 | B-2 |
| Q2007 | B-1 |
| Q2008 | A-2 |
| Q2010 | A-1 |
| Q2014 | B-3 |
| Q2015 | B-2 |
| Q2301 | C-3 |
| Q2303 | C-2 |
| Q2308 | D-2 |

- ▬ : Pattern from the side which enables seeing.
- ▬ : Pattern from the rear side.
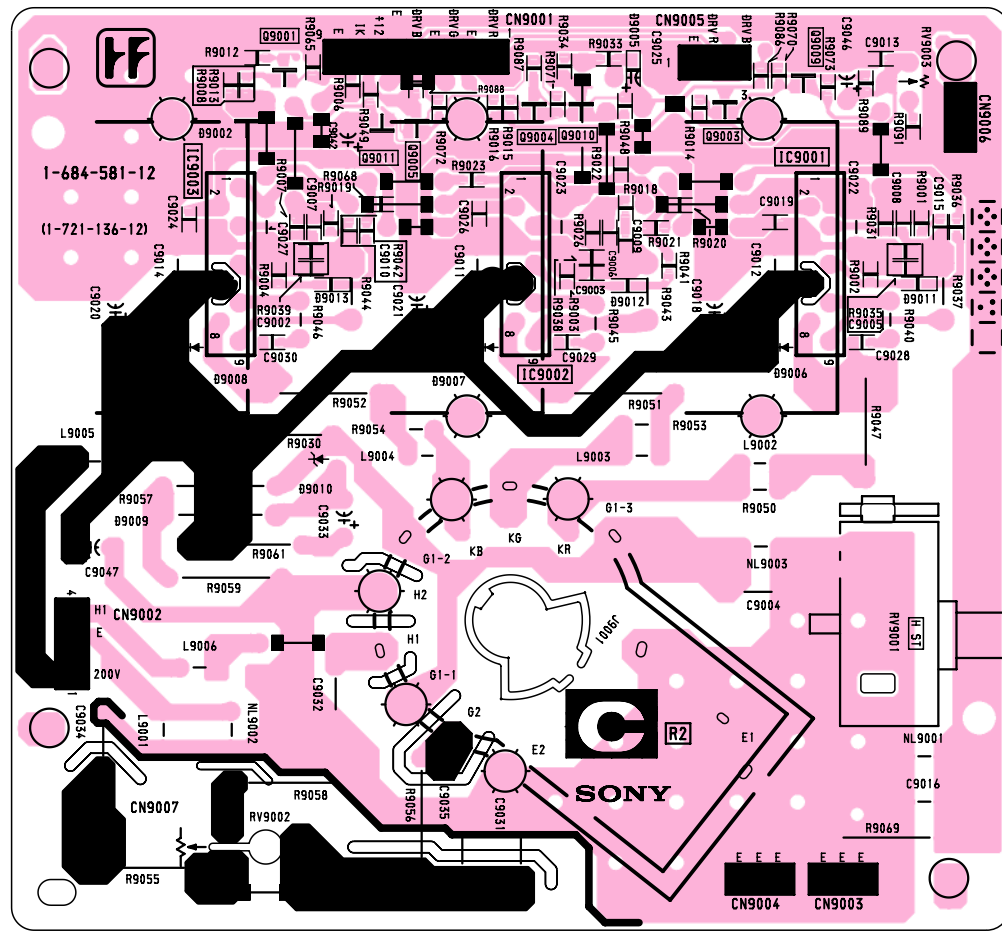
# PRINTED WIRING BOARDS

**C** [VIDEO AMPLIFIER]

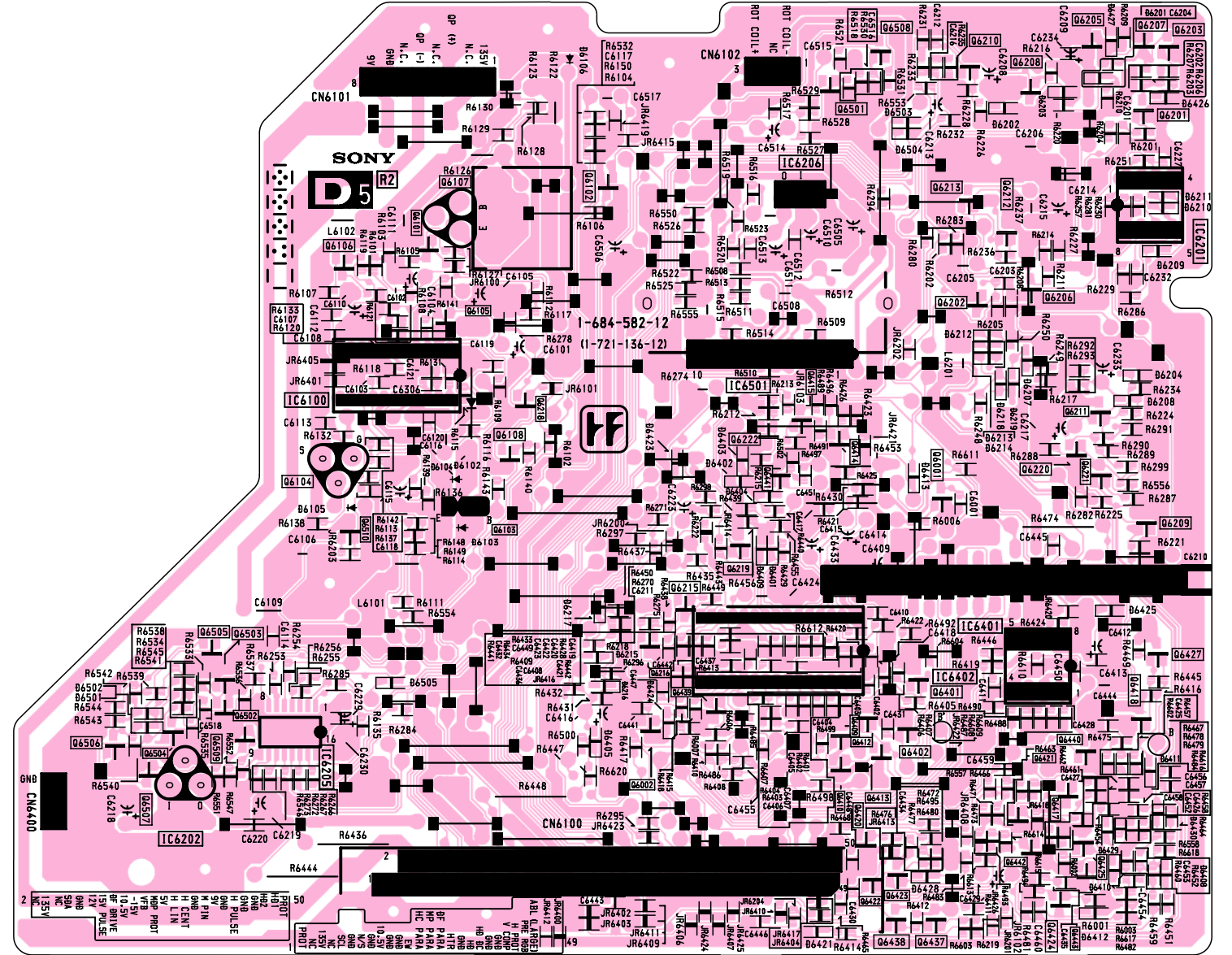**D5** [DEFLECTION CONTROL CIRCUIT]

**H1** [S-TERMINAL INPUT, AV INPUT, PRESET KEY, PHONE OUT]
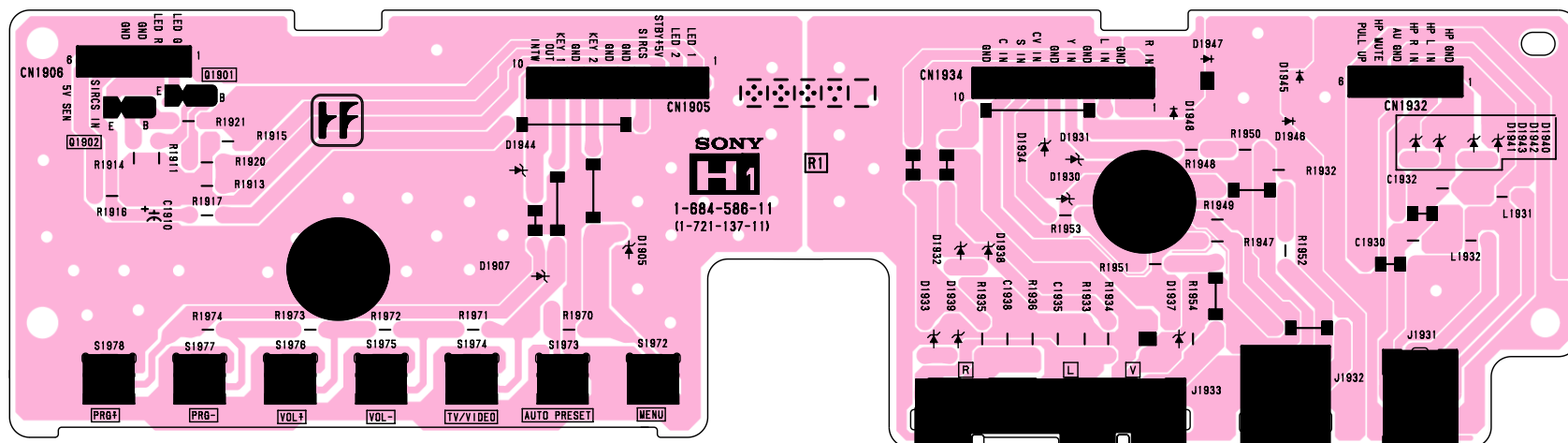
**DH** [MAGNETIC FIELD CORRECTION]
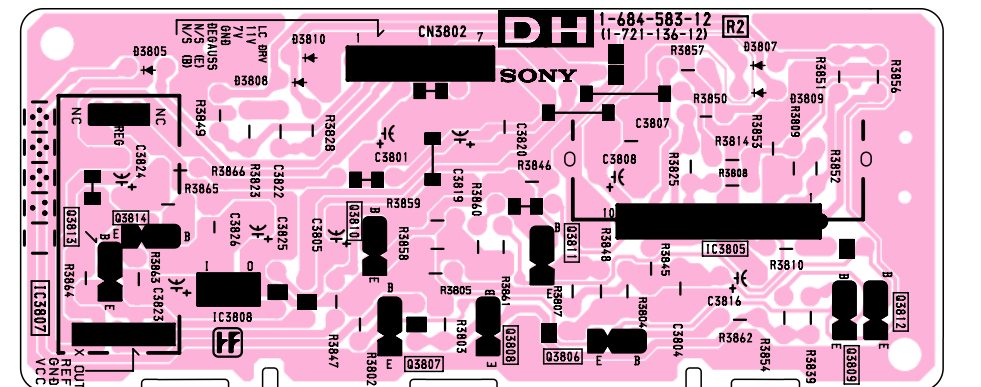
– C board –

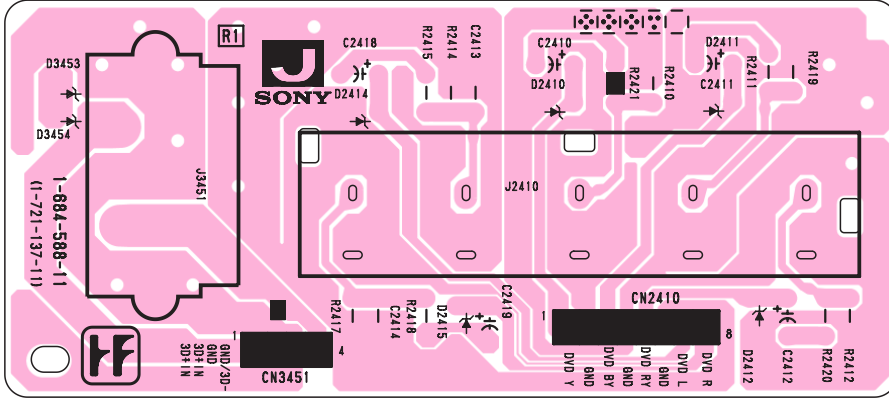– D5 board –

– H1 board –

– DH board –
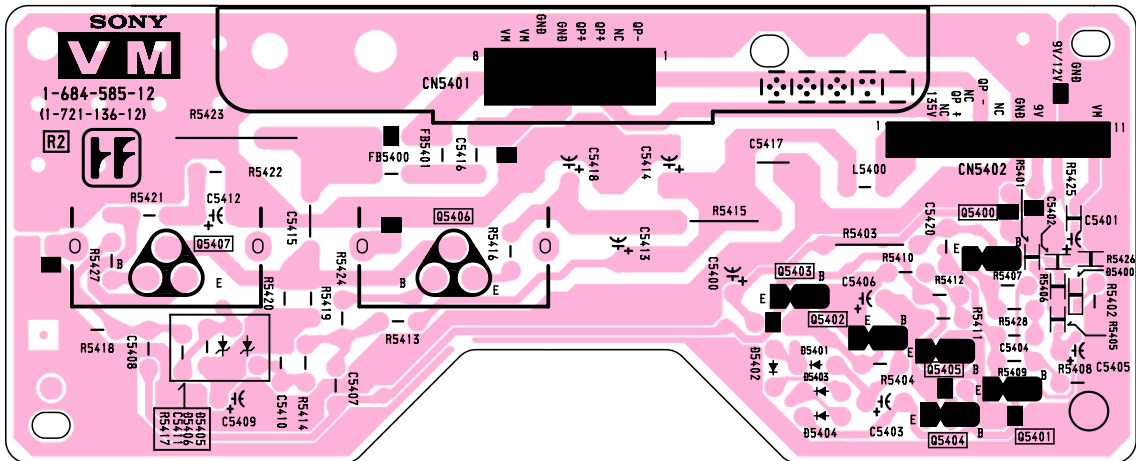
## PRINTED WIRING BOARDS

**J** [COMPONENT IN]          **VM** [VELOCITY MODULATION]
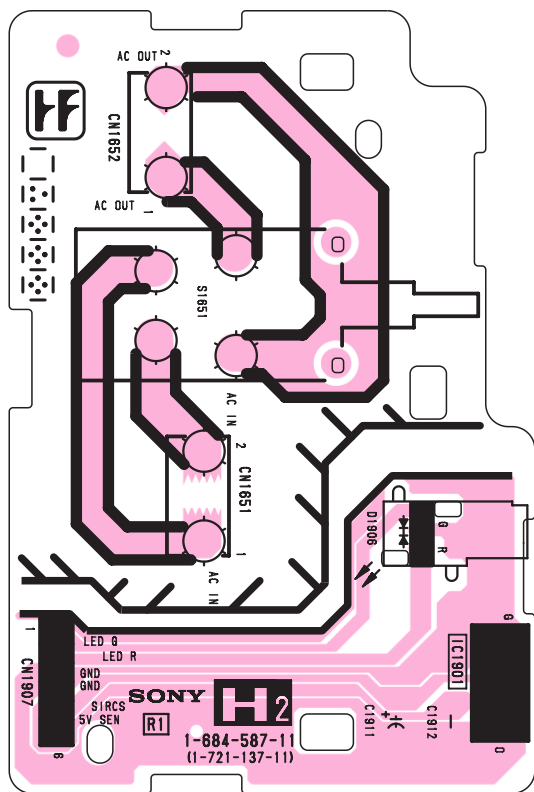
**– J board –**



**– VM board –**

H2  [POWER SW, LED,
SIRCS RECEIVER]

P  [PICTURE IN
PICTURE FEATURE]

F1  [AC LINE FILTER]

**– H2 board –**



**– P board –**
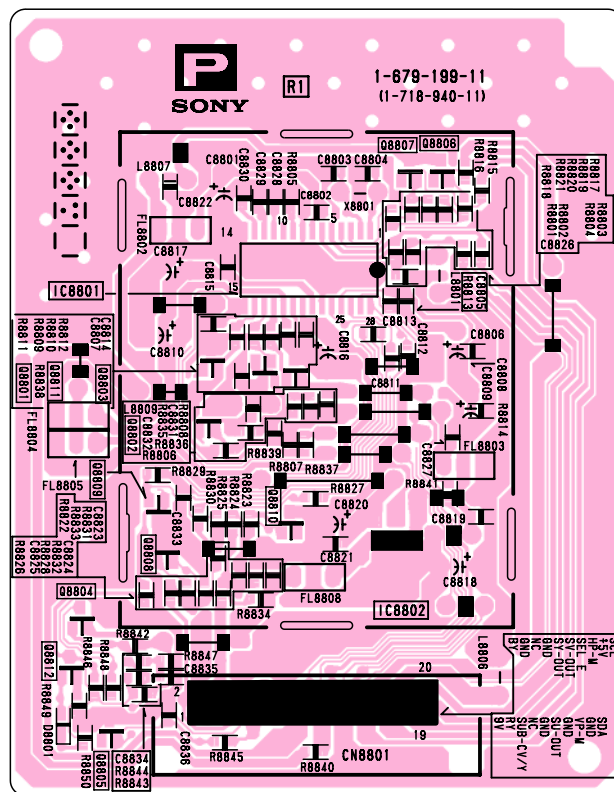


**– F1 board –**
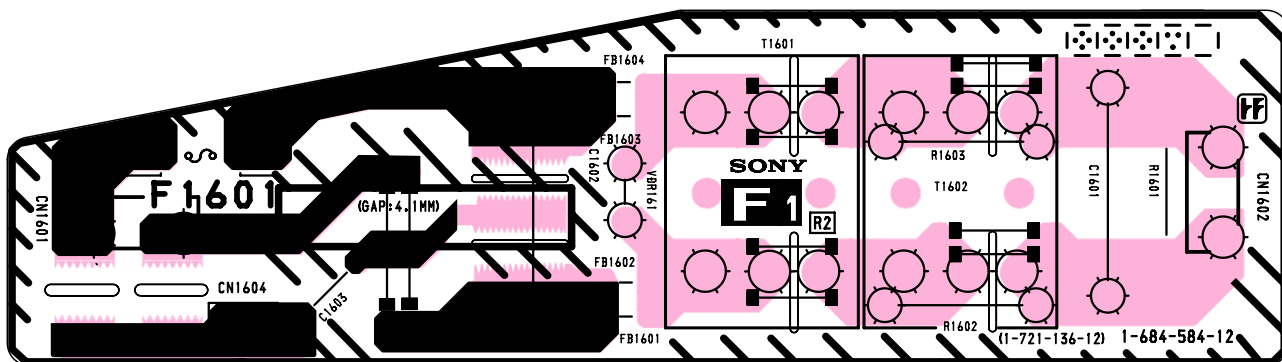
## 7-5 SEMICONDUCTORS

DIODE

| | | | | | |
|---|---|---|---|---|---|
| SPB-25MVWF | D1NS4<br>RD22ES-B1<br>D1N20R<br>RD12ESB1<br>RD15ESB1<br>ERA38-06<br>RD10ESB2<br>ERA85-009 | RD4.7ESB2<br>RD18ESB<br>RD30ESB2<br>RD6.8ESB1 | D2SB60A-F04 | MM3Z15VT1<br>MMDL914T1<br>MM3Z3V9T1 | D4SB60L<br>D4SBL20U |

| | | | | | |
|---|---|---|---|---|---|
| ERA22-08<br>D1NS6<br>1SS119-25<br>S3L20UF4<br>ELIZ<br>RGP02-20EL-6394<br>NNCD9.1A-T1<br>HZS9.1NB2 | GP08D | RN4Z | D10SC4M | D10SBS4F | RD7.5SB.T1<br>RD18ES-B2 |

IC
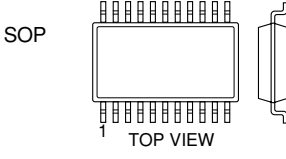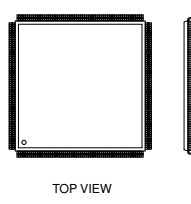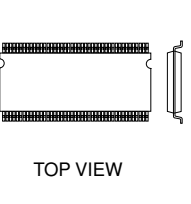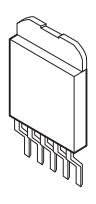
| | | | | | |
|---|---|---|---|---|---|
| 1SS355TE-17<br>RD5.6SB3<br>MA111-(TX)<br>RD9.1SB<br>MA113-TX | MA3091<br>MA3062M-TX | D1NL20UTR<br>UF4005PKG23 | M1MA152WK-T1 | ON3171-R | SBX1981-51P |

DIP
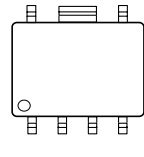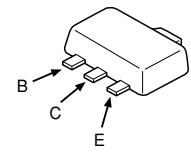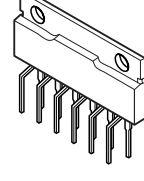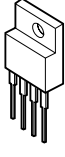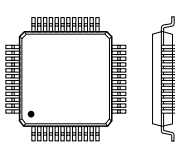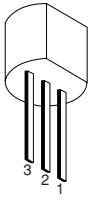
TOP VIEW

Dual In-line Package
Pin 6~98

| | | | | | |
|---|---|---|---|---|---|
| MCZ3001D<br>UPC339C<br>LM393N<br>NJU4066M<br>UPC358C<br>TDA9178 | | DM-58 | STV9379A | BA09T<br>BA12T<br>TA7805S<br>PQ09RF2 | TDA6111Q/N4 |
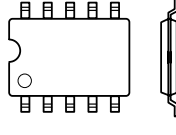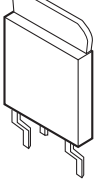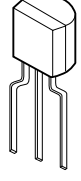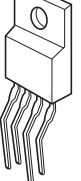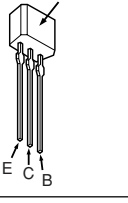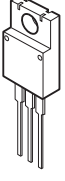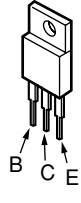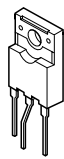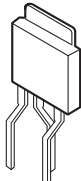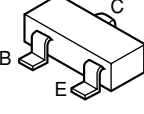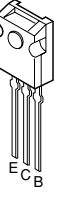
IC

| | | | | | |
|---|---|---|---|---|---|
| SOP<br>TOP VIEW<br>Small outline L-leaded<br>Pin 8~98 | | LA6510 | TOP VIEW | TOP VIEW | |
| SDA9588XB23<br>TLC2933IPWR-12<br>TC7SET00FU(TE85R)<br>TLC2932IPWR<br>CXA1875AM-T4<br>NJM4560M<br>MM1115XFBE | M52055FP<br>TC74HC4538AF(EL)<br>MSM514265E-<br>60JSDR1<br>TC90A690F<br>BU4053BCF-E2 | LA6510 | CXD2095AQ<br>UPD64083<br>CXP750096-044Q | MT48LC1M16A1TG65 | PQ07VZ012ZP |

| | | | | | |
|---|---|---|---|---|---|
| | B C E | | | | 3 2 1 |
| MM1476AF(TP) | S-80743AL-A7-T1 | AN7583Z | PQ05RF2 | CXA2151Q<br>CXA2150Q<br>CXA2069Q<br>CXA2163AQ | NJM78L05A |
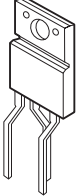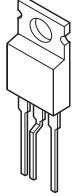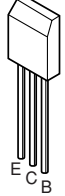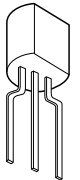
TRANSISTOR

| | | | | | |
|---|---|---|---|---|---|
| | | | | LETTER SIDE<br>E C B | |
| BR24C16F-E2 | BA25BC0FP-E2<br>BA033FP-E2 | UPC1093J-1-T<br>NJM79L12A-T1<br>AN77L05-TA | PQ6RD83B | 2SC2785-HFE<br>2SA1175-HFE<br>DTA144ESA<br>DTC114ESA<br>DTC144ESA | 2SA2005<br>2SC5511<br>IRF1830G-LF49<br>2SC3840(3) |

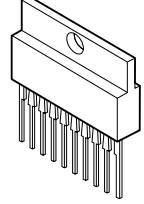| | | | | | |
|---|---|---|---|---|---|
| B C E | | | | C<br>B<br>E | E C B |
| IRF1740G | 2SC5698-SONY-CA<br>2SC5696-SONY-CA | 2SK2663 | 2SD2114K<br>2SC2712-YG<br>UN2213<br>2SA1037AK-T146-R<br>MSB709-RT1<br>2SA1162-G<br>UN2211<br>DTC114TKA-T146 | DTC144EKA<br>2SC2223-F13<br>2SD601A-Q-TX<br>MSD601-RT1<br>MSB709-RT1<br>2SC1623-L5L6<br>DTC143TKA-T146 | 2SB1142-T |

TRANSISTOR

| | | | | | |
|---|---|---|---|---|---|
| IRF1B7N50A-LF31 | 2SC2500-B | IRF720-LF49 | 2SD774-34<br>2SB733-34 | 2SK246-GR | |

# SECTION 8
# EXPLODED VIEWS

**NOTE:**

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

## 8-1. SPEAKER BRACKET

■ : 7-685-663-71  SCREW +BVTP 4 × 16

## 8-2. 3D SPEAKER

■ : 7-685-663-71  SCREW +BVTP 4 × 16



| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| 1 | 4-302-404-03 | SCREW (WASHER HEAD)(+P4 x 16) | |
| 2 | 1-825-163-11 | SPEAKER (5 CM) | |
| 3 | 1-825-164-11 | SPEAKER (13 x 6CM) | |
| 4 | * 4-086-708-01 | BRACKET,SPEAKER | |
| 5 | 4-374-745-21 | CUSHION (A) | |
| | | | |
| 6 | X-4040-346-1 | REAR COVER ASSY (■ 16 SCREWS) | |
| 7 | * X-4040-051-1 | BRACKET ASSY, WOOFER | |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| 51 | * 4-087-460-01 | 3D BOX, TOP  ( ■ 20 SCREWS) | |
| 52 | * 4-087-461-01 | 3D BOX, BOTTOM | |
| 53 | 1-825-162-11 | SPEAKER (16CM) | |
| 54 | 4-064-929-02 | SCREW, TP+TWH 4x25 | |
| 55 | A-1601-923-A | 3D BOX ASSY | 51-53 |

# KV-DR34M97
## RM-991

## 8-3. CHASSIS

● : 7-685-648-79  SCREW +BVTP 3 × 12
■ : 7-685-663-71  SCREW +BVTP 4 × 16
▲ : 7-685-650-79  SCREW +BVTP 3 × 16
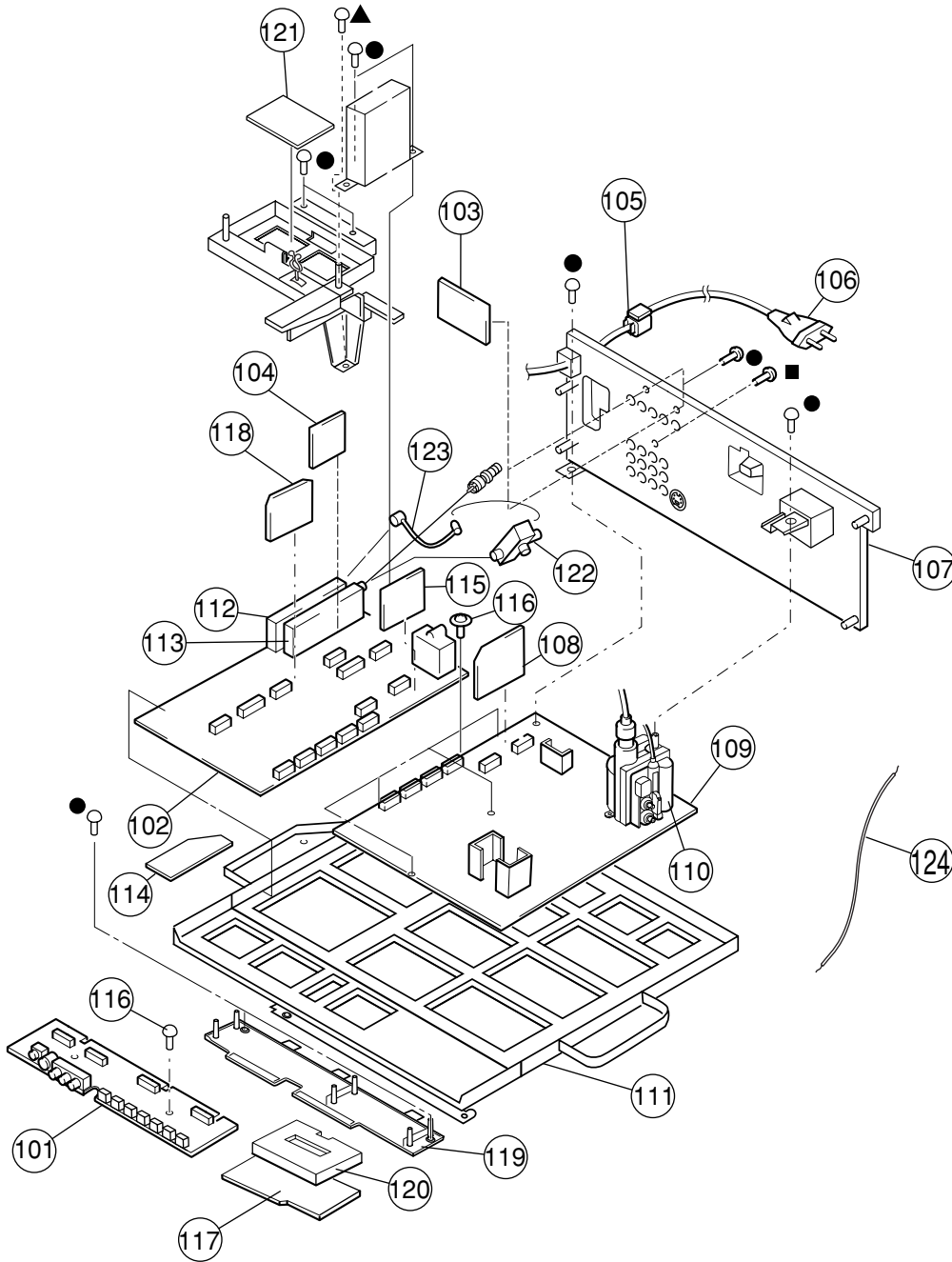


| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| 101 | * A-1400-491-A | H1 BOARD, MOUNTED | |
| 102 | * A-1300-338-A | A BOARD, COMPLETE | |
| 103 | * A-1400-500-A | J BOARD, MOUNTED | |
| 104 | * A-1300-299-A | P BOARD, COMPLETE | |
| 105 | ⚠ 4-022-115-12 | HOLDER, AC CORD | |
| 106 | ⚠ 1-823-483-11 | CORD, POWER (WITH NOISE FILTER) | |
| 107 | * 4-086-706-01 | BRACKET, TERMINAL | |
| 108 | * A-1400-586-A | D5 BOARD, MOUNTED | |
| 109 | * A-1300-339-A | D BOARD, COMPLETE | |
| 110 | ⚠ 1-453-332-22 | TRANSFORMER ASSY, FLYBACK | |
| | | (NX-4601/M3B4) | |
| 111 | * 4-086-321-01 | BRACKET, MAIN | |
| 112 | 8-598-450-10 | TUNER, FSS BTF-LG434 | |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| 113 | 8-598-452-30 | TUNER, FSS BTF-WG442 | |
| 114 | * A-1400-490-A | F1 BOARD, MOUNTED | |
| 115 | * A-1300-290-A | B3 BOARD, COMPLETE | |
| 116 | 4-046-797-01 | SCREW (3 x 12)(+)BVTP | |
| 117 | * A-1400-492-A | H2 BOARD MOUNTED | |
| 118 | * A-1300-298-A | BC1 BOARD MOUNTED | |
| 119 | * 4-086-449-02 | BRACKET, H | |
| 120 | * 4-086-450-01 | COVER, H | |
| 121 | * A-1400-588-A | DH BOARD MOUNTED | |
| 122 | 1-251-658-21 | SPLITTER RF | |
| 123 | * 1-550-110-00 | P-P CABLE | |
| 124 | 1-900-251-82 | LEAD ASSY, G2 (CN9007 (AT C BOARD) TO | |
| | | CN6810 (AT D BOARD)) | |

## 8-4. PICTURE TUBE

● : 7-685-648-79 SCREW +BVTP 3 × 12
■ : 7-685-663-71 SCREW +BVTP 4 × 16
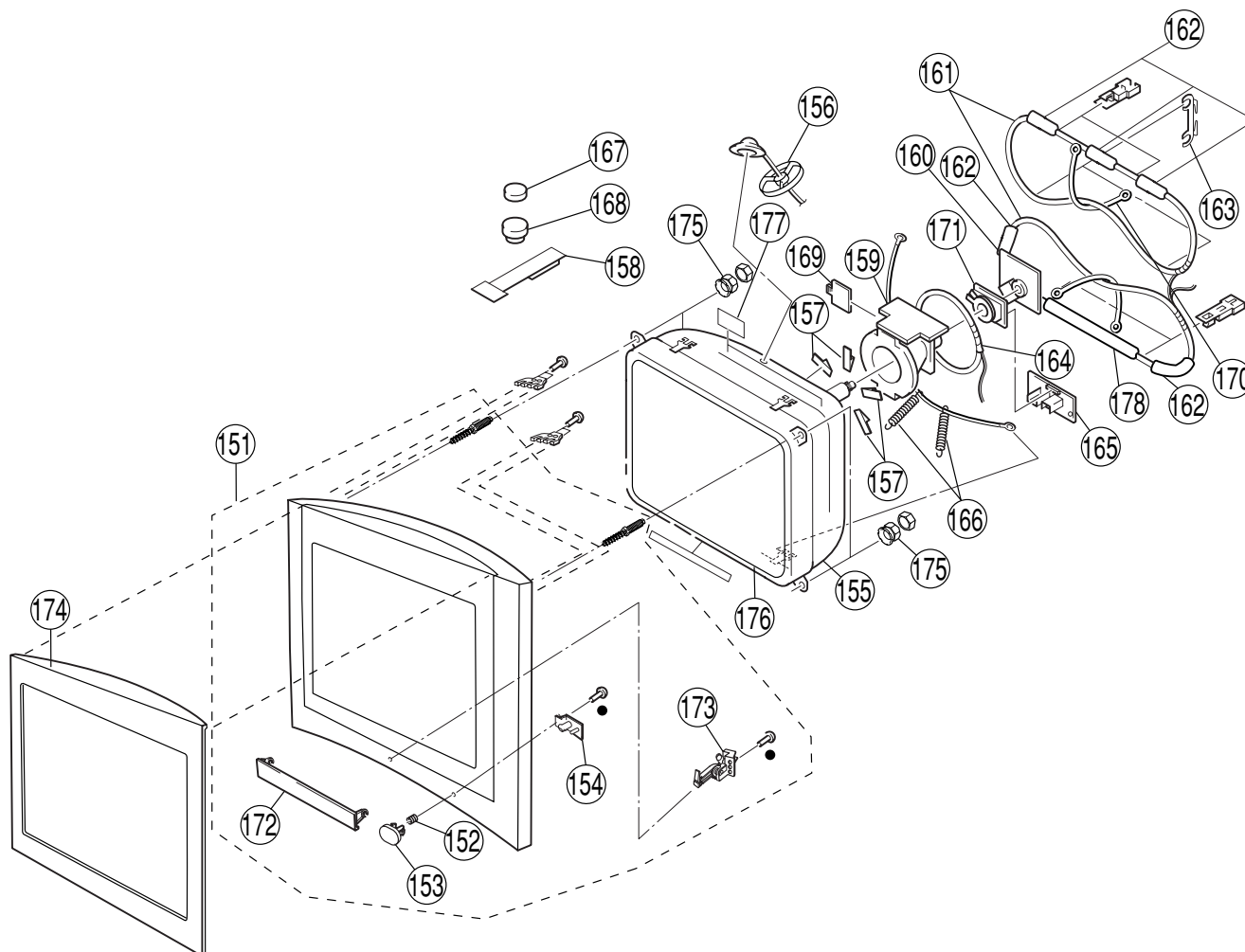


| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| 151 | X-4040-050-1 | CABINET ASSY | 152-154, 172,173 |
| 152 | 4-036-405-11 | SPRING, COMPRESSION | |
| 153 | 4-086-448-01 | BUTTON, POWER | |
| 154 | 4-086-707-01 | GUIDE, LIGHT | |
| 155 | ⚠ 8-735-076-05 | PICTURE TUBE (A80LPD90X) | |
| | | | |
| 156 | * 3-704-372-11 | HOLDER, HV CABLE | |
| 157 | 4-046-600-11 | SPACER, DY | |
| 158 | X-4387-214-3 | PERMALOY ASSY, CORRECTION | |
| 159 | ⚠ 8-451-500-71 | DEFLECTION YOKE (Y34RSC2-Y3) | |
| 160 | * A-1400-587-A | C BOARD, MOUNTED | |
| | | | |
| 161 | ⚠ 1-419-293-21 | COIL, DEGAUSSING | |
| 162 | * 4-074-512-21 | CUSHION S, DGC | |
| 163 | 4-061-369-01 | HOLDER, DEGAUSE COIL | |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| 164 | 1-452-896-11 | COIL, NA ROTATION (RT200) | |
| 165 | * A-1400-499-A | VM BOARD, MOUNTED | |
| | | | |
| 166 | 4-078-766-01 | SPRING, EXTENSION | |
| 167 | 1-452-032-00 | MAGNET, DISC | |
| 168 | 1-452-094-00 | CIRCULAR DISC MAGNET B | |
| 169 | 4-077-228-02 | PIECE, TLH CONVERGENCE | |
| 170 | 4-067-455-01 | BAND, DGC | |
| | | | |
| 171 | 8-453-011-41 | NA299-C | |
| 172 | X-4039-978-1 | DOOR ASSY CONTROL | |
| 173 | 4-083-848-02 | DAMPER DOOR | |
| 174 | X-4040-049-1 | BEZEL ASSY ( ■ 18 SCREWS) | |
| 175 | 4-387-204-01 | NUT, SPECIAL CRT | |
| | | | |
| 176 | 1-419-295-11 | COIL, LANDING CORRECTION | |
| 177 | 4-069-652-02 | CUSHION (HS BAND) | |
| 178 | 4-074-513-21 | CUSHION(L), DGC | |

 **A**

# SECTION 9
# ELECTRICAL PARTS LIST

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Items marked " ∗ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

- All resistors are in ohms
- F : nonflammable

CAPACITORS
- MF : µF, PF : µµF

COILS
- MMH : mH, UH : µH

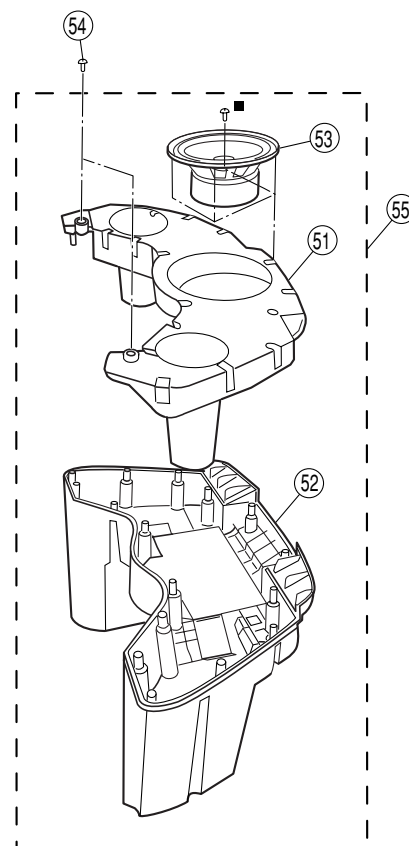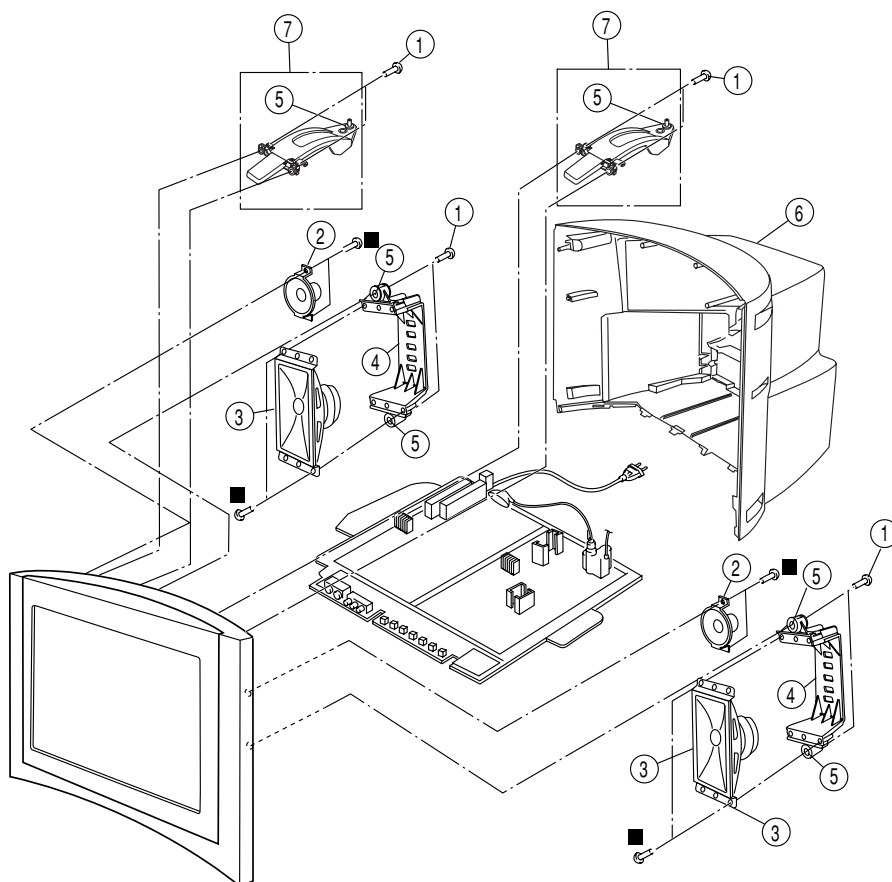| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---------|----------|-------------|---|---|--------|
| ∗ | A-1300-338-A | A BOARD COMPLETE | | | |
| | | ∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗ | | | |
| | 4-382-854-11 | SCREW (M3X10), P, SW (+) | | | |
| | | <CAPACITOR> | | | |
| C001 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C002 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C004 | 1-163-001-11 | CERAMIC CHIP | 220PF | 10.00% | 50V |
| C005 | 1-163-001-11 | CERAMIC CHIP | 220PF | 10.00% | 50V |
| C006 | 1-107-725-11 | CERAMIC CHIP | 0.1UF | 10.00% | 16V |
| C007 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C009 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C010 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C012 | 1-163-227-11 | CERAMIC CHIP | 10PF | 0.50PF | 50V |
| C013 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C014 | 1-126-967-11 | ELECT | 47UF | 20.00% | 50V |
| C015 | 1-163-227-11 | CERAMIC CHIP | 10PF | 0.50PF | 50V |
| C016 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5.00% | 50V |
| C017 | 1-163-247-91 | CERAMIC CHIP | 68PF | 5.00% | 50V |
| C020 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C021 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C022 | 1-163-809-11 | CERAMIC CHIP | 0.047UF | 10.00% | 25V |
| C024 | 1-163-227-11 | CERAMIC CHIP | 10PF | 0.50PF | 50V |
| C028 | 1-163-037-11 | CERAMIC CHIP | 0.022UF | 10.00% | 50V |
| C030 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V |
| C031 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V |
| C032 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C033 | 1-115-339-11 | CERAMIC CHIP | 0.1UF | 10.00% | 50V |
| C034 | 1-163-259-91 | CERAMIC CHIP | 220PF | 5.00% | 50V |
| C035 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C036 | 1-104-665-11 | ELECT | 100UF | 20.00% | 25V |
| C041 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C043 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C044 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C045 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C046 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C047 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C048 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C050 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C052 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C053 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C103 | 1-107-725-11 | CERAMIC CHIP | 0.1UF | 10.00% | 16V |
| C104 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C107 | 1-163-005-91 | CERAMIC CHIP | 470PF | 10.00% | 50V |
| C108 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C109 | 1-163-005-91 | CERAMIC CHIP | 470PF | 10.00% | 50V |
| C110 | 1-163-005-91 | CERAMIC CHIP | 470PF | 10.00% | 50V |
| C111 | 1-163-005-91 | CERAMIC CHIP | 470PF | 10.00% | 50V |
| C112 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C113 | 1-126-967-11 | ELECT | 47UF | 20.00% | 50V |
| C114 | 1-126-967-11 | ELECT | 47UF | 20.00% | 50V |
| C301 | 1-126-768-11 | ELECT | 2200UF | 20.00% | 16V |
| C326 | 1-126-963-11 | ELECT | 4.7UF | 20.00% | 50V |
| C1100 | 1-163-239-11 | CERAMIC CHIP | 33PF | 5.00% | 50V |
| C1101 | 1-163-009-91 | CERAMIC CHIP | 0.001UF | 10.00% | 50V |
| C1102 | 1-163-007-11 | CERAMIC CHIP | 680PF | 10.00% | 50V |
| C1200 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C1201 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| C1202 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C1203 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C1204 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C1205 | 1-107-698-11 | ELECT | 10UF | 20.00% | 25V |
| C1206 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| C1207 | 1-107-698-11 | ELECT | 10UF | 20.00% | 25V |
| C1208 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C1209 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C1210 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C1211 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C1215 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V |
| C1216 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C1217 | 1-104-665-11 | ELECT | 100UF | 20.00% | 25V |
| C1220 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V |
| C1222 | 1-110-501-11 | CERAMIC CHIP | 0.33UF | 10.00% | 16V |
| C1223 | 1-126-963-11 | ELECT | 4.7UF | 20.00% | 50V |
| C1224 | 1-126-963-11 | ELECT | 4.7UF | 20.00% | 50V |
| C1225 | 1-126-963-11 | ELECT | 4.7UF | 20.00% | 50V |
| C1226 | 1-126-963-11 | ELECT | 4.7UF | 20.00% | 50V |
| C1227 | 1-126-963-11 | ELECT | 4.7UF | 20.00% | 50V |
| C1228 | 1-126-963-11 | ELECT | 4.7UF | 20.00% | 50V |
| C1229 | 1-126-963-11 | ELECT | 4.7UF | 20.00% | 50V |
| C1230 | 1-126-963-11 | ELECT | 4.7UF | 20.00% | 50V |
| C1232 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C1233 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C1234 | 1-126-974-11 | ELECT | 3300UF | 20.00% | 50V |
| C1235 | 1-163-009-91 | CERAMIC CHIP | 0.001UF | 10.00% | 50V |
| C1236 | 1-163-009-91 | CERAMIC CHIP | 0.001UF | 10.00% | 50V |
| C1237 | 1-164-489-11 | CERAMIC CHIP | 0.22UF | 10.00% | 16V |
| C1238 | 1-164-489-11 | CERAMIC CHIP | 0.22UF | 10.00% | 16V |
| C1239 | 1-115-339-11 | CERAMIC CHIP | 0.1UF | 10.00% | 50V |
| C1241 | 1-128-550-11 | ELECT | 2200UF | 20.00% | 50V |
| C1243 | 1-126-974-11 | ELECT | 3300UF | 20.00% | 50V |
| C1244 | 1-128-550-11 | ELECT | 2200UF | 20.00% | 50V |
| C1245 | 1-128-550-11 | ELECT | 2200UF | 20.00% | 50V |
| C1247 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | | 16V |
| C1248 | 1-163-037-11 | CERAMIC CHIP | 0.022UF | 10.00% | 50V |
| C1249 | 1-163-037-11 | CERAMIC CHIP | 0.022UF | 10.00% | 50V |
| C1250 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | | 16V |
| C1251 | 1-163-037-11 | CERAMIC CHIP | 0.022UF | 10.00% | 50V |
| C1252 | 1-163-037-11 | CERAMIC CHIP | 0.022UF | 10.00% | 50V |
| C1253 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | | 16V |

A

| REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|---|--------|---|
| C1254 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C1255 | 1-126-941-11 | ELECT | 470UF | 20.00% | 25V |
| C1256 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C1257 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C1258 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V |
| | | | | | |
| C1259 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C1261 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V |
| C1262 | 1-126-957-11 | ELECT | 0.22UF | 20.00% | 50V |
| C1263 | 1-126-965-91 | ELECT | 22UF | 20.00% | 50V |
| C1264 | 1-126-965-91 | ELECT | 22UF | 20.00% | 50V |
| | | | | | |
| C1265 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| C1266 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V |
| C1267 | 1-137-374-11 | MYLAR | 0.047UF | 5.00% | 50V |
| C1268 | 1-163-018-00 | CERAMIC CHIP | 0.0056UF | 10.00% | 50V |
| C1270 | 1-163-018-00 | CERAMIC CHIP | 0.0056UF | 10.00% | 50V |
| | | | | | |
| C1271 | 1-137-374-11 | MYLAR | 0.047UF | 5.00% | 50V |
| C1273 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C1274 | 1-115-339-11 | CERAMIC CHIP | 0.1UF | 10.00% | 50V |
| C1275 | 1-126-948-11 | ELECT | 100UF | 20.00% | 35V |
| C1276 | 1-104-760-11 | CERAMIC CHIP | 0.047UF | 10.00% | 50V |
| | | | | | |
| C1277 | 1-104-760-11 | CERAMIC CHIP | 0.047UF | 10.00% | 50V |
| C1279 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C1280 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C1281 | 1-164-489-11 | CERAMIC CHIP | 0.22UF | 10.00% | 16V |
| C1282 | 1-164-489-11 | CERAMIC CHIP | 0.22UF | 10.00% | 16V |
| | | | | | |
| C1283 | 1-163-017-00 | CERAMIC CHIP | 0.0047UF | 10.00% | 50V |
| C1284 | 1-163-017-00 | CERAMIC CHIP | 0.0047UF | 10.00% | 50V |
| C1285 | 1-163-017-00 | CERAMIC CHIP | 0.0047UF | 10.00% | 50V |
| C1286 | 1-164-182-11 | CERAMIC CHIP | 0.0033UF | 10.00% | 50V |
| C1287 | 1-164-182-11 | CERAMIC CHIP | 0.0033UF | 10.00% | 50V |
| | | | | | |
| C1288 | 1-163-989-11 | CERAMIC CHIP | 0.033UF | 10.00% | 25V |
| C1289 | 1-163-989-11 | CERAMIC CHIP | 0.033UF | 10.00% | 25V |
| C1291 | 1-104-665-11 | ELECT | 100UF | 20.00% | 25V |
| C1292 | 1-115-339-11 | CERAMIC CHIP | 0.1UF | 10.00% | 50V |
| C1293 | 1-163-019-00 | CERAMIC CHIP | 0.0068UF | 10.00% | 50V |
| | | | | | |
| C1295 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C1296 | 1-115-339-11 | CERAMIC CHIP | 0.1UF | 10.00% | 50V |
| C1297 | 1-137-374-11 | MYLAR | 0.047UF | 5.00% | 50V |
| C1298 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V |
| C1301 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| | | | | | |
| C1302 | 1-115-339-11 | CERAMIC CHIP | 0.1UF | 10.00% | 50V |
| C1312 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | | 16V |
| C1322 | 1-137-374-11 | MYLAR | 0.047UF | 5.00% | 50V |
| C1323 | 1-136-165-00 | FILM | 0.1UF | 5.00% | 50V |
| C2200 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| | | | | | |
| C2201 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C2202 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C2203 | 1-126-963-11 | ELECT | 4.7UF | 20.00% | 50V |
| C2204 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | | 16V |
| C2205 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | | 16V |
| | | | | | |
| C2206 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C2207 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | | 16V |
| C2208 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | | 16V |
| C2209 | 1-126-968-11 | ELECT | 100UF | 20.00% | 50V |
| C2600 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| | | | | | |
| C2601 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C2602 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C2603 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C2605 | 1-104-665-11 | ELECT | 100UF | 20.00% | 10V |
| C2606 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| | | | | | |
| C2607 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C2609 | 1-104-665-11 | ELECT | 100UF | 20.00% | 10V |

| REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|---|--------|---|
| C2612 | 1-104-665-11 | ELECT | 100UF | 20.00% | 25V |
| C2613 | 1-126-936-11 | ELECT | 3300UF | 20.00% | 16V |
| C2615 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| | | | | | |
| C2616 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C3001 | 1-126-963-11 | ELECT | 4.7UF | 20.00% | 50V |
| C3002 | 1-109-982-11 | CERAMIC CHIP | 1UF | 10.00% | 10V |
| C3003 | 1-109-982-11 | CERAMIC CHIP | 1UF | 10.00% | 10V |
| C3005 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| | | | | | |
| C3006 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C3007 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V |
| C3008 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V |
| C3010 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C3012 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| | | | | | |
| C3013 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C3015 | 1-107-725-11 | CERAMIC CHIP | 0.1UF | 10.00% | 16V |
| C3019 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C3020 | 1-109-982-11 | CERAMIC CHIP | 1UF | 10.00% | 10V |
| C3021 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| | | | | | |
| C3033 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C3034 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C3037 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C3038 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C3039 | 1-216-295-91 | SHORT CHIP | 0 | | |
| | | | | | |
| C3040 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C3041 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C3042 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C3043 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C3044 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| | | | | | |
| C3045 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C3046 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C3330 | 1-107-725-11 | CERAMIC CHIP | 0.1UF | 10.00% | 16V |
| C3331 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C3336 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| | | | | | |
| C3338 | 1-163-005-91 | CERAMIC CHIP | 470PF | 10.00% | 50V |
| C3350 | 1-163-005-91 | CERAMIC CHIP | 470PF | 10.00% | 50V |
| C3351 | 1-163-005-91 | CERAMIC CHIP | 470PF | 10.00% | 50V |
| C3352 | 1-163-005-91 | CERAMIC CHIP | 470PF | 10.00% | 50V |
| C3353 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| | | | | | |
| C3354 | 1-126-967-11 | ELECT | 47UF | 20.00% | 50V |
| C3355 | 1-126-967-11 | ELECT | 47UF | 20.00% | 50V |
| C4301 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4302 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4303 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| | | | | | |
| C4304 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4305 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4306 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4307 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V |
| C4308 | 1-164-492-11 | CERAMIC CHIP | 0.15UF | 10.00% | 16V |
| | | | | | |
| C4309 | 1-125-838-11 | CERAMIC CHIP | 2.2UF | 10% | 6.3V |
| C4310 | 1-107-902-11 | ELECT | 1UF | 20.00% | 50V |
| C4311 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4312 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C4313 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| | | | | | |
| C4314 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4315 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4316 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C4317 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4318 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V |
| | | | | | |
| C4319 | 1-115-340-11 | CERAMIC CHIP | 0.22UF | 10.00% | 25V |
| C4321 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V |
| C4322 | 1-163-017-00 | CERAMIC CHIP | 0.0047UF | 10.00% | 50V |

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| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| C4323 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4324 | 1-163-009-91 | CERAMIC CHIP | 0.001UF | 10.00% | 50V |
| | | | | | |
| C4325 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C4326 | 1-104-760-11 | CERAMIC CHIP | 0.047UF | 10.00% | 50V |
| C4327 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C4328 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C4330 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| | | | | | |
| C4331 | 1-115-340-11 | CERAMIC CHIP | 0.22UF | 10.00% | 25V |
| C4333 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V |
| C4334 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C4335 | 1-115-185-11 | CERAMIC CHIP | 0.033UF | 10.00% | 50V |
| C4336 | 1-163-009-91 | CERAMIC CHIP | 0.001UF | 10.00% | 50V |
| | | | | | |
| C4339 | 1-136-244-11 | FILM | 0.1UF | 5.00% | 50V |
| C4341 | 1-130-489-00 | MYLAR | 0.033UF | 5.00% | 50V |
| C4342 | 1-164-344-11 | CERAMIC CHIP | 0.068UF | 10.00% | 25V |
| C4343 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4344 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| | | | | | |
| C4345 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V |
| C4346 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V |
| C4347 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4348 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V |
| C4349 | 1-127-760-11 | CERAMIC CHIP | 4.7UF | 10% | 6.3V |
| | | | | | |
| C4352 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4354 | 1-164-161-11 | CERAMIC CHIP | 0.0022UF | 10.00% | 50V |
| C4355 | 1-164-489-11 | CERAMIC CHIP | 0.22UF | 10.00% | 16V |
| C4356 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C4357 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V |
| | | | | | |
| C4358 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4359 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V |
| C4360 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4361 | 1-164-161-11 | CERAMIC CHIP | 0.0022UF | 10.00% | 50V |
| C4362 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| | | | | | |
| C4367 | 1-216-295-91 | SHORT CHIP | 0 | | |
| C4368 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V |
| C4369 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4370 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4371 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V |
| | | | | | |
| C4373 | 1-126-934-11 | ELECT | 220UF | 20.00% | 16V |
| C4374 | 1-126-934-11 | ELECT | 220UF | 20.00% | 16V |
| C4375 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C4376 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C4383 | 1-126-965-91 | ELECT | 22UF | 20.00% | 50V |
| | | | | | |
| C4384 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C4390 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C4394 | 1-163-017-00 | CERAMIC CHIP | 0.0047UF | 10.00% | 50V |
| C8300 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V |
| C8301 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| | | | | | |
| C8302 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C8303 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C8304 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C8305 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C8306 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| | | | | | |
| C8307 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C8308 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C8309 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C8310 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C8311 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| | | | | | |
| C8312 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8313 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8314 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8315 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8316 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |

| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| C8317 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8318 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8319 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8320 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C8321 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| | | | | | |
| C8322 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8323 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8324 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C8325 | 1-126-935-11 | ELECT | 470UF | 20.00% | 16V |
| C8326 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V |
| | | | | | |
| C8329 | 1-163-249-11 | CERAMIC CHIP | 82PF | 5.00% | 50V |
| C8330 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8331 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8334 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C8335 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| | | | | | |
| C8336 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C8337 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8338 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8339 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8340 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V |
| | | | | | |
| C8341 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V |
| C8342 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C8343 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C8346 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8349 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| | | | | | |
| C8354 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V |
| C8355 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C8356 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8357 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C8358 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| | | | | | |
| C8359 | 1-163-037-11 | CERAMIC CHIP | 0.022UF | 10.00% | 50V |
| C8360 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C8361 | 1-126-961-11 | ELECT | 2.2UF | 20.00% | 50V |
| C8366 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C8367 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| | | | | | |
| C8368 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C8369 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C8370 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8371 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8372 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| | | | | | |
| C8373 | 1-163-227-11 | CERAMIC CHIP | 10PF | 0.50PF | 50V |
| C8375 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C8376 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8379 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C8381 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| | | | | | |
| C8382 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8383 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8384 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8385 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8386 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| | | | | | |
| C8390 | 1-126-963-11 | ELECT | 4.7UF | 20.00% | 50V |
| C8391 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8392 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8393 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8394 | 1-216-295-91 | SHORT CHIP | 0 | | |
| | | | | | |
| C8411 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C8413 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C8430 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C8441 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |
| C8446 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| | | | | | |
| C8447 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8448 | 1-164-690-91 | CERAMIC CHIP | 0.0022UF | 5.00% | 50V |

**A**

| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---------|----------|-------------|--|--|--------|
| C8450 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V |
| C8451 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | | 16V |
| C8452 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8453 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8454 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8455 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C8456 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C8457 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C8459 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8462 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8480 | 1-164-346-11 | CERAMIC CHIP | 1UF | | 16V |

**<CONNECTOR>**

| REF NO. | PART NO. | DESCRIPTION |
|---------|----------|-------------|
| CN1100 * | 1-785-608-11 | PIN, CONNECTOR 4P |
| CN1108 | 1-793-494-11 | CONNECTOR, BOARD TO BOARD 40P |
| CN1113 | 1-900-703-51 | LEAD ASSY, SPEAKER |
| CN1114 * | 1-564-507-11 | PLUG, CONNECTOR 4P |
| CN1116 | 1-695-915-11 | TAB (CONTACT) |
| CN1138 * | 1-564-508-11 | PLUG, CONNECTOR 5P |
| CN1190 * | 1-764-333-11 | PLUG, CONNECTOR 10P |
| CN1193 * | 1-764-333-11 | PLUG, CONNECTOR 10P |
| CN2600 | 1-695-915-11 | TAB (CONTACT) |
| CN4301 * | 1-564-515-11 | PLUG, CONNECTOR 12P |
| CN8301 * | 1-764-333-11 | PLUG, CONNECTOR 10P |
| CN8302 * | 1-564-511-11 | PLUG, CONNECTOR 8P |
| CN8401 | 1-793-493-11 | CONNECTOR, BOARD TO BOARD 20P |
| CN8402 | 1-793-493-11 | CONNECTOR, BOARD TO BOARD 20P |

**<DIODE>**

| REF NO. | PART NO. | DESCRIPTION | |
|---------|----------|-------------|--|
| D001 | 8-719-081-97 | MMDL914T1 | |
| D002 | 8-719-081-97 | MMDL914T1 | |
| D003 | 8-719-081-97 | MMDL914T1 | |
| D004 | 8-719-081-97 | MMDL914T1 | |
| D005 | 8-719-081-97 | MMDL914T1 | |
| D006 | 8-719-081-97 | MMDL914T1 | |
| D007 | 8-719-158-18 | RD5.6SB3 | |
| D013 | 8-719-158-18 | RD5.6SB3 | |
| D100 | 8-719-081-97 | MMDL914T1 | |
| D300 | 1-216-295-91 | SHORT CHIP | 0 |
| D301 | 8-719-081-97 | MMDL914T1 | |
| D302 | 8-719-081-97 | MMDL914T1 | |
| D303 | 8-719-081-97 | MMDL914T1 | |
| D317 | 8-719-081-97 | MMDL914T1 | |
| D1200 | 8-719-978-69 | DTZ-TT11-16B | |
| D1201 | 8-719-081-97 | MMDL914T1 | |
| D1202 | 8-719-081-97 | MMDL914T1 | |
| D1203 | 8-719-081-97 | MMDL914T1 | |
| D1204 | 8-719-081-97 | MMDL914T1 | |
| D1211 | 8-719-041-97 | MA113-(TX) | |
| D1214 | 8-719-041-97 | MA113-(TX) | |
| D1216 | 8-719-081-97 | MMDL914T1 | |
| D1217 | 8-719-081-97 | MMDL914T1 | |
| D1218 | 8-719-081-97 | MMDL914T1 | |
| D2200 | 8-719-158-35 | RD9.1S-B | |
| D2201 | 8-719-158-35 | RD9.1S-B | |
| D4301 | 8-719-081-97 | MDL914T1 | |
| D4302 | 1-216-295-91 | SHORT CHIP | 0 |
| D4303 | 8-719-037-05 | RD7.5SB-T1 | |
| D4305 | 8-719-109-81 | RD4.7ESB2 | |

| REF NO. | PART NO. | DESCRIPTION | | REMARK |
|---------|----------|-------------|--|--------|
| D4308 | 8-719-081-97 | MMDL914T1 | | |
| D4312 | 8-719-401-63 | MA3062M-TX | | |
| D4313 | 8-719-050-38 | DIODE M1MA152WK-T1 | | |
| D4314 | 8-719-050-38 | DIODE M1MA152WK-T1 | | |
| D4315 | 8-719-069-60 | DZSTE-179.1B | | |
| D4317 | 8-719-081-97 | MMDL914T1 | | |
| D4318 | 8-719-081-97 | DL914T1 | | |
| D4319 | 8-719-081-97 | MMDL914T1 | | |
| D4322 | 1-216-295-91 | SHORT CHIP | 0 | |
| D4323 | 8-719-081-97 | MMDL914T1 | | |
| D4324 | 8-719-081-97 | MMDL914T1 | | |
| D8301 | 8-719-158-35 | RD9.1S-B | | |
| D8302 | 8-719-158-35 | RD9.1S-B | | |
| D8303 | 8-719-158-35 | RD9.1S-B | | |
| D8304 | 8-719-158-35 | RD9.1S-B | | |
| D8305 | 8-719-158-35 | RD9.1S-B | | |
| D8306 | 8-719-158-35 | RD9.1S-B | | |
| D8307 | 8-719-158-35 | RD9.1S-B | | |
| D8308 | 8-719-158-35 | RD9.1S-B | | |
| D8309 | 8-719-158-35 | RD9.1S-B | | |
| D8310 | 8-719-158-35 | RD9.1S-B | | |
| D8311 | 8-719-158-35 | RD9.1S-B | | |
| D8312 | 8-719-158-35 | RD9.1S-B | | |
| D8313 | 8-719-158-35 | RD9.1S-B | | |
| D8314 | 8-719-158-35 | RD9.1S-B | | |
| D8315 | 8-719-158-35 | RD9.1S-B | | |
| D8316 | 8-719-158-35 | RD9.1S-B | | |
| D8320 | 8-719-158-35 | RD9.1S-B | | |
| D8321 | 8-719-158-35 | RD9.1S-B | | |
| D8322 | 8-719-158-35 | RD9.1S-B | | |
| D8323 | 8-719-158-35 | RD9.1S-B | | |
| D8324 | 8-719-158-35 | RD9.1S-B | | |
| D8325 | 8-719-158-35 | RD9.1S-B | | |
| D8331 | 8-719-041-97 | MA113-(TX) | | |

**<FERRITE BEAD>**

| REF NO. | PART NO. | DESCRIPTION | |
|---------|----------|-------------|--|
| FB002 | 1-414-233-22 | FERRITE | 0UH |
| FB003 | 1-414-233-22 | FERRITE | 0UH |
| FB004 | 1-414-233-22 | FERRITE | 0UH |
| FB005 | 1-414-233-22 | FERRITE | 0UH |
| FB006 | 1-414-233-22 | FERRITE | 0UH |
| FB008 | 1-414-233-22 | FERRITE | 0UH |
| FB1300 | 1-216-295-91 | SHORT CHIP | 0 |
| FB4301 | 1-216-295-91 | SHORT CHIP | 0 |
| FB4302 | 1-216-295-91 | SHORT CHIP | 0 |
| FB4303 | 1-216-295-91 | SHORT CHIP | 0 |

**<FILTER>**

| REF NO. | PART NO. | DESCRIPTION |
|---------|----------|-------------|
| FL001 | 1-236-071-11 | ENCAPSULATED COMPONENT |
| FL8301 | 1-236-071-11 | ENCAPSULATED COMPONENT |
| FL8303 | 1-236-071-11 | ENCAPSULATED COMPONENT |
| FL8304 | 1-236-071-11 | ENCAPSULATED COMPONENT |
| FL8305 | 1-236-071-11 | ENCAPSULATED COMPONENT |
| FL8311 | 1-236-071-11 | ENCAPSULATED COMPONENT |
| FL8312 | 1-236-071-11 | ENCAPSULATED COMPONENT |

**<IC>**

| REF NO. | PART NO. | DESCRIPTION |
|---------|----------|-------------|
| IC001 | 8-752-930-60 | IC CXP750096-044Q |
| IC002 | 8-759-663-29 | MM1476AF(TP) |

# A

| REF NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------|-------------|--------|
| IC003 | 8-759-641-86 | BR24C16F-E2 | |
| IC100 | 8-759-042-02 | S-80743AL-A7-S | |
| | | | |
| IC1200 | 8-759-100-96 | UPC4558G2 | |
| IC1203 | 8-759-100-96 | UPC4558G2 | |
| IC1204 | 8-759-690-61 | AN7583Z | |
| IC1205 | 8-759-711-10 | NJU4066BM | |
| IC1207 | 6-702-145-01 | IC NJW1139GK1-TE2 | |
| | | | |
| IC2200 | 8-759-745-64 | NJM4560M | |
| IC2600 | 8-759-095-63 | PQ09RF2 | |
| IC2601 | 8-759-065-07 | PQ05RF2 | |
| IC2603 | 8-759-460-72 | BA033FP-E2 | |
| IC3001 | 8-752-093-84 | CXA2151Q | |
| | | | |
| IC3002 | 8-759-677-02 | BU4053BCF-E2 | |
| IC3003 | 8-759-548-56 | M52055FP | |
| IC4301 | 8-752-100-25 | CXA2150AQ | |
| IC4302 | 8-759-708-05 | NJM78L05A | |
| IC4304 | 8-759-135-80 | UPC358C | |
| | | | |
| IC8302 | 8-752-080-04 | CXA2069Q | |
| IC8306 | 8-752-099-05 | IC CXA2163AQ-T6 | |
| IC8309 | 8-759-337-26 | MM1115XFBE | |
| IC8310 | 8-759-542-15 | TDA9178 | |
| IC8312 | 8-759-485-79 | TC7SET08FU(TE85L | |

**<JACK>**

| REF NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------|-------------|--------|
| J8301 | 1-784-646-11 | TERMINAL, S | |
| J8302 | 1-778-387-11 | JACK BLOCK, PIN 12P | |

**<CHIP CONDUCTOR>**

| REF NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------|-------------|--------|
| JR001 | 1-216-295-91 | SHORT CHIP | 0 |
| JR102 | 1-216-295-91 | SHORT CHIP | 0 |
| JR107 | 1-216-295-91 | SHORT CHIP | 0 |
| JR1214 | 1-216-295-91 | SHORT CHIP | 0 |
| JR1219 | 1-216-295-91 | SHORT CHIP | 0 |
| | | | |
| JR1301 | 1-216-295-91 | SHORT CHIP | 0 |
| JR1303 | 1-216-295-91 | SHORT CHIP | 0 |
| JR4301 | 1-216-295-91 | SHORT CHIP | 0 |
| JR8301 | 1-216-295-91 | SHORT CHIP | 0 |
| JR8302 | 1-216-295-91 | SHORT CHIP | 0 |

**<COIL>**

| REF NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------|-------------|--------|
| L001 | 1-414-856-11 | INDUCTOR | 10UH |
| L002 | 1-414-856-11 | INDUCTOR | 10UH |
| L003 | 1-414-751-11 | INDUCTOR | 1UH |
| L005 | 1-414-856-11 | INDUCTOR | 10UH |
| L006 | 1-414-856-11 | INDUCTOR | 10UH |
| | | | |
| L101 | 1-414-856-11 | INDUCTOR | 10UH |
| L102 | 1-414-856-11 | INDUCTOR | 10UH |
| L103 | 1-414-856-11 | INDUCTOR | 10UH |
| L104 | 1-414-856-11 | INDUCTOR | 10UH |
| L105 | 1-414-856-11 | INDUCTOR | 10UH |
| | | | |
| L1200 | 1-414-856-11 | INDUCTOR | 10UH |
| L1201 | 1-414-856-11 | INDUCTOR | 10UH |
| L1300 | 1-414-856-11 | INDUCTOR | 10UH |
| L3001 | 1-469-555-21 | INDUCTOR | 10UH |
| L3002 | 1-412-029-11 | INDUCTOR | 10UH |
| | | | |
| L3003 | 1-412-029-11 | INDUCTOR | 10UH |
| L3302 | 1-414-856-11 | INDUCTOR | 10UH |
| L3303 | 1-414-856-11 | INDUCTOR | 10UH |

| REF NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------|-------------|--------|
| L3304 | 1-414-856-11 | INDUCTOR | 10UH |
| L3305 | 1-414-856-11 | INDUCTOR | 10UH |
| | | | |
| L3306 | 1-414-856-11 | INDUCTOR | 10UH |
| L4301 | 1-412-029-11 | INDUCTOR | 10UH |
| L4302 | 1-412-029-11 | INDUCTOR | 10UH |
| L4303 | 1-412-029-11 | INDUCTOR | 10UH |
| L4304 | 1-412-029-11 | INDUCTOR | 10UH |
| | | | |
| L4305 | 1-412-029-11 | INDUCTOR | 10UH |
| L4306 | 1-412-029-11 | INDUCTOR | 10UH |
| L4307 | 1-412-029-11 | INDUCTOR | 10UH |

**<IC LINK>**

| REF NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------|-------------|--------|
| PS1201 | 1-533-597-41 | LINK, IC | |

**<TRANSISTOR>**

| REF NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------|-------------|--------|
| Q001 | 8-729-010-05 | MSB709-RT1 | |
| Q002 | 8-729-230-49 | 2SC2712-YG | |
| Q003 | 8-729-230-49 | 2SC2712-YG | |
| Q004 | 8-729-230-49 | 2SC2712-YG | |
| Q101 | 8-729-010-05 | MSB709-RT1 | |
| | | | |
| Q301 | 8-729-010-05 | MSB709-RT1 | |
| Q302 | 8-729-010-05 | MSB709-RT1 | |
| Q313 | 8-729-230-49 | 2SC2712-YG | |
| Q1203 | 8-729-027-44 | DTC114TKA-T146 | |
| Q1204 | 8-729-224-62 | 2SK246-GR | |
| | | | |
| Q1205 | 8-729-230-49 | 2SC2712-YG | |
| Q1206 | 8-729-230-49 | 2SC2712-YG | |
| Q1207 | 8-729-010-05 | MSB709-RT1 | |
| Q1208 | 8-729-027-44 | DTC114TKA-T146 | |
| Q1209 | 8-729-027-44 | DTC114TKA-T146 | |
| | | | |
| Q1210 | 8-729-027-44 | DTC114TKA-T146 | |
| Q2200 | 8-729-027-56 | DTC143TKA-T146 | |
| Q2201 | 8-729-027-56 | DTC143TKA-T146 | |
| Q3001 | 8-729-102-07 | 2SC2223-F13 | |
| Q3002 | 8-729-102-07 | 2SC2223-F13 | |
| | | | |
| Q3003 | 8-729-102-07 | 2SC2223-F13 | |
| Q3014 | 8-729-010-05 | MSB709-RT1 | |
| Q3015 | 8-729-102-07 | 2SC2223-F13 | |
| Q3018 | 8-729-102-07 | 2SC2223-F13 | |
| Q3023 | 8-729-102-07 | 2SC2223-F13 | |
| | | | |
| Q3300 | 8-729-010-05 | MSB709-RT1 | |
| Q4301 | 8-729-010-25 | MSD601-RT1 | |
| Q4305 | 8-729-010-25 | MSD601-RT1 | |
| Q4306 | 8-729-216-22 | 2SA1162-G | |
| Q4307 | 8-729-010-25 | MSD601-RT1 | |
| | | | |
| Q4308 | 8-729-216-22 | 2SA1162-G | |
| Q4309 | 8-729-216-22 | 2SA1162-G | |
| Q4310 | 8-729-010-25 | MSD601-RT1 | |
| Q4314 | 8-729-421-19 | UN2213 | |
| Q4315 | 8-729-010-25 | MSD601-RT1 | |
| | | | |
| Q4316 | 8-729-216-22 | 2SA1162-G | |
| Q4317 | 8-729-216-22 | 2SA1162-G | |
| Q4318 | 8-729-216-22 | 2SA1162-G | |
| Q4319 | 8-729-216-22 | 2SA1162-G | |
| Q4320 | 8-729-010-25 | MSD601-RT1 | |
| | | | |
| Q4321 | 8-729-216-22 | 2SA1162-G | |
| Q4330 | 8-729-216-22 | 2SA1162-G | |
| Q4335 | 8-729-216-22 | 2SA1162-G | |
| Q4336 | 8-729-216-22 | 2SA1162-G | |
| Q4337 | 8-729-216-22 | 2SA1162-G | |

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| REF NO. | PART NO. | DESCRIPTION | | REMARK | | | REF NO. | PART NO. | DESCRIPTION | | REMARK | | |
|---------|----------|-------------|---|--------|---|---|---------|----------|-------------|---|--------|---|---|
| Q4340 | 8-729-010-25 | MSD601-RT1 | | | | | R035 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | |
| Q4341 | 8-729-010-25 | MSD601-RT1 | | | | | R036 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | |
| Q8301 | 8-729-010-05 | MSB709-RT1 | | | | | | | | | | | |
| Q8302 | 8-729-230-49 | 2SC2712-YG | | | | | R037 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | |
| Q8303 | 8-729-230-49 | 2SC2712-YG | | | | | R038 | 1-216-045-00 | RES-CHIP | 680 | 5% | 1/10W | |
| | | | | | | | R039 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| Q8304 | 8-729-230-49 | 2SC2712-YG | | | | | R040 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | |
| Q8305 | 8-729-010-05 | MSB709-RT1 | | | | | R041 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| Q8306 | 8-729-230-49 | 2SC2712-YG | | | | | | | | | | | |
| Q8307 | 8-729-230-49 | 2SC2712-YG | | | | | R042 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| Q8310 | 8-729-230-49 | 2SC2712-YG | | | | | R043 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| | | | | | | | R044 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | |
| Q8319 | 8-729-010-05 | MSB709-RT1 | | | | | R045 | 1-216-065-91 | RES-CHIP | 4.7K | % | 1/10W | |
| Q8320 | 8-729-010-05 | MSB709-RT1 | | | | | R046 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | |
| Q8321 | 8-729-010-05 | MSB709-RT1 | | | | | | | | | | | |
| Q8326 | 8-729-230-49 | 2SC2712-YG | | | | | R047 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | |
| Q8327 | 8-729-421-19 | UN2213 | | | | | R048 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | |
| | | | | | | | R051 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| Q8328 | 8-729-421-19 | UN2213 | | | | | R052 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| Q8329 | 8-729-230-49 | 2SC2712-YG | | | | | R053 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| Q8330 | 8-729-230-49 | 2SC2712-YG | | | | | | | | | | | |
| Q8331 | 8-729-230-49 | 2SC2712-YG | | | | | R054 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| Q8332 | 8-729-230-49 | 2SC2712-YG | | | | | R057 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| | | | | | | | R059 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | |
| Q8333 | 8-729-230-49 | 2SC2712-YG | | | | | R061 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | |
| Q8334 | 8-729-230-49 | 2SC2712-YG | | | | | R065 | 1-216-045-00 | RES-CHIP | 680 | 5% | 1/10W | |
| Q8335 | 8-729-230-49 | 2SC2712-YG | | | | | | | | | | | |
| Q8336 | 8-729-230-49 | 2SC2712-YG | | | | | R067 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| Q8351 | 8-729-230-49 | 2SC2712-YG | | | | | R068 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | |
| | | | | | | | R070 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | |
| Q8352 | 8-729-010-05 | MSB709-RT1 | | | | | R071 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| Q8361 | 8-729-230-49 | 2SC2712-YG | | | | | R072 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| Q8362 | 8-729-230-49 | 2SC2712-YG | | | | | | | | | | | |
| Q8363 | 8-729-230-49 | 2SC2712-YG | | | | | R073 | 1-216-055-00 | RES-CHIP | 1.8K | 5% | 1/10W | |
| Q8364 | 8-729-010-05 | MSB709-RT1 | | | | | R074 | 1-216-055-00 | RES-CHIP | 1.8K | 5% | 1/10W | |
| | | | | | | | R075 | 1-216-055-00 | RES-CHIP | 1.8K | 5% | 1/10W | |
| Q8365 | 8-729-230-49 | 2SC2712-YG | | | | | R076 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| | | | | | | | R077 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| | | | | | | | R078 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| | | \<RESISTOR\> | | | | | R079 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| | | | | | | | R080 | 1-216-063-91 | RES-CHIP | 3.9K | 5% | 1/10W | |
| R001 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | R081 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R002 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | R082 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W | |
| R003 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | | | | | | | |
| R004 | 1-216-295-91 | SHORT CHIP | 0 | | | | R083 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R005 | 1-216-295-91 | SHORT CHIP | 0 | | | | R084 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| | | | | | | | R085 | 1-208-798-11 | METAL CHIP | 4.7K | 0.5% | 1/10W | |
| R006 | 1-216-029-00 | RES-CHIP | 150 | 5% | 1/10W | | R086 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | |
| R010 | 1-216-061-91 | RES-CHIP | 3.3K | 5% | 1/10W | | R087 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | |
| R011 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | | | | | | | |
| R012 | 1-216-061-91 | RES-CHIP | 3.3K | 5% | 1/10W | | R101 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R013 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R102 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| | | | | | | | R105 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R014 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R109 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W | |
| R015 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R110 | 1-216-043-91 | RES-CHIP | 560 | 5% | 1/10W | |
| R016 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | | | | | | | | |
| R017 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R111 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R018 | 1-216-045-00 | RES-CHIP | 680 | 5% | 1/10W | | R112 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| | | | | | | | R123 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R019 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R124 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R020 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | | R301 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W | |
| R022 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | | | | | | | |
| R023 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R302 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W | |
| R024 | 1-216-063-91 | RES-CHIP | 3.9K | 5% | 1/10W | | R303 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W | |
| | | | | | | | R304 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R025 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R1200 | 1-216-060-00 | RES-CHIP | 3K | 5% | 1/10W | |
| R026 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R1201 | 1-216-061-91 | RES-CHIP | 3.3K | 5% | 1/10W | |
| R027 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | | | | | | | |
| R028 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R1202 | 1-216-060-00 | RES-CHIP | 3K | 5% | 1/10W | |
| R029 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R1203 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| | | | | | | | R1204 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R031 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | R1205 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | |
| R032 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R1206 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | |
| R033 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | | | | | | | |

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| REF NO. | PART NO. | DESCRIPTION | | | REMARK | | REF NO. | PART NO. | DESCRIPTION | | | REMARK | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R1207 | 1-216-061-91 | RES-CHIP | 3.3K | 5% | 1/10W | | R2207 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R1217 | 1-216-077-91 | RES-CHIP | 15K | 5% | 1/10W | | R2208 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R1218 | 1-216-077-91 | RES-CHIP | 15K | 5% | 1/10W | | R2209 | 1-216-117-00 | RES-CHIP | 680K | 5% | 1/10W |
| R1219 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W | | | | | | | |
| R1220 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W | | R2210 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| | | | | | | | R2211 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R1221 | 1-216-079-00 | RES-CHIP | 18K | 5% | 1/10W | | R2212 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R1222 | 1-216-079-00 | RES-CHIP | 18K | 5% | 1/10W | | R2213 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R1223 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R2214 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R1224 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | | | | | | |
| R1225 | 1-216-071-00 | RES-CHIP | 8.2K | 5% | 1/10W | | R2215 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| | | | | | | | R2602 | 1-215-882-00 | METAL OXIDE | 22 | 5% | 2W |
| R1227 | 1-216-071-00 | RES-CHIP | 8.2K | 5% | 1/10W | | R2603 | 1-215-882-00 | METAL OXIDE | 22 | 5% | 2W |
| R1228 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | | R3001 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W |
| R1229 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | | R3002 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W |
| R1230 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | | | | | | | |
| R1231 | 1-216-295-91 | SHORT CHIP | 0 | | | | R3003 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W |
| | | | | | | | R3004 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W |
| R1232 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W | | R3005 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W |
| R1233 | 1-216-093-91 | RES-CHIP | 68K | 5% | 1/10W | | R3006 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1234 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W | | R3007 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R1235 | 1-216-093-91 | RES-CHIP | 68K | 5% | 1/10W | | | | | | | |
| R1236 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W | | R3008 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| | | | | | | | R3009 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R1237 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W | | R3010 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R1238 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R3011 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R1239 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R3012 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R1240 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W | | | | | | | |
| R1241 | 1-216-295-91 | SHORT CHIP | 0 | | | | R3013 | 1-216-295-91 | SHORT CHIP | 0 | | |
| | | | | | | | R3014 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1242 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R3015 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R1243 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W | | R3016 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R1244 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R3017 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1245 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | | | | | | |
| R1246 | 1-216-061-91 | RES-CHIP | 3.3K | 5% | 1/10W | | R3018 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| | | | | | | | R3019 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1247 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R3020 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R1248 | 1-216-069-00 | RES-CHIP | 6.8K | 5% | 1/10W | | R3021 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1249 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R3022 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1250 | 1-216-069-00 | RES-CHIP | 6.8K | 5% | 1/10W | | | | | | | |
| R1251 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | | R3023 | 1-216-295-91 | SHORT CHIP | 0 | | |
| | | | | | | | R3024 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R1252 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R3027 | 1-216-129-00 | RES-CHIP | 2.2M | 5% | 1/10W |
| R1253 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | | R3031 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1254 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R3033 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1256 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | | | | | | | |
| R1257 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R3034 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| | | | | | | | R3035 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1258 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W | | R3036 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1259 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R3044 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1260 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W | | R3047 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W |
| R1262 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W | | | | | | | |
| R1263 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R3048 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W |
| | | | | | | | R3053 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1265 | 1-249-397-11 | CARBON | 22 | 5% | 1/4W | | R3076 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R1268 | 1-249-397-11 | CARBON | 22 | 5% | 1/4W | | R3300 | 1-216-043-91 | RES-CHIP | 560 | 5% | 1/10W |
| R1269 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R3304 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R1270 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | | | | | | |
| R1271 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R3320 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| | | | | | | | R3323 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1272 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R3334 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1273 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R3362 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R1274 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R3374 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R1275 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | | | | | | |
| R1276 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R4301 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| | | | | | | | R4302 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R2200 | 1-216-021-00 | RES-CHIP | 68 | 5% | 1/10W | | R4303 | 1-216-133-91 | RES-CHIP | 3.3M | 5% | 1/10W |
| R2201 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R4304 | 1-208-798-11 | METAL CHIP | 4.7K | 0.5% | 1/10W |
| R2202 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R4305 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R2203 | 1-216-021-00 | RES-CHIP | 68 | 5% | 1/10W | | | | | | | |
| R2204 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R4306 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| | | | | | | | R4307 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R2205 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W | | R4308 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R2206 | 1-216-117-00 | RES-CHIP | 680K | 5% | 1/10W | | | | | | | |

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| REF NO. | PART NO. | DESCRIPTION | | REMARK | | | REF NO. | PART NO. | DESCRIPTION | | REMARK | | |
|---------|----------|-------------|---|--------|---|---|---------|----------|-------------|---|--------|---|---|
| R4309 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W | | R4402 | 1-208-790-11 | METAL CHIP | 2.2K | 0.5% | 1/10W | |
| R4310 | 1-216-077-91 | RES-CHIP | 15K | 5% | 1/10W | | R4403 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| | | | | | | | R4404 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R4311 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R4405 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R4314 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W | | R4410 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R4315 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | | | | | | | |
| R4316 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W | | R4418 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R4317 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R4419 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| | | | | | | | R4420 | 1-216-069-00 | RES-CHIP | 6.8K | 5% | 1/10W | |
| R4318 | 1-216-121-11 | RES-CHIP | 1M | 5% | 1/10W | | R4421 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R4319 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W | | R4425 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | |
| R4320 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | | | | | | | |
| R4321 | 1-216-059-00 | RES-CHIP | 2.7K | 5% | 1/10W | | R4426 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | |
| R4322 | 1-216-061-91 | RES-CHIP | 3.3K | 5% | 1/10W | | R4429 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| | | | | | | | R4431 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R4323 | 1-216-085-91 | RES-CHIP | 33K | 5% | 1/10W | | R4433 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R4324 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R4442 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | |
| R4325 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | | | | | | | |
| R4326 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R4443 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W | |
| R4327 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R4444 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | |
| | | | | | | | R4445 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | |
| R4328 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R4450 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R4329 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R4452 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R4330 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | | | | | | | |
| R4332 | 1-216-295-91 | SHORT CHIP | 0 | | | | R4453 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | |
| R4339 | 1-208-822-11 | METAL CHIP | 47K | 0.5% | 1/10W | | R4454 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| | | | | | | | R4472 | 1-208-798-11 | METAL CHIP | 4.7K | 0.5% | 1/10W | |
| R4343 | 1-208-842-11 | METAL CHIP | 330K | 0.5% | 1/10W | | R4473 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W | |
| R4344 | 1-208-844-11 | METAL CHIP | 390K | 0.5% | 1/10W | | R4482 | 1-164-161-11 | CERAMIC CHIP | 0.0022UF | 10.00% | 50V | |
| R4345 | 1-208-814-91 | METAL CHIP | 22K | 0.5% | 1/10W | | | | | | | | |
| R4346 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W | | R4483 | 1-216-093-91 | RES-CHIP | 68K | 5% | 1/10W | |
| R4347 | 1-208-822-11 | METAL CHIP | 47K | 0.5% | 1/10W | | R4484 | 1-208-846-11 | METAL CHIP | 470K | 0.5% | 1/10W | |
| | | | | | | | R4487 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W | |
| R4349 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W | | R4488 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | |
| R4350 | 1-216-295-91 | SHORT CHIP | 0 | | | | R4489 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W | |
| R4351 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | | | | | | | | |
| R4352 | 1-208-798-11 | METAL CHIP | 4.7K | 0.5% | 1/10W | | R4490 | 1-208-828-11 | METAL CHIP | 82K | 0.5% | 1/10W | |
| R4353 | 1-208-804-11 | METAL CHIP | 8.2K | 0.5% | 1/10W | | R4492 | 1-216-115-00 | RES-CHIP | 560K | 5% | 1/10W | |
| | | | | | | | R8301 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W | |
| R4354 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | | R8302 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W | |
| R4355 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W | | R8303 | 1-216-022-00 | RES-CHIP | 75 | 5% | 1/10W | |
| R4356 | 1-208-790-11 | METAL CHIP | 2.2K | 0.5% | 1/10W | | | | | | | | |
| R4357 | 1-216-045-00 | RES-CHIP | 680 | 5% | 1/10W | | R8304 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | |
| R4359 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | | R8305 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W | |
| | | | | | | | R8306 | 1-216-022-00 | RES-CHIP | 75 | 5% | 1/10W | |
| R4361 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | | R8307 | 1-216-022-00 | RES-CHIP | 75 | 5% | 1/10W | |
| R4362 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R8308 | 1-216-105-91 | RES-CHIP | 220K | 5% | 1/10W | |
| R4375 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | | | | | | | |
| R4376 | 1-208-814-91 | METAL CHIP | 22K | 0.5% | 1/10W | | R8309 | 1-216-105-91 | RES-CHIP | 220K | 5% | 1/10W | |
| R4379 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R8310 | 1-216-022-00 | RES-CHIP | 75 | 5% | 1/10W | |
| | | | | | | | R8311 | 1-216-105-91 | RES-CHIP | 220K | 5% | 1/10W | |
| R4380 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R8312 | 1-216-105-91 | RES-CHIP | 220K | 5% | 1/10W | |
| R4381 | 1-208-774-11 | METAL CHIP | 470 | 0.5% | 1/10W | | R8313 | 1-216-022-00 | RES-CHIP | 75 | 5% | 1/10W | |
| R4382 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | | | | | | | |
| R4383 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R8314 | 1-216-105-91 | RES-CHIP | 220K | 5% | 1/10W | |
| R4384 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | | R8315 | 1-216-105-91 | RES-CHIP | 220K | 5% | 1/10W | |
| | | | | | | | R8316 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W | |
| R4385 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | | R8317 | 1-216-067-00 | RES-CHIP | 5.6K | 5% | 1/10W | |
| R4386 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | | R8318 | 1-216-067-00 | RES-CHIP | 5.6K | 5% | 1/10W | |
| R4387 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | | | | | | | |
| R4388 | 1-216-295-91 | SHORT CHIP | 0 | | | | R8322 | 1-216-022-00 | RES-CHIP | 75 | 5% | 1/10W | |
| R4391 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | | R8323 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| | | | | | | | R8324 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R4392 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | | R8325 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R4393 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | | R8326 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W | |
| R4394 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | | | | | | | |
| R4395 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | | R8327 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R4396 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R8328 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W | |
| | | | | | | | R8329 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W | |
| R4397 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | R8330 | 1-216-022-00 | RES-CHIP | 75 | 5% | 1/10W | |
| R4398 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | R8334 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R4399 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | | | | | | | |
| R4400 | 1-208-798-11 | METAL CHIP | 4.7K | 0.5% | 1/10W | | R8336 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R4401 | 1-208-789-11 | METAL CHIP | 2K | 0.5% | 1/10W | | R8337 | 1-216-022-00 | RES-CHIP | 75 | 5% | 1/10W | |

**A**

| REF NO. | PART NO. | DESCRIPTION | | REMARK | | | REF NO. | PART NO. | DESCRIPTION | | REMARK | | |
|---------|----------|-------------|------|--------|-----|-------|---------|----------|-------------|------|--------|-----|-------|
| R8338 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R8450 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R8339 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R8451 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R8340 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | | | | | | |
| | | | | | | | R8452 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R8341 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R8453 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R8342 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R8454 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R8343 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R8455 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R8344 | 1-216-022-00 | RES-CHIP | 75 | 5% | 1/10W | | R8464 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8345 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | | | | | | |
| | | | | | | | R8465 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8346 | 1-216-031-00 | RES-CHIP | 180 | 5% | 1/10W | | R8466 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8347 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R8467 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8348 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | | R8468 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8349 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R8469 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8350 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | | | | | | |
| | | | | | | | R8470 | 1-216-069-00 | RES-CHIP | 6.8K | 5% | 1/10W |
| R8351 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R8471 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8352 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R8478 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R8353 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R8479 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R8354 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | R8480 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R8357 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | | | | | | | |
| | | | | | | | R8481 | 1-216-095-00 | RES-CHIP | 82K | 5% | 1/10W |
| R8358 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | | R8482 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R8361 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | | R8484 | 1-216-045-00 | RES-CHIP | 680 | 5% | 1/10W |
| R8363 | 1-216-642-11 | METAL CHIP | 430 | 0.5% | 1/10W | | R8485 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W |
| R8364 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W | | R8486 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R8365 | 1-216-067-00 | RES-CHIP | 5.6K | 5% | 1/10W | | | | | | | |
| | | | | | | | R8487 | 1-216-045-00 | RES-CHIP | 680 | 5% | 1/10W |
| R8366 | 1-216-067-00 | RES-CHIP | 5.6K | 5% | 1/10W | | R8488 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8367 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W | | R8489 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R8369 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W | | R8490 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R8370 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R8491 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8372 | 1-216-295-91 | SHORT CHIP | 0 | | | | | | | | | |
| | | | | | | | R8492 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8373 | 1-216-295-91 | SHORT CHIP | 0 | | | | R8493 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W |
| R8374 | 1-216-039-00 | RES-CHIP | 390 | 5% | 1/10W | | R8494 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8375 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W | | R8495 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W |
| R8376 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R8496 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R8377 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | | | | | | |
| | | | | | | | R8497 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8378 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | R8498 | 1-216-043-91 | RES-CHIP | 560 | 5% | 1/10W |
| R8379 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | R8499 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W |
| R8380 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R8500 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R8381 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R8501 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W |
| R8382 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | | | | | | |
| | | | | | | | R8502 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R8383 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | R8507 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8384 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R8508 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8388 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | R8512 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W |
| R8390 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W | | R8536 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8391 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W | | | | | | | |
| | | | | | | | R8538 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8395 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | R8540 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8396 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | R8541 | 1-216-039-00 | RES-CHIP | 390 | 5% | 1/10W |
| R8399 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R8576 | 1-216-013-00 | RES-CHIP | 33 | 5% | 1/10W |
| R8400 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R8577 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R8411 | 1-216-083-00 | RES-CHIP | 27K | 5% | 1/10W | | | | | | | |
| | | | | | | | R8578 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W |
| R8414 | 1-208-796-11 | METAL CHIP | 3.9K | 0.5% | 1/10W | | R8579 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R8415 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R8582 | 1-208-291-11 | RES-CHIP | 4.7M | 5% | 1/10W |
| R8417 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R8583 | 1-208-291-11 | RES-CHIP | 4.7M | 5% | 1/10W |
| R8418 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | R8584 | 1-208-291-11 | RES-CHIP | 4.7M | 5% | 1/10W |
| R8419 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | | | | | | | |
| | | | | | | | R8587 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R8420 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | | R8588 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8435 | 1-216-295-91 | SHORT CHIP | 0 | | | | R8589 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8441 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | R8590 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8442 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | | | | | | |
| R8446 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | | | | | | | |
| | | | | | | | | | **<TUNER>** | | | |
| R8447 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | | | | | | |
| R8448 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | TU101 | 8-598-452-30 | TUNER, FSS BTF-WG442 | | | |
| R8449 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | TU3301 | 8-598-450-10 | TUNER, FSS BTF-LG434 | | | |

A   B3

| REF NO. | PART NO. | DESCRIPTION | | | REMARK | |
|---|---|---|---|---|---|---|
| | | <CRYSTAL> | | | | |
| X001 | 1-567-928-11 | VIBLATOR, CERAMIC | | | | |
| X3001 | 1-781-922-21 | VIBRATOR, CERAMIC | | | | |
| X4301 | 1-760-895-21 | VIBRATOR, CERAMIC | | | | |
| X8301 | 1-781-612-11 | VIBRATOR, CRYSTAL | | | | |

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* A-1300-290-A  B3 BOARD COMPLETE
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| REF NO. | PART NO. | DESCRIPTION | | | REMARK | |
|---|---|---|---|---|---|---|
| | | <CAPACITOR> | | | | |
| C501 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C502 | 1-124-779-00 | ELECT CHIP | 10UF | 20.00% | 16V | |
| C503 | 1-124-779-00 | ELECT CHIP | 10UF | 20.00% | 16V | |
| C505 | 1-124-779-00 | ELECT CHIP | 10UF | 20.00% | 16V | |
| C507 | 1-124-779-00 | ELECT CHIP | 10UF | 20.00% | 16V | |
| C512 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C539 | 1-126-204-11 | ELECT CHIP | 47UF | 20.00% | 16V | |
| C540 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C543 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C545 | 1-126-396-11 | ELECT CHIP | 47UF | 20.00% | 16V | |
| C546 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C548 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C549 | 1-126-204-11 | ELECT CHIP | 47UF | 20.00% | 16V | |
| C550 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C551 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C554 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C555 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C556 | 1-126-396-11 | ELECT CHIP | 47UF | 20.00% | 16V | |
| C557 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C559 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C560 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C601 | 1-126-394-11 | ELECT CHIP | 10UF | 20.00% | 16V | |
| C602 | 1-126-394-11 | ELECT CHIP | 10UF | 20.00% | 16V | |
| C603 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C604 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C605 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C606 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C607 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C608 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C609 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C610 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C611 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C612 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C613 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C614 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C615 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C616 | 1-126-396-11 | ELECT CHIP | 47UF | 20.00% | 16V | |
| C617 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C618 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C619 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V | |
| C620 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C621 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C622 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C623 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C624 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C625 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C626 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |

| REF NO. | PART NO. | DESCRIPTION | | | REMARK | |
|---|---|---|---|---|---|---|
| C627 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C628 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C629 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C630 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C631 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C632 | 1-126-206-11 | ELECT CHIP | 100UF | 20.00% | 6.3V | |
| C633 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C634 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C635 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C636 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C637 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C638 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C639 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C640 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C642 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C643 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C644 | 1-126-398-11 | ELECT CHIP | 4.7UF | 20.00% | 35V | |
| C645 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C652 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C653 | 1-126-206-11 | ELECT CHIP | 100UF | 20.00% | 6.3V | |
| C801 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C802 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C803 | 1-126-206-11 | ELECT CHIP | 100UF | 20.00% | 6.3V | |
| C804 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C805 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C806 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C807 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C808 | 1-109-982-11 | CERAMIC CHIP | 1UF | 10.00% | 10V | |
| C809 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C810 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C811 | 1-163-023-00 | CERAMIC CHIP | 0.015UF | 10.00% | 50V | |
| C812 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C813 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C814 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C815 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C816 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C817 | 1-109-982-11 | CERAMIC CHIP | 1UF | 10.00% | 10V | |
| C818 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C819 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C820 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C821 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C822 | 1-109-982-11 | CERAMIC CHIP | 1UF | 10.00% | 10V | |
| C823 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C824 | 1-109-982-11 | CERAMIC CHIP | 1UF | 10.00% | 10V | |
| C825 | 1-126-204-11 | ELECT CHIP | 47UF | 20.00% | 16V | |
| C826 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V | |
| C831 | 1-126-204-11 | ELECT CHIP | 47UF | 20.00% | 16V | |
| C833 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V | |
| C834 | 1-126-204-11 | ELECT CHIP | 47UF | 20.00% | 16V | |
| | | <CONNECTOR> | | | | |
| CN502 | 1-793-497-11 | CONNECTOR, BOARD TO BOARD 40P | | | | |
| | | <DIODE> | | | | |
| D501 | 8-719-082-02 | DIODE MM3Z3V9T1 | | | | |
| D601 | 8-719-081-97 | MMDL914T1 | | | | |
| D800 | 8-719-081-97 | MMDL914T1 | | | | |

**B3**

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

| REF NO. | PART NO. | DESCRIPTION | | REMARK |
|---------|----------|-------------|---|--------|
| | | <FERRITE BEAD> | | |
| FB501 | 1-414-813-11 | FERRITE | 0UH | |
| FB502 | 1-414-813-11 | FERRITE | 0UH | |
| FB503 | 1-414-813-11 | FERRITE | 0UH | |
| FB504 | 1-414-813-11 | FERRITE | 0UH | |
| FB601 | 1-414-553-11 | FERRITE | 0UH | |
| | | <FILTER> | | |
| FL501 | 1-233-877-11 | FILTER, LOW PASS | | |
| FL502 | 1-233-504-21 | FILTER, LOW PASS | | |
| FL503 | 1-233-504-21 | FILTER, LOW PASS | | |
| FL504 | 1-234-177-21 | FERRITE | 0UH | |
| FL505 | 1-234-177-21 | FERRITE | 0UH | |
| FL506 | 1-234-177-21 | FERRITE | 0UH | |
| FL601 | 1-234-177-21 | FERRITE | 0UH | |
| FL602 | 1-234-177-21 | FERRITE | 0UH | |
| FL603 | 1-234-177-21 | FERRITE | 0UH | |
| FL801 | 1-234-177-21 | FERRITE | 0UH | |
| FL901 | 1-234-113-21 | FILTER, LOW PASS | | |
| FL902 | 1-234-112-21 | FILTER, LOW PASS | | |
| FL903 | 1-234-112-21 | FILTER, LOW PASS | | |
| | | <IC> | | |
| IC504 | 8-759-669-78 | TLC2933IPWR-12 | | |
| IC505 | 8-759-547-54 | TC7SET00FU(TE85 | | |
| IC506 | 8-759-547-54 | TC7SET00FU(TE85 | | |
| IC601 | 8-752-409-78 | CXD2095AQ | | |
| IC602 | 8-759-836-37 | MT48LC1M16A1TG-6S | | |
| IC603 | 8-759-669-75 | TLC2932IPWR | | |
| IC604 | 8-752-072-94 | CXA1875AM-T4 | | |
| IC605 | 8-749-015-18 | PQ07VZ012ZP | | |
| IC801 | 6-700-188-01 | IS41C16256-35K | | |
| IC802 | 6-701-892-01 | TC90A90F(BH,DRY) | | |
| IC803 | 8-749-015-18 | PQ07VZ012ZP | | |
| | | <CHIP CONDUCTOR> | | |
| JR601 | 1-216-295-91 | SHORT CHIP | 0 | |
| | | <COIL> | | |
| L503 | 1-412-026-11 | INDUCTOR | 1UH | |
| L505 | 1-412-029-11 | INDUCTOR | 10UH | |
| L506 | 1-412-026-11 | INDUCTOR | 1UH | |
| L508 | 1-412-029-11 | INDUCTOR | 10UH | |
| L509 | 1-412-029-11 | INDUCTOR | 10UH | |
| L512 | 1-412-026-11 | INDUCTOR | 1UH | |
| L604 | 1-412-029-11 | INDUCTOR | 10UH | |
| L605 | 1-412-029-11 | INDUCTOR | 10UH | |
| L801 | 1-412-026-11 | INDUCTOR | 1UH | |
| L802 | 1-412-026-11 | INDUCTOR | 1UH | |
| L803 | 1-412-026-11 | INDUCTOR | 1UH | |
| L804 | 1-412-026-11 | INDUCTOR | 1UH | |
| L805 | 1-412-026-11 | INDUCTOR | 1UH | |
| L806 | 1-412-026-11 | INDUCTOR | 1UH | |
| L807 | 1-412-026-11 | INDUCTOR | 1UH | |

| REF NO. | PART NO. | DESCRIPTION | | | REMARK | |
|---------|----------|-------------|---|---|--------|---|
| | | <TRANSISTOR> | | | | |
| Q501 | 8-729-010-05 | MSB709-RT1 | | | | |
| Q502 | 8-729-120-28 | 2SC1623-L5L6 | | | | |
| Q503 | 8-729-120-28 | 2SC1623-L5L6 | | | | |
| Q504 | 8-729-421-19 | UN2213 | | | | |
| Q516 | 8-729-010-25 | MSD601-RT1 | | | | |
| Q517 | 8-729-010-25 | MSD601-RT1 | | | | |
| Q518 | 8-729-010-05 | MSB709-RT1 | | | | |
| Q521 | 8-729-010-25 | MSD601-RT1 | | | | |
| Q522 | 8-729-010-25 | MSD601-RT1 | | | | |
| Q523 | 8-729-010-25 | MSD601-RT1 | | | | |
| Q602 | 8-729-010-25 | MSD601-RT1 | | | | |
| Q605 | 8-729-010-25 | MSD601-RT1 | | | | |
| Q606 | 8-729-010-25 | MSD601-RT1 | | | | |
| Q901 | 8-729-010-05 | MSB709-RT1 | | | | |
| Q902 | 8-729-010-05 | MSB709-RT1 | | | | |
| Q903 | 8-729-010-05 | MSB709-RT1 | | | | |
| Q907 | 8-729-010-05 | MSB709-RT1 | | | | |
| Q908 | 8-729-010-05 | MSB709-RT1 | | | | |
| Q909 | 8-729-010-05 | MSB709-RT1 | | | | |
| | | <RESISTOR> | | | | |
| R501 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R502 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R503 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R504 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R505 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R506 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R507 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R513 | 1-216-639-11 | METAL CHIP | 330 | 0.5% | 1/10W | |
| R514 | 1-216-639-11 | METAL CHIP | 330 | 0.5% | 1/10W | |
| R515 | 1-216-639-11 | METAL CHIP | 330 | 0.5% | 1/10W | |
| R517 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R518 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R520 | 1-208-776-11 | METAL CHIP | 560 | 0.5% | 1/10W | |
| R521 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R523 | 1-208-776-11 | METAL CHIP | 560 | 0.5% | 1/10W | |
| R524 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R526 | 1-208-776-11 | METAL CHIP | 560 | 0.5% | 1/10W | |
| R528 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W | |
| R529 | 1-208-800-11 | METAL CHIP | 5.6K | 0.5% | 1/10W | |
| R530 | 1-208-800-11 | METAL CHIP | 5.6K | 0.5% | 1/10W | |
| R531 | 1-216-031-00 | RES-CHIP | 180 | 5% | 1/10W | |
| R532 | 1-208-800-11 | METAL CHIP | 5.6K | 0.5% | 1/10W | |
| R533 | 1-216-031-00 | RES-CHIP | 180 | 5% | 1/10W | |
| R537 | 1-216-643-11 | METAL CHIP | 470 | 0.5% | 1/10W | |
| R538 | 1-216-659-11 | METAL CHIP | 2.2K | 0.5% | 1/10W | |
| R539 | 1-216-659-11 | METAL CHIP | 2.2K | 0.5% | 1/10W | |
| R561 | 1-216-043-91 | RES-CHIP | 560 | 5% | 1/10W | |
| R562 | 1-216-043-91 | RES-CHIP | 560 | 5% | 1/10W | |
| R563 | 1-216-043-91 | RES-CHIP | 560 | 5% | 1/10W | |
| R564 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R598 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R600 | 1-216-061-91 | RES-CHIP | 3.3K | 5% | 1/10W | |
| R604 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | |
| R605 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R608 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R609 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | |
| R610 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | |

**B3**

| REF NO. | PART NO. | DESCRIPTION | | REMARK | | | REF NO. | PART NO. | DESCRIPTION | | REMARK | | |
|---------|----------|-------------|--|--------|--|--|---------|----------|-------------|--|--------|--|--|
| R611 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R697 | 1-216-117-00 | RES-CHIP | 680K | 5% | 1/10W | |
| R612 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R698 | 1-216-117-00 | RES-CHIP | 680K | 5% | 1/10W | |
| R613 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | | | | | | | | |
| | | | | | | | R699 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R614 | 1-216-295-91 | SHORT CHIP | 0 | | | | R701 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R615 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W | | R702 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R616 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R708 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R617 | 1-216-295-91 | SHORT CHIP | 0 | | | | R709 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R619 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | | | | | | | |
| | | | | | | | R710 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R622 | 1-216-295-91 | SHORT CHIP | 0 | | | | R711 | 1-216-061-91 | RES-CHIP | 3.3K | 5% | 1/10W | |
| R623 | 1-216-295-91 | SHORT CHIP | 0 | | | | R712 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | |
| R624 | 1-216-295-91 | SHORT CHIP | 0 | | | | R713 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R626 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R714 | 1-216-061-91 | RES-CHIP | 3.3K | 5% | 1/10W | |
| R628 | 1-216-295-91 | SHORT CHIP | 0 | | | | | | | | | | |
| | | | | | | | R715 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | |
| R629 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R716 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R631 | 1-216-295-91 | SHORT CHIP | 0 | | | | R717 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | |
| R634 | 1-216-295-91 | SHORT CHIP | 0 | | | | R718 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | |
| R635 | 1-216-295-91 | SHORT CHIP | 0 | | | | R801 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R638 | 1-216-295-91 | SHORT CHIP | 0 | | | | | | | | | | |
| | | | | | | | R802 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R639 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | | R804 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R640 | 1-216-009-91 | RES-CHIP | 22 | 5% | 1/10W | | R806 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R642 | 1-216-295-91 | SHORT CHIP | 0 | | | | R807 | 1-216-061-91 | RES-CHIP | 3.3K | 5% | 1/10W | |
| R643 | 1-216-295-91 | SHORT CHIP | 0 | | | | R808 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R645 | 1-216-295-91 | SHORT CHIP | 0 | | | | | | | | | | |
| | | | | | | | R810 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R647 | 1-216-295-91 | SHORT CHIP | 0 | | | | R812 | 1-216-125-00 | RES-CHIP | 1.5M | 5% | 1/10W | |
| R648 | 1-208-782-11 | METAL CHIP | 1K | 0.5% | 1/10W | | R813 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R650 | 1-211-960-11 | METAL CHIP | 22 | 0.5% | 1/10W | | R814 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R651 | 1-216-295-91 | SHORT CHIP | 0 | | | | R815 | 1-216-061-91 | RES-CHIP | 3.3K | 5% | 1/10W | |
| R653 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | | | | | | | | |
| | | | | | | | R817 | 1-208-788-11 | METAL CHIP | 1.8K | 0.5% | 1/10W | |
| R654 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | | R818 | 1-208-782-11 | METAL CHIP | 1K | 0.5% | 1/10W | |
| R655 | 1-216-295-91 | SHORT CHIP | 0 | | | | R820 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R657 | 1-216-009-91 | RES-CHIP | 22 | 5% | 1/10W | | R822 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R658 | 1-216-295-91 | SHORT CHIP | 0 | | | | R825 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R660 | 1-208-774-11 | METAL CHIP | 470 | 0.5% | 1/10W | | | | | | | | |
| | | | | | | | R830 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R664 | 1-216-295-91 | SHORT CHIP | 0 | | | | R832 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R665 | 1-216-035-00 | RES-CHIP | 270 | 5% | 1/10W | | R834 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R666 | 1-216-646-11 | METAL CHIP | 620 | 0.5% | 1/10W | | R907 | 1-208-790-11 | METAL CHIP | 2.2K | 0.5% | 1/10W | |
| R667 | 1-208-794-11 | METAL CHIP | 3.3K | 0.5% | 1/10W | | R908 | 1-208-790-11 | METAL CHIP | 2.2K | 0.5% | 1/10W | |
| R668 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | | | | | | | | |
| | | | | | | | R909 | 1-208-790-11 | METAL CHIP | 2.2K | 0.5% | 1/10W |
| R671 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R910 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R672 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R911 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R673 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R912 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R674 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R942 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W | |
| R675 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | | | | | | | |
| | | | | | | | R943 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | |
| R676 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R957 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W | |
| R677 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R958 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W | |
| R678 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R959 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W | |
| R679 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R960 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W | |
| R680 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | | | | | | | |
| | | | | | | | R961 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W | |
| R681 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R962 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W | |
| R682 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R981 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W | |
| R683 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R982 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W | |
| R684 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R983 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W | |
| R685 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | | | | | | | |
| | | | | | | | R984 | 1-216-061-91 | RES-CHIP | 3.3K | 5% | 1/10W | |
| R686 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | | R985 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W | |
| R690 | 1-216-295-91 | SHORT CHIP | 0 | | | | R986 | 1-216-061-91 | RES-CHIP | 3.3K | 5% | 1/10W | |
| R691 | 1-216-061-91 | RES-CHIP | 3.3K | 5% | 1/10W | | R987 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R692 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | | R988 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | |
| R693 | 1-216-009-91 | RES-CHIP | 22 | 5% | 1/10W | | | | | | | | |
| | | | | | | | R989 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W | |
| R694 | 1-216-295-91 | SHORT CHIP | 0 | | | | R990 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W | |
| R695 | 1-216-047-91 | RES-CHIP | 820 | 5% | 1/10W | | R991 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R696 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | | R993 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W | |

B3  BC1

| REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|---|--------|---|
| RB019 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| RB020 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| RB021 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| RB022 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| RB023 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| | | | | | |
| RB024 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| RB025 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| RB026 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| RB027 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| RB801 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| | | | | | |
| RB802 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| RB803 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| RB804 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| RB805 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| RB806 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| | | | | | |
| RB807 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| RB808 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| RB809 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| RB810 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |
| RB811 | 1-239-409-11 | NETWORK RESISTOR (CHIP) | | 47 | |

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\* A-1300-298-A   BC1 BOARD COMPLETE
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&lt;CAPACITOR&gt;

| REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|---|--------|---|
| C2001 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C2002 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C2003 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C2004 | 1-107-698-11 | ELECT | 10UF | 20.00% | 25V |
| C2005 | 1-163-131-00 | CERAMIC CHIP | 390PF | 5.00% | 50V |
| | | | | | |
| C2006 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C2007 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C2008 | 1-104-665-11 | ELECT | 100UF | 20.00% | 10V |
| C2009 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C2010 | 1-163-102-00 | CERAMIC CHIP | 24PF | 5.00% | 50V |
| | | | | | |
| C2011 | 1-163-102-00 | CERAMIC CHIP | 24PF | 5.00% | 50V |
| C2012 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| C2013 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C2014 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| C2016 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| | | | | | |
| C2018 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| C2019 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C2021 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C2022 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C2023 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| | | | | | |
| C2024 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| C2025 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| C2026 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| C2027 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| C2028 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| | | | | | |
| C2029 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C2030 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| C2032 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C2033 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C2034 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| | | | | | |
| C2035 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C2036 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C2037 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |

| REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|---|--------|---|
| C2038 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C2039 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| | | | | | |
| C2040 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C2041 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C2044 | 1-104-665-11 | ELECT | 100UF | 20.00% | 10V |
| C2045 | 1-163-106-00 | CERAMIC CHIP | 36PF | 5.00% | 50V |
| C2046 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| | | | | | |
| C2047 | 1-164-505-11 | CERAMIC CHIP | 2.2UF | | 16V |
| C2048 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C2049 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V |
| C2050 | 1-163-231-11 | CERAMIC CHIP | 15PF | 5.00% | 50V |
| C2051 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| | | | | | |
| C2052 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C2053 | 1-109-889-11 | ELECT | 1UF | 20.00% | 50V |
| C2054 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| C2055 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C2056 | 1-163-231-11 | CERAMIC CHIP | 15PF | 5.00% | 50V |
| | | | | | |
| C2058 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| C2063 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C2064 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| C2066 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C2072 | 1-163-237-11 | CERAMIC CHIP | 27PF | 5.00% | 50V |
| | | | | | |
| C2074 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C2075 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C2078 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C2079 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| C2081 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| | | | | | |
| C2096 | 1-163-231-11 | CERAMIC CHIP | 15PF | 5.00% | 50V |
| C2097 | 1-163-231-11 | CERAMIC CHIP | 15PF | 5.00% | 50V |
| C2100 | 1-163-038-91 | CERAMIC CHIP | 0.1UF | | 25V |
| C2101 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| C2103 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| | | | | | |
| C2104 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| C2105 | 1-163-031-91 | CERAMIC CHIP | 0.01UF | | 50V |
| C2300 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C2301 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C2302 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| | | | | | |
| C2303 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C2304 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C2305 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C2306 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C2307 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| | | | | | |
| C2308 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V |
| C2309 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C2310 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C2312 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C2313 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| | | | | | |
| C2314 | 1-163-007-11 | CERAMIC CHIP | 680PF | 10.00% | 50V |
| C2315 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C2316 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C2317 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C2318 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| | | | | | |
| C2319 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5.00% | 50V |
| C2320 | 1-163-229-11 | CERAMIC CHIP | 12PF | 5.00% | 50V |
| C2321 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C2322 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5.00% | 50V |
| C2323 | 1-163-229-11 | CERAMIC CHIP | 12PF | 5.00% | 50V |
| | | | | | |
| C2324 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C2326 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C2327 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C2330 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |
| C2331 | 1-163-021-91 | CERAMIC CHIP | 0.01UF | 10.00% | 50V |

BC₁

| REF NO. | PART NO. | DESCRIPTION | | REMARK |
|---------|----------|-------------|---|--------|
| | | \<CONNECTOR\> | | |
| CN2001 | 1-793-496-11 | CONNECTOR, BOARD TO BOARD 20P | | |
| | | \<FERRITE BEAD\> | | |
| FB2001 | 1-414-234-22 | FERRITE | 0UH | |
| FB2002 | 1-414-234-22 | FERRITE | 0UH | |
| FB2008 | 1-414-234-22 | FERRITE | 0UH | |
| FB2010 | 1-414-234-22 | FERRITE | 0UH | |
| FB2011 | 1-414-234-22 | FERRITE | 0UH | |
| FB2012 | 1-414-234-22 | FERRITE | 0UH | |
| FB2014 | 1-414-234-22 | FERRITE | 0UH | |
| FB2015 | 1-414-234-22 | FERRITE | 0UH | |
| FB2016 | 1-216-295-91 | SHORT CHIP | 0 | |
| FB2017 | 1-216-295-91 | SHORT CHIP | 0 | |
| | | \<FILTER\> | | |
| FL2000 | 1-236-071-11 | ENCAPSULATED COMPONENT | | |
| FL2001 | 1-239-848-11 | FILTER, LOW PASS | | |
| FL2002 | 1-239-848-11 | FILTER, LOW PASS | | |
| FL2003 | 1-239-848-11 | FILTER, LOW PASS | | |
| FL2004 | 1-239-848-11 | FILTER, LOW PASS | | |
| | | \<IC\> | | |
| IC2001 | 6-700-394-01 | IC BA25BC0FP-E2 | | |
| IC2004 | 6-700-960-01 | IC UPD64083GF-3BA | | |
| IC2005 | 8-759-460-72 | BA033FP-E2 | | |
| IC2300 | 6-701-972-01 | IC TC90A69F | | |
| | | \<COIL\> | | |
| L2001 | 1-410-200-31 | INDUCTOR | 4.7UH | |
| L2002 | 1-412-058-11 | INDUCTOR | 10UH | |
| L2003 | 1-412-058-11 | INDUCTOR | 10UH | |
| L2005 | 1-412-058-11 | INDUCTOR | 10UH | |
| L2006 | 1-412-058-11 | INDUCTOR | 10UH | |
| L2007 | 1-412-058-11 | INDUCTOR | 10UH | |
| L2008 | 1-412-058-11 | INDUCTOR | 10UH | |
| L2300 | 1-412-058-11 | INDUCTOR | 10UH | |
| L2301 | 1-412-031-11 | INDUCTOR | 47UH | |
| L2302 | 1-412-031-11 | INDUCTOR | 47UH | |
| L2303 | 1-412-031-11 | INDUCTOR | 47UH | |
| L2304 | 1-410-514-11 | INDUCTOR | 27UH | |
| L2305 | 1-410-514-11 | INDUCTOR | 27UH | |
| L2306 | 1-412-058-11 | INDUCTOR | 10UH | |
| L2307 | 1-412-026-11 | INDUCTOR | 1UH | |
| | | \<TRANSISTOR\> | | |
| Q2002 | 8-729-026-49 | 2SA1037AK-T146-R | | |
| Q2003 | 8-729-026-49 | 2SA1037AK-T146-R | | |
| Q2004 | 8-729-026-49 | 2SA1037AK-T146-R | | |
| Q2005 | 8-729-230-49 | 2SC2712-YG | | |
| Q2006 | 8-729-230-49 | 2SC2712-YG | | |
| Q2007 | 8-729-230-49 | 2SC2712-YG | | |
| Q2008 | 8-729-230-49 | 2SC2712-YG | | |
| Q2009 | 8-729-230-49 | 2SC2712-YG | | |
| Q2010 | 8-729-230-49 | 2SC2712-YG | | |
| Q2011 | 8-729-230-49 | 2SC2712-YG | | |
| Q2012 | 8-729-026-49 | 2SA1037AK-T146-R | | |
| Q2013 | 8-729-026-49 | 2SA1037AK-T146-R | | |

| REF NO. | PART NO. | DESCRIPTION | | REMARK | | |
|---------|----------|-------------|---|--------|---|---|
| Q2014 | 8-729-230-49 | 2SC2712-YG | | | | |
| Q2015 | 8-729-230-49 | 2SC2712-YG | | | | |
| Q2016 | 8-729-230-49 | 2SC2712-YG | | | | |
| Q2018 | 8-729-026-49 | 2SA1037AK-T146-R | | | | |
| Q2019 | 8-729-230-49 | 2SC2712-YG | | | | |
| Q2301 | 8-729-026-49 | 2SA1037AK-T146-R | | | | |
| Q2302 | 8-729-230-49 | 2SC2712-YG | | | | |
| Q2303 | 8-729-230-49 | 2SC2712-YG | | | | |
| Q2304 | 8-729-026-49 | 2SA1037AK-T146-R | | | | |
| Q2305 | 8-729-230-49 | 2SC2712-YG | | | | |
| Q2306 | 8-729-230-49 | 2SC2712-YG | | | | |
| Q2307 | 8-729-230-49 | 2SC2712-YG | | | | |
| Q2308 | 8-729-026-49 | 2SA1037AK-T146-R | | | | |
| Q2309 | 8-729-230-49 | 2SC2712-YG | | | | |
| | | \<RESISTOR\> | | | | |
| R2001 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | |
| R2002 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R2004 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R2005 | 1-216-295-91 | SHORT CHIP | 0 | | | |
| R2011 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W | |
| R2012 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | |
| R2015 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W | |
| R2021 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R2027 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R2028 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R2029 | 1-216-043-91 | RES-CHIP | 560 | 5% | 1/10W | |
| R2030 | 1-216-043-91 | RES-CHIP | 560 | 5% | 1/10W | |
| R2031 | 1-216-067-00 | RES-CHIP | 5.6K | 5% | 1/10W | |
| R2032 | 1-216-067-00 | RES-CHIP | 5.6K | 5% | 1/10W | |
| R2033 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W | |
| R2034 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W | |
| R2035 | 1-216-043-91 | RES-CHIP | 560 | 5% | 1/10W | |
| R2036 | 1-216-644-11 | METAL CHIP | 510 | 0.5% | 1/10W | |
| R2037 | 1-216-045-00 | RES-CHIP | 680 | 5% | 1/10W | |
| R2039 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | |
| R2040 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | |
| R2041 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | |
| R2042 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | |
| R2043 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | |
| R2044 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | |
| R2046 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | |
| R2047 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | |
| R2048 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R2049 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | |
| R2050 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | |
| R2051 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R2052 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R2053 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W | |
| R2054 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W | |
| R2055 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | |
| R2056 | 1-216-067-00 | RES-CHIP | 5.6K | 5% | 1/10W | |
| R2057 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R2058 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | |
| R2059 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R2060 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | |
| R2061 | 1-216-043-91 | RES-CHIP | 560 | 5% | 1/10W | |
| R2062 | 1-216-105-91 | RES-CHIP | 220K | 5% | 1/10W | |
| R2063 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W | |
| R2064 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | |
| R2066 | 1-216-033-00 | RES-CHIP | 220 | 5% | 1/10W | |

## BC₁ C

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

| REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|---|--------|---|
| R2067 | 1-216-043-91 | RES-CHIP | 560 | 5% | 1/10W |
| R2069 | 1-216-639-11 | METAL CHIP | 330 | 0.5% | 1/10W |
| R2070 | 1-216-641-11 | METAL CHIP | 390 | 0.5% | 1/10W |
| R2071 | 1-216-067-00 | RES-CHIP | 5.6K | 5% | 1/10W |
| R2072 | 1-216-043-91 | RES-CHIP | 560 | 5% | 1/10W |
| R2073 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R2074 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R2076 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R2077 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R2108 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R2115 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R2301 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R2306 | 1-216-039-00 | RES-CHIP | 390 | 5% | 1/10W |
| R2307 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R2308 | 1-216-047-91 | RES-CHIP | 820 | 5% | 1/10W |
| R2309 | 1-216-051-00 | RES-CHIP | 1.2K | 5% | 1/10W |
| R2310 | 1-216-069-00 | RES-CHIP | 6.8K | 5% | 1/10W |
| R2311 | 1-216-075-00 | RES-CHIP | 12K | 5% | 1/10W |
| R2312 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R2313 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R2314 | 1-216-039-00 | RES-CHIP | 390 | 5% | 1/10W |
| R2315 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R2317 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R2318 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R2319 | 1-216-047-91 | RES-CHIP | 820 | 5% | 1/10W |
| R2320 | 1-216-051-00 | RES-CHIP | 1.2K | 5% | 1/10W |
| R2321 | 1-216-075-00 | RES-CHIP | 12K | 5% | 1/10W |
| R2322 | 1-216-069-00 | RES-CHIP | 6.8K | 5% | 1/10W |
| R2323 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R2324 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R2325 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R2326 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R2327 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W |
| R2328 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W |
| R2330 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W |
| R2331 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R2333 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R2334 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R2335 | 1-414-234-22 | FERRITE | 0UH | | |

&lt;VARIABLE RESISTOR&gt;

| | | | |
|---|---|---|---|
| RV2001 | 1-223-271-21 | RES, ADJ, CERMET 220 | |

&lt;CRYSTAL&gt;

| | | | |
|---|---|---|---|
| X2001 | 1-767-606-11 | VIBRATOR, CRYSTAL | |

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| | | | |
|---|---|---|---|
| * A-1400-587-A | C BOARD MOUNTED | | |

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| | | | |
|---|---|---|---|
| 4-382-854-01 | SCREW (M3X8), P, SW (+) | | |

&lt;CAPACITOR&gt;

| REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|---|--------|---|
| C9002 | 1-163-087-00 | CERAMIC CHIP | 4PF | 0.25PF | 50V |
| C9003 | 1-163-087-00 | CERAMIC CHIP | 4PF | 0.25PF | 50V |
| C9004 | 1-104-574-11 | CERAMIC | 0.0047UF | 10.00% | 2KV |

| REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|---|--------|---|
| C9005 | 1-163-087-00 | CERAMIC CHIP | 4PF | 0.25PF | 50V |
| C9006 | 1-163-091-00 | CERAMIC CHIP | 8PF | 0.25PF | 50V |
| C9007 | 1-163-091-00 | CERAMIC CHIP | 8PF | 0.25PF | 50V |
| C9008 | 1-163-091-00 | CERAMIC CHIP | 8PF | 0.25PF | 50V |
| C9009 | 1-163-087-00 | CERAMIC CHIP | 4PF | 0.25PF | 50V |
| C9010 | 1-163-087-00 | CERAMIC CHIP | 4PF | 0.25PF | 50V |
| C9011 | 1-136-207-11 | MYLAR | 0.047UF | 10.00% | 250V |
| C9012 | 1-136-207-11 | MYLAR | 0.047UF | 10.00% | 250V |
| C9014 | 1-136-207-11 | MYLAR | 0.047UF | 10.00% | 250V |
| C9015 | 1-163-087-00 | CERAMIC CHIP | 4PF | 0.25PF | 50V |
| C9016 | 1-102-110-00 | CERAMIC | 220PF | 10.00% | 50V |
| C9018 | 1-107-961-91 | ELECT | 10UF | 20.00% | 250V |
| C9019 | 1-163-035-00 | CERAMIC CHIP | 0.047UF | | 50V |
| C9020 | 1-107-961-91 | ELECT | 10UF | 20.00% | 250V |
| C9021 | 1-107-961-91 | ELECT | 10UF | 20.00% | 250V |
| C9022 | 1-101-004-00 | CERAMIC | 0.01UF | | 50V |
| C9023 | 1-101-004-00 | CERAMIC | 0.01UF | | 50V |
| C9024 | 1-163-035-00 | CERAMIC CHIP | 0.047UF | | 50V |
| C9025 | 1-126-934-11 | ELECT | 220UF | 20.00% | 16V |
| C9026 | 1-163-035-00 | CERAMIC CHIP | 0.047UF | | 50V |
| C9027 | 1-101-004-00 | CERAMIC | 0.01UF | | 50V |
| C9028 | 1-163-017-00 | CERAMIC CHIP | 0.0047UF | 10.00% | 50V |
| C9029 | 1-163-017-00 | CERAMIC CHIP | 0.0047UF | 10.00% | 50V |
| C9030 | 1-163-017-00 | CERAMIC CHIP | 0.0047UF | 10.00% | 50V |
| C9031 | 1-104-574-11 | CERAMIC | 0.0047UF | 10.00% | 2KV |
| C9032 | 1-162-116-00 | CERAMIC | 680PF | 10.00% | 2KV |
| C9033 | 1-107-662-11 | ELECT | 22UF | 20.00% | 250V |
| C9035 | 1-104-574-11 | CERAMIC | 0.0047UF | 10.00% | 2KV |
| C9042 | 1-126-940-11 | ELECT | 330UF | 20.00% | 25V |
| C9047 | 1-107-651-11 | ELECT | 4.7UF | 20.00% | 250V |

&lt;CONNECTOR&gt;

| | | | |
|---|---|---|---|
| CN9001 * | 1-564-512-11 | PLUG, CONNECTOR 9P | |
| CN9002 | 1-691-765-11 | PLUG (MICRO CONNECTOR) 3P | |
| CN9003 | 1-695-915-11 | TAB (CONTACT) | |
| CN9004 | 1-695-915-11 | TAB (CONTACT) | |
| CN9007 | 1-785-879-11 | CONNECTOR, ONE TOUCH | |

&lt;DIODE&gt;

| | | | |
|---|---|---|---|
| D9002 | 8-719-400-75 | MA3091 | |
| D9005 | 8-719-081-97 | MMDL914T1 | |
| D9006 | 8-719-051-85 | HSS83TD | |
| D9007 | 8-719-051-85 | HSS83TD | |
| D9008 | 8-719-051-85 | HSS83TD | |
| D9009 | 8-719-908-03 | GP08D | |
| D9010 | 8-719-110-17 | RD10ESB2 | |
| D9011 | 1-216-295-91 | SHORT CHIP | 0 |
| D9012 | 1-216-295-91 | SHORT CHIP | 0 |
| D9013 | 8-719-081-97 | MMDL914T1 | |

&lt;IC&gt;

| | | | |
|---|---|---|---|
| IC9001 | 8-759-360-83 | TDA6111Q/N4 | |
| IC9002 | 8-759-360-83 | TDA6111Q/N4 | |
| IC9003 | 8-759-360-83 | TDA6111Q/N4 | |

&lt;JACK&gt;

| | | | |
|---|---|---|---|
| J9001 ⚠ | 1-540-071-22 | SOCKET, CRT | |

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

**C** **D**

| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---------|----------|-------------|--|--|--------|
| | | <COIL> | | | |
| L9001 | 1-414-158-11 | INDUCTOR | 2.2UH | | |
| L9002 | 1-408-591-11 | INDUCTOR | 1UH | | |
| L9003 | 1-408-591-11 | INDUCTOR | 1UH | | |
| L9004 | 1-408-591-11 | INDUCTOR | 1UH | | |
| L9005 | 1-406-666-21 | INDUCTOR | 150UH | | |
| L9006 | 1-412-526-11 | INDUCTOR | 12UH | | |
| | | <FILTER> | | | |
| LP9001 | * 4-042-408-01 | PIN, COATING LEAD | | | |
| LP9002 | * 4-042-408-01 | PIN, COATING LEAD | | | |
| LP9003 | * 4-042-408-01 | PIN, COATING LEAD | | | |
| LP9004 | * 4-042-408-01 | PIN, COATING LEAD | | | |
| | | <NEON LAMP> | | | |
| NL9001 | 1-519-526-11 | LAMP, NEON | | | |
| NL9003 | 1-519-526-11 | LAMP, NEON | | | |
| | | <TRANSISTOR> | | | |
| Q9001 | 8-729-026-49 | 2SA1037AK-T146-R | | | |
| Q9009 | 8-729-026-49 | 2SA1037AK-T146-R | | | |
| Q9010 | 8-729-026-49 | 2SA1037AK-T146-R | | | |
| Q9011 | 8-729-026-49 | 2SA1037AK-T146-R | | | |
| | | <RESISTOR> | | | |
| R9001 | 1-216-059-00 | RES-CHIP | 2.7K | 5% | 1/10W |
| R9004 | 1-216-117-00 | RES-CHIP | 680K | 5% | 1/10W |
| R9006 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R9007 | 1-208-789-11 | METAL CHIP | 2K | 0.5% | 1/10W |
| R9008 | 1-216-085-91 | RES-CHIP | 33K | 5% | 1/10W |
| R9012 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R9013 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R9018 | 1-216-059-00 | RES-CHIP | 2.7K | 5% | 1/10W |
| R9019 | 1-216-059-00 | RES-CHIP | 2.7K | 5% | 1/10W |
| R9021 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R9023 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R9026 | 1-208-789-11 | METAL CHIP | 2K | 0.5% | 1/10W |
| R9031 | 1-208-789-11 | METAL CHIP | 2K | 0.5% | 1/10W |
| R9033 | 1-208-808-11 | METAL CHIP | 12K | 0.5% | 1/10W |
| R9034 | 1-208-800-11 | METAL CHIP | 5.6K | 0.5% | 1/10W |
| R9035 | 1-208-790-11 | METAL CHIP | 2.2K | 0.5% | 1/10W |
| R9036 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R9037 | 1-240-233-71 | METAL OXIDE | 100 | 5% | 3W |
| R9038 | 1-208-790-11 | METAL CHIP | 2.2K | 0.5% | 1/10W |
| R9039 | 1-208-790-11 | METAL CHIP | 2.2K | 0.5% | 1/10W |
| R9041 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R9042 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R9043 | 1-240-233-71 | METAL OXIDE | 100 | 5% | 3W |
| R9044 | 1-240-233-71 | METAL OXIDE | 100 | 5% | 3W |
| R9047 | 1-219-744-11 | CARBON | 220 | 5% | 1/2W |
| R9048 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R9049 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R9050 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W |
| R9051 | 1-219-744-11 | CARBON | 220 | 5% | 1/2W |
| R9052 | 1-219-744-11 | CARBON | 220 | 5% | 1/2W |
| R9053 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W |
| R9054 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W |
| R9055 | 1-243-994-91 | CEMENTED | 820K | 5% | 0.5W |

| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---------|----------|-------------|--|--|--------|
| R9056 | 1-219-750-91 | CARBON | 22K | 5% | 1/2W |
| R9057 | 1-220-827-91 | RESISTOR | 560K | 5% | 1/2W |
| R9058 | 1-243-994-91 | CEMENTED | 820K | 5% | 0.5W |
| R9059 | 1-219-746-11 | CARBON | 1K | 5% | 1/2W |
| R9061 | 1-219-743-11 | CARBON | 100 | 5% | 1/2W |
| R9065 | 1-216-069-00 | RES-CHIP | 6.8K | 5% | 1/10W |
| R9068 | 1-216-101-00 | RES-CHIP | 150K | 5% | 1/10W |
| R9069 | 1-219-743-11 | CARBON | 100 | 5% | 1/2W |
| R9070 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W |
| R9071 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W |
| R9072 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W |
| R9073 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| | | <VARIABLE RESISTOR> | | | |
| RV9001 | 1-241-656-11 | RES, ADJ, METAL FILM 110M | | | |
| RV9002 | 1-230-641-11 | RES, ADJ, METAL GLAZE 2.2M | | | |

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|--|--|--|--|--|--|
| * A-1300-339-A | | D BOARD COMPLETE | | | |
| | | \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* | | | |
| * 4-363-146-00 | | HEAT SINK, V.OUT | | | |
| 4-382-854-11 | | SCREW (M3X10), P, SW (+) | | | |
| 4-382-854-21 | | SCREW (M3X14), P, SW (+) | | | |
| | | <CAPACITOR> | | | |
| C6100 | 1-161-830-00 | CERAMIC | 0.0047UF | 99% | 500V |
| C6101 | 1-107-680-91 | ELECT | 22UF | 20.00% | 450V |
| C6102 | 1-161-830-00 | CERAMIC | 0.0047UF | 99% | 500V |
| C6103 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C6104 | 1-163-009-91 | CERAMIC CHIP | 0.001UF | 10.00% | 50V |
| C6105 | 1-115-339-11 | CERAMIC CHIP | 0.1UF | 10.00% | 50V |
| C6107 | 1-137-605-11 | MYLAR | 0.01UF | 10.00% | 250V |
| C6108 | 1-161-830-00 | CERAMIC | 0.0047UF | 99% | 500V |
| C6109 | 1-126-971-11 | ELECT | 470UF | 20.00% | 50V |
| C6111 | 1-161-830-00 | CERAMIC | 0.0047UF | 99% | 500V |
| C6113 | 1-126-965-91 | ELECT | 22UF | 20.00% | 50V |
| C6334 | 1-126-940-11 | ELECT | 330UF | 20.00% | 25V |
| C6600 | 1-128-550-11 | ELECT | 2200UF | 20.00% | 50V |
| C6601 | 1-126-967-11 | ELECT | 47UF | 20.00% | 50V |
| C6602 | 1-129-720-00 | FILM | 0.033UF | 5.00% | 630V |
| C6603 | 1-126-949-11 | ELECT | 220UF | 20.00% | 35V |
| C6604 | 1-126-967-11 | ELECT | 47UF | 20.00% | 50V |
| C6607 ⚠ | 1-119-892-51 | CERAMIC | 470PF | 10.00% | 250V |
| C6608 ⚠ | 1-119-892-51 | CERAMIC | 470PF | 10.00% | 250V |
| C6612 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C6613 | 1-161-830-00 | CERAMIC | 0.0047UF | 99% | 500V |
| C6614 | 1-161-830-00 | CERAMIC | 0.0047UF | | 500V |
| C6615 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C6616 | 1-126-961-11 | ELECT | 2.2UF | 20.00% | 50V |
| C6617 | 1-161-830-00 | CERAMIC | 0.0047UF | | 500V |
| C6618 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 16V |
| C6619 | 1-161-830-00 | CERAMIC | 0.0047UF | 99% | 500V |
| C6620 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 16V |
| C6621 | 1-131-940-11 | ELECT | 1200UF | 20% | 250V |
| C6622 | 1-131-940-11 | ELECT | 1200UF | 20% | 250V |
| C6624 | 1-126-966-11 | ELECT | 33UF | 20.00% | 50V |
| C6629 | 1-125-906-11 | ELECT | 560UF | 20.00% | 450V |
| C6633 | 1-136-479-11 | FILM | 0.001UF | 2.00% | 50V |

D

| REF NO. | PART NO. | DESCRIPTION | | REMARK | | | REF NO. | PART NO. | DESCRIPTION | | REMARK | | |
|---------|----------|-------------|---|--------|---|---|---------|----------|-------------|---|--------|---|---|
| C6634 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V | | C6849 | 1-115-339-11 | CERAMIC CHIP | 0.1UF | 10.00% | 50V | |
| C6635 | 1-126-963-11 | ELECT | 4.7UF | 20.00% | 50V | | C6850 | 1-115-339-11 | CERAMIC CHIP | 0.1UF | 10.00% | 50V | |
| | | | | | | | C6851 | 1-107-639-11 | ELECT | 47UF | 20.00% | 160V | |
| C6645 | 1-163-009-91 | CERAMIC CHIP | 0.001UF | 10.00% | 50V | | C6853 | 1-102-228-00 | CERAMIC | 470PF | 10.00% | 500V | |
| C6647 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V | | C6854 | 1-126-941-11 | ELECT | 470UF | 20.00% | 25V | |
| C6648 | 1-125-969-91 | CERAMIC | 680PF | 10.00% | 1KV | | | | | | | | |
| C6649 | 1-125-969-91 | CERAMIC | 680PF | 10.00% | 1KV | | C6855 | 1-123-024-21 | ELECT | 33UF | | 160V | |
| C6650 | 1-125-969-91 | CERAMIC | 680PF | 10.00% | 1KV | | C6856 | 1-126-971-11 | ELECT | 470UF | 20.00% | 50V | |
| | | | | | | | C6857 | 1-102-228-00 | CERAMIC | 470PF | 10.00% | 500V | |
| C6651 | 1-125-969-91 | CERAMIC | 680PF | 10.00% | 1KV | | C6858 | 1-102-228-00 | CERAMIC | 470PF | 10.00% | 500V | |
| C6652 | 1-110-626-11 | ELECT | 330UF | 20.00% | 160V | | C6859 | 1-162-129-00 | CERAMIC | 150PF | 10.00% | 2KV | |
| C6653 | 1-136-287-11 | MYLAR | 0.0047UF | 5.00% | 50V | | | | | | | | |
| C6654 | 1-126-936-11 | ELECT | 3300UF | 20.00% | 16V | | C6860 | 1-162-129-00 | CERAMIC | 150PF | 10.00% | 2KV | |
| C6655 | 1-126-936-11 | ELECT | 3300UF | 20.00% | 16V | | C6862 | 1-130-202-00 | FILM | 0.022UF | 5.00% | 200V | |
| | | | | | | | C6864 | 1-129-898-00 | FILM | 0.0022UF | 5.00% | 630V | |
| C6656 | 1-136-165-00 | FILM | 0.1UF | 5.00% | 50V | | C6865 | 1-130-202-00 | FILM | 0.022UF | 5.00% | 400V | |
| C6658 | 1-104-330-91 | CERAMIC | 470PF | 10.00% | 1KV | | C6866 | 1-102-030-00 | CERAMIC | 330PF | 10.00% | 500V | |
| C6660 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V | | | | | | | | |
| C6661 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V | | C6867 | 1-130-785-11 | MYLAR | 0.47UF | 10.00% | 100V | |
| C6662 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V | | C6868 | 1-162-974-11 | CERAMIC CHIP | 0.01UF | | 50V | |
| | | | | | | | C6869 | 1-107-882-91 | ELECT | 100UF | 20.00% | 16V | |
| C6665 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V | | C6870 | 1-128-528-11 | ELECT | 470UF | 20.00% | 25V | |
| C6666 | 1-137-150-11 | MYLAR | 0.01UF | 5.00% | 50V | | C6879 | 1-107-960-11 | ELECT | 4.7UF | 20.00% | 160V | |
| C6668 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V | | | | | | | | |
| C6669 | 1-125-969-91 | CERAMIC | 680PF | 10.00% | 1KV | | C6882 | 1-104-574-11 | CERAMIC | 0.0047UF | 10.00% | 2KV | |
| C6670 | 1-125-969-91 | CERAMIC | 680PF | 10.00% | 1KV | | C6884 | 1-125-889-91 | CERAMIC CHIP | 2.2UF | 10% | 10V | |
| | | | | | | | C6886 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V | |
| C6672 | 1-135-946-21 | FILM | 47000PF | 3% | 800V | | C6888 | 1-162-964-11 | CERAMIC CHIP | 0.001UF | 10.00% | 50V | |
| C6673 | 1-136-189-00 | MYLAR | 0.1UF | 10.00% | 250V | | C6889 | 1-109-844-11 | FILM | 0.68UF | 5.00% | 250V | |
| C6674 | 1-128-527-11 | ELECT | 330UF | 20.00% | 25V | | | | | | | | |
| C6679 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V | | | | | | | | |
| C6800 | 1-102-129-00 | CERAMIC | 0.01UF | 10.00% | 50V | | | | <CONNECTOR> | | | | |
| C6801 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V | | CN6602 | * 1-508-786-00 | PIN, CONNECTOR (5MM PITCH) 2P | | | | |
| C6802 | 1-162-974-11 | CERAMIC CHIP | 0.01UF | | 50V | | CN6603 | * 1-573-963-11 | PIN, CONNECTOR (PC BOARD) 3P | | | | |
| C6805 | 1-111-087-11 | ELECT | 330UF | 20.00% | 25V | | CN6604 | 1-580-843-11 | PIN, CONNECTOR (POWER) | | | | |
| C6806 | 1-107-933-11 | ELECT | 100UF | 20.00% | 100V | | CN6605 | * 1-764-333-11 | PLUG, CONNECTOR 10P | | | | |
| C6808 | 1-137-401-11 | MYLAR | 0.22UF | 10.00% | 100V | | CN6606 | * 1-764-333-11 | PLUG, CONNECTOR 10P | | | | |
| C6809 | 1-102-074-00 | CERAMIC | 0.001UF | 10.00% | 50V | | CN6609 | * 1-508-784-21 | PIN, CONNECTOR (5MM PITCH) 1P | | | | |
| C6810 | 1-106-220-00 | MYLAR | 0.1UF | 10.00% | 100V | | CN6610 | * 1-508-784-21 | PIN, CONNECTOR (5MM PITCH) 1P | | | | |
| C6811 | 1-111-087-11 | ELECT | 330UF | 20.00% | 25V | | CN6611 | * 1-508-784-21 | PIN, CONNECTOR (5MM PITCH) 1P | | | | |
| C6813 | 1-126-935-11 | ELECT | 470UF | 20.00% | 16V | | CN6612 | * 1-508-784-21 | PIN, CONNECTOR (5MM PITCH) 1P | | | | |
| C6814 | 1-125-889-91 | CERAMIC CHIP | 2.2UF | 10% | 10V | | CN6613 | * 1-508-784-21 | PIN, CONNECTOR (5MM PITCH) 1P | | | | |
| C6816 | 1-137-577-11 | FILM | 0.068UF | 5.00% | 400V | | CN6614 | * 1-508-784-21 | PIN, CONNECTOR (5MM PITCH) 1P | | | | |
| C6818 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V | | CN6615 | * 1-508-784-21 | PIN, CONNECTOR (5MM PITCH) 1P | | | | |
| C6819 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V | | CN6616 | * 1-508-784-21 | PIN, CONNECTOR (5MM PITCH) 1P | | | | |
| C6820 | 1-102-114-00 | CERAMIC | 470PF | 10.00% | 50V | | CN6618 | * 1-508-784-21 | PIN, CONNECTOR (5MM PITCH) 1P | | | | |
| C6821 | 1-106-383-00 | MYLAR | 0.047UF | 10.00% | 200V | | CN6619 | 1-564-507-41 | PLUG, CONNECTOR 4P | | | | |
| C6822 | 1-102-114-00 | CERAMIC | 470PF | 10.00% | 50V | | CN6801 | * 1-785-270-12 | PIN, DY CONNECTOR (PC BOARD) | | | | |
| C6823 | 1-106-383-00 | MYLAR | 0.047UF | 10.00% | 200V | | CN6802 | * 1-764-333-11 | PLUG, CONNECTOR 10P | | | | |
| C6826 | 1-102-030-00 | CERAMIC | 330PF | 10.00% | 500V | | CN6803 | 1-793-495-11 | CONNECTOR, BOARD TO BOARD 50P | | | | |
| C6827 | 1-102-030-00 | CERAMIC | 330PF | 10.00% | 500V | | CN6805 | 1-695-915-11 | TAB (CONTACT) | | | | |
| C6829 | 1-162-134-11 | CERAMIC | 470PF | 10.00% | 2KV | | CN6806 | 1-764-334-11 | PLUG, CONNECTOR 11P | | | | |
| C6830 | 1-117-619-11 | FILM | 1000PF | 3.00% | 1.2KV | | CN6807 | 1-695-915-11 | TAB (CONTACT) | | | | |
| C6831 | 1-117-838-11 | FILM | 8200PF | 3.00% | 1.5KV | | CN6808 | 1-695-915-11 | TAB (CONTACT) | | | | |
| C6832 | 1-117-842-11 | FILM | 12000PF | 3.00% | 1.5KV | | CN6809 | 1-695-915-11 | TAB (CONTACT) | | | | |
| C6836 | 1-127-681-11 | FILM | 10000PF | 2% | 100V | | CN6810 | 1-785-879-11 | CONNECTOR, ONE TOUCH | | | | |
| C6837 | 1-125-893-11 | FILM | 680PF | 3.00% | 1.5KV | | CN6811 | * 1-508-784-21 | PIN, CONNECTOR (5MM PITCH) 1P | | | | |
| C6838 | 1-125-893-11 | FILM | 680PF | 3.00% | 1.5KV | | CN6812 | * 1-508-784-21 | PIN, CONNECTOR (5MM PITCH) 1P | | | | |
| C6839 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V | | CN6819 | 1-695-915-11 | TAB (CONTACT) | | | | |
| C6840 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V | | | | | | | | |
| C6841 | 1-115-511-11 | FILM | 0.12UF | 5.00% | 250V | | | | | | | | |
| C6842 | 1-115-521-11 | FILM | 0.82UF | 5.00% | 250V | | | | <DIODE> | | | | |
| C6843 | 1-107-826-11 | CERAMIC CHIP | 0.1UF | 10.00% | 16V | | D6100 | 8-719-077-76 | D2SB60A-F04 | | | | |
| C6844 | 1-115-339-11 | CERAMIC CHIP | 0.1UF | 10.00% | 50V | | D6101 | 8-719-110-49 | RD18ES-B2 | | | | |
| C6845 | 1-117-664-11 | FILM | 0.27UF | 5.00% | 250V | | D6102 | 8-719-082-03 | DIODE MM3Z15VT1 | | | | |
| C6846 | 1-115-514-11 | FILM | 0.22UF | 5.00% | 250V | | D6103 | 8-719-081-97 | MMDL914T1 | | | | |
| C6848 | 1-113-979-51 | FILM | 0.047UF | 5% | 250V | | D6104 | 8-719-510-48 | D1N20R | | | | |

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

**D**

| REF NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------|-------------|--------|
| D6105 | 8-719-948-45 | ERA22-08 | |
| D6108 | 8-719-063-73 | DIODE D1NL20U-TR | |
| D6323 | 8-719-032-12 | D1NS6 | |
| D6601 | 8-719-911-19 | 1SS119-25 | |
| D6605 | 8-719-510-53 | D4SB60L | |
| | | | |
| D6608 | 8-719-404-50 | MA111-TX | |
| D6614 | 8-719-110-30 | RD12ES-B1 | |
| D6615 | 8-719-911-19 | 1SS119-25 | |
| D6618 | 8-719-979-64 | UF4005PKG23 | |
| D6620 | 8-719-063-73 | DIODE D1NL20U-TR | |
| | | | |
| D6623 | 8-719-911-19 | 1SS119-25 | |
| D6631 | 8-719-050-18 | D4SBL20U | |
| D6632 | 8-719-404-50 | MA111-TX | |
| D6633 | 8-719-510-12 | D10SC4M | |
| D6635 | 8-719-110-47 | RD18ESB | |
| | | | |
| D6636 | 8-719-911-19 | 1SS119-25 | |
| D6639 | 8-719-063-73 | DIODE D1NL20U-TR | |
| D6640 | 8-719-110-72 | RD30ESB2 | |
| D6641 | 8-719-109-96 | RD6.8ES-B1 | |
| D6642 | 8-719-911-19 | 1SS119-25 | |
| | | | |
| D6644 | 8-719-052-92 | D10SBS4F | |
| D6654 | 8-719-052-92 | D10SBS4F | |
| D6802 | 8-719-911-19 | 1SS119-25 | |
| D6803 | 8-719-510-73 | S3L20UF4 | |
| D6804 | 8-719-911-19 | 1SS119-25 | |
| | | | |
| D6806 | 8-719-911-19 | 1SS119-25 | |
| D6808 | 8-719-110-02 | RD7.5ES-B1 | |
| D6812 | 8-719-110-39 | RD15ES-B1 | |
| D6813 | 8-719-302-43 | EL1Z | |
| D6814 | 8-719-018-82 | RGP02-20EL-6394 | |
| | | | |
| D6816 | 8-719-510-73 | S3L20UF4 | |
| D6817 | 8-719-510-73 | S3L20UF4 | |
| D6820 | 8-719-970-87 | ERA38-06 | |
| D6821 | 8-719-970-87 | ERA38-06 | |
| D6822 | 8-719-067-18 | RN4Z | |
| | | | |
| D6824 | 8-719-510-73 | S3L20UF4 | |
| D6825 | 8-719-050-38 | DIODE M1MA152WK-T1 | |
| D6830 | 8-719-988-61 | 1SS355TE-17 | |
| D6831 | 8-719-945-81 | ERC06-15SA | |

**<FERRITE BEAD>**

| REF NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------|-------------|--------|
| FB6602 | 1-239-358-21 | FILTER, NOISE | |
| FB6603 | 1-239-358-21 | FILTER, NOISE | |
| FB6604 | 1-410-396-41 | FERRITE | 0.45UH |
| FB6605 | 1-410-396-41 | FERRITE | 0.45UH |
| FB6606 | 1-410-397-21 | FERRITE | 1.1UH |
| | | | |
| FB6607 | 1-410-396-41 | FERRITE | 0.45UH |
| FB6608 | 1-410-396-41 | FERRITE | 0.45UH |

**<IC>**

| REF NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------|-------------|--------|
| IC6600 | 8-759-670-30 | MCZ3001D | |
| IC6601 | 8-759-198-31 | UPC1093J-1-T | |
| IC6607 | 8-749-012-13 | DM-58 | |
| IC6608 | 8-759-133-90 | UPC339C | |
| IC6800 | 8-759-696-71 | STV9379A | |
| | | | |
| IC6804 | 8-759-394-36 | BA09T | |
| IC6805 | 8-759-394-35 | BA12T | |
| IC6806 | 8-749-013-76 | PQ6RD83B | |

**<CHIP CONDUCTOR>**

| REF NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------|-------------|--------|
| JR6601 | 1-216-295-91 | SHORT CHIP | 0 |
| JR6603 | 1-216-295-91 | SHORT CHIP | 0 |
| JR6608 | 1-216-295-91 | SHORT CHIP | 0 |
| JR6609 | 1-216-295-91 | SHORT CHIP | 0 |
| JR6614 | 1-216-295-91 | SHORT CHIP | 0 |
| | | | |
| JR6615 | 1-216-295-91 | SHORT CHIP | 0 |
| JR6616 | 1-216-295-91 | SHORT CHIP | 0 |

**<COIL>**

| REF NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------|-------------|--------|
| L6604 | 1-412-525-31 | INDUCTOR | 10UH |
| L6605 | 1-412-525-31 | INDUCTOR | 10UH |
| L6606 | 1-412-525-31 | INDUCTOR | 10UH |
| L6607 | 1-412-519-11 | INDUCTOR | 3.3UH |
| L6608 | 1-412-525-31 | INDUCTOR | 10UH |
| | | | |
| L6800 | 1-412-525-31 | INDUCTOR | 10UH |
| L6801 | 1-406-986-21 | INDUCTOR | 3.3UH |
| L6802 | 1-416-775-21 | INDUCTOR | 1MH |
| L6803 | 1-406-982-11 | INDUCTOR | 680UH |
| L6804 | 1-412-519-11 | INDUCTOR | 3.3UH |
| | | | |
| L6805 | 1-412-519-11 | INDUCTOR | 3.3UH |
| L6806 | 1-412-519-11 | INDUCTOR | 3.3UH |
| L6807 | 1-412-552-11 | INDUCTOR | 2.2MH |
| L6808 | 1-406-674-11 | INDUCTOR | 3.3MH |

**<PHOTO COUPLER>**

| REF NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------|-------------|--------|
| PH6601 ⚠ | 8-749-924-35 | ON3171-R | |
| PH6602 ⚠ | 8-749-924-35 | ON3171-R | |

**<IC LINK>**

| REF NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------|-------------|--------|
| PS6605 | 1-533-597-41 | LINK, IC | |
| PS6606 | 1-533-597-41 | LINK, IC | |
| PS6609 | 1-533-597-41 | LINK, IC | |
| PS6801 | 1-532-841-21 | LINK, IC | |

**<TRANSISTOR>**

| REF NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------|-------------|--------|
| Q6100 | 8-729-046-40 | 2SK2663 | |
| Q6102 | 8-729-023-22 | 2SD2114K | |
| Q6600 | 8-729-052-32 | IRFIB7N50A | |
| Q6601 | 8-729-119-78 | 2SC2785-HFE | |
| Q6603 | 8-729-052-32 | IRFIB7N50A | |
| | | | |
| Q6604 | 8-729-119-76 | 2SA1175-HFE | |
| Q6605 | 8-729-230-49 | 2SC2712-YG | |
| Q6608 | 8-729-200-21 | 2SC2500-B | |
| Q6609 | 8-729-029-56 | DTA144ESA | |
| Q6610 | 8-729-119-78 | 2SC2785-HFE | |
| | | | |
| Q6611 | 8-729-029-66 | DTC114ESA | |
| Q6613 | 8-729-030-02 | DTC144ESA | |
| Q6614 | 8-729-119-76 | 2SA1175-HFE | |
| Q6619 | 8-729-119-78 | 2SC2785-HFE | |
| Q6620 | 8-729-119-78 | 2SC2785-HFE | |
| | | | |
| Q6800 | 8-729-421-19 | UN2213 | |
| Q6802 | 8-729-025-19 | IRFI740G | |
| Q6803 | 8-729-119-76 | SA1175-HFE | |
| Q6804 | 8-729-119-78 | 2SC2785-HFE | |
| Q6805 | 8-729-140-96 | 2SD774-34 | |

> The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

# D

| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| Q6806 | 8-729-140-96 | 2SD774-34 | | | |
| Q6807 | 8-729-056-17 | TRANSISTOR 2SC5696-SONY-CA | | | |
| Q6808 | 8-729-056-16 | TRANSISTOR 2SC5698-SONY-CA | | | |
| Q6809 | 8-729-046-33 | IRF720-LF49 | | | |
| Q6810 | 8-729-047-60 | IRFI830G-LF49 | | | |
| Q6811 | 8-729-010-25 | MSD601-RT1 | | | |
| Q6812 | 8-729-043-95 | 2SC3840(3) | | | |
| Q6819 | 8-729-010-25 | MSD601-RT1 | | | |
| Q6820 | 8-729-010-25 | MSD601-RT1 | | | |
| Q6821 | 8-729-010-25 | MSD601-RT1 | | | |
| | | **\<RESISTOR\>** | | | |
| R6100 | 1-260-298-51 | CARBON | 3.3 | 5% | 1/2W |
| R6101 | 1-216-045-00 | RES-CHIP | 680 | 5% | 1/10W |
| R6102 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W |
| R6103 | 1-216-009-91 | RES-CHIP | 22 | 5% | 1/10W |
| R6104 | 1-240-205-91 | CARBON | 22M | 5% | 1/2W |
| R6105 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R6106 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6107 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R6108 | 1-215-493-00 | METAL | 1M | 1% | 1/4W |
| R6110 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R6500 | 1-220-797-11 | CEMENTED | 0.47 | 5% | 10W |
| R6600 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R6602 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R6603 | 1-218-871-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R6604 | 1-218-871-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R6611 | 1-218-863-11 | METAL CHIP | 4.7K | 0.5% | 1/10W |
| R6622 | 1-220-797-11 | CEMENTED | 0.47 | 5% | 10W |
| R6624 | 1-218-895-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| R6625 | 1-215-864-00 | METAL OXIDE | 150 | 5% | 1W |
| R6626 | 1-215-444-00 | METAL | 9.1K | 1% | 1/4W |
| R6627 | 1-215-481-00 | METAL | 330K | 1% | 1/4W |
| R6628 | 1-216-833-11 | RES-CHIP | 10K | 5% | 1/10W |
| R6629 | 1-215-481-00 | METAL | 330K | 1% | 1/4W |
| R6630 | 1-215-481-00 | METAL | 330K | 1% | 1/4W |
| R6631 | 1-208-808-11 | METAL CHIP | 12K | 0.5% | 1/10W |
| R6632 | 1-208-758-11 | METAL CHIP | 100 | 0.5% | 1/10W |
| R6633 | 1-215-458-00 | METAL | 36K | 1% | 1/4W |
| R6634 | 1-215-489-00 | METAL | 680K | 1% | 1/4W |
| R6635 | 1-215-489-00 | METAL | 680K | 1% | 1/4W |
| R6636 | 1-215-489-00 | METAL | 680K | 1% | 1/4W |
| R6637 | 1-215-463-00 | METAL | 56K | 1% | 1/4W |
| R6638 | 1-245-291-11 | RES, CEMENT-COATED 2.2 | | | |
| R6644 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R6645 | 1-220-886-11 | FUSIBLE | 0.1 | 10% | 1W |
| R6647 | 1-216-639-11 | METAL CHIP | 330 | 0.5% | 1/10W |
| R6648 | 1-216-829-11 | RES-CHIP | 4.7K | 5% | 1/10W |
| R6649 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R6654 | 1-216-841-11 | RES-CHIP | 47K | 5% | 1/10W |
| R6655 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6658 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W |
| R6659 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W |
| R6660 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6662 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R6663 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R6664 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R6666 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R6667 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R6669 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R6670 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6671 | 1-217-611-00 | METAL | 0.1 | 10% | 2W |

| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R6672 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R6674 | 1-249-418-11 | CARBON | 1.2K | 5% | 1/4W |
| R6675 | 1-208-774-11 | METAL CHIP | 470 | 0.5% | 1/10W |
| R6679 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R6680 | 1-216-362-11 | METAL OXIDE | 0.27 | 5% | 2W |
| R6681 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R6682 | 1-249-416-11 | CARBON | 820 | 5% | 1/4W |
| R6683 | 1-260-127-11 | CARBON | 220K | 5% | 1/2W |
| R6685 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R6686 ⚠ | 1-247-289-11 | CARBON | 8.2M | 5% | 1W |
| R6688 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R6689 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W |
| R6690 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R6691 | 1-260-131-11 | CARBON | 470K | 5% | 1/2W |
| R6692 | 1-249-410-11 | CARBON | 270 | 5% | 1/4W |
| R6693 | 1-215-451-00 | METAL | 18K | 1% | 1/4W |
| R6694 | 1-215-471-00 | METAL | 120K | 1% | 1/4W |
| R6696 | 1-215-925-11 | METAL OXIDE | 22K | 5% | 3W |
| R6699 | 1-216-833-11 | RES-CHIP | 10K | 5% | 1/10W |
| R6701 | 1-216-833-11 | RES-CHIP | 10K | 5% | 1/10W |
| R6702 | 1-216-840-11 | RES-CHIP | 39K | 5% | 1/10W |
| R6704 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W |
| R6710 | 1-217-158-00 | METAL | 0.47 | 10% | 5W |
| R6713 | 1-218-887-11 | METAL CHIP | 47K | 0.5% | 1/10W |
| R6715 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R6801 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W |
| R6802 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6803 | 1-215-405-00 | METAL | 220 | 1% | 1/4W |
| R6804 | 1-208-795-11 | METAL CHIP | 3.6K | 0.5% | 1/10W |
| R6805 | 1-208-802-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R6806 | 1-208-795-11 | METAL CHIP | 3.6K | 0.5% | 1/10W |
| R6807 | 1-249-383-11 | CARBON | 1.5 | 5% | 1/4W |
| R6808 | 1-216-603-11 | METAL CHIP | 10 | 0.5% | 1/10W |
| R6810 | 1-214-798-21 | METAL | 1.8 | 1% | 1/2W |
| R6811 | 1-215-913-11 | METAL OXIDE | 220 | 5% | 3W |
| R6813 | 1-214-798-21 | METAL | 1.8 | 1% | 1/2W |
| R6815 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R6816 | 1-216-085-91 | RES-CHIP | 33K | 5% | 1/10W |
| R6817 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6818 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6822 | 1-215-896-00 | METAL OXIDE | 4.7K | 5% | 2W |
| R6823 | 1-215-894-11 | METAL OXIDE | 2.2K | 5% | 2W |
| R6824 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R6825 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R6826 | 1-215-894-11 | METAL OXIDE | 2.2K | 5% | 2W |
| R6827 | 1-215-895-11 | METAL OXIDE | 3.3K | 5% | 2W |
| R6828 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W |
| R6829 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W |
| R6830 | 1-247-764-11 | CARBON | 10K | 5% | 1/2W |
| R6831 | 1-247-764-11 | CARBON | 10K | 5% | 1/2W |
| R6832 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6834 | 1-216-361-00 | METAL OXIDE | 0.22 | 5% | 2W |
| R6835 | 1-216-361-00 | METAL OXIDE | 0.22 | 5% | 2W |
| R6836 | 1-215-880-00 | METAL OXIDE | 10 | 5% | 2W |
| R6837 | 1-215-880-00 | METAL OXIDE | 10 | 5% | 2W |
| R6839 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R6841 | 1-216-434-11 | METAL OXIDE | 1.8K | 5% | 1W |
| R6842 | 1-215-923-00 | METAL OXIDE | 10K | 5% | 3W |
| R6843 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6844 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R6846 | 1-260-127-11 | CARBON | 220K | 5% | 1/2W |
| R6847 | 1-216-295-91 | SHORT CHIP | 0 | | |

The components identified by shading
and mark ⚠ are critical for safety.
Replace only with part number specified.

**D**  **D5**

| REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|---|--------|---|
| R6848 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R6849 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R6850 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6851 | 1-260-288-11 | CARBON | 0.47 | 5% | 1/2W |
| R6852 | 1-216-345-11 | METAL OXIDE | 0.47 | 5% | 1W |
| R6853 | 1-260-288-11 | CARBON | 0.47 | 5% | 1/2W |
| R6854 | 1-215-923-00 | METAL OXIDE | 10K | 5% | 3W |
| R6855 | 1-214-897-00 | METAL | 22K | 1% | 1/2W |
| R6856 | 1-215-923-00 | METAL OXIDE | 10K | 5% | 3W |
| R6857 | 1-215-923-00 | METAL OXIDE | 10K | 5% | 3W |
| R6858 | 1-214-897-00 | METAL | 22K | 1% | 1/2W |
| R6859 | 1-215-871-11 | METAL OXIDE | 2.2K | 5% | 1W |
| R6860 | 1-215-923-00 | METAL OXIDE | 10K | 5% | 3W |
| R6863 | 1-215-894-11 | METAL OXIDE | 2.2K | 5% | 2W |
| R6864 | 1-215-429-00 | METAL | 2.2K 1% | 1/4W | |
| R6865 | 1-215-429-00 | METAL | 2.2K 1% | 1/4W | |
| R6866 | 1-215-423-00 | METAL | 1.2K 1% | 1/4W | |
| R6867 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R6868 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R6869 | 1-216-849-11 | RES-CHIP | 220K | 5% | 1/10W |
| R6870 | 1-216-085-91 | RES-CHIP | 33K | 5% | 1/10W |
| R6872 | 1-260-125-11 | CARBON | 150K | 5% | 1/2W |
| R6873 | 1-260-125-11 | CARBON | 150K | 5% | 1/2W |
| R6875 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R6876 | 1-260-288-11 | CARBON | 0.47 | 5% | 1/2W |
| R6880 | 1-208-802-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R6884 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R6889 | 1-260-123-11 | CARBON | 100K | 5% | 1/2W |
| R6890 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R6894 | 1-260-123-11 | CARBON | 100K 5% | 1/2W | |
| R6895 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6896 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6897 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6899 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6903 | 1-215-923-00 | METAL OXIDE | 10K | 5% | 3W |
| R6905 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W |
| R6906 | 1-214-897-00 | METAL | 22K | 1% | 1/2W |
| R6908 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W |
| R6909 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W |
| R6910 | 1-247-895-91 | CARBON | 470K 5% | 1/4W | |

**<RELAY>**

| | | | |
|---|---|---|---|
| RY6601 ⚠ | 1-755-198-12 | RELAY | |
| RY6603 ⚠ | 1-755-357-11 | RELAY, AC POWER | |

**<TRANSFORMER>**

| | | | |
|---|---|---|---|
| T6100 ⚠ | 1-433-844-11 | TRANSFORMER, CONVERTER | |
| T6602 ⚠ | 1-435-690-11 | TRANSFORMER, CONVERTER (PIT) | |
| T6800 | 1-429-741-11 | TRANSFORMER, DRIVE | |
| T6801 | 1-437-690-11 | TRANSFORMER, FERRITE (DFT) | |
| T6802 | 1-437-430-11 | TRANSFORMER, FERRITE (HDT) | |
| T6803 ⚠ | 1-453-332-22 | TRANSFORMER ASSY FLY BACK | |
| | | (NX-460//M3B4) | |
| T6804 | 1-437-430-11 | TRANSFORMER, FERRITE (HDT) | |

**<THERMISTOR>**

| | | |
|---|---|---|
| TH6100 | 1-803-586-11 | THERMISTOR, NTC |
| TH6601 | 1-803-540-11 | THERMISTOR |
| TH6801 | 1-800-193-00 | THERMISTOR |

| REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|---|--------|---|
| | | **<VARISTOR>** | | | |
| VD6603 | 1-803-830-11 | VARISTOR (ERZV14D621) | | | |

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* A-1400-586-A  D5 BOARD MOUNTED
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| | 4-382-854-11 | SCREW (M3X10), P, SW (+) | | | |
|---|---|---|---|---|---|

**<CAPACITOR>**

| C6101 | 1-126-965-91 | ELECT | 22UF | 20.00% | 50V |
|-------|--------------|-------|------|--------|-----|
| C6102 | 1-126-965-91 | ELECT | 22UF | 20.00% | 50V |
| C6103 | 1-107-725-11 | CERAMIC CHIP | 0.1UF | 10.00% | 16V |
| C6104 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C6105 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V |
| C6106 | 1-136-347-11 | FILM | 0.0047UF | 5.00% | 630V |
| C6107 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V |
| C6108 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V |
| C6109 | 1-129-716-00 | FILM | 0.015UF | 5.00% | 630V |
| C6110 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V |
| C6111 | 1-136-165-00 | FILM | 0.1UF | 5.00% | 50V |
| C6114 | 1-107-725-11 | CERAMIC CHIP | 0.1UF | 10.00% | 16V |
| C6115 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V |
| C6116 | 1-136-479-11 | FILM | 0.001UF | 2.00% | 50V |
| C6117 | 1-163-037-11 | CERAMIC CHIP | 0.022UF | 10.00% | 50V |
| C6118 | 1-107-725-11 | CERAMIC CHIP | 0.1UF | 10.00% | 16V |
| C6119 | 1-162-960-11 | CERAMIC CHIP | 220PF | 10.00% | 50V |
| C6201 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C6202 | 1-162-964-11 | CERAMIC CHIP | 0.001UF | 10.00% | 50V |
| C6204 | 1-162-962-11 | CERAMIC CHIP | 470PF | 10.00% | 50V |
| C6206 | 1-136-479-11 | FILM | 0.001UF | 2.00% | 50V |
| C6208 | 1-126-968-11 | ELECT | 100UF | 20.00% | 50V |
| C6209 | 1-104-663-11 | ELECT | 33UF | 20.00% | 25V |
| C6210 | 1-107-725-11 | CERAMIC CHIP | 0.1UF | 10.00% | 16V |
| C6213 | 1-126-965-91 | ELECT | 22UF | 20.00% | 50V |
| C6214 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V |
| C6215 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V |
| C6216 | 1-104-760-11 | CERAMIC CHIP | 0.047UF | 10.00% | 50V |
| C6218 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V |
| C6219 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V |
| C6220 | 1-107-725-11 | CERAMIC CHIP | 0.1UF | 10.00% | 16V |
| C6227 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V |
| C6229 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V |
| C6230 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V |
| C6233 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C6306 | 1-104-760-11 | CERAMIC CHIP | 0.047UF | 10.00% | 50V |
| C6402 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C6403 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5.00% | 50V |
| C6404 | 1-115-416-11 | CERAMIC CHIP | 0.001UF | 5.00% | 25V |
| C6406 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V |
| C6408 | 1-162-964-11 | CERAMIC CHIP | 0.001UF | 10.00% | 50V |
| C6409 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V |
| C6410 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V |
| C6411 | 1-107-725-11 | CERAMIC CHIP | 0.1UF | 10.00% | 16V |
| C6412 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V |
| C6413 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V |
| C6414 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V |
| C6416 | 1-126-934-11 | ELECT | 220UF | 20.00% | 16V |

## D5

| REF NO. | PART NO. | DESCRIPTION | | REMARK | | | REF NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------|-------------|---|--------|---|---|---------|----------|-------------|--------|
| C6422 | 1-163-037-11 | CERAMIC CHIP | 0.022UF | 10.00% | 50V | | D6405 | 8-719-081-97 | MMDL914T1 | |
| C6423 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V | | D6409 | 8-719-081-97 | MMDL914T1 | |
| | | | | | | | D6411 | 8-719-081-97 | MMDL914T1 | |
| C6424 | 1-136-479-11 | FILM | 0.001UF | 2.00% | 50V | | D6413 | 8-719-081-97 | MMDL914T1 | |
| C6425 | 1-107-725-11 | CERAMIC CHIP | 0.1UF | 10.00% | 16V | | D6423 | 8-719-081-97 | MMDL914T1 | |
| C6426 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V | | | | | |
| C6427 | 1-162-964-11 | CERAMIC CHIP | 0.001UF | 10.00% | 50V | | D6423 | 8-719-404-50 | MA111-TX | |
| C6428 | 1-163-259-91 | CERAMIC CHIP | 220PF | 5.00% | 50V | | D6424 | 1-216-295-91 | SHORT CHIP | 0 |
| | | | | | | | D6425 | 8-719-988-61 | 1SS355TE-17 | |
| C6429 | 1-126-965-91 | ELECT | 22UF | 20.00% | 50V | | D6426 | 8-719-988-61 | 1SS355TE-17 | |
| C6430 | 1-104-760-11 | CERAMIC CHIP | 0.047UF | 10.00% | 50V | | D6427 | 8-719-988-61 | 1SS355TE-17 | |
| C6432 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V | | | | | |
| C6433 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V | | D6428 | 8-719-081-97 | MMDL914T1 | |
| C6434 | 1-107-823-11 | CERAMIC CHIP | 0.47UF | 10.00% | 16V | | D6501 | 8-719-081-97 | MMDL914T1 | |
| | | | | | | | D6502 | 8-719-081-97 | MMDL914T1 | |
| C6436 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V | | D6503 | 8-719-988-61 | 1SS355TE-17 | |
| C6437 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V | | D6504 | 8-719-988-61 | 1SS355TE-17 | |
| C6441 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5.00% | 50V | | | | | |
| C6442 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5.00% | 50V | | D6505 | 8-719-988-61 | 1SS355TE-17 | |
| C6443 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V | | | | | |
| | | | | | | | | | | |
| C6444 | 1-136-479-11 | FILM | 0.001UF | 2.00% | 50V | | | | <IC> | |
| C6445 | 1-162-964-11 | CERAMIC CHIP | 0.001UF | 10.00% | 50V | | | | | |
| C6451 | 1-216-295-91 | SHORT CHIP | 0 | | | | IC6100 | 6-701-598-01 | IC UPC5023CS-184 | |
| C6452 | 1-104-760-11 | CERAMIC CHIP | 0.047UF | 10.00% | 50V | | IC6201 | 8-759-659-67 | LA6393DLL | |
| C6454 | 1-208-854-11 | METAL CHIP | 1M | 0.5% | 1/10W | | IC6202 | 8-759-231-53 | TA7805S | |
| | | | | | | | IC6205 | 8-752-072-81 | CXA1875AM | |
| C6458 | 1-162-962-11 | CERAMIC CHIP | 470PF | 10.00% | 50V | | IC6206 | 8-759-700-69 | NJM79L12A | |
| C6459 | 1-115-340-11 | CERAMIC CHIP | 0.22UF | 10.00% | 25V | | | | | |
| C6460 | 1-115-185-11 | CERAMIC CHIP | 0.033UF | 10.00% | 50V | | IC6401 | 8-759-659-67 | LA6393DLL | |
| C6505 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V | | IC6402 | 6-701-847-01 | IC UPC1898CT-A | |
| C6506 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V | | IC6501 | 8-759-822-38 | LA6510 | |
| | | | | | | | | | | |
| C6508 | 1-136-495-11 | FILM | 0.068UF | 5.00% | 50V | | | | | |
| C6510 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V | | | | <CHIP CONDUCTOR> | |
| C6511 | 1-126-947-11 | ELECT | 47UF | 20.00% | 25V | | | | | |
| C6512 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V | | JR6100 | 1-216-295-91 | SHORT CHIP | 0 |
| C6513 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V | | JR6101 | 1-216-295-91 | SHORT CHIP | 0 |
| | | | | | | | JR6102 | 1-216-295-91 | SHORT CHIP | 0 |
| C6514 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V | | JR6103 | 1-216-295-91 | SHORT CHIP | 0 |
| C6515 | 1-107-714-11 | ELECT | 10UF | 20.00% | 50V | | JR6200 | 1-216-295-91 | SHORT CHIP | 0 |
| C6516 | 1-104-760-11 | CERAMIC CHIP | 0.047UF | 10.00% | 50V | | | | | |
| C6517 | 1-107-714-11 | ELECT | 10UF | 20.00% | 50V | | JR6201 | 1-216-295-91 | SHORT CHIP | 0 |
| C6518 | 1-162-964-11 | CERAMIC CHIP | 0.001UF | 10.00% | 50V | | JR6202 | 1-216-295-91 | SHORT CHIP | 0 |
| | | | | | | | JR6204 | 1-216-295-91 | SHORT CHIP | 0 |
| | | | | | | | JR6401 | 1-216-295-91 | SHORT CHIP | 0 |
| | | <CONNECTOR> | | | | | JR6402 | 1-216-295-91 | SHORT CHIP | 0 |
| | | | | | | | | | | |
| CN6100 | 1-793-498-11 | CONNECTOR, BOARD TO BOARD 50P | | | | | JR6403 | 1-216-295-91 | SHORT CHIP | 0 |
| CN6101 * | 1-564-523-11 | PLUG, CONNECTOR 8P | | | | | JR6404 | 1-216-295-91 | SHORT CHIP | 0 |
| CN6102 * | 1-564-518-11 | PLUG, CONNECTOR 3P | | | | | JR6405 | 1-216-295-91 | SHORT CHIP | 0 |
| CN6400 | 1-695-915-11 | TAB (CONTACT) | | | | | JR6406 | 1-216-295-91 | SHORT CHIP | 0 |
| | | | | | | | JR6407 | 1-216-295-91 | SHORT CHIP | 0 |
| | | <DIODE> | | | | | JR6408 | 1-216-295-91 | SHORT CHIP | 0 |
| | | | | | | | JR6409 | 1-216-295-91 | SHORT CHIP | 0 |
| D6102 | 8-719-987-87 | ERA85-009 | | | | | JR6410 | 1-216-295-91 | SHORT CHIP | 0 |
| D6103 | 8-719-911-19 | 1SS119-25 | | | | | JR6411 | 1-216-295-91 | SHORT CHIP | 0 |
| D6104 | 8-719-911-19 | 1SS119-25 | | | | | JR6413 | 1-216-295-91 | SHORT CHIP | 0 |
| D6105 | 8-719-063-73 | DIODE D1NL20U-TR | | | | | | | | |
| D6201 | 8-719-081-97 | MMDL914T1 | | | | | JR6414 | 1-216-295-91 | SHORT CHIP | 0 |
| | | | | | | | JR6416 | 1-216-295-91 | SHORT CHIP | 0 |
| D6202 | 8-719-081-97 | MMDL914T1 | | | | | JR6417 | 1-216-295-91 | SHORT CHIP | 0 |
| D6203 | 8-719-081-97 | MMDL914T1 | | | | | JR6418 | 1-216-295-91 | SHORT CHIP | 0 |
| D6207 | 8-719-081-97 | MMDL914T1 | | | | | JR6420 | 1-216-295-91 | SHORT CHIP | 0 |
| D6208 | 8-719-081-97 | MMDL914T1 | | | | | | | | |
| D6218 | 1-216-295-91 | SHORT CHIP | 0 | | | | JR6421 | 1-216-295-91 | SHORT CHIP | 0 |
| | | | | | | | JR6422 | 1-216-295-91 | SHORT CHIP | 0 |
| D6219 | 1-216-295-91 | SHORT CHIP | 0 | | | | JR6423 | 1-216-295-91 | SHORT CHIP | 0 |
| D6401 | 8-719-081-97 | MMDL914T1 | | | | | JR6424 | 1-216-295-91 | SHORT CHIP | 0 |
| D6402 | 8-719-081-97 | MMDL914T1 | | | | | JR6425 | 1-216-295-91 | SHORT CHIP | 0 |
| D6403 | 8-719-081-97 | MMDL914T1 | | | | | | | | |
| D6404 | 1-216-295-91 | SHORT CHIP | 0 | | | | JR6426 | 1-216-295-91 | SHORT CHIP | 0 |

D5

| REF NO. | PART NO. | DESCRIPTION | REMARK | | | REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|--------|--|--|---------|----------|-------------|--|--------|--|
| | | <COIL> | | | | | | <RESISTOR> | | | |
| L6101 | 1-416-920-11 | INDUCTOR | 10MH | | | R6001 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| L6102 | 1-406-989-21 | INDUCTOR | 10MH | | | R6002 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| L6201 | 1-412-537-31 | INDUCTOR | 100UH | | | R6003 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| | | | | | | R6006 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| | | | | | | R6007 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| | | <TRANSISTOR> | | | | R6102 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| Q6001 | 1-801-806-11 | TR DTC144EKA | | | | R6104 | 1-216-061-91 | RES-CHIP | 3.3K | 5% | 1/10W |
| Q6002 | 8-729-422-33 | 2SD601A-Q-TX | | | | R6107 | 1-216-061-91 | RES-CHIP | 3.3K | 5% | 1/10W |
| Q6103 | 8-729-140-93 | 2SB733-34 | | | | R6108 | 1-208-802-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| Q6104 | 8-729-046-33 | IRF720-LF49 | | | | R6109 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| Q6105 | 8-729-216-22 | 2SA1162-G | | | | | | | | | |
| | | | | | | R6111 | 1-208-808-11 | METAL CHIP | 12K | 0.5% | 1/10W |
| Q6106 | 8-729-010-25 | MSD601-RT1 | | | | R6112 | 1-208-805-11 | METAL CHIP | 9.1K | 0.5% | 1/10W |
| Q6107 | 8-729-804-87 | 2SB1142-T | | | | R6113 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| Q6108 | 8-729-010-25 | MSD601-RT1 | | | | R6114 | 1-208-798-11 | METAL CHIP | 4.7K | 0.5% | 1/10W |
| Q6201 | 8-729-010-25 | MSD601-RT1 | | | | R6115 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| Q6203 | 8-729-010-25 | MSD601-RT1 | | | | | | | | | |
| | | | | | | R6116 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| Q6205 | 8-729-010-25 | MSD601-RT1 | | | | R6117 | 1-208-784-11 | METAL CHIP | 1.2K | 0.5% | 1/10W |
| Q6207 | 8-729-421-19 | UN2213 | | | | R6118 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| Q6208 | 8-729-216-22 | 2SA1162-G | | | | R6119 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| Q6209 | 8-729-010-05 | MSB709-RT1 | | | | R6120 | 1-208-818-11 | METAL CHIP | 33K | 0.5% | 1/10W |
| Q6212 | 8-729-216-22 | 2SA1162-G | | | | | | | | | |
| | | | | | | R6121 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| Q6213 | 8-729-010-25 | MSD601-RT1 | | | | R6122 | 1-215-860-11 | METAL OXIDE | 33 | 5% | 1W |
| Q6215 | 8-729-010-25 | MSD601-RT1 | | | | R6127 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| Q6216 | 8-729-216-22 | 2SA1162-G | | | | R6128 | 1-208-796-11 | METAL CHIP | 3.9K | 0.5% | 1/10W |
| Q6218 | 8-729-010-25 | MSD601-RT1 | | | | R6129 | 1-208-774-11 | METAL CHIP | 470 | 0.5% | 1/10W |
| Q6219 | 8-729-422-33 | 2SD601A-Q-TX | | | | | | | | | |
| | | | | | | R6130 | 1-208-814-91 | METAL CHIP | 22K | 0.5% | 1/10W |
| Q6220 | 8-729-010-25 | MSD601-RT1 | | | | R6131 | 1-208-812-11 | METAL CHIP | 18K | 0.5% | 1/10W |
| Q6221 | 8-729-010-25 | MSD601-RT1 | | | | R6132 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| Q6401 | 8-729-010-25 | MSD601-RT1 | | | | R6133 | 1-208-822-11 | METAL CHIP | 47K | 0.5% | 1/10W |
| Q6402 | 8-729-216-22 | 2SA1162-G | | | | R6136 | 1-208-814-91 | METAL CHIP | 22K | 0.5% | 1/10W |
| Q6409 | 8-729-216-22 | 2SA1162-G | | | | | | | | | |
| | | | | | | R6137 | 1-208-814-91 | METAL CHIP | 22K | 0.5% | 1/10W |
| Q6410 | 8-729-010-25 | MSD601-RT1 | | | | R6138 | 1-208-788-11 | METAL CHIP | 1.8K | 0.5% | 1/10W |
| Q6412 | 8-729-216-22 | 2SA1162-G | | | | R6140 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| Q6413 | 8-729-010-25 | MSD601-RT1 | | | | R6141 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| Q6414 | 8-729-216-22 | 2SA1162-G | | | | R6142 | 1-208-792-11 | METAL CHIP | 2.7K | 0.5% | 1/10W |
| Q6415 | 8-729-010-25 | MSD601-RT1 | | | | | | | | | |
| | | | | | | R6143 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| Q6417 | 8-729-010-25 | MSD601-RT1 | | | | R6148 | 1-208-820-11 | METAL CHIP | 39K | 0.5% | 1/10W |
| Q6418 | 8-729-216-22 | 2SA1162-G | | | | R6201 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| Q6420 | 8-729-216-22 | 2SA1162-G | | | | R6203 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| Q6422 | 8-729-216-22 | 2SA1162-G | | | | R6204 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| Q6423 | 8-729-216-22 | 2SA1162-G | | | | | | | | | |
| | | | | | | R6206 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| Q6424 | 8-729-010-25 | MSD601-RT1 | | | | R6207 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| Q6425 | 8-729-010-25 | MSD601-RT1 | | | | R6209 | 1-216-037-00 | RES-CHIP | 330 | 5% | 1/10W |
| Q6437 | 8-729-010-25 | MSD601-RT1 | | | | R6210 | 1-208-812-11 | METAL CHIP | 18K | 0.5% | 1/10W |
| Q6438 | 8-729-216-22 | 2SA1162-G | | | | R6216 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| Q6440 | 8-729-422-33 | 2SD601A-Q-TX | | | | | | | | | |
| | | | | | | R6218 | 1-208-850-11 | METAL CHIP | 680K | 0.5% | 1/10W |
| Q6441 | 8-729-216-22 | 2SA1162-G | | | | R6219 | 1-208-830-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| Q6501 | 8-729-216-22 | 2SA1162-G | | | | R6220 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| Q6502 | 8-729-216-22 | 2SA1162-G | | | | R6221 | 1-208-822-11 | METAL CHIP | 47K | 0.5% | 1/10W |
| Q6503 | 8-729-010-25 | MSD601-RT1 | | | | R6222 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| Q6504 | 8-729-010-25 | MSD601-RT1 | | | | | | | | | |
| | | | | | | R6224 | 1-208-822-11 | METAL CHIP | 47K | 0.5% | 1/10W |
| Q6505 | 8-729-010-25 | MSD601-RT1 | | | | R6225 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| Q6506 | 8-729-421-22 | UN2211 | | | | R6227 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| Q6507 | 8-729-421-22 | UN2211 | | | | R6229 | 1-208-798-11 | METAL CHIP | 4.7K | 0.5% | 1/10W |
| Q6508 | 8-729-422-33 | 2SD601A-Q-TX | | | | R6230 | 1-208-836-11 | METAL CHIP | 180K | 0.5% | 1/10W |
| Q6509 | 8-729-010-25 | MSD601-RT1 | | | | | | | | | |
| | | | | | | R6232 | 1-208-794-11 | METAL CHIP | 3.3K | 0.5% | 1/10W |
| Q6510 | 8-729-216-22 | 2SA1162-G | | | | R6237 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W |
| | | | | | | R6248 | 1-216-685-11 | METAL CHIP | 27K | 0.5% | 1/10W |
| | | | | | | R6249 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| | | | | | | R6250 | 1-208-820-11 | METAL CHIP | 39K | 0.5% | 1/10W |

**D5**

| REF NO. | PART NO. | DESCRIPTION | | REMARK | | REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|-----|--------|------|---------|----------|-------------|-----|--------|------|
| R6253 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | R6457 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6254 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | R6458 | 1-216-121-11 | RES-CHIP | 1M | 5% | 1/10W |
| R6255 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | R6459 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R6256 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | R6460 | 1-208-824-11 | METAL CHIP | 56K | 0.5% | 1/10W |
| R6266 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | R6461 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R6267 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W | R6462 | 1-208-818-11 | METAL CHIP | 33K | 0.5% | 1/10W |
| R6272 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | R6463 | 1-208-818-11 | METAL CHIP | 33K | 0.5% | 1/10W |
| R6273 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W | R6466 | 1-218-760-11 | METAL CHIP | 220K | 0.5% | 1/10W |
| R6274 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W | R6467 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6278 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | R6468 | 1-208-810-11 | METAL CHIP | 15K | 0.5% | 1/10W |
| R6283 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | R6469 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6287 | 1-216-095-00 | RES-CHIP | 82K | 5% | 1/10W | R6471 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6288 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W | R6472 | 1-208-814-91 | METAL CHIP | 22K | 0.5% | 1/10W |
| R6289 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | R6473 | 1-208-814-91 | METAL CHIP | 22K | 0.5% | 1/10W |
| R6290 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | R6474 | 1-214-905-11 | METAL | 47K | 1% | 1/2W |
| R6291 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | R6475 | 1-208-800-11 | METAL CHIP | 5.6K | 0.5% | 1/10W |
| R6292 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W | R6476 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R6293 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W | R6477 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W |
| R6294 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | R6480 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6295 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | R6481 | 1-218-760-11 | METAL CHIP | 220K | 0.5% | 1/10W |
| R6401 | 1-216-295-91 | SHORT CHIP | 0 | | | R6482 | 1-208-842-11 | METAL CHIP | 330K | 0.5% | 1/10W |
| R6402 | 1-208-822-11 | METAL CHIP | 47K | 0.5% | 1/10W | R6483 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6403 | 1-208-832-11 | METAL CHIP | 120K | 0.5% | 1/10W | R6484 | 1-208-830-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| R6404 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | R6487 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R6405 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | R6489 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R6406 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | R6490 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R6407 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W | R6491 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6408 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | R6492 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6411 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | R6493 | 1-208-822-11 | METAL CHIP | 47K | 0.5% | 1/10W |
| R6412 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | R6494 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R6413 | 1-216-067-00 | RES-CHIP | 5.6K | 5% | 1/10W | R6495 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R6414 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | R6496 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6415 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | R6497 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W |
| R6417 | 1-216-295-91 | SHORT CHIP | 0 | | | R6498 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R6419 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W | R6499 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R6422 | 1-216-121-11 | RES-CHIP | 1M | 5% | 1/10W | R6500 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R6423 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W | R6508 | 1-208-798-11 | METAL CHIP | 4.7K | 0.5% | 1/10W |
| R6424 | 1-216-295-91 | SHORT CHIP | 0 | | | R6509 | 1-208-840-11 | METAL CHIP | 270K | 0.5% | 1/10W |
| R6428 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W | R6510 | 1-216-085-91 | RES-CHIP | 33K | 5% | 1/10W |
| R6429 | 1-208-812-11 | METAL CHIP | 18K | 0.5% | 1/10W | R6511 | 1-216-085-91 | RES-CHIP | 33K | 5% | 1/10W |
| R6430 | 1-214-913-00 | METAL | 100K | 1% | 1/2W | R6512 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W |
| R6431 | 1-216-113-00 | RES-CHIP | 470K | 5% | 1/10W | R6513 | 1-216-085-91 | RES-CHIP | 33K | 5% | 1/10W |
| R6432 | 1-216-081-00 | RES-CHIP | 22K | 5% | 1/10W | R6514 | 1-208-840-11 | METAL CHIP | 270K | 0.5% | 1/10W |
| R6433 | 1-208-798-11 | METAL CHIP | 4.7K | 0.5% | 1/10W | R6515 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W |
| R6434 | 1-208-798-11 | METAL CHIP | 4.7K | 0.5% | 1/10W | R6516 | 1-208-798-11 | METAL CHIP | 4.7K | 0.5% | 1/10W |
| R6435 | 1-216-295-91 | SHORT CHIP | 0 | | | R6517 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R6436 | 1-214-921-00 | METAL | 220K | 1% | 1/2W | R6518 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R6437 | 1-216-295-91 | SHORT CHIP | 0 | | | R6519 | 1-208-812-11 | METAL CHIP | 18K | 0.5% | 1/10W |
| R6439 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W | R6520 | 1-208-784-11 | METAL CHIP | 1.2K | 0.5% | 1/10W |
| R6440 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | R6521 | 1-208-790-11 | METAL CHIP | 2.2K | 0.5% | 1/10W |
| R6441 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W | R6522 | 1-208-830-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| R6446 | 1-216-295-91 | SHORT CHIP | 0 | | | R6523 | 1-215-429-00 | METAL | 2.2K | 1% | 1/4W |
| R6447 | 1-214-905-11 | METAL | 47K | 1% | 1/2W | R6525 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R6448 | 1-214-917-00 | METAL | 150K | 1% | 1/2W | R6526 | 1-208-808-11 | METAL CHIP | 12K | 0.5% | 1/10W |
| R6449 | 1-216-295-91 | SHORT CHIP | 0 | | | R6527 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R6450 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W | R6528 | 1-216-639-11 | METAL CHIP | 330 | 0.5% | 1/10W |
| R6452 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W | R6529 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6453 | 1-260-119-11 | CARBON | 47K | 5% | 1/2W | R6530 | 1-208-814-91 | METAL CHIP | 22K | 0.5% | 1/10W |
| R6455 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W | R6531 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R6456 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W | R6532 | 1-208-804-11 | METAL CHIP | 8.2K | 0.5% | 1/10W |

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

D5  DH  F1

| REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|---|--------|---|
| R6533 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6534 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6535 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R6536 | 1-208-812-11 | METAL CHIP | 18K | 0.5% | 1/10W |
| R6537 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| | | | | | |
| R6538 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6539 | 1-208-820-11 | METAL CHIP | 39K | 0.5% | 1/10W |
| R6540 | 1-208-822-11 | METAL CHIP | 47K | 0.5% | 1/10W |
| R6541 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6542 | 1-208-812-11 | METAL CHIP | 18K | 0.5% | 1/10W |
| | | | | | |
| R6543 | 1-208-822-11 | METAL CHIP | 47K | 0.5% | 1/10W |
| R6544 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6545 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6546 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6551 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| | | | | | |
| R6552 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6553 | 1-216-077-91 | RES-CHIP | 15K | 5% | 1/10W |
| R6554 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6555 | 1-208-806-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R6557 | 1-208-814-91 | METAL CHIP | 22K | 0.5% | 1/10W |
| | | | | | |
| R6558 | 1-208-826-11 | METAL CHIP | 68K | 0.5% | 1/10W |
| R6602 | 1-208-768-11 | METAL CHIP | 270 | 0.5% | 1/10W |
| R6604 | 1-216-095-00 | RES-CHIP | 82K | 5% | 1/10W |
| R6608 | 1-208-812-11 | METAL CHIP | 18K | 0.5% | 1/10W |
| R6609 | 1-208-798-11 | METAL CHIP | 4.7K | 0.5% | 1/10W |
| | | | | | |
| R6610 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R6611 | 1-216-057-00 | RES-CHIP | 2.2K | 5% | 1/10W |
| R6612 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R6614 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R6618 | 1-162-962-11 | CERAMIC CHIP | 470PF | 10.00% | 50V |
| | | | | | |
| R6619 | 8-719-081-97 | MMDL914T1 | | | |
| R6619 | 8-719-404-50 | MA111-TX | | | |
| R6620 | 1-216-295-91 | SHORT CHIP | 0 | | |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* A-1400-588-A  DH BOARD MOUNTED
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

<CAPACITOR>

| C3801 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
|-------|--------------|-------|------|--------|-----|
| C3804 | 1-102-129-00 | CERAMIC | 0.01UF | 10.00% | 50V |
| C3805 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C3807 | 1-102-129-00 | CERAMIC | 0.01UF | 10.00% | 50V |
| C3816 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| | | | | | |
| C3819 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V |
| C3822 | 1-136-165-00 | FILM | 0.1UF | 5.00% | 50V |
| C3823 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| C3824 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V |
| C3825 | 1-126-964-11 | ELECT | 10UF | 20.00% | 50V |
| | | | | | |
| C3826 | 1-136-165-00 | FILM | 0.1UF | 5.00% | 50V |

<CONNECTOR>

CN3802 \* 1-564-510-11  PLUG, CONNECTOR 7P

<DIODE>

D3805  8-719-911-19  1SS119-25

| REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|---|--------|---|
| | | <IC> | | | |
| IC3805 | 8-759-822-38 | LA6510 | | | |
| IC3808 | 8-759-189-43 | AN77L05-TA | | | |
| | | | | | |
| | | <TRANSISTOR> | | | |
| Q3807 | 8-729-030-02 | DTC144ESA | | | |
| Q3808 | 8-729-030-02 | DTC144ESA | | | |
| Q3809 | 8-729-119-78 | 2SC2785-HFE | | | |
| Q3812 | 8-729-119-78 | 2SC2785-HFE | | | |
| Q3813 | 8-729-119-78 | 2SC2785-HFE | | | |
| | | | | | |
| Q3814 | 8-729-119-76 | 2SA1175-HFE | | | |
| | | | | | |
| | | <RESISTOR> | | | |
| R3802 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R3803 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R3804 | 1-215-433-00 | METAL | 3.3K | 1% | 1/4W |
| R3805 | 1-215-429-00 | METAL | 2.2K | 1% | 1/4W |
| R3808 | 1-247-883-00 | CARBON | 150K | 5% | 1/4W |
| | | | | | |
| R3809 | 1-215-469-00 | METAL | 100K | 1% | 1/4W |
| R3810 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R3814 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R3823 | 1-249-395-11 | CARBON | 15 | 5% | 1/4W |
| R3825 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| | | | | | |
| R3828 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W |
| R3839 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R3845 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R3848 | 1-215-451-00 | METAL | 18K | 1% | 1/4W |
| R3849 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W |
| | | | | | |
| R3852 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R3854 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R3863 | 1-215-433-00 | METAL | 3.3K | 1% | 1/4W |
| R3864 | 1-215-433-00 | METAL | 3.3K | 1% | 1/4W |
| R3865 | 1-215-397-00 | METAL | 100 | 1% | 1/4W |
| | | | | | |
| R3866 | 1-215-469-00 | METAL | 100K | 1% | 1/4W |

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\* A-1400-490-A  F1 BOARD MOUNTED
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| | 1-533-223-11 | HOLDER, FUSE | | | |
|---|---|---|---|---|---|
| \* | 4-374-846-01 | COVER, CAPACITOR, CAP TYPE | | | |

<CAPACITOR>

| C1601 | ⚠ 1-104-708-51 | MYLAR | 0.47UF | 20.00% | 250V |
|-------|--------------|-------|--------|--------|------|
| C1602 | ⚠ 1-109-835-51 | MYLAR | 0.68UF | 20.00% | 250V |
| C1603 | ⚠ 1-117-703-51 | CERAMIC | 0.0047UF | 99% | 250V |

<CONNECTOR>

| CN1601 | 1-580-843-11 | PIN, CONNECTOR (POWER) |
|--------|--------------|------------------------|
| CN1602 | 1-580-843-11 | PIN, CONNECTOR (POWER) |
| CN1604 | 1-695-915-11 | TAB (CONTACT) |

<FUSE>

F1601  ⚠ 1-576-334-11  FUSE, CYLINDERICAL (TIME-LAG)

| | | | | |
|---|---|---|---|---|
| **F1** | **H1** | **H2** | | |

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | | **<FERRITE BEAD>** | | | |
| FB1601 | 1-410-397-21 | FERRITE | 1.1UH | | |
| FB1602 | 1-410-397-21 | FERRITE | 1.1UH | | |
| FB1603 | 1-410-397-21 | FERRITE | 1.1UH | | |
| FB1604 | 1-410-397-21 | FERRITE | 1.1UH | | |
| | | **<RESISTOR>** | | | |
| R1601 ⚠ | 1-219-759-91 | CARBON | 1M | 5% | 1/2W |
| | | **<TRANSFORMER>** | | | |
| T1601 ⚠ | 1-433-900-21 | TRANSFORMER, LINE FILTER | | | |
| T1602 ⚠ | 1-433-900-21 | TRANSFORMER, LINE FILTER | | | |
| | | **<VARISTOR>** | | | |
| VDR161 | 1-803-830-11 | VARISTOR (ERZV14D621) | | | |

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\* A-1400-491-A  H1 BOARD MOUNTED
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| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | | **<CAPACITOR>** | | | |
| C1910 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C1930 | 1-136-153-00 | FILM | 0.01UF | 5.00% | 50V |
| C1932 | 1-136-153-00 | FILM | 0.01UF | 5.00% | 50V |
| C1935 | 1-102-824-00 | CERAMIC | 470PF | 5.00% | 50V |
| C1938 | 1-102-824-00 | CERAMIC | 470PF | 5.00% | 50V |
| | | **<CONNECTOR>** | | | |
| CN1905 \* | 1-764-333-11 | PLUG, CONNECTOR 10P | | | |
| CN1906 | 1-564-509-11 | PLUG, CONNECTOR 6P | | | |
| CN1932 \* | 1-564-509-11 | PLUG, CONNECTOR 6P | | | |
| CN1934 \* | 1-764-333-11 | PLUG, CONNECTOR 10P | | | |
| | | **<DIODE>** | | | |
| D1905 | 8-719-070-16 | NNCD9.1A-T1 | | | |
| D1907 | 8-719-070-16 | NNCD9.1A-T1 | | | |
| D1930 | 8-719-929-15 | HZS9.1NB2 | | | |
| D1944 | 8-719-070-16 | NNCD9.1A-T1 | | | |
| D1945 | 8-719-911-19 | 1SS119-25 | | | |
| D1946 | 8-719-911-19 | 1SS119-25 | | | |
| | | **<JACK>** | | | |
| J1931 | 1-770-786-11 | JACK | | | |
| J1932 | 1-784-646-11 | TERMINAL, S | | | |
| J1933 | 1-770-329-11 | JACK, PIN 3P | | | |
| | | **<COIL>** | | | |
| L1931 | 1-414-856-11 | INDUCTOR | 10UH | | |
| L1932 | 1-414-856-11 | INDUCTOR | 10UH | | |

| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | | **<TRANSISTOR>** | | | |
| Q1901 | 8-729-030-02 | DTC144ESA | | | |
| Q1902 | 8-729-030-02 | DTC144ESA | | | |
| | | **<RESISTOR>** | | | |
| R1911 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R1913 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R1914 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R1915 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R1916 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W |
| R1917 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R1920 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R1921 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R1933 | 1-247-895-91 | CARBON | 470K | 5% | 1/4W |
| R1934 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R1935 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R1936 | 1-247-895-91 | CARBON | 470K | 5% | 1/4W |
| R1952 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R1970 | 1-249-426-11 | CARBON | 5.6K | % | 1/4W |
| R1971 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R1972 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R1973 | 1-249-420-11 | CARBON | 1.8K | 5% | 1/4W |
| R1974 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| | | **<SWITCH>** | | | |
| S1972 | 1-692-431-21 | SWITCH, TACTILE | | | |
| S1973 | 1-692-431-21 | SWITCH, TACTILE | | | |
| S1974 | 1-692-431-21 | SWITCH, TACTILE | | | |
| S1975 | 1-692-431-21 | SWITCH, TACTILE | | | |
| S1976 | 1-692-431-21 | SWITCH, TACTILE | | | |
| S1977 | 1-692-431-21 | SWITCH, TACTILE | | | |
| S1978 | 1-692-431-21 | SWITCH, TACTILE | | | |

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\* A-1400-492-A  H2 BOARD MOUNTED
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\* 4-055-304-01  HOLDER, LED

| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | | **<CAPACITOR>** | | | |
| C1911 | 1-126-947-11 | ELECT | 47UF | 20.00% | 16V |
| C1912 | 1-102-824-00 | CERAMIC | 470PF | 5.00% | 50V |
| | | **<CONNECTOR>** | | | |
| CN1651 \* | 1-580-844-11 | PIN, CONNECTOR (POWER) | | | |
| CN1652 \* | 1-580-844-11 | PIN, CONNECTOR (POWER) | | | |
| CN1907 \* | 1-564-521-11 | PLUG, CONNECTOR 6P | | | |
| | | **<DIODE>** | | | |
| D1906 | 8-719-083-18 | DIODE SPB-25MVWF | | | |
| | | **<IC>** | | | |
| IC1901 | 8-742-134-01 | SBX1981-51RP | | | |

The components identified by shading
and mark ⚠ are critical for safety.
Replace only with part number specified.

H₂  J  P

| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | | <SWITCH> | | | |
| S1651 ⚠ | 1-571-433-31 | SWITCH, PUSH (AC POWER) | | | |

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A-1400-500-A  J BOARD MOUNTED
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| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | | <CAPACITOR> | | | |
| C2410 | 1-126-967-11 | ELECT | 47UF | 20.00% | 50V |
| C2411 | 1-126-967-11 | ELECT | 47UF | 20.00% | 50V |
| C2412 | 1-126-967-11 | ELECT | 47UF | 20.00% | 50V |
| C2413 | 1-102-112-00 | CERAMIC | 330PF | 10.00% | 50V |
| C2414 | 1-102-112-00 | CERAMIC | 330PF | 10.00% | 50V |
| C2418 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V |
| C2419 | 1-126-960-11 | ELECT | 1UF | 20.00% | 50V |
| | | <CONNECTOR> | | | |
| CN2410 * | 1-564-523-11 | PLUG, CONNECTOR 8P | | | |
| | | <DIODE> | | | |
| D2410 | 8-719-929-15 | HZS9.1NB2 | | | |
| D2411 | 8-719-929-15 | HZS9.1NB2 | | | |
| D2412 | 8-719-929-15 | HZS9.1NB2 | | | |
| D2414 | 8-719-929-15 | HZS9.1NB2 | | | |
| D2415 | 8-719-929-15 | HZS9.1NB2 | | | |
| | | <JACK> | | | |
| J2410 | 1-784-623-11 | BLOCK, PIN JACK 5P | | | |
| | | <RESISTOR> | | | |
| R2410 | 1-247-804-11 | CARBON | 75 | 5% | 1/4W |
| R2411 | 1-247-804-11 | CARBON | 75 | 5% | 1/4W |
| R2412 | 1-247-804-11 | CARBON | 75 | 5% | 1/4W |
| R2414 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W |
| R2415 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R2417 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W |
| R2418 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |

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* A-1300-299-A  P BOARD COMPLETE
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | | <CAPACITOR> | | | |
| C8801 | 1-104-665-11 | ELECT | 100UF | 20.00% | 10V |
| C8802 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8803 | 1-162-915-11 | CERAMIC CHIP | 10PF | 0.50PF | 50V |
| C8804 | 1-162-915-11 | CERAMIC CHIP | 10PF | 0.50PF | 50V |
| C8805 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8806 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8807 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8808 | 1-126-967-11 | ELECT | 47UF | 20.00% | 50V |

| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| C8809 | 1-126-967-11 | ELECT | 47UF | 20.00% | 50V |
| C8810 | 1-104-665-11 | ELECT | 100UF | 20.00% | 10V |
| C8811 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8812 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8813 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8814 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8815 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8816 | 1-104-665-11 | ELECT | 100UF | 20.00% | 10V |
| C8817 | 1-104-665-11 | ELECT | 100UF | 20.00% | 10V |
| C8818 | 1-104-665-11 | ELECT | 100UF | 20.00% | 10V |
| C8819 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8820 | 1-104-665-11 | ELECT | 100UF | 20.00% | 10V |
| C8821 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8822 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8823 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8824 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C8825 | 1-117-720-11 | CERAMIC CHIP | 4.7UF | | 10V |
| C8826 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8827 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8828 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8829 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8830 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8831 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8832 | 1-162-926-11 | CERAMIC CHIP | 82PF | 5.00% | 50V |
| C8834 | 1-164-004-11 | CERAMIC CHIP | 0.1UF | 10.00% | 25V |
| C8835 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| | | <CONNECTOR> | | | |
| CN8801 | 1-793-496-11 | CONNECTOR, BOARD TO BOARD 20P | | | |
| | | <DIODE> | | | |
| D8801 | 8-719-081-97 | MMDL914T1 | | | |
| | | <FILTER> | | | |
| FL8802 | 1-236-071-11 | ENCAPSULATED COMPONENT | | | |
| FL8803 | 1-236-071-11 | ENCAPSULATED COMPONENT | | | |
| FL8804 | 1-236-071-11 | ENCAPSULATED COMPONENT | | | |
| FL8805 | 1-236-071-11 | ENCAPSULATED COMPONENT | | | |
| FL8808 | 1-236-071-11 | ENCAPSULATED COMPONENT | | | |
| | | <IC> | | | |
| IC8801 | 8-759-830-24 | SDA9588XB23 | | | |
| IC8802 | 8-759-460-72 | BA033FP-E2 | | | |
| | | <COIL> | | | |
| L8801 | 1-414-856-11 | INDUCTOR | 10UH | | |
| L8806 | 1-412-537-31 | INDUCTOR | 100UH | | |
| L8807 | 1-414-856-11 | INDUCTOR | 10UH | | |
| L8809 | 1-408-412-00 | INDUCTOR | 18UH | | |
| | | <TRANSISTOR> | | | |
| Q8801 | 8-729-010-05 | MSB709-RT1 | | | |
| Q8802 | 8-729-010-05 | MSB709-RT1 | | | |
| Q8803 | 8-729-010-05 | MSB709-RT1 | | | |
| Q8804 | 8-729-010-05 | MSB709-RT1 | | | |
| Q8805 | 8-729-010-05 | MSB709-RT1 | | | |

**P** | **VM**

| REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|---|--------|---|
| Q8806 | 8-729-230-49 | 2SC2712-YG | | | |
| Q8807 | 8-729-230-49 | 2SC2712-YG | | | |
| Q8808 | 8-729-010-05 | MSB709-RT1 | | | |
| Q8809 | 8-729-010-05 | MSB709-RT1 | | | |
| Q8810 | 8-729-010-05 | MSB709-RT1 | | | |
| Q8811 | 8-729-010-05 | MSB709-RT1 | | | |
| Q8812 | 8-729-230-49 | 2SC2712-YG | | | |
| | | **<RESISTOR>** | | | |
| R8801 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R8802 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R8803 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8804 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8805 | 1-216-295-91 | SHORT CHIP | 0 | | |
| R8806 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8807 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8808 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8809 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8810 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8811 | 1-216-639-11 | METAL CHIP | 330 | 0.5% | 1/10W |
| R8812 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8815 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R8816 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R8817 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8818 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8819 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R8820 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R8821 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8822 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R8823 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R8824 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8825 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8826 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8827 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8828 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8829 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8830 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8831 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R8832 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R8833 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R8834 | 1-216-089-91 | RES-CHIP | 47K | 5% | 1/10W |
| R8835 | 1-216-047-91 | RES-CHIP | 820 | 5% | 1/10W |
| R8836 | 1-216-047-91 | RES-CHIP | 820 | 5% | 1/10W |
| R8837 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8838 | 1-216-053-00 | RES-CHIP | 1.5K | 5% | 1/10W |
| R8839 | 1-216-053-00 | RES-CHIP | 1.5K | 5% | 1/10W |
| R8840 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8841 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R8842 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R8843 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8844 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R8845 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R8846 | 1-216-041-00 | RES-CHIP | 470 | 5% | 1/10W |
| R8847 | 1-216-121-11 | RES-CHIP | 1M | 5% | 1/10W |
| R8848 | 1-216-073-91 | RES-CHIP | 10K | 5% | 1/10W |
| R8849 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R8850 | 1-216-051-00 | RES-CHIP | 1.2K | 5% | 1/10W |

| REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|---|--------|---|
| | | **<CRYSTAL>** | | | |
| X8801 | 1-781-946-21 | VIBRATOR, CRYSTAL | | | |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* A-1400-499-A  VM BOARD MOUNTED
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

| REF NO. | PART NO. | DESCRIPTION | | REMARK | |
|---------|----------|-------------|---|--------|---|
| | 4-382-854-11 | SCREW (M3X10), P, SW (+) | | | |
| | | **<CAPACITOR>** | | | |
| C5401 | 1-126-935-11 | ELECT | 470UF | 20.00% | 16V |
| C5402 | 1-113-619-11 | CERAMIC CHIP | 0.47UF | | 10V |
| C5403 | 1-126-935-11 | ELECT | 470UF | 20.00% | 6.3V |
| C5405 | 1-126-933-11 | ELECT | 100UF | 20.00% | 16V |
| C5406 | 1-126-935-11 | ELECT | 470UF | 20.00% | 6.3V |
| C5407 | 1-107-364-11 | MYLAR | 0.01UF | 10.00% | 200V |
| C5408 | 1-107-364-11 | MYLAR | 0.01UF | 10.00% | 200V |
| C5409 | 1-107-649-11 | ELECT | 2.2UF | 20.00% | 250V |
| C5410 | 1-130-471-00 | MYLAR | 0.001UF | 5.00% | 50V |
| C5411 | 1-130-471-00 | MYLAR | 0.001UF | 5.00% | 50V |
| C5412 | 1-126-935-11 | ELECT | 470UF | 20.00% | 16V |
| C5413 | 1-107-648-91 | ELECT | 100UF | 20.00% | 160V |
| C5415 | 1-104-999-11 | MYLAR | 0.1UF | 10.00% | 200V |
| C5417 | 1-101-821-00 | CERAMIC | 0.0022UF | | 500V |
| C5418 | 1-107-638-11 | ELECT | 33UF | 20.00% | 160V |
| | | **<CONNECTOR>** | | | |
| CN5401 \* | 1-770-723-11 | CONNECTOR, BOARD TO BOARD 8P | | | |
| CN5402 | 1-764-334-11 | PLUG, CONNECTOR 11P | | | |
| | | **<DIODE>** | | | |
| D5400 | 8-719-404-50 | MA111-TX | | | |
| D5401 | 8-719-510-02 | D1NS4 | | | |
| D5402 | 8-719-911-19 | 1SS119-25 | | | |
| D5403 | 8-719-911-19 | 1SS119-25 | | | |
| D5404 | 8-719-911-19 | 1SS119-25 | | | |
| D5405 | 8-719-110-56 | RD22ES-B1 | | | |
| D5406 | 8-719-110-56 | RD22ES-B1 | | | |
| | | **<COIL>** | | | |
| L5400 | 1-412-525-31 | INDUCTOR | 10UH | | |
| | | **<FILTER>** | | | |
| LP5401 \* | 4-042-408-01 | PIN, COATING LEAD | | | |
| | | **<TRANSISTOR>** | | | |
| Q5400 | 8-729-119-78 | 2SC2785-HFE | | | |
| Q5401 | 8-729-119-78 | 2SC2785-HFE | | | |
| Q5402 | 8-729-119-78 | 2SC2785-HFE | | | |
| Q5403 | 8-729-119-78 | 2SC2785-HFE | | | |
| Q5404 | 8-729-119-76 | 2SA1175-HFE | | | |

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

VM

| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---------|----------|-------------|---|---|--------|
| Q5405 | 8-729-119-76 | 2SA1175-HFE | | | |
| Q5406 | 8-729-045-05 | 2SA2005 | | | |
| Q5407 | 8-729-045-04 | 2SC5511 | | | |
| | | **<RESISTOR>** | | | |
| R5401 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R5402 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W |
| R5403 | 1-247-739-11 | CARBON | 100 | 5% | 1/2W |
| R5404 | 1-249-418-11 | CARBON | 1.2K | 5% | 1/4W |
| R5405 | 1-216-864-11 | SHORT CHIP | 0 | | |
| R5406 | 1-216-065-91 | RES-CHIP | 4.7K | 5% | 1/10W |
| R5407 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W |
| R5408 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R5409 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R5410 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W |
| R5411 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W |
| R5412 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R5413 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W |
| R5414 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W |
| R5415 | 1-247-739-11 | CARBON | 100 | 5% | 1/2W |
| R5416 | 1-249-385-11 | CARBON | 2.2 | 5% | 1/4W |
| R5417 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W |
| R5418 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W |
| R5419 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R5420 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R5421 | 1-249-385-11 | CARBON | 2.2 | 5% | 1/4W |
| R5422 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |

| REF NO. | PART NO. | DESCRIPTION | | | REMARK |
|---------|----------|-------------|---|---|--------|
| R5423 | 1-215-915-11 | METAL OXIDE | 470 | 5% | 3W |
| R5424 | 1-249-395-11 | CARBON | 15 | 5% | 1/4W |
| R5425 | 1-216-017-91 | RES-CHIP | 47 | 5% | 1/10W |
| R5427 | 1-249-395-11 | CARBON | 15 | 5% | 1/4W |

*****************************************************************

**ACCESORRIES AND PACKING MATERIALS**
****************************************

| | 3-701-910-00 | SCREW, SPECIAL (DIA. 3.8X20) |
|---|---|---|
| * | 4-074-148-01 | BAG, PROTECTION |
| * | 4-087-316-01 | CUSHION, UPPER |
| * | 4-087-317-01 | CUSHION, LOWER |
| * | 4-087-318-01 | INDIVIDUAL CARTON |
| * | 4-087-319-01 | TRAY |
| | 4-087-164-11 | MANUAL, INSTRUCTION |
| | 4-392-003-11 | BAND, HOLD |
| | 4-065-210-01 | JOINT |
| | 4-392-004-11 | CLIP |

*****************************************************************

**BATTERY COVER REMOTE COMMANDER**
****************************************

| | 1-477-313-11 | REMOTE COMMANDER (RM-991) |
|---|---|---|
| | 4-079-833-01 | BATTERY COVER REMOTE COMMANDER |

# SONY

# *Trinitron Color TV*

## Operating Instructions

- Before operating the unit, please read this manual thoroughly and retain it for future reference.

## 使用說明書

- 使用本電視機之前請先詳細閱讀此手冊，並妥善保存以備日後用作參考。

## 使用说明书

- 使用本电视机之前请详细阅读此手册，并妥善保存以备日后用作参考。

**FD Trinitron**

# WEGA
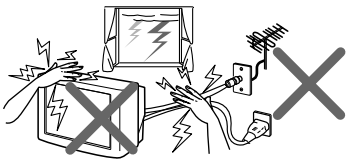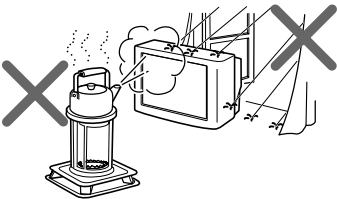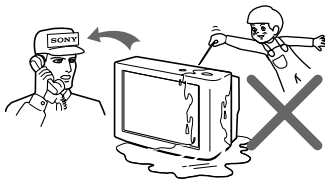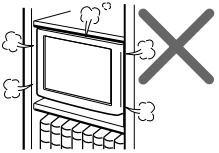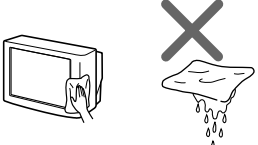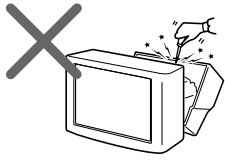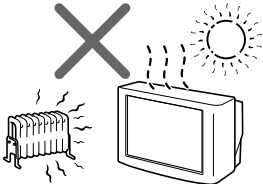
## *KV-DR34*
## *KV-DR29*

M97
M93

© 2002    Sony Corporation

# WARNING

- Dangerously high voltages are present inside the TV.

- TV operating voltage: 220 – 240 V AC.

- Do not plug in the power cord until you have completed making all other connections; otherwise a minimum leakage current might flow through the antenna and other terminals to ground.

- To avoid battery leakage and damage to the remote, remove the batteries from the remote if you are not going to use it for several days.  If any liquid leaks from the batteries and touches your skin, immediately wash it away with water.

For your own safety, do not touch any part of the TV, the power cord and the antenna cable during lightning storms.

For children's safety, do not leave children alone with the TV.  Do not allow children to climb onto it.

To prevent fire or shock hazard, do not expose the TV to rain or moisture.

Do not operate the TV if any liquid or solid object falls into it.  Have it checked immediately by qualified personnel only.

Do not block the ventilation openings of the TV. Do not install the TV in a confined space, such as a bookcase or built-in cabinet.

Clean the TV with a dry and soft cloth.
Do not use benzine, thinner, or any other chemicals to clean the TV.  Do not attach anything (e.g., adhesive tape, cellophane tape, glue) on the painted cabinet of the TV. Do not scratch the picture tube.

Do not open the cabinet and the rear cover of the TV as high voltages and other hazards are present inside the TV.  Refer servicing and disposal of the TV to qualified personnel.

Your TV is recommended for home use only.
Do not use the TV in any vehicle or where it may be subject to excessive dust, heat, moisture or vibrations.
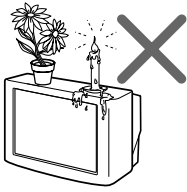
Do not place any objects on the TV.
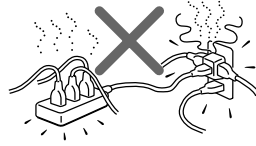
Do not plug in too many appliances to the same power socket. Do not damage the power cord.
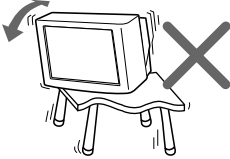
Install the TV on a stable TV stand and floor which can support the TV set weight. Ensure that the TV stand surface is flat and its area is larger than the bottom area of the TV.
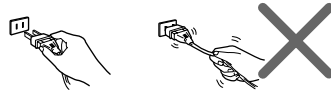
Pull the power cord out by the plug. Do not pull the power cord itself. Even if your TV is turned off, it is still connected to the AC power source (mains) as long as the power cord is plugged in. Unplug the TV before moving it or if you are not going to use it for several days.

# ■ Securing the TV

To prevent the TV from falling, use the supplied  screws, clamps and band to secure the TV.
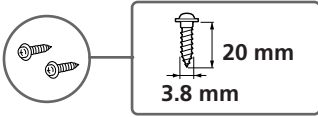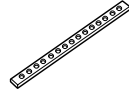


**screws**          20 mm          3.8 mm          **clamps**          **band**
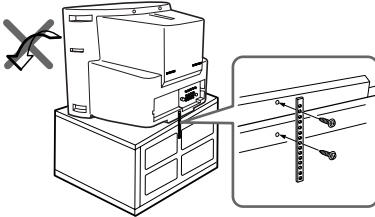


Screw the band to the TV stand and to the provided hole at the rear of your TV.

**or**
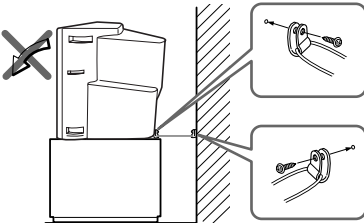


(1)  Put a cord or chain through the clamps.
(2)  Screw one clamp to a wall or pillar and the other clamp to the provided hole at the rear of your TV.

**or**
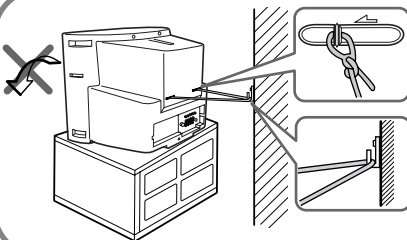


(1)  Attach each end of a cord or chain to the provided holders at the rear of your TV.
(2)  Securely fix the attached cord or chain to a wall or pillar using an attachment which can support the TV set weight.

**Note**
• Use only the supplied screws.  Use of other screws may damage the TV.

# Table of Contents

GB

# ■ Getting Started

### Step 1

Insert the batteries (supplied) into the remote.

**Note**
• Do not use old or different types of batteries together.
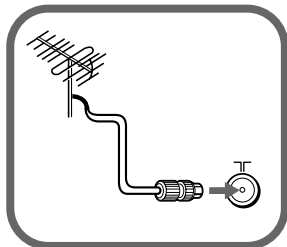
### Step 2

Connect the antenna cable (not supplied) to ⊤⊤ (antenna input) at the rear of the TV.

**Tip**
• You can also connect your TV to other optional components (see page 30).
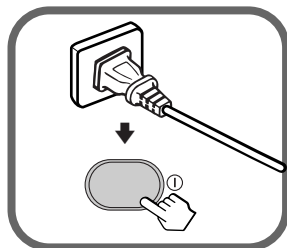
### Step 3

Plug in the power cord, then press ① on the TV to turn it on.

### Step 4

```
 INITIAL SETUP  ◉◣
LANGUAGE:    ENGLISH
             中文
             عربي
             ไทย
```
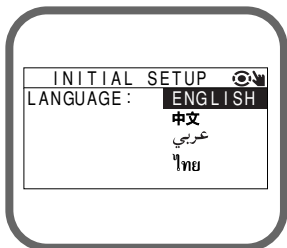
Set up the TV by following the instructions of the "INITIAL SETUP" menu (see page 7).

# ■ Setting up your TV ("INITIAL SETUP")

When you turn on your TV for the first time, the "INITIAL SETUP" menu will appear. This menu allows you to change the menu language, adjust the picture position and preset the TV channels automatically.
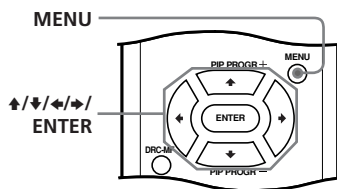
**MENU**

**♠/♦/◄/►/ ENTER**

**1** Press ♠ or ♦ to select the desired menu language (e.g.,"ENGLISH"), then press ENTER.

The selected menu language appears.

```
 INITIAL SETUP  ☺
LANGUAGE:  ENGLISH
           中文
           عربي
           ไทย
```

**2** Press ♠ or ♦ (or ◄/►), then press ENTER to adjust the picture position if it is not aligned to the TV screen.

The ⊞ or ⊟ icon on the screen flashes while adjusting.

```
  INITIAL SETUP  ☺
```

```
PIC ROTATION ⊟▢◖▮
```
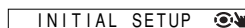
**3** Press ♠ or ♦ to select "YES", then press ENTER to preset the channels automatically (see page 27).

The screen will indicate automatic presetting is in progress.

To skip automatic channel presetting, select "NO", then press ENTER.

```
  INITIAL SETUP  ☺
START AUTO PROGRAM
NOW?

             YES
             NO
```

```
  INITIAL SETUP  ☺
PR:09
TV SYS:AUTO
VHF LOW▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮···
```
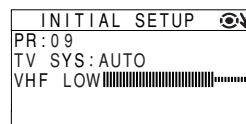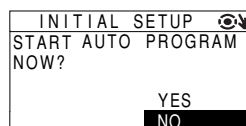
**4** Press ♠ or ♦ to select "NO", then press ENTER. The "INITIAL SETUP" menu will not appear again the next time you turn on the TV by pressing ①.

To allow this menu to appear again, select "YES", then press ENTER.

```
  INITIAL SETUP  ☺
DISPLAY THIS MENU
NEXT TIME?
             YES
             NO
```
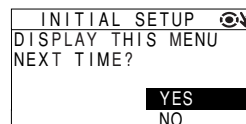
**Tip**
• You can immediately go to the end of the "INITIAL SETUP" menu by pressing MENU.
• You can also set up your TV using the menu system (see page 17).

# ■ TV front and rear panels



**TV rear panel**

**TV front panel**
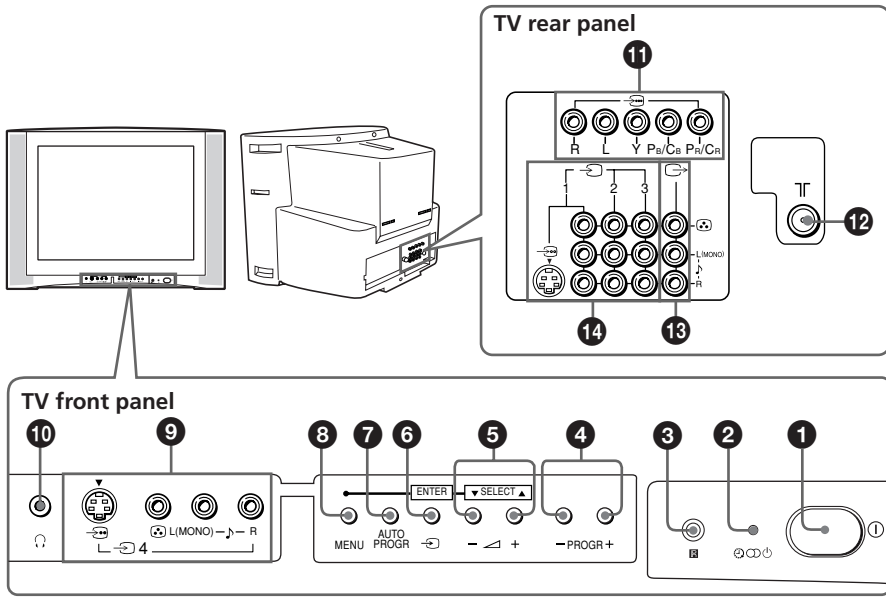
| Button/Terminal | Function | Page |
|---|---|---|
| ❶ ⏻ | Turn off or turn on the TV. | – |
| ❷ ⏼ | Standby indicator. | – |
| ❷ 🕐 | Wake Up indicator. | 15 |
| ❷ ⏾ | Stereo/bilingual indicator. | 16 |
| ❸ ℝ | Remote control sensor. | – |
| ❹ PROGR +/– | Select program number. | – |
| ❺ ◢ +/– | Adjust volume. | – |
| ❻ ⊸ | Select TV or video input. | – |
| ❼ AUTO PROGR | Preset channels automatically. | – |
| Menu operations | | |
| ❺ SELECT ▼/▲ | Select and adjust items | 19 |
| ❻ ENTER | Confirm selected items | 19 |
| ❽ MENU | Display or cancel the menu | 19 |
| ❾ ⊸4 | Video input terminal 4. | 30 |
| ❿ ⌒ | Headphone jack. | – |
| ⓫ ⊸⋯ | Component video input terminal. | 31 |
| ⓬ ⊤ | Antenna input terminal. | 30 |
| ⓭ ⊏→ | Monitor output terminal. | 30 |
| ⓮ ⊸1, ⊸2, ⊸3 | Video input terminal 1, 2, 3. | 30 |

# ■ Remote control
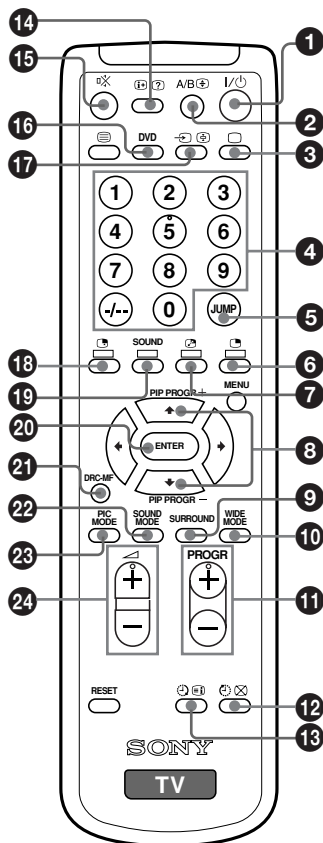
| Button | Function | Page |
|---|---|---|
| ❶ I/⏻ | Turn off temporarily or turn on the TV. | – |
| ❸ ▢ | Display the TV input. | – |
| ❹ 0 – 9, -/-- | Input numbers. | – |
| ❺ JUMP | Jump to previous program number. | – |
| ❾ SURROUND | Select surround mode. | 14 |
| ❿ WIDE MODE | Select wide-mode (16:9). | 12 |
| ⓫ PROGR +/– | Select program number. | – |
| ⓮ (i+) | Display on-screen information. | – |
| ⓯ ◻✕ | Mute the sound. | – |
| ⓰ DVD | Select DVD input. | 31 |
| ⓱ ⊷ | Select TV or video input. | 30 |
| ㉑ DRC-MF | Select DRC-MF mode. | 12 |
| ㉒ SOUND MODE | Select sound mode. | 11 |
| ㉓ PIC MODE | Select picture mode. | 11 |
| ㉔ ⊿ +/– | Adjust volume. | – |
| **Timer operations** | | |
| ⓬ (⏱) | Set TV to turn off automatically. | 15 |
| ⓭ (⏱) | Set TV to turn on automatically. | 15 |
| **PIP operations (yellow label) (KV-DR34M97 only)** | | |
| ❻ ▢ | Display a sub screen. | 13 |
| ❼ ▱ | Swap main and sub screens. | 13 |
| ❽ PIP PROGR +/ PIP PROGR – | Display and change programs in the sub screen. | 13,14 |
| ⓲ ▣ | Select a video input in the sub screen. | 13 |
| ⓳ SOUND | Swap sound between main and sub screen. | 13 |
| ⓴ ENTER | Change sub screen to main screen. | 14 |
| **Stereo/bilingual operations** | | |
| ❷ A/B | Select stereo/bilingual mode. | 16 |

| Button | Function | Page |
|---|---|---|
| **Menu operations** | | |
| ㉗ MENU | Display or cancel the menu. | 19 |
| ㉘ ENTER | Confirm selected items. | 19 |
| ㊱ ↑, ↓, ←, → | Select and adjust items. | 19 |
| **Teletext operations (green label)** | | |
| ㉕ ⊕ | | |
| ㉖ 0 – 9 | | |
| ㉙ PROGR +/– | | |
| ㉚ ⊗ | | |
| ㉛ ⊟ | Not function for your TV. | – |
| ㉜ ⑦ | | |
| ㉝ ▤ | | |
| ㉞ ⊕ | | |
| ㉟ ▬ (red, green, yellow, blue) | | |
| ㊲ RESET | Set TV to factory setting. | 32 |
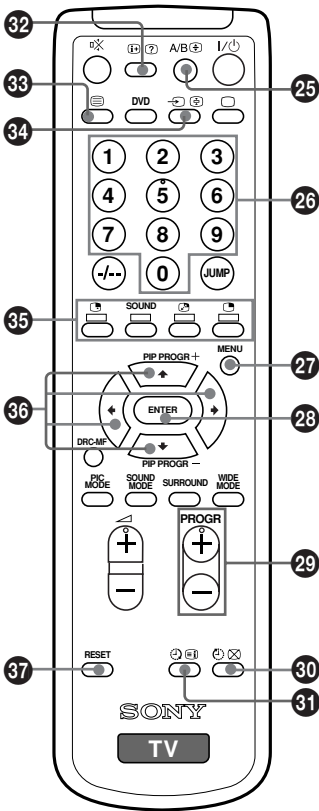
# ■ Selecting the picture and sound modes

You can select picture and sound modes and adjust the setting to your preference in the "PERSONAL" option.

**PIC MODE**

**SOUND MODE**
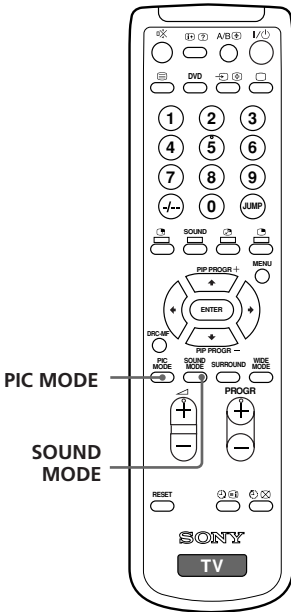
## Selecting the picture mode

Press PIC MODE to select the desired picture mode.

| Select | To |
|--------|-----|
| "DYNAMIC" | view high contrast pictures. |
| "STANDARD" | view normal pictures. |
| "HI-FINE" | view higher density pictures with mild contrast. |
| "PERSONAL" | receive the last adjusted picture setting from the "ADJUST" option in the "PICTURE" menu (see page 21). |

## Selecting the sound mode

Press SOUND MODE to select the desired sound mode.

| Select | To |
|--------|-----|
| "♪ DYNAMIC" | listen to dynamic and clear sound that emphasizes both the low and high tones. |
| "♪ DRAMA" | listen to sound that emphasizes voice and high tones. |
| "♪ SOFT" | listen to soft sound. |
| "♪ PERSONAL" | receive the last adjusted sound setting from the "ADJUST" option in the "SOUND" menu (see page 23). |

# ■ Viewing higher quality pictures with DRC-MF

The Digital Reality Creation-Multi Function (DRC-MF) feature allows you to enjoy higher quality pictures on your TV. You can use the DRC-MF button to select "DRC1250" or "DRC PROGRESSIVE".
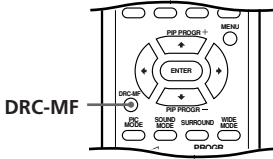
**DRC-MF**

| Select | To |
|---|---|
| "DRC1250" | view super real (higher density) pictures. |
| "DRC PROGRESSIVE" | reduce jitter of any small areas or scanning lines (e.g., letters or the edge of objects) on the screen. |

**Note**
• The DRC-MF mode is not selectable when the "GAME MODE" or Picture-in-Picture ("PIP") mode is turned on.

The DRC-MF logo ( **DRC-MF** Digital Reality Creation ) and "DRC-MF" are trademarks of Sony Corporation.

# ■ Viewing the picture in wide mode

When receiving a wide-mode (16:9) signal, the picture will appear "squeezed" (compressed) on your screen. Use the WIDE MODE button to view the picture with the optimal effect.
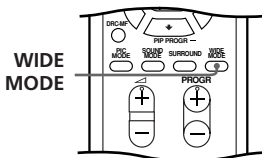
**WIDE MODE**

| Select | To |
|---|---|
| "ON" | view the picture in wide-mode (16:9). |
| "OFF" | cancel wide-mode (16:9). |

# ■ Watching Picture-in-Picture (PIP)

## ► KV-DR34M97 only

With the PIP feature, you can display two different TV programs or video input at the same time by using the ⬜ button.
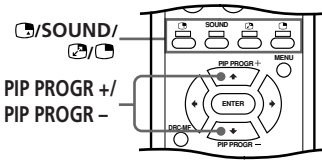
| To | Press |
|---|---|
| Display a sub screen | ⬜.<br>To cancel the sub screen, press the button again. |
| Change a program number in the sub screen | PIP PROGR + or PIP PROGR –. |
| Select a video input in the sub screen | ⬜. |
| Swap pictures between the main and sub screens | ⬜. |
| Swap sound between the main and sub screens<br><br>A "♪" symbol will appear next to the program number or video input display to indicate which screen you are hearing. | SOUND. |

**⬜/SOUND/ ⬜/⬜**

**PIP PROGR +/ PIP PROGR –**

**Notes**
- The DRC-MF mode is not selectable when PIP is turned on.
- The picture and sound from the ⬜ (monitor output) terminals will always be from the main screen, even when you select the sub screen sound by pressing SOUND (see page 30).

# ■ Selecting a TV program using PIP

► **KV-DR34M97 only**

You can select your desired TV program directly from the PIP sub screen by using PIP PROGR +/– buttons.

**PIP PROGR +/
PIP PROGR –/
ENTER**
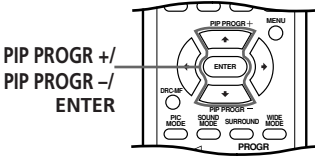
**1** Press PIP PROGR +/– until the desired program appears in the sub screen.

**2** Press ENTER to change the sub screen program to the main screen.
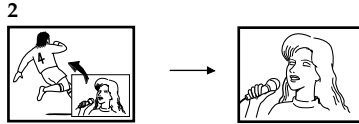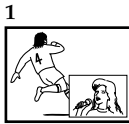
# ■ Listening with surround sound

You can use the SURROUND button to listen to the sound effects of a concert hall or movie theater.
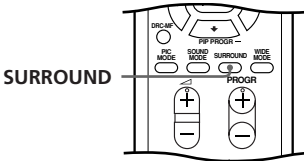
**SURROUND**

| Select | To |
|---|---|
| "TruSurround" | listen to the surround sound that spreads out to the rear of a room. |
| "SIMULATED" | listen to monaural sound with a stereo-like effect. |
| "OFF" | cancel surround sound. |

The surround of your TV is categorized as TruSurround.

**TruSurround™** is a trademark of SRS Labs, Inc. SRS and the SRS symbol are registered trademarks of SRS Labs, Inc. in the United States and selected foreign countries. SRS and TruSurround are incorporated under license from SRS Labs, Inc. and are protected under United States Patent Nos. 4,748,669 and 4,841,572 with numerous additional issued and pending foreign patents.

# ■ Setting the timers

You can set your TV to turn on and off automatically by using the WAKE UP and SLEEP timers respectively.
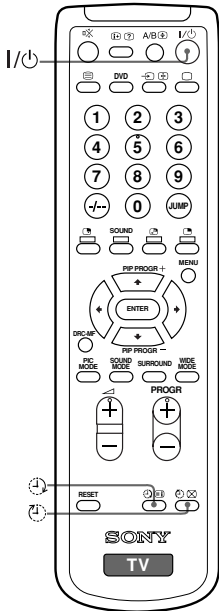
## Setting the Wake Up timer

**1** Press ⊕ until the desired period of time appears on the screen.

**WAKE UP TIMER:10M**
**(After 10 minutes)**

**WAKE UP TIMER:OFF** ← **WAKE UP TIMER:12H00M**
**(No Wake Up timer)** **(After 12 hours)**
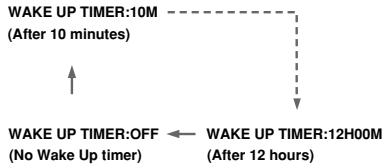
The Wake Up timer starts immediately after you have set it.

**2** Select the program number or video input you want to wake up to.

**3** Press I/ᗌ, or set the Sleep timer if you want the TV to turn off automatically.

The ⊕ indicator on the TV lights up orange when the TV goes into standby mode.

## Setting the Sleep timer

Press ⊕ until the desired period of time appears on the screen.

**SLEEP TIMER:30M** → **SLEEP TIMER:60M**
**(After 30 minutes)** **(After 60 minutes)**

**SLEEP TIMER:OFF** ← **SLEEP TIMER:90M**
**(No Sleep timer)** **(After 90 minutes)**
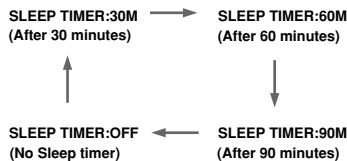
The Sleep timer starts immediately after you have set it.

**Notes**
- You can also cancel the Wake Up and Sleep timers by turning off the TV's main power.
- If no buttons are pressed for more than two hours after the TV is turned on using the Wake Up timer, the TV automatically goes into standby mode.

Advanced Operations | **15**

# ■ Enjoying stereo or bilingual programs

You can enjoy stereo sound or bilingual programs of NICAM and A2 stereo systems by using the A/B button.

**A/B**
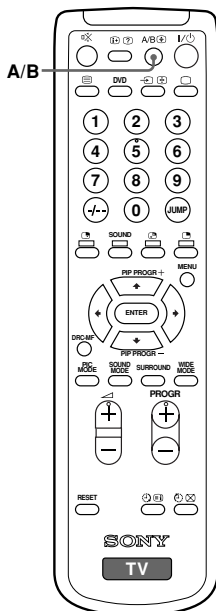
## When receiving a NICAM program

| Broadcasting | On-screen display (Selected sound) |
|---|---|
| NICAM stereo | NICAM (Stereo sound) → MONO (Regular sound) |
| NICAM bilingual | NICAM MAIN (Main sound) → NICAM SUB (Sub sound) → MONO (Regular sound) |
| NICAM monaural | NICAM MAIN (Main sound) → MONO (Regular sound) |

## When receiving an A2 program

| Broadcasting | On-screen display (Selected sound) |
|---|---|
| A2 stereo | STEREO (Stereo sound) → MONO (Regular sound) |
| A2 bilingual | MAIN (Main sound) → SUB (Sub sound) |

**Notes**
- If the stereo sound is noisy when receiving a stereo program, select "MONO". The sound becomes monaural, but the noise is reduced.
- Before receiving a NICAM stereo program in China, please check the NICAM broadcast condition in your area. When receiving a NICAM stereo program, the receiving conditions might vary depending on area. In addition, different strength of the NICAM broadcast signal might affect the receiving quality.
- If the sound is distorted when receiving a monaural program through ⊤⌐ (antenna input), press A/B repeatedly until "MONO" appears on the screen. To cancel the monaural sound setting, press A/B again until "AUTO" appears on the screen.

# ■ Introducing the menu system

The MENU button lets you open a menu and change the settings of your TV.
The following is an overview of the menu system.



PICTURE icon
SOUND icon
PIP icon
SETUP icon
CH PRESET icon
Menu level 1

Return icon
Name of the current menu
Guide mark icon
Menu level 3
Menu level 2

```
⤴ SETUP                    ◎◎
▦ LANGUAGE :    ENGLISH
♪ PIC ROTATI   中文
▭ ECO MODE:O   عربي
▤ PROGRAM SE   ไทย
�📺 COLOR SYS
```
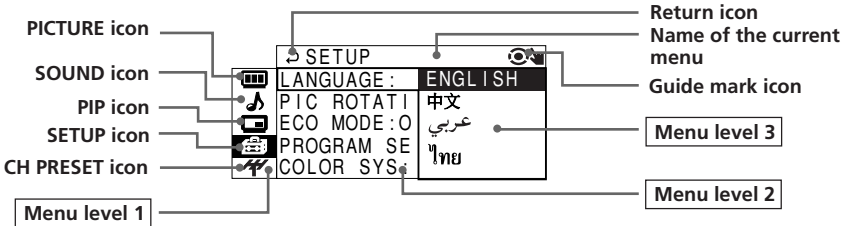
| Level 1 | Level 2 | Level 3/Function | Page |
|---------|---------|-----------------|------|
| "PICTURE" | "DRC-MF" | Select the "DRC-MF" mode: "DRC1250" → "PROGRESSIVE" | 20 |
| | "PICTURE MODE" | Select the picture mode: "DYNAMIC" → "STANDARD" → "HI-FINE" → "PERSONAL" → "ADJUST" | |
| | "ADJUST" | Adjust the "PERSONAL" option: "PICTURE" → "COLOR" → "BRIGHT" → "HUE" → "SHARP" | |
| | "3D-NR" | Reduce picture noise: "ON" → "OFF" | |
| | "WIDE MODE" | Change the picture size. | |
| | "GAME MODE" | Adjust the picture settings for video games. | |
| "SOUND" | "SOUND MODE" | Select the sound mode: "DYNAMIC" → "DRAMA" → "SOFT" → "PERSONAL" → "ADJUST" | 22 |
| | "ADJUST" | Adjust the "PERSONAL" option: "BASS" → "TREBLE" → "BALANCE" → "BBE"* | |
| | "SURROUND" | Select the "SURROUND" mode: "TruSurround" → "SIMULATED" →"OFF" | |
| | "INTELLIGENT VOL" | Adjust volume automatically. | |
| "PIP" (KV-DR34M97 only) | "POSITION" | Change the position of the sub screen. | 24 |
| | "PIP" | Display a sub screen within the main picture. | |
| | "SWAP" | Exchange pictures between main screen and sub screen. | |

*continued*

| Level 1 | Level 2 | Level 3/Function | Page |
|---------|---------|------------------|------|
| "SETUP" | "LANGUAGE" | Change the menu language:<br>"ENGLISH" → "中文"(Chinese) →<br>"عربي"(Arabic) → "ไทย"(Thai) | 25 |
| | "PIC ROTATION" | Adjust the picture position. | |
| | "ECO MODE" | Reduce power consumption of your TV. | |
| | "PROGRAM SETUP" | Adjust each program number settings. | |
| | "COLOR SYS" | Select the color system:<br>"AUTO" → "PAL" → "SECAM" → "NTSC3.58"<br>→ "NTSC4.43" | |
| "CH PRESET" | "AUTO PROGRAM" | Preset channels automatically. | 27 |
| | "MANUAL PROGRAM" | Preset channels manually. | |
| | "TV SYS" | Select the TV system:<br>"B/G" → "I" → "D/K" → "M" | |

\* The BBE is manufactured by Sony Corporation under license from BBE Sound, Inc. It is covered by U.S. Patent No. 4,638,258 and No. 4,482,866. The word "BBE" and the BBE symbol are the trademarks of BBE Sound, Inc.

## How to use the menu

Press MENU to display the menu.

**MENU**

⊃ PICTURE ◉↘
DRC-MF:DRC1250
PICTURE MODE:DYNAMIC
3D-NR:OFF
WIDE MODE:OFF
GAME MODE:OFF

Press ▲ or ▼ (or ◄/►) to select the desired item.

⊃ PIP ◉↘
POSITION:▣
PIP:OFF
SWAP

Press ENTER to confirm your selection and go to the next level.

⊃ PIP ◉↘
POSITION:▣
PIP:OFF
SWAP

### Other menu operations

| To | Press |
|---|---|
| Adjust the setting value | ▲, ▼, ◄ or ►. |
| Move to the next/previous menu level | ◄ or ►. |
| Cancel the menu | MENU. |

**Tips**
- If you want to exit from Menu level 2 to Menu level 1, press ▲ or ▼ until the return icon ( ⊃ ) is highlighted, then press ENTER.
- Some of the menu items can be operated directly using the remote buttons.
- The MENU, ENTER, and SELECT ▼/▲ buttons on the TV can also be used for the operations above.

**Front of TV**

ENTER  ▼ SELECT ▲

MENU  AUTO PROGR  ⊕  ─ ⊿ +  ─PROGR+
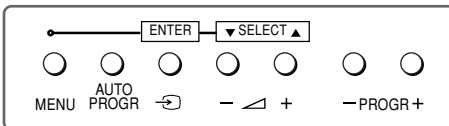
# ■ Changing the "PICTURE" setting

The "PICTURE" menu allows you to adjust the picture settings.

**1** Press MENU.

**2** Make sure the "PICTURE" icon (▥) is selected, then press ENTER.

```
⮌ PICTURE              ◉◣
▦ DRC-MF:DRC1250
♪ PICTURE MODE:DYNAMIC
▱ 3D-NR:OFF
▦ WIDE MODE:OFF
〲 GAME MODE:OFF
```
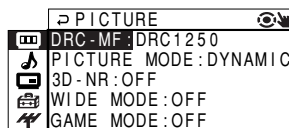
**3** Press ✦ or ✦ to select the desired item (e.g., "DRC-MF"), then press ENTER.

```
⮌ PICTURE              ◉◣
▦ DRC-MF:        DRC1250
♪ PICTURE MOD PROGRESSIVE
▱ 3D-NR:OFF
▦ WIDE MODE:O
〲 GAME MODE:O
```
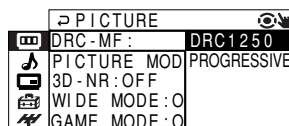
| Select | To |
|---|---|
| "DRC-MF" | choose either "DRC1250" or "PROGRESSIVE" (see page 12). |
| "PICTURE MODE" | choose either "DYNAMIC", "STANDARD", "HI-FINE", "PERSONAL"*, or "ADJUST" (see page 11). |
| "3D-NR" | adjust picture signal automatically to reduce noise. <br><br>Press ✦ or ✦ to select "ON", then press ENTER. <br><br>To cancel, select "OFF", then press ENTER. |
| "WIDE MODE" | choose either "ON" or "OFF" (see page 12). |
| "GAME MODE" | adjust the picture setting that is suitable to view video games. <br><br>Press ✦ or ✦ to select "ON", then press ENTER. <br><br>To cancel, select "OFF", then press ENTER. |

\* When the "PERSONAL" mode is selected, you can receive the last adjusted picture settings from the "ADJUST" option (see page 21).

**Notes**
- "GAME MODE" is available only when receiving signals through ⭲ (video input), ⭲ (S video input), or ⭲ (component video input).
- The DRC-MF mode is not selectable when GAME MODE is on.

## Adjusting the "ADJUST" items under "PICTURE MODE"

**1** Press ↑ or ↓ to select
the desired item (e.g., "COLOR"),
then press ENTER.

COLOR ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖······ 80

**2** Adjust the value according to the following table, then press ENTER.

| For | Press ↓ or ← to | Press ↑ or → to |
| --- | --- | --- |
| "PICTURE" | decrease picture contrast. | increase picture contrast. |
| "COLOR" | decrease color intensity. | increase color intensity. |
| "BRIGHT" | darken the picture. | brighten the picture. |
| "HUE" | increase red picture tones. | increase green picture tones. |
| "SHARP" | soften the picture. | sharpen the picture. |

**Notes**
• "HUE" can be adjusted for the NTSC color system only.
• Reducing sharpness ("SHARP") can also reduce picture noise.

**3** Repeat the above steps to adjust other items.

The adjusted settings will be received when you select "PERSONAL".

# ■ Changing the "SOUND" setting

The "SOUND" menu allows you to adjust the sound settings.

**1** Press MENU.

**2** Press ▲ or ▼ to select the "SOUND"
icon (♪), then press ENTER.

```
⏎ SOUND                    ☜☝
▥  SOUND MODE :DYNAMIC
♪  SURROUND :OFF
▱  INTELLIGENT VOL :OFF
🗄
🎵
```
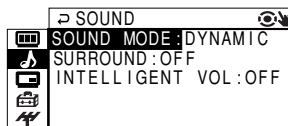
**3** Press ▲ or ▼ to select the desired item
(e.g., "SOUND MODE"), then press ENTER.

```
⏎ SOUND                    ☜☝
▥  SOUND MODE : DYNAMIC
♪  SURROUND :OF  DRAMA
▱  INTELLIGENT  SOFT
🗄             PERSONAL
🎵             └ADJUST
```
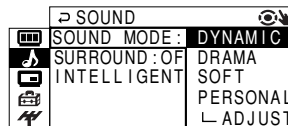
| Select | To |
|--------|-----|
| "SOUND MODE" | choose either "DYNAMIC", "DRAMA", "SOFT", "PERSONAL"*, or "ADJUST" (see page 11). |
| "SURROUND" | choose either "TruSurround", "SIMULATED" or "OFF" (see page 14). |
| "INTELLIGENT VOL" | adjust the volume of all program numbers and video inputs automatically. |
| | Press ▲ or ▼ to select "ON", then press ENTER. |
| | To cancel, select "OFF", then press ENTER. |

\*   When the "PERSONAL" mode is selected, you can receive the last adjusted sound
settings from the "ADJUST" option (see page 23).

## Adjusting the "ADJUST" items under "SOUND MODE"

**1** Press ↑ or ↓ to select
the desired item (e.g., "BALANCE"),
then press ENTER.

BALANCE ⸺⸺⸺▐⸺⸺⸺ 00

**2** Adjust the value according to the following table, then press ENTER .

| For | Press ↓ or ← to | Press ↑ or → to |
|---|---|---|
| "BASS" | decrease the bass. | increase the bass. |
| "TREBLE" | decrease the treble. | increase the treble. |
| "BALANCE" | increase the left speaker's volume. | increase the right speaker's volume. |
| "BBE" | select "HIGH" for higher enhancement of sound clarity; select "LOW" for lower enhancement of sound clarity; select "OFF" to cancel BBE sound. | |

**3** Repeat the above steps to adjust other items.

The adjusted settings will be received when you select "PERSONAL".

# ■ Changing the Picture-in-Picture ("PIP") setting

► **KV-DR34M97 only**

The "PIP" menu allows you to display a sub screen, change the sub screen position and exchange pictures between the main and sub screens.

**1** Press MENU.

**2** Press ▲ or ▼ to select the "PIP" icon (▭), then press ENTER.
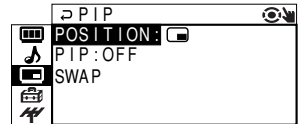
**3** Press ▲ or ▼ to select the desired item (e.g., "POSITION"), then press ENTER.
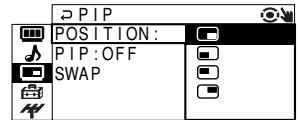
| Select | To |
|--------|-----|
| "POSITION" | change the position of the sub screen. |
| | Press ▲ or ▼ to select the desired position, then press ENTER . |
| | ▣ ←→ ▣ ←→ ▣ ←→ ▣ |
| "PIP" | display a sub screen. |
| | Press ▲ or ▼ to select "ON", then press ENTER . |
| | To cancel, press ⬛ or select "OFF", then press ENTER . |
| "SWAP" | exchange pictures between the main screen and sub screen. |

# ■ Changing the "SETUP" setting

The "SETUP" menu allows you to change the menu language, adjust the picture position, reduce your TV power consumption, set up your program numbers and select the color system.

**1** Press MENU.

**2** Press ▲ or ▼ to select the "SETUP" icon (🧰), then press ENTER.

```
⊃ SETUP                    👁
📺 LANGUAGE:ENGLISH
🎵 PIC ROTATION
📺 ECO MODE:OFF
🧰 PROGRAM SETUP
📺 COLOR SYS:AUTO
```
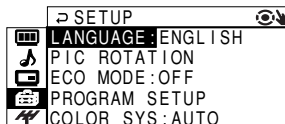
**3** Press ▲ or ▼ to select the desired item (e.g., "COLOR SYS"), then press ENTER.

```
⊃ SETUP                    👁
📺 LANGUAGE:EN  AUTO
🎵 PIC ROTATIO  PAL
📺 ECO MODE:OF  SECAM
🧰 PROGRAM SET  NTSC3.58
📺 COLOR SYS:   NTSC4.43
```

| Select | To |
|--------|-----|
| "LANGUAGE" | change the menu language. |
| | Press ▲ or ▼ to select either "ENGLISH", "中文" (Chinese), "عربي" (Arabic), or "ไทย" (Thai) then press ENTER. |
| | The selected menu language appears. |
| "PIC ROTATION" | adjust the picture position when it is not aligned with the TV screen. |
| | Press ▲ , ▶ , ▼ or ◀ to adjust the picture position, then press ENTER. |
| | PIC ROTATION ⊟◀▭▶⊞ |
| "ECO MODE" | reduce power consumption of your TV to save energy. |
| | Press ▲ or ▼ to select "ON", then press ENTER. |
| | To cancel, select "OFF", then press ENTER. |
| | When you press 🔆 or turn on the TV, ECO MODE ( 🔋ₑᴄₒ ) symbol will appear on the screen for about 40 seconds. |
| "PROGRAM SETUP" | adjust each channel settings (see **Adjusting each program number settings ("PROGRAM SETUP")** on page 26). |
| "COLOR SYS" | Select the color system. Normally, set this to "AUTO". |

## Adjusting each program number settings ("PROGRAM SETUP")

**1** Select "PROGRAM SETUP" from the "SETUP" menu.

**2** Select "PR" and press ENTER. Press ▲ or ▼ to select the desired program number you want to adjust, then press ENTER.

```
⇄ PROGRAM SETUP      ⊙⇲
PR:14
SKIP:OFF
CHILD LOCK:OFF
```
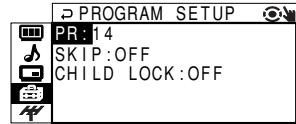
**3** Press ▲ or ▼ to select the desired item (e.g., "SKIP"), then press ENTER.

```
⇄ PROGRAM SETUP      ⊙⇲
PR:14              ON
SKIP:             OFF
CHILD LOCK:
```

| Select | To |
|---|---|
| "PR" | select the desired program number. |
| "SKIP" | skip unwanted or unused program number. |
| | Press ▲ or ▼ to select "ON", then press ENTER. |
| | To cancel, select "OFF", then press ENTER. |
| "CHILD LOCK" | prevent children from watching this selected program number. |
| | Press ▲ or ▼ to select "ON", then press ENTER. |
| | The lock symbol ( 🔒 ) appears on the screen. |
| | To cancel, select "OFF", then press ENTER |
| | If you preset a locked program number, that program number will be unlocked automatically. |

**4** To continue adjusting other program numbers, press ▲ or ▼ to select "PR", then repeat step 2 and 3.

# ■ Changing the Channel Preset ("CH PRESET") setting

The "CH PRESET" menu allows you to preset channels automatically, manually preset channels and select the TV system.

**1** Press MENU.

**2** Press ▲ or ▼ to select the "CH PRESET" icon (📡), then press ENTER.

```
⊃ CH PRESET          ⊙⅊
📺  AUTO PROGRAM
♪   MANUAL PROGRAM
🖥  TV SYS : B / G
📠
📡
```
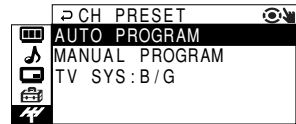
**3** Press ▲ or ▼ to select the desired item (e.g., "AUTO PROGRAM"), then press ENTER.

```
⊃ AUTO PROGRAM       ⊙⅊
📺  PR : 01
♪   TV SYS : AUTO
🖥  VHF LOW ▓▓▓▓▓▓▓▓▓▓▓▓▓─────
📠
📡
```
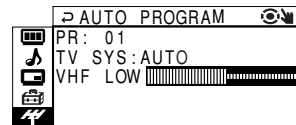
| Select | To |
|---|---|
| "AUTO PROGRAM" | preset channels automatically. |
| "MANUAL PROGRAM" | manually preset desired channels and channels that cannot be preset automatically (see **Presetting channels manually** on page 28). |
| "TV SYS" | select the TV system.<br><br>Press ▲ or ▼ to select either "B/G", "I", "D/K" or "M", then press ENTER. |

## Presetting channels manually

**1** After selecting "MANUAL PROGRAM", select the program number to which you want to preset a channel.

(1) Make sure "PR" is selected, then press ENTER.

```
⇄ MANUAL  PROGRAM  ⊙
📺  PR: 06
🎵  TV  SYS:B/G
📺  〽SENS:HIGH
🖥  VHF  LOW ||||||||||||||||||||||......
〽  FINE:AUTO
```

(2) Press ✦ or ✦ until the program number you want to preset (e.g., program number "10") appears on the menu, then press ENTER.

```
⇄ MANUAL  PROGRAM  ⊙
📺  PR: 10
🎵  TV  SYS:B/G
📺  〽SENS:HIGH
🖥  VHF  LOW ||||||||||||||||||||||......
〽  FINE:AUTO
```
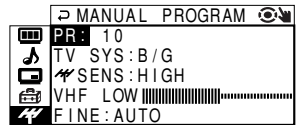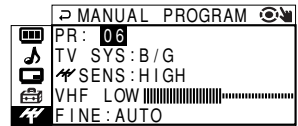
**Tip**
• You can also select the program number with the PROGR +/− or number buttons.

**2** Select the desired channel.

(1) Press ✦ or ✦ to select either "VHF LOW", "VHF HIGH", or "UHF", then press ENTER.

```
⇄ MANUAL  PROGRAM  ⊙
📺  PR: 10
🎵  TV  SYS:B/G
📺  〽SENS:HIGH
🖥  VHF  LOW ||||||||||||||||||||||......
〽  FINE:AUTO
```

(2) Press ✦ or ✦ until the desired channel's broadcast appears on the TV screen, then press ENTER.

```
⇄ MANUAL  PROGRAM  ⊙
📺  PR: 10
🎵  TV  SYS:B/G
📺  〽SENS:HIGH
🖥  VHF  LOW ||||||||||||||||||||||||||||||......
〽  FINE:AUTO
```
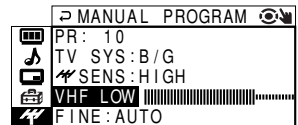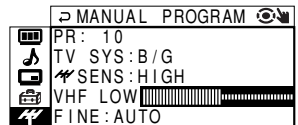
**3** If the sound of the desired channel is abnormal, select the appropriate TV system.

(1) Press ✦ or ✦ to select "TV SYS", then press ENTER.

```
⇄ MANUAL  PROGRAM  ⊙
📺  PR: 10        B/G
🎵  TV  SYS:       I
📺  〽SENS:HIG   D/K
🖥  VHF  LOW |||||||||  M
〽  FINE:AUTO
```

(2) Press ✦ or ✦ until the sound becomes normal, then press ENTER.

```
⇄ MANUAL  PROGRAM  ⊙
📺  PR: 10
🎵  TV  SYS:I
📺  〽SENS:HIGH
🖥  VHF  LOW |||||||||||||||||||||||||||||||......
〽  FINE:AUTO
```
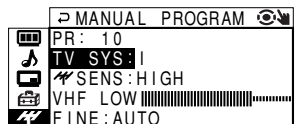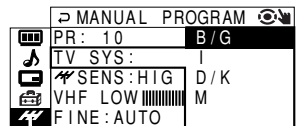
**4** If you are not satisfied with the picture and sound quality, you may be able to improve them by using the "FINE" tuning feature.

(1) Press ♠ or ♦ to select "FINE", then press ENTER.

```
⊐ MANUAL  PROGRAM  ⊙⊌
📇 PR: 10          AUTO
♪  TV SYS:I        MANUAL
📇 📉SENS:HIG
📠 VHF LOW ▌▌▌▌▌▌
📉 FINE:
```
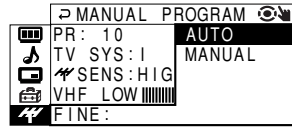
(2) Press ♠ or ♦ to select "MANUAL", then press ENTER.

```
⊐ MANUAL  PROGRAM  ⊙⊌
📇 PR: 10          AUTO
♪  TV SYS:I        MANUAL
📇 📉SENS:HIG       ⊟ ⊞
📠 VHF LOW ▌▌▌▌▌▌
📉 FINE:
```
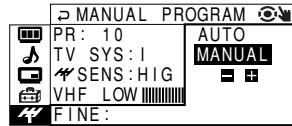
(3) Press ♠, ♦, ← or → until the picture and sound quality are optimal, then press ENTER.
The + or – icon on the menu flashes while tuning.

```
⊐ MANUAL  PROGRAM  ⊙⊌
📇 PR: 10
♪  TV SYS:I
📇 📉SENS:HIGH
📠 VHF LOW ▌▌▌▌▌▌▌▌▌▌▌▌▌▌▌▌▌▌▌·····
📉 FINE:MANUAL
```
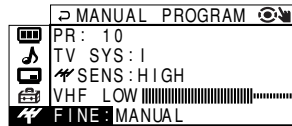
**5** If the TV signal is too strong and the picture is distorted, you can adjust the TV reception sensitivity.

(1) Press ♠ or ♦ to select "📉SENS", then press ENTER.

```
⊐ MANUAL  PROGRAM  ⊙⊌
📇 PR: 10          HIGH
♪  TV SYS:I        LOW
📇 📉SENS:
📠 VHF LOW ▌▌▌▌▌▌
📉 FINE:MANUAL
```
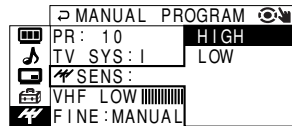
(2) Press ♠ or ♦ to select "LOW", then press ENTER.

```
⊐ MANUAL  PROGRAM  ⊙⊌
📇 PR: 10
♪  TV SYS:I
📇 📉SENS:LOW
📠 VHF LOW ▌▌▌▌▌▌▌▌▌▌▌▌▌▌▌▌▌▌▌·····
📉 FINE:MANUAL
```
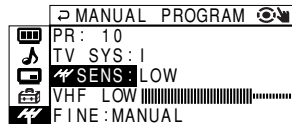
**Note**
- If you connect a VCR to ⊓ (antenna input), preset the signal output from the VCR to the program number 0 on the TV.
- "📉 SENS" is available for KV-DR34M97 only.

# ■ Connecting optional components

## Connecting to the video input terminal ( ⊷ )

**TV front panel**

**S Video cable (not supplied)**

**Audio/Video cable (not supplied)**

**Camcorder**

L(MONO) — R

⊷ 4

**Video game equipment**

**TV rear panel**

R L Y P_B/C_B P_R/C_R

1 2 3

L(MONO)

R

**Antenna cable (not supplied)**

**Audio/Video cable (not supplied)**

**S Video cable (not supplied)**

**VCR**
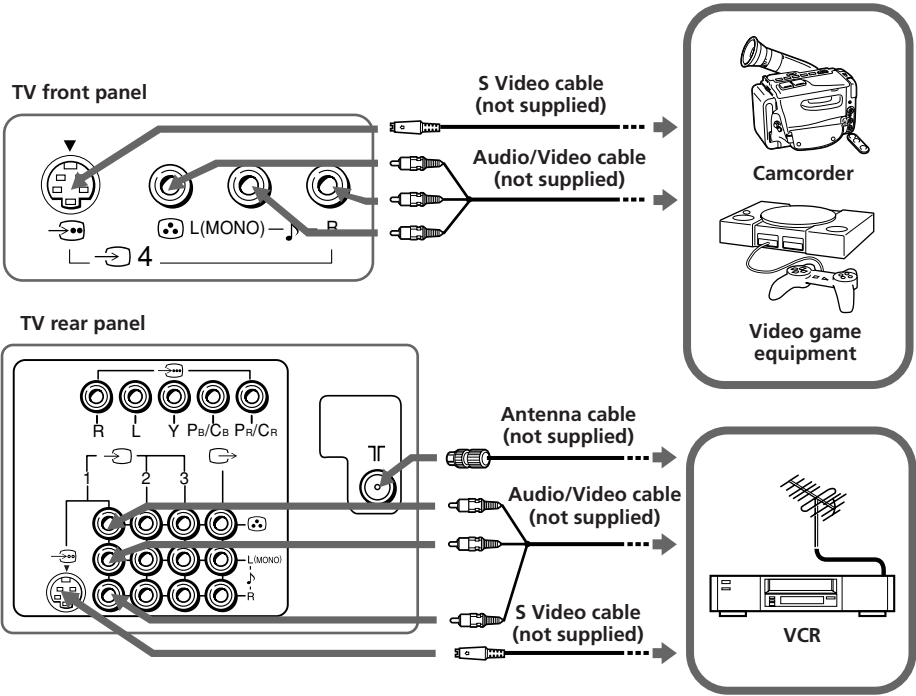
## Connecting to the monitor output terminal ( ⊳ )

**TV rear panel**

R L Y P_B/C_B P_R/C_R

1 2 3

L(MONO)

R

**Audio/Video cable (not supplied)**

**Audio system**

**VCR**
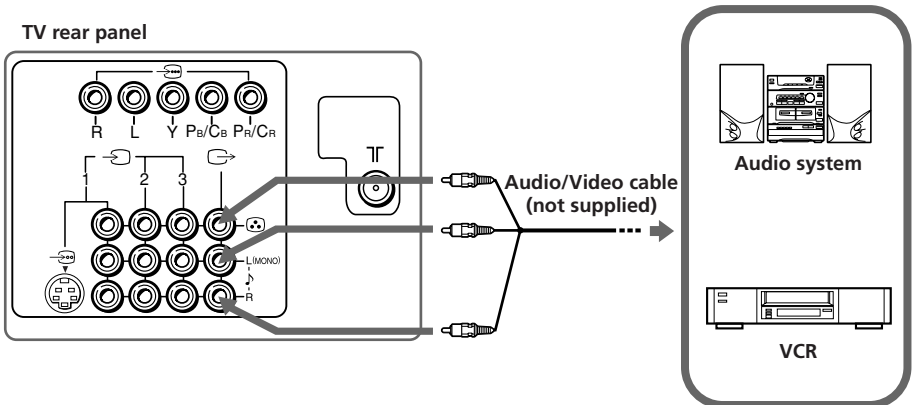
## Connecting a DVD player to the component video input terminal ( ⋯ )

1 Using an audio cable, connect R and L under ⋯ (component video input) on your TV to the LINE OUT, AUDIO R and L output connectors on your DVD player.

2 Using a component video cable, connect Y, P$_B$/C$_B$, and P$_R$/C$_R$ under ⋯ (component video input) on your TV to the COMPONENT VIDEO OUT Y, C$_B$, and C$_R$ output connectors on your DVD player.

3 Press DVD on the remote to watch the ⋯ (component video input) and "DVD" will appear on your screen.
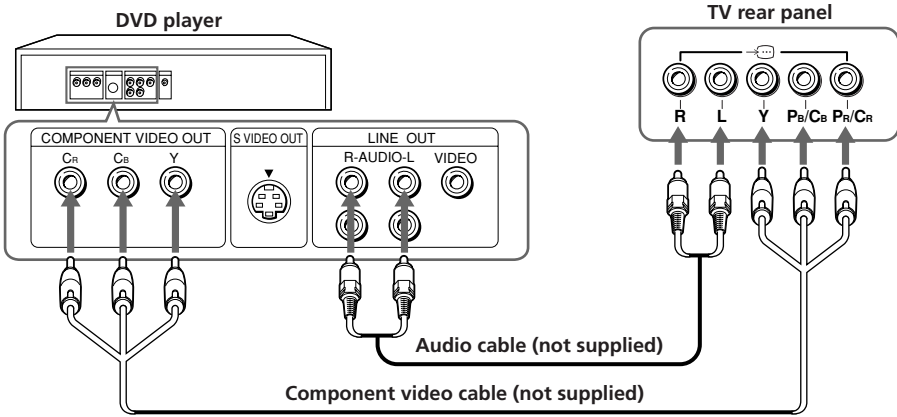


**Notes**
• Some DVD player terminals may be labeled differently:

| Connect | To (on the DVD player) |
| --- | --- |
| Y (green) | Y |
| P$_B$/C$_B$ (blue) | C$_B$, P$_B$, C$_b$ or B-Y |
| P$_R$/C$_R$ (red) | C$_R$, P$_R$, C$_r$ or R-Y |

• When both ⋯ (S video) and ⋯ (video) for ⋯ 1 or ⋯ 4 are connected at the same time, ⋯ (S video) is automatically selected. To view ⋯ (video), disconnect the S video cable.

• If you select "DVD" on your TV screen, the signal from the ⋯ (monitor output) jacks will not output properly. This does not indicate a malfunction.

• When receiving a progressive signal through the ⋯ (component video input), "PIP" is not available, and "DRC-MF" and "GAME MODE" are not selectable.

# ■ Troubleshooting

If you have any problem while viewing your TV, you can either use the Reset function or check the Troubleshooting guide below. If the problem persists, contact your Sony dealer.
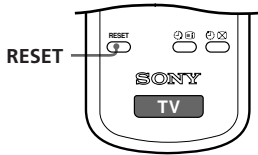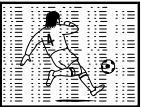
**RESET** 

## Reset function

Press the RESET button on your remote control. Your TV will go blank for about half a second then the picture will reappear with "RESET" displayed on your TV screen for about 10 seconds.

Pressing RESET will set your TV to the factory setting, but certain problems may be solved.

## Troubleshooting guide

| Symptom | Possible cause | Solutions | Page |
|---|---|---|---|
| **Snowy picture** | • The connection is loose or the cable is damaged. | • Check the antenna cable and connection on the TV, VCR and at the wall. | 30 |
|  | • The antenna setup is inappropriate. | • Check the antenna setup. Contact a Sony dealer for advice. | – |
| **Noisy sound** | • Channel presetting is inappropriate or incomplete. | • Display the "CH PRESET" menu and select "MANUAL PROGRAM" to preset the channel again. | 28 |
|  | • Signal transmission is low. | • Try using a booster. | – |
| **Distorted picture** | • Broadcast signals are too strong. | • Display the "CH PRESET" menu and select "MANUAL PROGRAM". Then, select " SENS: LOW" (KV-DR34M97 only). | 29 |
| **Noisy sound** |  | • Turn off or disconnect the booster if it is in use. | – |
| **Good picture** | • The TV system setting is inappropriate. | • Display the "CH PRESET" menu and select the appropriate TV system ("TV SYS"). | 28 |
| **Noisy sound** | • PIP sound is selected when PIP is displayed (KV-DR34M97 only). | • Press SOUND or . | 13 |

| Symptom | Possible cause | Solutions | Page |
|---|---|---|---|
| **No picture**<br><br>**No sound** | • The power cord, antenna or VCR is not connected. | • Check the power cord, antenna and VCR connections. | 30 |
| | • The TV is not turned on. | • Press I/ᵁ (power).<br><br>• Press ① (main power) on the TV to turn off the TV for about five seconds, then turn it on again. | 9<br><br>8 |
| **Good picture**<br><br>**No sound** | • The volume level is too low. | • Press ∠ + to increase the volume level. | 8 |
| | • The sound is muted.<br><br>• PIP sound is selected when PIP is displayed (KV-DR34M97 only). | • Press ◻✕ to cancel the muting.<br><br>• Press SOUND or ◻. | 9<br><br>13 |
| **Dotted lines or stripes** | • There is local interference from cars, neon signs, hair dryers, power generators, etc. | • Do not use a hair dryer or other equipment near the TV.<br><br>• Check the antenna setup. Contact a Sony dealer for advice. | –<br><br>– |
| **Double images or "ghosts"** | • Broadcast signals are reflected by nearby mountains or buildings. | • Use a highly directional antenna.<br><br>• Use the fine tuning ("FINE") function. | –<br><br>29 |
| | • The antenna setup is inappropriate. | • Check the antenna setup. Contact a Sony dealer for advice. | – |
| | • Use of a booster is inappropriate. | • Turn off or disconnect the booster if it is in use. | – |
| **No color** | • The color level setting is too low. | • Display the "PICTURE" menu and select "ADJUST" of "PICTURE MODE", then adjust the "COLOR" level. | 21 |
| | • The color system setting is inappropriate. | • Display the "SETUP" menu and check the color system ("COLOR SYS") setting (usually set this to "AUTO"). | 25 |
| | • The antenna setup is inappropriate. | • Check the antenna setup. Contact a Sony dealer for advice. | – |

Additional Information | 33

## *continued*

| Symptom | Possible cause | Solutions | Page |
|---|---|---|---|
| **Picture slant**<br><br>Good morning! | • The magnetic disturbance from external speakers or other equipment, or the direction of the earth's magnetic field may affect the TV. | • Keep external speakers or other electrical equipment away from the TV.<br><br>• Display the "SETUP" menu and adjust "PIC ROTATION" so that the picture position is optimal. | –<br><br>25 |
| **Abnormal color patches**<br> | • The magnetic disturbance from external speakers or other equipment, or the direction of the earth's magnetic field may affect the TV. | • Keep external speakers or other equipment away from the TV. Do not move the TV while the TV is turned on. Press ① (main power) on the TV to turn off the TV for about 15 minutes, then turn it on again to demagnetize the TV. | – |
| **TV cannot receive stereo broadcast sound.**<br><br>**or** | • The stereo reception setting is inappropriate. | • Press A/B until "AUTO" appears on the screen. | 16 |
|  | • The connection is loose or the cable is damaged. | • Check the antenna cable and connection on the TV, VCR and on the wall. | 30 |
| **Stereo broadcast sound switches on and off or is distorted.** | • The antenna setup is inappropriate. | • Check the antenna setup. Contact a Sony dealer for advice. | – |
| **The ⏻ (standby) indicator on your TV flashes red several times after every three seconds.** | • Your TV's self-diagnosis function indicates the possible problems. | • Count the number of times the ⏻ (standby) indicator flashes. Press ① (main power) to turn off your TV. Contact your nearest Sony service center. | – |
| **Cannot play shooting games.** | • Some shooting games which involve pointing a light beam at the TV screen with an electronic gun or rifle cannot be used with your TV. For details, see the instruction manual supplied with the video game software. | — | – |

| Symptom | Possible cause | Solutions | Page |
|---------|----------------|-----------|------|
| **TV cabinet creaks.** | • Changes in room temperature sometimes make the TV cabinet expand or contract, causing a noise. This does not indicate a malfunction. | — | – |
| **A small "boom" sound is heard when the TV is turned on.** | • The TV's demagnetizing function is working. This does not indicate a malfunction. | — | – |

# ■ Specifications

| | KV-DR34M97 | KV-DR29M93 | Note |
|---|---|---|---|
| **Power requirements** | 220-240 V AC, 50/60 Hz | | |
| **Power consumption (W)** | Indicated on the rear of the TV | | |
| **Television system** | B/G, I, D/K, M | | |
| **Color system** | PAL, PAL 60, SECAM, NTSC3.58, NTSC4.43 | | |
| **Stereo/Bilingual system** | NICAM Stereo/Bilingual B/G, I;<br>A2 Stereo/Bilingual B/G | | |
| **Channel coverage**<br>    **B/G** | VHF : E2 to E12<br>UHF : E21 to E69<br>CATV : S01 to S03, S1 to S41 | | |
| **I** | UHF : B21 to B68<br>CATV : S01 to S03, S1 to S41 | | |
| **D/K** | VHF : C1 to C12, R1 to R12<br>UHF : C13 to C57, R21 to R60<br>CATV : S01 to S03, S1 to S41, Z1 to Z39 | | |
| **M** | VHF : A2 to A13<br>UHF : A14 to A79<br>CATV : A-8 to A-2, A to W+4, W+6 to W+84 | | |
| **〒 (Antenna)** | 75-ohm external terminal | | |
| **Audio output (Speaker)** | 6W + 6W | | |
| **3D WOOFER** | 15W | | |
| **Number of terminal**<br>    **⊙ (Video)** | Input: 4        Output: 1 | Phono jacks; 1 Vp-p, 75 ohms | |
| **♪ (Audio)** | Input: 4        Output: 1 | Phono jacks; 500 mVrms | |
| **⊸ (S Video)** | Input: 2 | Y: 1 Vp-p, 75 ohms,<br>unbalanced, sync negative<br>C: 0.286 Vp-p, 75 ohms | |
| **⊸ (Component Video)** | Input: 1 | Phono jacks;<br>Y: 1 Vp-p, 75 ohms,<br>sync negative<br>$P_B/C_B$: 0.7 Vp-p, 75 ohms<br>$P_R/C_R$ 0.7 Vp-p, 75 ohms<br>Audio: 500 mVrms | |
| **⌓ (Headphone)** | Output: 1 | Stereo minijack | |
| **Picture tube** | 34 in. | 29 in. | |
| **Tube size (cm)** | 86 | 72 | Measured diagonally |
| **Screen size (cm)** | 80 | 68 | Measured diagonally |
| **Dimensions (w/h/d, mm)** | $894 \times 690 \times 569$ | $786 \times 596 \times 514$ | |
| **Mass (kg)** | 85 | 57 | |

Design and specifications are subject to change without notice.