

# EIKI

FILE NO.

**SERVICE MANUAL**

**Multimedia Projector**

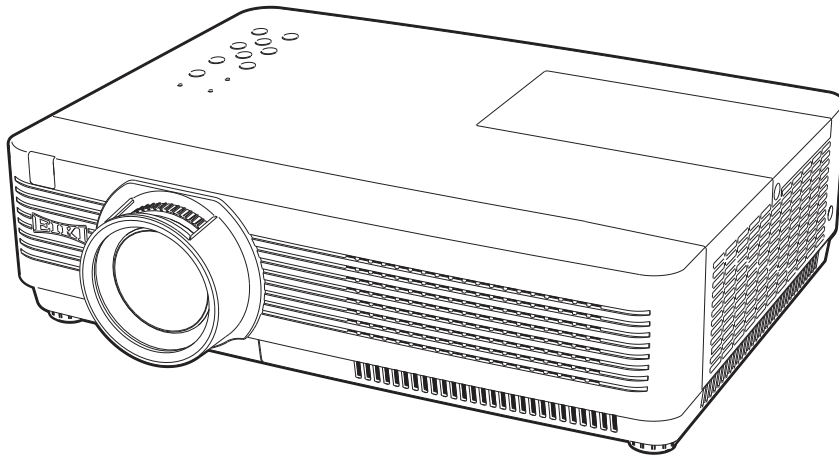
**Model No. LC-XB100  
LC-XB200**

U.S.A, Canada,  
Europe, Hong Kong

**Original Version**

Chassis No. KB5-XB10000

KG5-XB20000



Give complete " Chassis No." for parts order or servicing, it is shown on the rating sheet on the cabinet on the projector.

## FOREWORD

For your convenience, all service parts, identified in this manual are available through Eiki's normal distribution channels. In addition to service part number, the generic descriptions have been given, where possible, to allow your service technicians to substitute equivalent components which might be available from other sources.

All orders for service parts will be honored. However, in instances where generic components are considered to be available from several common sources, as would be the case with an industry standard fuse, resistor, or semiconductor, it may be more economical and expeditious to purchase the part locally.

## PRODUCT CODE

### LC-XB100

**1 122 463 01** (KB5BC)

**1 122 464 01** (LB5BC)

**1 122 464 06** (LB5GC)

### LC-XB200

**1 122 473 01** (KG5BC)

**1 122 474 01** (LG5BC)

**1 122 474 06** (LG5GC)

REFERENCE NO. SM5111054-00


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# Safety Instructions

## Safety Precautions


### WARNING:

The chassis of this projector is isolated (COLD) from AC line by using the converter transformer. Primary side of the converter and lamp power supply unit circuit is connected to the AC line and it is hot, which hot circuit is identified with the line (  ) in the schematic diagram. For continued product safety and protection of personnel injury, servicing should be made with qualified personnel.

The following precautions must be observed.

- |   |   |
|---|---|
| <p>1: An isolation transformer should be connected in the power line between the projector and the AC line before any service is performed on the projector.</p> <p>2: Comply with all caution and safety-related notes provided on the cabinet back, cabinet bottom, inside the cabinet or on the chassis.</p> <p>3: When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as, control knobs, adjustment covers or shields, barriers, etc.</p> | <p>ment covers or shields, barriers, etc.<br/><b>DO NOT OPERATE THIS PROJECTOR WITHOUT THE PROTECTIVE SHIELD IN POSITION AND PROPERLY SECURED.</b></p> <p>4: Before replacing the cabinet cover, thoroughly inspect the inside of the cabinet to see that no stray parts or tools have been left inside.</p> <p>Before returning any projector to the customer, the service personnel must be sure it is completely safe to operate without danger of electric shock.</p> |
|---|---|

## Product Safety Notice

Product safety should be considered when a component replacement is made in any area of the projector. Components indicated by mark  in the parts list and the schematic diagram designate components in which safety can be of special significance. It is, therefore, particularly recommended that the replacement of these parts must be made by exactly the same parts.

## Service Personnel Warning

Eye damage may result from directly viewing the light produced by the Lamp used in this equipment. Always turn off Lamp before opening cover. The Ultraviolet radiation eye protection required during this servicing. Never turn the power on without the lamp to avoid electric-shock or damage of the devices since the stabilizer generates high voltages (15kV - 25kV) at its starts.

Since the lamp is very high temperature during units operation replacement of the lamp should be done at least 45 minutes after the power has been turned off, to allow the lamp cool-off.

### DO NOT ATTEMPT TO SERVICING THE REMOTE CONTROL UNIT.

Laser Beam may be leaked out when in disassemble the Unit. As the Laser Beam used in this Remote control unit is harmful to the eyes.

If the Remote Control unit is failed, please replace it with a new one.



# Specifications

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## Mechanical Information

Projector Type	Multi-media Projector
Dimensions (W x H x D)	12.80" x 3.27" x 9.12" (326mm x 83.1mm x 231.6mm) (Not including protrusions)
Net Weight	6.17 lbs (2.8 kg)
Feet Adjustment	0° to 12°

## Panel Resolution

LCD Panel System	0.63" TFT Active Matrix type, 3 panels
Panel Resolution	1,024 x 768 dots
Number of Pixels	2,359,296 (1,024 x 768 x 3 panels)

## Signal Compatibility

Color System	PAL, SECAM, NTSC, NTSC4.43, PAL-M, and PAL-N
High Definition TV Signal	480i, 480p, 575i, 575p, 720p, 1035i, and 1080i
Scanning Frequency	H-sync. 15 kHz–100 kHz, V-sync. 50–100 Hz

## Optical Information

Projection Image Size (Diagonal)	Adjustable from 30" to 300"
Throw Distance	2.3' - 23.7' (0.69m - 7.23m)
Projection Lens	F 1.65 ~ 2.33 lens with f 15.5 mm ~ 24.5 mm with manual zoom and focus
Projection Lamp	225 W

## Interface

Video Input Jack	RCA Type x 1
S-video Input Jack	Mini DIN 4 pin x 1
Audio Input Jacks	RCA Type x 2
Computer 1 /Computer2 Audio Input Jacks	Mini Jack x 2
Computer In 1/ Component Input Terminal	Mini D-sub 15 pin x 1
Computer In 2/DVI-I Input	DVI-I Terminal x 1
Monitor Output Terminal	Mini D-sub 15 pin x 1
Control port	D-sub 9 pin x 1
Audio Output Jack	Mini Jack (stereo) x 1 (variable)
LAN Connection Terminal	100 Base-TX (100Mbps)/10 Base-T (10Mbps), RJ45

## Audio

Internal Audio Amp	7.0 W RMS
Built-in Speaker	1 speaker, ø1.46" (37mm)

## Power

Voltage and Power Consumption	AC 100–120 V (3.7A Max. Ampere), 50/60 Hz (The U.S.A and Canada) AC 200–240 V (2.0A Max. Ampere), 50/60 Hz (Continental Europe and The U.K.)
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## Operating Environment

Operating Temperature	41°F–95°F (5 °C–35 °C)
Storage Temperature	14°F–140°F (-10°C–60 °C)

## Remote Control

Battery	AAA or LR03 1.5V ALKALINE TYPE x 2
Operating Range	16.4' (5 m)/±30°
Dimensions	2.0" (W) x 0.7" (H) x 4.3" (D) (52 mm x 18 mm x 110 mm)
Net Weight	2.37 oz (67 g) (including batteries)

- The specifications are subject to change without notice.
- LCD panels are manufactured to the highest possible standards. Even though 99.99% of the pixels are effective, a tiny fraction of the pixels (0.01 % or less) may be ineffective by the characteristics of the LCD panels.



This symbol on the nameplate means the product is Listed by Underwriters Laboratories Inc. It is designed and manufactured to meet rigid U.L. safety standards against risk of fire, casualty and electrical hazards.

# Circuit Protections

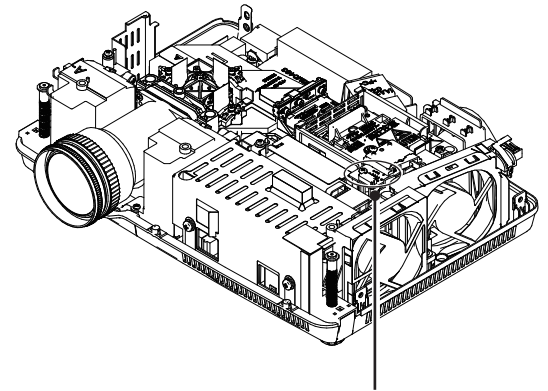
This projector provides the following circuit protections to operate in safety. If the abnormality occurs inside the projector, it will automatically turn off by operating one of the following protection circuits.

## Thermal switch

There is the thermal switch (SW902) inside of the projector to detect the internal temperature rising abnormally. When the internal temperature reaches near 100°C, the thermal switch opens to stop the operation of the power supply circuit.

The thermal switch can be reset itself automatically when the internal temperature becomes normal.

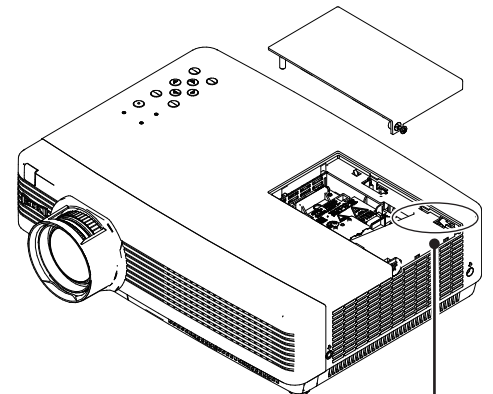
When the internal temperature reaches near 70°C, the thermal switch returns automatically.



Thermal switch (SW902)

## Lamp cover switch

The lamp cover switch (SW901) cuts off the drive signal to the lamp circuit when the lamp cover is removed or not closed completely. After opening the lamp cover for replacing the lamp ass'y, place the lamp cover correctly otherwise the projector can not turn on.



Lamp cover switch (SW901)

## Fuse

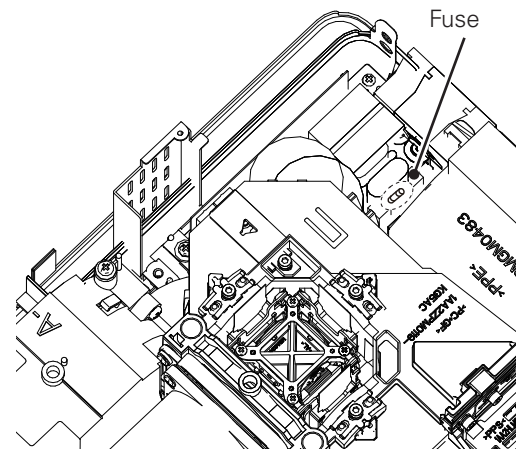
A fuse is located inside of the projector. When the POWER indicator is not lighting, the fuse may be opened. Check the fuse as following steps.

The fuse should be used with the following type;

**Fuse Part No.: 323 021 7804**  
**TYPE T6.3AH 250V FUSE**  
**LITTLE FUSE INC. TYPE 21506.3**

### How to replace the fuse

1. The fuse is placed on the filter board under the main board. Remove the cabinet top and the main board.
2. Take the fuse off, and replace the new one with the specified type.



## Circuit Protections

### Warning temperature and power failure protection

The projector will be automatically turned off when the internal temperature of the projector is abnormally high, or the cooling fans stop spinning, or the power supplies in the projector are failed.

- If the WARNING indicator is flashing, it may detect the abnormal temperature inside the projector. Check the following possible causes and wait until the WARNING indicator stops flashing, and then try to turn on the projector.
- If the WARNING indicator lights red, it may defect the cooling fans or power supply circuits. Check fans operation and power supply lines referring to the chapter "Power supply & protection circuit" in the Chassis Block Diagram section.

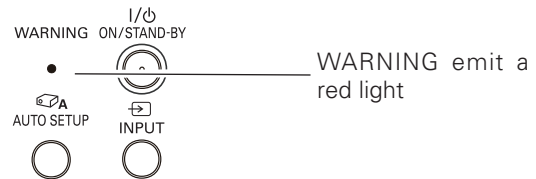
#### Possible causes

- Air filters are clogged with dust particles. Remove dust from the air filters by following instructions in the "Air filter care and cleaning" below.
- Ventilation slots of the projector are blocked. In such an event, reposition the projector so that ventilation slots are not obstructed.
- Check if projector is used at higher temperature place (Normal operating temperature is 5 to 35 °C or 41 to 95°F)

### **The projector is shut down and the WARNING indicator lights red.**

When the projector detects an abnormal condition, it is automatically shut down to protect the inside of the projector and the WARNING indicator lights red. In this case, unplug the AC power cord and reconnect it, and then turn the projector on once again to verify operation. If the projector cannot be turned on and the WARNING indicator still lights red, unplug the AC power cord and contact the service station.

#### Top Control



#### **CAUTION**

DO NOT LEAVE THE PROJECTOR WITH THE AC POWER CORD CONNECTED UNDER AN ABNORMAL CONDITION. IT MAY RESULT IN FIRE OR ELECTRIC SHOCK.

# Maintenance

## Cleaning the Air Filter

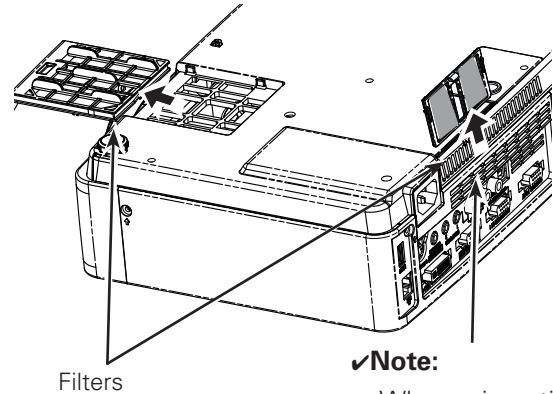
Filter prevents dust from accumulating on the optical elements inside the projector. Should the filters become clogged with dust particles, it will reduce cooling fans' effectiveness and may result in internal heat buildup and adversely affect the life of the projector. If a Filter warning icon appears on the screen, clean the filters immediately. Clean the filters by following the steps below.

- 1 Turn off the projector, and unplug the AC power cord from the AC outlet.
- 2 Turn the projector over and remove the filters.
- 3 Clean the filters softly by using a brush.
- 4 Replace the filters properly. Make sure that the filters are fully inserted to the projector.



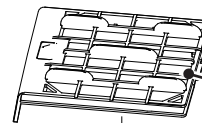
### CAUTION

Do not operate the projector with the filters removed. Dust may accumulate on the optical elements degrading picture quality. Do not put anything into the air vents. Doing so may result in malfunction of the projector.

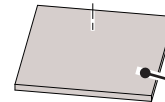


### ✓Note:

When reinserting this filter, be sure that the slit part is facing the outer side.



Filter Base



Air Filter

### RECOMMENDATION

**We recommend avoiding dusty/smoky environments when you operate the projector. Usage in these environments may cause poor image quality.**

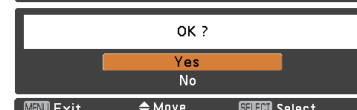
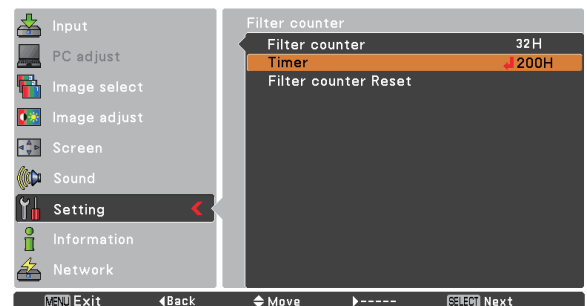
When using the projector under dusty or smoky conditions, dust may accumulate on a lens, LCD panels, or optical elements inside the projector degrading the quality of a projected image. When the symptoms above are noticed, contact your authorized dealer or service station for proper cleaning.

## Resetting the Filter Counter

Be sure to reset the Filter counter after cleaning or replacing the filters.

- 1 Press the MENU button to display the On-Screen Menu. Use the Point buttons to select **Setting** and then press the Point or SELECT button.
- 2 Use the Point buttons to select **Filter counter** and then press the SELECT button. Use the Point buttons to select **Filter counter reset** and then press SELECT button. **Filter counter Reset?** appears. Select **Yes** to continue.
- 3 Another confirmation dialog box appears, select **Yes** to reset the Filter counter.

### Filter counter



**Filter counter , Reset?** appears.

Select **Yes**, then another confirmation box appears.

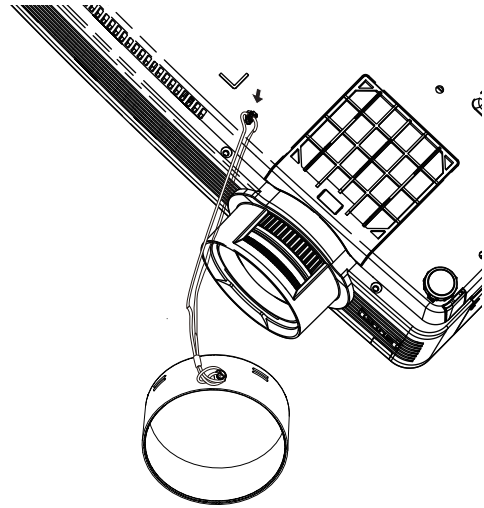
Select **Yes** again to reset the Filter counter.

## Attaching the Lens Cover

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When moving the projector or while it is not in use, replace the lens cap.

- 1 Thread the string through the hole on the lens cap and then tie a knot in the string to secure it in place.
- 2 To pass the other end of the string into the hole on the top of the projector and pull at it.



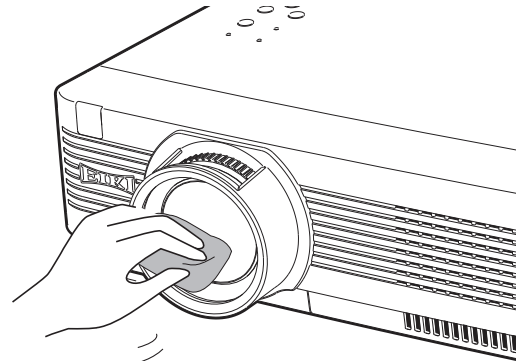
## Cleaning the Projection Lens

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Unplug the AC power cord before cleaning.

Gently wipe the projection lens with a cleaning cloth that contains a small amount of non-abrasive camera lens cleaner or use a lens cleaning paper or commercially available air blower to clean the lens.

Avoid using an excessive amount of cleaner. Abrasive cleaners, solvents or other harsh chemicals might scratch the surface of the lens.



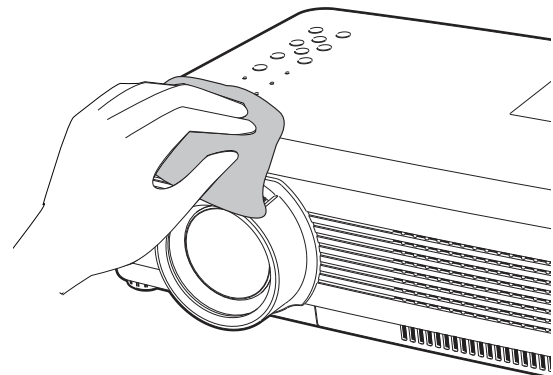
## Cleaning the Projector Cabinet

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Unplug the AC power cord before cleaning.

Gently wipe the projector body with a soft dry cleaning cloth. When the cabinet is heavily soiled, use a small amount of mild detergent and finish with a soft dry cleaning cloth. Avoid using an excessive amount of cleaner. Abrasive cleaners, solvents or other harsh chemicals might scratch the surface of the cabinet.

When the projector is not in use, put the projector in an appropriate carrying case to protect it from dust and scratches.





# Lamp Replacement

## Lamp replacement

### WARNING:

- For continued safety, replace with a lamp assembly of the same type.
- Allow the projector to cool for at least 45 minutes before you open the lamp cover. The inside of the projector can become very hot.
- Do not drop the lamp module or touch the glass bulb! The glass can shatter and cause injury.

### Procedure

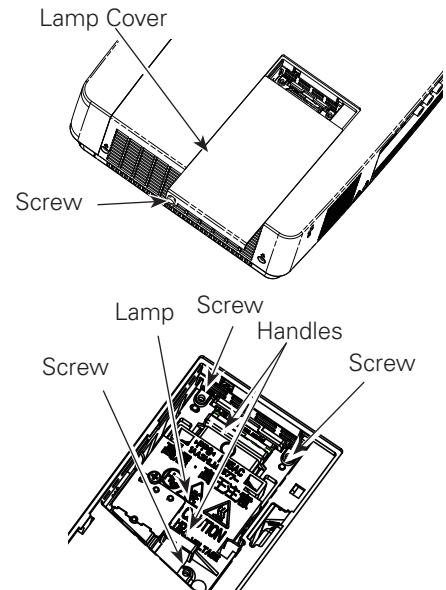
- 1** Unplug the AC power cord. Let the projector cool for at least 45 minutes.
- 2** Loosen the screw and open the lamp cover.
- 3** Loosen the three (3) screws that secure the lamp. Lift the lamp out of the projector by using the handles.
- 4** Replace the lamp with a new one and secure the three (3) screws. Make sure that the lamp is set properly. Push the lamp cover and secure the screw.
- 5** Connect the AC power cord to the projector and turn on the projector.

### Note

- The projector cannot be turned-on with lamp cover removed, because when the lamp cover is removed, the lamp cover switch is also released to switch off the lamp circuit.

### ORDER REPLACEMENT LAMP

Type No.	POA-LMP131
Service Parts No.	610 343 2069



**WARNING : TURN OFF THE UV LAMP BEFORE OPENING THE LAMP COVER.  
USE UV RADIATION EYE AND SKIN PROTECTION DURING SERVICING.**



## CAUTION

Allow a projector to cool for at least 45 minutes before you open the Lamp Cover. The inside of the projector can become very hot.



## CAUTION

When replacing the lamp because it has stopped illuminating, there is a possibility that the lamp may be broken.

If replacing the lamp of a projector which has been installed on the ceiling, you should always assume that the lamp is broken, and you should stand to the side of the lamp cover, not underneath it. Remove the lamp cover gently. Small pieces of glass may fall out when the lamp cover is opened. If pieces of glass get into your eyes or mouth, seek medical advice immediately.



## CAUTION

For continued safety, replace with a lamp of the same type. Do not drop a lamp or touch a glass bulb! The glass can shatter and may cause injury.

## Lamp Replacement

### Recommendation

Should the air filter become clogged with dust particles, it will reduce the cooling fan's effectiveness and may result in internal heat build up and short lamp life. We recommend cleaning the air filter after the projection lamp is replaced.

Refer to "Air Filter Cleaning".

### How to check Lamp Used Time

The LAMP REPLACE indicator will light yellow when the total lamp used time (Corresponding value) reaches 2,500 hours. This is to indicate that lamp replacement is required.

The total lamp used time is calculated by using the below expression,

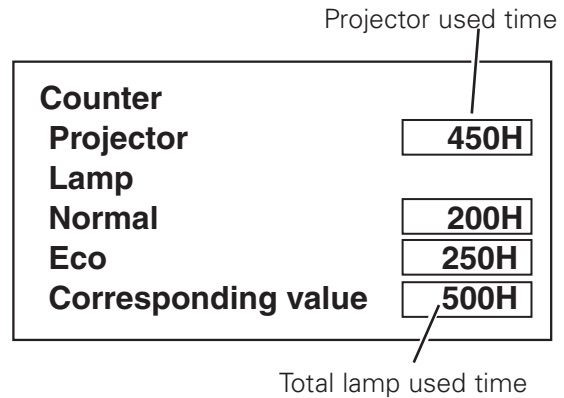
Total lamp used time =  $T_{eco} + T_{normal} \times 1.25$

$T_{eco}$ : used time in the Eco mode

$T_{normal}$ : used time in the Normal mode.

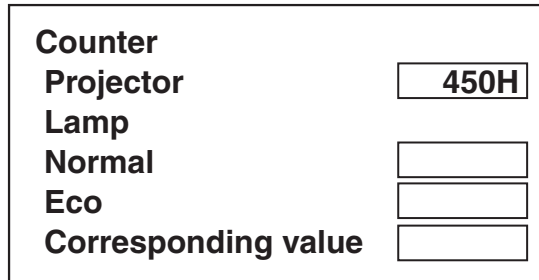
You can check the lamp used time following to the below procedure.

- 1 Press and hold the **ON/STAND-BY** button on the projector for more than 20 seconds.
- 2 The projector used time and lamp used time will be displayed on the screen briefly as follows.



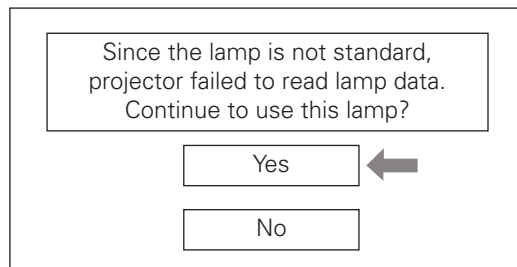
#### Note:

When non-standard lamp is used, lamp used time should not appear.



### Warning Message on the non-standard lamp used

If the non-standard lamp is used, the warning and confirmation messages will appear on the screen every startup. Some of the functions are limited when the non-standard lamp is used in spite of the warning.



## Security Function Notice

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This projector provides security functions such as "Key lock", "PIN code lock" and "Logo PIN code lock". When the projector has set these security function on, you are required to enter correct PIN code to use the projector. If you do not know the correct PIN code to the projector, the projector can no longer be operated or started. In this case, you must reset those function first according to the resetting procedure described below and then check up on the projector.

Function	Description
<b>Key lock</b>	Locks operation of the top control or the remote control. If the Key lock is enabled with top control lock, the projector can no longer be started. Initial setting: Key lock function is disabled
<b>PIN code lock</b>	Prevents the projector from being operated by an unauthorized person. Initial code: "1234"
<b>Logo PIN code lock</b>	Prevents an unauthorized person for changing the start-up logo on the screen. Initial code: "4321"

## Resetting procedure

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- 1** Disconnect the AC power cord from the AC outlet.
- 2** As pressing the **SELECT** button on the projector, connect the AC power cord into an AC outlet again. Keep pressing the **SELECT** button until the POWER indicator lights continuously.

This is complete the resetting of the security function. The PIN code lock and Logo PIN code lock are reset as the initial PIN code at the factory and the Key lock function is disabled.

Please refer to the owner's manual for further information of the security functions.



# Mechanical Disassembly

Mechanical disassembly should be made following procedures in numerical order.

Following steps show the basic procedures, therefore unnecessary step may be ignored.

Caution:

The parts and screws should be placed exactly the same position as the original otherwise it may cause loss of performance and product safety.

Screws Expression (Type Diameter x Length) mm	
T type	M Type
	

## 1 Cabinet Top, Front, R/C Board removal

1. Loose screw A (M3x8 ) to remove the Lamp Cover.
2. Remove 5 screws B (M3x8 ) to remove the Cabinet top.
3. Remove the Control Buttons and Dec Inlay LED.
4. Remove 3 screws C (M3x6) and 3 screws D (T3x8 ) to remove the Cabinet Front.
5. Remove screw E (T3x6 ) to remove the R/C Board.

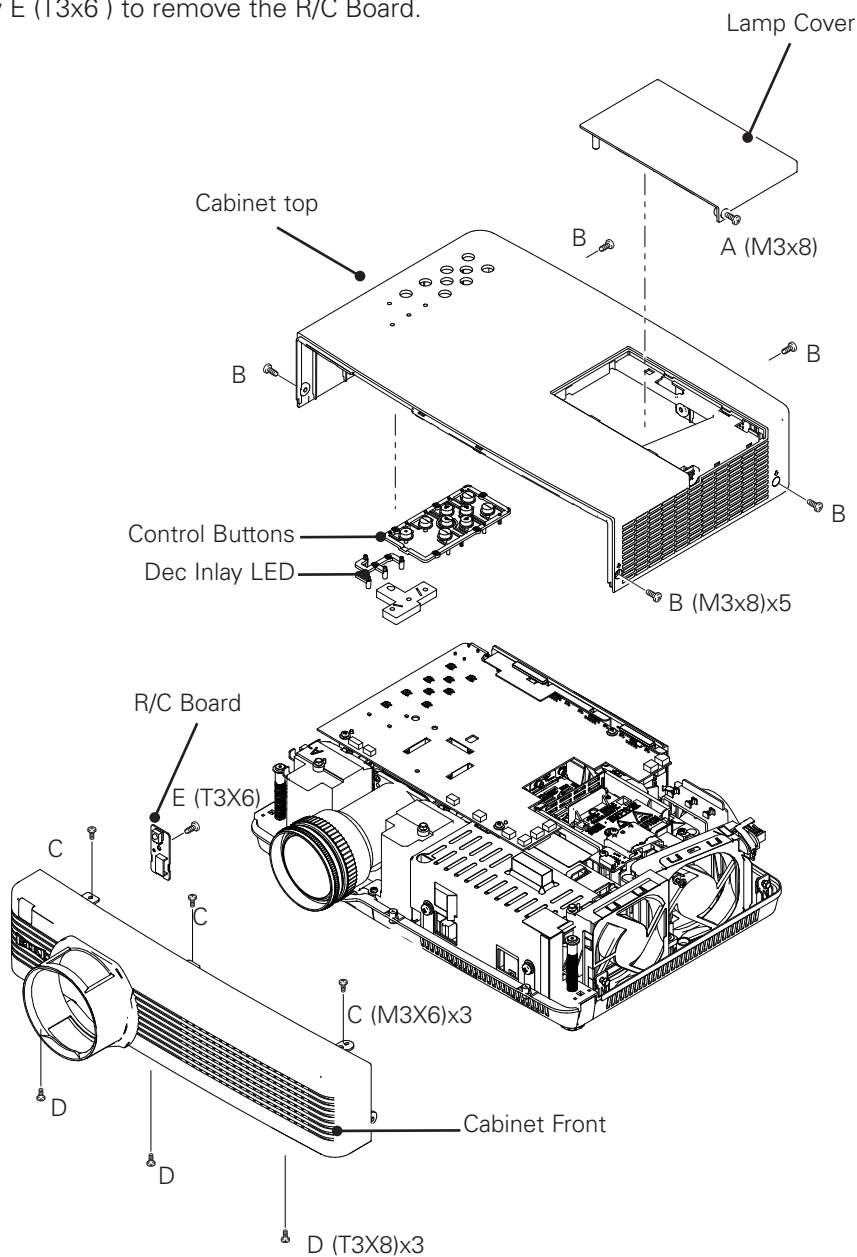


Fig.1

## 2 Main Board, AV Panel and Fan removal

1. Remove 5 screws A (M2.5x6) and 2 screws B (M4x4) to remove the Main Board.
2. Release the hooks to remove the AV Panel and remove 3 screws C (T3x6) to remove the AV Board.
3. Remove 3 screws D (T3x8) to remove the fans (FN902 and FN906).

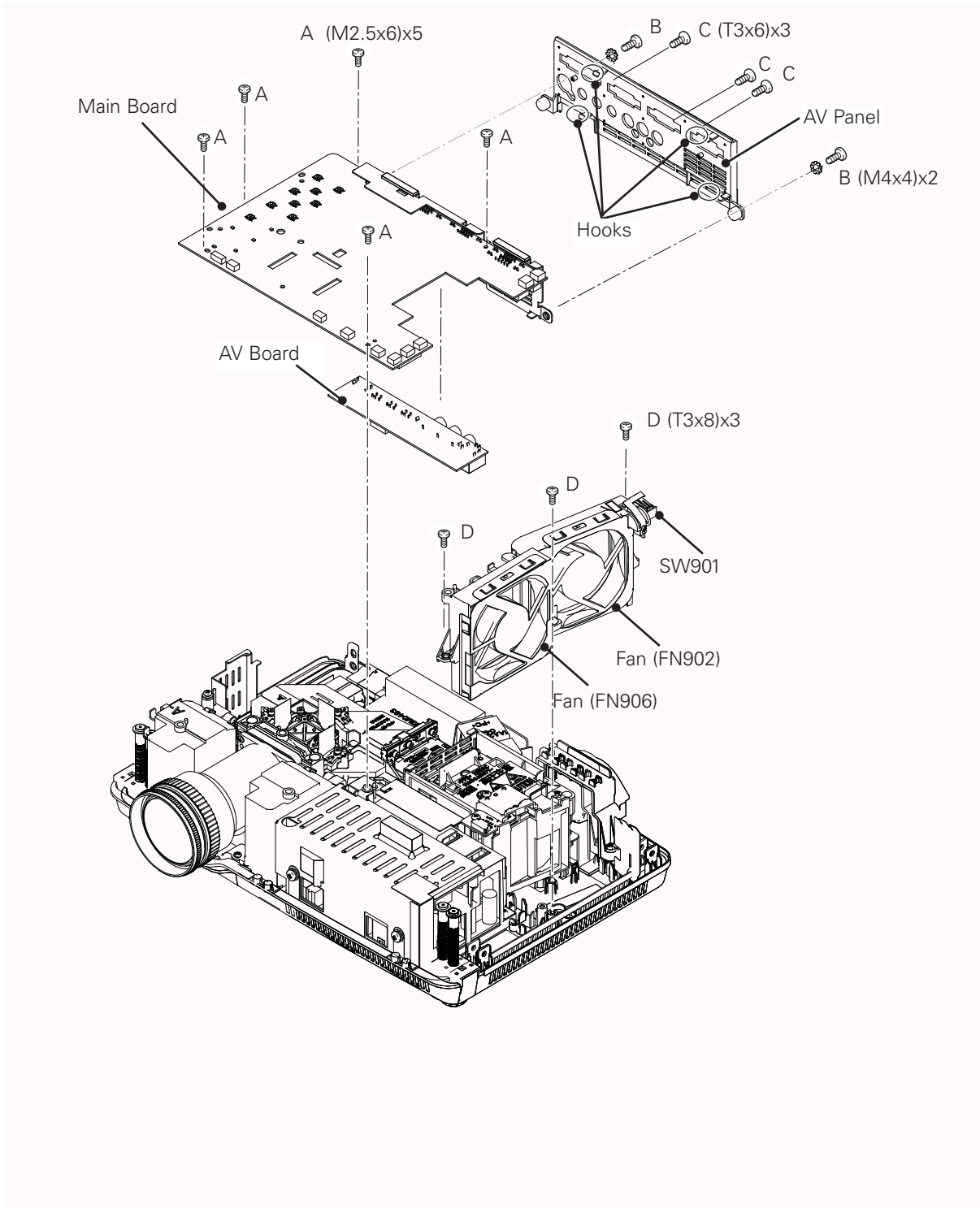


Fig.2

### 3 Speaker(SP901), Fan (FN901),Lamp Unit(LP900) and Optical Unit removal

1. Remove the 4 screws A (T3x8) to remove the speaker holder and the Speaker (SP901).
2. Remove 2 screws B (T3x8) and screw C (T3x12) to remove the fan (FN901).
3. Remove the lamp shield-top. Remove 3 screws D(M3x7) to remove the Lamp unit (LP900).
4. Remove the 2 screws E (T3x6) to remove the CONNECT ID board.
5. Remove the screw F (T3x8) to disconnect the Ballast socket.
6. Remove 5 screws G (T3x8) and 3 screws H(T3x8) to remove the Optical Unit and the Lamp holder.

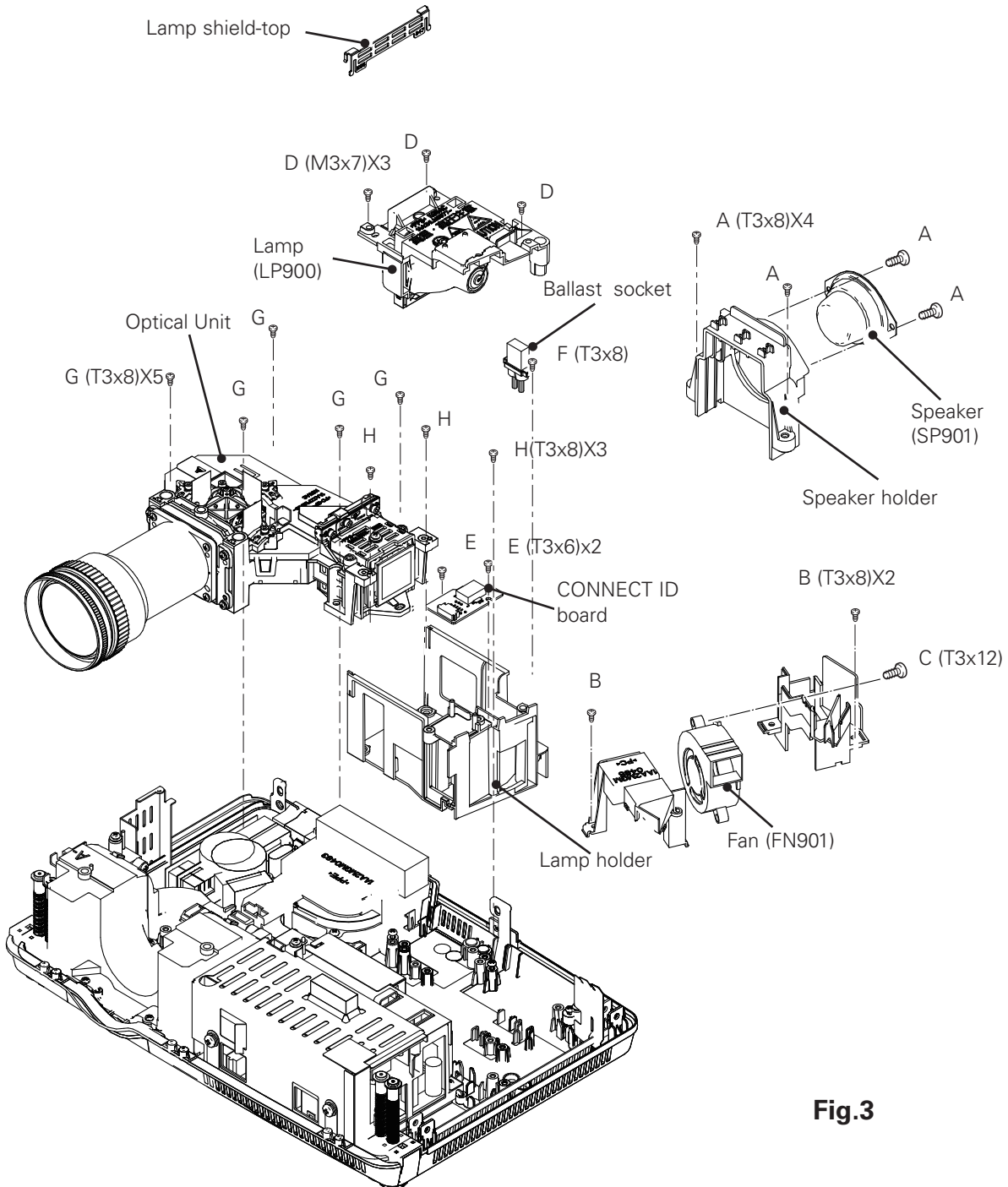


Fig.3

## 4 Power Board removal

1. Remove 3 screws A (T3x8), screw B (M3x8) and 3 screws C (M4x4) to remove the power board shield.
2. Remove the 2 screws D (T3x8) to remove the Ballast board.
3. Remove the power board holder. Loosen the hooks to remove the Power board.

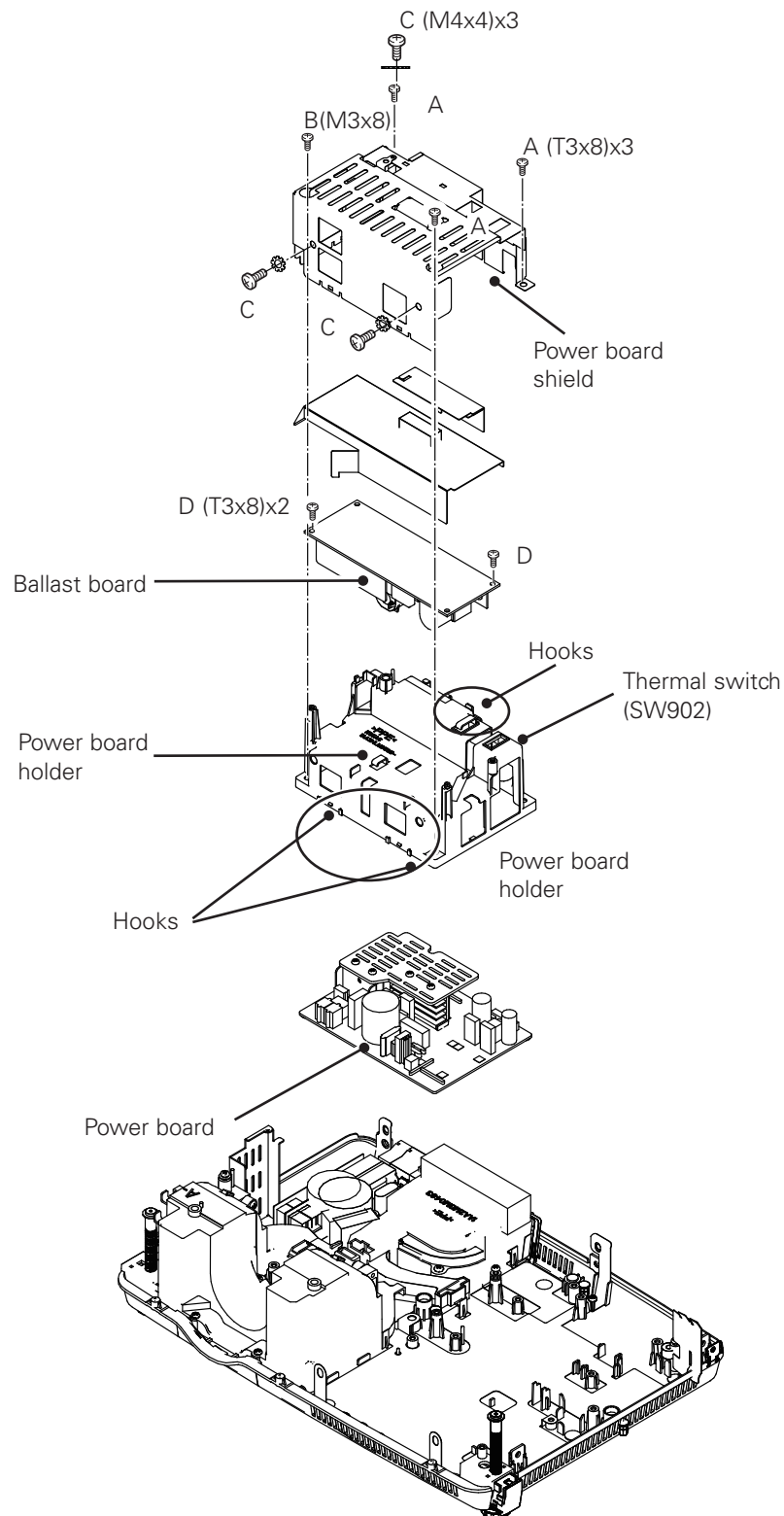


Fig.4

## 5 Mounting Duct, Fan(FN903, FN904, FN905) and Filter Board removal

1. Remove screw A (M4x4) , 2 screws B (T3x12) and 4screws C (T3x6) to remove the Mounting duct top, Mounting duct bottom and fan (FN904).
2. Remove 2 screws D (T3x12) to remove the fans (FN903 and FN905).
3. Remove screw E (T3x8) and screw F (M3X8) to remove the Left side shield.
4. Remove 2 screws G (T3x8) to remove the filter board.
5. Remove the Air filters.

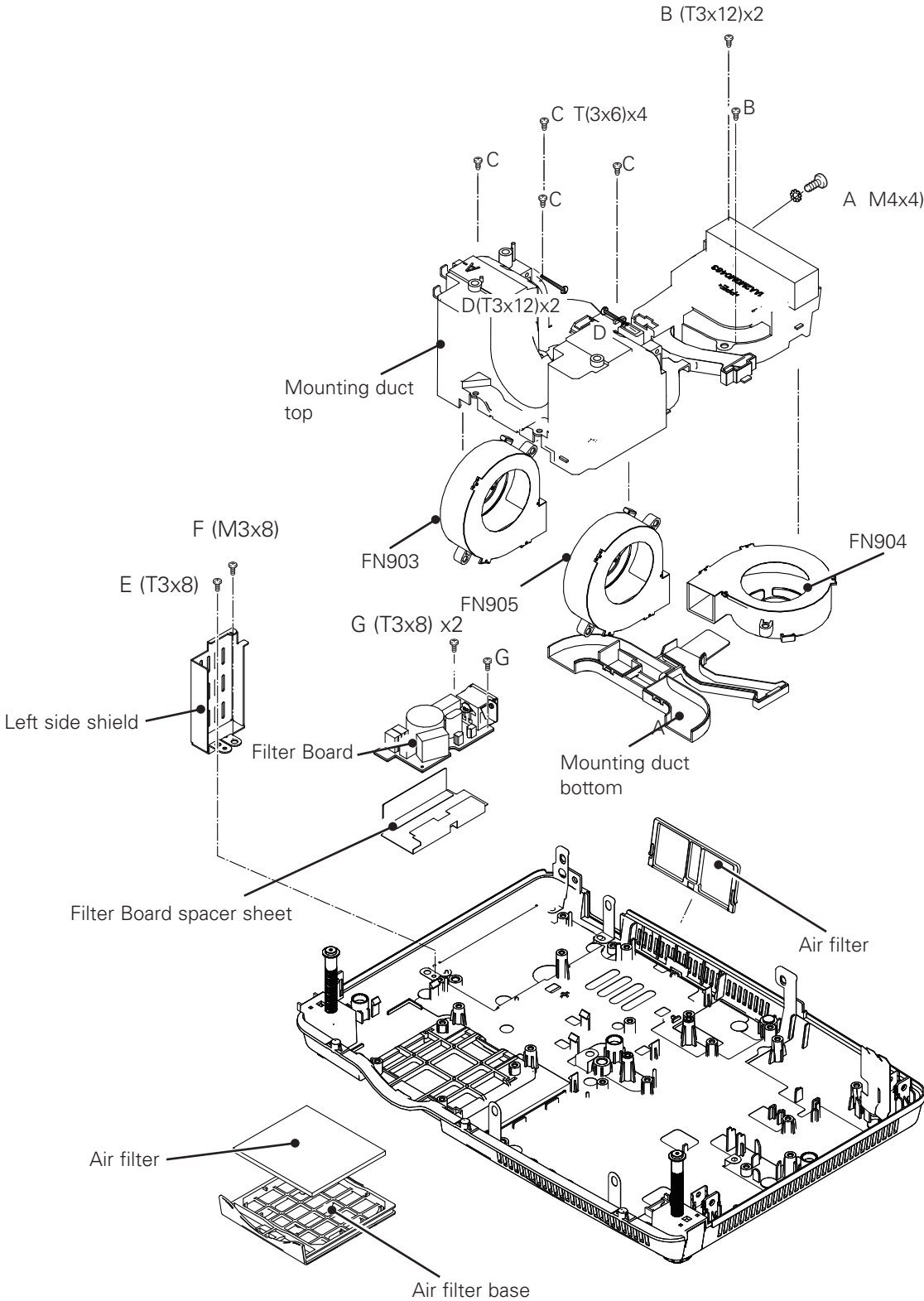


Fig.5



# Optical Parts Disassembly

Before taking this procedure, remove Cabinet Top , Main Board and the Network board following to the “Mechanical Disassembly”:

Disassembly requires a 2.0mm hex wrench.

## 1 Projection lens disassembly

Note: The optical unit should be removed from the cabinet bottom before removing the projection lens.

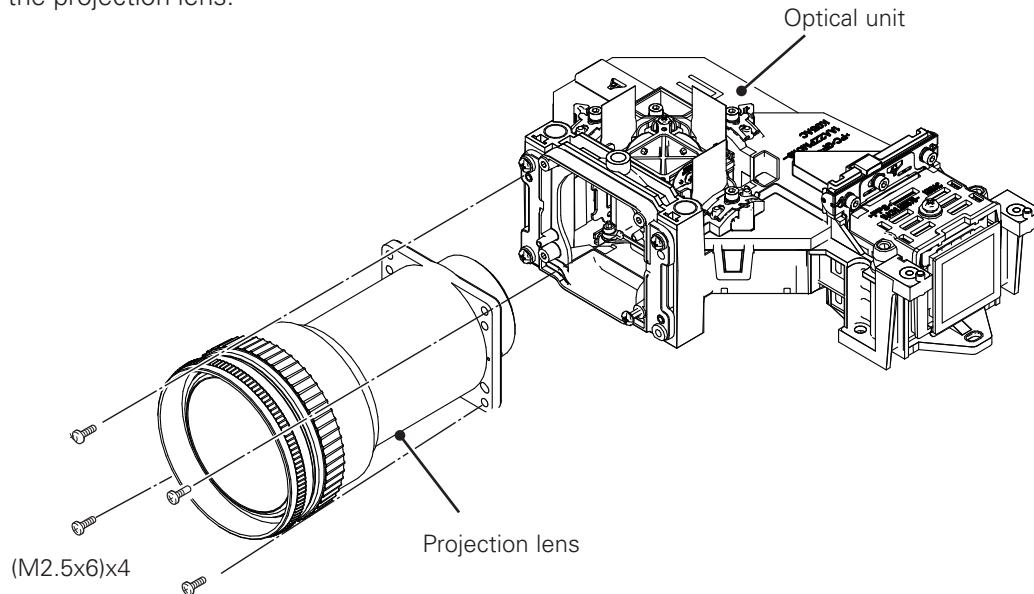


Fig.1

## 2 Integrator lens-in disassembly

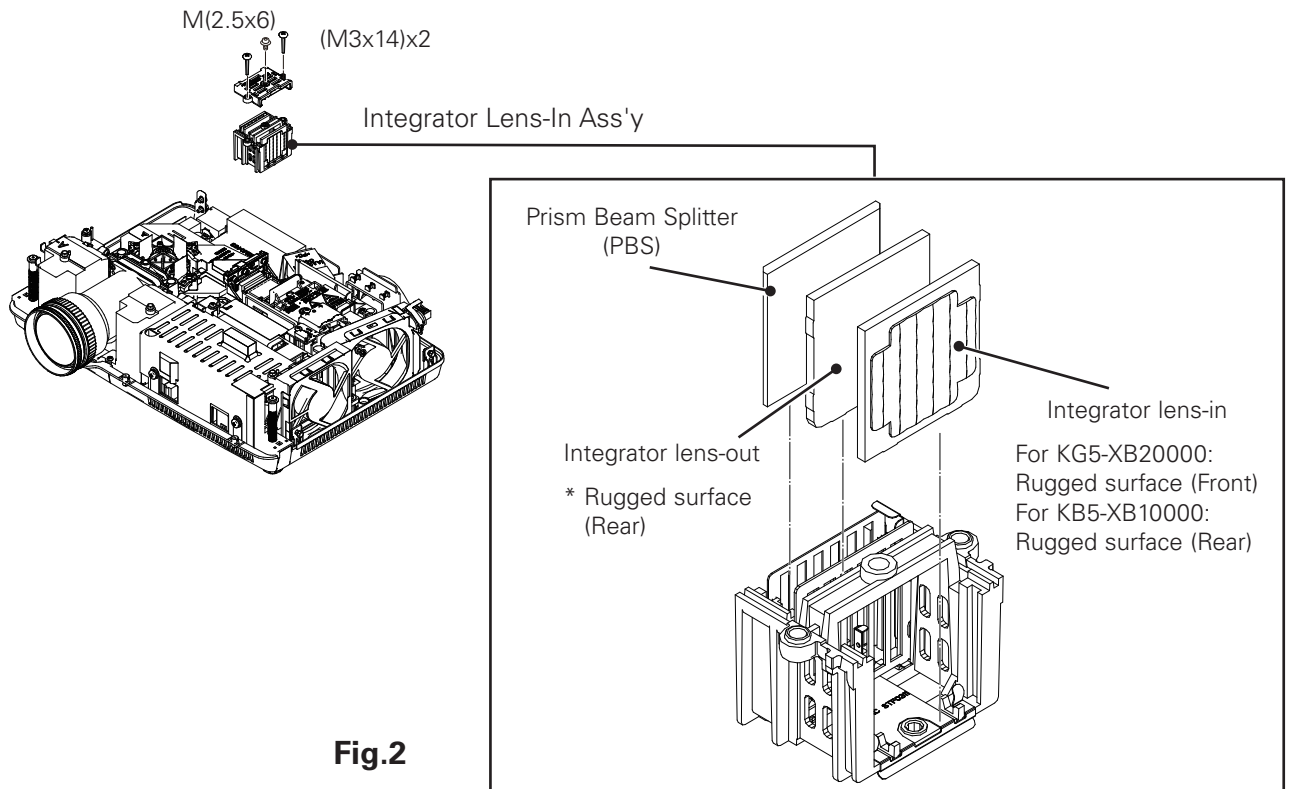


Fig.2

### 3 LCD Panel/Prism Ass'y removal

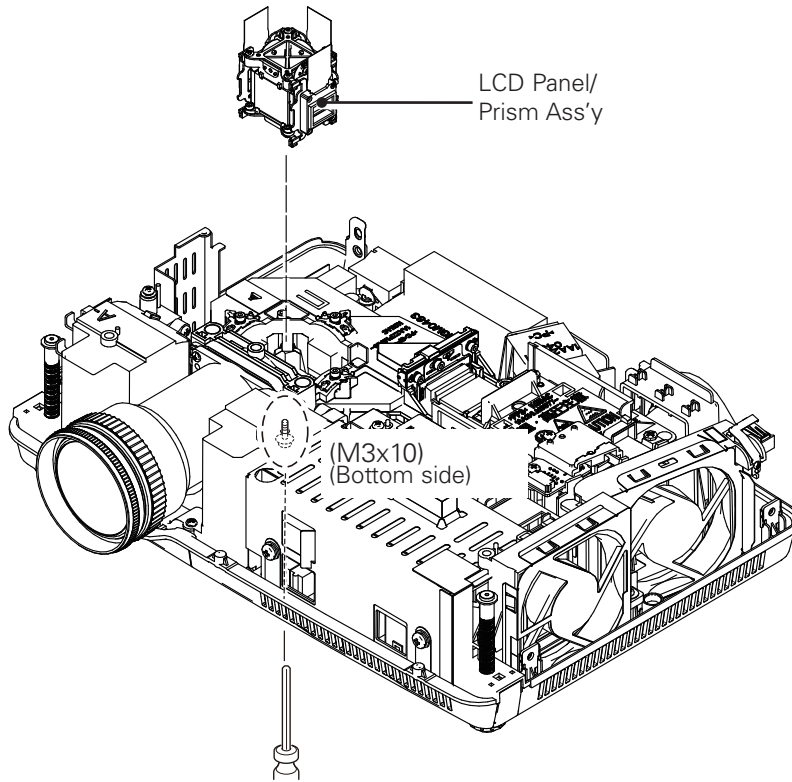


Fig.3-1

#### **IMPORTANT NOTICE on LCD Panel/Prism Ass'y Replacement**

LCD panels used for this model can not be replaced separately. Do not disassemble the LCD Panel/Prism Ass'y. These LCD panels are installed with precision at the factory. When replacing the LCD panel, should be replaced whole of the LCD panels and prism ass'y at once.

After replacing LCD Panel/Prism ass'y, please check the following points.

- Check that there is no color shading at the top, bottom, left or right of the screen. If there is, try to remove the shading following to the chapter "Optical Adjustment".
- Check the white balance. If it needs the adjustment, adjust the white balance following to the "White Balance adjustment" , "Gamma adjustment" and "Common Center adjustment" in the chapter "Electrical Adjustment".
- Check the white uniformity on the screen.

If you find the color shading at the some part of the screen, it needs to take the color shading adjustment. This adjustment should be performed by a computer and it also requires a special software "Color Shading Correction".

## Panel Type Check

There are 2 types of LCD Panel/Prism Ass'y for this model. Either L-Type or R-Type LCD Panel/Prism Ass'y is used on the projector. Check which type of LCD Panel/Prism Ass'y is used with the figure below.

When replacing the LCD Panel/Prism Ass'y, you need to take "Panel Type Check and Setting" on the Electrical Adjustment for the replaced LCD Panel/Prism Ass'y.

The gamma-characteristics is different between L-Type and R-Type LCD Panel/Prism Ass'y.

### How to check the type of LCDPanel/Prism Ass'y

Check the printed number on the flat cable of the G-LCD Panel.

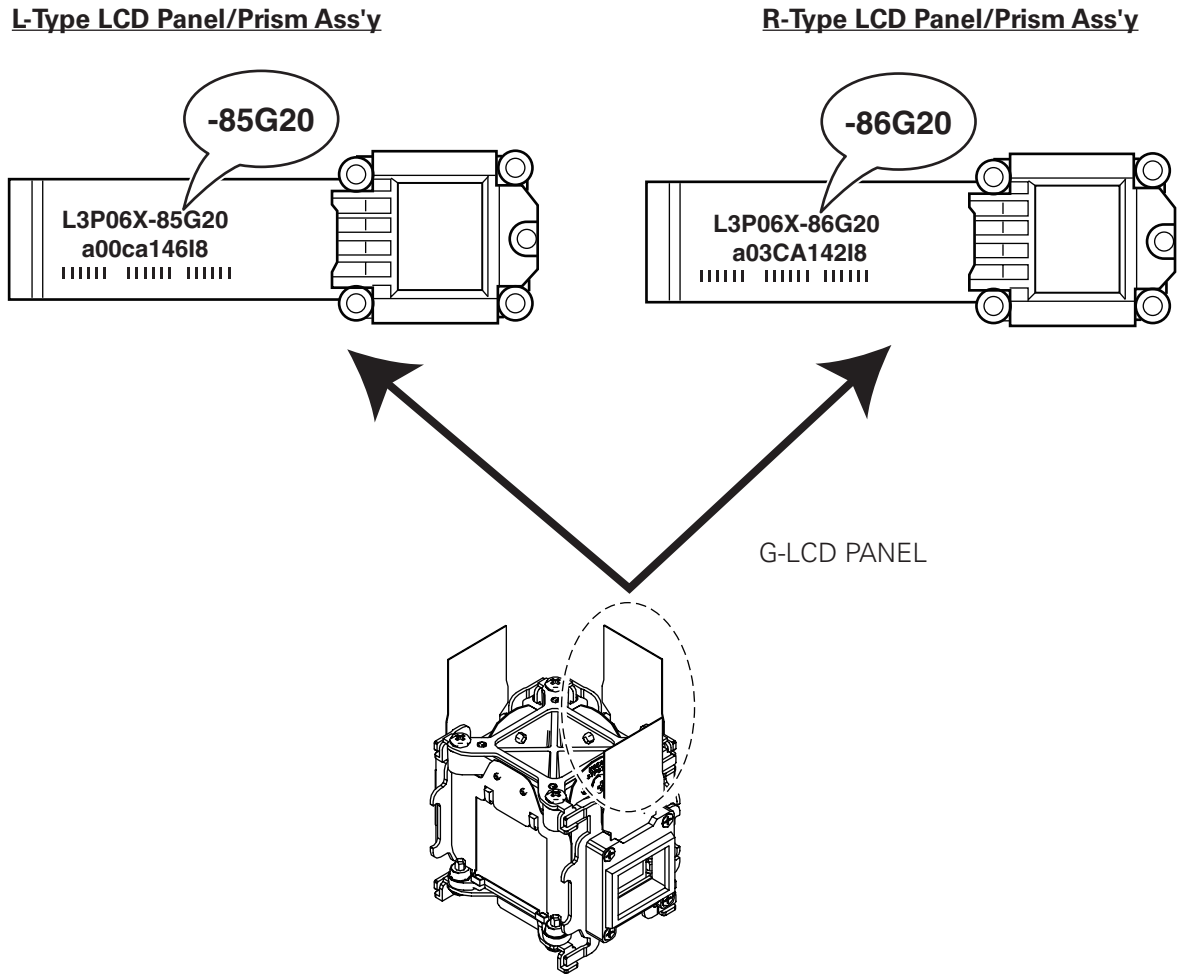
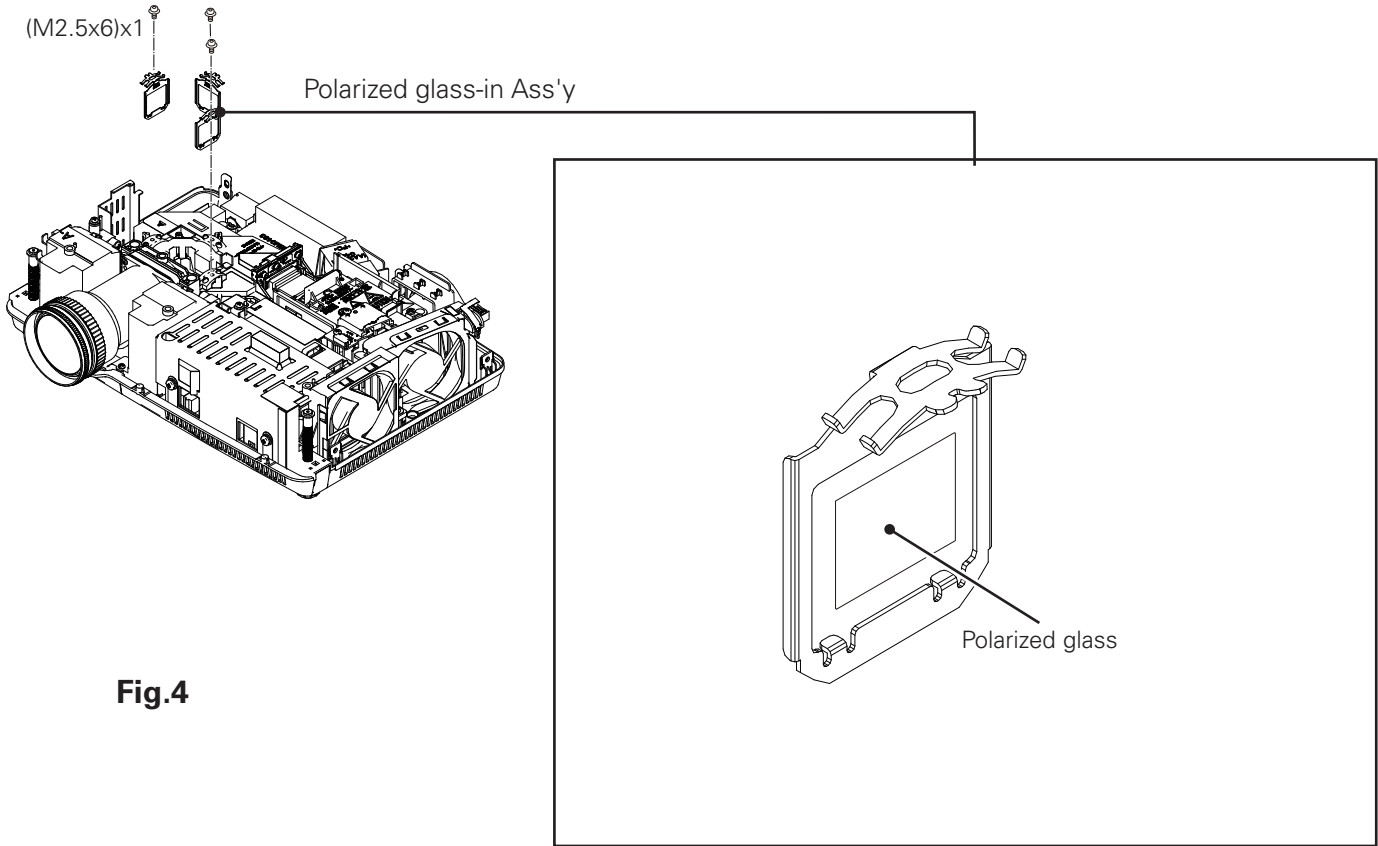


Fig.3-2

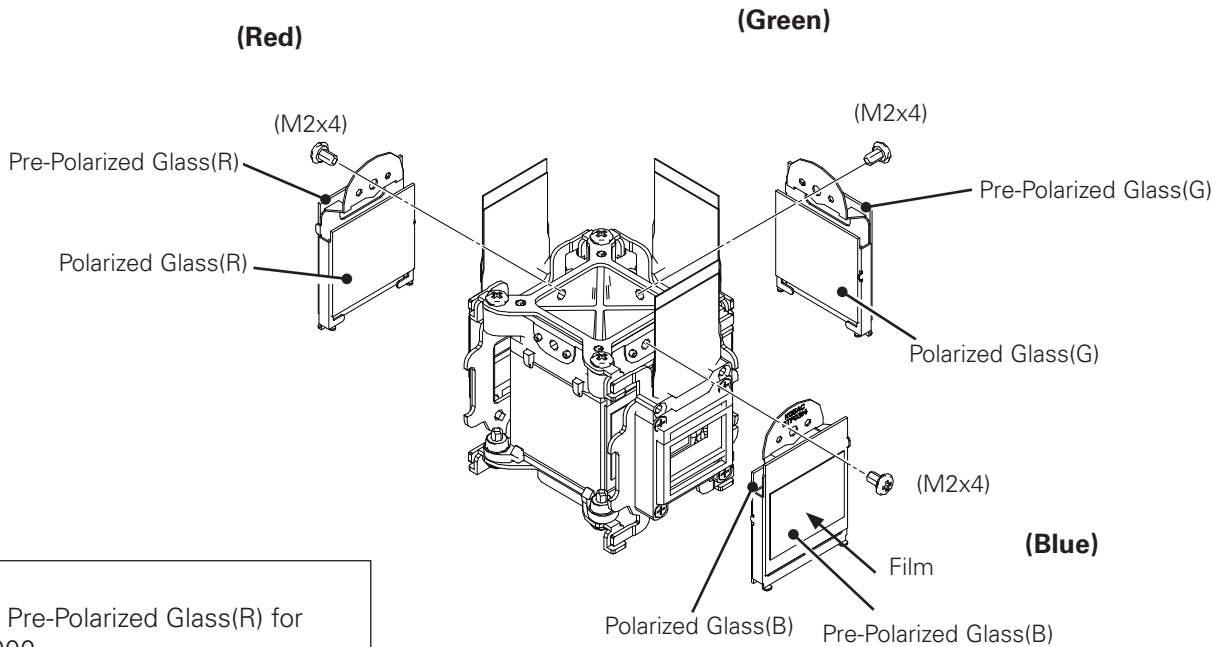
**4 Polarized glass-in disassembly**



**Fig.4**

**5 Polarized glass, Pre-polarized glass removal**

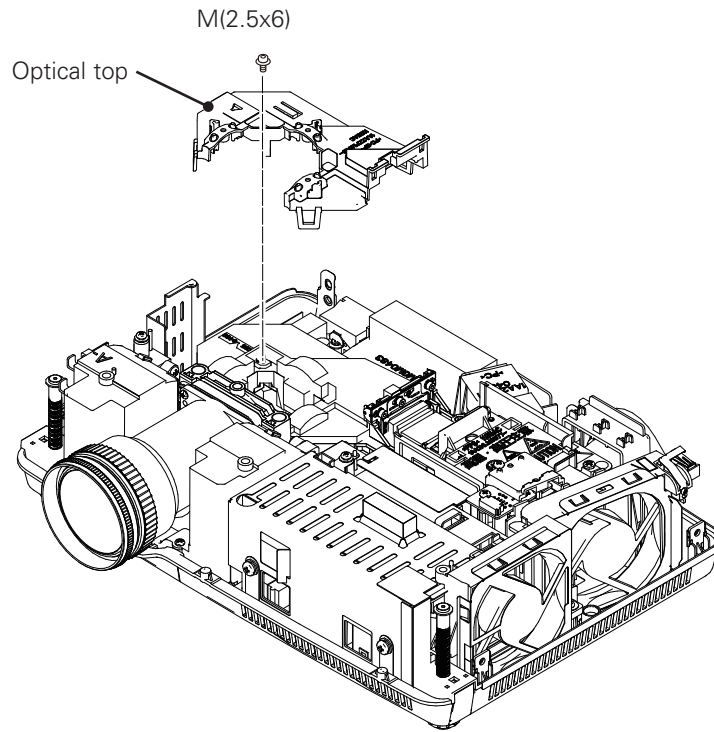
\* Mount the polarized glasses as the film attached side faces the LCD panel side.



**\* Note:**  
There is no Pre-Polarized Glass(R) for KB5-XB10000.

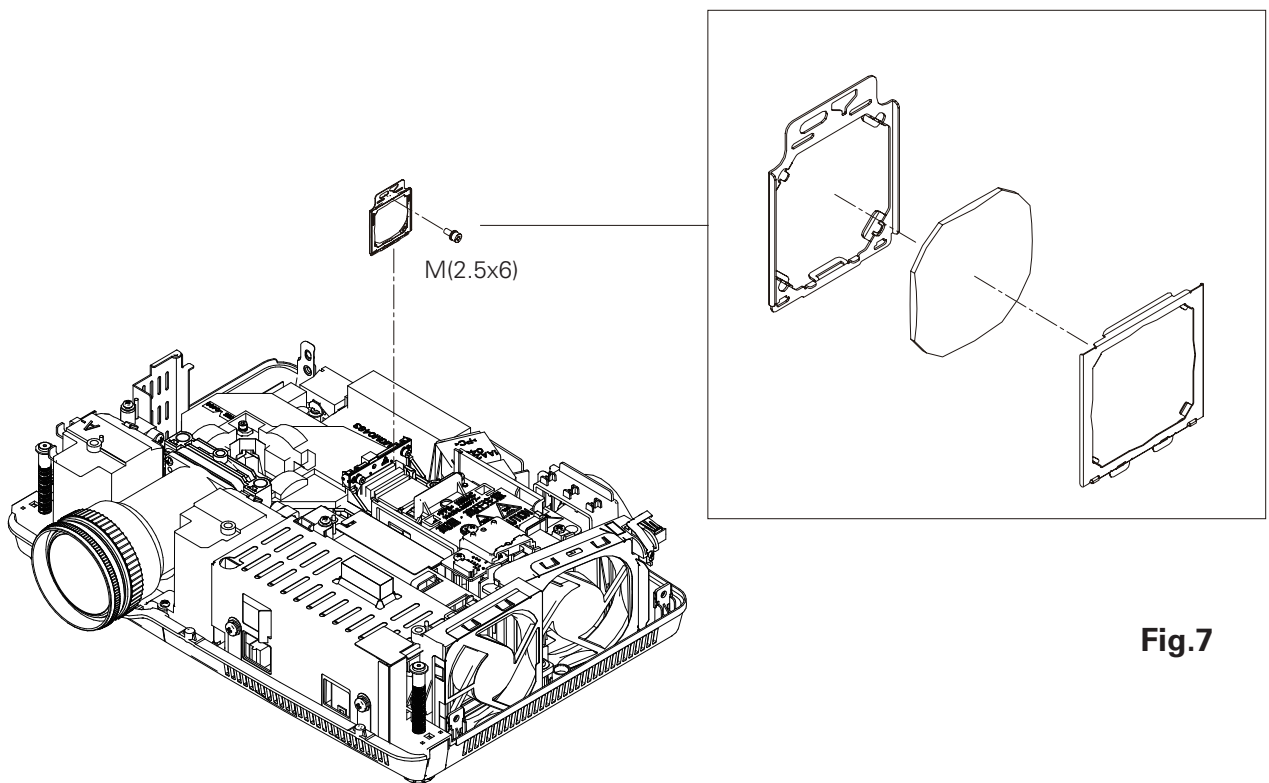
**Fig.5**

**6 Optical unit top removal**



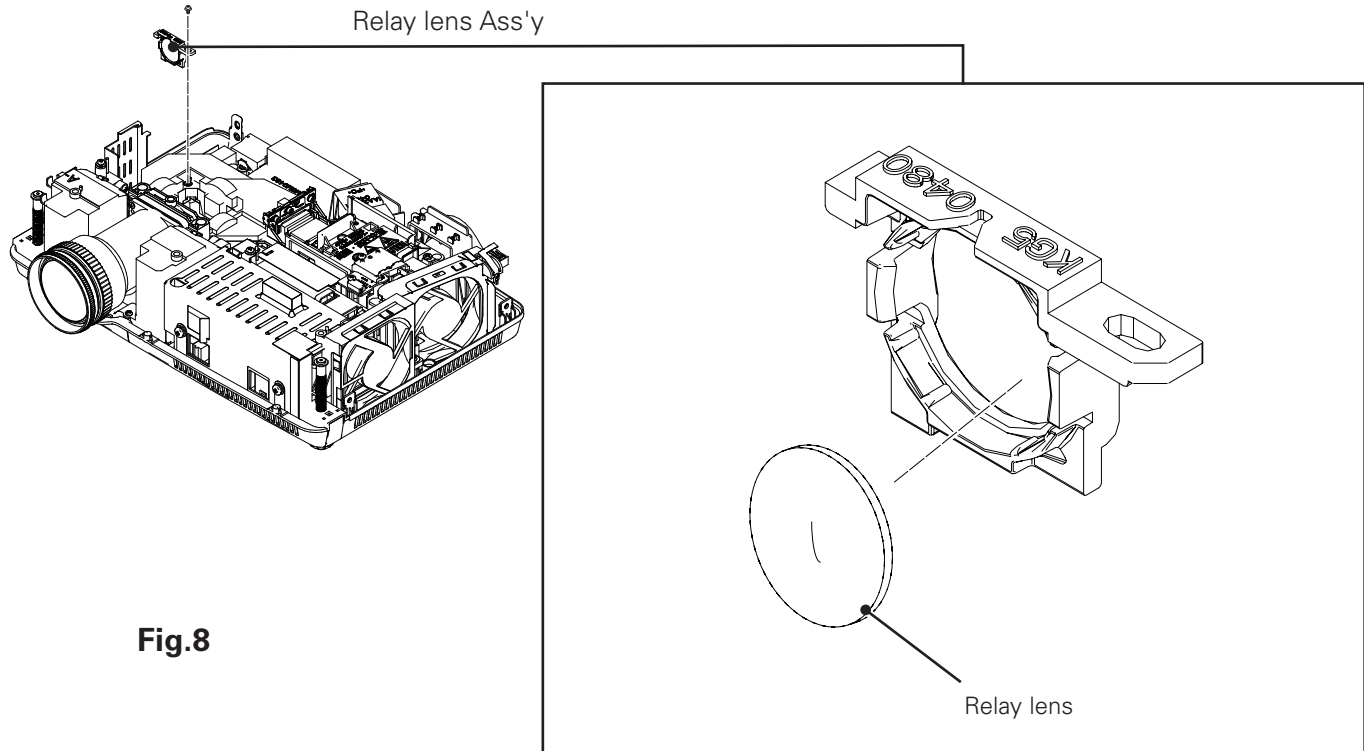
**Fig.6**

**7 Condenser lens disassembly**



**Fig.7**

**8** Relay lens disassembly



### 8 Locations and Directions

When mounting or assembling the optical parts in the optical unit, the parts must be mounted in the specified location and direction as shown in figure below.

No.	Parts Name
1	Integrator lens (IN)
2	Integrator lens (OUT)
3	Prism beam splitter (PBS)
4	Condenser lens (OUT)
5	Dichroic mirror (B)
6	Dichroic mirror (G)
7	Condenser lens (G)
8	Mirror (R)
9	Relay lens (IN)
10	Condenser lens (R)
11	Condenser lens (B)
12	Mirror (B)

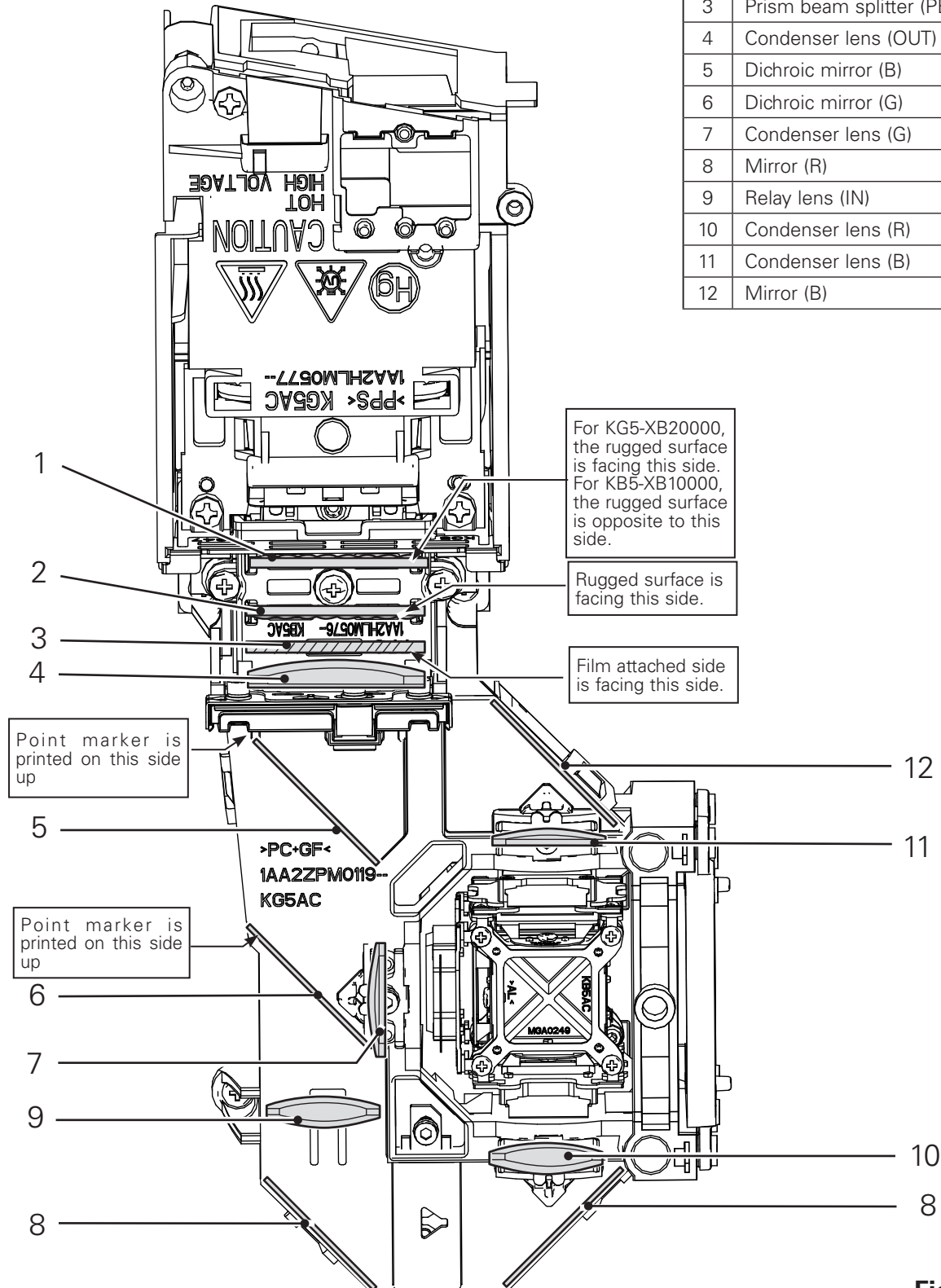


Fig.8

# Adjustments

## Adjustments after Parts Replacement

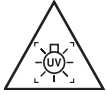
● : Adjustment necessary ○ : Check necessary

		Disassembly / Replaced Parts					
		LCD/ Prism Ass'y	Integrator Lens (OUT)	Relay Lens (OUT)	Polarized Glass	Power Board	Main Board
					G		
Optical Adjustments	Contrast Adjustment						
	G-Contrast adjustment	○			●		
	Integrator lens adjustment	○	●				
	Relay lens-out adjustment	○		●			
Electrical Adjustments	Fan control adjustment					●	●
	Reference voltage adjustment						●
	Panel type check and setting	●					●
	Auto calibration adjustment [PC]						●
	Auto calibration adjustment [Component]						●
	Auto calibration adjustment [Video]						●
	Common center adjustment	●					●
	50% white adjustment [PC]	●					●
	White balance adjustment [PC]	○					○
	50% white adjustment [Video]	●					●
	White balance adjustment [Video]	○					○
	White uniformity adjustment	○					○
	Keystone offset adjustment						●



# Optical Adjustments

Before taking optical adjustments below, remove the Cabinet Top following to the “Mechanical Disassembly” Adjustments require a 2.0mm hex wrench and a slot screwdriver. When you adjust Integrator lens or Relay lens adjustment, you need to disconnect FPC cables of LCD panels on the main board. Optical adjustment requires a 2.0mm hex wrench and a slot screwdriver.  
Note: Do not disconnect connectors on the main board, because the projector cannot turn on due to operate the power failure protection.



**WARNING : USE UV RADIATION EYE AND SKIN PROTECTION DURING SERVICING**

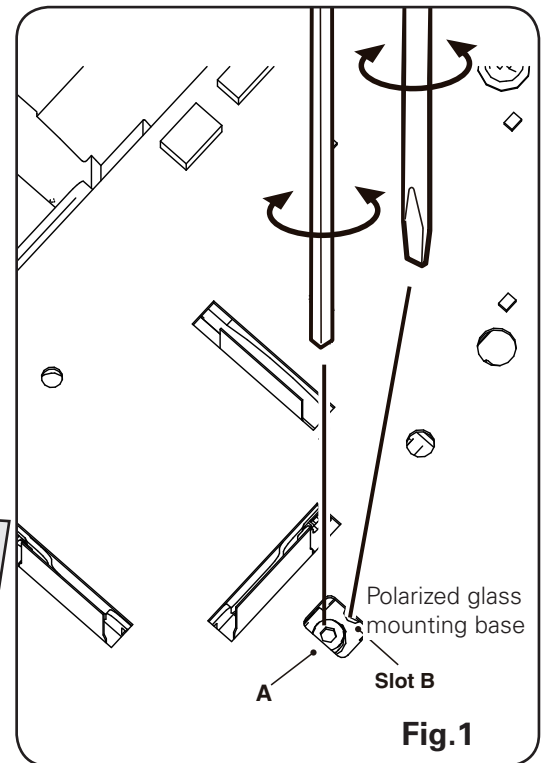
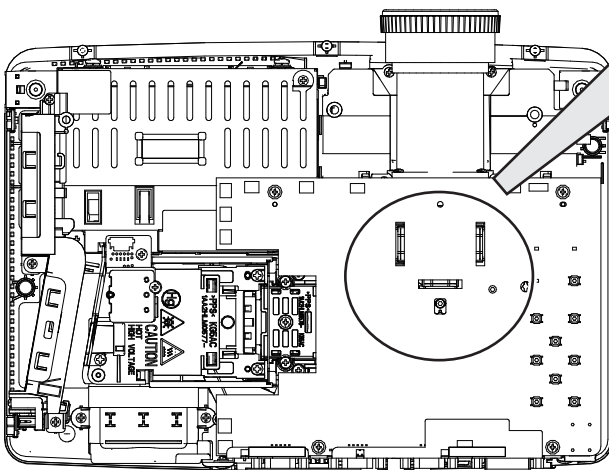
**CAUTION:** To prevent suffer of UV radiation, those adjustment must be completed within 25 minutes.

## Contrast adjustment

### [Before Adjustment]

- Input a 100% of black raster signal.

- 1 Loosen a screw **A** (Fig.1) on the polarized glass mounting base which you intend to adjust.
- 2 Adjust the slot **B** to obtain the darkest brightness on the screen by using a hex screwdriver.
- 3 Tighten the screw **A** to fix the polarized glass mounting base.



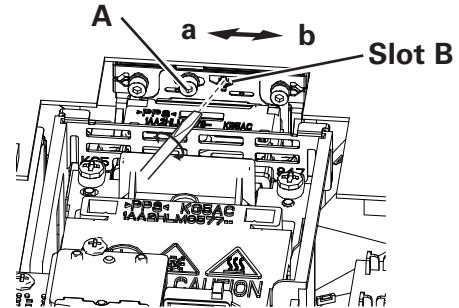
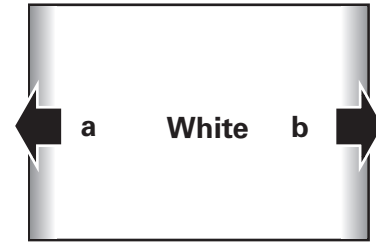
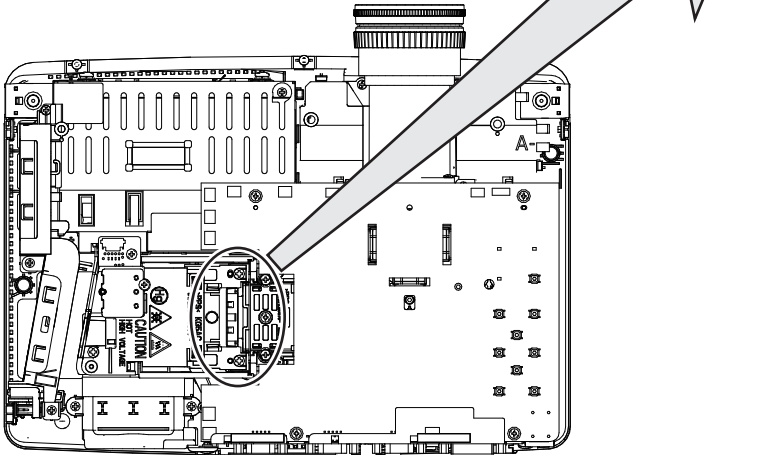
## Optical Adjustments

### Integrator lens adjustment

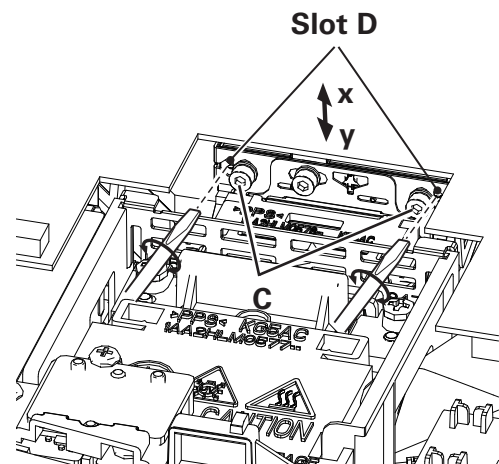
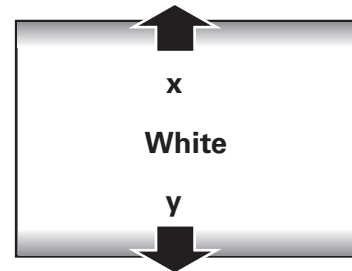
- 1 Turn the projector on by a state of without FPC cables.
- 2 Project all of lights on the screen.
- 3 Adjust the adjustment base of integrator lens assy to make color uniformity in white.
  - 1) If the shading appears on the left or right of the screen as shown in **Fig.2-1**, loosen 1 screw **A**, and adjust the slot **B** to make color uniformity in white by using a slot screwdriver.
  - 2) If the shading appears on the top or bottom of the screen as shown in **Fig.2-2**, loosen 2 screws **C**, and adjust the slots **D** to make color uniformity in white by using a slot screwdriver
- 4 Tighten screws **A** and **C** to fix the Integrator lens unit.

Note:

The relay lens adjustment must be carried out after completing this adjustment.



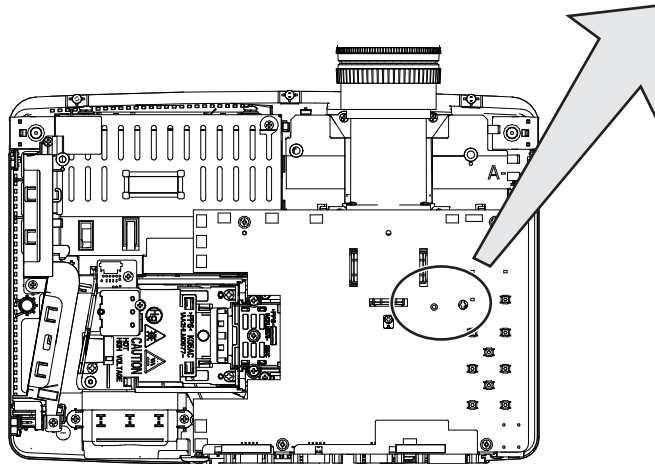
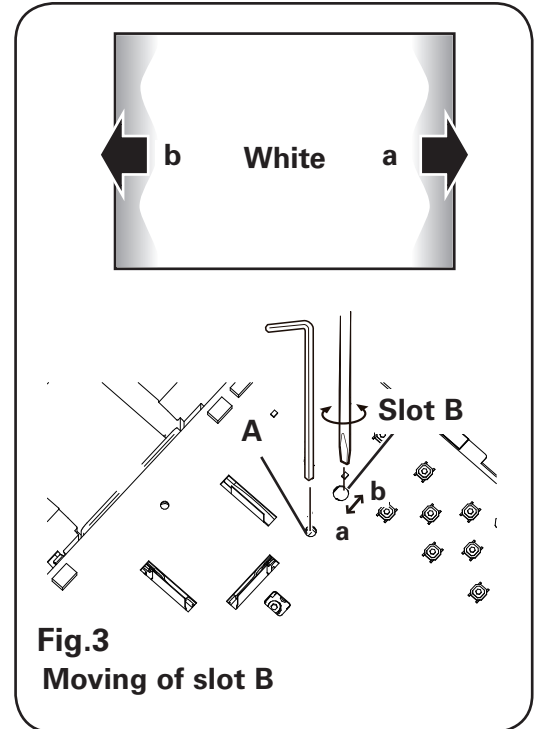
**Fig.2-1**  
Moving of slot B



**Fig.2-2**  
Moving of Slot D

## Relay lens-Out adjustment

- 1 Turn the projector on by a state of without FPC cables.
- 2 Project all of lights on the screen.
- 3 Adjust the adjustment base of relay lens assy to make color uniformity in white.  
If the shading appears on the left or right of the screen as shown in **Fig.3**, loosen 1 screw **A** by using a hex screwdriver, and adjust the slot **B** to make color uniformity in white by using a slot screwdriver.
- 4 Tighten the screw **A** to fix the relay lens unit.



# Electrical Adjustments

## Service Adjustment Menu Operation

### To enter the service mode

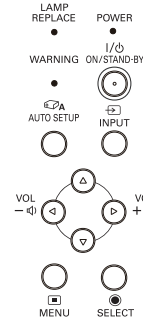
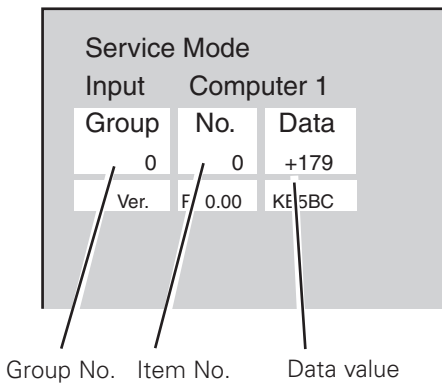
To enter the "Service Mode", press and hold the **MENU** and **SELECT** button for more than 3 seconds. The service menu appears on the screen as follows.

### To adjust service data

Select the adjustment group no. by pressing the **MENU** button (increase) or **SELECT** button (decrease), and select the adjustment item no. by pressing the pointer **▲** or **▼** button, and change the data value by pressing the **◀** or **▶** button. Refer to the "Service Adjustment Data Table" for further description of adjustment group no., item no. and data value.

### To exit the service mode

To exit the service mode, press the **ON/STAND-BY** button.



## Memory IC (IC1371) Replacement

Memory IC on the main board stores the data for the service adjustments, and should not be replaced except for the case of defective device.

If replaced, the re-adjustments are required following to the "Electrical Adjustments".

### ● Caution to memory IC replacement

When memory IC is replaced with new one, the CPU writes down the default data of the service adjustments to the replaced IC as the mentioned on the service adjustment table. As these data are not the same data as factory shipped data, it should be required to perform the re-adjustments following to the "Electrical Adjustments".

Please note that in this case the lamp replace counter will be reset.

### ● Caution of Main Board replacement (in the case memory IC is not defective)

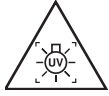
When the main board is replaced, memory IC should be replaced with the one on previous main board. After replacement, it should be required to perform the re-adjustments following to the "Electrical Adjustments".

In this case, the lamp replace counter can be kept the value as before.

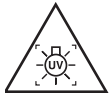
## Electrical Adjustments

### Circuit Adjustments

CAUTION: The each circuit has been made by the fine adjustment at factory. Do not attempt to adjust the following adjustments except requiring the readjustments in servicing otherwise it may cause loss of performance and product safety. Before adjustment, please turn on the projector more than ten minutes.



**WARNING : USE UV RADIATION EYE AND SKIN PROTECTION DURING SERVICING.**



**CAUTION:**  
**To prevent suffer of UV radiation, those adjustments must be completed within 25 minutes.**

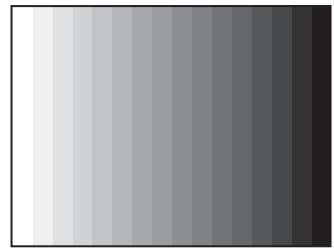
#### [Adjustment Condition]

- Input signal
  - Video signal .....1.0Vp-p/75Ω terminated, 16 steps gray scale (Composite video signal)
  - Component Video signal .....1.0Vp-p/75Ω terminated, 8 color 100% color bar or 16 step gray scale (Component video signal)
  - Computer signal.....0.7Vp-p/75Ω terminated, 16 steps gray scale pattern
- Image control mode .....“STANDARD” mode unless otherwise noted.

#### Note:

\* Please refer to “Service Adjustment Menu Operation” for entering the service mode and adjusting the service data.

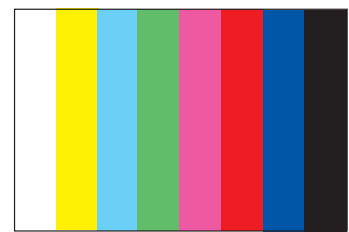
#### 16 steps gray scale pattern



↑  
White 100%

↑  
Black 100%

#### 8 color 100% color bar



↑  
W

↑  
Y

↑  
C

↑  
G

↑  
M

↑  
R

↑  
B

↑  
BLK

↑  
White 100%

↑  
Black 100%

## Output Voltage adjustment

After replacing the Power Board readjust the Output voltage adjustment as follows.

1. Connect a digital voltmeter to RED WIRE (+) and BLACK WIRE (-).
2. Adjust the voltage by using VR621 as following.

AC Input	Reading
230V	374V $\pm$ 1V

Caution:

Be sure to connect the lamp when taking this adjustment.

\* This adjustment is not required even if the power board is replaced because this adjustment is carried out before parts shipment.

## 2. Fan Control adjustment

1. Enter the service mode.
2. Connect a digital voltmeter to test point "TPFANA" (+) and chassis ground (-). Select group no. "250"; item no. "0" and change data value to adjust voltage to be **5.0  $\pm$ 0.1V**.
3. Connect a digital voltmeter to test point "TPFANA" (+) and chassis ground (-). Select item no. "1" and change data value to adjust voltage to be **13.5  $\pm$ 0.1V**.
4. Connect a digital voltmeter to test point "TPFANB" (+) and chassis ground (-). Select item no. "2" and change data value to adjust voltage to be **4.5  $\pm$ 0.1V**.
5. Connect a digital voltmeter to test point "TPFANB" (+) and chassis ground (-). Select item no. "3" and change data value to adjust voltage to be **13.5  $\pm$ 0.1V**.
6. Connect a digital voltmeter to test point "TPFANC" (+) and chassis ground (-). Select item no. "4" and change data value to adjust voltage to be **5.0  $\pm$ 0.1V**.
7. Connect a digital voltmeter to test point "TPFANC" (+) and chassis ground (-). Select item no. "5" and change data value to adjust voltage to be **13.5  $\pm$ 0.1V**.

## 1. Panel Type Check and Setting

\* Before setting, you need to check which type of LCD panel is placed on the projector according to the item "LCD Panel/Prism Ass'y removal" in the chapter "Optical Parts Disassembly".

1. Enter the service mode.

2. Panel Type Check

Select group no. "290"; item no. "0". Check the data value as follows;

Data value: 0 For L-Type of LCD Panel

Data value: 20 For R-Type of LCD panel

3. Panel Type Setting

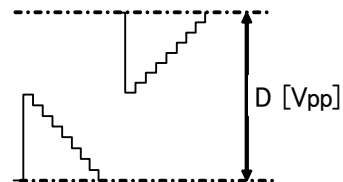
Select group no. "290"; item no. "1" and change data value from 10 to 0 or 20 depending on your LCD Panel type. When the data value reaches 0 or 20, it returns to 10 quickly. The gamma-characteristics changes according to your selection.

### Note:

Be careful to take this adjustment. The value of gamma adjustment data will be reset and cannot be restored if you change the mode of LCD panel type.

## 3. Reference Voltage Adjustment

1. Enter the service mode.
2. Receive the 16-step grey scale computer signal with **Computer 1 [RGB]** mode.
3. Select group no. "101"; item no. "12" to adjust the voltage of **TP\_VMIDG** to be **7.00  $\pm$ 0.01V**.
4. Select group no. "101"; item no. "14" to adjust the voltage of **TP35G** to make the amplitude "**D[Vpp]**" to be **10.00  $\pm$ 0.05V**.



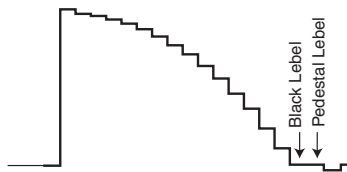
### 4. Auto Calibration adjustment [PC]

1. Enter the service mode.
2. Receive the 16-step grey scale computer signal with **Computer1 [RGB]** mode.
3. To start the auto-calibration for PC adjustment, select group no. "260", item no. "0" and then change data value from "0" to "1". After the auto-calibration completed, "OK" will appear on the screen.

Below adjustments are performed when the above auto calibration is failed.

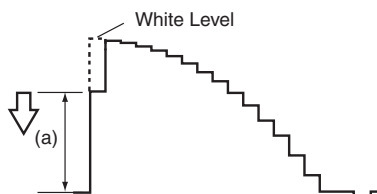
#### Pedestal adjustment [PC]

1. Enter the service mode.
2. Receive the 16-step grey scale computer signal with **Computer1 [RGB]** mode.
3. Connect an oscilloscope to test point "TP35G" (+) and chassis ground (-).
4. Select group no. "0", item no. "0" and change data value to adjust the pedestal level and black level to be the same level.
5. Connect an oscilloscope to test point "TP35R" (+) and chassis ground (-).
6. Select item no. "1" and change data value to adjust the pedestal level and black level to be the same level.
7. Connect an oscilloscope to test point "TP35B" (+) and chassis ground (-).
8. Select item no. "2" and change data value to adjust the pedestal level and black level to be the same level.



#### Gain adjustment [PC]

1. Enter the service mode.
2. Receive the 16-step grey scale computer signal with **Computer1 [RGB]** mode.
3. Connect an oscilloscope to test point "TP35G" (+) and chassis ground (-).
4. Select group no. "0", item no. "3" and adjust the amplitude "a" to be minimum by changing the Data value.
5. Connect an oscilloscope to test point "TP35R" (+) and chassis ground (-).
6. Select group no. "0", item no. "4" and adjust the amplitude "a" to be minimum by changing the Data value.
7. Connect an oscilloscope to test point "TP35B" (+) and chassis ground (-).
8. Select group no. "0", item no. "5" and adjust the amplitude "a" to be minimum by changing the Data value.



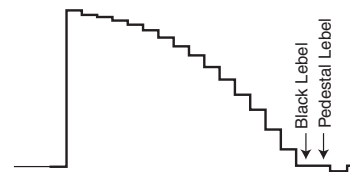
### 5. Auto Calibration adjustment [Component]

1. Enter the service mode.
2. Receive the 8 color 100% color bar 480i-component signal with **Computer2 [Component]** mode.
3. To start the auto-calibration for Component adjustment, select group no. "260", item no. "0" and then change data value from "0" to "1". After the auto-calibration completed, "OK" will appear on the screen.

Below adjustments are performed when the above auto calibration is failed.

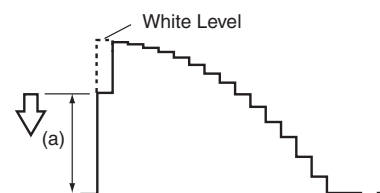
#### Pedestal adjustment [Component]

1. Enter the service mode.
2. Receive the 16-step grey scale 480i-component signal with **Computer2 [Component]** mode.
3. Connect an oscilloscope to test point "TP35G" (+) and chassis ground (-).
4. Select group no. "0", item no. "0" and change data value to adjust the pedestal level and black level to be the same level.
5. Connect an oscilloscope to test point "TP35R" (+) and chassis ground (-).
6. Select item no. "1" and change data value to adjust the pedestal level and black level to be the same level.
7. Connect an oscilloscope to test point "TP35B" (+) and chassis ground (-).
8. Select item no. "2" and change data value to adjust the pedestal level and black level to be the same level.



#### Gain adjustment [Component]

1. Enter the service mode.
2. Receive the 16-step grey scale 480i-component signal with **Computer2 [Component]** mode.
3. Connect an oscilloscope to test point "TP35G" (+) and chassis ground (-).
4. Select group no. "0", item no. "3" and adjust the amplitude "a" to be minimum by changing the Data value.



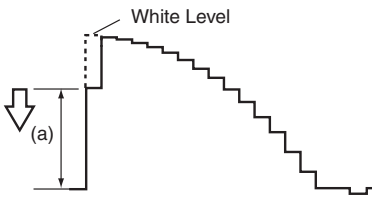
### 6. Auto Calibration adjustment [Video]

1. Enter the service mode.
2. Receive the 16-step grey scale composite video signal with **Video** mode.
3. To start the auto-calibration for Component adjustment, select group no. "260"; item no. "0" and then change data value from "0" to "1". After the auto-calibration completed, "OK" will appear on the screen.

below adjustment is performed when the above auto calibration is failed.

#### Gain adjustment [Video]

1. Enter the service mode.
2. Receive the 16-step grey scale composite video signal with **Video [Video]** mode.
3. Connect an oscilloscope to test point "TP35G" (+) and chassis ground (-).
4. Select group no. "20"; item no. "0" and adjust the amplitude "a" to be minimum by changing the Data value.

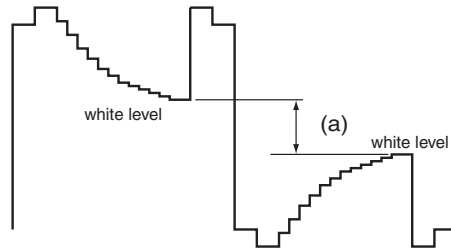


### 7. Common Center adjustment

1. Enter the service mode.
2. Receive the 50%-Whole Gray computer signal with **Computer1 [RGB]** mode.
3. Select group no. "100"; item no. "92" and change data value to "2" to reduce the panel frequency.
4. Project only green light component to the screen.
5. Select group no. "101"; item no. "1" and change data value to obtain the minimum flicker on the screen.
6. Project only red light component to the screen.
7. Select item no. "0" and change data value to obtain the minimum flicker on the screen.
8. Project only blue light component to the screen.
9. Select item no. "2" and change data value to obtain the minimum flicker on the screen.
10. Select group no. "100"; item no. "92" and change data value to "0" to reset the panel frequency.

### 8. 50% White adjustment [PC]

1. Enter the service mode.
2. Receive the 16-step grey scale computer signal with **Computer1 [RGB]** mode.
3. Connect an oscilloscope to test point "TP35G" (+) and chassis ground (-).
4. Select group no. "100"; item no. "6" and change data value to adjust amplitude "a" to be  $1.6 \pm 0.1 V$ .



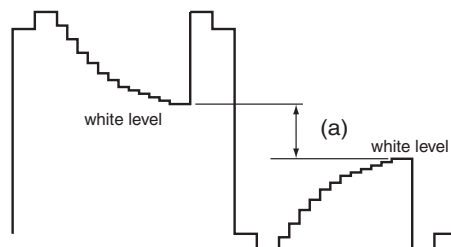
### 9. White Balance adjustment [PC]

1. Enter the service mode,
2. Receive the 16-step gray scale computer signal with **Computer1 [RGB]** mode.
3. Select group no. "100" item no. "7" (Red) or "8" (Blue), and change Data values respectively to make a proper white balance.

Confirm that the same white balance is obtained in video and computer input.

### 10. 50% White adjustment [Video]

1. Enter the service mode.
2. Receive the 16-step grey scale composite video signal with **Video[Video]** mode.
3. Connect an oscilloscope to test point "TP35G" (+) and chassis ground (-).
4. Select group no. "100"; item no. "6" and change data value to adjust amplitude "a" to be  $1.6 \pm 0.1 V$ .





### 11. White Balance adjustment [Video]

---

1. Enter the service mode.
2. Receive the 16-step grey scale composite video signal with **Video[Video]** mode.
3. Select group no. "**100**" item no. "**7**" (Red) or "**8**" (Blue), and change Data values respectively to make a proper white balance.

Confirm that the same white balance is obtained in video and computer input.

### 12. Keystone Offset adjustment

---

After replacing the G-sensor circuit (IC3851) or Memory IC (IC1371), readjust the Keystone Offset adjustment as follows.

1. Put the projector on a horizontal place with the adjustable feet being minimum range and then enter the service mode.
2. Select group no. "**102**", item no. "**3**" and set data value from "**0**" to "**5**".
3. By pressing the **SELECT** button, the Keystone Offset adjustment will start.
4. When it has completed, the "OK" message will appear on the screen.
5. By pressing any button on the projector or the remote control, the "OK" message will disappear. (Data value of Group no. "102", item no. "3" will be back from "5" to "0" for initial value.)

### Color Shading Correction adjustment

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If the correction of the Color shading adjustment is necessary, please adjust the "Color shading" by using the "COLOR SHADING CORRECTION" software supplied separately.

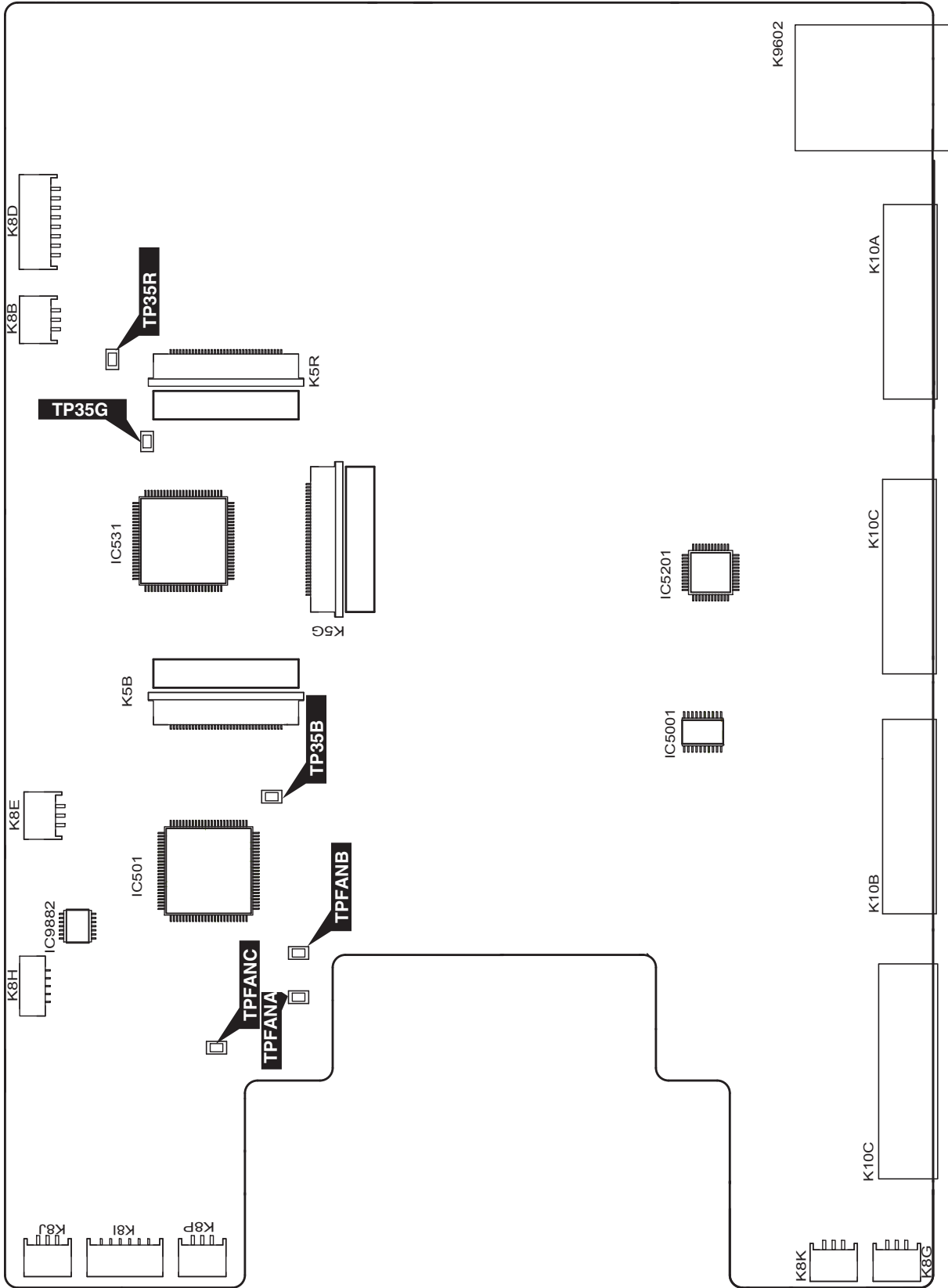
The color shading correction adjustment for this model should be performed with the whole-gray patterns specified as below.

**4-input patterns:**

**6.25% gray, 12.5% gray, 25% gray, 50% gray**

Test Points and Locations

MAIN BOARD



**Service Adjustment Data Table**

These initial values are the reference data written from the CPU ROM to memory IC when replaced new memory IC. The adjustment items indicated with “\*” are required to readjust following to the “Electrical adjustments.” Other items should be used with the initial data value.



Group/Item	Item Name	Function	Initial	Range	Note
<b>Group 0</b>	<b>AD Converter (PW190)</b>				
0	ADC G-OFFSET	PC / Component / SCART	128/120/128	0 - 255	* G-Pedestal Adjustment
1	ADC R-OFFSET	PC / Component / SCART	128/140/128	0 - 255	* R-Pedestal Adjustment
2	ADC B-OFFSET	PC / Component / SCART	128/140/128	0 - 255	* B-Pedestal Adjustment
3	ADC G-GAIN	PC / Component / SCART	50/50/50	0 - 255	* G-Gain Adjustmen
4	ADC R-GAIN	PC / Component / SCART	40/40/40	0 - 255	* R-Gain Adjustmen
5	ADC B-GAIN	PC / Component / SCART	40/40/40	0 - 255	* B-Gain Adjustmen
6	GRAAFLTR/RBAAFLTR	Green (Red and Blue) Anti-Alias Filter	4 / R / R	0 - 7	
7	GRNAADWNSMPL / RBAADWNSMPL	Green (Red and Blue) Anti-Alias Downsample	0 / R / R	0 - 3	Composite & S-Video / Component / PC
8	GRNAAHF / RBAAHF	Green (Red and Blue) Anti-Alias High Frequency	3 / R / R	0 - 3	*R: Read only value
10	SOGTH	PC / Component / SCART SyncOn Green Threhold	8 / 8 / 4	0 - 15	
11	SOGHYSDIS	PC / Component / SCART Sync On Green Hsysterisis Enable	0	0 - 1	
12	HS1TH		4	0 - 7	
13	HS0TH		4	0 - 7	
100	PreCoast PC Signal		3	0 - 63	
101	PostCoast PC Signal		8	0 - 63	
120	PreCoast PC Video 480i		7	0 - 63	
121	PostCoast PC Video 480i		13	0 - 63	
122	PreCoast PC Video 575i		7	0 - 63	
123	PostCoast PC Video 575i		13	0 - 63	
124	PreCoast PC Video 480p		7	0 - 63	
125	PostCoast PC Video 480p		13	0 - 63	
126	PreCoast PC Video 575p		7	0 - 63	
127	PostCoast PC Video 575p		13	0 - 63	
128	PreCoast PC Video 720p 60Hz		7	0 - 63	
129	PostCoast PC Video 720p 60Hz		13	0 - 63	
130	PreCoast PC Video 720p 50Hz		7	0 - 63	
131	PostCoast PC Video 720p 50Hz		13	0 - 63	
132	PreCoast PC Video 1080i 60Hz		7	0 - 63	
133	PostCoast PC Video 1080i 60Hz		13	0 - 63	
134	PreCoast PC Video 1080i 50Hz		7	0 - 63	
135	PostCoast PC Video 1080i 50Hz		13	0 - 63	
136	PreCoast PC Video 1035i		7	0 - 63	
137	PostCoast PC Video 1035i		13	0 - 63	
138	PreCoast PC Video 1080p 60Hz		7	0 - 63	
139	PostCoast PC Video 1080p 60Hz		13	0 - 63	
140	PreCoast PC Video 1080p 50Hz		7	0 - 63	
141	PostCoast PC Video 1080p 50Hz		13	0 - 63	
142	PreCoast PC Video 1080p 30Hz		7	0 - 63	
143	PostCoast PC Video 1080p 30Hz		13	0 - 63	
144	PreCoast PC Video 1080p 25Hz		7	0 - 63	
145	PostCoast PC Video 1080p 25Hz		13	0 - 63	
146	PreCoast PC Video 1080p 24Hz		7	0 - 63	
147	PostCoast PC Video 1080p 24Hz		13	0 - 63	

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
150	PreCoast YCbCr 480i		7	0 - 63	
151	PostCoast YCbCr 480i		13	0 - 63	
152	PreCoast YCbCr 575i		7	0 - 63	
153	PostCoast YCbCr 575i		13	0 - 63	
154	PreCoast YCbCr 480p		7	0 - 63	
155	PostCoast YCbCr 480p		13	0 - 63	
156	PreCoast YCbCr 575p		7	0 - 63	
157	PostCoast YCbCr 575p		13	0 - 63	
158	PreCoast YCbCr 720p 60Hz		7	0 - 63	
159	PostCoast YCbCr 720p 60Hz		13	0 - 63	
160	PreCoast YCbCr 720p 50Hz		7	0 - 63	
161	PostCoast YCbCr 720p 50Hz		13	0 - 63	
162	PreCoast YCbCr 1080i 60Hz		7	0 - 63	
163	PostCoast YCbCr 1080i 60Hz		13	0 - 63	
164	PreCoast YCbCr 1080i 50Hz		7	0 - 63	
165	PostCoast YCbCr 1080i 50Hz		13	0 - 63	
166	PreCoast YCbCr 1035i		7	0 - 63	
167	PostCoast YCbCr 1035i		13	0 - 63	
180	PreCoast SCART 480i		7	0 - 63	
181	PostCoast SCART 480i		13	0 - 63	
182	PreCoast SCART 575i		7	0 - 63	
183	PostCoast SCART 575i		13	0 - 63	
<b>Group 10</b>	<b>Sync Processor</b>				
0	SYNCAMPHLCKTOLOW	Minimum sync amplitude threshold for HLCK 1 to 0 transition	0x1000	0 - 9999	
1	SYNCAMPHLCKTOHI	Minimum sync amplitude threshold for HLCK 0 to 1 transition	0x700	0 - 9999	
<b>Group 20</b>	<b>Video Decoder *R : Read Only Value</b>				
0	Y Level	Composite / S-Video - Y Level (ADC RGB Gain)	10 / 10	0 - 255	Composite / S-Video * Gain Adjustment [Video]
1	C Level	Composite / S-Video - C Level (ADC Saturation)	115 / 115	0 - 255	Composite / S-Video
2					
3	XCXL Level	Cross-Chroma, Cross-Luma Level	3	0 - 5	
4	C2DNBANDWIDTH	Comb 2D Narrow Bandwidth	3 / 3	0 - 3	NTSC/PAL
5	C2DWBANDWIDTH	Comb 2D Wide Bandwidth	4 / 4	0 - 7	NTSC/PAL
6	C2DCNMINLEAK	Comb 2D Chroma Narrow Band Minimum Leakage	0 / 3	0 - 3	Left Values are adjustable if CXCL Level = 5.
7	C2DCNSLOPELEAK	Comb 2D Narrow Band Slope Leakage	7 / 7	0 - 7	NTSC/PAL
8	C2DCWMINLEAK	Comb 2D Wide Band Minimum Leakage	1 / 3	0 - 3	NTSC/PAL
9	C2DCWSLOPELEAK	Comb 2D CW Slope Leakage	6 / 6	0 - 7	NTSC/PAL
10	COMBLEAK2BPGAIN	Comb Leak To Ban Pass Gain	1 / 0	0 - 3	NTSC/PAL
11	C2DBDIAGONALGAIN	Comb 2D Band Pass Diagonal Gain	1 / 3	0 - 3	NTSC/PAL
12	C2DNBCWBCLGAIN	Comb 2D Narrow Band Comb Wide Band Comb	1 / 1	0 - 3	NTSC/PAL
13	RLUMASETUP-Enable	75IRE Setup Enable	0	0 - 1	Effective only NTSC Signal
<b>Group 40</b>	<b>General</b>				
0	IP Mode	Sets for IP Off	1	0 - 1	0: IP Block not used 1: IP OFF used with IP Block
1	3:2 PullDown Mode		1	1 - 3	bit0 : Global Motion bit1 : Video Motion
2	Detect Film Mode Enable		0	0 - 2	0 : 2:3pull down & 2:2pull down 1 : 2:3pull down 2 : 2:2pull down
3	Force IP Mode		2	0 - 2	0 : IP Process Disable 1 : Force Normal IP Mode 2 : Force Film Mode Effective only for PSF Signal.
<b>Group 41</b>	<b>Deinterlacer setting</b> Effective only for Progressive ON-L1 mode.				

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
0	Motion Adaptive Weight Value	<KDEINT>	30	0 - 255	
1	Angle Interpolation Level	0 : Conservative <====> 4 : Aggressive	4	0 - 4	
2	CUE Low Pass Filter Enable	<CUELPFEN>	0	0 - 1	
<b>Group 42</b>	<b>Deinterlacer setting</b> Effective only for Progressive ON-L2 mode.				
0	Motion Adaptive Weight Value	<KDEINT>	0	0 - 255	
1	Angle Interpolation Level	0 : Conservative <====> 4 : Aggressive	2	0 - 4	
2	CUE Low Pass Filter Enable	<CUELPFEN>	0	0 - 1	
<b>Group 43</b>	<b>Deinterlacer setting</b> Effective only for Progressive ON/Film mode.				
0	Motion Adaptive Weight Value	<KDEINT>	30	0 - 255	
1	Angle Interpolation Level	0 : Conservative <====> 4 : Aggressive	4	0 - 4	
2	CUE Low Pass Filter Enable	<CUELPFEN>	0	0 - 1	
<b>Group 45</b>	<b>Noise Reduction (Time)</b> Effective only for N.R - Off				
0	Noise Pixel Range	<NSRANGEY> / <NSRANGEUV>	1	0 - 2	
1	Noise Region 0	<NSREGIONY0> / <NSREGIONUV0>	12	0 - 1023	
2	Noise Region 1	<NSREGIONY1> / <NSREGIONUV1>	24	0 - 1023	
3	Noise Region 2	<NSREGIONY2> / <NSREGIONUV2>	40	0 - 1023	
4	Noise Gain Level	<NSFILTERY**> / <NSFILTERUV**>	0	0 - 255	
<b>Group 47</b>	<b>Noise Reduction (Time)</b> Effective only for N.R L1				
0	Noise Pixel Range	<NSRANGEY> / <NSRANGEUV>	1	0 - 2	
1	Noise Region 0	<NSREGIONY0> / <NSREGIONUV0>	12	0 - 1023	
2	Noise Region 1	<NSREGIONY1> / <NSREGIONUV1>	24	0 - 1023	
3	Noise Region 2	<NSREGIONY2> / <NSREGIONUV2>	40	0 - 1023	
4	Noise Gain Level	<NSFILTERY**> / <NSFILTERUV**>	50	0 - 255	
<b>Group 49</b>	<b>Noise Reduction (Time)</b> Effective only for N.R L2				
0	Noise Pixel Range	<NSRANGEY> / <NSRANGEUV>	1	0 - 2	
1	Noise Region 0	<NSREGIONY0> / <NSREGIONUV0>	12	0 - 1023	
2	Noise Region 1	<NSREGIONY1> / <NSREGIONUV1>	24	0 - 1023	
3	Noise Region 2	<NSREGIONY2> / <NSREGIONUV2>	40	0 - 1023	
4	Noise Gain Level	<NSFILTERY**> / <NSFILTERUV**>	100	0 - 255	
<b>Group 50</b>	<b>2:2pull down setting</b>				
0	22Film Mode Sensitivity	Film Detection Sensitivity <FILMSTVT22>	4	1 - 5	
1	22Film Mode Threshold Low	<FILMTHRD22A>	80	0 - 32767	
2	22Film Mode Threshold High	<FILMTHRD22B>	120	0 - 32767	
3	VOFTHR13	<VOFTHR13>	124	0 - 1023	Read only
4	VOFTHR12	<VOFTHR12>	124	0 - 1023	Read only
5	VOFTHR23	<VOFTHR23>	124	0 - 1023	Read only
6	Video Motion Window Start X	<VOFSTARX>	10	0 - 2047	Range of detective for Film mode
7	Video Motion Window Stop X	<VOFSTOPX>	10	0 - 2047	Range of detective for Film mode
8	Video Motion Window Start Y	<VOFSTARY>	10	0 - 1023	Range of detective for Film mode
9	Video Motion Window Stop Y	<VOFSTOPY>	10	0 - 1023	Range of detective for Film mode
<b>Group 51</b>	<b>2:3pull down setting</b>				

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
0	Global Motion Sensitivity	Film Detection Sensitivity <FILMSTVT23>	4	1 - 5	
1	Video Motion Sensitivity	Film Detection Sensitivity <VOFSTVT>	4	1 - 5	
2	Video Motion Threshold Low	<VOFTHRDA>	120	0 - 32767	
3	Video Motion Threshold High	<VOFTHRDB>	180	0 - 32767	
4	Global Motion Threshold	<GMDTHRD>	124	0 - 1024	
5	23Film Mode Threshold	<FILMTHRD23>	100	0 - 32767	
6	Global Motion Window Start X	<GMDSTARX>	10	0 - 2047	Range of detective for Film mode
7	Global Motion Window Stop X	<GMDSTOPX>	10	0 - 2047	Range of detective for Film mode
8	Global Motion Window Start Y	<GMDSTARY>	10	0 - 1023	Range of detective for Film mode
9	Global Motion Window Stop Y	<GMDSTOPY>	10	0 - 1023	Range of detective for Film mode
<b>Group 60</b>	<b>Image</b>				
0	Center Contrast		512/556/534/534/492/492	0 - 1023	
1	Center Brightness		512/480/512/500/512/512	0 - 1023	Video(S-Video) / Component / SCART /
2	Center Color		512/534/512/512/512/512	0 - 1023	ANALOG / DIGITAL / HDCP
3	Center Tint		90/90/90/90/90/90	0-180	Setting Value=
4	Center Sharpness		16/16/16/16/16/16	16	(MENU Value - MENU Center Value )
5	Alpha Contrast		40/40/40/40/40/40	0-1000	x Alpha / 10 + Center
6	Alpha Brightness		70/70/70/70/70/70	0-1000	[Setting Value to PwV]
7	Alpha Color		70/70/70/70/70/70	0-1000	Contrast [Max] 1023 [Min] 0
8	Alpha Tint		10/10/10/10/10/10	0-1000	Brightness [Max] 1023 [Min] 0
9	Alpha Sharpness		10/10/10/10/10/10	0-1000	Color [Max] 1023 [Min] 0
					Tint [Max] 180 [Min] 0
					Sharpness [Max] 57 [Min] 0
<b>Group 100</b>	<b>Panel Service</b>				
0	G-SubGain		2048/2064/2000/2000/1950/1950/1830/1900	0-4095	PCStandard/PCDynamic/PCReal/PCBlackBoard/AVStandard/AVDynamic/AVCinema/AVBlackBoard
1	R-SubGain		2048/2064/2000/2000/1850/2048/1950/2048	0-4095	
2	B-SubGain		2048/2064/2000/2000/2048/2000/2048/2048	0-4095	
3	G-SubBright		0/0/24/32/0/0/0/0	0-4095	PCStandard/PCDynamic/PCReal/PCBlackBoard/AVStandard/AVDynamic/AVCinema/AVBlackBoard
4	R-SubBright		0/0/24/40/0/32/0/32	0-4095	
5	B-SubBright		0/0/24/32/16/0/50/32	0-4095	
6	G-GammaShift		0	0-4095	PC/AV Center=512 [R] and [B] are linked with [G]
7	R-GammaShift		0	0-4095	
8	B-GammaShift		0	0-4095	
9	G-ReferH		4000/4000	0-4095	[R] and [B] are linked with [G] Scan Direction (Front/Rear)
10	G-ReferL		1048/1048	0-4095	[R] and [B] are linked with [G] Scan Direction (Front/Rear)
11	R-ReferH		4000/4000	0-4095	Scan Direction (Front/Rear)
12	R-ReferL		1048/1048	0-4095	Scan Direction (Front/Rear)
13	B-ReferH		4000/4000	0-4095	Scan Direction (Front/Rear)
14	B-ReferL		1048/1048	0-4095	Scan Direction (Front/Rear)
15	DXOutR		234	0-1023	
16	DXOutG		234	0-1023	
17	DXOutB		234	0-1023	
18	H_Change_Pos		30	0-255	
19	SH_Base		273	0-4095	
20	NRG_Pos		42	0-127	
21	NRG_Width		31	0-255	
22	OSD_Pos		2	0-3	
23	OSD_Ptn		0	0-9	
24	GammaCtrl		1	0-1	
25	REF_GatePos		30	0-1023	
26	REF_GateDur		130	0-1023	
27	R-BasePos		8	0-15	
28	G-BasePos		8	0-15	
29	B-BasePos		8	0-15	
30	RGB-Adjust		0	0-7	
31	RGB-AdjLv		0	0-4095	Operation STEP=256[0<->256<->512<->768<->1023]

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
32	LineR0		0	0-1023	(MIN<->MAX Cyclic Operation)
33	LineR1		0	0-1023	(MIN<->MAX Cyclic Operation)
34	LineR2		0	0-1023	(MIN<->MAX Cyclic Operation)
35	LineR3		0	0-1023	(MIN<->MAX Cyclic Operation)
36	LineR4		0	0-1023	(MIN<->MAX Cyclic Operation)
37	LineG0		0	0-1023	(MIN<->MAX Cyclic Operation)
38	LineG1		0	0-1023	(MIN<->MAX Cyclic Operation)
39	LineG2		0	0-1023	(MIN<->MAX Cyclic Operation)
40	LineG3		0	0-1023	(MIN<->MAX Cyclic Operation)
41	LineG4		0	0-1023	(MIN<->MAX Cyclic Operation)
42	LineB0		0	0-1023	(MIN<->MAX Cyclic Operation)
43	LineB1		0	0-1023	(MIN<->MAX Cyclic Operation)
44	LineB2		0	0-1023	(MIN<->MAX Cyclic Operation)
45	LineB3		0	0-1023	(MIN<->MAX Cyclic Operation)
46	LineB4		0	0-1023	(MIN<->MAX Cyclic Operation)
47	GhostR-Pos		8	0-31	
48	GhostG-Pos		8	0-31	
49	GhostB-Pos		8	0-31	
50	GhostR-Cent		0	0-2047	
51	GhostR-Start		128	0-255	
52	GhostR-End		128	0-255	
53	GhostG-Cent		0	0-2047	
54	GhostG-Start		128	0-255	
55	GhostG-End		128	0-255	
56	GhostB-Cent		0	0-2047	
57	GhostB-Start		128	0-255	
58	GhostB-End		128	0-255	
59	BlockR1		0	0-2047	(MIN<->MAX Cyclic Operation)
60	BlockG1		0	0-2047	(MIN<->MAX Cyclic Operation)
61	BlockB1		0	0-2047	(MIN<->MAX Cyclic Operation)
62	BlockR2		0	0-2047	(MIN<->MAX Cyclic Operation)
63	BlockG2		0	0-2047	(MIN<->MAX Cyclic Operation)
64	BlockB2		0	0-2047	(MIN<->MAX Cyclic Operation)
65	ReverceR		0	0-2047	(MIN<->MAX Cyclic Operation)
66	ReverceG		0	0-2047	(MIN<->MAX Cyclic Operation)
67	ReverceB		0	0-2047	(MIN<->MAX Cyclic Operation)
68	BackCrossR-Cent		0	0-2047	
69	BackCrossR-Start		128	0-255	
70	BackCrossR-End		128	0-255	
71	BackCrossG-Cent		0	0-2047	
72	BackCrossG-Start		128	0-255	
73	BackCrossG-End		128	0-255	
74	BackCrossBR-Cent		0	0-2047	
75	BackCrossB-Start		128	0-255	
76	BackCrossB-End		128	0-255	
77	ColshdSelect		1	0-1	
78	R-Min		276	0-1023	
79	R-Mid2		452	0-1023	
80	R-Mid1		548	0-1023	
81	R-Max		684	0-1023	
82	G-Min		276	0-1023	
83	G-Mid2		452	0-1023	
84	G-Mid1		584	0-1023	
85	G-Max		684	0-1023	
86	B-Min		276	0-1023	
87	B-Mid2		452	0-1023	
88	B-Mid1		584	0-1023	
89	B-Max		684	0-1023	
90	H-OutPos		108	0-2047	
91	OutAreaLv		0	0-1023	
92	FlickerAdj		0	0/2	not used
93	FRC_Bit		3	0-3	
94	FrontCTalkR-Cent		0	0-2047	
95	FrontCTalkR-Start		126	0-255	
96	FrontCTalkR-End		128	0-255	
97	FrontCTalkG-Cent		0	0-2047	
98	FrontCTalkG-Start		126	0-255	
99	FrontCTalkG-End		128	0-255	
100	FrontCTalkB-Cent		0	0-2047	

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
101	FrontCTalkB-Start		126	0-255	
102	FrontCTalkB-End		128	0-255	
103	R-DCOffset-NGain		0/0	0-1023	Scan Direction (Front/Rear)
104	R-DCOffset-N1		0/0	0-2047	Scan Direction (Front/Rear)
105	R-DCOffset-N2		0/0	0-2047	Scan Direction (Front/Rear)
106	R-DCOffset-N3		0/0	0-2047	Scan Direction (Front/Rear)
107	R-DCOffset-N4		0/0	0-2047	Scan Direction (Front/Rear)
108	R-DCOffset-N5		0/0	0-2047	Scan Direction (Front/Rear)
109	R-DCOffset-N6		0/0	0-2047	Scan Direction (Front/Rear)
110	R-DCOffset-N7		0/0	0-2047	Scan Direction (Front/Rear)
111	R-DCOffset-N8		0/0	0-2047	Scan Direction (Front/Rear)
112	R-DCOffset-N9		0/0	0-2047	Scan Direction (Front/Rear)
113	R-DCOffset-N10		0/0	0-2047	Scan Direction (Front/Rear)
114	R-DCOffset-N11		0/0	0-2047	Scan Direction (Front/Rear)
115	R-DCOffset-N12		0/0	0-2047	Scan Direction (Front/Rear)
116	G-DCOffset-NGain		0/0	0-1023	Scan Direction (Front/Rear)
117	G-DCOffset-N1		0/0	0-2047	Scan Direction (Front/Rear)
118	G-DCOffset-N2		0/0	0-2047	Scan Direction (Front/Rear)
119	G-DCOffset-N3		0/0	0-2047	Scan Direction (Front/Rear)
120	G-DCOffset-N4		0/0	0-2047	Scan Direction (Front/Rear)
121	G-DCOffset-N5		0/0	0-2047	Scan Direction (Front/Rear)
122	G-DCOffset-N6		0/0	0-2047	Scan Direction (Front/Rear)
123	G-DCOffset-N7		0/0	0-2047	Scan Direction (Front/Rear)
124	G-DCOffset-N8		0/0	0-2047	Scan Direction (Front/Rear)
125	G-DCOffset-N9		0/0	0-2047	Scan Direction (Front/Rear)
126	G-DCOffset-N10		0/0	0-2047	Scan Direction (Front/Rear)
127	G-DCOffset-N11		0/0	0-2047	Scan Direction (Front/Rear)
128	G-DCOffset-N12		0/0	0-2047	Scan Direction (Front/Rear)
129	B-DCOffset-NGain		0/0	0-1023	Scan Direction (Front/Rear)
130	B-DCOffset-N1		0/0	0-2047	Scan Direction (Front/Rear)
131	B-DCOffset-N2		0/0	0-2047	Scan Direction (Front/Rear)
132	B-DCOffset-N3		0/0	0-2047	Scan Direction (Front/Rear)
133	B-DCOffset-N4		0/0	0-2047	Scan Direction (Front/Rear)
134	B-DCOffset-N5		0/0	0-2047	Scan Direction (Front/Rear)
135	B-DCOffset-N6		0/0	0-2047	Scan Direction (Front/Rear)
136	B-DCOffset-N7		0/0	0-2047	Scan Direction (Front/Rear)
137	B-DCOffset-N8		0/0	0-2047	Scan Direction (Front/Rear)
138	B-DCOffset-N9		0/0	0-2047	Scan Direction (Front/Rear)
139	B-DCOffset-N10		0/0	0-2047	Scan Direction (Front/Rear)
140	B-DCOffset-N11		0/0	0-2047	Scan Direction (Front/Rear)
141	B-DCOffset-N12		0/0	0-2047	Scan Direction (Front/Rear)
142	R-DCOffset-PGain		0/0	0-1023	Scan Direction (Front/Rear)
143	R-DCOffset-P1		0/0	0-2047	Scan Direction (Front/Rear)
144	R-DCOffset-P2		0/0	0-2047	Scan Direction (Front/Rear)
145	R-DCOffset-P3		0/0	0-2047	Scan Direction (Front/Rear)
146	R-DCOffset-P4		0/0	0-2047	Scan Direction (Front/Rear)
147	R-DCOffset-P5		0/0	0-2047	Scan Direction (Front/Rear)
148	R-DCOffset-P6		0/0	0-2047	Scan Direction (Front/Rear)
149	R-DCOffset-P7		0/0	0-2047	Scan Direction (Front/Rear)
150	R-DCOffset-P8		0/0	0-2047	Scan Direction (Front/Rear)
151	R-DCOffset-P9		0/0	0-2047	Scan Direction (Front/Rear)
152	R-DCOffset-P10		0/0	0-2047	Scan Direction (Front/Rear)
153	R-DCOffset-P11		0/0	0-2047	Scan Direction (Front/Rear)
154	R-DCOffset-P12		0/0	0-2047	Scan Direction (Front/Rear)
155	G-DCOffset-PGain		0/0	0-2013	Scan Direction (Front/Rear)
156	G-DCOffset-P1		0/0	0-2047	Scan Direction (Front/Rear)
157	G-DCOffset-P2		0/0	0-2047	Scan Direction (Front/Rear)
158	G-DCOffset-P3		0/0	0-2047	Scan Direction (Front/Rear)
159	G-DCOffset-P4		0/0	0-2047	Scan Direction (Front/Rear)
160	G-DCOffset-P5		0/0	0-2047	Scan Direction (Front/Rear)
161	G-DCOffset-P6		0/0	0-2047	Scan Direction (Front/Rear)
162	G-DCOffset-P7		0/0	0-2047	Scan Direction (Front/Rear)
163	G-DCOffset-P8		0/0	0-2047	Scan Direction (Front/Rear)
164	G-DCOffset-P9		0/0	0-2047	Scan Direction (Front/Rear)
165	G-DCOffset-P10		0/0	0-2047	Scan Direction (Front/Rear)
166	G-DCOffset-P11		0/0	0-2047	Scan Direction (Front/Rear)
167	G-DCOffset-P12		0/0	0-1023	Scan Direction (Front/Rear)
168	B-DCOffset-PGain		0/0	0-1023	Scan Direction (Front/Rear)
169	B-DCOffset-P1		0/0	0-2047	Scan Direction (Front/Rear)



## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
170	B-DCOffset-P2		0/0	0-2047	Scan Direction (Front/Rear)
171	B-DCOffset-P3		0/0	0-2047	Scan Direction (Front/Rear)
172	B-DCOffset-P4		0/0	0-2047	Scan Direction (Front/Rear)
173	B-DCOffset-P5		0/0	0-2047	Scan Direction (Front/Rear)
174	B-DCOffset-P6		0/0	0-2047	Scan Direction (Front/Rear)
175	B-DCOffset-P7		0/0	0-2047	Scan Direction (Front/Rear)
176	B-DCOffset-P8		0/0	0-2047	Scan Direction (Front/Rear)
177	B-DCOffset-P9		0/0	0-2047	Scan Direction (Front/Rear)
178	B-DCOffset-P10		0/0	0-2047	Scan Direction (Front/Rear)
179	B-DCOffset-P11		0/0	0-2047	Scan Direction (Front/Rear)
180	B-DCOffset-P12		0/0	0-2047	Scan Direction (Front/Rear)
181	ENBX-R		0	0-127	
182	ENBX-G		0	0-127	
183	ENBX-B		0	0-127	
184	DXOutPos		0	0-1	
185	R_V_INPUT_SETP_0		22	0-1023	
186	R_V_INPUT_SETP_512		18	0-1023	
187	R_V_INPUT_SETP_1024		14	0-1023	
188	R_V_INPUT_SETP_1536		10	0-1023	
189	R_V_INPUT_SETP_2048		4	0-1023	
190	R_V_INPUT_SETP_2560		0	0-1023	
191	R_V_INPUT_SETP_3072		1019	0-1023	
192	R_V_INPUT_SETP_3584		1016	0-1023	
193	R_V_INPUT_SETP_4096		1013	0-1023	
194	G_V_INPUT_SETP_0		22	0-1023	
195	G_V_INPUT_SETP_512		18	0-1023	
196	G_V_INPUT_SETP_1024		14	0-1023	
197	G_V_INPUT_SETP_1536		10	0-1023	
198	G_V_INPUT_SETP_2048		4	0-1023	
199	G_V_INPUT_SETP_2560		0	0-1023	
200	G_V_INPUT_SETP_3072		1019	0-1023	
201	G_V_INPUT_SETP_3584		1016	0-1023	
202	G_V_INPUT_SETP_4096		1013	0-1023	
203	B_V_INPUT_SETP_0		22	0-1023	
204	B_V_INPUT_SETP_512		18	0-1023	
205	B_V_INPUT_SETP_1024		14	0-1023	
206	B_V_INPUT_SETP_1536		10	0-1023	
207	B_V_INPUT_SETP_2048		4	0-1023	
208	B_V_INPUT_SETP_2560		0	0-1023	
209	B_V_INPUT_SETP_3072		1019	0-1023	
210	B_V_INPUT_SETP_3584		1016	0-1023	
211	B_V_INPUT_SETP_4096		1013	0-1023	
212	ERPPOL		84	0-4095	
213	FRP_POS		32	0-255	
214	SWAP		1344	0-2047	
215	PRE_COLSHD_SEL		0	0-255	
216	HSYNC_FOLLOW		1	0-1	
217	DELAY_HSYNC		0	0-2047	
218	DELAY_VSYNC		16	0-255	
219	VSYNC_FOLLOW		0	0-1	
220	BLANK_RCENTER		0	0-2047	
221	BLANK_RSTART		128	0-255	
222	BLANK_REND		128	0-255	
223	BLANK_GCENTER		0	0-2047	
224	BLANK_GSTART		128	0-255	
225	BLANK_GEND		128	0-255	
226	BLANK_BCENTER		0	0-2047	
227	BLANK_BSTART		128	0-255	
228	BLANK_BEND		128	0-255	
229	Output limit R		3686/3686/3686/3686	0-4095	
230	Output limit G		3686/3686/3686/3686	0-4095	
231	Output limit B		3686/3686/3686/3686	0-4095	
232	CROSSTALK_COEF_R		1023	0-1023	
233	CROSSTALK_COEF_G		1023	0-1023	
234	CROSSTALK_COEF_B		1023	0-1023	
235	LCCON_ENABLE		1	0-1	
236	ENBY_L1		11	0-255	
237	ENBY_H1		692	0-1023	
238	ENBY_L2		11	0-255	

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
239	ENBY_H2		692	0-1023	
<b>Group 101</b>	<b>Panel Service(6170/62334)</b>				
0	R_LCCOM		153	0-255	
1	G_LCCOM		153	0255	
2	B-LCCOM		153	0-255	
3	R-ENBX-PW		5	0-15	
4	G-ENBX-PW		5	0-15	
5	B-ENBX-PW		5	0-15	
6	R-DXIN		44	0-127	
7	G-DXIN		44	0-127	
8	B-DXIN		44	0-127	
9	R-ENB11N		20	0-31	
10	G-ENBX11N		20	0-31	
11	B-ENBX11N		20	0-31	
12	Vmid		153	0-255	
13	R-Ref		165	0-255	
14	G-Ref		165	0-255	
15	G-Ref		165	0-255	
<b>Group 102</b>	<b>Auto Keystone Setup Value</b>				
0	OFFSET		0	-1056 - 1056	
1	OFFSET SWITCH		0	0 - 1	
2	DEBUG MODE		0	0 - 1	
3	SERVICE CALIBRATION		0	0 - 1	
4	LOCK COUNT		5	1 - 255	
5	DELT VERT RESULT		64	1 - 255	
6	ANGLE 1 COUNT		1	1 - 10	
7	ANGLE 2 COUNT		5	1 - 10	
8	BLIND SECTOR 1		160	0 - 1024	
9	BLIND SECTOR 3		32	0 - 1024	
10	BLIND SECTOR BIAS		61	0 - 1024	
<b>Group 103</b>	<b>Help mode for panle domain</b>				
0	Help mode on/off		1	0-1	
1	APL threshold value		230	0 - 255	
2	Max value		21	0 - 255	
3	Value per unit time		3	0 - 50	
4	Time per 1step		1	1 - 30	
5	Realtime APL		RO	1 - 255	
<b>Group 200</b>	<b>Option</b>				
0	Logo Prohibition (Forced No Brand)	Logo Prohibition (0: Menu, 1: Forced, 2: China, 3-9: not used)	0	0 - 2	Effective after AC On
1	RS232C Baudrate	Baud Rate	0	0 - 2	0: 19200bps, 1: 9600bps, 2: 115200bps
2	PJLink Enable	PJLink	0	0 - 1	0: Disable 1: Enable
3	Shipping Setting		0	0 - 20	Default set when the value is set to 10
4	CABLE SW	Long Cable	0	0 - 10	0: Disable, 1: Enable
5	PW Debug Command Enable		0	0 - 1	0:Disable (Serial Command Eanble) 1: Enable (PW Debug Mode)
6	Device Refresh Disable		0	0 - 1	0:Enable, 1:Disable No last memory
7	Device Access Disable		0	0 - 1	0:Enable (Normal), 1:Disable No last memory
50	Lamp Replacement Display	Lamp Warning Display On / Off	1	0 - 1	1: On, 0: Off
51	Filter Warning Display	Filter Warning Display On / Off	1	0 - 1	1: On, 0: Off
52	Lamp Counter reset Times	Reset Times of Lamp Counter	0	0 - 255	Read only

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
53	Filter Counter Reset Times	Filter Counter Reset Times	0	0-255	
54	Factory Default Execute Times	Reset times of Factory Default	0	0 - 255	Read only
55	Motor Disable	Motors Disable	0	0 - 1	0: On, 1: Off
56	Menu Position	Move menu (X axis)	0	0 - 1024	
57	Menu Position	Move menu (Y axis)	0	0 - 1024	
58	Lamp Go Out		0	0 - 1	
59	Source Search Enable	Source Search Enable (0: Disable 1:Enable)	0	0-1	
60	Language Default Setting	Language Default setting (0: English 1:Japanese)	0	0-1	
61	OSD Aspect HL	OSD display position offset H left	105	0-1024	
62	OSD Aspect HR	OSD display position offset H right	105	0-1024	
63	Screen Aspect VT	OSD display offset V top	45	0-1024	
64	Screen Aspect VB	OSD display offset V bottom	45	0-1024	
70	RC Mode	RC mode setting	0-1	1	
<b>Group 201</b>	<b>Option (signal)</b>				
0	FrameLock Option		1	0 - 1	0: FrameLockOFF at PC signal 1: FrameLockON at PC signal and 47Hz (Vfreq) ~ Panel frequency of input signal
2	Field Sense Invert Enable		0	0 - 1	Reverse Processing of FLDINVSetting Value 0: Disable - Used FLDINV Setting Value 1: Enable - Used Reversed FLDINV Setting Value
3					
4	Sub Image Enable		1	0 - 1	0:Disable (Service Adjustment Dsiable, Used all the Center Values 1:Enable (Service Adjustment Enable)
6	Zoom Accelerator Enable		0	0 - 1	0:Zoom Accelerator OFF, 1:Zoom Accelerator ON No last memory
7	DZoom Reset by Keystone		0	0 - 1	0:Enable (Normal), 1:Disable (Dzoo is not cancelled even if Keystone is cancelled) No last memory
8	Stability Count	Count Value of V-missing	5	0 - 255	
9	Sensitivity for Signal Lost (HSYNC)	Only used this value for No Signal Judgement(Hz)	350	0 - 65535	
10	Sensitivity for Signal Lost (VSYNC)	Only used this value for No Signal Judgement(Line)	3	0 - 255	
11	Keystone Filter Center Value	Reference Value	16	0 - 30	
<b>Group 202</b>	<b>Option (MCI model only)</b>				
0	Memory Viewer OSD	Memory Viewer OSD Display (1: Yes, 0: No)	1	0 - 1	
<b>Group 210</b>	<b>LampControl</b>				
0	DIMMER_CTRL_LEVEL1	Luminance Level 1 Data for Dimmer: Dim Level 1 at the less than the Value	7	0 - 255	
1	DIMMER_CTRL_LEVEL2	Luminance Level 2 Data for Dimmer: Dim Level 2 at the less than the Value	14	0 - 255	
2	DIMMER_CTRL_LEVEL3	Luminance Level 3 Data for Dimmer: Dim Level 3 at the less than the Value	21	0 - 255	
3	DIMMER_CTRL_LEVEL4	Luminance Level 4 Data for Dimmer: Dim Level 4 at the less than the Value	28	0 - 255	
4	DIMMER_CTRL_LEVEL5	Luminance Level 5 Data for Dimmer: Dim Level 5 at the less than the Value	35	0 - 255	
5	DIMMER_CTRL_LEVEL6	Luminance Level 6 Data for Dimmer: Dim Level 6 at the less than the Value	42	0 - 255	
6	DIMMER_CTRL_LEVEL7	Luminance Level 7 Data for Dimmer: Dim Level 7 at the less than the Value	49	0 - 255	
7	DIMMER_CTRL_LEVEL8	Luminance Level 8 Data for Dimmer: Dim Level 8 at the less than the Value	56	0-255	

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note		
8	DIMMER_CTRL_LEVEL9	Luminance Level 9 Data for Dimmer: Dim Level 9 at the less than the Value	63	0-255			
9	DIMMER_CTRL_LEVEL10	Luminance Level 10 Data for Dimmer: Dim Level 10 at the less than the Value	70	0-255			
10	DIMMER_CTRL_LEVEL11	Luminance Level 11 Data for Dimmer: Dim Level 11 at the less than the Value	77	0 - 255			
11	DIMMER_CTRL_LEVEL12	Luminance Level 12 Data for Dimmer: Dim Level 12 at the less than the Value	84	0 - 255			
12	DIMMER_CTRL_LEVEL13	Luminance Level 13 Data for Dimmer: Dim Level 13 at the less than the Value	91	0 - 255			
13	DIMMER_CTRL_LEVEL14	Luminance Level 14 Data for Dimmer: Dim Level 14 at the less than the Value	98	0 - 255			
14	DIMMER_CTRL_LEVEL15	Luminance Level 15 Data for Dimmer: Dim Level 15 at the less than the Value	105	0 - 255			
15	DIMMER_AVERAGE_POINT	Luminance Data Avarage Point for Mimmer	4	0 - 16			
16	DIMMER_AVERAGE_DATA	Luminance Data Avarage Value for Dimmer	-	-	* Read only		
17	DIMMER_LEVEL_AUTO	Current Dimmer Level	-	-	* Read only		
18	DIMMER_LEVEL_NORMAL	Normal Dimmer Level	8	0 - 15			
19	DIMMER_LEVEL_ECO	Eco Dimmer Level	0	0 - 15			
20	Lamp check enable		0		0: Lamp Failure Detection OFF (White 50% Back), 1 : ON (Blue 100% Back)		
21	VOLTAGE_LEVEL	Lamp Voltage	-		Unit: 8bit(Raw Data) * Read only		
22	DIMMER_LEVEL_HIGH	Dimmer level High	15	0 - 15			
<b>Group 231</b>	<b>VBI Slice Level</b>						
0	Generic Initial Slicing Level	PW190 register 0xE344	0x34	0-255			
1	Generic High Level Threshold	PW190 register 0xE345	-	0-255			
2	Generic Low Level Threshold	PW190 register 0xE346	-	0-255			
3	Generic Minimum Low Level	PW190 register 0xE347	0x30	0-255			
4	Generic Maximum High Level	PW190 register 0xE348	0xe0	0-255			
<b>Group 250</b>	<b>FAN Control</b>						
0	FAN1 MIN ADJUST (DAC)	DAC Output for Fan	10	0 - 255			
1	FAN1 MAX ADJUST (DAC)	Adjust the tolerance of DAC and Fan Volage.	225	0 - 255			
2	FAN2 MIN ADJUST (DAC)		10	0 - 255			
3	FAN2 MAX ADJUST (DAC)	* Lamp mode is forced Eco	225	0 - 255			
4	FAN3 MIN ADJUST (DAC)		15	0-255			
5	FAN3 MAX ADJUST (DAC)		255	0-255			
6	Not used						
7	Not used						
<b>Group 251</b>							
	Not used						
<b>Group 252</b>	<b>Fan Option</b>						
0	HI-LAND SWITCH	0: Normal, 1: Hi-Land, 2-4: Hi-Land 1-3	0	0 - 5			
1	SAFETY SWITCH	For test purpose	0	0 - 6			
2	FAN MANUAL SWITCH	0: Auto, 1: Manual	0	0 - 3			
3	FAN1 MANUAL VOLTAGE	Fan Voltage (unit : 0.1V)	100	0 - 255			
4	FAN2 MANUAL VOLTAGE	Effective only when Fan Manual switch is 1	100	0 - 255			
5	FAN3 MANUAL VOLTAGE		100	0 - 255			
6	Not used		-				
<b>Group 253</b>	<b>Fan Tem Error Setting (Memorized)</b>		Normal	Ceiling	HiLand-Normal	HiLand-Ceiling	
5	Temp A Warning (Normal)	Temp. A to judge the Temp Error at Normal (Room)	42	42	41	41	30-100
6	Temp B Warning (Normal)	Temp. B to judge the Temp Error at Normal (Panel)	60	60	60	60	30-100
7	Temp C Warning (Normal)	Temp. C to judge the Temp Error at Normal (Lamp)	60	60	60	60	30-100
8	Temp B-A Warning (Normal)	Temp. B-A to judge the Temp Error at Normal (Clogging Det.)	100	100	100	100	0-100

## Electrical Adjustments

Group/Item	Item Name	Function	Initial				Range	Note
9	Temp C-A Warning(Normal)	Temp. C-A to judge the Temp Error at Normal (Clogging Det.)	100	100	100	100	0-100	
10	Temp A Warning (Eco)	Temp. A to judge the Temp Error at Eco (Room)	42	42	41	41	30-100	
11	Temp B Warning (Eco)	Temp. B to judge the Temp Error at Eco(Panel)	58	58	58	58	30-100	
12	Temp C Warning (Eco)	Temp. C to judge the Temp Error at Eco(Panel)	60	60	60	60	30-100	
13	Temp B-A Warning (Eco)	Temp. B-A to judge the Temp Error at Normal (Clogging Det.)	100	100	100	100	0-100	
14	Temp C-A Warning (Eco)	Temp. C-A to judge the Temp Error at Normal (Clogging Det.)	100	100	100	100	0-100	
15	Temp A Warning Offset (Temp)		5				0-100	
16	Temp B Warning Offset (Temp)	Offset of Temp Error (Temp.) Error Setting Value is increased XC at the below condition	5				0-100	
17	Temp C Warning Offset (Temp)	* Standby	5				0-100	
18	Temp B-A Warning Offset (Temp)	* Right to turn on the lamp * Right to change the Lamp mode	0				0-100	
19	Temp C-A Warning Offset (Temp)		0				0-100	
20	Temp A Warning Offset (Time)		3				0-100	
21	Temp B Warning Offset (Time)	Offset of Temp Error (Minutes) Error Setting Value is increased X minute at the below condition	3				0-100	
22	Temp C Warning Offset (Time)	* Standby	3				0-100	
23	Temp B-A Warning Offset (Time)	* Right to turn on the lamp * Right to change the Lamp mode	3				0-100	
24	Temp C-A Warning Offset (Time)		3				0-100	
<b>Group 254</b>	<b>Fan Control Range Setting (Temp./Voltage)</b>		Normal	Ceiling	HiLand-Normal	HiLand-Ceiling		
10	Normal Fan Control Min Temp	Temp Sensor Control Start/End Temp.p at Normal	33	33	33	33	20-100	
11	Normal Fan Control Max Temp		38	38	37	37	20-100	
12	Normal Fan1 Min		75	80	90	90	0-255	
13	Normal Fan1 Max	Fan voltage value at Normal (unit: 0.1V)	125	125	135	135	0-255	
14	Normal Fan2 Min		68	75	80	80	0-255	
15	Normal Fan2 Max		80	80	80	80	0-255	
16	Normal Fan3 Min		80	85	90	90	0-255	
17	Normal Fan3 Max		135	135	135	135	0-255	
20	Eco Fan Control Min Temp	Temp Sensor Control Start/End Temp.p at Eco	30	30	33	33	20-100	
21	Eco Fan Control Max Temp		38	38	37	37	20-100	
22	Eco Fan1 Min		55	60	80	80	0-255	
23	Eco Fan1 Max	Fan voltage value at Eco (unit: 0.1V)	115	120	125	125	0-255	
24	Eco Fan2 Min		45	45	55	55	0-255	
25	Eco Fan2 Max		50	50	60	60	0-255	
26	Eco Fan3 Min		70	75	80	80	0-255	
27	Eco Fan3 Max		125	125	125	125	0-255	
<b>Group 255</b>	<b>Fan Start/Cooling Setting</b>							
0	Fan1 Initial Volt	Fan Start Voltage (0.1V)	55				0-255	
1	Fan2 Initial Volt		55				0-255	
2	Fan3 Initial Volt		55				0-255	
4	Fan1 Cooling Speed	Fan Voltage at Power Off (0.1V)	130				0-255	
5	Fan2 Cooling Speed		130				0-255	
6	Fan3 Cooling Spees		130				0-255	
8	Cooling Time L1	Cooling Time stting at Fan Mode L1 (x 30 sec) 1: 30, 3: 90, 15: 450 sec.	2				1-15	
9	Cooling Time L2	Cooling Time stting at Fan Mode L2 (x 30 sec) 1: 30, 3: 90, 15: 450 sec.	3				1-15	
10	Temp Error Cooling Time	Cooling Time setting at Temp Erro (x 30 sec)	3				1-15	
11	OnStart Cooling Start Thresh-old		38				0-100	
12	After shutdown cooling	Cooling after shutdown (0: No, 1: Yes)	1				0-1	
<b>Group 256</b>	<b>Fan Lamp Voltage Down Setting</b>							
0	Lamp Voltage	Current Lamp Voltage (0.1V)(Read only)	-				0-255	

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
1	Lamp Vol Threshold	Threshold to judge Lamp Voltage Down (Vx10)	0	30-90	
2	Fan1 Speed Gain		10	0-255	
3	Fan2 Speed Gain	Additional Fan Speed of Min at Lamp Voltage Down (unit: 0.1V)	10	0-255	
4	Fan3 Speed Gain		10	0-255	
<b>Group 257</b>	<b>Fan Dimmer Setting</b>				
0	Dimmer Average Check Period	Dimmer Average measurement Time (0:10sec. 1:30sec. 2:60 sec. 90: sec...10:30sec.)	1	0-10	
1	Dimmer Average	Dimmer Average Value (Read only)	-		
2	Last Voltage Difference		-		
3	Voltage Difference Goal		-		
<b>Group 258</b>	<b>FAN network mode IC Temp.</b>				
0	Standby Cooling Check Cycle	Standby Cooling Check Cycle	5	-	
1	Standby Cooling Start Threshold	Standby Cooling Start Threshold	40	-	
2	Standby Cooling Enable	Standby Cooling Enable	1	-	
<b>Group 260</b>	<b>Auto Calibration(Common)*Auto Calibration</b>				
0	Execute Calibration		0	0 - 1	Executes Auto-Calibration when changing the Value (PC White 100%)
1	Loop Count	Maximum Execution Times (OFFSET->GAIN)	10	1 - 30	
2	Auto Status	Result of Auto-Calibration (Last Memory)	0	0 / 1 / 9	0: OK, 1: Adjusting,9: Error * ReadOnly
3	AutoWait	Wait Value for each setting	1	1 - 20	
4	CHECK -Tolerance	Tolerance of OFFSET	2	1 - 255	
<b>Group 261</b>	<b>Auto Calibration (RGB)</b>				
0	OFFSET AREA H START	Black Level Acquiring Area H-Start Position	975	0 - 1000	
1	OFFSET AREA V START	Black Level Acquiring Area V-Start Position	500	0 - 1000	
2	GAIN AREA H START	White Level Acquiring Area H-Start Position	25	0 - 1000	
3	GAIN AREA V START	White Level Acquiring Area V-Start Position	500	0 - 1000	
4	Image AREA H WIDTH	Black/White Level Acquiring Area	13	0 - 4095	
5	Image AREA V HIGHT	Black/White Level Acquiring Area Height	9	0 - 4095	
6	OFFSET target	Target Value of Black Level Adj.	3	0 - 127	
7	OFFSET tolerance	Tolerance of Black Level Adj.	1	1 - 127	
8	GAIN target	Target Value of White Level Adj.	238	0 - 255	
9	GAIN tolerance	Tolerance of White Level Adj.	1	1 - 255	
<b>Group 262</b>	<b>Auto Calibration (CVBS/SVIDEO)</b>				
0	Y Image Area Start X	Y Acquiring Area H-Start Position	20	0 - 1000	
1	Y Image Area Start Y	Y Acquiring Area V-Start Position	200	0 - 1000	
2	Cb Image Area Start X	Cb Acquiring Area H-Start Position	500	0 - 1000	
3	Cb Image Area Start Y	Cb Acquiring Area V-Start Position	200	0 - 1000	
4	Cr Image Area Start X	Cr Acquiring Area H-Start Position	500	0 - 1000	
5	Cr Image Area Start Y	Cr Acquiring Area V-Start Position	200	0 - 1000	
6	Image Area H Width	Image Level Acquiring Area	8	0 - 4095	
7	Image Area V Hight	Image Level Acquiring Area Height	9	0 - 4095	
8	Y Target Level	Target Value of Y Level Adj.	217	0 - 255	
9	Cb Target Level	Target Value of Cb Level Adj.	212	0 - 255	
10	Cr Target Level	Target Value of Cr Level Adj.	212	0 - 255	
11	Gain Tolerance	Tolerance of Level Adj.	1	0 - 255	
12	Delta Gain	Deviation Width of Gain Value	9	0 - 255	

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
<b>Group 264</b>	<b>Auto Calibration (YCbCr)</b>				
0	Y-OFFSET AREA H START	Y - Offset Acquiring Area H-Start Position	925	0 - 1000	
1	Y-OFFSET AREA V START	Y - Offset Acquiring Area V-Start Position	500	0 - 1000	
2	CB - OFFSET AREA H START	CB - Offset Acquiring Area H-Start Position	925	0 - 1000	
3	CB - OFFSET AREA V START	CB - Offset Acquiring Area V-Start Position	500	0 - 1000	
4	CR - OFFSET AREA H START	CR - Offset Acquiring Area H-Start Position	925	0 - 1000	
5	CR - OFFSET AREA V START	CR - Offset Acquiring Area V-Start Position	500	0 - 1000	
6	Y - GAIN AREA H START		50	0 - 1000	
7	Y - GAIN AREA V START		500	0 - 1000	
8	CB - GAIN AREA H START		800	0 - 1000	
9	CB - GAIN AREA V START		500	0 - 1000	
10	CR - GAIN AREA H START		700	0 - 1000	
11	CR - GAIN AREA V START		500	0 - 1000	
12	Image AREA H WIDTH	YCBCR Level Acquiring Area	13	0 - 4095	
13	Image AREA V HIGHT	YCBCR Level Acquiring Area Height	9	0 - 4095	
14	Y - OFFSET TARTGET		4	0 - 255	
15	CB OFFSET TARGET		128	0 - 255	
16	CR OFFSET TARGET		128	0-255	
17	Y-GAIN TARGET		217	0-255	
18	CB-GAINTARGET		237	0-255	
19	CR-GAINTARGET		237	0-255	
20	OFFSET torelance	Torelance of OFFSET Adj.	1	1-255	
21	GAIN torelance	Torelance of GAIN Adj.	1	1-255	
<b>Group 270</b>	<b>CUSTOM(Aspect)</b>				
0	Scaler Horizontal	Horizontal Scaler Edit	100	68-132	
1	Sclaler Vertical	Vertical Scaler Edit	100	68-132	
2	Connect	Seperate/Connect Edit	0	0-1	0:Seperate, 1: Connect
3	Position Horizontal	Horizontal Postion Correction	100	85-115	
4	Position Vertical	Vertical Position Correct	100	85-115	
5	Aspect Enable	Aspect Adj. Enable	0	0-1	1: Enable, 0: Disable
<b>Group 280</b>	<b>AutoPC Adjust</b>				
0	AutoPCAdjustEnable	Auto-PC Adj Operation Enable if Un-supported Signal Input	0	0-1	0:Enabel, 1:Disable
1	Frequency Step	Frequency Steps of Total Dot	1	0-3	
2	Frequency Threshold	Total Dot Frequency Threshold	5	0-10	0[]<-- --> 10[Not matched]
3	Fine Phase	Do Phase Adj after Total Dot Adj.	1	0-1	0:Excutes Fine Phase; 1:Not Excute
4	BLKDET	Black Level Detection Area	1	0 - 3	
5	PHASEMSK	Phase Detection Filter	0	0 - 3	0: Effective All Bit, 1: Disable Lower 1 bit 2: Disable Lower 2 bit, 3: Disable Lower 3 bit
<b>Group 290</b>	<b>PanelType * Panel Type Check</b>				
0	GammaL/R-View	Current Setting Check	0	0-20	0: Gamma for L-Turn 20: Gamma for R-Turn * Read only
1	GammaL/R-Change	Setting of Gamma	10	0-20	Sets L-Turn Gamma if the Value is set to 0. Sets R-Turn Gamma if the Value is set to 20.
<b>Group 500</b>	<b>Composite (NTSC) Composite / S-Video</b>				
0					
1	Disp Dots		668	0 ~ 4095	
2	H Back Porch		28	0 ~ 4095	
3	V Back Porch		18	0 ~ 4095	
4	Disp Line		458	0 ~ 4095	
<b>Group 501</b>	<b>Composite (PAL) Composite / S-Video</b>				
0					
1	Disp Dots		658	0 ~ 4095	
2	H Back Porch		34	0 ~ 4095	
3	V Back Porch		22	0 ~ 4095	

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
4	Disp Line		536	0 ~ 4095	
<b>Group 502</b>	<b>Composite (SECAM) Composite / S-Video</b>				
0					
1	Disp Dots		652	0 ~ 4095	
2	H Back Porch		28	0 ~ 4095	
3	V Back Porch		22	0 ~ 4095	
4	Disp Line		536	0 ~ 4095	
<b>Group 510</b>	<b>SCART(480i)</b>				
0					
1	Disp Dots		674	0 ~ 4095	
2	H Back Porch		132	0 ~ 4095	
3	V Back Porch		43	0 ~ 4095	
4	Disp Line		452	0 ~ 4095	
<b>Group 511</b>	<b>SCART (575i)</b>				
0					
1	Disp Dots		650	0 ~ 4095	
2	H Back Porch		152	0 ~ 4095	
3	V Back Porch		68	0 ~ 4095	
4	Disp Line		514	0 ~ 4095	
<b>Group 520</b>	<b>YCbCr (480i)</b>				
0	Total Dots		858	0 ~ 4095	
1	Disp Dots		670	0 ~ 4095	
2	H Back Porch		146	0 ~ 4095	
3	V Back Porch		48	0 ~ 4095	
4	Disp Line		458	0 ~ 4095	
<b>Group 521</b>	<b>YCbCr (575i)</b>				
0	Total Dots		864	0~4095	
1	Disp Dots		656	0~4095	
2	H Back Porch		162	0~4095	
3	V Back Porch		64	0~4095	
4	Disp Line		534	0~4095	
<b>Group 522</b>	<b>YCbCr (480P)</b>				
0	Total Dots		858	0 ~ 4095	* Read only
1	Disp Dots		684	0 ~ 4095	
2	H Back Porch		136	0 ~ 4095	
3	V Back Porch		46	0 ~ 4095	
4	Disp Line		460	0 ~ 4095	
<b>Group 523</b>	<b>YCbCr (575P)</b>				
0	Total Dots		864	0 ~ 4095	* Read only
1	Disp Dots		690	0 ~ 4095	
2	H Back Porch		142	0 ~ 4095	
3	V Back Porch		56	0 ~ 4095	
4	Disp Line		550	0 ~ 4095	
<b>Group 524</b>	<b>YCbCr (720P - 60)</b>				
0	Total Dots		1650	0 ~ 4095	* Read only
1	Disp Dots		1248	0 ~ 4095	
2	H Back Porch		313	0 ~ 4095	
3	V Back Porch		34	0 ~ 4095	
4	Disp Line		700	0 ~ 4095	
<b>Group 525</b>	<b>YCbCr (720P - 50 )</b>				
0	Total Dots		1980	0 ~ 4095	* Read only
1	Disp Dots		1248	0 ~ 4095	
2	H Back Porch		338	0 ~ 4095	
3	V Back Porch		36	0 ~ 4095	
4	Disp Line		700	0 ~ 4095	



## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
<b>Group 526</b>	<b>YCbCr (1080i - 60)</b>				
0	Total Dots		2200	0 ~ 4095	* Read only
1	Disp Dots		1872	0 ~ 4095	
2	H Back Porch		256	0 ~ 4095	
3	V Back Porch		54	0 ~ 4095	
4	Disp Line		1052	0 ~ 4095	
<b>Group 527</b>	<b>YCbCr (1080i - 50)</b>				
0	Total Dots		2640	0 ~ 4095	* Read only
1	Disp Dots		1870	0 ~ 4095	
2	H Back Porch		257	0 ~ 4095	
3	V Back Porch		54	0 ~ 4095	
4	Disp Line		1052	0 ~ 4095	
<b>Group 528</b>	<b>YCbCr (1035i)</b>				
0	Total Dots		2200	0 ~ 4095	* Read only
1	Disp Dots		1872	0 ~ 4095	
2	H Back Porch		256	0 ~ 4095	
3	V Back Porch		92	0 ~ 4095	
4	Disp Line		1012	0 ~ 4095	
<b>Group 540</b>	<b>RGB Video (480i)</b>				
0	Total Dots		960	0 ~ 4095	
1	Disp Dots		752	0 ~ 4095	
2	H Back Porch		166	0 ~ 4095	
3	V Back Porch		48	0 ~ 4095	
4	Disp Line		460	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
<b>Group 541</b>	<b>RGB Video (575i)</b>				
0	Total Dots		966	0 ~ 4095	
1	Disp Dots		736	0 ~ 4095	
2	H Back Porch		182	0 ~ 4095	
3	V Back Porch		66	0 ~ 4095	
4	Disp Line		536	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
<b>Group 542</b>	<b>RGB Video (480P)</b>				
0	Total Dots		960	0 ~ 4095	
1	Disp Dots		766	0 ~ 4095	
2	H Back Porch		156	0 ~ 4095	
3	V Back Porch		46	0 ~ 4095	
4	Disp Line		460	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
<b>Group 543</b>	<b>RGB Video (575P)</b>				
0	Total Dots		986	0 ~ 4095	
1	Disp Dots		774	0 ~ 4095	
2	H Back Porch		174	0 ~ 4095	
3	V Back Porch		62	0 ~ 4095	
4	Disp Line		540	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
<b>Group 544</b>	<b>RGB Video (720P - 60 )</b>				
0	Total Dots		1650	0 ~ 4095	
1	Disp Dots		1248	0 ~ 4095	
2	H Back Porch		318	0 ~ 4095	
3	V Back Porch		34	0 ~ 4095	
4	Disp Line		702	0 ~ 4095	
5	Clamp		1	0 ~ 255	

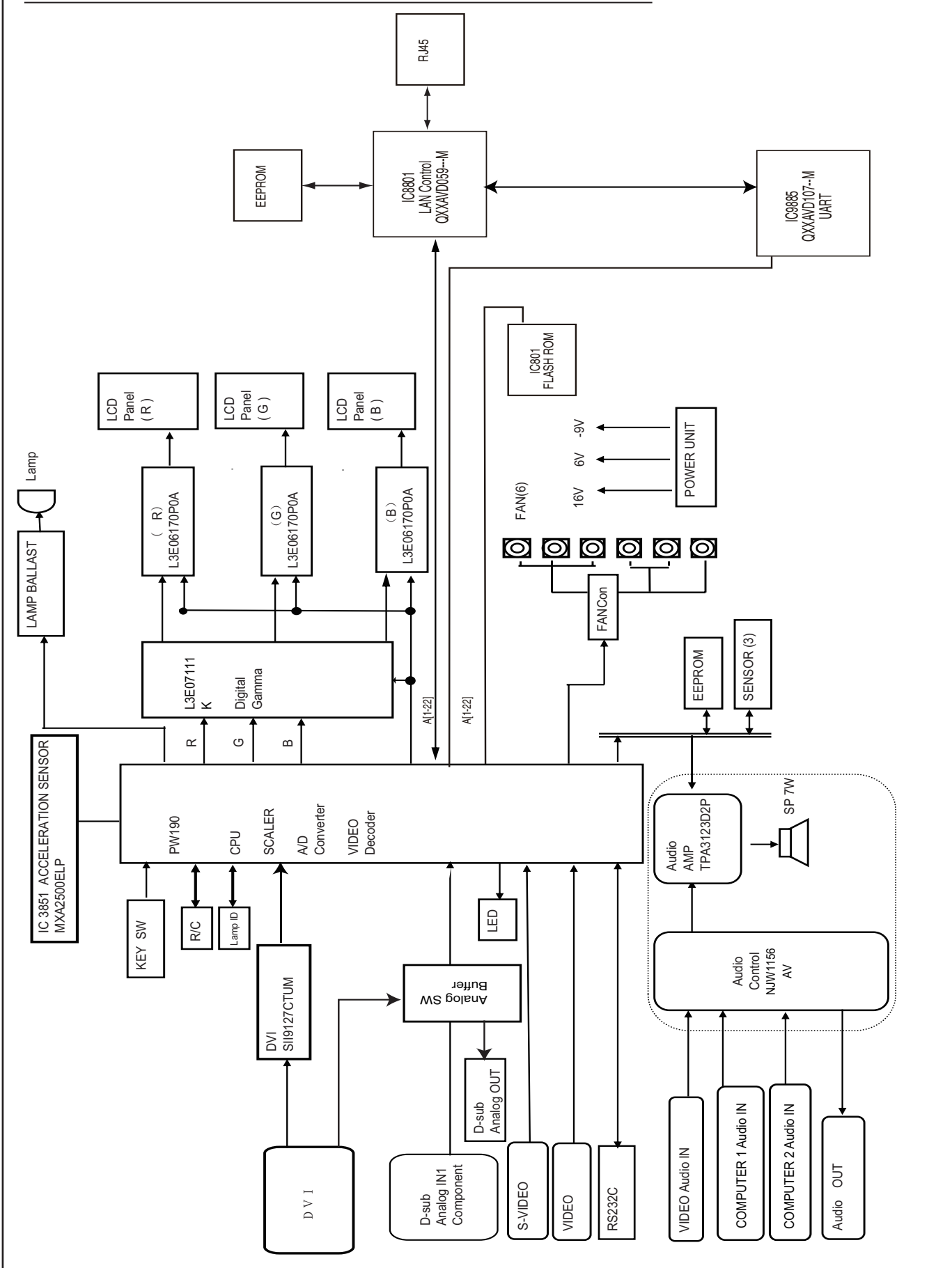
## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
6	Clamp Width		31	0 ~ 255	
<b>Group 545</b>	<b>RGB Video (720P - 50 )</b>				
0	Total Dots		1980	0 ~ 4095	
1	Disp Dots		1246	0 ~ 4095	
2	H Back Porch		310	0 ~ 4095	
3	V Back Porch		34	0 ~ 4095	
4	Disp Line		702	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
<b>Group 546</b>	<b>RGB Video (1080i - 60)</b>				
0	Total Dots		2200	0 ~ 4095	
1	Disp Dots		1872	0 ~ 4095	
2	H Back Porch		260	0 ~ 4095	
3	V Back Porch		56	0 ~ 4095	
4	Disp Line		1052	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
<b>Group 547</b>	<b>RGB Video (1080i - 50)</b>				
0	Total Dots		2640	0 ~ 4095	
1	Disp Dots		1868	0 ~ 4095	
2	H Back Porch		260	0 ~ 4095	
3	V Back Porch		54	0 ~ 4095	
4	Disp Line		1052	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
<b>Group 548</b>	<b>RGB Video (1035i)</b>				
0	Total Dots		2200	0 ~ 4095	
2	H Back Porch		258	0 ~ 4095	
3	V Back Porch		92	0 ~ 4095	
4	Disp Line		1012	0 ~ 4095	
<b>Group 560</b>	<b>HDCP (480P)</b>				
7	Over Scan	Over Scan Rate (0 ~ 25.5% at 0.1% steps)	0	0 - 255	
8	VSBEQ		2	0 - 15	
<b>Group 561</b>	<b>HDCP (575P)</b>				
7	Over Scan	Over Scan Rate (0 ~ 25.5% at 0.1% steps)	0	0 - 255	
8	VSBEQ		2	0 - 15	
<b>Group 562</b>	<b>HDCP (720P-60)</b>				
7	Over Scan	Over Scan Rate (0 ~ 25.5% at 0.1% steps)		0 - 255	
8	VSBEQ		2	0 - 15	
<b>Group 563</b>	<b>HDCP (720P-50)</b>				
7	Over Scan	Over Scan Rate (0 ~ 25.5% at 0.1% steps)	0	0 - 255	
8	VSBEQ		2	0 - 15	
<b>Group 564</b>	<b>HDCP (1080i-60)</b>				
7	Over Scan	Over Scan Rate (0 ~ 25.5% at 0.1% steps)	0	0 - 255	
8	VSBEQ		2	0 - 15	
<b>Group 565</b>	<b>HDCP (1080i-50)</b>				
7	Over Scan	Over Scan Rate (0 ~ 25.5% at 0.1% steps)	0	0 - 255	
8	VSBEQ		2	0 - 15	

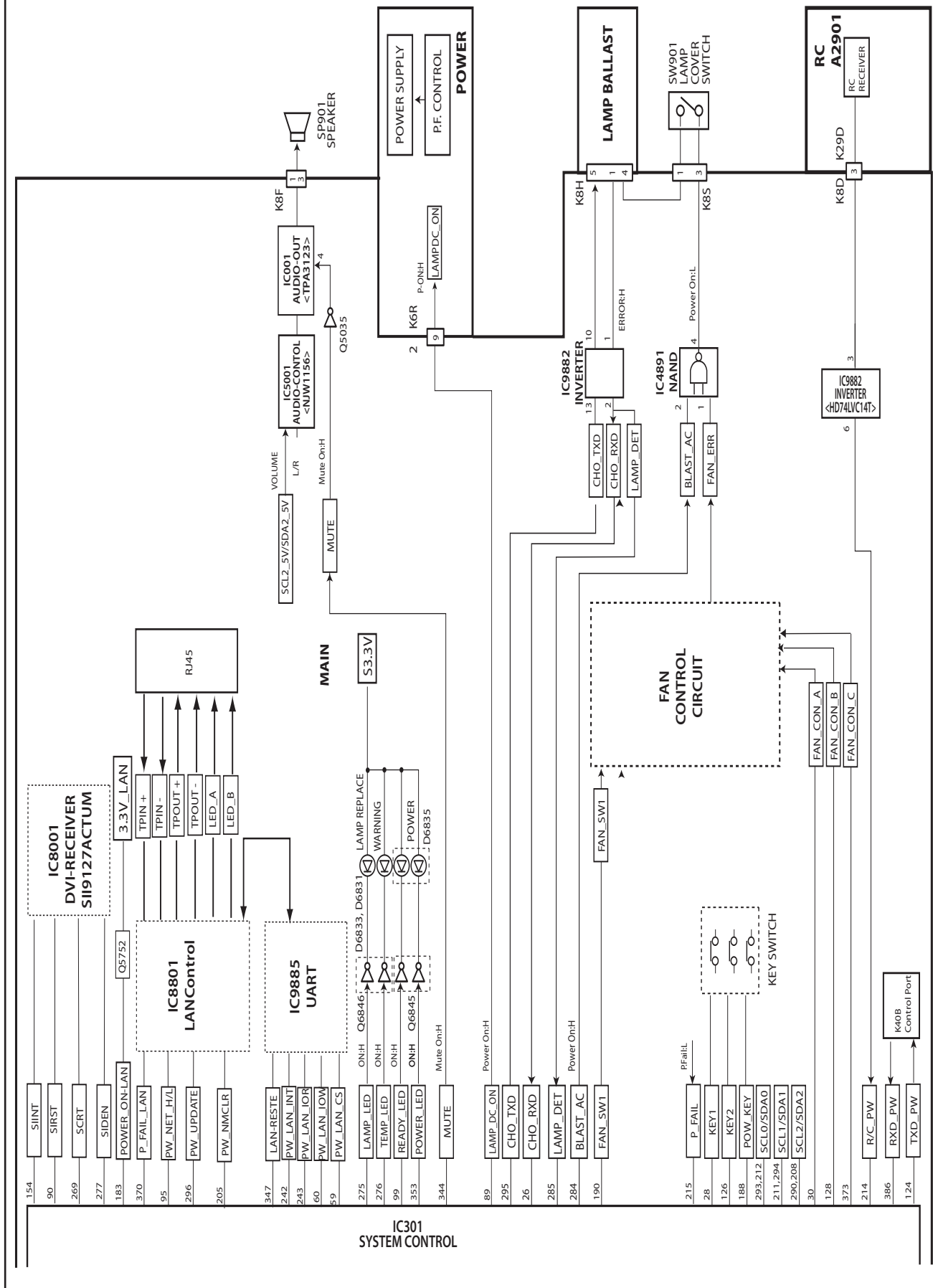
## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
<b>Group 566</b>	<b>HDCP (1035i)</b>				
7	Over Scan	Over Scan Rate (0 ~ 25.5% at 0.1% steps)	0	0 - 255	
8	VSBEQ		2	0 - 15	
<b>Group 981</b>	<b>Color Shading Adj Offset</b>				
0	R-Max		0/0	0-255	
1	R-Mid1		0/0	0-255	
2	R-Mid2		0/0	0-255	
3	R-Min		0/0	0-255	
4	G-Max		0/0	0-255	
5	G-Mid1		0/0	0-255	
6	G-Mid2		0/0	0-255	
7	G-Min		0/0	0-255	
8	B-Max		0/0	0-255	
9	B-Mid1		0/0	0-255	
10	B-Mid2		0/0	0-255	
11	B-Min		0/0	0-255	

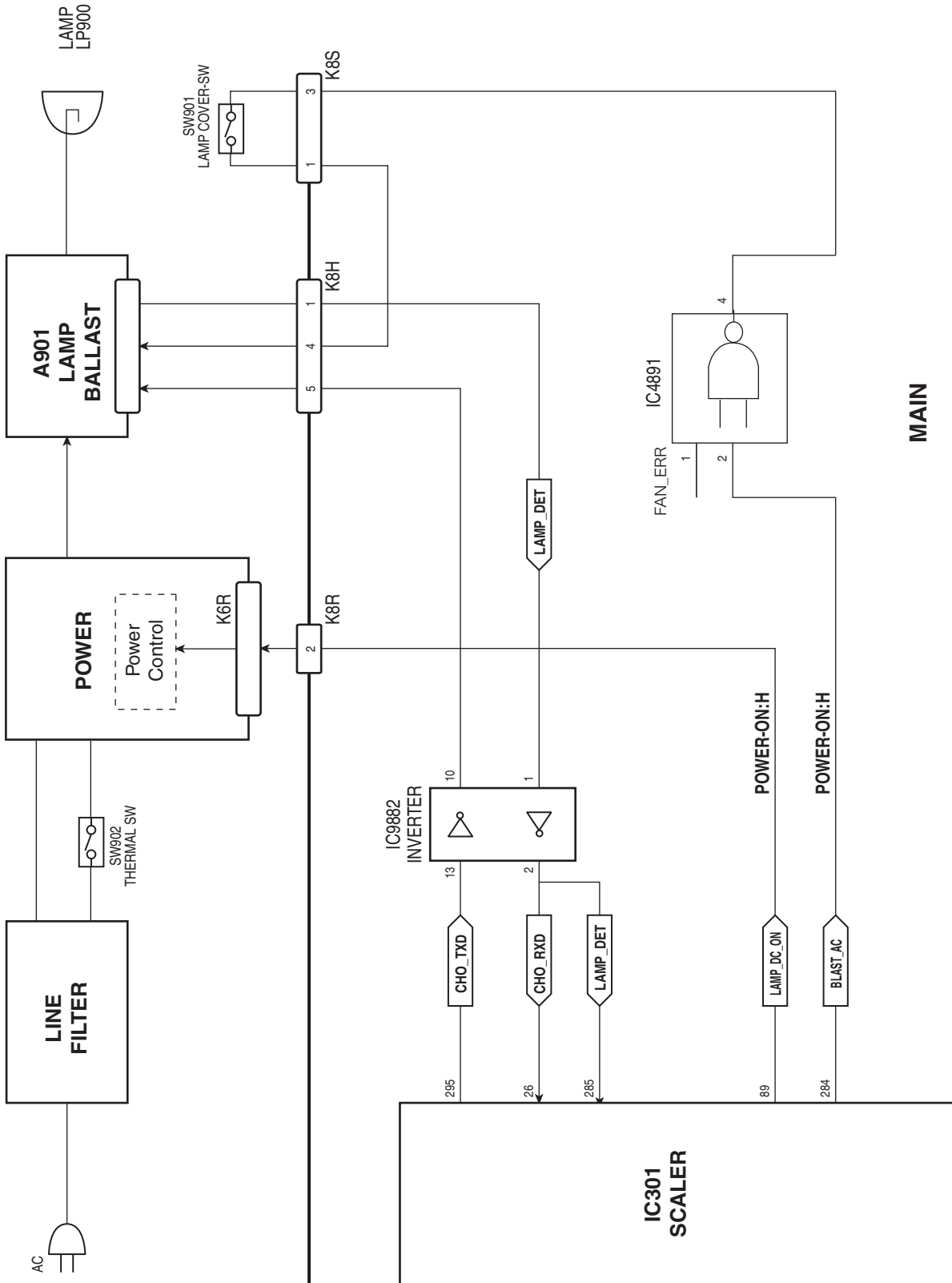
**Chassis over view**



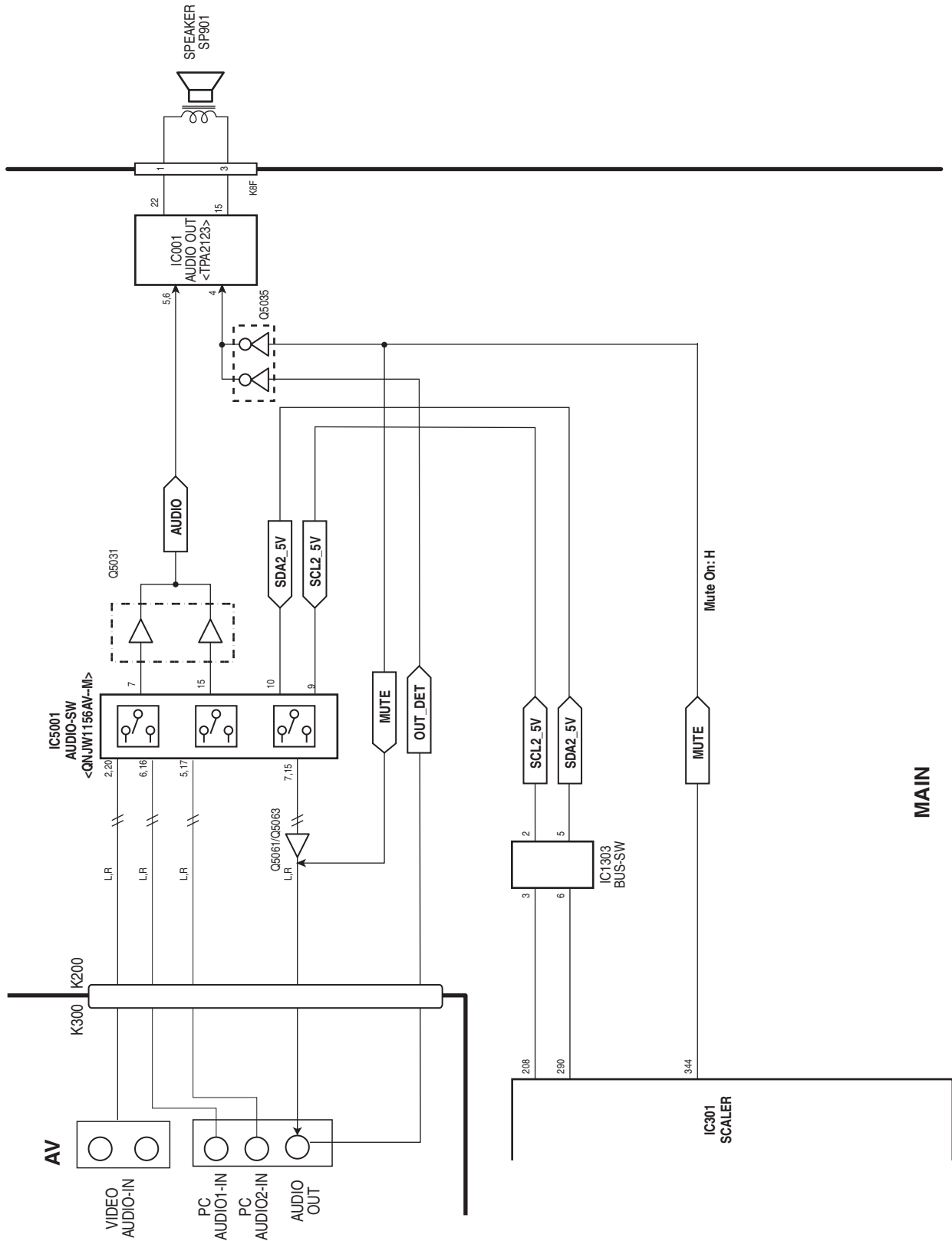
# System control



# Lamp control

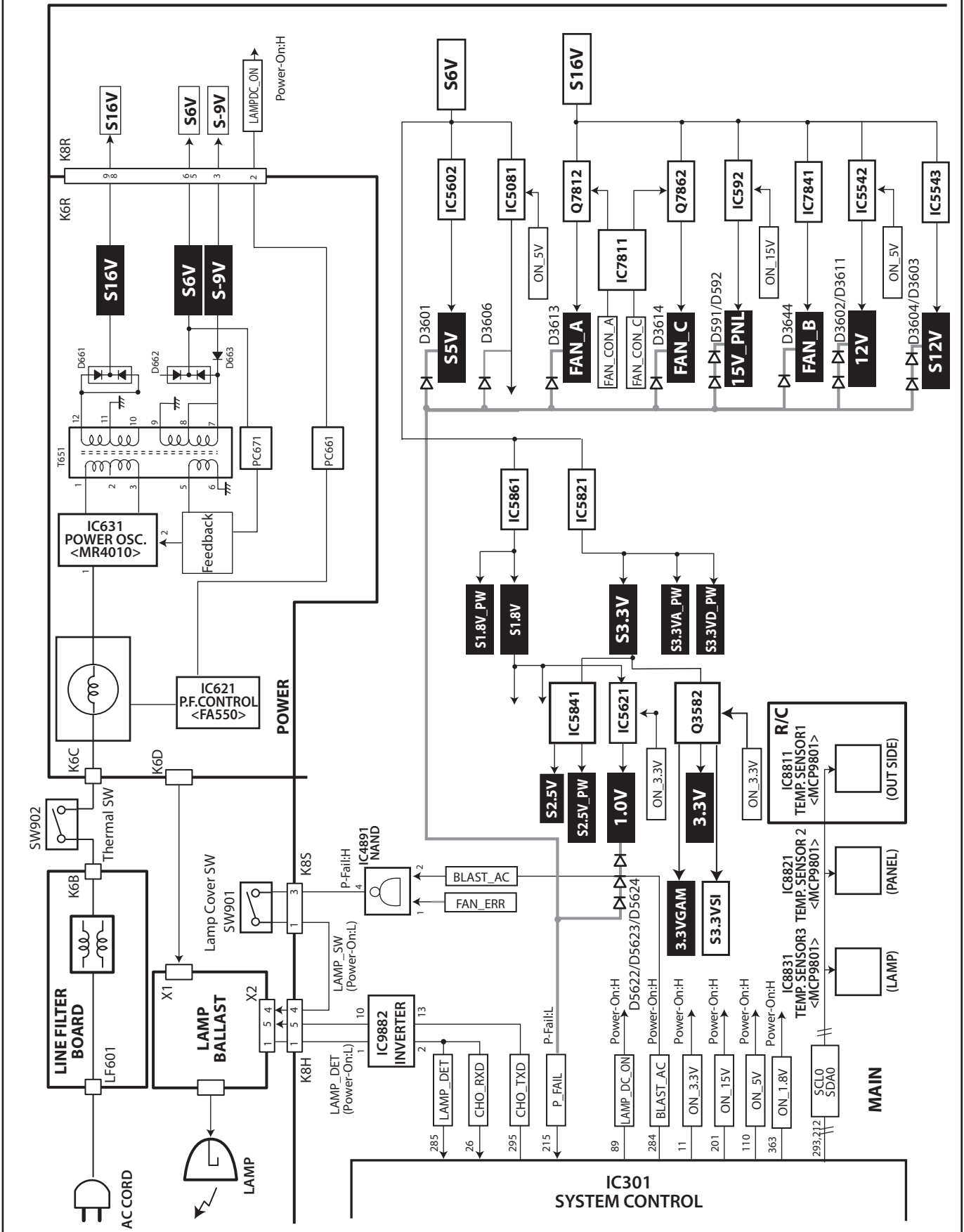


# Audio circuit



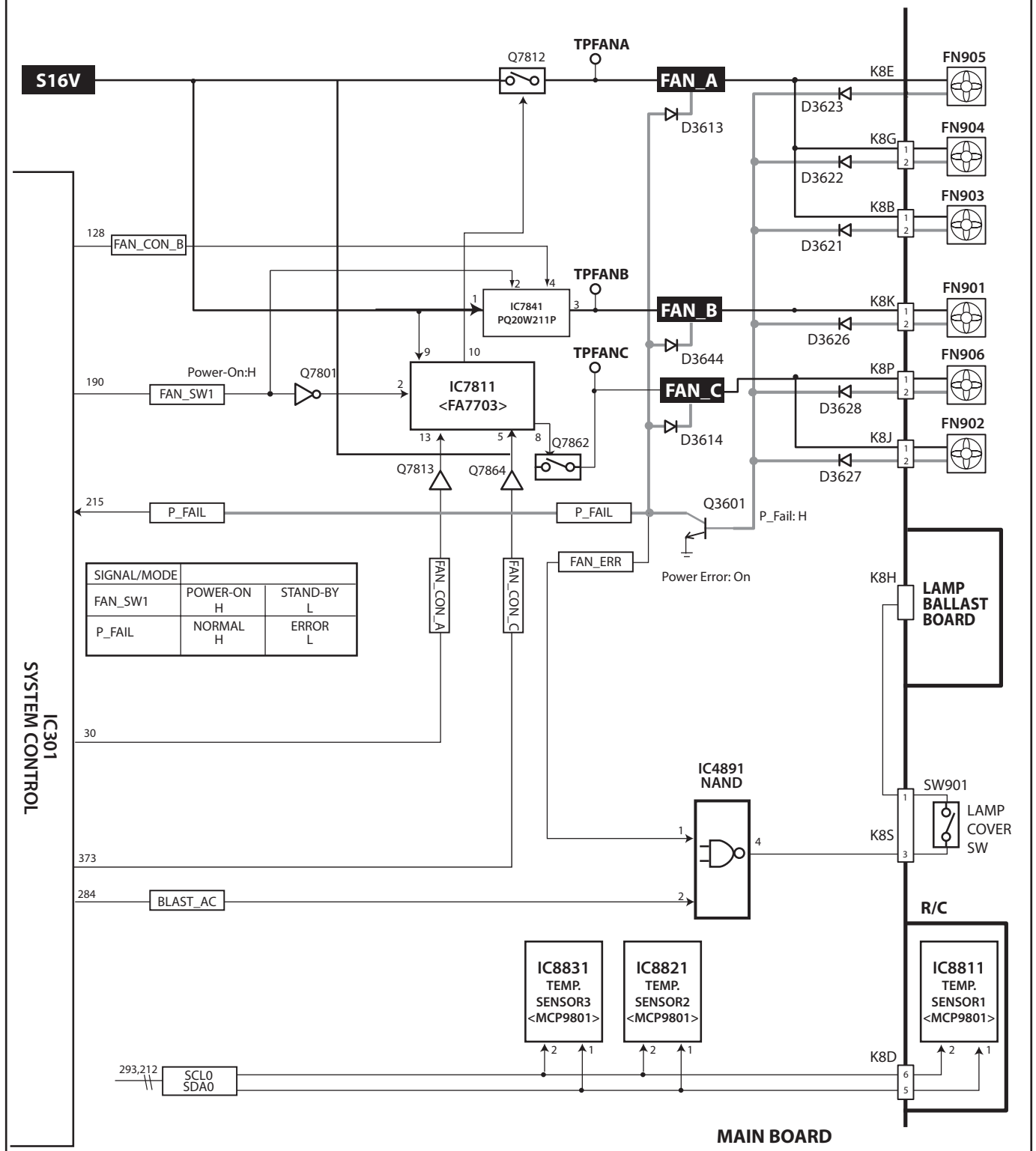
MAIN

# Power supply & protection circuit





























# Fan control circuit



# Troubleshooting

## Indicators and Projector Condition

Check the indicators for projector condition.

Indicators			Projector Condition
POWER red/green	WARNING red	LAMP REPLACE yellow	
			The projector is off. (The AC power cord is unplugged.)
			The projector is in stand-by mode. Press the ON/STAND-BY button to turn on the projector.
			The projector is operating normally.
			The projector is preparing for stand-by or the projection lamp is being cooled down. The projector cannot be turned on until cooling is completed and the POWER indicator stops blinking.
			The projector is in the Power management mode.
			The temperature inside the projector is abnormally high. The projector cannot be turned on. When the projector is cooled down enough and the temperature returns to normal, the POWER indicator stops blinking and the projector can be turned on. (The WARNING indicator keeps blinking.)
			The projector has been cooled down enough and the temperature returns to normal. When turning on the projector, the WARNING indicator stops blinking.
			The projector detects an abnormal condition and cannot be turned on. Unplug the AC power cord and plug it again to turn on the projector. If the projector is turned off again, unplug the AC power cord and contact the dealer or the service center for service and checkup. Do not leave the projector on. It may cause an electric shock or a fire hazard.

 • • • green.

 • • • red

 • • • off

 • • • blinks green.

 • • • blinks red.

\* When the life of the projection lamp draws to an end, the LAMP REPLACE indicator lights yellow. When this indicator lights yellow, replace the projection lamp with a new one promptly. Reset the lamp replacement counter after replacement of the lamp.

### No Power

This projector provides a function which can be specified a defective area simply by indicating the LEDs. Connect the AC cord and press the Power button once and then check the LED indication.

- **When all of LED indicators are not lighting**, the symptom indicates that the primary power supply circuit does not operate properly. Check the power primary circuit and parts as follow;

AC cord, F601 (Fuse), Power board,

SW902 (Thermal sw.) short in normal

SW902 opens when the surrounding temperature of the switch exceeds 100°C.

- **When the WARNING (red) and POWER (red) indicators are flashing**, the symptom indicates that the projector detected an abnormal temperature risen inside the projector. Check the air filters and remove the object near the intake and exhaust fan openings, and wait until the POWER indicator stops flashing, and then try to turn on the projector.

The internal temperature is monitored by sensor ICs, IC8831, IC8821 on the Main board and IC8811 on the R/C board.

- **When the WARNING indicator lights red**, the symptom indicates that the projector detected an abnormality in the cooling fan operation or in the power supply secondary circuits. Check fan operation and power supply lines, and the driving signal status.

The P\_FAIL signal (Error: L) is sent to pin 215 of IC301 <SYSTEM CONTROL> when the abnormality occurred inside the projector, and then the IC301 sends the shutdown signal, LAMP\_DC\_ON, to the power supply circuit to stop its operation, and signal BLAST\_AC to the lamp ballast board via IC4891 and SW901 <lamp cover switch> to stop operation of the lamp circuit.

An abnormality occurs on the secondary power supply;

Check power supplies S16V, S6V, S-9V. P\_FAIL signal becomes "Low" when the abnormality occurs on any of the power supply lines.

An abnormality occurs on the fan control circuit;

Check FN901, FN902, FN903, FN904, FN905, FN906 and peripheral circuit.

If any of the fans has an error, the fan lock signal drives Q3601 becomes "High". As the result, signal FAN\_ERR becomes Low and is sent to lamp ballast board to stop lamp circuit.

An abnormality occurs on the drive signals;

ON\_15V signal (Power-on: H) is output from pin 201 of IC301 and switches IC592, 15.5V supply circuit, ON\_5V signal (Power-on: H) is output from pin 110 of IC301 and switches IC5542, IC5081, 11-AMP supply circuit, ON\_3.3V signal (Power-on: H) is output from pin 11 of IC301 and switches IC5621, 1.0V and Q3582 3.3V supply circuit.

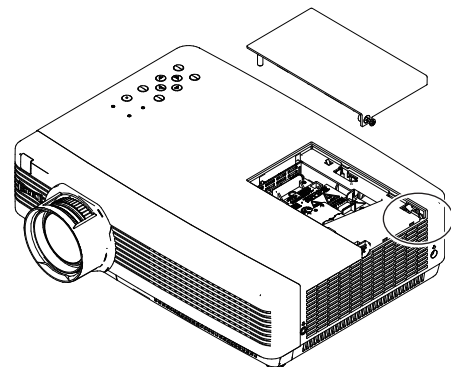
LAMP\_DC\_ON signal (Power-on: H) is output from pin 89 of IC301 and supplied to the P.C Control IC, IC621, on the power supply board through Q651, and PC661.

BLAST\_AC signal (Power-on: H) is output from pin 284 of IC301 and applied to pin 2 of IC4891 and output pin 4 and then supplied to the lamp ballast board through SW901 <Lamp Cover SW>.

LAMP\_DET signal at the pin 285 of IC301 is applied from the lamp ballast unit. If the abnormality occurred on the lamp ballast unit, LAMP\_DET signal becomes "High" and then IC301 shuts down the power supply circuit.

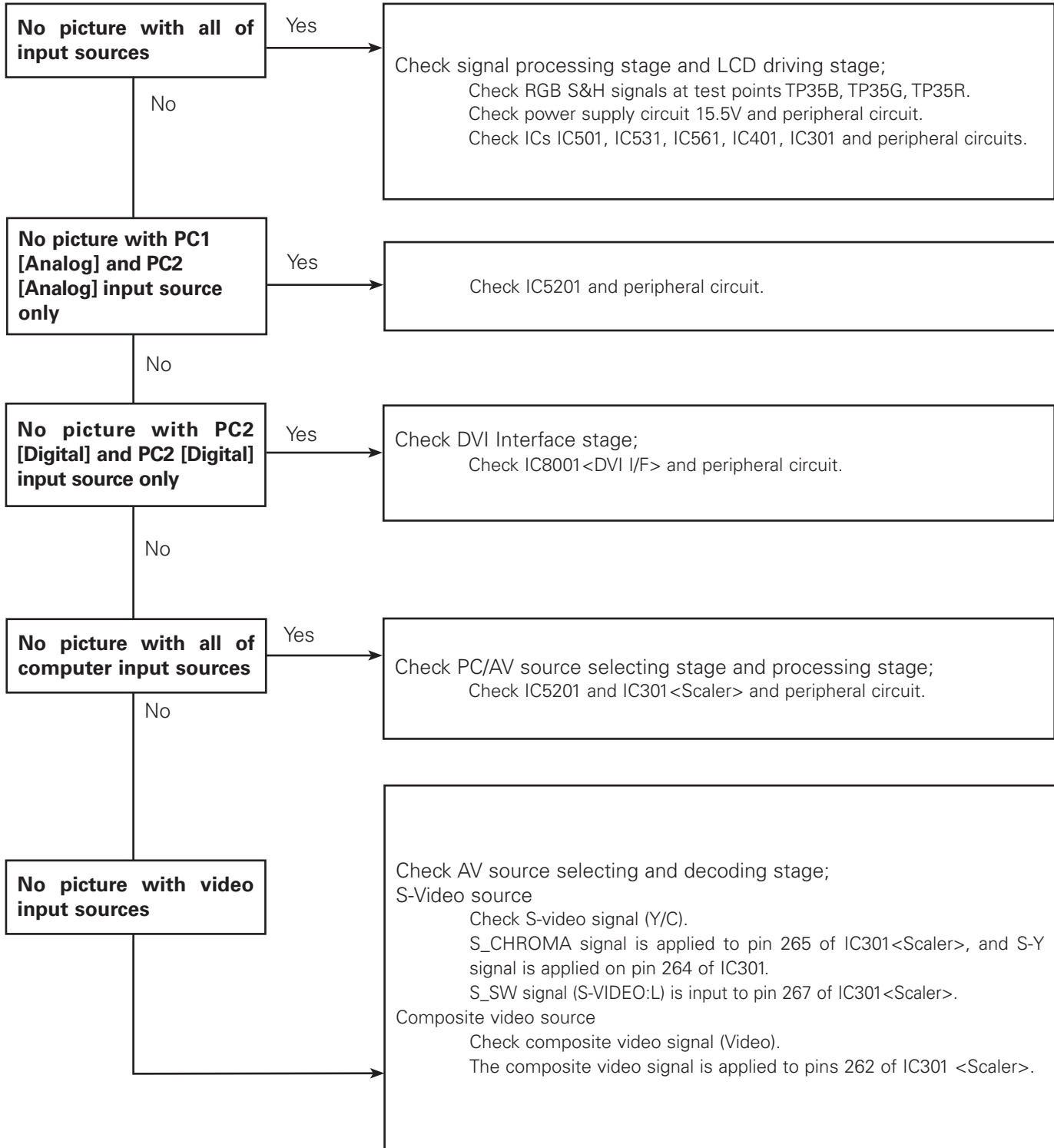
#### Lamp Cover switch

Make sure that the lamp cover is mounted correctly. If not or the lamp cover removed, the lamp does not light on for the safety. Check the lamp cover and lamp cover switch (SW901).



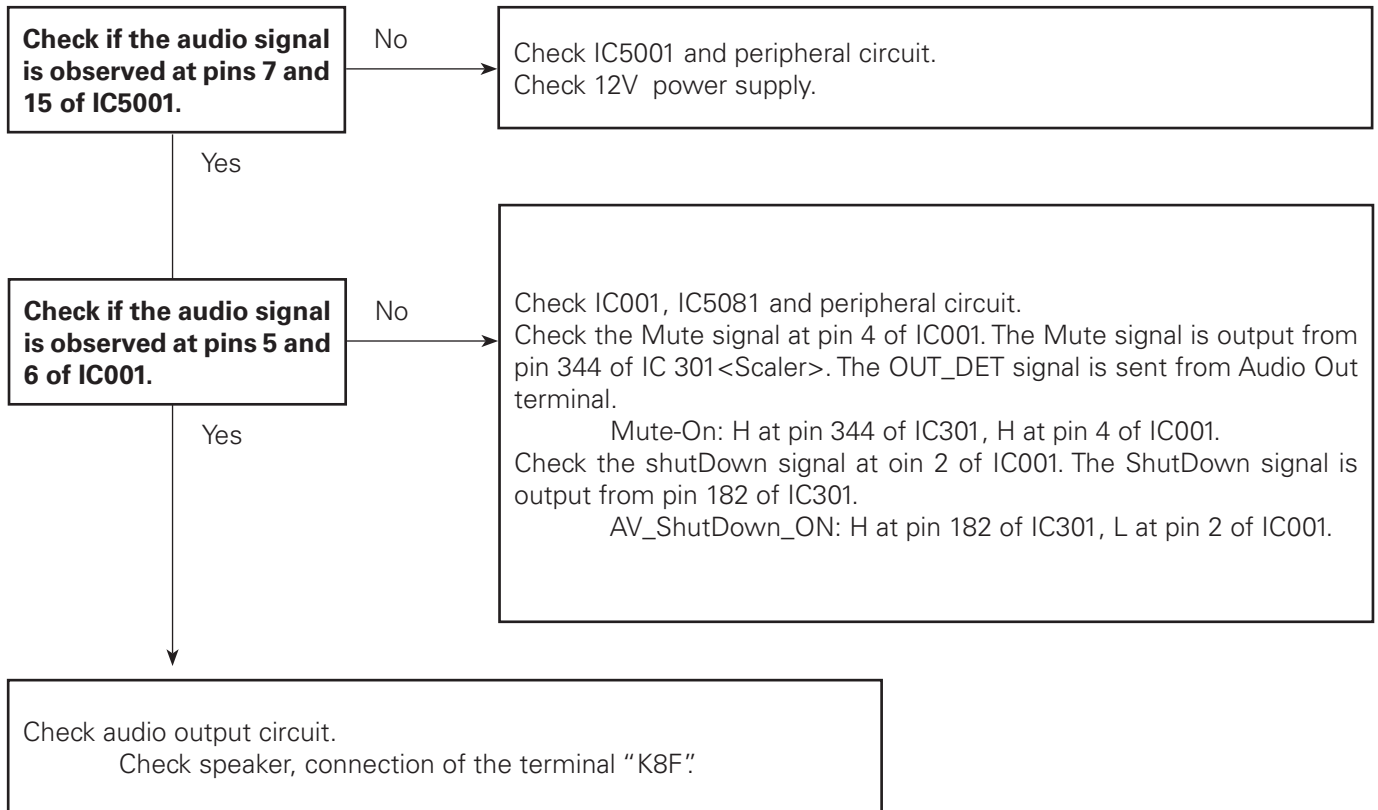
## No Picture

Check following steps.



## No Sound

Check following steps.



# Control Port Functions

## Scaler I/O Port Functions (PW190)

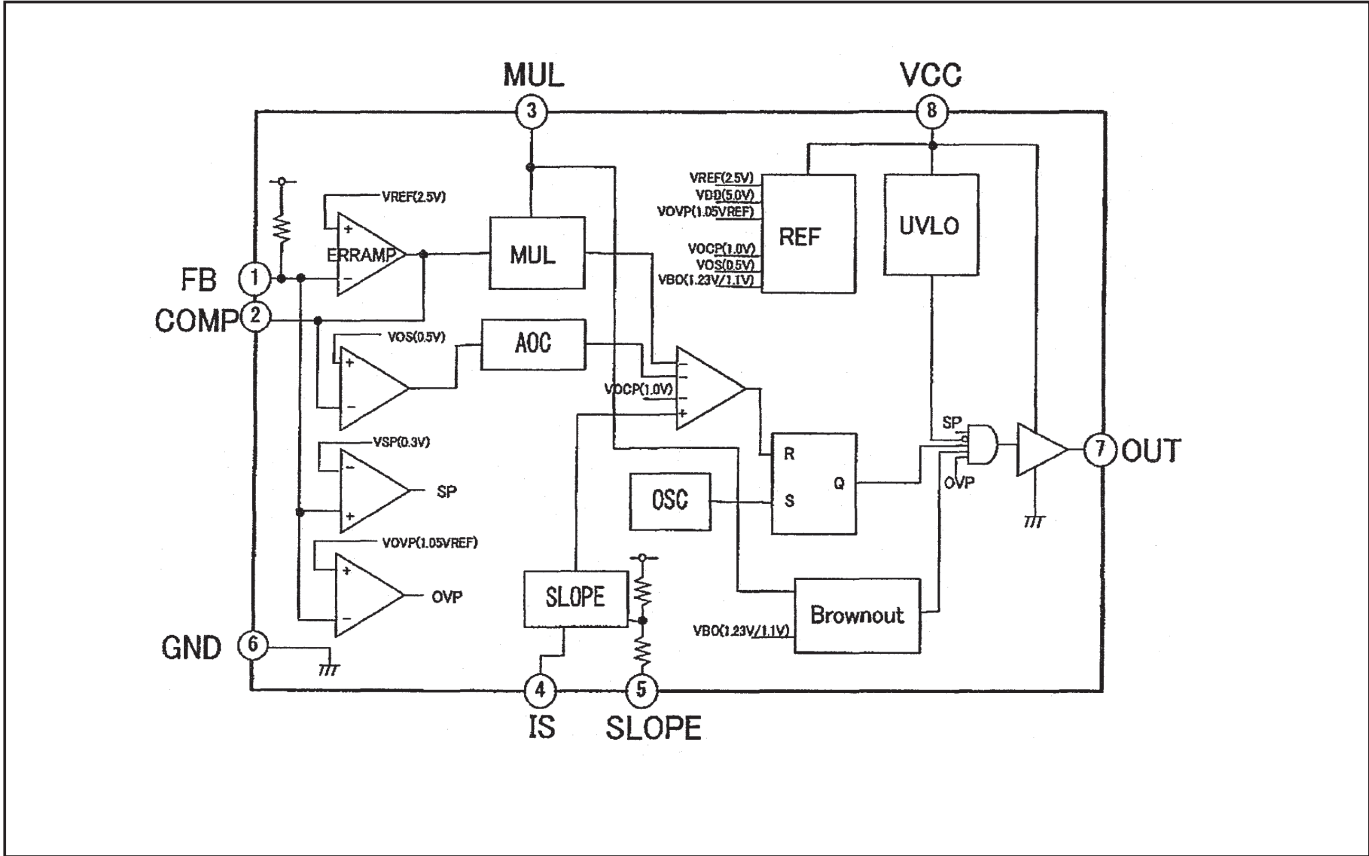
PIN NO.	PORT NO.	PORT NAME	FUNCTION	SIGNAL NAME	DESCRIPTION	I/O
11	A11	PORTC5		ON_3.3V	3.3V Power Drive, Power On: H	O
110	B11	PORTC6		ON_5V	5VA Drive On/Off, On: H	O
111	B12	PORTC1		SCS_PW	3-Wired Serial Control	O
124	B25	TXD_PW		TXD_PW	Serial Control RXD	O
201	C11	PORTC7		ON_150V	15V Power Driver, Pow on:H	O
202	C12	PORTC2		SDATA_PW	3-Wired Serial Control Data	O
205	C15	PORTI7		PW_NMCLR	LAN control	I
208	C18	PORTH5	2-Wire Serial Data 2	SDA2	IIC Bus Switch IC DAC, SoundIC[5V_SW]	O
211	C21	PORTH1	2-Wire Serial Clock 1	SCL1		O
212	C22	PORTH7	2-Wire Serial Data 0	SDA0	IIC Bus Temp Sensor [S3.3V]	O
28	C26	ADC1		KEY1	Input/Select/Keystone	I
278	D5	PORTD5		ID PWR SW	lamp ID power 5V ON/OFF	I
284	D11	PWM1		BLAST_AC	Ballast CTL	O
285	D12	PORTC3		LAMP_DET	LampErrorDet Low=Error	I
290	D17	PORTH4	2-Wire Serial Clock 2	SCL2	IIC Bus Control Clock	O
293	D20	PORTH6	2-Wire Serial Clock 0	SCL0	IIC Bus Control Clock	O
294	D21	PORTH3	2-Wire Serial Data 1	SDA1	IIC Bus Control Data	O
296	D23	PORTI6		PW_UPDATE	LAN control	O
215	D24	ADC0	ADC0	P_FAIL	Power Failure Signal Input, Failure:L	I
126	D25	ADC2	ADC2	KEY2	Key Control Input	I
29	D26	ADC6	ADC6	LAMP Option	Lamp Option	I
362	E14	PORTC4		IRM_RST	L3E07111 reset	O
363	E15	PORTC0		ON_1.8V	SiI9127 power control	O
368	E20	PORTH0		RXD_PW	Serial Control RXD	I
370	E22	ADC5	ADC5	P_FAIL_LAN	LAN error detect	I
30	E26	DAC1	DAC1	FAN CON_A	FAN CON_A	O
298	F23	ADC4	ADC4	BRAND Option	Option Switch BRAND	I
128	F25	DAC2	DAC2	FAN CON_B	FAN CON_B	O
373	H22	DAC0	DAC0	FAN_CON_C	FAN_CON_C	O
92	K1	PORTB3		DG[1]		O
185	K2	PORTB1		DB[1]		O
347	K4	PORTD5		LAN-RESET	UART control	I
91	L1	PORTB5		DR[1]		O
184	L2	PORTB6		PW_LAMP_ID_A	lamp ID	O
269	L3	PORTB7		SCDT	SiI9127 sync detect	I
346	L4	PORTB4		DR[0]		O
90	M1	PORTA0		SIRST	SiI9127 Reset	O
183	M2	PORTA1		POWER_ON_LAN	POWER_ON_LAN	O
268	M3	PORTB0		DB[0]		O
345	M4	PORTB2		DG[0]		O
89	N1	PORTA3		LAMP_DC_ON	Power Control, Power On: H	O
182	N2	PORTA5		AV-SHUTDOWN	7W AMP control	O
267	N3	PORTA6		S_SW	S_Video DET, Low=Connect, High=NC	I
344	N4	PORTA7		MUTE	High=Mute_ON	O
413	N5	PORTA4		MONIT_OUT	Low=in, High=Monit OUT	O
474	N6	PORTA2		SW_PNL_REF	15.5V for PANEL REF on/off	O
329	AC9	PORTD2	A[22]	A[22]		O
242	AD17	EXTINT0	XINT	PW_LAN_INT	UART INTERRUPT	O
160	AE12	PORTD0	A[20]	A[20]		O
154	AE18	EXTINT1		SIINT	9127 INTERRUPT	O
72	AF12	PORTD1	A[21]	A[21]		O

# Waveform

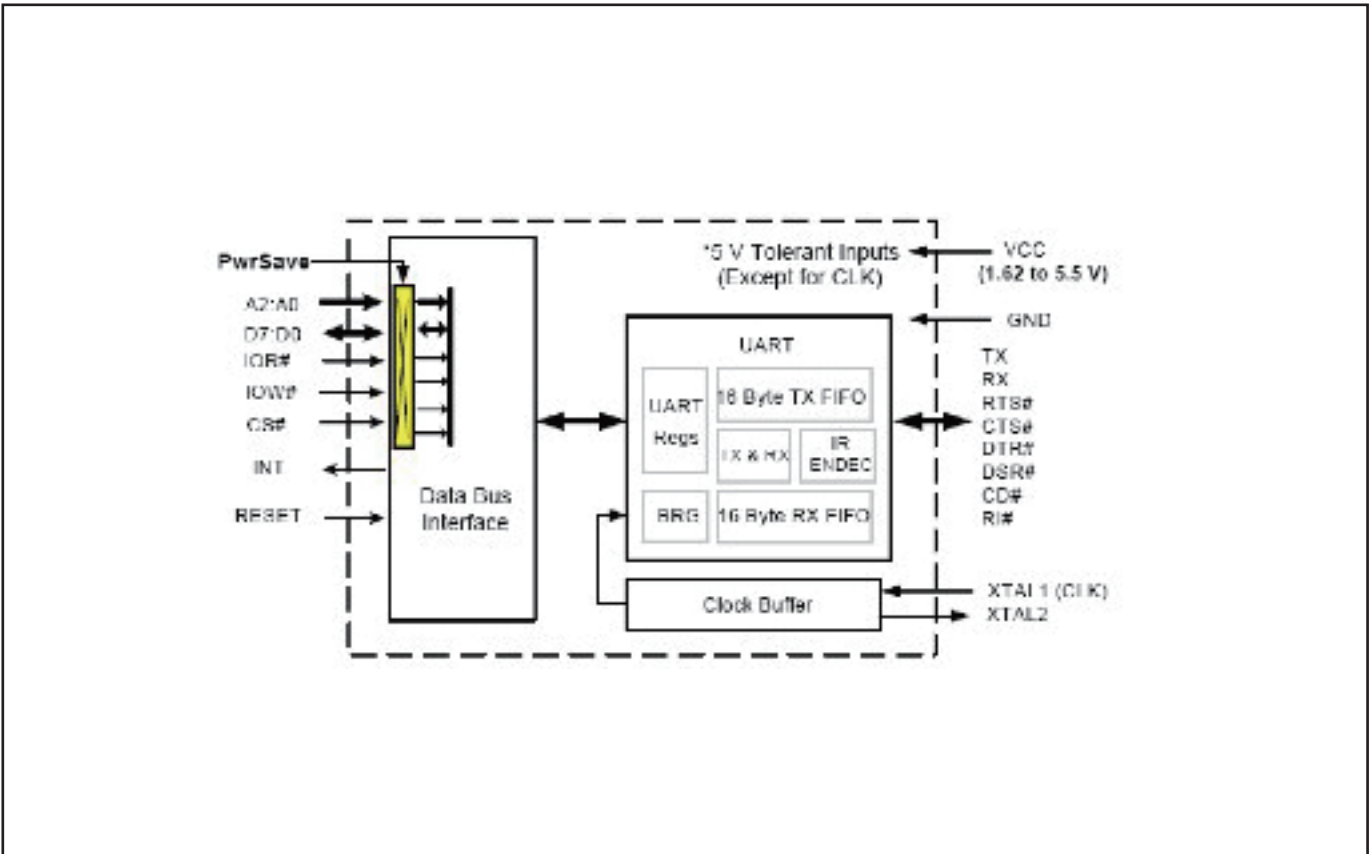
VIDEO signal <VIDEO>	HSYNC signal	VSYNC signal
HSYNC signal <TPDHS>	VSYNC signal <TPDVS>	
R-S&H signal <TP35R>	G-S&H signal <TP35G>	B-S&H signal <TP35B>

IC Block Diagrams

● FA5550NG <P.F. Control, IC621>

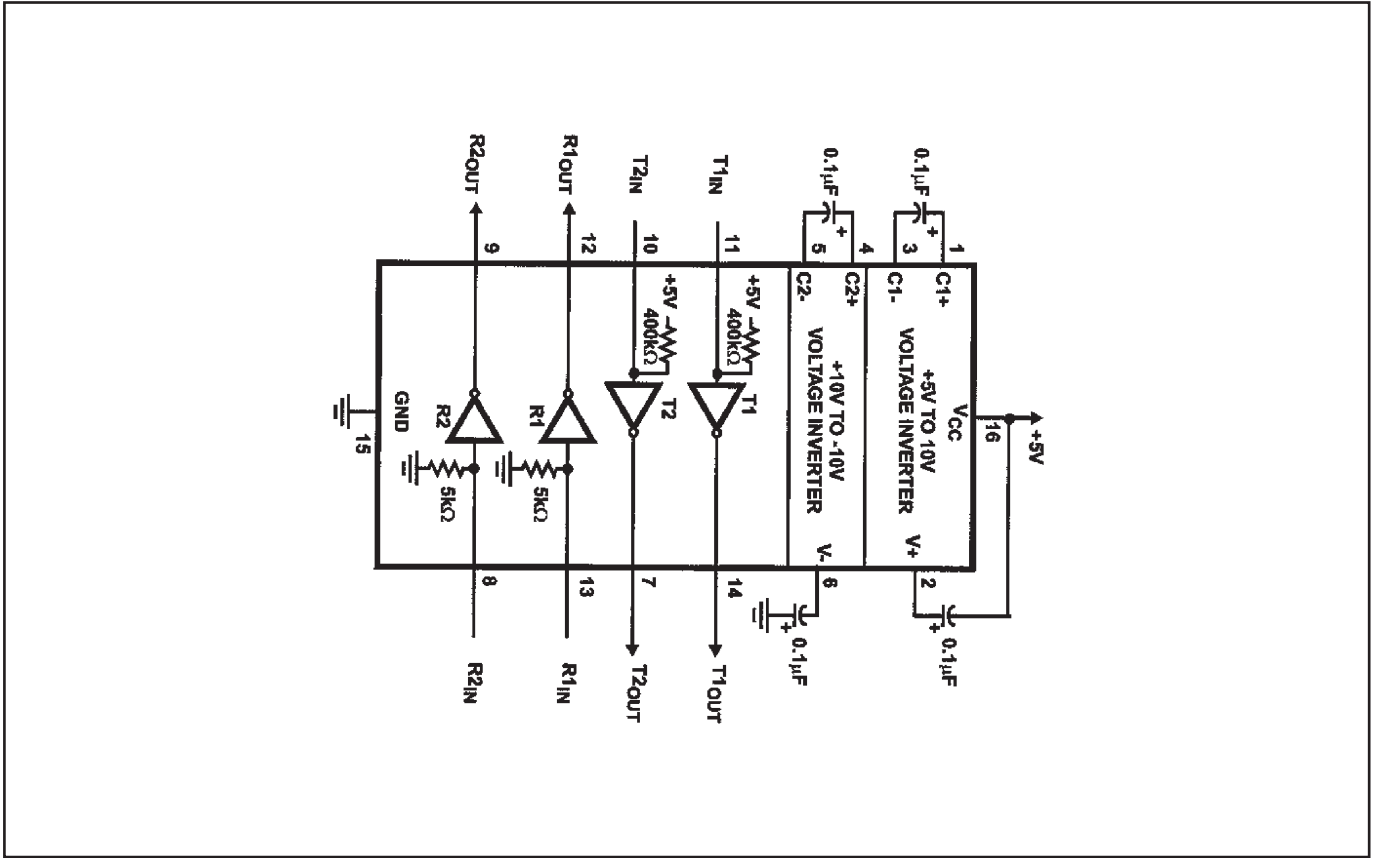


● XR16L5701IL24 <UART, IC9885>

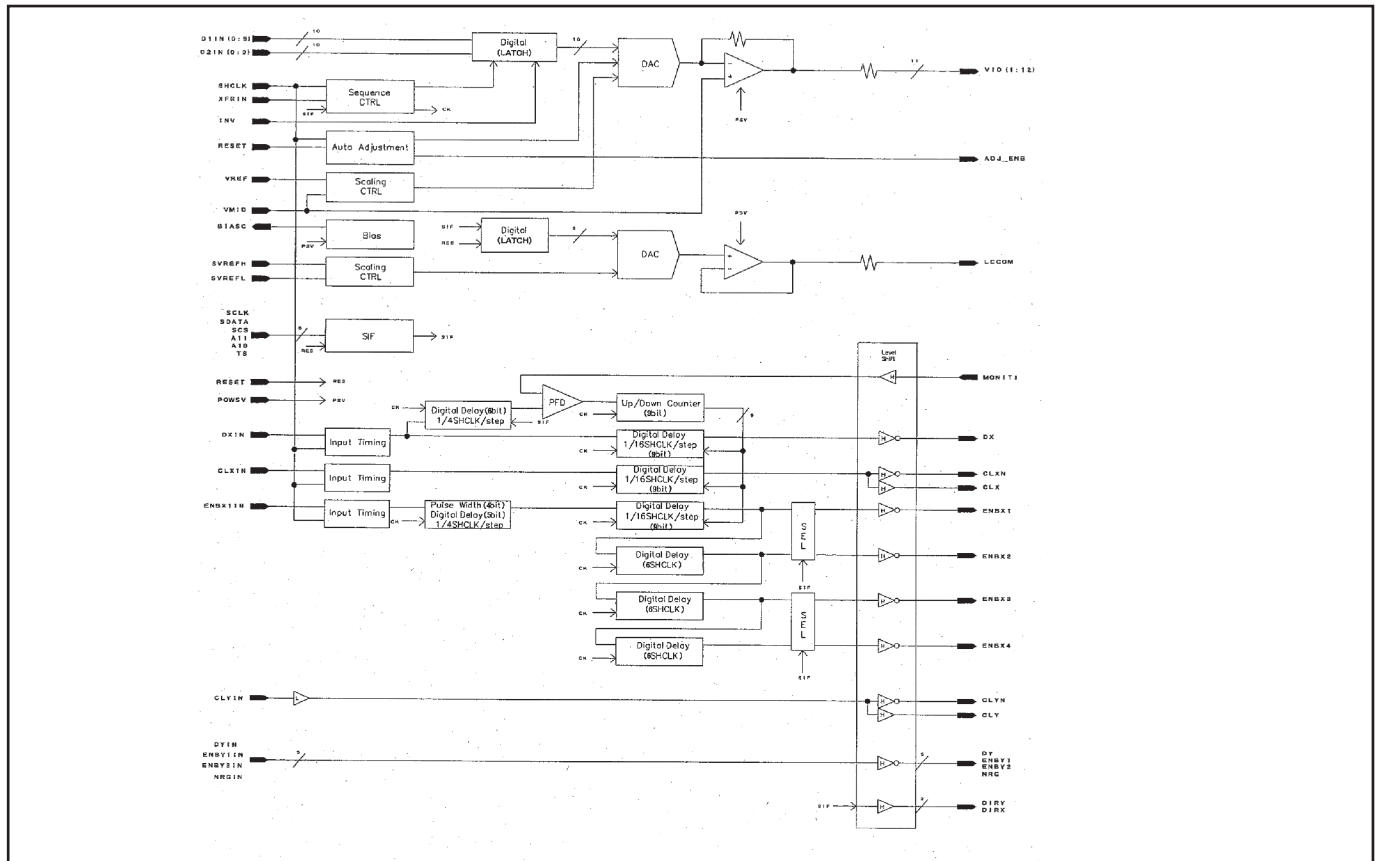




● HIN202EIB <RS-232C Driver, IC3801>

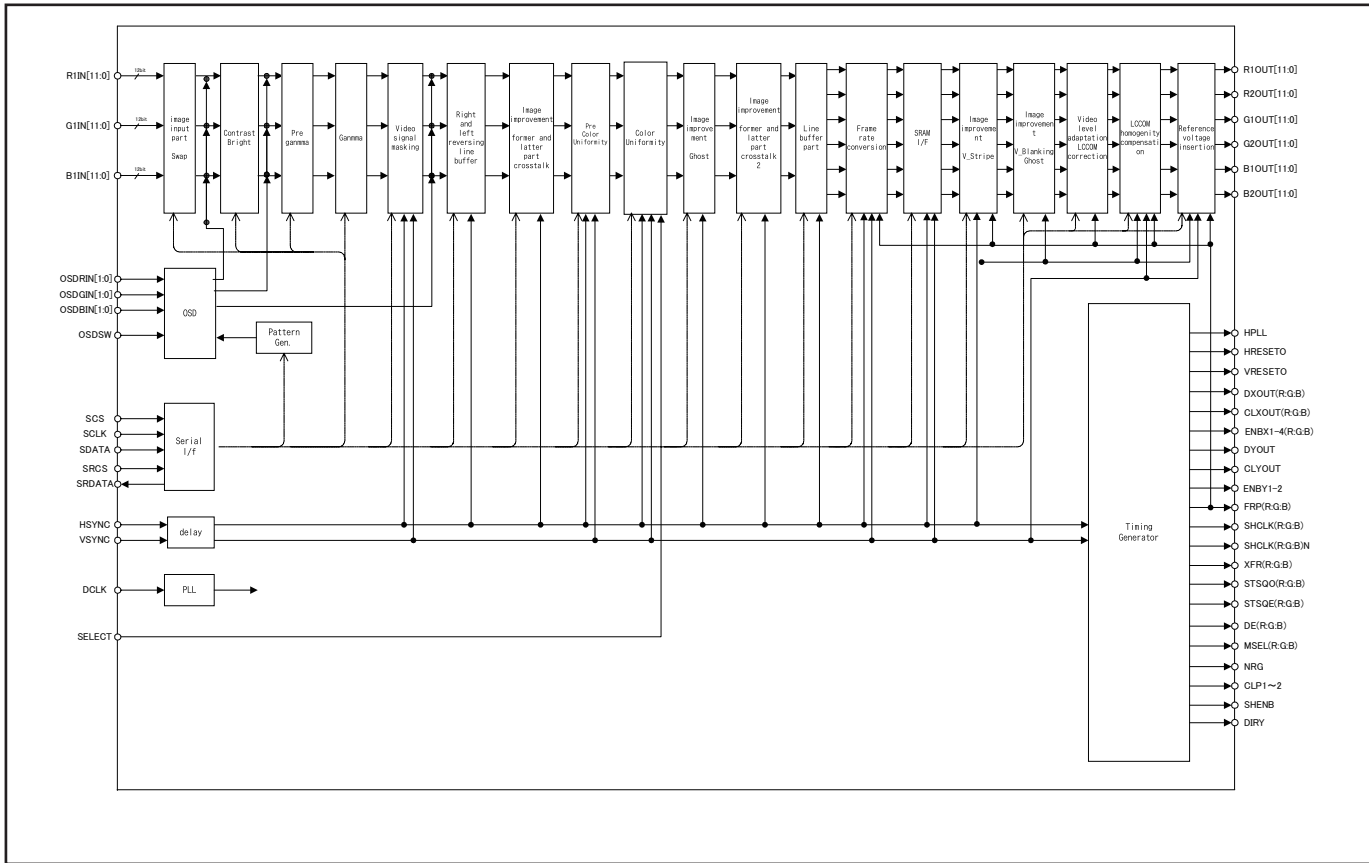


● L3E06170 <D/A, S/H-LCD Driver, IC501, IC531, IC561>

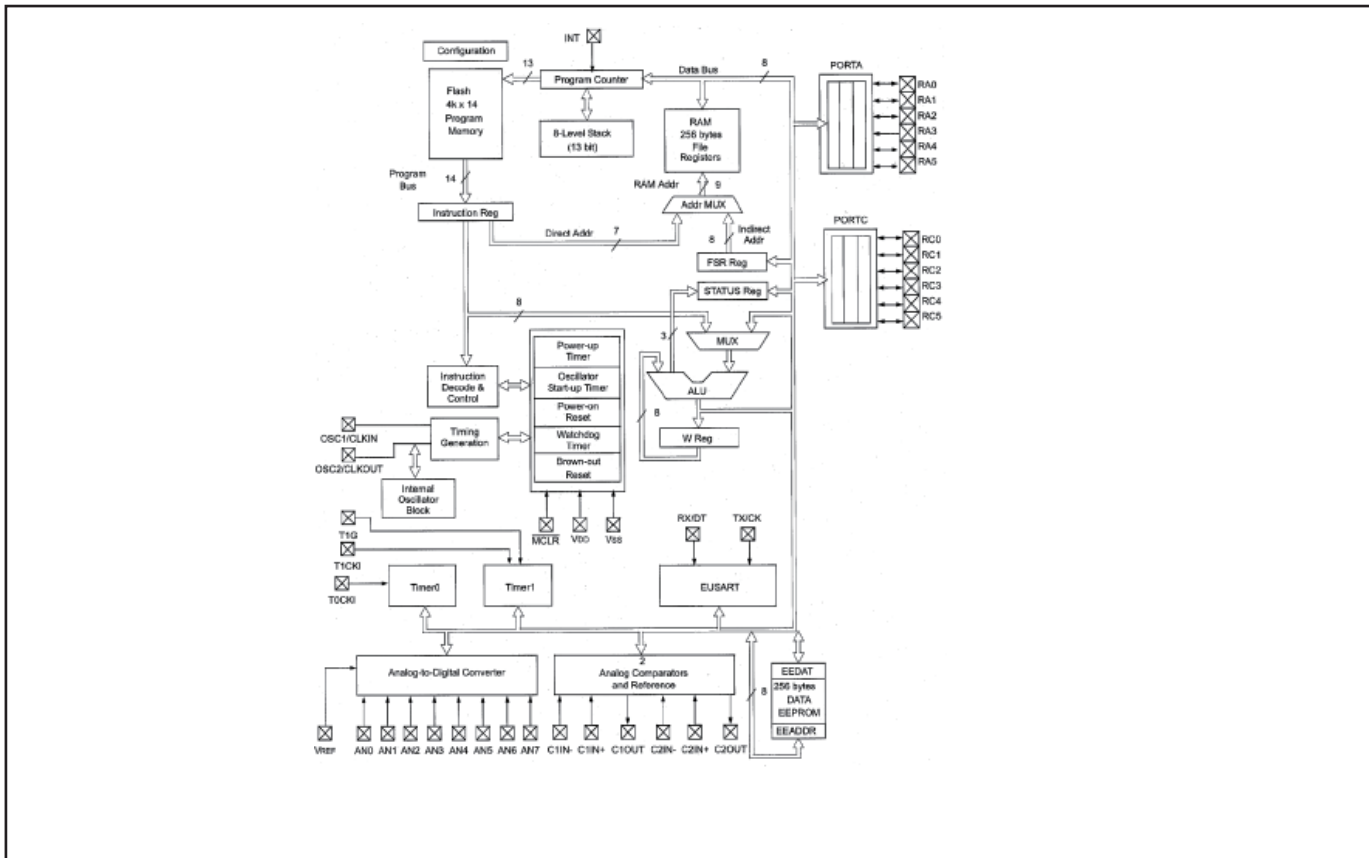


## IC Block Diagrams

### ● L3E07111 <LCD Driver & Gamma Correction, IC401>

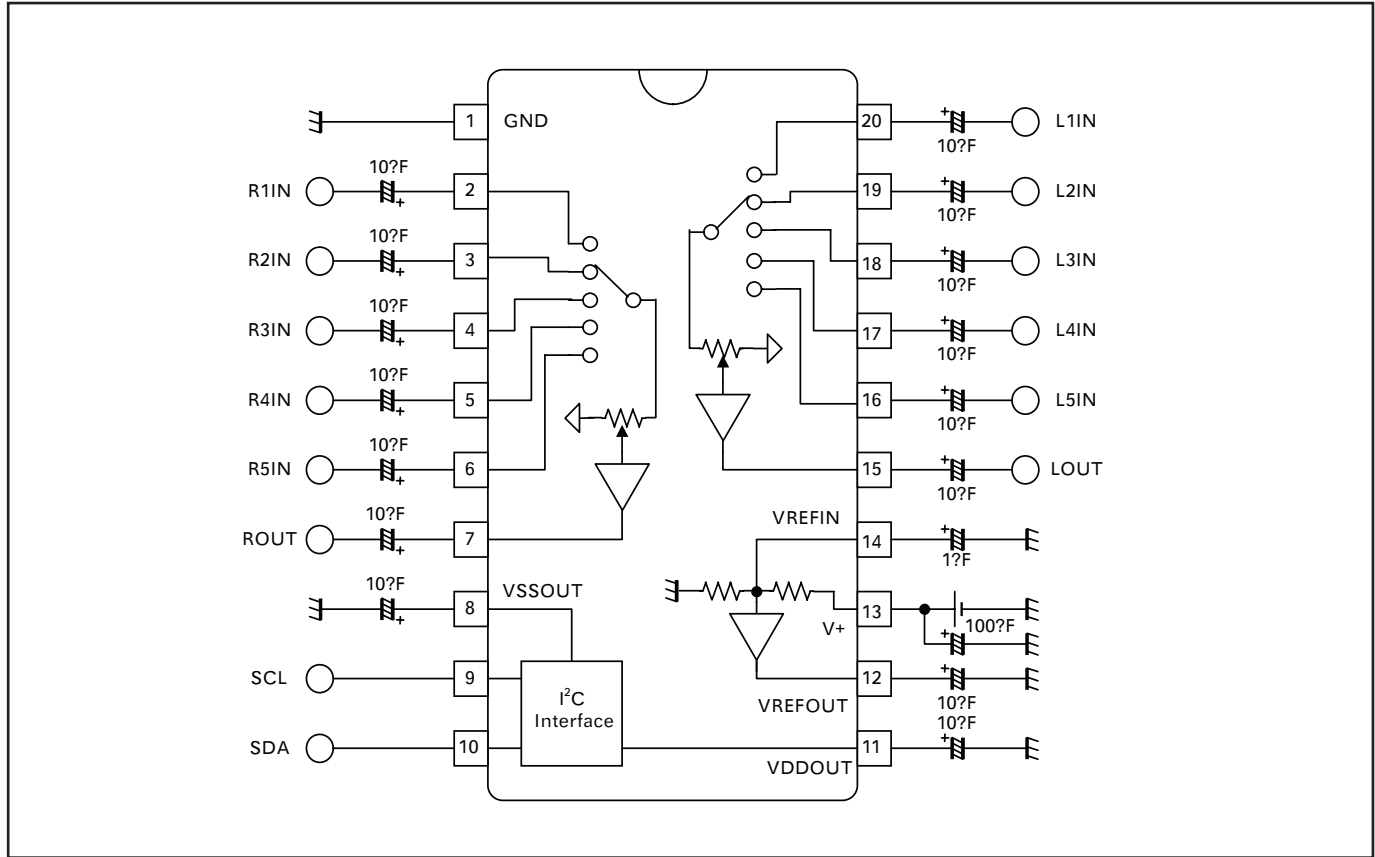


### ● PIC16F688T <LAMP ID, IC8741>

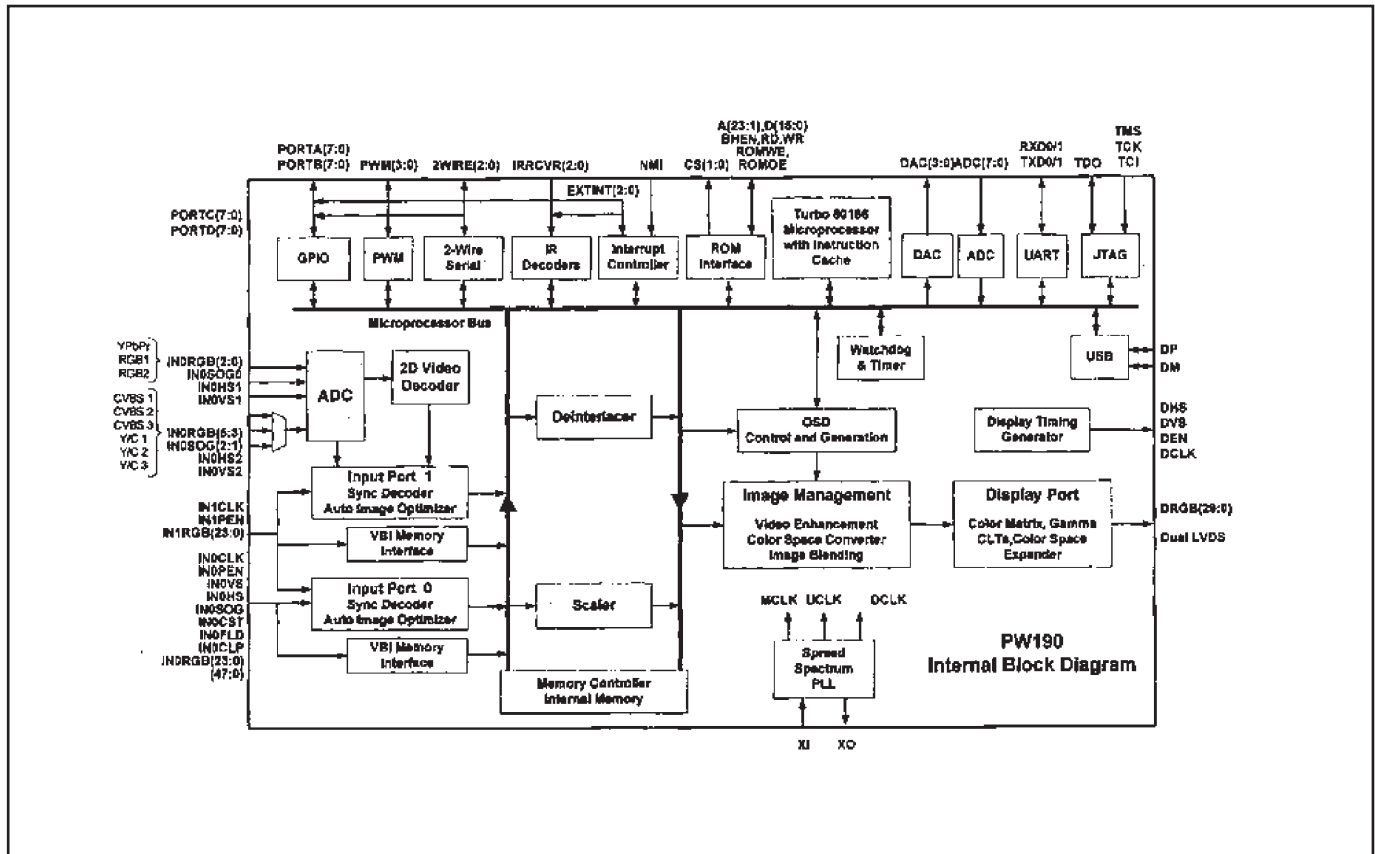


IC Block Diagrams

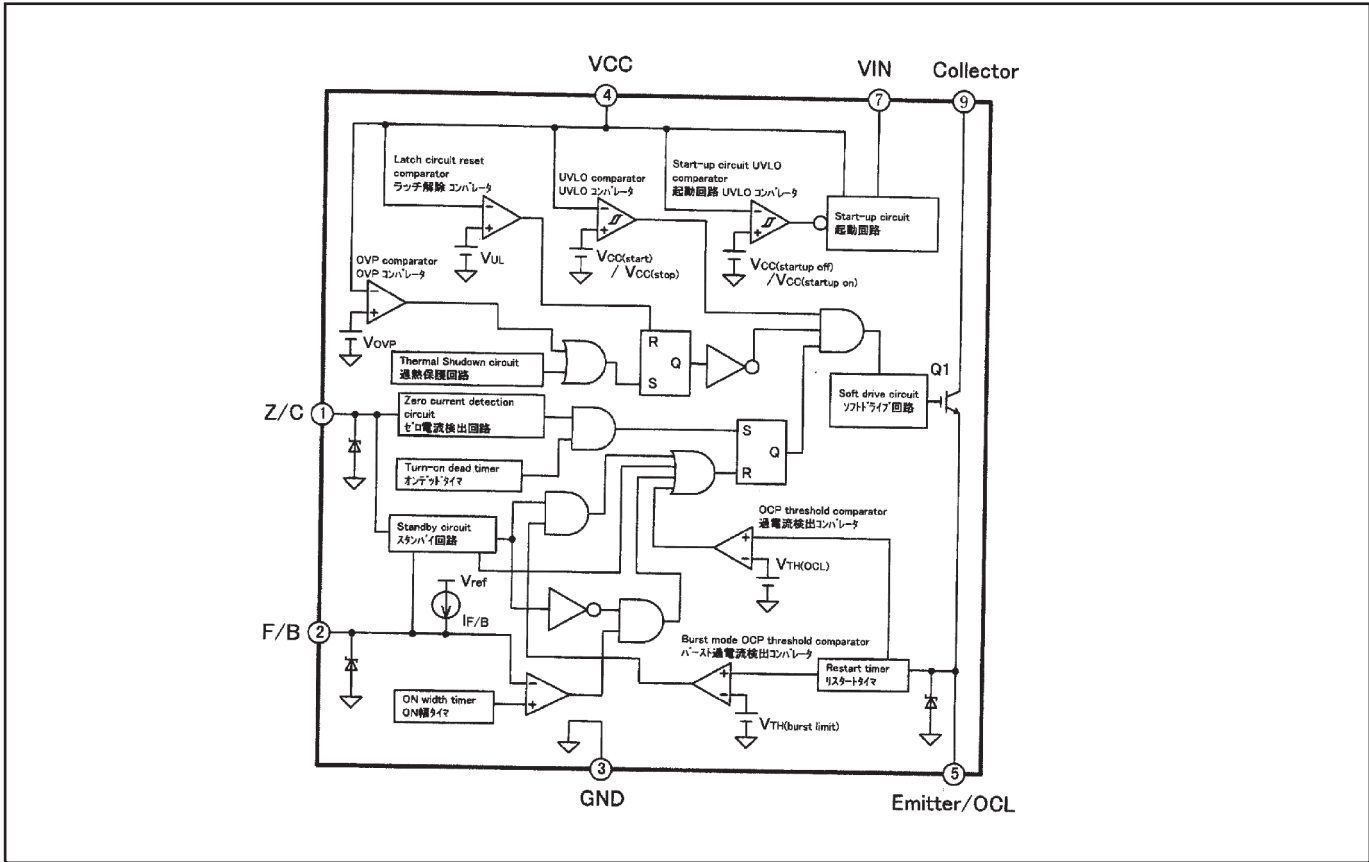
● NJW1156 <Audio Control, IC5001>



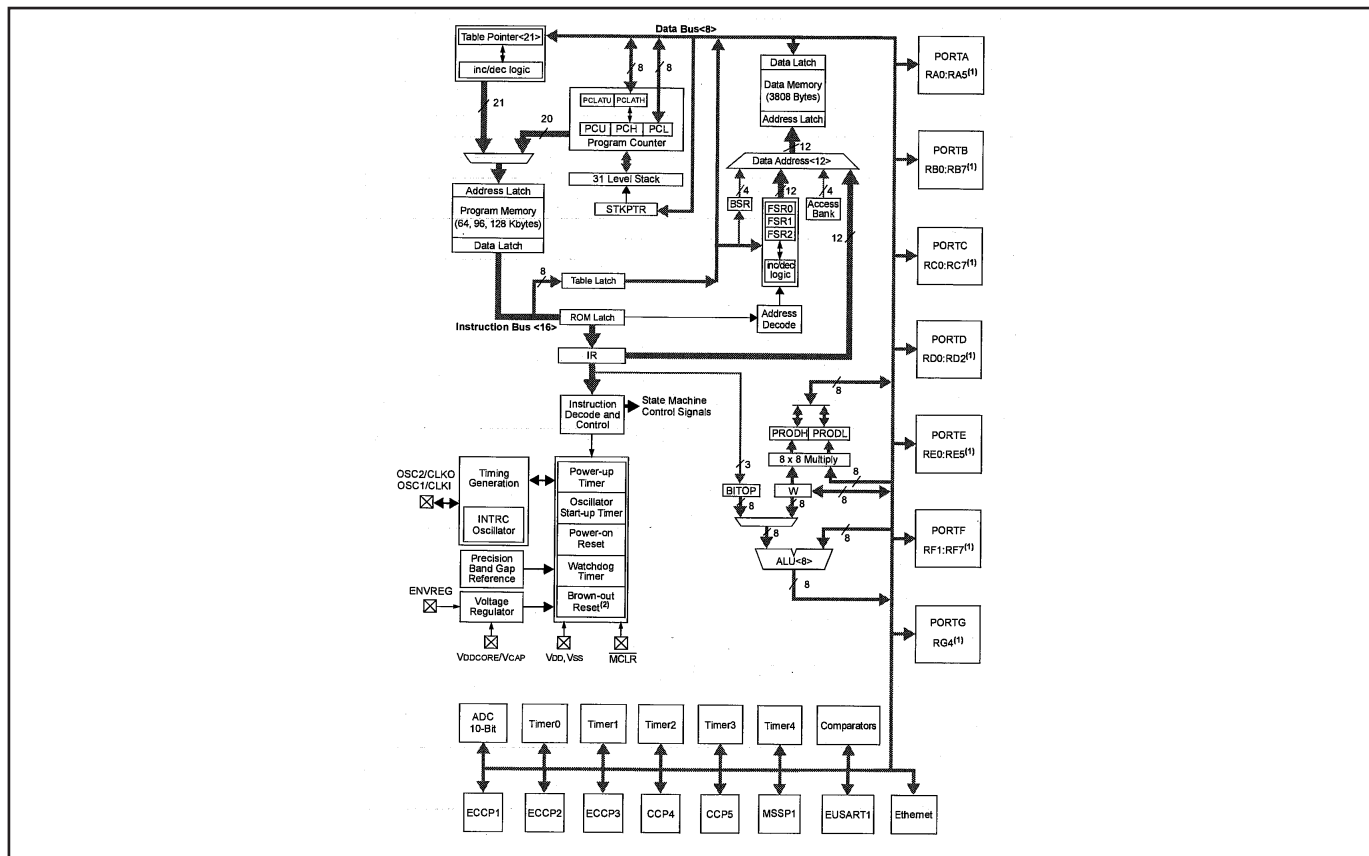
● PW190 <Scaler, IC301>



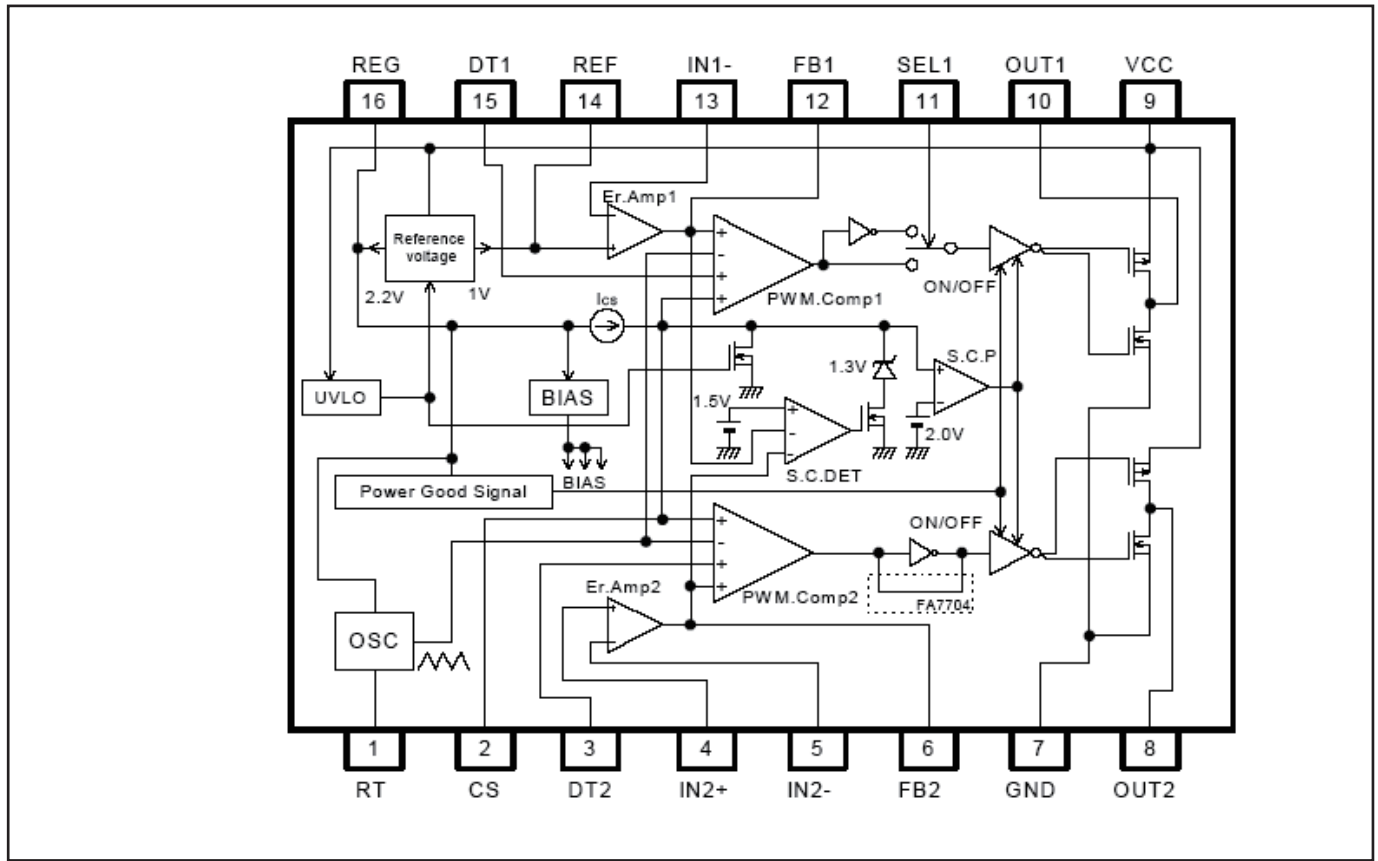
● MR4010 <Power OSC, IC631>



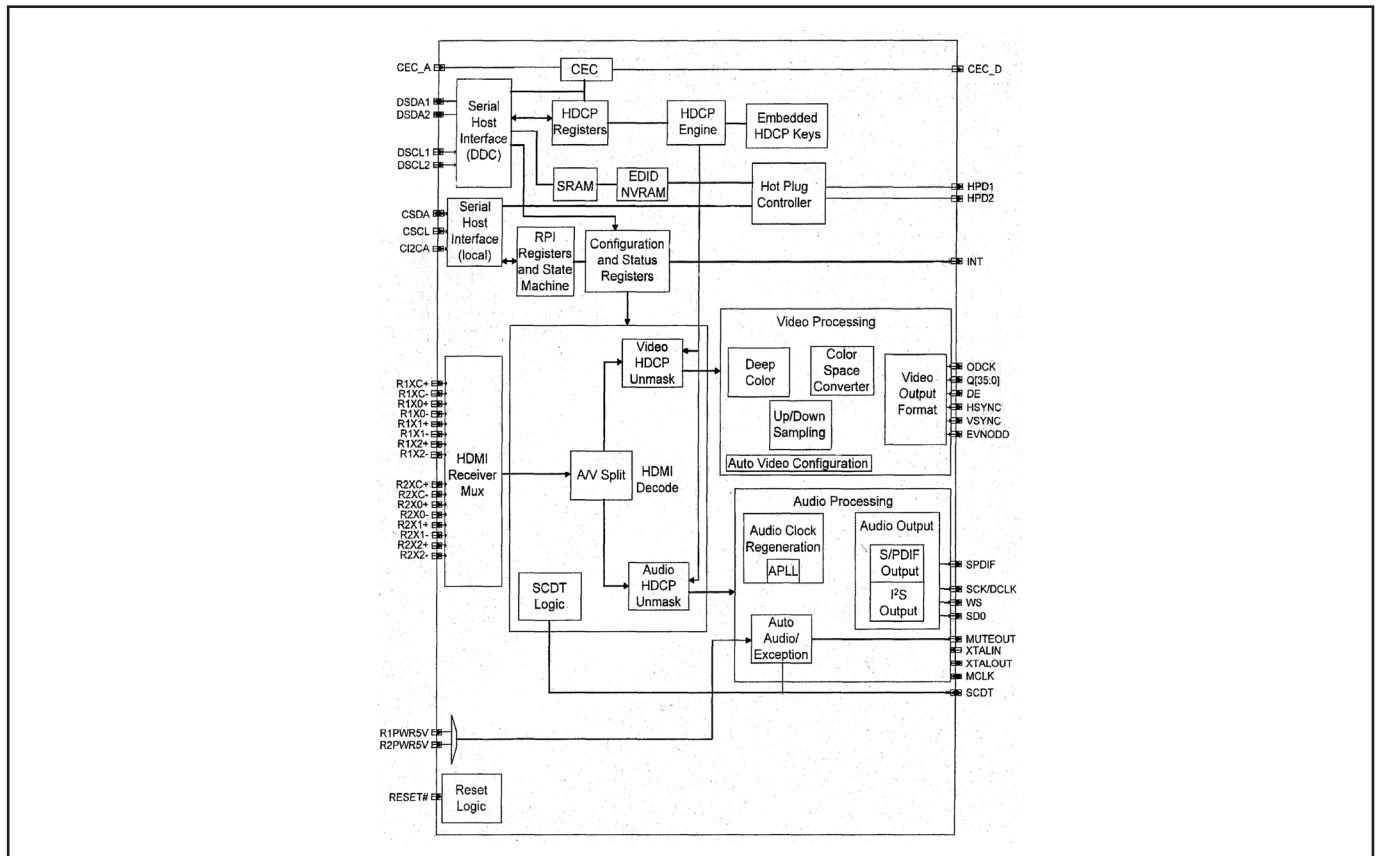
● PIC18F67J60 <LAN CONTROL, IC8801>



● FA7703 <DC-DC Converter, IC7811>



● Sil9127 <HDMI Receiver, IC8001>



# Electrical Parts List

Product safety should be considered when a component replacement is made in any area of a projector.  
Components indicated by a  $\Delta$  mark in this parts list and the circuit diagram show components whose value have special significance to product safety. It is particularly recommended that only parts specified on the following parts list be used for components replacement pointed out by the mark.

## ● Read Description in the parts list

Read description in the Capacitor and Resistor as follows:

<b>CAPACITOR</b>	<b>CERAMIC</b>	<b>100P</b>	<b>K</b>	<b>50V</b>	
					Rated Voltage
					Tolerance Symbols:
					Less than 10pF
					A : Not specified    B : $\pm 0.1\text{pF}$ C : $\pm 0.25\text{pF}$
					D : $\pm 0.5\text{pF}$ E : $+0 -1\text{pF}$ F : $\pm 1\text{PF}$
					G : $\pm 2\text{pF}$ H : $+0.1 -0\text{pF}$ L : $+0 -0.1\text{pF}$
					R : $\pm 0.25 -0\text{pF}$ S : $+0 -0.25\text{pF}$
					More than 10pF
					A : Not specified    B : $\pm 0.1\%$ C : $\pm 0.25\%$
					D : $\pm 0.5\%$ F : $\pm 1\%$ G : $\pm 2\%$
					H : $\pm 3\%$ J : $\pm 5\%$ K : $\pm 10\%$
					L : $\pm 15\%$ M : $\pm 20\%$ N : $\pm 30\%$
					P : $+100 -0\%$ Q : $+30 -10\%$ T : $+50 -10\%$
					U : $+75 -10\%$ V : $+20 -10\%$ W : $+100 -10\%$
					X : $+40 -20\%$ Y : $+150 -10\%$ Z : $+80 -20\%$

Rated value: P=pico farad, U=micro farad

Material:

CERAMIC..... Ceramic  
 MT-PAPER..... Metallized Paper  
 POLYESTER..... Polyester  
 MT-POLYEST..... Metallized Polyester  
 POLYPRO..... Polypropylene  
 MT-POLYPRO..... Metallized Polypropylene  
 COMPO FILM..... Composite film  
 MT-COMPO..... Metallized Composite  
 STYRENE..... Styrene  
 TA-SOLID..... Tantalum Oxide Solid Electrolytic  
 AL-SOLID..... Aluminium Solid Electrolytic  
 ELECT..... Aluminum Foil Electrolytic  
 NP-ELECT..... Non-polarised Electrolytic  
 OS-SOLID..... Aluminium Solid with Organic Semiconductive Electrolytic  
 POS-SOLID..... Polymerized Organic Semiconductive  
 DL-ELECT..... Double Layered Electrolytic  
 PPS-FILM..... Polyphenylene Sulfide Film  
 MT-PPS-FILM..... Metalized Polyphenylene Sulfide Film  
 MT-PEN-FILM..... Metalized Polyethylenenaphthalate Film  
 CAPACITOR..... Other

<b>RESISTOR</b>	<b>CARBON</b>	<b>4.7K</b>	<b>J</b>	<b>A</b>	<b>1/4W</b>	
						Rated Wattage
						Performance Symbols:
						A: General    B: Non flammable    Z: Low noise
						Other: Temperature coefficient
						T : $\pm 10\text{ppm}/^\circ\text{C}$ U : $\pm 25\text{ppm}/^\circ\text{C}$ C : $\pm 50\text{ppm}/^\circ\text{C}$
						D : $\pm 100\text{ppm}/^\circ\text{C}$ E : $\pm 200\text{ppm}/^\circ\text{C}$ F : $\pm 250\text{ppm}/^\circ\text{C}$
						G : $\pm 350\text{ppm}/^\circ\text{C}$ H : $\pm 1000\text{ppm}/^\circ\text{C}\pm 10\%$ W : $\pm 1200\text{ppm}/^\circ\text{C}\pm 10\%$
						Y : $\pm 1400\text{ppm}/^\circ\text{C}\pm 10\%$ J : $\pm 2000\text{ppm}/^\circ\text{C}\pm 10\%$ K : $\pm 2400\text{ppm}/^\circ\text{C}\pm 10\%$
						L : $\pm 2700\text{ppm}/^\circ\text{C}\pm 10\%$ M : $\pm 3000\text{ppm}/^\circ\text{C}\pm 10\%$ N : $\pm 3300\text{ppm}/^\circ\text{C}\pm 10\%$
						P : $\pm 3600\text{ppm}/^\circ\text{C}\pm 10\%$ Q : $\pm 3900\text{ppm}/^\circ\text{C}\pm 10\%$ R : $\pm 4200\text{ppm}/^\circ\text{C}\pm 10\%$
						S : $\pm 4300\text{ppm}/^\circ\text{C}\pm 10\%$ V : $\pm 4500\text{ppm}/^\circ\text{C}\pm 10\%$ X : $\pm 8000\text{ppm}/^\circ\text{C}\pm 10\%$
						Tolerance Symbols:
						A : $\pm 0.05\%$ B : $\pm 0.1\%$ C : $\pm 0.25\%$ D : $\pm 0.5\%$
						F : $\pm 1\%$ G : $\pm 2\%$ J : $\pm 5\%$ K : $\pm 10\%$
						M : $\pm 20\%$ P : $+5 -15\%$ Z : 0 ohm
						Rated value, ohms:
						K: 1,000, M: 1,000,000

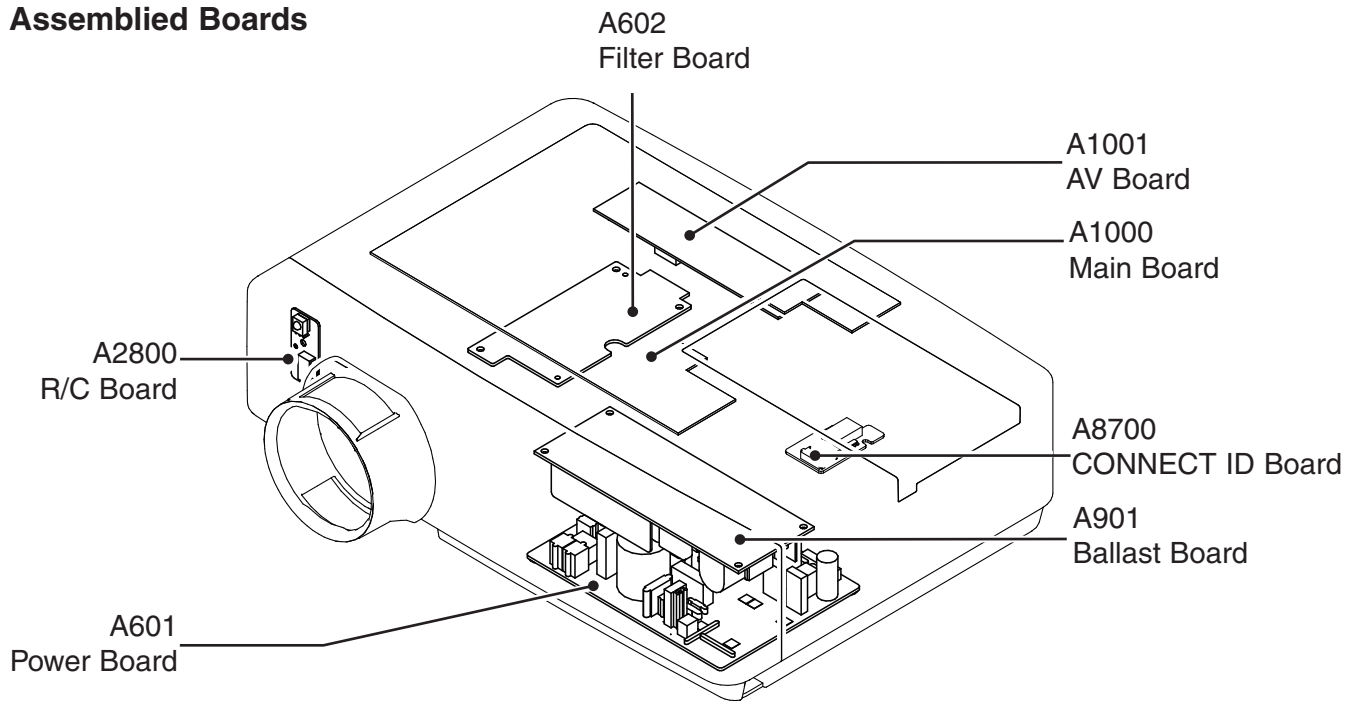
Material:

CARBON..... Carbon  
 MT-FILM..... Metal Film  
 OXIDE-MT..... Oxide Metal Film  
 SOLID..... Composition  
 MT-GLAZE..... Metal Glaze  
 WIRE WOUND... Wire Wound  
 CERAMIC RES.. Ceramic  
 FUSIBLE RES... Fusible  
 RESISTOR ..... Other

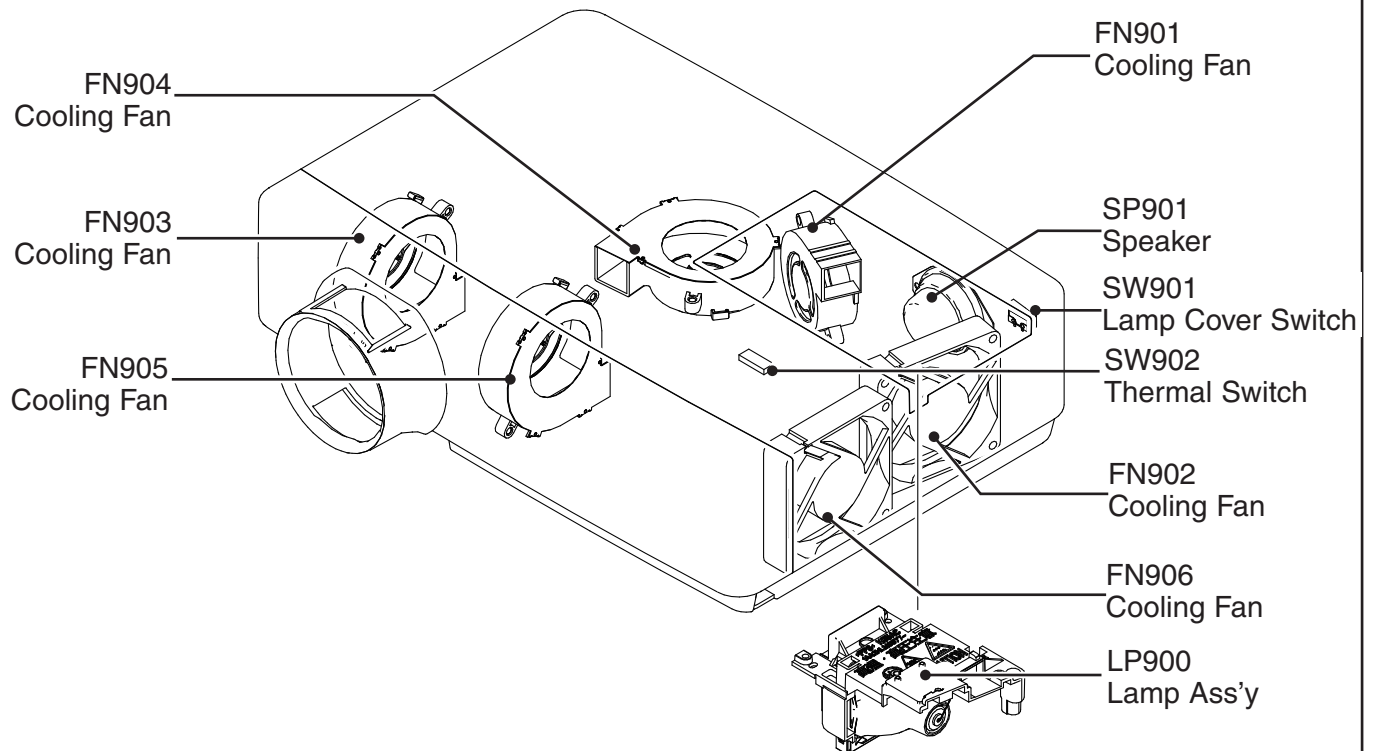
Electrical Parts List

Electrical Parts Location

● Assembled Boards



● Out Of Circuit Board



## Electrical Parts List

## Electrical Parts List

Note: Parts order must contain Chassis No., Part No., and Descriptions.

Key No.	Part No.	Description	Key No.	Part No.	Description
<b>ASSEMBLED BOARDS</b>			<b>INTEGRATED CIRCUIT</b>		
<b>FOR KG5-XB20000</b>			IC621	409 690 7918	IC FA5550N
△A601	655 002 7610	ASSY,PWB,POWER KG5AC	IC631	309 653 7405	IC MR4010-7101
△A602	655 002 7603	ASSY,PWB,FILTER KG5AC	IC671	409 692 2515	IC TA76L431FB
△A1000	655 002 7986	ASSY,PWB,MIAN KG5BC	<b>CAPACITOR</b>		
△A1001	655 002 7979	ASSY,PWB,AV KG5BC	C611	303 222 1326	CERAMIC 1000P K 1K
△A2800	655 002 7962	ASSY,PWB,R/C KG5BC		304 084 6300	CERAMIC 1000P K 1K
△A8700	655 002 7955	ASSY,PWB,ID CONNECT-1 KG5BC	C612	303 222 1326	CERAMIC 1000P K 1K
<b>FOR KB5-XB10000</b>				304 084 6300	CERAMIC 1000P K 1K
△A601	655 002 7610	ASSY,PWB,POWER KG5AC	C613	303 451 4119	MT-POLYEST 1U K 450V
△A602	655 002 7603	ASSY,PWB,FILTER KG5AC	C614	303 451 4119	MT-POLYEST 1U K 450V
△A1000	655 003 0160	ASSY,PWB,MIAN KB5BC	C615	404 118 3609	ELECT 150U M 420V
△A1001	655 002 7979	ASSY,PWB,AV KG5BC	C621	303 336 3510	CERAMIC 0.47U K 16V
△A2800	655 002 7962	ASSY,PWB,R/C KG5BC	C622	304 091 4504	CERAMIC 0.047U K 50V
△A8700	655 002 7955	ASSY,PWB,ID CONNECT-1 KG5BC	C623	304 090 1207	CERAMIC 0.01U K 50V
<b>OUT OF CIRCUIT BOARD</b>			C625	304 090 1207	CERAMIC 0.01U K 50V
△L601	945 033 2228	FERRITE	C626	303 396 9613	CERAMIC 1U K 25V
△LP900	610 343 2069	POA-LMP131	C627	304 091 3309	CERAMIC 2200P K 50V
△A901	645 099 2575	BALLAST	C631	303 157 4215	CERAMIC 220P J 50V
△A901A	610 344 5335	CABLE,BALLAST KG5AC	C632	404 111 2401	CERAMIC 680P K 2K
△FN901	645 099 5217	MOTOR,BLW DC 1.92W	C633	303 265 3216	CERAMIC 1000P J 50V
△FN902	645 099 6160	MOTOR,FAN DC 3.36W	C634	304 091 3309	CERAMIC 2200P K 50V
△FN903	645 099 6832	MOTOR,BLW DC 3.0W	C641	304 091 2609	CERAMIC 0.1U K 50V
△FN904	645 099 6849	MOTOR,BLW DC 3.0W	C644	303 417 9912	CERAMIC 4.7U K 25V
△FN905	645 099 6832	MOTOR,BLW DC 3.0W	C651	304 097 0005	ELECT 100U M 25V
△FN906	645 099 6856	MOTOR,FAN DC 3.36W	C653	303 367 0410	CERAMIC 0.1U K 50V
△SP901	652 002 6445	SPEAKER,8		303 370 1510	CERAMIC 0.1U K 50V
△SW901	645 097 3925	SWITCH,MICRO 1P-2T	C661	303 445 4405	ELECT 1800U M 25V
△SW902	652 002 8852	THERMAL	C662	303 367 0410	CERAMIC 0.1U K 50V
Z6B&6C	652 002 8470	ASSY,WIRE		304 091 2609	CERAMIC 0.1U K 50V
<b>655 002 7610 ASSY,PWB,POWER KG5AC</b>			C663	303 367 0410	CERAMIC 0.1U K 50V
<b>TRANSISTOR</b>			C664	303 429 6718	ELECT 1500U M 10V
Q611	305 146 6405	TR 2SK2837	C665	303 409 9913	ELECT 470U M 16V
Q641	305 014 4512	TR 2SC2412K T146 R	C671	304 091 2609	CERAMIC 0.1U K 50V
	305 014 4611	TR 2SC2412K T146 S	△C691	304 073 4508	CERAMIC 2200P K 250V
	305 015 8727	TR 2SC2812-L6-TB	△C692	304 073 4508	CERAMIC 2200P K 250V
	305 015 8925	TR 2SC2812-L7-TB	<b>RESISTOR</b>		
	305 163 1615	TR 2SC2812N-L6-TB0	R611	401 353 0311	MT-GLAZE 430K JA 1/3W
	305 173 9816	TR 2SC3928A1R	R612	401 353 0212	MT-GLAZE 360K JA 1/3W
	305 173 9915	TR 2SC3928A1S	R613	301 256 6314	MT-GLAZE 47K JA 1/10W
Q642	305 014 4512	TR 2SC2412K T146 R	R614	302 106 5508	RESISTER 0.075 KB 5W
	305 014 4611	TR 2SC2412K T146 S	R615	301 188 3313	MT-GLAZE 680K JA 1/4W
	305 015 8727	TR 2SC2812-L6-TB	R616	301 188 3313	MT-GLAZE 680K JA 1/4W
	305 015 8925	TR 2SC2812-L7-TB	R621	301 265 5711	MT-GLAZE 8.2K FA 1/10W
	305 163 1615	TR 2SC2812N-L6-TB0	R622	301 264 9215	MT-GLAZE 330 FA 1/10W
	305 173 9816	TR 2SC3928A1R	R624	301 162 2912	MT-GLAZE 220 JA 1/10W
	305 173 9915	TR 2SC3928A1S	R625	301 256 5614	MT-GLAZE 47 JA 1/10W
Q643	305 217 6600	TR 2SK3934	R626	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
Q651	305 134 5928	TR 2SA1037AK-T146-R	R627	301 150 5918	MT-GLAZE 10K JA 1/10W
	305 147 2218	TR 2SA1037AK-S-T146	R628	301 150 5918	MT-GLAZE 10K JA 1/10W
	305 173 9618	TR 2SA1235A1E	R629	301 255 7312	MT-GLAZE 510K JA 1/10W
	305 173 9717	TR 2SA1235A1F	R631	301 255 7718	MT-GLAZE 11K JA 1/10W
	405 220 3115	TR ISA1235AC1E	R633	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
	405 220 3016	TR ISA1235AC1F	R634	301 256 1715	MT-GLAZE 33K JA 1/10W
			R635	302 099 6308	OXIDE-MT 0.39JA 1W
			R636	301 162 3018	MT-GLAZE 22K JA 1/10W
			R641	301 150 5918	MT-GLAZE 10K JA 1/10W
			R642	301 256 6611	MT-GLAZE 68K JA 1/10W
			R643	301 150 5918	MT-GLAZE 10K JA 1/10W
			R644	301 150 5918	MT-GLAZE 10K JA 1/10W
			R646	301 256 7212	MT-GLAZE 18K JA 1/10W



## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
R648	301 256 7212	MT-GLAZE 18K JA 1/10W	△R601	301 287 5416	MT-GLAZE 200K JA 1W
R651	301 150 5918	MT-GLAZE 10K JA 1/10W	△R602	301 287 5416	MT-GLAZE 200K JA 1W
R652	301 292 1915	MT-GLAZE 22 FA 1/2W	<b>VARIABLE RESISTOR</b>		
R662	301 152 3219	MT-GLAZE 330 JA 1/10W	△VA601	407 255 6304	VARISTOR MYG3-14K300ZT
R671	301 256 7618	MT-GLAZE 3.9K JA 1/10W		408 061 9701	VARISTOR S14K300E2S5M4,2
R672	301 150 6212	MT-GLAZE 1K JA 1/10W	△LF601	645 093 1765	SOCKET,INLET AC 3P
R673	301 264 2919	MT-GLAZE 12K FA 1/10W	△LF601H	610 343 1475	HOLDER POWER AC-KG5AC
R674	301 264 7518	MT-GLAZE 2.7K FA 1/10W	<b>MISCELLANEOUS</b>		
R675	301 150 6212	MT-GLAZE 1K JA 1/10W	△F601	423 034 4101	FUSE 250V 6.3A
R676	301 264 2810	MT-GLAZE 1.2K FA 1/10W		323 021 7804	FUSE 250V 6.3A
R683	301 265 0211	MT-GLAZE 390 FA 1/10W	<b>655 002 7986 ASSY,PWB,MIAN KG5BC (FOR KG5-XB20000)</b>		
R684	301 264 9314	MT-GLAZE 3.3K FA 1/10W	<b>655 003 0160 ASSY,PWB,MIAN KB5BC (FOR KB5-XB10000)</b>		
<b>VARIABLE RESISTOR</b>			<b>TRANSISTOR</b>		
VR621	645 095 2579	VR,SEMI,1K N	Q036	406 021 7804	TR 2SC4617
<b>TRANSFORMER</b>			Q037	406 021 7804	TR 2SC4617
T651	645 097 6483	TRANS,POWER,PULSE COIL	Q1012	406 021 7804	TR 2SC4617
L612	945 084 0273	INDUCTOR,1400U	Q1062	406 021 7804	TR 2SC4617
L613	910 244 3975	CORE	Q1421	305 134 5928	TR 2SA1037AK-T146-R
L614	910 244 3975	CORE		305 147 2218	TR 2SA1037AK-S-T146
L661	910 244 3975	CORE		305 173 9618	TR 2SA1235A1E
L662	910 244 3975	CORE		305 173 9717	TR 2SA1235A1F
L663	945 041 1978	INDUCTOR,330 OHM		405 220 3115	TR ISA1235AC1E
<b>DIODE</b>				405 220 3016	TR ISA1235AC1F
D611	307 191 3903	DIODE FML-G16S	Q1422	406 021 7804	TR 2SC4617
D611D	645 098 1715	FERRITE	Q2011	406 021 7804	TR 2SC4617
D611E	645 098 1715	FERRITE	Q2021	406 021 7804	TR 2SC4617
D613	307 149 0810	DIODE 1SS355-TE-17	Q2031	406 021 7804	TR 2SC4617
D632	307 247 8827	DIODE RF101L2S	Q3051	406 021 7804	TR 2SC4617
D633	307 146 8116	DIODE EG01C	Q3582	305 217 6917	TR TPC6107 TE85L
D651	307 247 8827	DIODE RF101L2S	Q3583	406 021 7804	TR 2SC4617
D661	407 261 9504	DIODE YG862C10R	Q3601	406 021 7804	TR 2SC4617
D662	307 222 9607	DIODE FMB-2306	Q3801	305 191 5814	TR 3LN01C-TB-E
	307 202 9801	DIODE FMB-26L	Q4015	305 217 7815	TR HN1B04FE-Y TE85L
	307 253 7504	DIODE RB085T-60	Q4016	305 217 7815	TR HN1B04FE-Y TE85L
	307 250 2403	DIODE RB225T-60	Q5031	405 221 7914	TR HN1C01FE-Y
D663	307 247 8827	DIODE RF101L2S	Q5035	405 221 7914	TR HN1C01FE-Y
	307 190 4119	DIODE SFPL-52V	Q5061	405 221 7914	TR HN1C01FE-Y
D664	307 210 5416	DIODE RB551V-30-TE-17	Q5062	405 221 7914	TR HN1C01FE-Y
DB611	307 202 7708	DIODE D10XB60	Q5306	406 021 7804	TR 2SC4617
<b>MISCELLANEOUS</b>			Q5336	305 134 5928	TR 2SA1037AK-T146-R
△F631	324 006 1305	FUSE 250V 2.5A		305 147 2218	TR 2SA1037AK-S-T146
Q611F	645 098 1715	FERRITE		305 173 9618	TR 2SA1235A1E
△PC661	307 223 7315	PC TLP421F(D4-GB-TP4)		305 173 9717	TR 2SA1235A1F
	307 223 8312	PC TLP421F(D4-GR-TP4)		405 220 3115	TR ISA1235AC1E
	407 265 7813	PC TLP781F(D4-GB-TP7)		405 220 3016	TR ISA1235AC1F
△PC671	307 223 7315	PC TLP421F(D4-GB-TP4)	Q5751	305 217 6917	TR TPC6107 TE85L
	307 223 8312	PC TLP421F(D4-GR-TP4)	Q5752	406 021 7804	TR 2SC4617
	407 265 7813	PC TLP781F(D4-GB-TP7)	Q6845	405 221 7914	TR HN1C01FE-Y
PTH611	308 037 5501	THERMISTOR NTPDB5R0LDHBO	Q6846	405 221 7914	TR HN1C01FE-Y
PTH641	408 062 4606	TH PRF18BD471QB1RB	Q7801	405 221 7914	TR HN1C01FE-Y
ZD631	307 206 5413	ZD UDZS-TE-178.2B	Q7802	405 221 7914	TR HN1C01FE-Y
<b>655 002 7603 ASSY,PWB,FILTER KG5AC</b>			Q7812	305 217 8515	TR RSQ025P03-TR
<b>CAPACITOR</b>			Q7813	305 217 7815	TR HN1B04FE-Y TE85L
△C601	404 117 6403	MT-POLYEST 1U K 275V	Q7842	305 217 7815	TR HN1B04FE-Y TE85L
	404 117 8902	MT-POLYEST 1U K 310V	Q7862	305 217 8515	TR RSQ025P03-TR
△C602	404 117 6403	MT-POLYEST 1U K 275V	Q7864	305 217 7815	TR HN1B04FE-Y TE85L
	404 117 8902	MT-POLYEST 1U K 310V	Q8091	305 217 7815	TR HN1B04FE-Y TE85L
△C603	304 073 3907	CERAMIC 1000P K 250V	Q9602	305 211 1918	TR RJU002N06
△C604	304 073 3907	CERAMIC 1000P K 250V	Q9603	305 211 1918	TR RJU002N06
<b>RESISTOR</b>					

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
Q9604	305 211 1918	TR RJU002N06		304 103 6601	CERAMIC 0.22U K 16V
Q9631	406 021 7804	TR 2SC4617	C039	303 454 0613	CERAMIC 0.01U K 50V
Q9632	305 134 5928	TR 2SA1037AK-T146-R	C041	303 454 0613	CERAMIC 0.01U K 50V
	305 147 2218	TR 2SA1037AK-S-T146	C1000	403 467 0911	CERAMIC 0.1U K 25V
	305 173 9618	TR 2SA1235A1E	C1001	303 453 8917	CERAMIC 0.1U K 16V
	305 173 9717	TR 2SA1235A1F		303 453 8610	CERAMIC 0.1U K 16V
	405 220 3115	TR ISA1235AC1E		303 409 3426	CERAMIC 0.1U K 16V
	405 220 3016	TR ISA1235AC1F	C1003	303 381 5316	ELECT 100U M 16V
Q9641	406 021 7804	TR 2SC4617	C1005	303 396 9613	CERAMIC 1U K 25V
Q9642	305 134 5928	TR 2SA1037AK-T146-R	C1010	303 453 8917	CERAMIC 0.1U K 16V
	305 147 2218	TR 2SA1037AK-S-T146		303 453 8610	CERAMIC 0.1U K 16V
	305 173 9618	TR 2SA1235A1E		303 409 3426	CERAMIC 0.1U K 16V
	305 173 9717	TR 2SA1235A1F	C1011	303 454 0415	CERAMIC 0.068U K 16V
	405 220 3115	TR ISA1235AC1E		303 442 0519	CERAMIC 0.068U K 16V
	405 220 3016	TR ISA1235AC1F	C1013	303 453 8917	CERAMIC 0.1U K 16V
				303 453 8610	CERAMIC 0.1U K 16V
				303 409 3426	CERAMIC 0.1U K 16V
			C1014	303 454 0415	CERAMIC 0.068U K 16V
				303 442 0519	CERAMIC 0.068U K 16V
			C1015	303 453 8917	CERAMIC 0.1U K 16V
				303 453 8610	CERAMIC 0.1U K 16V
				303 409 3426	CERAMIC 0.1U K 16V
			C1031	403 455 1012	CERAMIC 1U K 10V
				303 433 1112	CERAMIC 1U K 10V
			C1032	403 455 1012	CERAMIC 1U K 10V
				303 433 1112	CERAMIC 1U K 10V
			C1033	403 455 1012	CERAMIC 1U K 10V
				303 433 1112	CERAMIC 1U K 10V
			C1034	303 194 5312	ELECT 33U M 16V
			C1042	303 453 8917	CERAMIC 0.1U K 16V
				303 453 8610	CERAMIC 0.1U K 16V
				303 409 3426	CERAMIC 0.1U K 16V
			C1050	403 455 1012	CERAMIC 1U K 10V
				303 433 1112	CERAMIC 1U K 10V
			C1051	303 453 8917	CERAMIC 0.1U K 16V
				303 453 8610	CERAMIC 0.1U K 16V
				303 409 3426	CERAMIC 0.1U K 16V
			C1052	403 455 1012	CERAMIC 1U K 10V
				303 433 1112	CERAMIC 1U K 10V
			C1053	403 455 1012	CERAMIC 1U K 10V
				303 433 1112	CERAMIC 1U K 10V
			C1092	303 358 3215	CERAMIC 10U K 6.3V
				303 370 0018	CERAMIC 10U K 6.3V
				303 368 7319	CERAMIC 10U K 6.3V
			C1301	303 453 8917	CERAMIC 0.1U K 16V
				303 453 8610	CERAMIC 0.1U K 16V
				303 409 3426	CERAMIC 0.1U K 16V
			C1331	303 276 1911	CERAMIC 22P J 50V
			C1332	403 456 4616	CERAMIC 27P J 50V
				303 309 2519	CERAMIC 27P J 50V
			C1371	303 453 8917	CERAMIC 0.1U K 16V
				303 453 8610	CERAMIC 0.1U K 16V
				303 409 3426	CERAMIC 0.1U K 16V
			C1421	403 455 1012	CERAMIC 1U K 10V
				303 433 1112	CERAMIC 1U K 10V
			C1422	303 453 8917	CERAMIC 0.1U K 16V
				303 453 8610	CERAMIC 0.1U K 16V
				303 409 3426	CERAMIC 0.1U K 16V
			C1423	303 453 8917	CERAMIC 0.1U K 16V
				303 453 8610	CERAMIC 0.1U K 16V
				303 409 3426	CERAMIC 0.1U K 16V
			C1424	303 453 8917	CERAMIC 0.1U K 16V
				303 453 8610	CERAMIC 0.1U K 16V
				303 409 3426	CERAMIC 0.1U K 16V
			C1427	303 453 8917	CERAMIC 0.1U K 16V
				303 453 8610	CERAMIC 0.1U K 16V
				303 409 3426	CERAMIC 0.1U K 16V

## INTEGRATED CIRCUIT

IC001	409 691 0413	IC TPA3123D2PWPR
IC1031	309 039 7817	IC NJM4558M-TE2
IC1051	409 697 3913	IC LE24C023M-TLM-E
IC1303	310 479 4004	IC TC7WBD125AFK
IC1371	410 656 8600	IC 24AA64T-I/MS
IC1422	309 431 4424	IC M62334FP-DF5Q
IC1424	410 666 5804	IC UPC358GR-9LG-E1-A
IC301	309 670 8419	IC PW190-10L
IC3801	309 652 0714	IC HIN202EIBNZ-T
IC3851	309 644 3310	IC MXA2500EL
IC4891	309 395 5915	IC TC7SH00FU-(TE85L)
IC5001	409 683 5716	IC NJW1156AV
IC5542	410 656 8501	IC XC6216BC02MR
IC5543	410 656 8501	IC XC6216BC02MR
IC5601	409 685 9415	IC MP2307DN
IC5602	410 666 0809	IC LM39101D-5.0V
IC5621	410 651 0104	IC R1131D101B-TR-F
IC5821	409 689 2115	IC MP2106DK
IC5841	309 598 5217	IC TAR5S25
IC5861	409 689 2115	IC MP2106DK
IC592	309 461 7822	IC PQ20WZ11
IC7811	309 675 1316	IC FA7703V-H1
IC7841	309 461 7822	IC PQ20WZ11
IC8001	409 698 5510	IC SII9127ACTU
IC801	410 678 3003	IC S29GL032N90TFI030KD5AC
IC8081	310 595 8009	IC PQ1LAX95MSPQ
IC8091	410 643 5100	IC PQ070XNB1ZPH
IC841	410 647 7902	IC MCP103T-300
IC8801	410 689 1005	IC PIC18F67J60-I/PT-KD5AC
IC8802	410 656 8600	IC 24AA64T-I/MS
IC8803	410 681 7302	IC M25P10-AVMN6TP

## CAPACITOR

C001	303 396 5516	ELECT 470U M 16V
C002	303 378 1611	ELECT 470U M 16V
C003	303 336 3510	CERAMIC 0.47U K 16V
	304 110 9800	CERAMIC 0.47U K 16V
C004	303 396 9613	CERAMIC 1U K 25V
C005	303 396 9613	CERAMIC 1U K 25V
C006	303 396 9613	CERAMIC 1U K 25V
C007	303 336 3510	CERAMIC 0.47U K 16V
	304 110 9800	CERAMIC 0.47U K 16V
C008	303 396 9613	CERAMIC 1U K 25V
C010	303 281 2415	CERAMIC 0.22U K 16V
	304 103 6601	CERAMIC 0.22U K 16V
C011	403 455 1616	CERAMIC 10U K 16V
C012	303 336 3510	CERAMIC 0.47U K 16V
	304 110 9800	CERAMIC 0.47U K 16V
C013	303 396 9613	CERAMIC 1U K 25V
C014	303 396 9613	CERAMIC 1U K 25V
C015	303 281 2415	CERAMIC 0.22U K 16V

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
C1428	303 453 8917	CERAMIC 0.1U K 16V		303 282 5118	CERAMIC 470P K 50V
	303 453 8610	CERAMIC 0.1U K 16V	C308	303 453 8917	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C1429	303 453 8917	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C309	303 453 8917	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C1431	303 453 8917	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C310	303 230 3616	TA-SOLID 47U M 6.3V
	303 409 3426	CERAMIC 0.1U K 16V		303 384 4712	TA-SOLID 47U M 6.3V
C1432	303 453 8917	CERAMIC 0.1U K 16V	C311	303 453 8719	CERAMIC 470P K 50V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 9211	CERAMIC 470P K 50V
	303 409 3426	CERAMIC 0.1U K 16V		303 282 5118	CERAMIC 470P K 50V
C1441	303 401 3810	ELECT 10U M 25V	C312	303 453 8917	CERAMIC 0.1U K 16V
	303 424 1510	ELECT 10.0U M 25V		303 453 8610	CERAMIC 0.1U K 16V
C1442	303 396 9613	CERAMIC 1U K 25V		303 409 3426	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V	C313	303 453 8917	CERAMIC 0.1U K 16V
C1871	403 455 1012	CERAMIC 1U K 10V		303 453 8610	CERAMIC 0.1U K 16V
	303 433 1112	CERAMIC 1U K 10V		303 409 3426	CERAMIC 0.1U K 16V
C1872	403 455 1012	CERAMIC 1U K 10V	C314	303 453 8719	CERAMIC 470P K 50V
	303 433 1112	CERAMIC 1U K 10V		303 453 9211	CERAMIC 470P K 50V
C2002	303 453 8917	CERAMIC 0.1U K 16V		303 282 5118	CERAMIC 470P K 50V
	303 453 8610	CERAMIC 0.1U K 16V	C315	303 230 3616	TA-SOLID 47U M 6.3V
	303 409 3426	CERAMIC 0.1U K 16V		303 384 4712	TA-SOLID 47U M 6.3V
C2003	303 230 3616	TA-SOLID 47U M 6.3V	C316	303 453 8917	CERAMIC 0.1U K 16V
	303 384 4712	TA-SOLID 47U M 6.3V		303 453 8610	CERAMIC 0.1U K 16V
C2004	303 358 3215	CERAMIC 10U K 6.3V		303 409 3426	CERAMIC 0.1U K 16V
	303 368 7319	CERAMIC 10U K 6.3V	C317	303 453 8917	CERAMIC 0.1U K 16V
C2011	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V	C318	303 453 8917	CERAMIC 0.1U K 16V
C2012	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V	C319	303 453 8719	CERAMIC 470P K 50V
C2021	303 358 3215	CERAMIC 10U K 6.3V		303 453 9211	CERAMIC 470P K 50V
	303 368 7319	CERAMIC 10U K 6.3V		303 282 5118	CERAMIC 470P K 50V
C2022	303 453 8917	CERAMIC 0.1U K 16V	C320	303 230 3616	TA-SOLID 47U M 6.3V
	303 453 8610	CERAMIC 0.1U K 16V		303 384 4712	TA-SOLID 47U M 6.3V
	303 409 3426	CERAMIC 0.1U K 16V	C321	303 453 8917	CERAMIC 0.1U K 16V
C2891	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V	C322	303 453 8917	CERAMIC 0.1U K 16V
C2892	303 453 7217	CERAMIC 47P J 50V		303 453 8610	CERAMIC 0.1U K 16V
	303 454 1610	CERAMIC 47P J 50V		303 409 3426	CERAMIC 0.1U K 16V
	303 305 8812	CERAMIC 47P J 50V	C323	303 453 8719	CERAMIC 470P K 50V
C2893	303 453 8917	CERAMIC 0.1U K 16V		303 453 9211	CERAMIC 470P K 50V
	303 453 8610	CERAMIC 0.1U K 16V		303 282 5118	CERAMIC 470P K 50V
	303 409 3426	CERAMIC 0.1U K 16V	C324	303 453 8917	CERAMIC 0.1U K 16V
C301	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V	C326	303 453 8917	CERAMIC 0.1U K 16V
C302	303 230 3616	TA-SOLID 47U M 6.3V		303 453 8610	CERAMIC 0.1U K 16V
	303 384 4712	TA-SOLID 47U M 6.3V		303 409 3426	CERAMIC 0.1U K 16V
C303	303 453 8719	CERAMIC 470P K 50V	C327	303 453 8917	CERAMIC 0.1U K 16V
	303 453 9211	CERAMIC 470P K 50V		303 453 8610	CERAMIC 0.1U K 16V
	303 282 5118	CERAMIC 470P K 50V		303 409 3426	CERAMIC 0.1U K 16V
C304	303 453 8917	CERAMIC 0.1U K 16V	C328	303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
C3052	303 372 7510	CERAMIC 2.2U K 6.3V	C329	303 453 8719	CERAMIC 470P K 50V
	303 370 0216	CERAMIC 2.2U K 6.3V		303 453 9211	CERAMIC 470P K 50V
C3053	403 455 1012	CERAMIC 1U K 10V		303 282 5118	CERAMIC 470P K 50V
	303 433 1112	CERAMIC 1U K 10V	C330	403 457 2512	CERAMIC 0.47U K 10V
C306	303 453 8917	CERAMIC 0.1U K 16V		303 376 6311	CERAMIC 0.47U K 10V
	303 453 8610	CERAMIC 0.1U K 16V	C331	303 453 8917	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C307	303 453 8719	CERAMIC 470P K 50V		303 409 3426	CERAMIC 0.1U K 16V
	303 453 9211	CERAMIC 470P K 50V	C332	303 453 8719	CERAMIC 470P K 50V

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
	303 453 9211	CERAMIC 470P K 50V	C3517	303 276 3113	CERAMIC 33P J 50V
	303 282 5118	CERAMIC 470P K 50V	C3518	303 276 3113	CERAMIC 33P J 50V
C333	303 453 8917	CERAMIC 0.1U K 16V	C3519	303 276 3113	CERAMIC 33P J 50V
	303 453 8610	CERAMIC 0.1U K 16V	C352	303 453 8917	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C334	303 453 8917	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C3521	303 276 3113	CERAMIC 33P J 50V
	303 409 3426	CERAMIC 0.1U K 16V	C3522	303 276 3113	CERAMIC 33P J 50V
C335	303 453 8917	CERAMIC 0.1U K 16V	C3523	303 276 3113	CERAMIC 33P J 50V
	303 453 8610	CERAMIC 0.1U K 16V	C3524	303 276 3113	CERAMIC 33P J 50V
	303 409 3426	CERAMIC 0.1U K 16V	C3526	303 276 3113	CERAMIC 33P J 50V
C336	303 453 8719	CERAMIC 470P K 50V	C3527	303 453 7019	CERAMIC 33P J 50V
	303 453 9211	CERAMIC 470P K 50V		303 453 9617	CERAMIC 33P J 50V
	303 282 5118	CERAMIC 470P K 50V		303 276 3113	CERAMIC 33P J 50V
C337	303 453 8917	CERAMIC 0.1U K 16V	C3528	303 276 3113	CERAMIC 33P J 50V
	303 453 8610	CERAMIC 0.1U K 16V	C3529	303 276 3113	CERAMIC 33P J 50V
	303 409 3426	CERAMIC 0.1U K 16V	C353	303 453 8917	CERAMIC 0.1U K 16V
C338	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V	C3531	303 396 9613	CERAMIC 1U K 25V
C339	303 453 8917	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
	303 453 8610	CERAMIC 0.1U K 16V	C3532	303 396 9613	CERAMIC 1U K 25V
	303 409 3426	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
C341	303 453 8917	CERAMIC 0.1U K 16V	C3533	303 396 9613	CERAMIC 1U K 25V
	303 453 8610	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
	303 409 3426	CERAMIC 0.1U K 16V	C3534	303 396 9613	CERAMIC 1U K 25V
C342	303 453 8917	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
	303 453 8610	CERAMIC 0.1U K 16V	C3536	303 381 5316	ELECT 100U M 16V
	303 409 3426	CERAMIC 0.1U K 16V	C3538	303 401 3810	ELECT 10U M 25V
C343	303 453 8917	CERAMIC 0.1U K 16V		303 424 1510	ELECT 10.0U M 25V
	303 453 8610	CERAMIC 0.1U K 16V	C3539	303 396 9613	CERAMIC 1U K 25V
	303 409 3426	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
C344	303 453 8917	CERAMIC 0.1U K 16V	C354	303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
C346	303 453 8917	CERAMIC 0.1U K 16V	C3541	303 396 9613	CERAMIC 1U K 25V
	303 453 8610	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
	303 409 3426	CERAMIC 0.1U K 16V	C3542	303 276 3113	CERAMIC 33P J 50V
C347	303 453 8917	CERAMIC 0.1U K 16V	C3543	303 453 7019	CERAMIC 33P J 50V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 9617	CERAMIC 33P J 50V
	303 409 3426	CERAMIC 0.1U K 16V		303 276 3113	CERAMIC 33P J 50V
C348	303 453 8917	CERAMIC 0.1U K 16V	C3544	303 276 3113	CERAMIC 33P J 50V
	303 453 8610	CERAMIC 0.1U K 16V	C3546	303 276 3113	CERAMIC 33P J 50V
	303 409 3426	CERAMIC 0.1U K 16V	C3547	303 276 3113	CERAMIC 33P J 50V
C3501	303 396 9613	CERAMIC 1U K 25V	C3548	303 276 3113	CERAMIC 33P J 50V
	303 397 7618	CERAMIC 1U K 25V	C3549	303 276 3113	CERAMIC 33P J 50V
C3502	303 396 9613	CERAMIC 1U K 25V	C355	303 453 8917	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V		303 453 8610	CERAMIC 0.1U K 16V
C3503	303 396 9613	CERAMIC 1U K 25V		303 409 3426	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V	C3551	303 276 3113	CERAMIC 33P J 50V
C3504	303 396 9613	CERAMIC 1U K 25V	C3552	303 276 3113	CERAMIC 33P J 50V
C3506	303 381 5316	ELECT 100U M 16V	C3553	303 276 3113	CERAMIC 33P J 50V
C3508	303 401 3810	ELECT 10U M 25V	C3554	303 276 3113	CERAMIC 33P J 50V
	303 424 1510	ELECT 10.0U M 25V	C3556	303 276 3113	CERAMIC 33P J 50V
C3509	303 396 9613	CERAMIC 1U K 25V	C3557	303 453 7019	CERAMIC 33P J 50V
	303 397 7618	CERAMIC 1U K 25V		303 453 9617	CERAMIC 33P J 50V
C351	303 453 8917	CERAMIC 0.1U K 16V		303 276 3113	CERAMIC 33P J 50V
	303 453 8610	CERAMIC 0.1U K 16V	C3558	303 276 3113	CERAMIC 33P J 50V
	303 409 3426	CERAMIC 0.1U K 16V	C3559	303 276 3113	CERAMIC 33P J 50V
C3511	303 396 9613	CERAMIC 1U K 25V	C356	303 453 8917	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V		303 453 8610	CERAMIC 0.1U K 16V
C3512	303 276 3113	CERAMIC 33P J 50V		303 409 3426	CERAMIC 0.1U K 16V
C3513	303 453 7019	CERAMIC 33P J 50V	C3561	303 396 9613	CERAMIC 1U K 25V
	303 453 9617	CERAMIC 33P J 50V		303 397 7618	CERAMIC 1U K 25V
	303 276 3113	CERAMIC 33P J 50V	C3562	303 396 9613	CERAMIC 1U K 25V
C3514	303 276 3113	CERAMIC 33P J 50V		303 397 7618	CERAMIC 1U K 25V
C3516	303 276 3113	CERAMIC 33P J 50V	C3563	303 396 9613	CERAMIC 1U K 25V

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
	303 397 7618	CERAMIC 1U K 25V		303 376 6311	CERAMIC 0.47U K 10V
C3564	303 396 9613	CERAMIC 1U K 25V	C373	403 457 2512	CERAMIC 0.47U K 10V
	303 397 7618	CERAMIC 1U K 25V		303 376 6311	CERAMIC 0.47U K 10V
C3566	303 381 5316	ELECT 100U M 16V	C374	403 457 2512	CERAMIC 0.47U K 10V
C3568	303 401 3810	ELECT 10U M 25V		303 376 6311	CERAMIC 0.47U K 10V
	303 424 1510	ELECT 10.0U M 25V	C377	303 453 8917	CERAMIC 0.1U K 16V
C3569	303 396 9613	CERAMIC 1U K 25V		303 453 8610	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V		303 409 3426	CERAMIC 0.1U K 16V
C357	303 453 8917	CERAMIC 0.1U K 16V	C378	303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
C3571	303 396 9613	CERAMIC 1U K 25V	C379	303 453 8917	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V		303 453 8610	CERAMIC 0.1U K 16V
C3572	303 276 3113	CERAMIC 33P J 50V		303 409 3426	CERAMIC 0.1U K 16V
C3573	303 453 7019	CERAMIC 33P J 50V	C380	303 453 8917	CERAMIC 0.1U K 16V
	303 453 9617	CERAMIC 33P J 50V		303 453 8610	CERAMIC 0.1U K 16V
	303 276 3113	CERAMIC 33P J 50V		303 409 3426	CERAMIC 0.1U K 16V
C3574	303 276 3113	CERAMIC 33P J 50V	C3801	303 453 8917	CERAMIC 0.1U K 16V
C3576	303 276 3113	CERAMIC 33P J 50V		303 453 8610	CERAMIC 0.1U K 16V
C3577	303 276 3113	CERAMIC 33P J 50V		303 409 3426	CERAMIC 0.1U K 16V
C3578	303 276 3113	CERAMIC 33P J 50V	C3802	303 453 8917	CERAMIC 0.1U K 16V
C3579	303 276 3113	CERAMIC 33P J 50V		303 453 8610	CERAMIC 0.1U K 16V
C358	303 453 8917	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C3803	303 453 8917	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C3581	303 276 3113	CERAMIC 33P J 50V		303 409 3426	CERAMIC 0.1U K 16V
C3582	303 276 3113	CERAMIC 33P J 50V	C3804	303 453 8917	CERAMIC 0.1U K 16V
C3583	303 276 3113	CERAMIC 33P J 50V		303 453 8610	CERAMIC 0.1U K 16V
C3584	303 276 3113	CERAMIC 33P J 50V		303 409 3426	CERAMIC 0.1U K 16V
C3586	303 276 3113	CERAMIC 33P J 50V	C3806	403 455 1012	CERAMIC 1U K 10V
C3587	303 453 7019	CERAMIC 33P J 50V		303 433 1112	CERAMIC 1U K 10V
	303 453 9617	CERAMIC 33P J 50V	C381	303 453 8917	CERAMIC 0.1U K 16V
	303 276 3113	CERAMIC 33P J 50V		303 453 8610	CERAMIC 0.1U K 16V
C3588	303 276 3113	CERAMIC 33P J 50V		303 409 3426	CERAMIC 0.1U K 16V
C3589	303 276 3113	CERAMIC 33P J 50V	C382	303 453 8917	CERAMIC 0.1U K 16V
C3598	303 394 5815	CERAMIC 4.7U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C3599	403 455 1012	CERAMIC 1U K 10V		303 409 3426	CERAMIC 0.1U K 16V
	303 433 1112	CERAMIC 1U K 10V	C383	303 453 8719	CERAMIC 470P K 50V
C361	403 455 1012	CERAMIC 1U K 10V		303 453 9211	CERAMIC 470P K 50V
	303 433 1112	CERAMIC 1U K 10V		303 282 5118	CERAMIC 470P K 50V
C362	403 455 1012	CERAMIC 1U K 10V	C384	303 453 8719	CERAMIC 470P K 50V
	303 433 1112	CERAMIC 1U K 10V		303 453 9211	CERAMIC 470P K 50V
C363	403 455 1012	CERAMIC 1U K 10V		303 282 5118	CERAMIC 470P K 50V
	303 433 1112	CERAMIC 1U K 10V	C385	303 453 8719	CERAMIC 470P K 50V
C364	303 454 0613	CERAMIC 0.01U K 50V		303 453 9211	CERAMIC 470P K 50V
	303 441 9810	CERAMIC 0.01U K 50V		303 282 5118	CERAMIC 470P K 50V
C365	303 454 0415	CERAMIC 0.068U K 16V	C3851	303 453 8917	CERAMIC 0.1U K 16V
	303 442 0519	CERAMIC 0.068U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C366	303 453 8917	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C3852	303 453 8917	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C367	303 453 8917	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C3853	303 336 3510	CERAMIC 0.47U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		304 110 9800	CERAMIC 0.47U K 16V
C368	303 453 8917	CERAMIC 0.1U K 16V	C3854	303 336 3510	CERAMIC 0.47U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		304 110 9800	CERAMIC 0.47U K 16V
	303 409 3426	CERAMIC 0.1U K 16V	C401	303 453 8719	CERAMIC 470P K 50V
C369	303 453 8917	CERAMIC 0.1U K 16V		303 453 9211	CERAMIC 470P K 50V
	303 453 8610	CERAMIC 0.1U K 16V		303 282 5118	CERAMIC 470P K 50V
	303 409 3426	CERAMIC 0.1U K 16V	C402	303 453 8917	CERAMIC 0.1U K 16V
C370	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V	C403	303 453 8719	CERAMIC 470P K 50V
C371	303 453 8917	CERAMIC 0.1U K 16V		303 453 9211	CERAMIC 470P K 50V
	303 453 8610	CERAMIC 0.1U K 16V		303 282 5118	CERAMIC 470P K 50V
	303 409 3426	CERAMIC 0.1U K 16V	C404	303 453 8917	CERAMIC 0.1U K 16V
C372	403 457 2512	CERAMIC 0.47U K 10V		303 453 8610	CERAMIC 0.1U K 16V

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
	303 409 3426	CERAMIC 0.1U K 16V		303 282 5118	CERAMIC 470P K 50V
C406	303 453 8917	CERAMIC 0.1U K 16V	C480	303 358 3215	CERAMIC 10U K 6.3V
	303 453 8610	CERAMIC 0.1U K 16V		303 370 0018	CERAMIC 10U K 6.3V
	303 409 3426	CERAMIC 0.1U K 16V		303 368 7319	CERAMIC 10U K 6.3V
C407	303 453 8719	CERAMIC 470P K 50V	C4808	303 368 7319	CERAMIC 10U K 6.3V
	303 453 9211	CERAMIC 470P K 50V	C481	303 358 3215	CERAMIC 10U K 6.3V
	303 282 5118	CERAMIC 470P K 50V		303 370 0018	CERAMIC 10U K 6.3V
C411	303 453 8917	CERAMIC 0.1U K 16V		303 368 7319	CERAMIC 10U K 6.3V
	303 453 8610	CERAMIC 0.1U K 16V	C482	303 358 3215	CERAMIC 10U K 6.3V
	303 409 3426	CERAMIC 0.1U K 16V		303 370 0018	CERAMIC 10U K 6.3V
C412	303 453 8917	CERAMIC 0.1U K 16V		303 368 7319	CERAMIC 10U K 6.3V
	303 453 8610	CERAMIC 0.1U K 16V	C483	303 358 3215	CERAMIC 10U K 6.3V
	303 409 3426	CERAMIC 0.1U K 16V		303 370 0018	CERAMIC 10U K 6.3V
C413	303 453 8719	CERAMIC 470P K 50V		303 368 7319	CERAMIC 10U K 6.3V
	303 453 9211	CERAMIC 470P K 50V	C4891	303 453 8917	CERAMIC 0.1U K 16V
	303 282 5118	CERAMIC 470P K 50V		303 453 8610	CERAMIC 0.1U K 16V
C414	303 453 8917	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C5001	303 396 9613	CERAMIC 1U K 25V
	303 409 3426	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
C416	303 453 8917	CERAMIC 0.1U K 16V	C5002	303 396 9613	CERAMIC 1U K 25V
	303 453 8610	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
	303 409 3426	CERAMIC 0.1U K 16V	C5004	303 396 9613	CERAMIC 1U K 25V
C417	303 372 7510	CERAMIC 2.2U K 6.3V		303 397 7618	CERAMIC 1U K 25V
	303 370 0216	CERAMIC 2.2U K 6.3V	C5009	303 396 9613	CERAMIC 1U K 25V
C421	303 453 8719	CERAMIC 470P K 50V		303 397 7618	CERAMIC 1U K 25V
	303 453 9211	CERAMIC 470P K 50V	C501	303 298 9612	CERAMIC 0.1U K 16V
	303 282 5118	CERAMIC 470P K 50V	C5011	303 394 5815	CERAMIC 4.7U K 16V
C422	403 455 1012	CERAMIC 1U K 10V	C5012	303 394 5815	CERAMIC 4.7U K 16V
	303 433 1112	CERAMIC 1U K 10V	C5013	303 394 5815	CERAMIC 4.7U K 16V
C423	303 453 8719	CERAMIC 470P K 50V	C5014	303 396 9613	CERAMIC 1U K 25V
	303 453 9211	CERAMIC 470P K 50V		303 397 7618	CERAMIC 1U K 25V
	303 282 5118	CERAMIC 470P K 50V	C502	303 453 8917	CERAMIC 0.1U K 16V
C424	403 455 1012	CERAMIC 1U K 10V		303 453 8610	CERAMIC 0.1U K 16V
	303 433 1112	CERAMIC 1U K 10V		303 409 3426	CERAMIC 0.1U K 16V
C426	403 455 1012	CERAMIC 1U K 10V	C5021	303 396 9613	CERAMIC 1U K 25V
	303 433 1112	CERAMIC 1U K 10V		303 397 7618	CERAMIC 1U K 25V
C427	303 453 8719	CERAMIC 470P K 50V	C5022	303 396 9613	CERAMIC 1U K 25V
	303 453 9211	CERAMIC 470P K 50V		303 397 7618	CERAMIC 1U K 25V
	303 282 5118	CERAMIC 470P K 50V	C5024	403 455 1616	CERAMIC 10U K 16V
C431	303 453 8719	CERAMIC 470P K 50V	C5025	403 455 1616	CERAMIC 10U K 16V
	303 453 9211	CERAMIC 470P K 50V	C5026	403 455 1616	CERAMIC 10U K 16V
	303 282 5118	CERAMIC 470P K 50V	C5027	403 455 1616	CERAMIC 10U K 16V
C432	303 453 8917	CERAMIC 0.1U K 16V	C5028	403 455 1616	CERAMIC 10U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C5029	403 455 1616	CERAMIC 10U K 16V
	303 409 3426	CERAMIC 0.1U K 16V	C503	303 453 8917	CERAMIC 0.1U K 16V
C433	303 453 8719	CERAMIC 470P K 50V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 9211	CERAMIC 470P K 50V		303 409 3426	CERAMIC 0.1U K 16V
	303 282 5118	CERAMIC 470P K 50V	C5038	303 454 0613	CERAMIC 0.01U K 50V
C434	303 453 8917	CERAMIC 0.1U K 16V		303 441 9810	CERAMIC 0.01U K 50V
	303 453 8610	CERAMIC 0.1U K 16V	C5039	303 454 0613	CERAMIC 0.01U K 50V
	303 409 3426	CERAMIC 0.1U K 16V		303 441 9810	CERAMIC 0.01U K 50V
C436	303 453 8917	CERAMIC 0.1U K 16V	C504	303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
C437	303 453 8917	CERAMIC 0.1U K 16V	C5041	303 454 0613	CERAMIC 0.01U K 50V
	303 453 8610	CERAMIC 0.1U K 16V	C506	303 298 9612	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V	C5061	403 455 1616	CERAMIC 10U K 16V
C438	303 358 3215	CERAMIC 10U K 6.3V	C5069	403 455 1616	CERAMIC 10U K 16V
	303 370 0018	CERAMIC 10U K 6.3V	C507	403 455 1616	CERAMIC 10U K 16V
	303 368 7319	CERAMIC 10U K 6.3V	C508	303 401 4312	ELECT 47U M 25V
C439	303 358 3215	CERAMIC 10U K 6.3V		303 419 5219	ELECT 47.0UM 25V
	303 370 0018	CERAMIC 10U K 6.3V	C509	303 397 8219	CERAMIC 2.2U K 25V
	303 368 7319	CERAMIC 10U K 6.3V	C5098	403 455 1616	CERAMIC 10U K 16V
C442	403 455 1012	CERAMIC 1U K 10V	C511	303 397 8219	CERAMIC 2.2U K 25V
	303 433 1112	CERAMIC 1U K 10V	C512	303 396 9613	CERAMIC 1U K 25V
C443	303 453 8719	CERAMIC 470P K 50V		303 397 7618	CERAMIC 1U K 25V
	303 453 9211	CERAMIC 470P K 50V	C513	303 396 9613	CERAMIC 1U K 25V

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
	303 397 7618	CERAMIC 1U K 25V	C5337	303 453 6319	CERAMIC 100P J 50V
C514	303 396 9613	CERAMIC 1U K 25V		303 454 0910	CERAMIC 100P J 50V
	303 397 7618	CERAMIC 1U K 25V		303 294 6110	CERAMIC 100P J 50V
C516	303 396 9613	CERAMIC 1U K 25V	C534	303 453 8917	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V		303 453 8610	CERAMIC 0.1U K 16V
C517	303 396 9613	CERAMIC 1U K 25V		303 409 3426	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V	C5341	303 433 1112	CERAMIC 1U K 10V
C518	303 342 3313	CERAMIC 0.1U K 25V	C536	303 298 9612	CERAMIC 0.1U K 16V
C519	303 396 9613	CERAMIC 1U K 25V	C537	403 455 1616	CERAMIC 10U K 16V
	303 397 7618	CERAMIC 1U K 25V	C538	303 401 4312	ELECT 47U M 25V
C5201	303 381 5217	ELECT 220U M 6.3V		303 419 5219	ELECT 47.0UM 25V
C5203	303 381 5217	ELECT 220U M 6.3V	C539	303 397 8219	CERAMIC 2.2U K 25V
C5206	303 381 5217	ELECT 220U M 6.3V	C541	303 397 8219	CERAMIC 2.2U K 25V
C521	303 396 9613	CERAMIC 1U K 25V	C542	303 396 9613	CERAMIC 1U K 25V
	303 397 7618	CERAMIC 1U K 25V		303 397 7618	CERAMIC 1U K 25V
C5211	303 453 8917	CERAMIC 0.1U K 16V	C543	303 396 9613	CERAMIC 1U K 25V
	303 453 8610	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
	303 409 3426	CERAMIC 0.1U K 16V	C544	303 396 9613	CERAMIC 1U K 25V
C5213	303 453 8917	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
	303 453 8610	CERAMIC 0.1U K 16V	C546	303 396 9613	CERAMIC 1U K 25V
	303 409 3426	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
C5216	303 453 8917	CERAMIC 0.1U K 16V	C547	303 396 9613	CERAMIC 1U K 25V
	303 453 8610	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
	303 409 3426	CERAMIC 0.1U K 16V	C548	303 342 3313	CERAMIC 0.1U K 25V
C5221	303 394 1312	ELECT 100U M 6.3V	C549	303 396 9613	CERAMIC 1U K 25V
	303 387 4917	ELECT 100U M 6.3V		303 397 7618	CERAMIC 1U K 25V
C5222	403 455 1012	CERAMIC 1U K 10V	C551	303 396 9613	CERAMIC 1U K 25V
	303 433 1112	CERAMIC 1U K 10V		303 397 7618	CERAMIC 1U K 25V
C5223	403 455 1012	CERAMIC 1U K 10V	C553	303 342 3313	CERAMIC 0.1U K 25V
	303 433 1112	CERAMIC 1U K 10V	C554	303 342 3313	CERAMIC 0.1U K 25V
C5224	303 276 1317	CERAMIC 1000P K 50V	C5540	303 437 4614	CERAMIC 10U K 25V
C5226	303 453 8917	CERAMIC 0.1U K 16V	C5541	303 437 4614	CERAMIC 10U K 25V
	303 453 8610	CERAMIC 0.1U K 16V	C5542	403 467 0911	CERAMIC 0.1U K 25V
	303 409 3426	CERAMIC 0.1U K 16V	C5543	403 467 0911	CERAMIC 0.1U K 25V
C5227	303 394 1312	ELECT 100U M 6.3V	C5544	303 391 5214	ELECT 47U M 16V
	303 387 4917	ELECT 100U M 6.3V	C557	303 396 9613	CERAMIC 1U K 25V
C5228	303 453 8917	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
	303 453 8610	CERAMIC 0.1U K 16V	C558	303 396 9613	CERAMIC 1U K 25V
	303 409 3426	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
C5229	303 453 8917	CERAMIC 0.1U K 16V	C5601	303 324 6417	CERAMIC 0.022U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C5602	303 279 5114	CERAMIC 3300P K 50V
	303 409 3426	CERAMIC 0.1U K 16V	C5603	303 437 4614	CERAMIC 10U K 25V
C523	303 342 3313	CERAMIC 0.1U K 25V	C5604	303 376 3112	ELECT 100U M 25V
C524	303 342 3313	CERAMIC 0.1U K 25V	C5605	303 369 0527	CERAMIC 0.01U K 25V
C527	303 396 9613	CERAMIC 1U K 25V	C5606	303 453 8610	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V		303 409 3426	CERAMIC 0.1U K 16V
C528	303 396 9613	CERAMIC 1U K 25V	C5607	303 381 5613	ELECT 220U M 16V
	303 397 7618	CERAMIC 1U K 25V		303 423 8916	ELECT 220U M 16V
C5304	303 454 0613	CERAMIC 0.01U K 50V	C561	303 298 9612	CERAMIC 0.1U K 16V
	303 441 9810	CERAMIC 0.01U K 50V	C5611	303 398 3312	ELECT 47U M 10V
C531	303 298 9612	CERAMIC 0.1U K 16V		303 387 6119	ELECT 47U M 10V
C532	303 453 8917	CERAMIC 0.1U K 16V	C5612	303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
C533	303 453 8917	CERAMIC 0.1U K 16V	C5613	303 392 1215	ELECT 47U M 6.3V
	303 453 8610	CERAMIC 0.1U K 16V		303 387 5310	ELECT 47U M 6.3V
	303 409 3426	CERAMIC 0.1U K 16V	C5614	303 453 8917	CERAMIC 0.1U K 16V
C5331	303 372 7510	CERAMIC 2.2U K 6.3V		303 453 8610	CERAMIC 0.1U K 16V
	303 370 0216	CERAMIC 2.2U K 6.3V		303 409 3426	CERAMIC 0.1U K 16V
C5332	303 453 8917	CERAMIC 0.1U K 16V	C562	303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
C5334	303 453 6814	CERAMIC 68P J 50V	C5621	303 383 5215	CERAMIC 4.7U K 6.3V
	303 454 0019	CERAMIC 68P J 50V	C5623	303 383 5215	CERAMIC 4.7U K 6.3V
	303 320 0419	CERAMIC 68P J 50V	C563	303 453 8917	CERAMIC 0.1U K 16V
C5336	403 456 4616	CERAMIC 27P J 50V		303 453 8610	CERAMIC 0.1U K 16V
	303 309 2519	CERAMIC 27P J 50V		303 409 3426	CERAMIC 0.1U K 16V

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
C564	303 409 3426	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
C566	303 298 9612	CERAMIC 0.1U K 16V	C7813	303 381 5613	ELECT 220U M 16V
C567	403 455 1616	CERAMIC 10U K 16V		303 423 8916	ELECT 220U M 16V
C568	303 401 4312	ELECT 47U M 25V	C7817	303 453 8917	CERAMIC 0.1U K 16V
	303 419 5219	ELECT 47.0UM 25V		303 453 8610	CERAMIC 0.1U K 16V
C569	303 397 8219	CERAMIC 2.2U K 25V		303 409 3426	CERAMIC 0.1U K 16V
C5705	303 376 3112	ELECT 100U M 25V	C7818	303 454 1917	CERAMIC 4700P K 50V
C571	303 397 8219	CERAMIC 2.2U K 25V	C7841	303 376 3112	ELECT 100U M 25V
C572	303 396 9613	CERAMIC 1U K 25V	C7842	403 467 0911	CERAMIC 0.1U K 25V
	303 397 7618	CERAMIC 1U K 25V	C7843	303 376 3112	ELECT 100U M 25V
C573	303 396 9613	CERAMIC 1U K 25V	C7844	403 467 0911	CERAMIC 0.1U K 25V
	303 397 7618	CERAMIC 1U K 25V	C7863	303 381 5613	ELECT 220U M 16V
C574	303 396 9613	CERAMIC 1U K 25V		303 423 8916	ELECT 220U M 16V
	303 397 7618	CERAMIC 1U K 25V	C7868	303 454 1917	CERAMIC 4700P K 50V
C5752	303 382 7814	CERAMIC 2.2U K 10V	C8001	303 358 3215	CERAMIC 10U K 6.3V
C5753	303 433 1112	CERAMIC 1U K 10V		303 368 7319	CERAMIC 10U K 6.3V
C576	303 396 9613	CERAMIC 1U K 25V	C8002	303 453 8917	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V		303 453 8610	CERAMIC 0.1U K 16V
C577	303 396 9613	CERAMIC 1U K 25V		303 409 3426	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V	C8003	303 453 8917	CERAMIC 0.1U K 16V
C578	303 342 3313	CERAMIC 0.1U K 25V		303 453 8610	CERAMIC 0.1U K 16V
C579	303 396 9613	CERAMIC 1U K 25V		303 409 3426	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V	C8004	303 453 8917	CERAMIC 0.1U K 16V
C581	303 396 9613	CERAMIC 1U K 25V		303 453 8610	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V		303 409 3426	CERAMIC 0.1U K 16V
C5821	303 369 0527	CERAMIC 0.01U K 25V	C8006	303 453 8917	CERAMIC 0.1U K 16V
C5822	303 157 7018	CERAMIC 1800P K 50V		303 453 8610	CERAMIC 0.1U K 16V
C5823	303 369 0527	CERAMIC 0.01U K 25V		303 409 3426	CERAMIC 0.1U K 16V
C5824	403 455 1616	CERAMIC 10U K 16V	C8007	303 453 8917	CERAMIC 0.1U K 16V
C5825	303 381 5316	ELECT 100U M 16V		303 453 8610	CERAMIC 0.1U K 16V
C5826	303 369 0527	CERAMIC 0.01U K 25V		303 409 3426	CERAMIC 0.1U K 16V
C5827	303 392 5015	CERAMIC 22U M 6.3V	C8008	303 358 3215	CERAMIC 10U K 6.3V
	303 443 9214	CERAMIC 22U M 6.3V		303 368 7319	CERAMIC 10U K 6.3V
C583	303 342 3313	CERAMIC 0.1U K 25V	C8009	303 358 3215	CERAMIC 10U K 6.3V
C584	303 342 3313	CERAMIC 0.1U K 25V		303 368 7319	CERAMIC 10U K 6.3V
C5843	303 368 7319	CERAMIC 10U K 6.3V	C801	303 453 8917	CERAMIC 0.1U K 16V
C5844	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C5861	303 324 6417	CERAMIC 0.022U K 16V		303 409 3426	CERAMIC 0.1U K 16V
C5862	303 279 5114	CERAMIC 3300P K 50V	C8011	303 453 8917	CERAMIC 0.1U K 16V
C5863	303 453 9815	CERAMIC 0.01U K 25V		303 453 8610	CERAMIC 0.1U K 16V
	303 369 0527	CERAMIC 0.01U K 25V		303 409 3426	CERAMIC 0.1U K 16V
C5864	403 455 1616	CERAMIC 10U K 16V	C8012	303 358 3215	CERAMIC 10U K 6.3V
C5865	303 381 5316	ELECT 100U M 16V		303 368 7319	CERAMIC 10U K 6.3V
C5866	303 369 0527	CERAMIC 0.01U K 25V	C8013	303 453 8917	CERAMIC 0.1U K 16V
C5867	303 392 5015	CERAMIC 22U M 6.3V		303 453 8610	CERAMIC 0.1U K 16V
	303 443 9214	CERAMIC 22U M 6.3V		303 409 3426	CERAMIC 0.1U K 16V
C587	303 396 9613	CERAMIC 1U K 25V	C8014	303 453 6616	CERAMIC 6P D 50V
	303 397 7618	CERAMIC 1U K 25V		303 454 0217	CERAMIC 6P D 50V
C588	303 396 9613	CERAMIC 1U K 25V	C8016	303 453 6616	CERAMIC 6P D 50V
	303 397 7618	CERAMIC 1U K 25V		303 454 0217	CERAMIC 6P D 50V
C596	403 467 0911	CERAMIC 0.1U K 25V	C8017	303 453 8917	CERAMIC 0.1U K 16V
C597	303 376 3112	ELECT 100U M 25V		303 453 8610	CERAMIC 0.1U K 16V
C598	403 467 0911	CERAMIC 0.1U K 25V		303 409 3426	CERAMIC 0.1U K 16V
C599	303 376 3112	ELECT 100U M 25V	C8018	303 453 8917	CERAMIC 0.1U K 16V
C6801	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V	C8019	303 453 8917	CERAMIC 0.1U K 16V
C6802	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V	C8021	303 453 8917	CERAMIC 0.1U K 16V
C6803	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V	C8022	303 453 8917	CERAMIC 0.1U K 16V
C7806	303 433 1112	CERAMIC 1U K 10V		303 453 8610	CERAMIC 0.1U K 16V
C7811	303 397 8219	CERAMIC 2.2U K 25V		303 409 3426	CERAMIC 0.1U K 16V
C7812	303 453 8917	CERAMIC 0.1U K 16V	C8023	303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V



Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C8024	303 358 3215	CERAMIC 10U K 6.3V		303 409 3426	CERAMIC 0.1U K 16V
	303 368 7319	CERAMIC 10U K 6.3V	C8811	303 453 8917	CERAMIC 0.1U K 16V
C8026	303 358 3215	CERAMIC 10U K 6.3V		303 453 8610	CERAMIC 0.1U K 16V
	303 368 7319	CERAMIC 10U K 6.3V		303 409 3426	CERAMIC 0.1U K 16V
C8027	303 358 3215	CERAMIC 10U K 6.3V	C8812	303 453 8917	CERAMIC 0.1U K 16V
	303 368 7319	CERAMIC 10U K 6.3V		303 453 8610	CERAMIC 0.1U K 16V
C8028	303 453 8917	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C8813	303 453 8917	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C8029	303 453 8917	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C8814	303 453 8917	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C8031	303 453 8917	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C8815	303 453 8917	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C8032	303 453 8917	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C8817	303 453 8917	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C8033	303 453 8917	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C8818	303 453 8917	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C8034	303 453 8917	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C8819	303 453 8917	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C8036	303 453 8917	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C8820	303 453 8917	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C8037	303 453 8917	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C8821	303 409 3426	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V	C8823	303 453 8917	CERAMIC 0.1U K 16V
C8038	303 368 7319	CERAMIC 10U K 6.3V		303 453 8610	CERAMIC 0.1U K 16V
C8081	303 433 1112	CERAMIC 1U K 10V		303 409 3426	CERAMIC 0.1U K 16V
C8082	303 433 1112	CERAMIC 1U K 10V	C8851	303 441 9810	CERAMIC 0.01U K 50V
C8083	303 394 1312	ELECT 100U M 6.3V	C9631	403 455 1012	CERAMIC 1U K 10V
C8091	303 433 1112	CERAMIC 1U K 10V		303 433 1112	CERAMIC 1U K 10V
C8092	303 358 3215	CERAMIC 10U K 6.3V	C9642	403 455 1012	CERAMIC 1U K 10V
	303 368 7319	CERAMIC 10U K 6.3V		303 433 1112	CERAMIC 1U K 10V
C8093	303 379 0217	POS-SOLID 68U M 6.3V	C9881	303 453 8917	CERAMIC 0.1U K 16V
C841	303 433 1112	CERAMIC 1U K 10V		303 453 8610	CERAMIC 0.1U K 16V
C842	303 392 1215	ELECT 47U M 6.3V		303 409 3426	CERAMIC 0.1U K 16V
	303 387 5310	ELECT 47U M 6.3V	C9882	303 453 8917	CERAMIC 0.1U K 16V
C843	303 454 0613	CERAMIC 0.01U K 50V		303 453 8610	CERAMIC 0.1U K 16V
C844	303 453 8511	CERAMIC 1000P K 50V		303 409 3426	CERAMIC 0.1U K 16V
	303 454 1214	CERAMIC 1000P K 50V	C9883	303 453 8917	CERAMIC 0.1U K 16V
C8801	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V	C9886	303 453 8917	CERAMIC 0.1U K 16V
C8802	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V	C9887	303 453 8917	CERAMIC 0.1U K 16V
C8803	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 409 3426	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V			
C8806	303 453 8917	CERAMIC 0.1U K 16V			
	303 453 8610	CERAMIC 0.1U K 16V			
	303 409 3426	CERAMIC 0.1U K 16V			
C8807	303 453 7019	CERAMIC 33P J 50V			
	303 453 9617	CERAMIC 33P J 50V			
	303 276 3113	CERAMIC 33P J 50V			
C8808	303 453 7019	CERAMIC 33P J 50V			
	303 453 9617	CERAMIC 33P J 50V			
	303 276 3113	CERAMIC 33P J 50V			
C8809	303 453 8917	CERAMIC 0.1U K 16V			
	303 453 8610	CERAMIC 0.1U K 16V			
	303 409 3426	CERAMIC 0.1U K 16V			
C8810	303 453 8917	CERAMIC 0.1U K 16V			

RESISTOR

R002	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R007	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R008	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R009	301 224 9019	MT-GLAZE	10K JA	1/16W
R010	301 224 9019	MT-GLAZE	10K JA	1/16W
R011	301 276 4710	MT-GLAZE	0.000 ZA	1/3W
R012	301 276 4710	MT-GLAZE	0.000 ZA	1/3W
R044	301 224 9019	MT-GLAZE	10K JA	1/16W
R047	301 224 9316	MT-GLAZE	1K JA	1/16W
R049	301 224 9019	MT-GLAZE	10K JA	1/16W
R1000	301 238 4512	MT-GLAZE	47 JA	1/3W
R1001	301 260 4115	MT-GLAZE	75 JA	1/3W

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
R1002	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R2005	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
R1004	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R2006	301 224 9316	MT-GLAZE 1K JA 1/16W
R1005	301 224 9019	MT-GLAZE 10K JA 1/16W	R2013	301 225 0718	MT-GLAZE 56K JA 1/16W
R1006	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R2014	301 225 1319	MT-GLAZE 470 JA 1/16W
R1007	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R2016	301 224 9316	MT-GLAZE 1K JA 1/16W
R1008	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R2017	301 225 1418	MT-GLAZE 47K JA 1/16W
R1009	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R2023	301 225 0718	MT-GLAZE 56K JA 1/16W
R1010	301 224 9019	MT-GLAZE 10K JA 1/16W	R2024	301 225 1319	MT-GLAZE 470 JA 1/16W
R1011	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R2026	301 224 9316	MT-GLAZE 1K JA 1/16W
R1013	301 224 9019	MT-GLAZE 10K JA 1/16W	R2027	301 225 1418	MT-GLAZE 47K JA 1/16W
R1015	301 224 9019	MT-GLAZE 10K JA 1/16W	R2036	301 225 8110	MT-GLAZE 10 JA 1/16W
R1017	301 224 9019	MT-GLAZE 10K JA 1/16W	R2037	301 225 8110	MT-GLAZE 10 JA 1/16W
R1018	301 150 5918	MT-GLAZE 10K JA 1/10W	R2038	301 225 8110	MT-GLAZE 10 JA 1/16W
R1019	301 224 9019	MT-GLAZE 10K JA 1/16W	R2043	301 224 8814	MT-GLAZE 100 JA 1/16W
R1021	301 260 4115	MT-GLAZE 75 JA 1/3W	R2053	301 224 8814	MT-GLAZE 100 JA 1/16W
R1027	301 150 6014	MT-GLAZE 0.000 ZA 1/10W	R2062	301 225 1418	MT-GLAZE 47K JA 1/16W
R1030	301 225 1418	MT-GLAZE 47K JA 1/16W	R2890	301 258 7517	MT-GLAZE 12 JA 1/3W
R1031	301 260 4115	MT-GLAZE 75 JA 1/3W	R2891	301 258 7517	MT-GLAZE 12 JA 1/3W
R1032	301 260 4115	MT-GLAZE 75 JA 1/3W	R2892	301 224 8814	MT-GLAZE 100 JA 1/16W
R1033	301 260 4115	MT-GLAZE 75 JA 1/3W	R2893	301 224 9712	MT-GLAZE 22 JA 1/16W
R1034	301 225 1418	MT-GLAZE 47K JA 1/16W	R2894	301 224 9712	MT-GLAZE 22 JA 1/16W
R1041	301 225 1418	MT-GLAZE 47K JA 1/16W	R2898	301 224 9019	MT-GLAZE 10K JA 1/16W
R1046	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R300	301 224 9019	MT-GLAZE 10K JA 1/16W
R1047	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R3002	301 224 8814	MT-GLAZE 100 JA 1/16W
R1052	301 263 7420	MT-GLAZE 75 JA 1/16W	R3012	301 224 8814	MT-GLAZE 100 JA 1/16W
R1055	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R302	301 227 5612	MT-GLAZE 8.2K JA 1/16W
R1056	301 225 0312	MT-GLAZE 33 JA 1/16W	R3022	301 224 8814	MT-GLAZE 100 JA 1/16W
R1057	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R303	301 224 9316	MT-GLAZE 1K JA 1/16W
R1058	301 240 5613	MT-GLAZE 3K JA 1/16W	R3032	301 224 8814	MT-GLAZE 100 JA 1/16W
R1062	301 263 7420	MT-GLAZE 75 JA 1/16W	R304	301 224 9316	MT-GLAZE 1K JA 1/16W
R1067	301 224 9019	MT-GLAZE 10K JA 1/16W	R3052	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R1068	301 224 9019	MT-GLAZE 10K JA 1/16W	R3053	301 224 8913	MT-GLAZE 100K JA 1/16W
R1070	301 263 7420	MT-GLAZE 75 JA 1/16W	R3054	301 224 8913	MT-GLAZE 100K JA 1/16W
R1072	301 263 7420	MT-GLAZE 75 JA 1/16W	R3056	301 224 9415	MT-GLAZE 1M JA 1/16W
R1077	301 263 7420	MT-GLAZE 75 JA 1/16W	R3057	301 224 9910	MT-GLAZE 22K JA 1/16W
R1079	301 263 7420	MT-GLAZE 75 JA 1/16W	R306	401 342 7314	MT-GLAZE 23.2K FA 1/16W
R1081	301 225 1418	MT-GLAZE 47K JA 1/16W	R3062	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R1089	301 224 9514	MT-GLAZE 2.2K JA 1/16W	R307	301 224 9712	MT-GLAZE 22 JA 1/16W
R1091	301 225 1418	MT-GLAZE 47K JA 1/16W	R308	301 224 9712	MT-GLAZE 22 JA 1/16W
R1100	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R309	301 224 9316	MT-GLAZE 1K JA 1/16W
R1103	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R310	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R1111	301 260 4115	MT-GLAZE 75 JA 1/3W	R311	301 224 9316	MT-GLAZE 1K JA 1/16W
R1136	301 225 1418	MT-GLAZE 47K JA 1/16W	R312	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R1309	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R313	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R1311	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R314	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R1331	301 224 9415	MT-GLAZE 1M JA 1/16W	R315	301 225 1814	MT-GLAZE 47 JA 1/16W
R1419	301 225 3818	MT-GLAZE 1.5K JA 1/16W	R316	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R1420	301 225 0718	MT-GLAZE 56K JA 1/16W	R317	301 225 1814	MT-GLAZE 47 JA 1/16W
R1421	301 294 3313	MT-GLAZE 15K FA 1/16W	R318	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R1424	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R319	301 224 9019	MT-GLAZE 10K JA 1/16W
R1425	301 294 3313	MT-GLAZE 15K FA 1/16W	R320	301 225 1814	MT-GLAZE 47 JA 1/16W
R1426	301 299 5411	MT-GLAZE 13K FA 1/16W	R321	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R1427	301 224 8814	MT-GLAZE 100 JA 1/16W	R322	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R1428	301 224 8814	MT-GLAZE 100 JA 1/16W	R323	301 225 1814	MT-GLAZE 47 JA 1/16W
R1435	301 294 4518	MT-GLAZE 18K FA 1/16W	R324	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R1444	301 235 0012	MT-GLAZE 7.5K JA 1/16W	R325	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R1446	301 235 0012	MT-GLAZE 7.5K JA 1/16W	R327	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R1447	301 225 1517	MT-GLAZE 3.9K JA 1/16W	R328	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R1448	301 224 9019	MT-GLAZE 10K JA 1/16W	R329	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R1458	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R339	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R1459	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R340	301 224 8814	MT-GLAZE 100 JA 1/16W
R1470	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R341	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R1471	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R342	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R1890	301 225 8110	MT-GLAZE 10 JA 1/16W	R343	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R2000	301 150 6014	MT-GLAZE 0.000 ZA 1/10W	R344	301 225 1814	MT-GLAZE 47 JA 1/16W
R2003	301 225 0718	MT-GLAZE 56K JA 1/16W	R345	301 225 1814	MT-GLAZE 47 JA 1/16W
R2004	301 225 1319	MT-GLAZE 470 JA 1/16W	R346	301 225 1814	MT-GLAZE 47 JA 1/16W

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
R347	301 224 8814	MT-GLAZE 100 JA 1/16W	R397	301 224 8814	MT-GLAZE 100 JA 1/16W
R348	301 224 8814	MT-GLAZE 100 JA 1/16W	R398	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R349	301 225 1814	MT-GLAZE 47 JA 1/16W	R399	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R350	301 263 7420	MT-GLAZE 75 JA 1/16W	R401	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R3502	301 225 1418	MT-GLAZE 47K JA 1/16W	R402	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R351	301 224 8814	MT-GLAZE 100 JA 1/16W	R403	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R352	301 224 8814	MT-GLAZE 100 JA 1/16W	R404	301 224 9019	MT-GLAZE 10K JA 1/16W
R353	301 263 7420	MT-GLAZE 75 JA 1/16W	R406	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R3532	301 225 1418	MT-GLAZE 47K JA 1/16W	R407	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R354	301 224 8814	MT-GLAZE 100 JA 1/16W	R4072	301 224 8814	MT-GLAZE 100 JA 1/16W
R355	301 224 8814	MT-GLAZE 100 JA 1/16W	R4077	301 224 8814	MT-GLAZE 100 JA 1/16W
R356	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R408	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R3562	301 225 1418	MT-GLAZE 47K JA 1/16W	R412	301 225 1814	MT-GLAZE 47 JA 1/16W
R357	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R414	301 225 1814	MT-GLAZE 47 JA 1/16W
R3580	301 037 5017	MT-GLAZE 0.000 ZA 1/10W	R416	301 225 1814	MT-GLAZE 47 JA 1/16W
R3585	301 224 9019	MT-GLAZE 10K JA 1/16W	R418	301 225 1814	MT-GLAZE 47 JA 1/16W
R3586	301 224 9316	MT-GLAZE 1K JA 1/16W	R419	301 225 1814	MT-GLAZE 47 JA 1/16W
R3587	301 224 9019	MT-GLAZE 10K JA 1/16W	R422	301 225 1814	MT-GLAZE 47 JA 1/16W
R3588	301 224 9019	MT-GLAZE 10K JA 1/16W	R423	301 225 1814	MT-GLAZE 47 JA 1/16W
R359	301 225 0015	MT-GLAZE 270 JA 1/16W	R424	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R360	301 225 0015	MT-GLAZE 270 JA 1/16W	R425	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R3601	301 225 0213	MT-GLAZE 3.3K JA 1/16W	R472	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R3602	301 224 9019	MT-GLAZE 10K JA 1/16W	R4834	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R3603	301 224 9019	MT-GLAZE 10K JA 1/16W	R4861	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
R361	301 256 1517	MT-GLAZE 13K JA 1/10W	R4862	301 229 3913	MT-GLAZE 180 JA 1/16W
	301 113 6914	MT-GLAZE 13K JA 1/16W	R4863	301 229 3913	MT-GLAZE 180 JA 1/16W
R3621	301 224 9019	MT-GLAZE 10K JA 1/16W	R5001	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
R3622	301 224 9019	MT-GLAZE 10K JA 1/16W	R5002	301 225 8110	MT-GLAZE 10 JA 1/16W
R3623	301 224 9019	MT-GLAZE 10K JA 1/16W	R5003	301 225 8110	MT-GLAZE 10 JA 1/16W
R3626	301 224 9019	MT-GLAZE 10K JA 1/16W	R5004	301 224 8913	MT-GLAZE 100K JA 1/16W
R3627	301 224 9019	MT-GLAZE 10K JA 1/16W	R5005	301 224 8913	MT-GLAZE 100K JA 1/16W
R3628	301 224 9019	MT-GLAZE 10K JA 1/16W	R5006	301 224 8913	MT-GLAZE 100K JA 1/16W
R363	301 224 9316	MT-GLAZE 1K JA 1/16W	R5007	301 224 8913	MT-GLAZE 100K JA 1/16W
R364	301 224 9316	MT-GLAZE 1K JA 1/16W	R501	301 224 8814	MT-GLAZE 100 JA 1/16W
R366	301 224 9316	MT-GLAZE 1K JA 1/16W	R502	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R367	301 225 1814	MT-GLAZE 47 JA 1/16W	R5021	301 224 8913	MT-GLAZE 100K JA 1/16W
R368	301 225 1814	MT-GLAZE 47 JA 1/16W	R5022	301 224 8913	MT-GLAZE 100K JA 1/16W
R369	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R503	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R370	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R5031	301 224 8814	MT-GLAZE 100 JA 1/16W
R372	301 226 2414	MT-GLAZE 560 JA 1/16W	R5032	301 224 8814	MT-GLAZE 100 JA 1/16W
R373	301 226 2414	MT-GLAZE 560 JA 1/16W	R5033	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R374	301 224 9316	MT-GLAZE 1K JA 1/16W	R5034	301 224 9316	MT-GLAZE 1K JA 1/16W
R375	301 224 9316	MT-GLAZE 1K JA 1/16W	R5036	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R378	301 224 9019	MT-GLAZE 10K JA 1/16W	R5037	301 224 9316	MT-GLAZE 1K JA 1/16W
R380	301 224 9019	MT-GLAZE 10K JA 1/16W	R504	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R3801	301 225 8110	MT-GLAZE 10 JA 1/16W	R5044	301 224 9019	MT-GLAZE 10K JA 1/16W
R3802	301 225 8110	MT-GLAZE 10 JA 1/16W	R5045	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R3803	301 225 8110	MT-GLAZE 10 JA 1/16W	R5046	301 224 9019	MT-GLAZE 10K JA 1/16W
R3804	301 225 8110	MT-GLAZE 10 JA 1/16W	R5047	301 224 9613	MT-GLAZE 2.7K JA 1/16W
R3806	301 225 0213	MT-GLAZE 3.3K JA 1/16W	R5048	301 224 9316	MT-GLAZE 1K JA 1/16W
R382	301 263 7420	MT-GLAZE 75 JA 1/16W	R5045	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R383	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R5061	301 224 9316	MT-GLAZE 1K JA 1/16W
R384	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R5062	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R3850	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R5063	301 224 9316	MT-GLAZE 1K JA 1/16W
R3851	301 227 5612	MT-GLAZE 8.2K JA 1/16W	R5064	301 224 9316	MT-GLAZE 1K JA 1/16W
R3853	301 256 6215	MT-GLAZE 270 JA 1/10W	R5066	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R3854	301 227 5612	MT-GLAZE 8.2K JA 1/16W	R5067	301 224 9316	MT-GLAZE 1K JA 1/16W
R388	301 150 6014	MT-GLAZE 0.000 ZA 1/10W	R5069	301 225 8011	MT-GLAZE 330 JA 1/16W
R389	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R508	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R391	301 224 9019	MT-GLAZE 10K JA 1/16W	R509	301 224 8814	MT-GLAZE 100 JA 1/16W
			R511	301 224 8814	MT-GLAZE 100 JA 1/16W
R395	301 225 1210	MT-GLAZE 4.7K JA 1/16W (FOR KG5-XB20000)	R512	301 224 8814	MT-GLAZE 100 JA 1/16W
R395	301 225 0817	MT-GLAZE 68K JA 1/16W (FOR KB5-XB10000)	R513	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
			R514	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
			R516	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
			R517	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R396	301 224 9019	MT-GLAZE 10K JA 1/16W	R518	301 226 1516	MT-GLAZE 0.000 ZA 1/16W

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
R5200	301 150 6014	MT-GLAZE 0.000 ZA 1/10W	R5704	301 224 8814	MT-GLAZE 100 JA 1/16W
R5208	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R571	301 224 8814	MT-GLAZE 100 JA 1/16W
R5209	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R572	301 224 8814	MT-GLAZE 100 JA 1/16W
R5214	301 224 9019	MT-GLAZE 10K JA 1/16W	R573	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R5216	301 224 9019	MT-GLAZE 10K JA 1/16W	R574	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R5217	301 224 9019	MT-GLAZE 10K JA 1/16W	R5751	301 224 9019	MT-GLAZE 10K JA 1/16W
R5218	301 224 9019	MT-GLAZE 10K JA 1/16W	R5752	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R5224	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R5753	301 224 9316	MT-GLAZE 1K JA 1/16W
R5225	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R5754	301 224 9019	MT-GLAZE 10K JA 1/16W
R5228	301 225 8110	MT-GLAZE 10 JA 1/16W	R576	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R5229	301 225 8110	MT-GLAZE 10 JA 1/16W	R5760	301 224 9019	MT-GLAZE 10K JA 1/16W
R5237	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R577	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R5241	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R578	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R531	301 224 8814	MT-GLAZE 100 JA 1/16W	R5803	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R5317	301 225 1814	MT-GLAZE 47 JA 1/16W	R5821	301 225 2118	MT-GLAZE 12K JA 1/16W
R5318	301 225 0619	MT-GLAZE 5.6K JA 1/16W	R5822	301 224 8913	MT-GLAZE 100K JA 1/16W
R532	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R5823	301 294 3016	MT-GLAZE 10K FA 1/16W
R5323	301 225 1814	MT-GLAZE 47 JA 1/16W	R5824	301 294 3511	MT-GLAZE 27K FA 1/16W
R5324	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R5825	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R5325	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R5841	301 294 3115	MT-GLAZE 1K FA 1/16W
R533	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R5842	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
R5331	301 225 8615	MT-GLAZE 560K JA 1/16W	R5861	301 234 9917	MT-GLAZE 6.8K JA 1/16W
R5332	301 224 9316	MT-GLAZE 1K JA 1/16W	R5862	301 224 8913	MT-GLAZE 100K JA 1/16W
R5333	301 224 9316	MT-GLAZE 1K JA 1/16W	R5863	301 294 3016	MT-GLAZE 10K FA 1/16W
R5334	301 224 9019	MT-GLAZE 10K JA 1/16W	R5864	301 294 3016	MT-GLAZE 10K FA 1/16W
R5336	301 224 9316	MT-GLAZE 1K JA 1/16W	R5865	301 212 0417	MT-GLAZE 680 FA 1/16W
R5337	301 224 9316	MT-GLAZE 1K JA 1/16W	R593	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
R5338	301 226 2414	MT-GLAZE 560 JA 1/16W	R594	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
R5342	301 225 0718	MT-GLAZE 56K JA 1/16W	R595	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R5343	301 224 9316	MT-GLAZE 1K JA 1/16W	R596	301 294 3016	MT-GLAZE 10K FA 1/16W
R5344	301 037 5017	MT-GLAZE 0.000 ZA 1/10W	R597	301 294 4419	MT-GLAZE 1.8K FA 1/16W
R5346	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R598	301 301 0410	MT-GLAZE 240 FA 1/16W
R5348	301 037 5017	MT-GLAZE 0.000 ZA 1/10W	R599	301 224 9316	MT-GLAZE 1K JA 1/16W
R535	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R6801	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R536	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R6803	301 224 9019	MT-GLAZE 10K JA 1/16W
R537	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R6804	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R539	301 224 8814	MT-GLAZE 100 JA 1/16W	R6806	301 224 9217	MT-GLAZE 15K JA 1/16W
R540	301 294 3313	MT-GLAZE 15K FA 1/16W	R6807	301 234 9917	MT-GLAZE 6.8K JA 1/16W
R541	301 224 8814	MT-GLAZE 100 JA 1/16W	R6808	301 225 1517	MT-GLAZE 3.9K JA 1/16W
R542	301 224 8814	MT-GLAZE 100 JA 1/16W	R6809	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R543	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R6811	301 225 1517	MT-GLAZE 3.9K JA 1/16W
R544	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R6812	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R546	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R6813	301 224 9019	MT-GLAZE 10K JA 1/16W
R547	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R6822	301 224 9316	MT-GLAZE 1K JA 1/16W
R548	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R6823	301 224 9019	MT-GLAZE 10K JA 1/16W
R549	301 299 2410	MT-GLAZE 5.6K FA 1/16W	R6831	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R5540	301 224 9316	MT-GLAZE 1K JA 1/16W	R6833	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R5541	301 276 4710	MT-GLAZE 0.000 ZA 1/3W	R6842	301 229 3913	MT-GLAZE 180 JA 1/16W
R5542	301 224 9316	MT-GLAZE 1K JA 1/16W	R6843	301 229 3913	MT-GLAZE 180 JA 1/16W
R5543	301 276 4710	MT-GLAZE 0.000 ZA 1/3W	R6845	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R5565	301 224 9316	MT-GLAZE 1K JA 1/16W	R6848	301 225 8011	MT-GLAZE 330 JA 1/16W
R5566	301 224 8913	MT-GLAZE 100K JA 1/16W	R6851	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R560	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R6857	301 229 3913	MT-GLAZE 180 JA 1/16W
R5601	301 224 8913	MT-GLAZE 100K JA 1/16W	R6858	301 229 3913	MT-GLAZE 180 JA 1/16W
R5602	301 234 9917	MT-GLAZE 6.8K JA 1/16W	R6867	301 105 7912	MT-GLAZE 0.000 ZA 1/16W
R5603	301 294 3016	MT-GLAZE 10K FA 1/16W	R6870	301 225 8011	MT-GLAZE 330 JA 1/16W
R5604	301 287 2029	MT-GLAZE 100K FA 1/16W	R6873	301 229 3913	MT-GLAZE 180 JA 1/16W
R5605	301 294 2613	MT-GLAZE 4.7K FA 1/16W	R6874	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R561	301 224 8814	MT-GLAZE 100 JA 1/16W	R6877	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R5611	301 224 8814	MT-GLAZE 100 JA 1/16W	R7801	301 224 9019	MT-GLAZE 10K JA 1/16W
R562	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R7802	301 224 9019	MT-GLAZE 10K JA 1/16W
R5622	301 190 1710	MT-GLAZE 0.000 ZA 1W	R7803	301 224 9019	MT-GLAZE 10K JA 1/16W
R563	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R7805	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R564	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R7816	301 225 8110	MT-GLAZE 10 JA 1/16W
R566	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R7818	301 294 3016	MT-GLAZE 10K FA 1/16W
R569	301 224 8814	MT-GLAZE 100 JA 1/16W	R7819	301 224 8913	MT-GLAZE 100K JA 1/16W
R5692	301 190 1710	MT-GLAZE 0.000 ZA 1W	R7821	301 294 3511	MT-GLAZE 27K FA 1/16W

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
R7824	301 294 2811	MT-GLAZE 2.2K FA 1/16W	R8094	301 304 3616	MT-GLAZE 1K DA 1/16W
R7828	301 224 9019	MT-GLAZE 10K JA 1/16W	R8096	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
R7829	301 224 9316	MT-GLAZE 1K JA 1/16W	R8099	301 224 9019	MT-GLAZE 10K JA 1/16W
R7831	301 224 9316	MT-GLAZE 1K JA 1/16W	R812	301 224 9316	MT-GLAZE 1K JA 1/16W
R7832	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R813	301 224 9316	MT-GLAZE 1K JA 1/16W
R7833	301 225 0213	MT-GLAZE 3.3K JA 1/16W	R846	301 224 9316	MT-GLAZE 1K JA 1/16W
R7834	301 286 4717	MT-GLAZE 30K JA 1/16W	R851	301 224 9316	MT-GLAZE 1K JA 1/16W
R7840	301 224 9316	MT-GLAZE 1K JA 1/16W	R852	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R7841	301 336 8818	MT-GLAZE 6.8K FA 1/16W	R8801	301 224 9316	MT-GLAZE 1K JA 1/16W
R7842	301 294 2811	MT-GLAZE 2.2K FA 1/16W	R8802	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R7843	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R8804	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R7844	301 225 8516	MT-GLAZE 1.8K JA 1/16W	R8805	301 224 9316	MT-GLAZE 1K JA 1/16W
R7845	301 224 9316	MT-GLAZE 1K JA 1/16W	R8806	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R7846	301 225 0213	MT-GLAZE 3.3K JA 1/16W	R8807	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R7847	301 286 4717	MT-GLAZE 30K JA 1/16W	R8808	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R7848	301 224 9019	MT-GLAZE 10K JA 1/16W	R8812	301 225 8110	MT-GLAZE 10 JA 1/16W
R7866	301 225 8110	MT-GLAZE 10 JA 1/16W	R8814	301 224 9415	MT-GLAZE 1M JA 1/16W
R7869	301 224 8913	MT-GLAZE 100K JA 1/16W	R8816	301 218 4518	MT-GLAZE 2.2K FA 1/16W
R7871	301 294 3511	MT-GLAZE 27K FA 1/16W	R8821	301 225 8110	MT-GLAZE 10 JA 1/16W
R7874	301 294 2811	MT-GLAZE 2.2K FA 1/16W	R8833	301 225 7915	MT-GLAZE 220 JA 1/16W
R7878	301 224 9019	MT-GLAZE 10K JA 1/16W	R8834	301 224 9712	MT-GLAZE 22 JA 1/16W
R7879	301 224 9316	MT-GLAZE 1K JA 1/16W	R8837	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R7881	301 224 9316	MT-GLAZE 1K JA 1/16W	R8838	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R7882	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R8839	301 225 7915	MT-GLAZE 220 JA 1/16W
R7883	301 225 0213	MT-GLAZE 3.3K JA 1/16W	R8840	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R7884	301 286 4717	MT-GLAZE 30K JA 1/16W	R8841	301 224 9019	MT-GLAZE 10K JA 1/16W
R8001	301 264 5316	MT-GLAZE 2.2 JA 1/10W	R8843	301 224 9019	MT-GLAZE 10K JA 1/16W
R8002	301 264 5316	MT-GLAZE 2.2 JA 1/10W	R8844	301 224 9019	MT-GLAZE 10K JA 1/16W
R8003	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R8845	301 035 4111	MT-GLAZE 0.000 ZA 1/8W
R8004	301 224 9415	MT-GLAZE 1M JA 1/16W	R8846	301 224 8913	MT-GLAZE 100K JA 1/16W
R8005	301 225 8110	MT-GLAZE 10 JA 1/16W	R8847	301 225 8011	MT-GLAZE 330 JA 1/16W
R8008	301 225 8110	MT-GLAZE 10 JA 1/16W	R8850	301 035 4111	MT-GLAZE 0.000 ZA 1/8W
R8009	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R8851	301 224 8814	MT-GLAZE 100 JA 1/16W
R801	301 224 9019	MT-GLAZE 10K JA 1/16W	R8852	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8010	301 225 1418	MT-GLAZE 47K JA 1/16W	R8853	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8011	301 225 1418	MT-GLAZE 47K JA 1/16W	R8861	301 225 8110	MT-GLAZE 10 JA 1/16W
R8014	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R8864	301 225 8110	MT-GLAZE 10 JA 1/16W
R8015	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R8881	301 224 9019	MT-GLAZE 10K JA 1/16W
R8016	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R891	301 224 8814	MT-GLAZE 100 JA 1/16W
R8017	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R898	301 224 8814	MT-GLAZE 100 JA 1/16W
R8018	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R9611	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R8020	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R9612	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R8023	301 264 5316	MT-GLAZE 2.2 JA 1/10W	R9613	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R8024	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R9631	301 224 9316	MT-GLAZE 1K JA 1/16W
R8029	301 225 0312	MT-GLAZE 33 JA 1/16W	R9632	301 224 9019	MT-GLAZE 10K JA 1/16W
R8032	301 225 0312	MT-GLAZE 33 JA 1/16W	R9633	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R8033	301 225 0312	MT-GLAZE 33 JA 1/16W	R9634	301 225 3818	MT-GLAZE 1.5K JA 1/16W
R8034	301 225 0312	MT-GLAZE 33 JA 1/16W	R9644	301 224 9316	MT-GLAZE 1K JA 1/16W
R8039	301 341 0616	MT-GLAZE 49.9 FA 1/16W	R9645	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
R804	301 224 9019	MT-GLAZE 10K JA 1/16W	R9646	301 224 9019	MT-GLAZE 10K JA 1/16W
R8040	301 150 6014	MT-GLAZE 0.000 ZA 1/10W	R9647	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R8049	301 341 0616	MT-GLAZE 49.9 FA 1/16W	R9648	301 225 3818	MT-GLAZE 1.5K JA 1/16W
R8050	301 150 6014	MT-GLAZE 0.000 ZA 1/10W	R9743	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8056	301 225 1418	MT-GLAZE 47K JA 1/16W	R9746	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8057	301 225 1418	MT-GLAZE 47K JA 1/16W	R9749	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8059	301 341 0616	MT-GLAZE 49.9 FA 1/16W	R9750	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8069	301 341 0616	MT-GLAZE 49.9 FA 1/16W	R9753	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R807	301 224 9019	MT-GLAZE 10K JA 1/16W	R9754	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R808	301 224 9019	MT-GLAZE 10K JA 1/16W	R9755	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
R8081	301 294 2613	MT-GLAZE 4.7K FA 1/16W	R9881	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8082	301 299 5312	MT-GLAZE 12K FA 1/16W	R9883	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8083	301 294 3016	MT-GLAZE 10K FA 1/16W	R9884	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8084	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R9886	301 224 9019	MT-GLAZE 10K JA 1/16W
R8088	301 150 6014	MT-GLAZE 0.000 ZA 1/10W	R9892	301 224 9019	MT-GLAZE 10K JA 1/16W
R809	301 225 8516	MT-GLAZE 1.8K JA 1/16W	R9893	301 224 9019	MT-GLAZE 10K JA 1/16W
R8092	301 272 7814	MT-GLAZE 100 FA 1/16W	R9894	301 224 9019	MT-GLAZE 10K JA 1/16W
R8093	301 225 8110	MT-GLAZE 10 JA 1/16W	RB312	945 037 0831	R-NETWORK 47X4 1/16W

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
RB313	945 037 0831	R-NETWORK 47X4 1/16		945 037 0817	R-NETWORK 0X4 1/16W
RB316	945 037 0831	R-NETWORK 47X4 1/1W	RB8001	645 072 0604	IMPEDANCE,120 OHM P
RB318	945 037 0831	R-NETWORK 47X4 1/16W	RB8002	645 072 0604	IMPEDANCE,120 OHM P
RB319	945 037 0831	R-NETWORK 47X4 1/16W	RB8003	645 072 0604	IMPEDANCE,120 OHM P
RB411	945 037 0831	R-NETWORK 47X4 1/16W	RB8004	645 072 0604	IMPEDANCE,120 OHM P
RB412	945 037 0831	R-NETWORK 47X4 1/16W	RB8006	645 072 0604	IMPEDANCE,120 OHM P
RB413	945 037 0831	R-NETWORK 47X4 1/16W	RB8007	645 072 0604	IMPEDANCE,120 OHM P
RB414	945 037 0831	R-NETWORK 47X4 1/16W			
RB416	945 037 0831	R-NETWORK 47X4 1/16W	<b>COIL</b>		
RB417	945 037 0831	R-NETWORK 47X4 1/16W	L1002	945 068 8349	FILTER,EMI 400MHZ
RB418	945 037 0831	R-NETWORK 47X4 1/16W	L1011	945 070 3660	INDUCTOR,90 OHM
RB419	945 037 0831	R-NETWORK 47X4 1/16W	L1012	945 068 8349	FILTER,EMI 400MHZ
RB421	945 037 0831	R-NETWORK 47X4 1/16W	L1013	945 070 3660	INDUCTOR,90 OHM
RB422	945 037 0831	R-NETWORK 47X4 1/16W	L1014	945 070 3660	INDUCTOR,90 OHM
RB423	945 037 0831	R-NETWORK 47X4 1/16W	L1016	945 070 3660	INDUCTOR,90 OHM
RB424	945 037 0831	R-NETWORK 47X4 1/16W	L1022	945 068 8349	FILTER,EMI 400MHZ
RB426	945 037 0831	R-NETWORK 47X4 1/16W	L1031	945 068 8332	FILTER,EMI 200MHZ
RB427	945 037 0831	R-NETWORK 47X4 1/16W	L1032	945 040 6455	INDUCTOR,4.7U M
RB428	945 037 0831	R-NETWORK 47X4 1/16W	L1033	945 068 8349	FILTER,EMI 400MHZ
RB429	945 037 0831	R-NETWORK 47X4 1/16W	L1034	945 068 8349	FILTER,EMI 400MHZ
RB431	945 037 0831	R-NETWORK 47X4 1/16W	L1035	945 068 8349	FILTER,EMI 400MHZ
RB432	945 037 0831	R-NETWORK 47X4 1/16W	L1036	945 068 8349	FILTER,EMI 400MHZ
RB433	945 037 0831	R-NETWORK 47X4 1/16W	L1037	945 068 8349	FILTER,EMI 400MHZ
RB434	945 037 0831	R-NETWORK 47X4 1/16W	L1041	945 068 8332	FILTER,EMI 200MHZ
RB436	945 037 0831	R-NETWORK 47X4 1/16W	L1051	945 068 8349	FILTER,EMI 400MHZ
RB437	945 037 0831	R-NETWORK 47X4 1/16W	L1061	945 068 8349	FILTER,EMI 400MHZ
RB501	945 036 3529	R-NETWORK 0X4 1/32W	L1071	945 068 8349	FILTER,EMI 400MHZ
	945 037 0817	R-NETWORK 0X4 1/16W	L1081	945 068 8332	FILTER,EMI 200MHZ
RB502	945 036 3529	R-NETWORK 0X4 1/32W	L1091	945 068 8332	FILTER,EMI 200MHZ
	945 037 0817	R-NETWORK 0X4 1/16W	L1421	945 041 1978	INDUCTOR,330 OHM
RB503	945 036 3529	R-NETWORK 0X4 1/32W	L2890	945 041 1978	INDUCTOR,330 OHM
	945 037 0817	R-NETWORK 0X4 1/16W	L2891	945 086 5368	IMPEDANCE,220 OHM P
RB504	945 036 3529	R-NETWORK 0X4 1/32W	L2892	945 018 9327	INDUCTOR,1000 OHM
	945 037 0817	R-NETWORK 0X4 1/16W	L2893	945 018 9327	INDUCTOR,1000 OHM
RB506	945 036 3529	R-NETWORK 0X4 1/32W	L2894	945 086 6037	IMPEDANCE,330 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L2895	945 086 6037	IMPEDANCE,330 OHM P
RB507	945 036 3529	R-NETWORK 0X4 1/32W	L2896	945 086 6037	IMPEDANCE,330 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L2897	945 086 6037	IMPEDANCE,330 OHM P
RB508	945 036 3529	R-NETWORK 0X4 1/32W	L2898	945 086 6037	IMPEDANCE,330 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L2899	945 018 9327	INDUCTOR,1000 OHM
RB531	945 036 3529	R-NETWORK 0X4 1/32W	L301	945 086 5368	IMPEDANCE,220 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L302	945 086 5368	IMPEDANCE,220 OHM P
RB532	945 036 3529	R-NETWORK 0X4 1/32W	L303	945 086 5368	IMPEDANCE,220 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L304	945 086 5368	IMPEDANCE,220 OHM P
RB533	945 036 3529	R-NETWORK 0X4 1/32W	L305	945 086 5368	IMPEDANCE,220 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L3051	945 068 8325	FILTER,EMI 20MHZ
RB534	945 036 3529	R-NETWORK 0X4 1/32W	L306	945 086 5368	IMPEDANCE,220 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L3061	945 068 8325	FILTER,EMI 20MHZ
RB536	945 036 3529	R-NETWORK 0X4 1/32W	L307	945 086 5368	IMPEDANCE,220 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L308	945 086 5368	IMPEDANCE,220 OHM P
RB537	945 036 3529	R-NETWORK 0X4 1/32W	L309	945 086 5368	IMPEDANCE,220 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L311	945 086 5368	IMPEDANCE,220 OHM P
RB538	945 036 3529	R-NETWORK 0X4 1/32W	L312	945 086 5368	IMPEDANCE,220 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L313	945 086 5368	IMPEDANCE,220 OHM P
RB561	945 036 3529	R-NETWORK 0X4 1/32W	L314	945 086 5368	IMPEDANCE,220 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L3501	945 041 1978	INDUCTOR,330 OHM
RB562	945 036 3529	R-NETWORK 0X4 1/32W	L3531	945 041 1978	INDUCTOR,330 OHM
	945 037 0817	R-NETWORK 0X4 1/16W	L3534	945 041 2210	INDUCTOR,0.12U K
RB563	945 036 3529	R-NETWORK 0X4 1/32W	L3561	945 041 1978	INDUCTOR,330 OHM
	945 037 0817	R-NETWORK 0X4 1/16W	L3621	945 086 5368	IMPEDANCE,220 OHM P
RB564	945 036 3529	R-NETWORK 0X4 1/32W	L3622	945 086 5368	IMPEDANCE,220 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L3623	945 086 5368	IMPEDANCE,220 OHM P
RB566	945 036 3529	R-NETWORK 0X4 1/32W	L3626	945 086 5368	IMPEDANCE,220 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L3627	945 086 5368	IMPEDANCE,220 OHM P
RB567	945 036 3529	R-NETWORK 0X4 1/32W	L3628	945 018 9327	INDUCTOR,1000 OHM
	945 037 0817	R-NETWORK 0X4 1/16W	L3629	945 086 5368	IMPEDANCE,220 OHM P
RB568	945 036 3529	R-NETWORK 0X4 1/32W	L3630	945 086 5368	IMPEDANCE,220 OHM P

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
L3631	945 018 9327	INDUCTOR,1000 OHM	D1001	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
L3632	945 086 5368	IMPEDANCE,220 OHM P		307 209 1214	ZD UDZS-TE-176.2B
L3633	945 018 9327	INDUCTOR,1000 OHM	D1002	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
L3634	945 086 5368	IMPEDANCE,220 OHM P		307 209 1214	ZD UDZS-TE-176.2B
L3638	945 018 9327	INDUCTOR,1000 OHM	D1003	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
L3639	945 086 5368	IMPEDANCE,220 OHM P		307 209 1214	ZD UDZS-TE-176.2B
L3641	945 018 9327	INDUCTOR,1000 OHM	D1011	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
L3642	945 086 5368	IMPEDANCE,220 OHM P		307 209 1214	ZD UDZS-TE-176.2B
L3691	945 018 9327	INDUCTOR,1000 OHM	D1031	307 210 5416	DIODE RB551V-30-TE-17
L3692	945 086 5368	IMPEDANCE,220 OHM P	D1034	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
L402	945 041 1978	INDUCTOR,330 OHM		307 209 1214	ZD UDZS-TE-176.2B
L4809	945 018 9327	INDUCTOR,1000 OHM	D1036	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
L4810	945 018 9327	INDUCTOR,1000 OHM		307 209 1214	ZD UDZS-TE-176.2B
L4811	945 018 9327	INDUCTOR,1000 OHM	D1041	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
L4812	945 086 5368	IMPEDANCE,220 OHM P		307 209 1214	ZD UDZS-TE-176.2B
L4814	945 018 9327	INDUCTOR,1000 OHM	D1042	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
L5001	945 062 2855	INDUCTOR,33U M		307 209 1214	ZD UDZS-TE-176.2B
L5002	945 062 2855	INDUCTOR,33U M	D1091	307 205 5216	DIODE RB521S-30-TE61
L501	945 041 1978	INDUCTOR,330 OHM	D1092	307 205 5216	DIODE RB521S-30-TE61
L502	945 041 1978	INDUCTOR,330 OHM	D2891	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
L5031	945 086 5368	IMPEDANCE,220 OHM P		307 209 1214	ZD UDZS-TE-176.2B
L5032	945 086 5368	IMPEDANCE,220 OHM P	D2892	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
L5201	945 041 1978	INDUCTOR,330 OHM		307 209 1214	ZD UDZS-TE-176.2B
L5202	945 041 1978	INDUCTOR,330 OHM	D2893	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
L531	945 041 1978	INDUCTOR,330 OHM		307 209 1214	ZD UDZS-TE-176.2B
L532	945 041 1978	INDUCTOR,330 OHM	D2894	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
L5332	945 032 8344	INDUCTOR,39U J		307 209 1214	ZD UDZS-TE-176.2B
L5601	945 038 4579	INDUCTOR,33U M	D2895	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
L5603	945 041 1978	INDUCTOR,330 OHM		307 209 1214	ZD UDZS-TE-176.2B
L5606	945 041 1978	INDUCTOR,330 OHM	D3051	307 235 0816	DIODE 1SS387 TPL3
L5608	945 041 1978	INDUCTOR,330 OHM		307 210 1923	DIODE 1SS400 TE-61
L5609	945 041 1978	INDUCTOR,330 OHM	D3601	307 235 0816	DIODE 1SS387 TPL3
L561	945 041 1978	INDUCTOR,330 OHM		307 210 1923	DIODE 1SS400 TE-61
L562	945 041 1978	INDUCTOR,330 OHM	D3602	307 235 0816	DIODE 1SS387 TPL3
L5662	945 041 1978	INDUCTOR,330 OHM		307 210 1923	DIODE 1SS400 TE-61
L5701	945 041 1978	INDUCTOR,330 OHM	D3603	307 235 0816	DIODE 1SS387 TPL3
L5702	945 041 1978	INDUCTOR,330 OHM		307 210 1923	DIODE 1SS400 TE-61
L5703	945 041 1978	INDUCTOR,330 OH	D3604	307 235 0816	DIODE 1SS387 TPL3
L5821	945 062 2930	INDUCTOR,10U M		307 210 1923	DIODE 1SS400 TE-61
L5822	945 041 1978	INDUCTOR,330 OHM	D3611	307 235 0816	DIODE 1SS387 TPL3
L5827	301 037 5017	MT-GLAZE 0.000 ZA 1/10W		307 210 1923	DIODE 1SS400 TE-61
L5828	945 041 1978	INDUCTOR,330 OHM	D3612	307 235 0816	DIODE 1SS387 TPL3
L5848	945 041 1978	INDUCTOR,330 OHM		307 210 1923	DIODE 1SS400 TE-61
L5861	945 062 2930	INDUCTOR,10U M	D3613	307 235 0816	DIODE 1SS387 TPL3
L5862	945 041 1978	INDUCTOR,330 OHM		307 210 1923	DIODE 1SS400 TE-61
L5867	301 037 5017	MT-GLAZE 0.000 ZA 1/10W	D3614	307 235 0816	DIODE 1SS387 TPL3
L5868	945 041 1978	INDUCTOR,330 OHM		307 210 1923	DIODE 1SS400 TE-61
L7811	945 062 2855	INDUCTOR,33U M	D3616	307 235 0816	DIODE 1SS387 TPL3
L7861	945 062 2855	INDUCTOR,33U M		307 210 1923	DIODE 1SS400 TE-61
L8001	945 086 6600	IMPEDANCE,220 OHM P	D3617	307 235 0816	DIODE 1SS387 TPL3
L8002	945 086 6600	IMPEDANCE,220 OHM P		307 210 1923	DIODE 1SS400 TE-61
L8003	945 086 6600	IMPEDANCE,220 OHM P	D3621	307 235 0816	DIODE 1SS387 TPL3
L8004	945 086 6600	IMPEDANCE,220 OHM P		307 210 1923	DIODE 1SS400 TE-61
L8006	945 086 6600	IMPEDANCE,220 OHM P	D3622	307 235 0816	DIODE 1SS387 TPL3
L8007	945 086 6600	IMPEDANCE,220 OHM P		307 210 1923	DIODE 1SS400 TE-61
L8081	945 041 1978	INDUCTOR,330 OHM	D3623	307 235 0816	DIODE 1SS387 TPL3
L8091	945 086 6600	IMPEDANCE,220 OHM P		307 210 1923	DIODE 1SS400 TE-61
L8166	945 086 5368	IMPEDANCE,220 OHM P	D3626	307 235 0816	DIODE 1SS387 TPL3
L8801	945 068 8318	FILTER,EMI 100MHZ		307 210 1923	DIODE 1SS400 TE-61
L8835	645 100 9340	IMPEDANCE,120 OHM P	D3627	307 235 0816	DIODE 1SS387 TPL3
L8836	645 100 9340	IMPEDANCE,120 OHM P		307 210 1923	DIODE 1SS400 TE-61
<b>DIODE</b>			D3628	307 235 0816	DIODE 1SS387 TPL3
D001	307 235 0816	DIODE 1SS387 TPL3		307 210 1923	DIODE 1SS400 TE-61
	307 210 1923	DIODE 1SS400 TE-61	D3644	307 235 0816	DIODE 1SS387 TPL3
D002	307 235 0816	DIODE 1SS387 TPL3		307 210 1923	DIODE 1SS400 TE-61
	307 210 1923	DIODE 1SS400 TE-61	D4812	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
				307 209 1214	ZD UDZS-TE-176.2B

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
D4813	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3		952 001 8830	SWITCH,PUSH 1P-1TX1
	307 209 1214	ZD UDZS-TE-176.2B	SW6803	945 026 2792	SWITCH,PUSH 1P-1TX1
D5061	307 235 0816	DIODE 1SS387 TPL3		952 001 8830	SWITCH,PUSH 1P-1TX1
	307 210 1923	DIODE 1SS400 TE-61	SW6804	945 026 2792	SWITCH,PUSH 1P-1TX1
D5062	307 235 0816	DIODE 1SS387 TPL3		952 001 8830	SWITCH,PUSH 1P-1TX1
	307 210 1923	DIODE 1SS400 TE-61	SW6806	945 026 2792	SWITCH,PUSH 1P-1TX1
D5201	307 210 5416	DIODE RB551V-30-TE-17		952 001 8830	SWITCH,PUSH 1P-1TX1
D5300	307 210 5416	DIODE RB551V-30-TE-17	SW6807	945 026 2792	SWITCH,PUSH 1P-1TX1
D5602	307 210 5416	DIODE RB551V-30-TE-17		952 001 8830	SWITCH,PUSH 1P-1TX1
D5622	307 235 0816	DIODE 1SS387 TPL3	SW6808	945 026 2792	SWITCH,PUSH 1P-1TX1
	307 210 1923	DIODE 1SS400 TE-61		952 001 8830	SWITCH,PUSH 1P-1TX1
D5623	307 235 0816	DIODE 1SS387 TPL3	SW6810	945 026 2792	SWITCH,PUSH 1P-1TX1
	307 210 1923	DIODE 1SS400 TE-61		952 001 8830	SWITCH,PUSH 1P-1TX1
D5624	307 235 0816	DIODE 1SS387 TPL3	SW6811	945 026 2792	SWITCH,PUSH 1P-1TX1
	307 210 1923	DIODE 1SS400 TE-61		952 001 8830	SWITCH,PUSH 1P-1TX1
D591	307 235 0816	DIODE 1SS387 TPL3	X1331	945 088 7179	OSC,CRYSTAL 27.0MHZ
	307 210 1923	DIODE 1SS400 TE-61	X8001	945 088 7179	OSC,CRYSTAL 27.0MHZ
D592	307 235 0816	DIODE 1SS387 TPL3	X8802	945 083 7556	OSC,CRYSTAL 25.0MHZ
	307 210 1923	DIODE 1SS400 TE-61	X9885	945 065 3538	CRYSTAL 14.7456MHZ
D6801	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3	<b>655 002 7979 ASSY,PWB,AV KG5BC</b>		
	307 209 1214	ZD UDZS-TE-176.2B	<b>CAPACITOR</b>		
D6802	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3	C2001	303 453 8610	CERAMIC 0.1U K 16V
	307 209 1214	ZD UDZS-TE-176.2B		303 409 3426	CERAMIC 0.1U K 16V
D6803	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3	C3051	303 454 0910	CERAMIC 100P J 50V
	307 209 1214	ZD UDZS-TE-176.2B	C3061	303 454 0910	CERAMIC 100P J 50V
D6831	307 209 7513	LED SML-210YT T86 L	<b>RESISTOR</b>		
D6833	307 203 7816	LED SML-210LT T86 M	R2001	301 260 4115	MT-GLAZE 75 JA 1/3W
D6835	307 222 4810	LED SML-521MUW T86	R2002	301 224 8814	MT-GLAZE 100 JA 1/16W
D6841	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3	R2008	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
	307 209 1214	ZD UDZS-TE-176.2B	R2010	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
D6842	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3	R2012	301 260 4115	MT-GLAZE 75 JA 1/3W
	307 209 1214	ZD UDZS-TE-176.2B	R2022	301 260 4115	MT-GLAZE 75 JA 1/3W
D6845	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3	R2051	301 150 5819	MT-GLAZE 100K JA 1/10W
	307 209 1214	ZD UDZS-TE-176.2B	R2052	301 150 5819	MT-GLAZE 100K JA 1/10W
D6846	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3	R3001	301 150 5819	MT-GLAZE 100K JA 1/10W
	307 209 1214	ZD UDZS-TE-176.2B	R3011	301 150 5819	MT-GLAZE 100K JA 1/10W
D7812	307 254 2716	DIODE CMS16	R3021	301 224 8913	MT-GLAZE 100K JA 1/16W
D7862	307 254 2716	DIODE CMS16	R3031	301 150 5819	MT-GLAZE 100K JA 1/10W
D8081	307 254 2716	DIODE CMS16	R3051	301 150 5819	MT-GLAZE 100K JA 1/10W
D8082	307 210 1923	DIODE 1SS400 TE-61	R3061	301 255 6513	MT-GLAZE 100 JA 1/10W
D8091	307 254 2716	DIODE CMS16	R3063	301 150 5819	MT-GLAZE 100K JA 1/10W
D8092	307 235 0816	DIODE 1SS387 TPL3	R3064	301 255 6513	MT-GLAZE 100 JA 1/10W
	307 210 1923	DIODE 1SS400 TE-61	<b>COIL</b>		
D8093	307 235 0816	DIODE 1SS387 TPL3	L2011	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
	307 210 1923	DIODE 1SS400 TE-61	L2021	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
D8094	307 235 0816	DIODE 1SS387 TPL3	<b>MISCELLANEOUS</b>		
	307 210 1923	DIODE 1SS400 TE-61	K20A	945 068 3740	JACK,RCA-3
D8801	307 209 7513	LED SML-210YT T86 L	K20B	645 089 9041	SOCKET,DIN 4P
<b>MISCELLANEOUS</b>			K30A	945 006 4792	JACK,PHONE D3.6
K10A	945 076 2698	SOCKET,DVI 29P		952 001 0070	JACK,PHONE D3.6
K10B	952 001 8601	SOCKET,D-SUB 15P		952 001 0971	JACK,PHONE D3.5
K10C	952 001 8571	SOCKET,D-SUB 15P	K30B	945 006 4792	JACK,PHONE D3.6
K40B	652 002 8135	PLUG,D-SUB 9P		952 001 0070	JACK,PHONE D3.6
K9602	645 093 6760	TRANS,PULSE		952 001 0971	JACK,PHONE D3.5
SC1030	945 076 3503	SURGE-ABSORBER	K30C	945 006 4792	JACK,PHONE D3.6
SC1031	945 076 3503	SURGE-ABSORBER		952 001 0070	JACK,PHONE D3.6
SC1032	945 076 3503	SURGE-ABSORBER		952 001 0971	JACK,PHONE D3.5
SC1033	945 076 3503	SURGE-ABSORBER		945 006 4792	JACK,PHONE D3.6
SC1041	945 076 3503	SURGE-ABSORBER		952 001 0070	JACK,PHONE D3.6
SC1081	945 076 3503	SURGE-ABSORBER		952 001 0971	JACK,PHONE D3.5
SC1091	945 076 3503	SURGE-ABSORBER	SC2001	945 076 3503	SURGE-ABSORBER
SC1091	945 076 3503	SURGE-ABSORBER	SC2011	945 076 3503	SURGE-ABSORBER
SC3081	945 076 3503	SURGE-ABSORBER	SC2021	945 076 3503	SURGE-ABSORBER
SC3082	945 076 3503	SURGE-ABSORBER	SC2051	945 076 3503	SURGE-ABSORBER
SW6801	945 026 2792	SWITCH,PUSH 1P-1TX1	SC2052	945 076 3503	SURGE-ABSORBER
	952 001 8830	SWITCH,PUSH 1P-1TX1	SC3001	945 076 3503	SURGE-ABSORBER
SW6802	945 026 2792	SWITCH,PUSH 1P-1TX1			

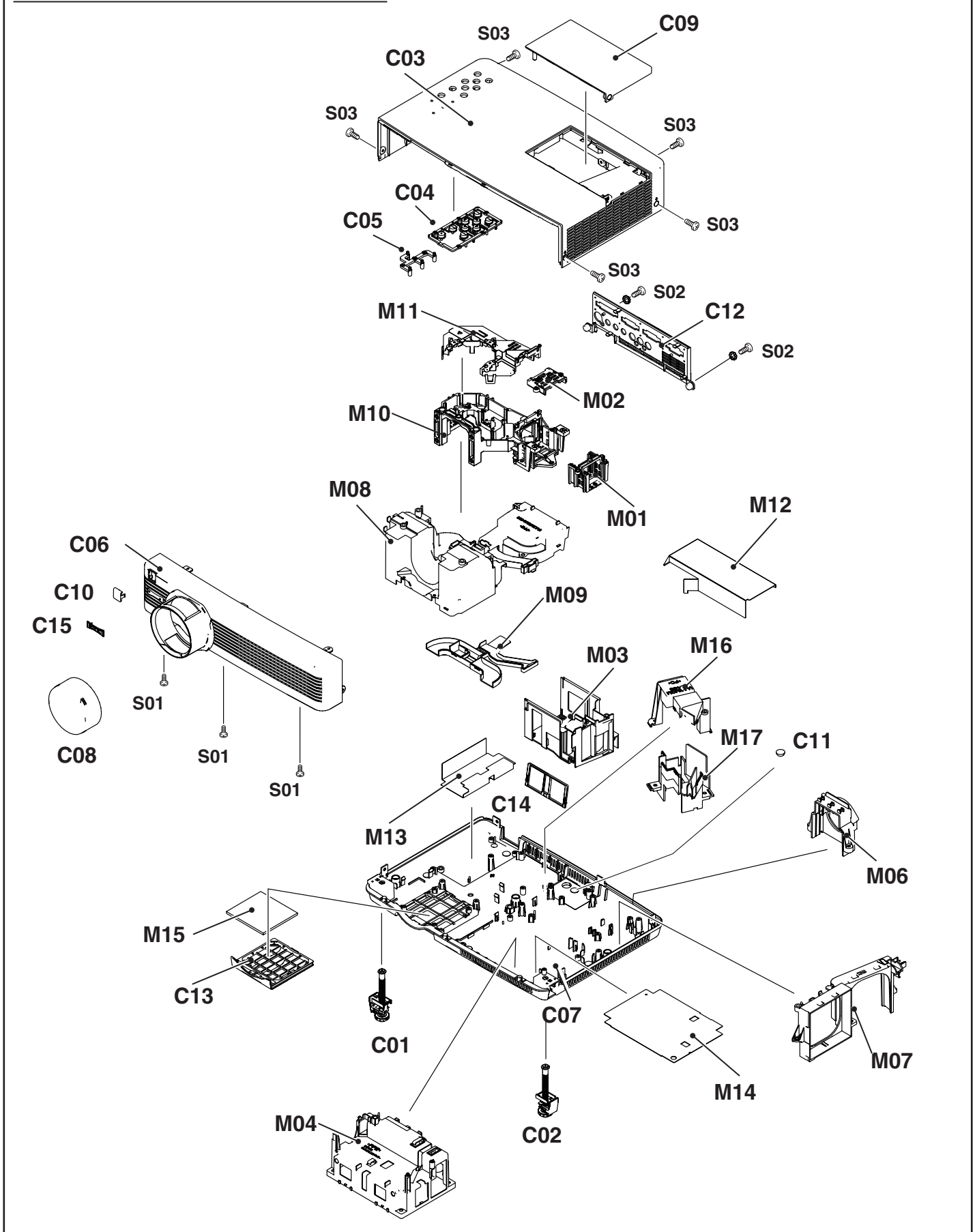


## Electrical Parts List

Key No. Part No.	Description	Key No. Part No.	Description
SC3011 945 076 3503	SURGE-ABSORBER	△US 945 064 6363	CORD,POWER-3.0MK,US
SC3021 945 076 3503	SURGE-ABSORBER	△EU 945 054 1156	CORD,POWER-3.0MK
SC3031 945 076 3503	SURGE-ABSORBER	△HK 945 054 1149	CORD,POWER-3.138MK
SC3051 945 076 3503	SURGE-ABSORBER		
SC3061 945 076 3503	SURGE-ABSORBER		
<b>655 002 7962 ASSY,PWB,R/C KG5BC</b>		<b>MISCELLANEOUS</b>	
<b>CAPACITOR</b>		610 343 0249	STRAP CAP-KT7AC
C2901 403 455 1012	CERAMIC 1U K 10V	610 342 8024	CARRY BAG-KL6A
303 433 1112	CERAMIC 1U K 10V	645 099 3589	UNIT,USB IR RECEIVER
C2902 303 453 8719	CERAMIC 470P K 50V	945 073 4855	CABLE,INTERFACE VGA
303 453 9211	CERAMIC 470P K 50V	645 093 1642	CABLE,INTERFACE VGA
303 282 5118	CERAMIC 470P K 50V	655 003 1310	CORRECTION CARD-KG5AC
C2903 303 368 7319	CERAMIC 10U K 6.3V		
C8833 303 453 8917	CERAMIC 0.1U K 16V		
303 453 8610	CERAMIC 0.1U K 16V		
303 409 3426	CERAMIC 0.1U K 16V		
<b>RESISTOR</b>			
R2902 301 256 5614	MT-GLAZE 47 JA 1/10W		
R2903 301 224 8814	MT-GLAZE 100 JA 1/16W		
R8831 301 225 8110	MT-GLAZE 10 JA 1/16W		
R8832 301 225 8110	MT-GLAZE 10 JA 1/16W		
<b>MISCELLANEOUS</b>			
A2901 945 084 1997	UNIT,REMOCON RECEIVER		
SC2091 945 076 3503	SURGE-ABSORBER		
SC2092 945 076 3503	SURGE-ABSORBER		
<b>655 002 7955 ASSY,PWB,ID CONNECT-1 KG5BC</b>			
<b>RESISTOR</b>			
R8738 301 226 1516	MT-GLAZE 0.000 ZA 1/16W		
<b>COIL</b>			
L8731 945 086 6037	IMPEDANCE,330 OHM P		
L8732 945 086 6037	IMPEDANCE,330 OHM P		
L8733 945 086 6037	IMPEDANCE,330 OHM P		
L8734 945 086 6037	IMPEDANCE,330 OHM P		
L8737 945 086 6037	IMPEDANCE,330 OHM P		
<b>PACKING MATERIALS</b>			
610 344 9371	CARTON CASE-KG5BC (FOR KG5-XB20000)		
610 344 9449	CARTON CASE-KB5BC (FOR KB5-XB10000)		
610 340 0297	POLY BAG-KB3AC		
610 344 5762	CUSHION SPACER-KG5AC		
610 343 1659	CUSHION TOP-KG5AC		
610 343 1642	CUSHION BTM-KG5AC		
<b>ACCESSORIES</b>			
<b>OWNER'S MANUAL</b>			
610 343 6456	CD-ROM(PJ NW MANAGER)		
610 343 5947	CD-ROM,OWNERS MANUAL-KG5BC		
655 002 7900	SETUP INST-KG5BC		
655 002 8730	SAFETY MANUAL-KG5BC		
<b>REMOTE CONTROL</b>			
645 099 3237	ASSY,REMOCON CXZV		
910 319 1820	RC-BATTERY LID-CXSP		
<b>AC CORD</b>			

# Mechanical Parts List

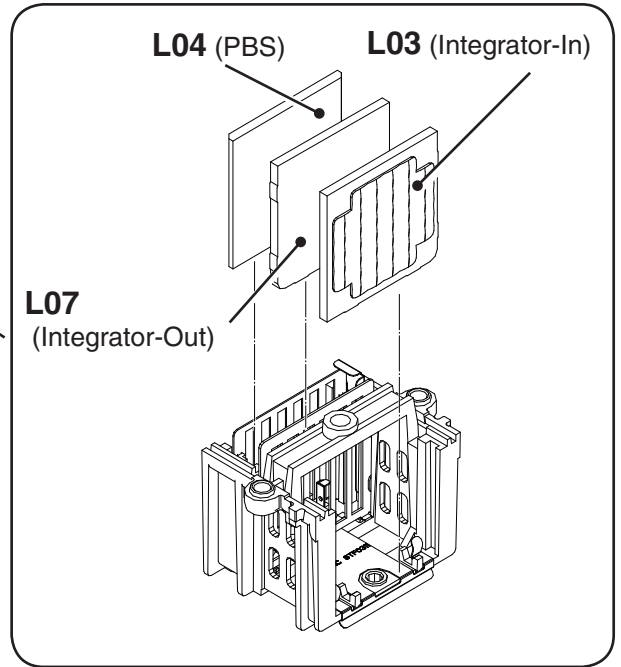
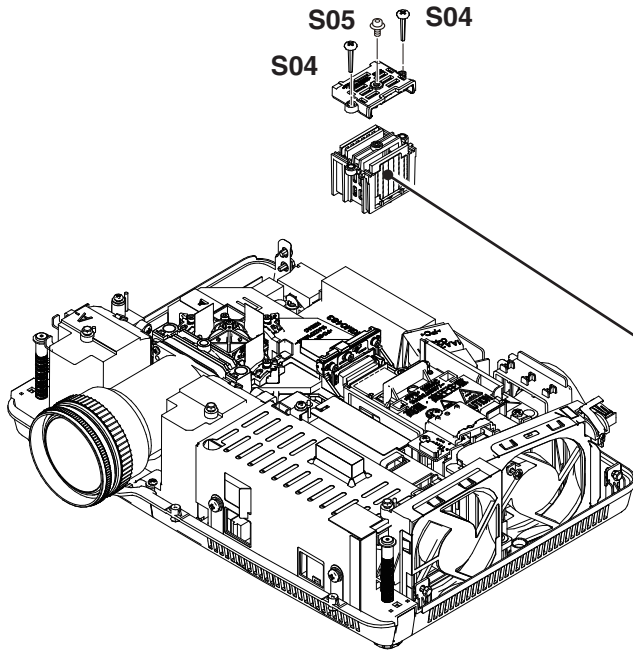
## Cabinet Parts Location



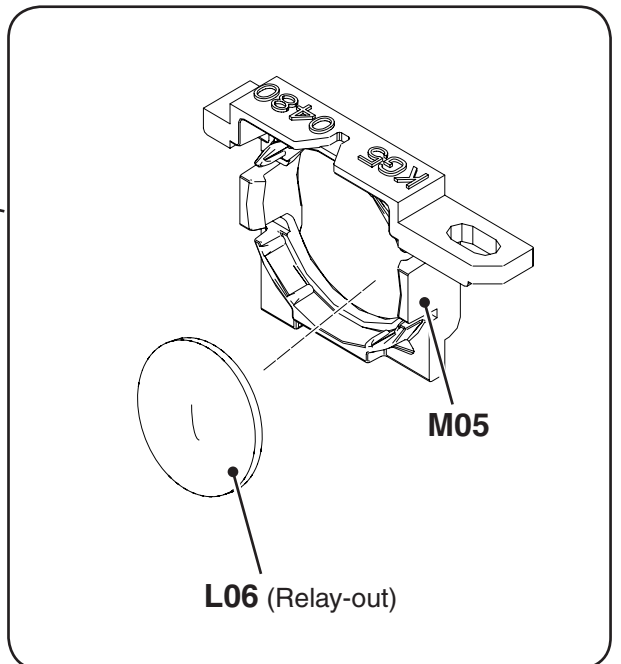
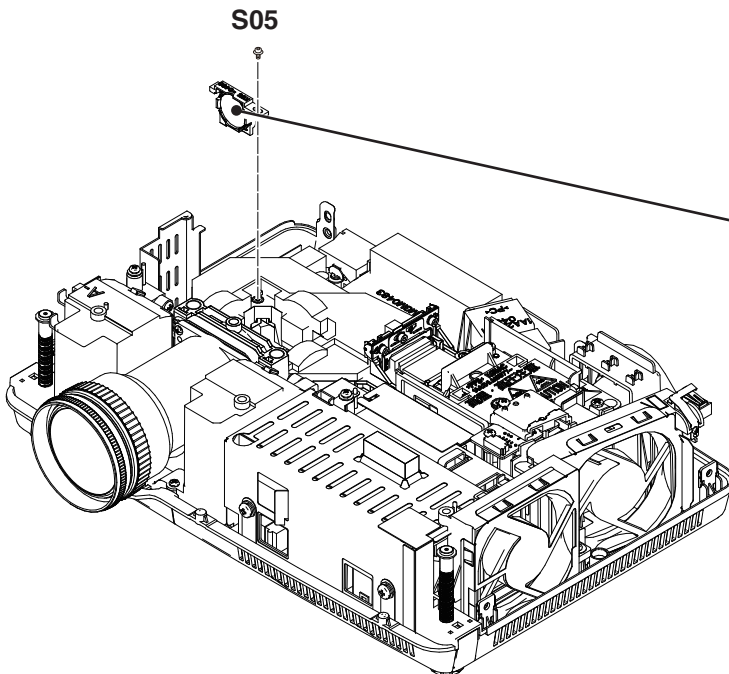
Mechanical Parts List

**Optical Parts Location**

Integrator Lens-In

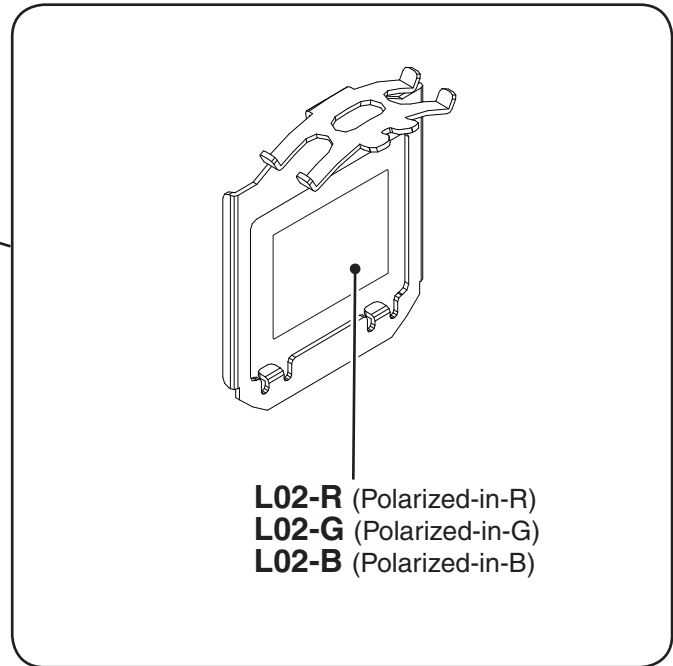
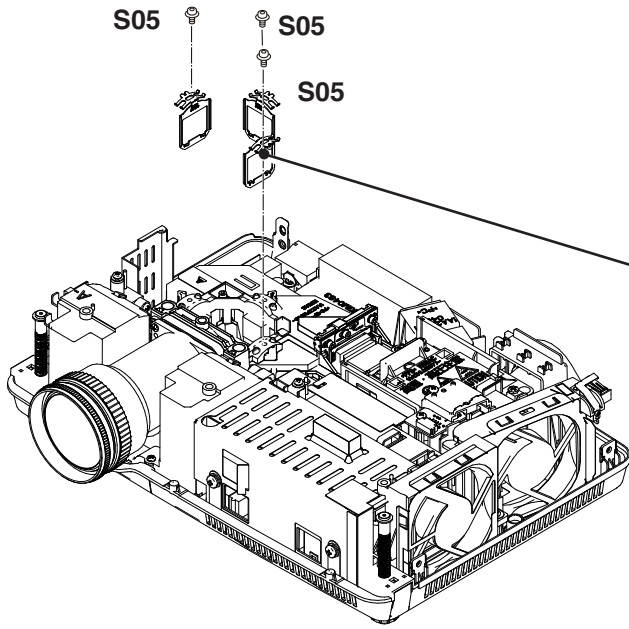


Relay Lens-Out

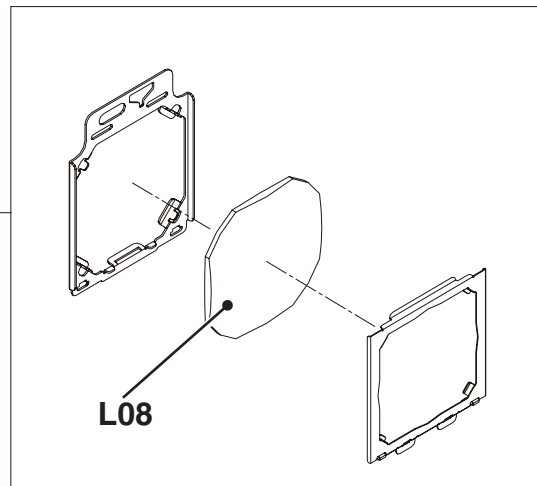
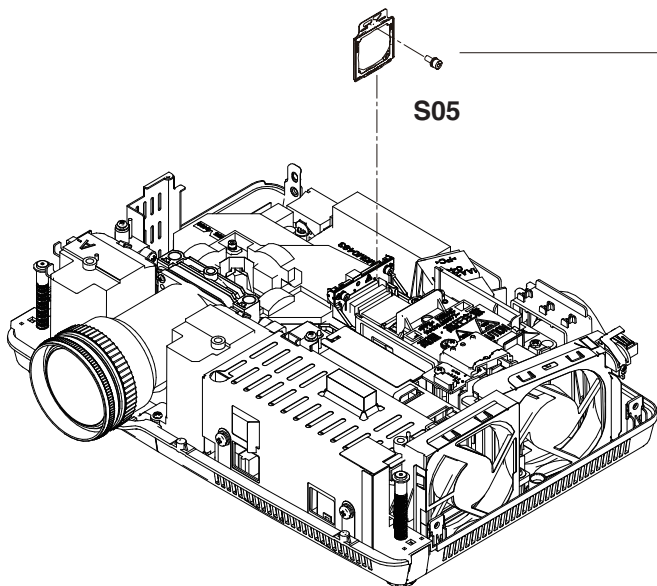


### Mechanical Parts List

#### Polarized Glass-In

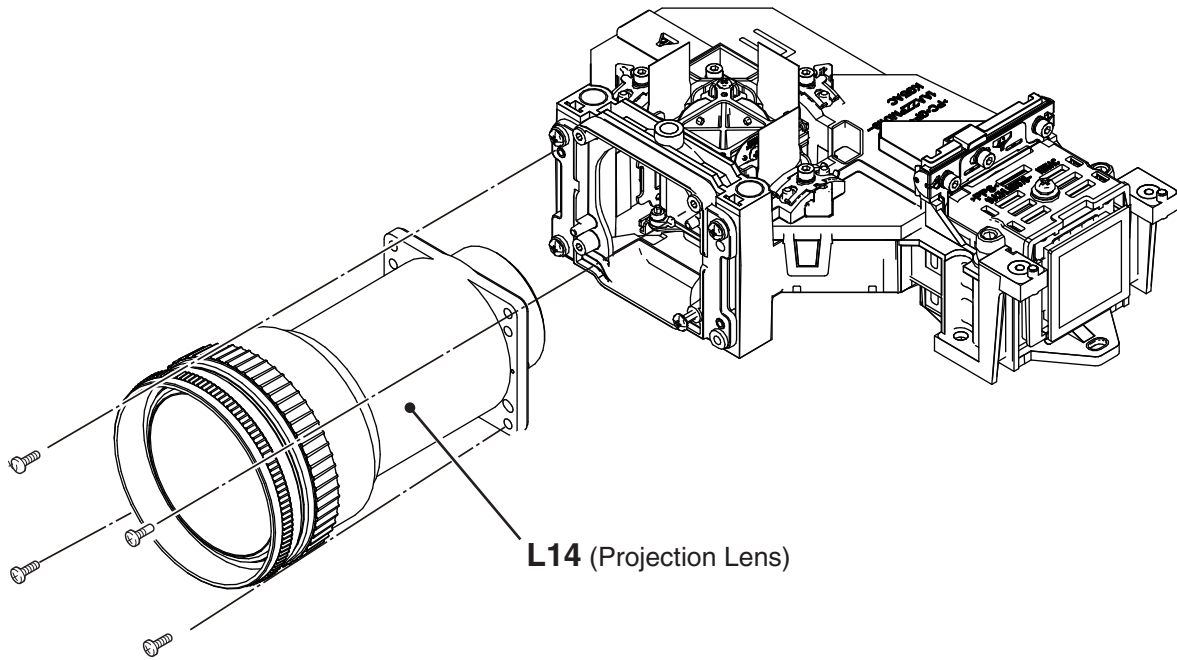


#### Condenser (Out) Lens



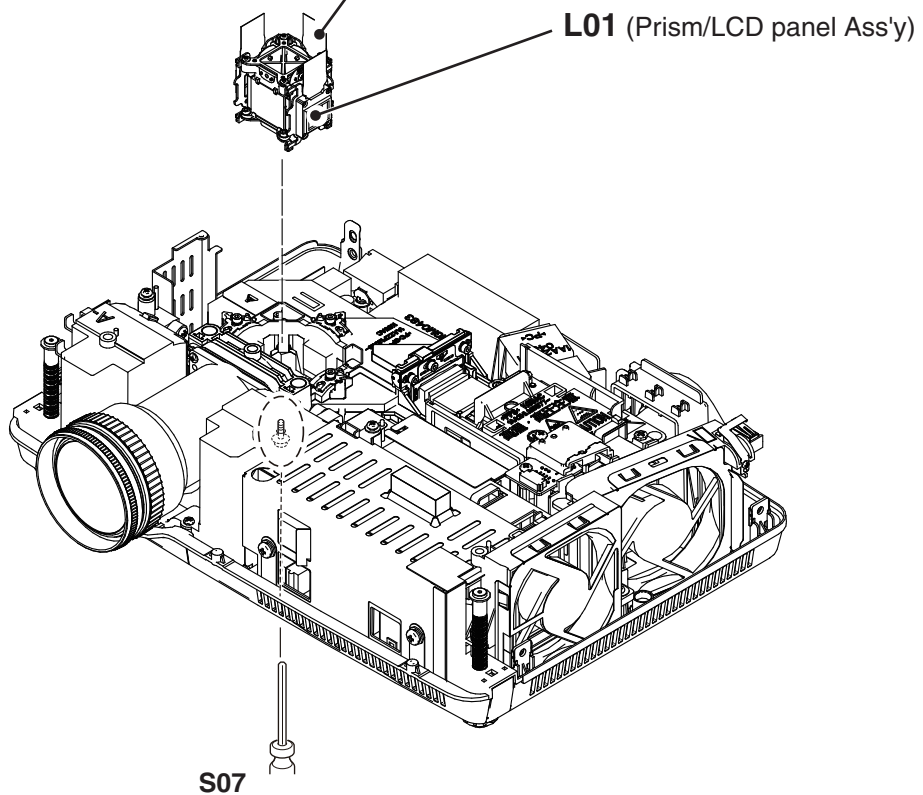
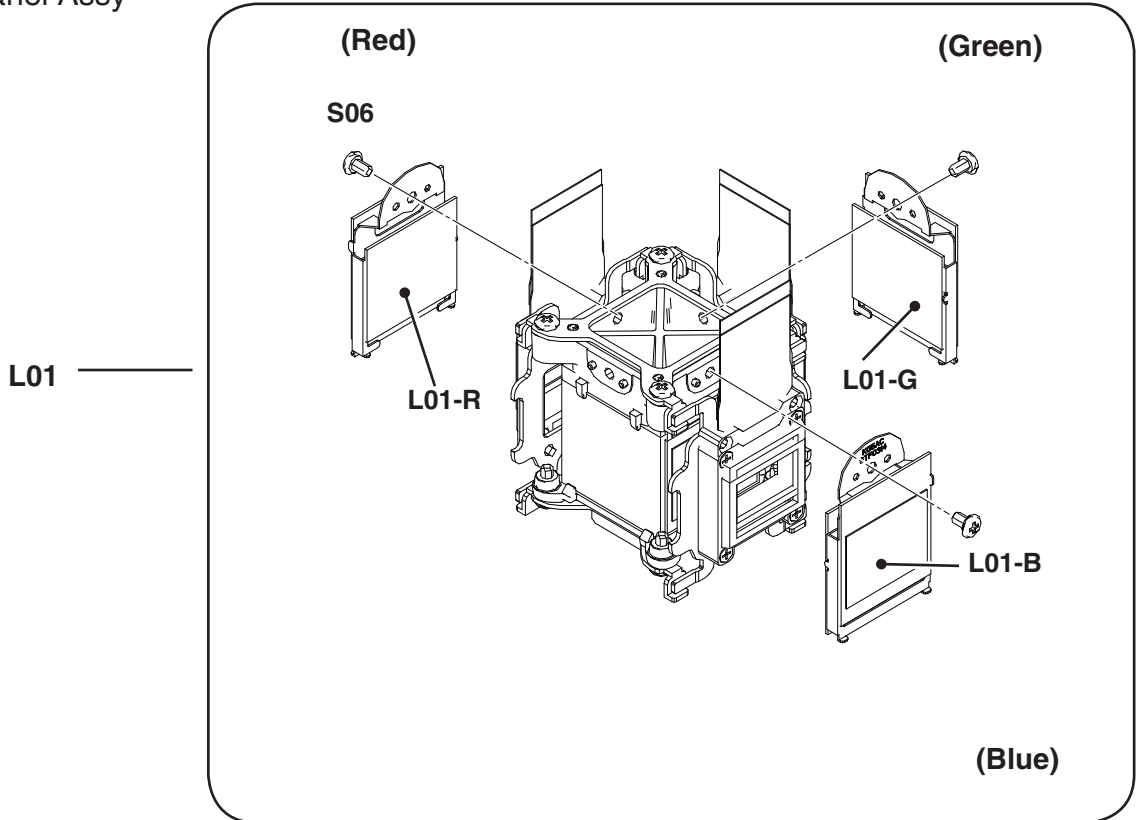
Mechanical Parts List

Projection Lens



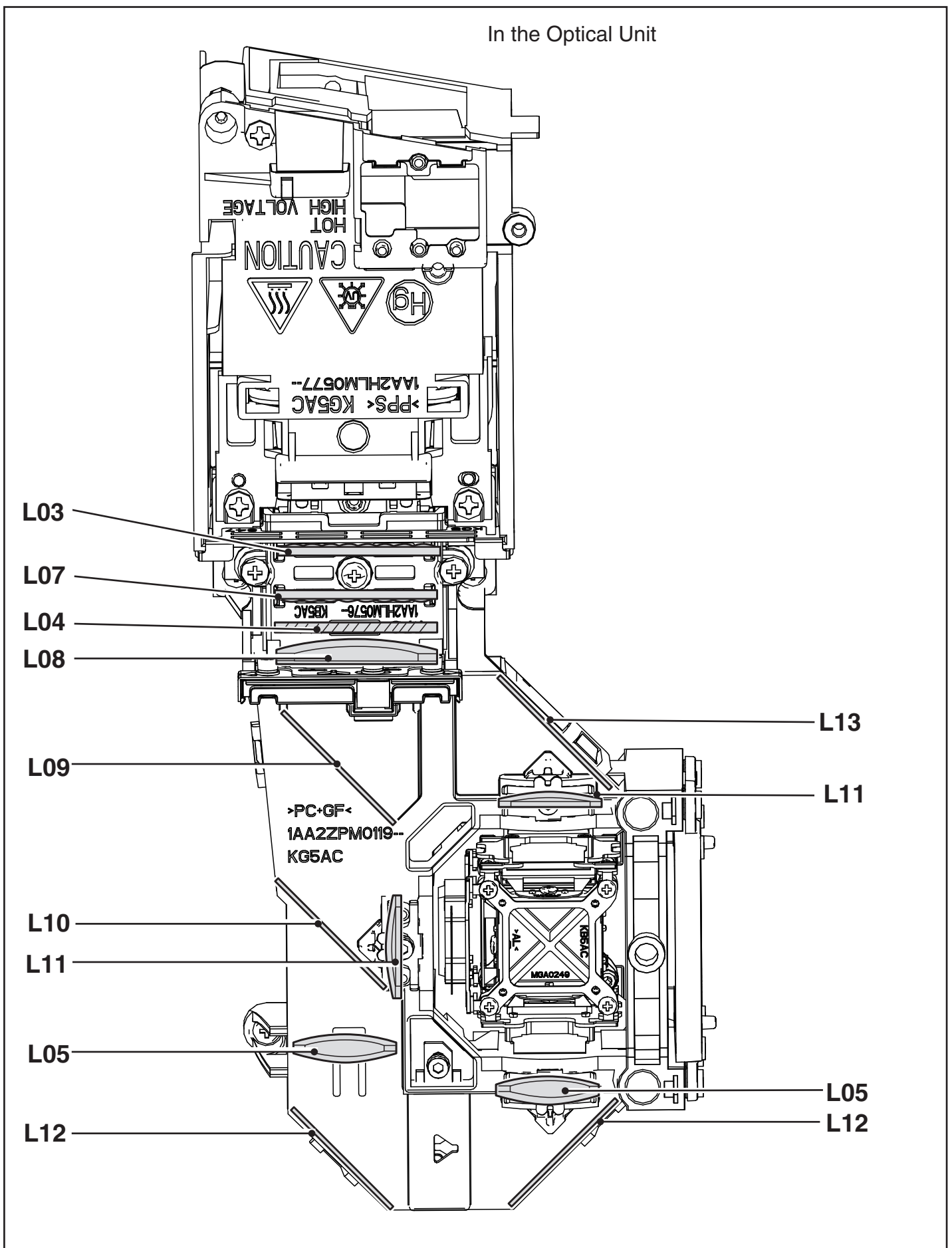
Mechanical Parts List

Prism/LCD Panel Assy



Mechanical Parts List

In the Optical Unit



## Mechanical Parts List

## Mechanical Parts List

Note: Parts order must contain Chassis No., Part No., and Descriptions.

Key No. Part No.	Description	Key No. Part No.	Description
<b>CABINET PARTS</b>		L02-B 610 346 5555	ASSY POL B IN-KG5AC (FOR KG5-XB20000)
C01 610 343 2045	ASSY STAND LEFT-KG5AC	L01 610 346 3124	ASSY PNL/PSM -KD5AC (Including Key No.L01-R and L01-B)
C02 610 343 2052	ASSY STAND RIGHT-KG5AC	L01-R 610 346 3148	COMPL P-POL R-KD5AC
C03 610 346 1250	CABINET TOP SERVICE-KG5BC	L01-G 610 346 3131	COMPL POL G-KG5AC
C04 610 344 8169	BUTTON CONTROL-KG5BC	L01-B 610 346 3155	COMPL POL B-KD5AC
C05 610 344 1788	DEC INLAY LED-KF5AC	L02-R 610 346 5562	ASSY POL R IN-KG5AC
C06 610 344 1740	CABINET FRONT-KG5BC	L02-G 610 346 5531	ASSY POL G IN-KG5AC
C07 610 343 0881	CABINET BTM-KG5AC	L02-B 610 346 5548	ASSY POL B IN-KD5AC (FOR KB5-XB10000)
C08 610 346 4268	CAP LENS-KG5AC	L03 645 099 0588	LENS, INTEGRATOR (IN)
C09 610 344 8213	COVER ,LP SERVICE-KG5BC	L04 945 086 6372	PRISM (PBS)
C10 610 343 0942	DEC INLAY RC-KG5AC	L05 645 099 0571	LENS, RELAY (IN)
C11 610 325 2477	DEC LEG-PT5EC	L06 645 099 0601	LENS, RELAY (OUT)
C12 610 345 4207	PANEL AV-KG5BC	L07 645 099 0595	LENS, INTEGRATOR (OUT)
C13 610 343 3943	PANEL NET F-KG5AC	L08 645 099 0564	LENS, CONDENSER (OUT) (FOR KG5-XB20000)
C14 610 343 3950	PANEL NET B-KG5AC	L08 645 099 9109	LENS, CONDENSER (OUT) (FOR KB5-XB10000)
C15 910 327 3748	BADGE EIKI-MT5BC	L09 645 099 7396	DICHROIC MIRROR (B)
<b>CHASSIS PART</b>		L10 645 099 7402	DICHROIC MIRROR (G)
M01 610 342 5795	HOLDER INT PBS BTM-KG5AC	L11 645 096 4657	LENS, CONDENSER (G)
M02 610 342 5788	HOLDER INT PBS TOP-KG5AC	L12 645 096 4718	MIRROR (R)
M03 610 343 1093	HOLDER LAMP HOUSE-KG5AC	L13 645 096 4701	MIRROR (B)
M04 610 343 1109	HOLDER POW PWB-KG5AC	L14 645 099 2568	LENS, PROJECTION
M05 610 343 1314	MTG RELAY OUT-KG5AC		
M06 610 343 1307	MTG SPEAKER-KG5AC		
M07 610 343 1352	MTG EXHAUST FAN-KG5AC		
M08 610 343 1338	MOUNTING DUCT PNL TOP-KG5AC		
M09 610 343 1369	MOUNTING DUCT PNL BTM-KG5AC (FOR KG5-XB20000)		
M08 610 345 4665	MOUNTING DUCT PNL TOP-KB5AC		
M09 610 345 4672	MOUNTING DUCT PNL BTM-KB5AC (FOR KB5-XB10000)		
M10 610 342 5771	OPTICAL BASE BTM-KG5AC		
M11 610 343 1086	OPTICAL BASE TOP-KG5AC		
M12 610 343 1550	SPACER SHEET POWER TOP-KG5AC		
M13 610 343 1543	SPACER SHEET FILTER A-KG5AC		
M14 610 343 1390	SPACER SHEET POWER BTM_KG5AC		
M15 610 343 1581	SPACER SPONGE NET-KG5AC		
M16 610 343 1345	MOUNTING DUCT LAMP TOP-KG5AC		
M17 610 343 1376	MOUNTING DUCT LAMP BTM-KG5AC		
<b>SCREWS</b>			
S01 411 200 2808	SCR TPG FLT 3x8		
S02 411 189 8907	SCR BIN 4x4		
S03 411 189 8600	SCR BIN 3x8		
S04 411 189 8303	SCR BIN 3X14		
S05 412 077 8108	SPECIAL SCREW-2.5X6		
S06 411 190 9108	SCR BIN 2X4		
S07 312 070 3400	SPECIAL SCREW-3.0X10V		
<b>OPTICAL PARTS</b>			
L01 610 344 3195	ASSY PNL/PSM -KG5AC (Including Key No.L01-R and L01-B)		
L01-R 610 344 3393	COMPL P-POL R-KG5AC		
L01-G 610 344 3386	COMPL POL G-KG5AC		
L01-B 610 344 3409	COMPL POL B-KG5AC		
L02-R 610 346 5562	ASSY POL R IN-KG5AC		
L02-G 610 346 5531	ASSY POL G IN-KG5AC		



**Mechanical Parts List**

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# **EIKI**

**A-key to better communications**

## Diagrams & Drawings

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### Schematic Diagrams Printed Wiring Board Drawings

Model	Chassis No.
LC-XB100	KB5-XB10000
LC-XB200	KG5-XB20000

These schematic diagrams and printed wiring board drawings are part of the service manual original for chassis No. KB5-XB10000 and KG5-XB20000, models LC-XB100 and LC-XB200.  
File with the service manual No. SM5111054-00.

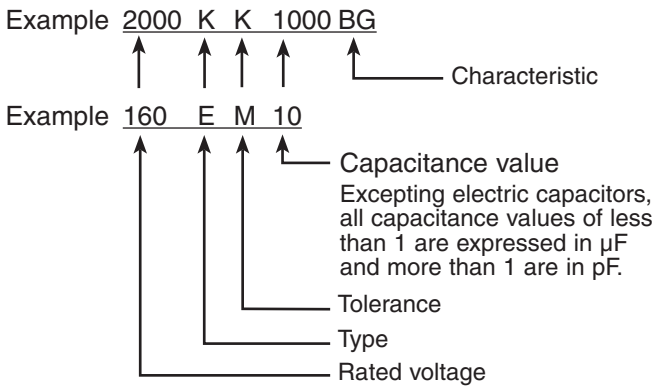
**Note:**

All the information of part numbers and values indicated on these diagrams are at the beginning of production. To improve the performance, there may be some differences to the actual set. When you order the service parts, use service parts code mentioned on the parts list in this service manual.

# Parts description and reading in schematic diagram

1. The parts specification of resistors, capacitors and coils are expressed in designated code. Please check the parts description by the following code table.
2. Some of transistors and diodes are indicated in mark for the substitution of parts name. Please check the parts name by the following code table.
3. Voltages and waveforms were taken with a video color bar signal (1Vp-p at 75 ohms terminated) and controls to normal.
4. Voltages were taken with a high-impedance digital voltmeter.

## Capacitor Reading



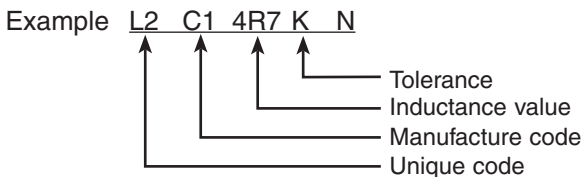
### Material table

Mark	Material
E	Electrolytic
P	Electrolytic (non-polarized)
C	Ceramic (temperature compensation)
K	Ceramic
F	Polyester
N	Polypropylene
M	Metalized polypropylene
H	Metalized polypropylar
B	Ceramic (semiconductor)
G	Metalized polyester
Y	Composite film
S	Styrol
T	Tantalum oxide solid electrolytic
U	Organic semiconductive electrolyte
D	Electric double layer electrolytic

### Tolerance table

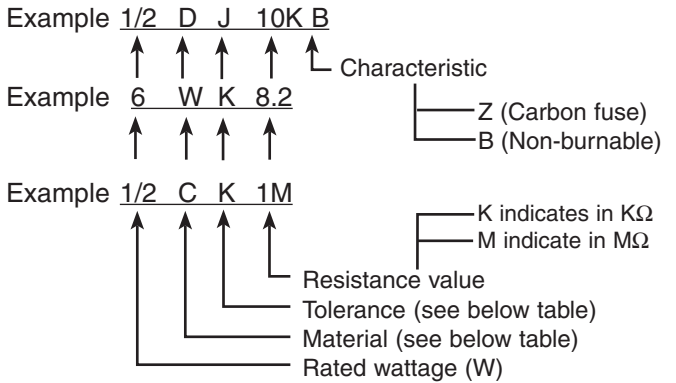
Mark	Tolerance
A	not specified
B	$\pm 0.1$
C	$\pm 0.25$
D	$\pm 0.5$
F	$\pm 1$
G	$\pm 2$
E	$\pm 2.5$
H	$\pm 3$
J	$\pm 5$
K	$\pm 10$
M	$\pm 20$
N	$\pm 30$
P	+100 -0
Q	+30 -10
T	+50 -10
U	+75 -10
V	+20 -10
W	+100 -10
X	+40 -20
Y	+150 -10
Z	+80 -20

## Coil Reading



Mark	Tolerance (nH)	Mark	Tolerance (%)
C	$\pm 0.25$	G	$\pm 2$
D	$\pm 0.5$	J	$\pm 5$
S	$\pm 0.3$	K	$\pm 10$
A	$\pm 0.2$	L	$\pm 15$
		M	$\pm 20$

## Resistor Reading



Note: Resistor which is indicated with resistance value only are 1/6W carbon resistor. Resistor which is indicated with material, tolerance and value are 1/4W rated wattage.

### Material table

Mark	Material
D	Carbon
N	Metal film
S	Oxide metal film
C	Solid
G	Metal glaze
W	Wire winding or cement
H	Ceramic
F	Fusible

### Tolerance table

Mark	Tolerance
A	$\pm 0.05$
B	$\pm 0.1$
C	$\pm 0.25$
D	$\pm 0.5$
F	$\pm 1$
G	$\pm 2$
J	$\pm 5$
K	$\pm 10$
M	$\pm 20$
P	+5 -15
Z	used in 0 ohm

## Diode/Transistor Type Reading

### Diode

Mark	Type number
R	1S2076A, 1S2473, 1N4148
AA	1S2076A, 1S2473, 1SS133, 1N4148

### Transistor

#### (1) NPN type

Mark	Type number			
--	2SC536	2SC945A	2SC1815	2SC1740S
AD	NF, NG	PA, QA	Y, GR	Q, R, S
AE	NF, NG	PA, QA, RA	O, Y, GR	Q, R, S

#### (2) PNP type

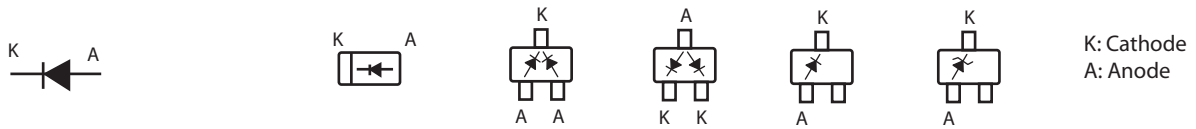
Mark	Type number			
--	2SA608	2SA564A	2SA1015	2SA933S
AB	NF	R	Y, GR	R
AC	NF	Q, R	O, Y, GR	Q, R

#### (3) Chip type

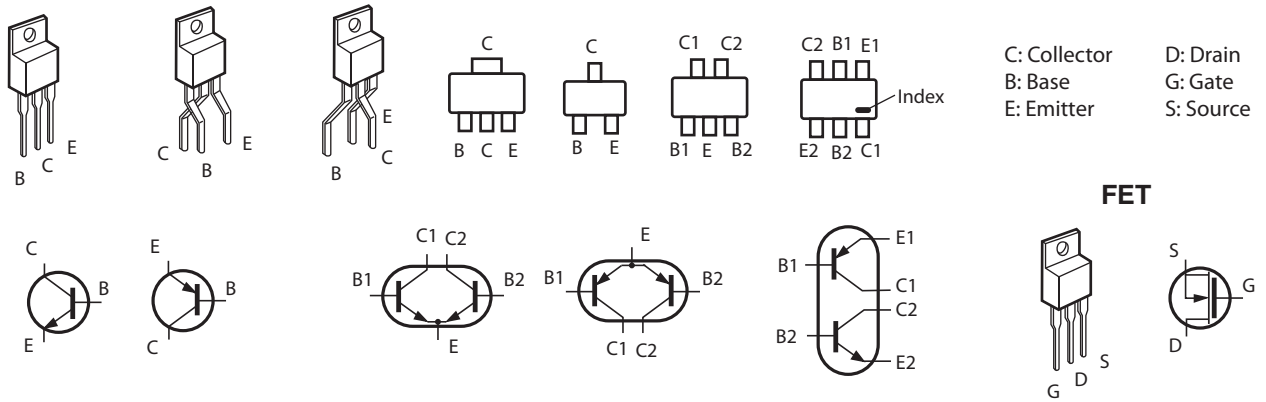
Mark	Type number				
--	2SA1179N	2SA1037K	2SA1037AK	2SC2812/N	2SC2412K
AJ	M6, M7	R, S	R, S		
AH				L6, L7	R, S

# Pin description of diode, transistor and IC

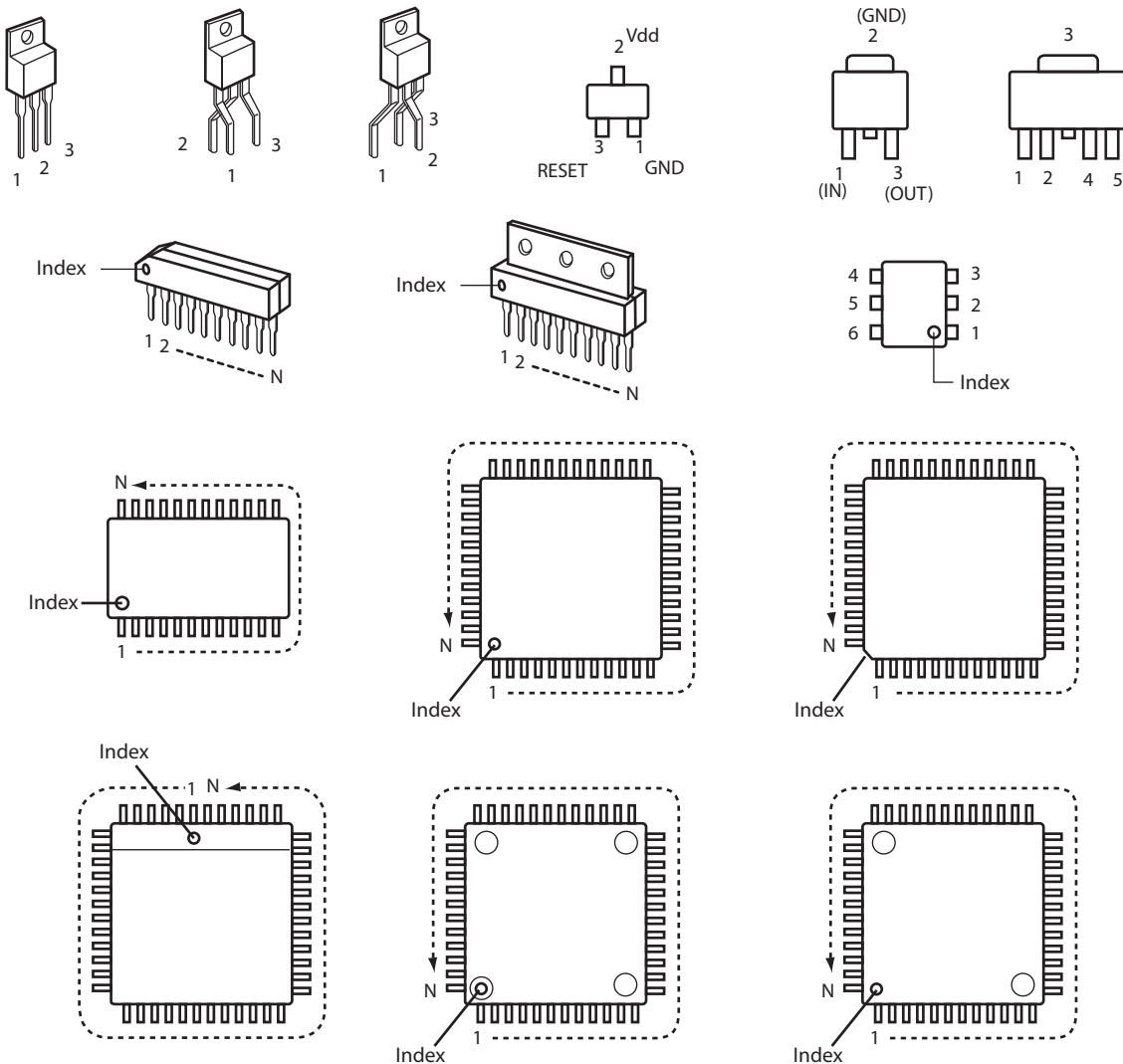
## ● Diode



## ● Transistor/FET



## ● IC



## Note on Soldering

---

### Do not use solder containing lead.

This product has been manufactured using lead-free solder in order to help preserve the environment.

Because of this, be sure to use lead-free solder when carrying out repair work, and never use solder containing lead.

Lead-free solder has a melting point that is 30–40 °C (86–104 °F) higher than solder containing lead, and moreover it does not contain lead which attaches easily to other metals. As a result, it does not melt as easily as solder containing lead, and soldering will be more difficult even if the temperature of the soldering iron is increased.

The extra difficulty in soldering means that soldering time will increase and damage to the components or the circuit board may easily occur.

Because of this, you should use a soldering iron and solder that satisfy the following conditions when carrying out repair work. Also, soldering work must be done in a short time.

### Soldering iron

Use a soldering iron which is 70 W or equivalent, and which lets you adjust the tip temperature up to 450 °C (842 °F) It should also have as good temperature recovery characteristics as possible.

### Solder

Use solder with the metal content and composition ratio by weight given in the table below. Do not use solders which do not meet these conditions.

Metal content	Tin (Sn)	Silver (Ag)	Copper (Cu)
Composition ratio by weight	96.5 %	3.0 %	0.5 %

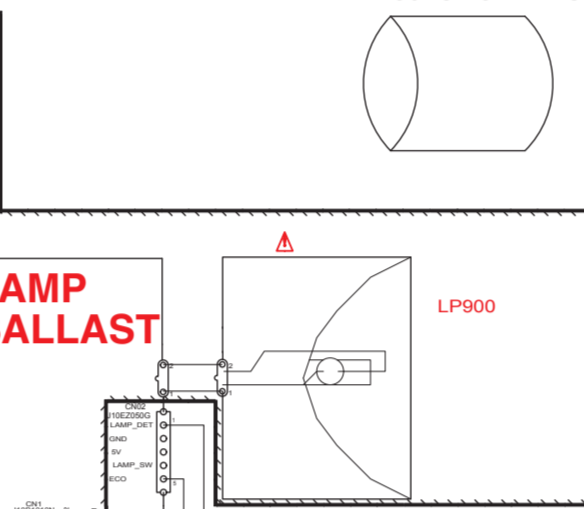
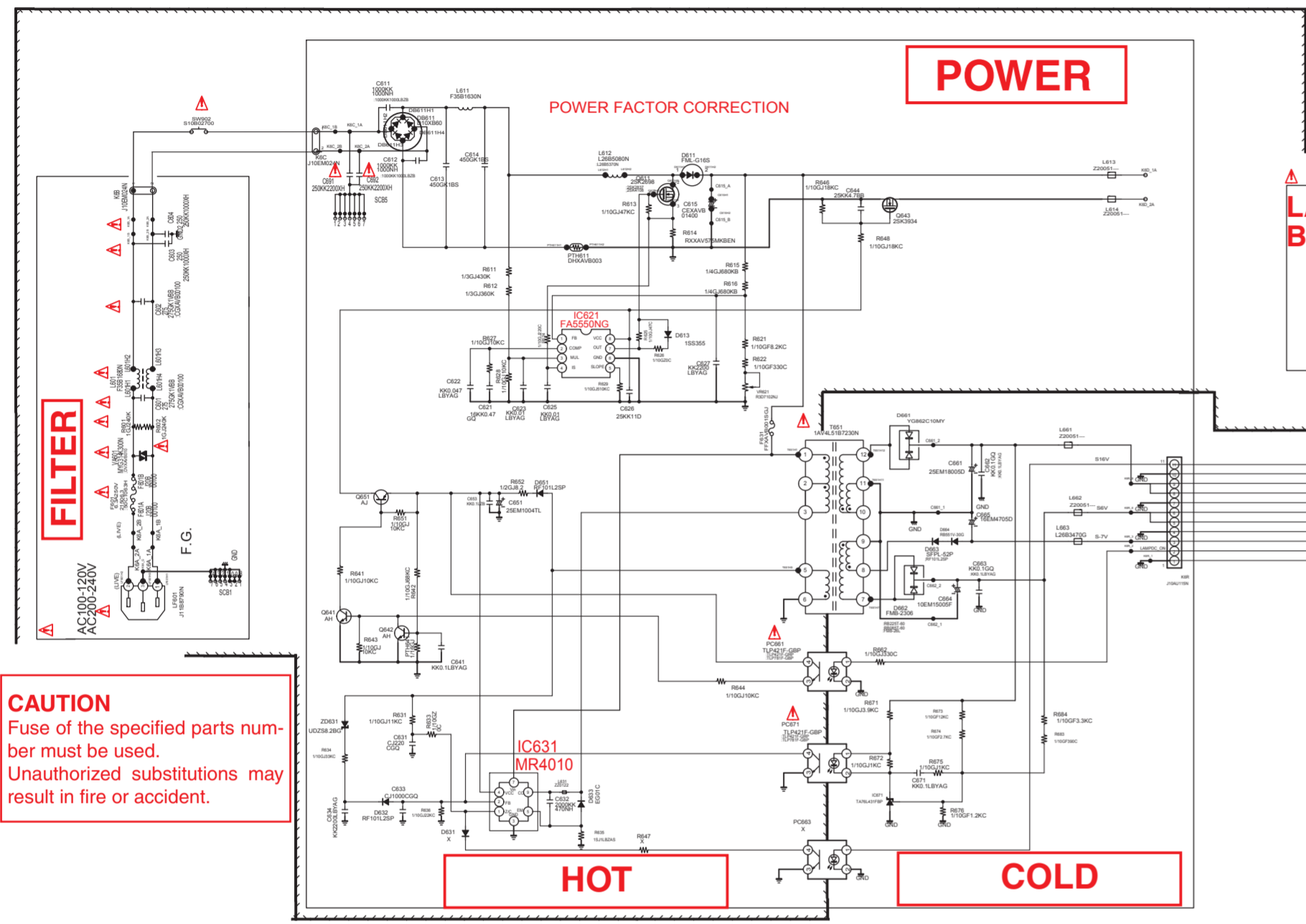
### Note:

If replacing existing solder containing lead with lead-free solder in the soldered parts of products that have been manufactured up until now, remove all of the existing solder at those parts before applying the lead-free solder.

**Schematic Diagrams**

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L



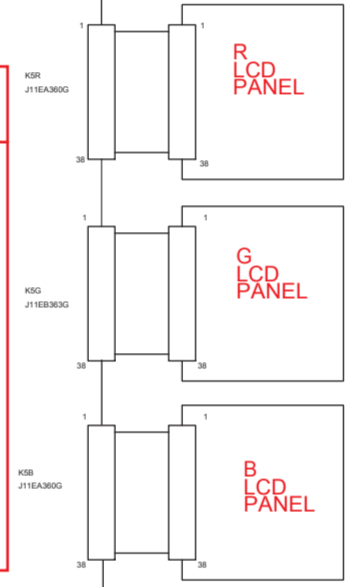
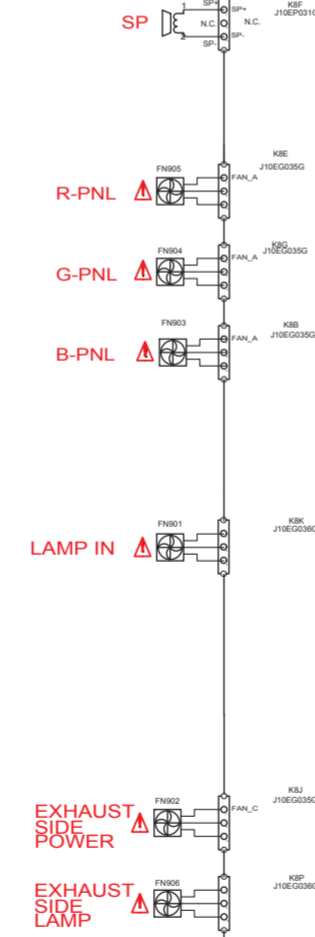
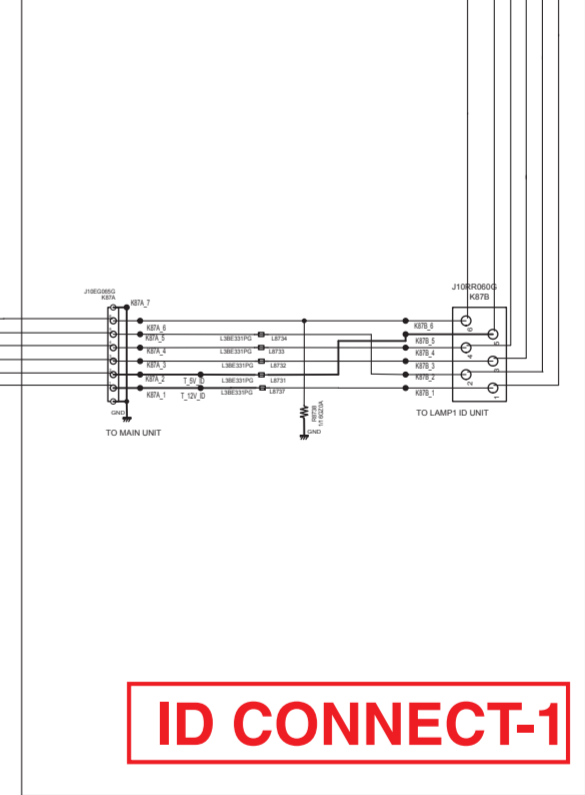
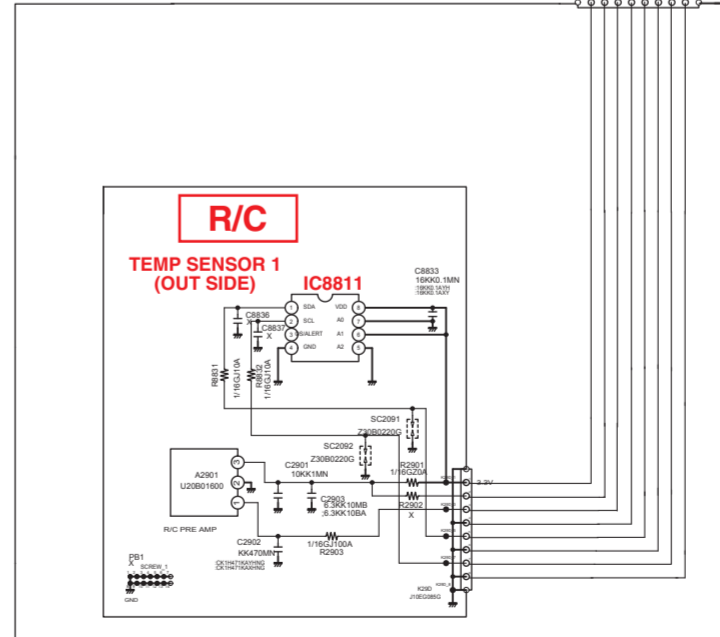
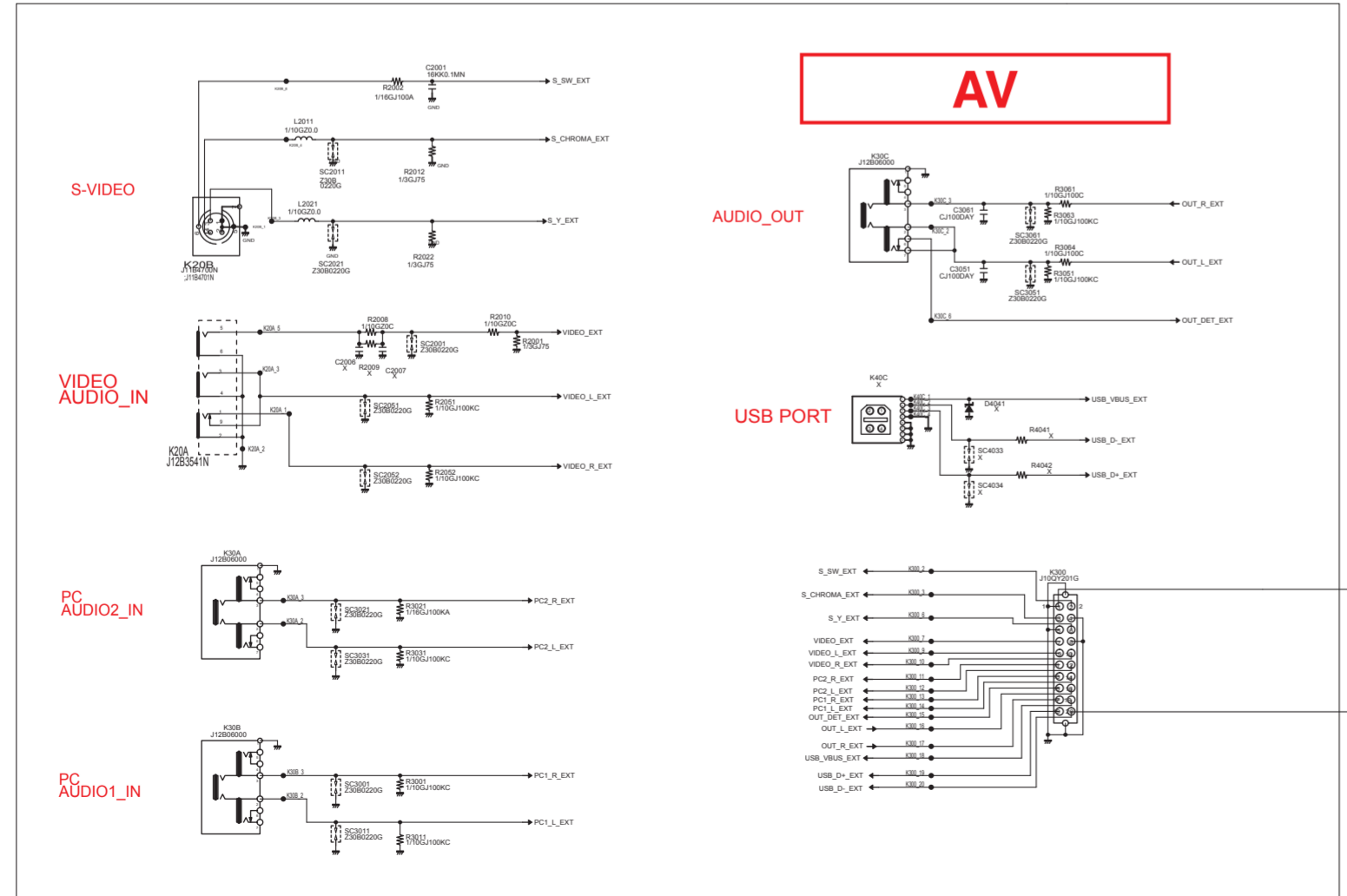
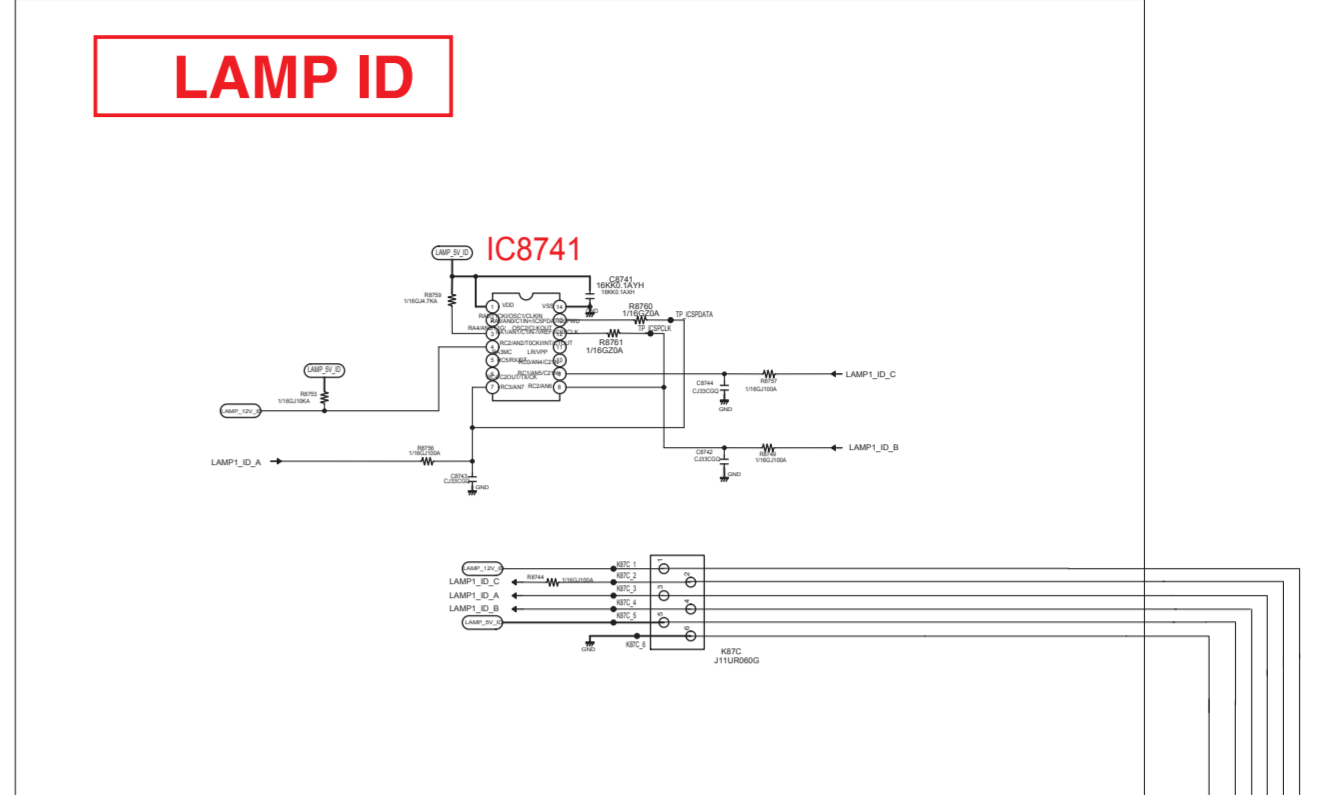
**CAUTION**

Components indicated by a mark **⚠** in this schematic diagram have the special significance in the safety. It is therefore, particularly recommended that the replacement of those parts must be made by exactly the same parts. Must be used with a specified fuse. Unauthorized substitutions may result in fire or accident.

This projector is isolated from AC line by using the internal converter transformer. Please pay attention to the following notes in servicing.

1. Do not touch the part on hot side (primary circuit) or both parts on the hot and cold sides (secondary circuit) at the same time.
2. Do not shorten the circuit between hot and cold sides.
3. The grounding lead must be connected to the ground of the same circuit when measuring the voltages and waveform.

**MAIN**



DVI-D Pin Assignments			
1	TMDS0	17	TMDS0
2	TMDS1	18	TMDS1
3	TMDS2	19	TMDS2
4	TMDS3	20	TMDS3
5	TMDS4	21	TMDS4
6	TMDS5	22	TMDS5
7	TMDS6	23	TMDS6
8	TMDS7	24	TMDS7
9	TMDS8	25	TMDS8
10	TMDS9	26	TMDS9
11	TMDS10	27	TMDS10
12	TMDS11	28	TMDS11
13	TMDS12	29	TMDS12
14	TMDS13	30	TMDS13
15	TMDS14	31	TMDS14
16	TMDS15	32	TMDS15

PCdigital  
DVI IN

DVI\_B  
DVI\_G  
DVI\_R  
DVI\_H  
DVI\_V

PC1  
RGB  
YCbCr/  
SCART

PC2  
RGB-IN/  
RGB-OUT

IC8001  
SI19127CTUM

IC5301  
TC7WH125FUK

IC4701  
TC7WH125FUK

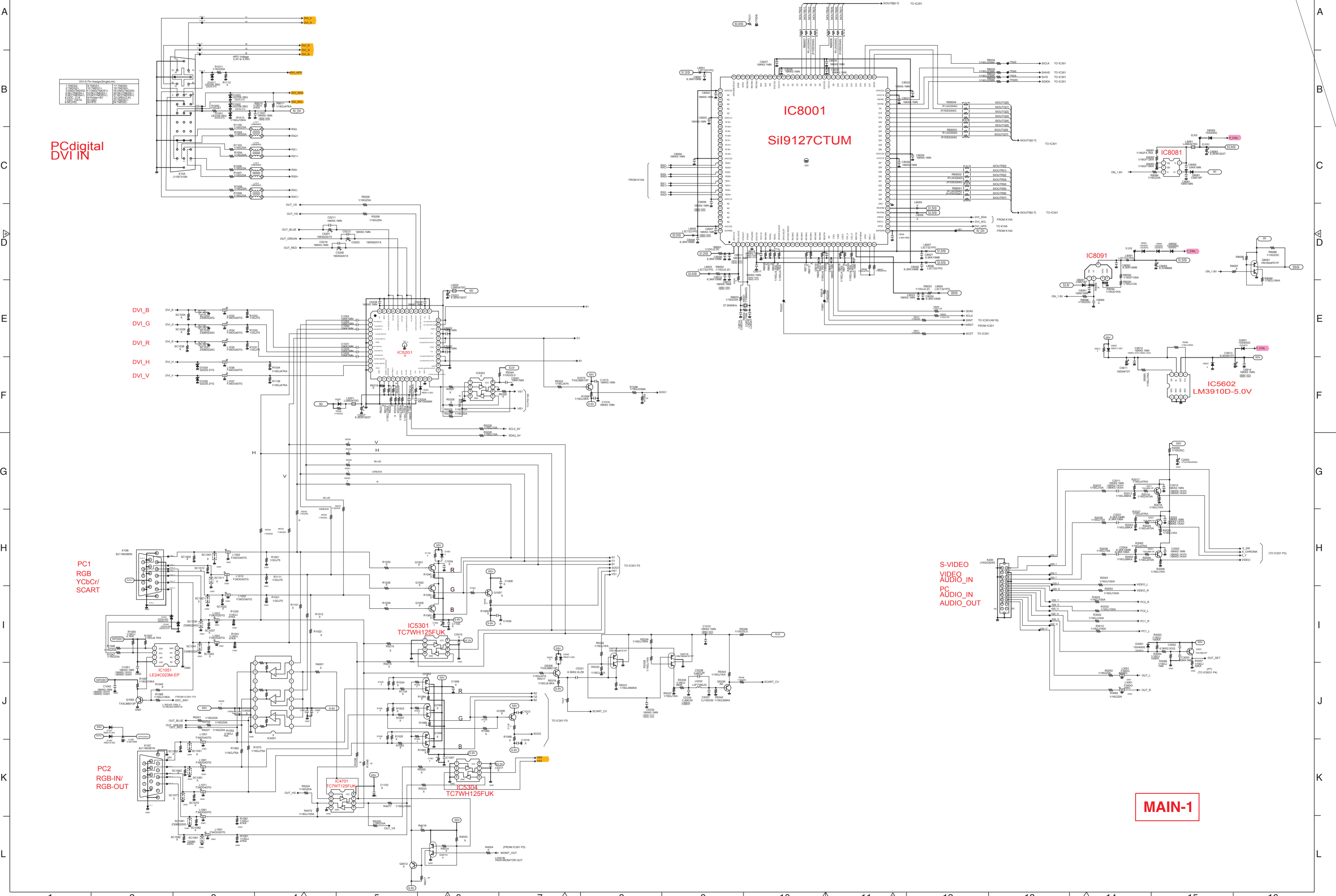
IC5304  
TC7WH125FUK

IC8091

IC5602  
LM3910D-5.0V

S-VIDEO  
VIDEO\_IN  
AUDIO\_IN  
PC  
AUDIO\_IN  
AUDIO\_OUT

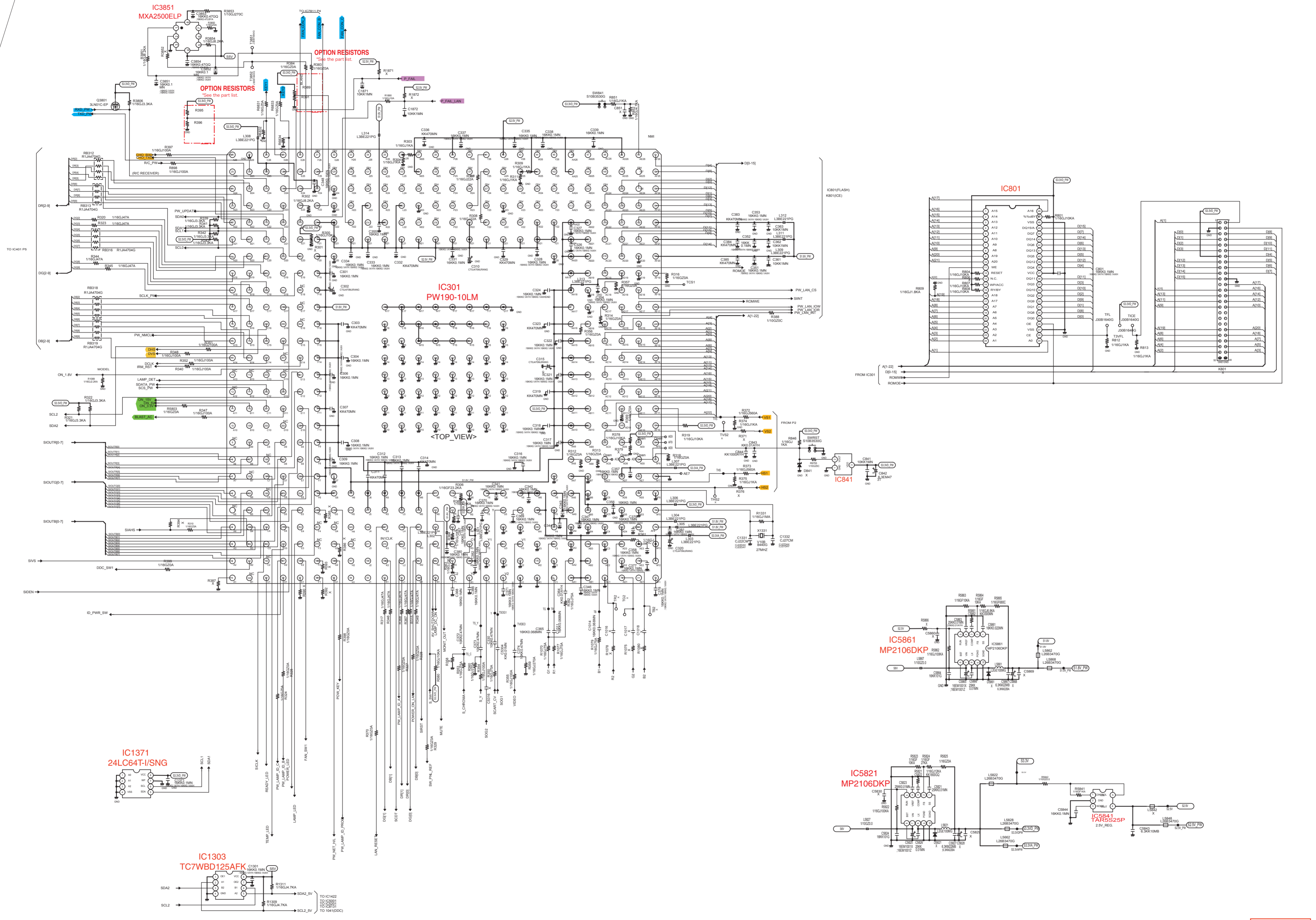
MAIN-1





A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L

**LED**

**KEY SW**

**R/C**

**LAMP BALLAST**

**LAMP\_COVER\_SW**

**ID**

**POWER**

**FN903 B-PNL** **FN904 G-PNL** **FN905 R-PNL** **FN901 LAMP IN** **FN902 EXHAUST SIDE POWER** **FN906 EXHAUST SIDE LAMP**

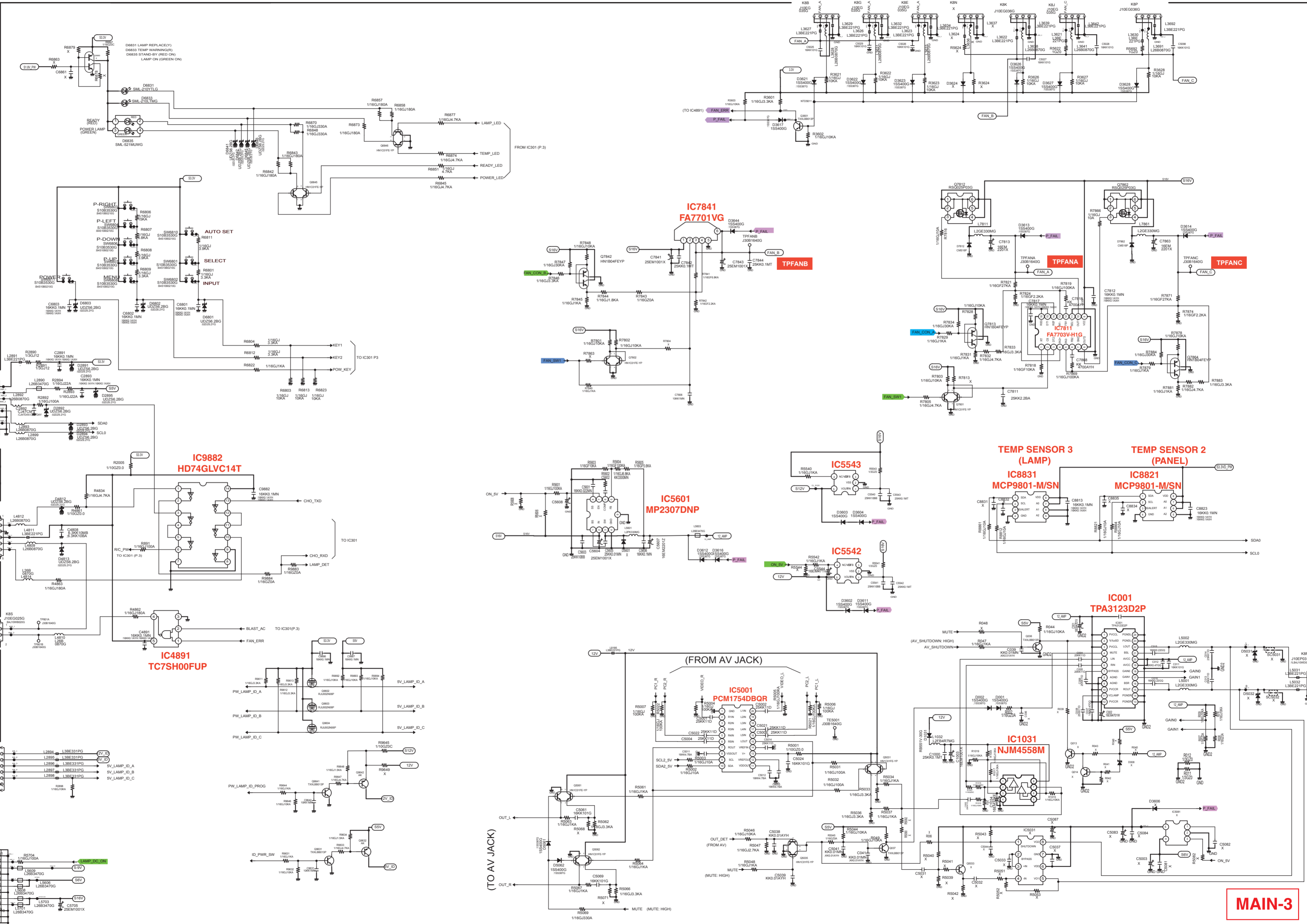
**IC7841 FA7701VG**

**TEMP SENSOR 3 (LAMP)**

**TEMP SENSOR 2 (PANEL)**

**IC001 TPA3123D2P**

**MAIN-3**



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L

IC301  
SYSTEM CONTROL

IC301  
SYSTEM CONTROL

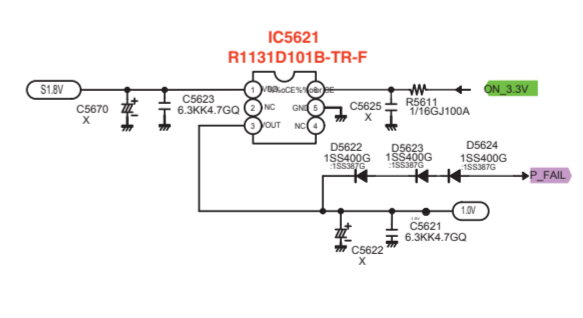
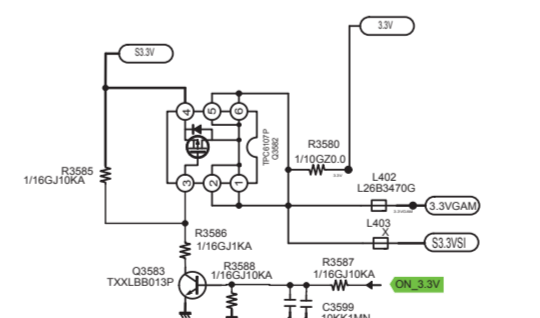
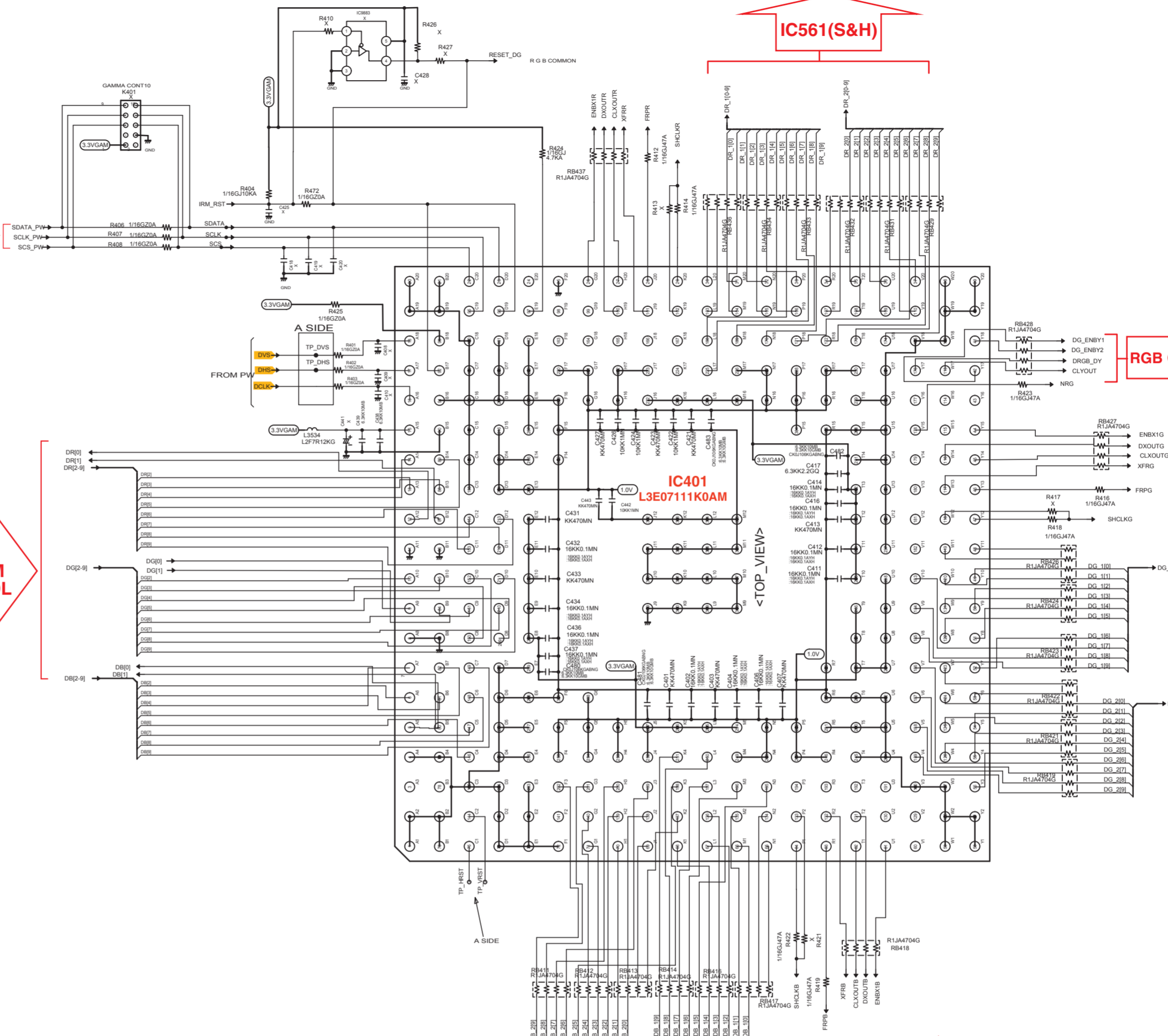
IC561(S&H)

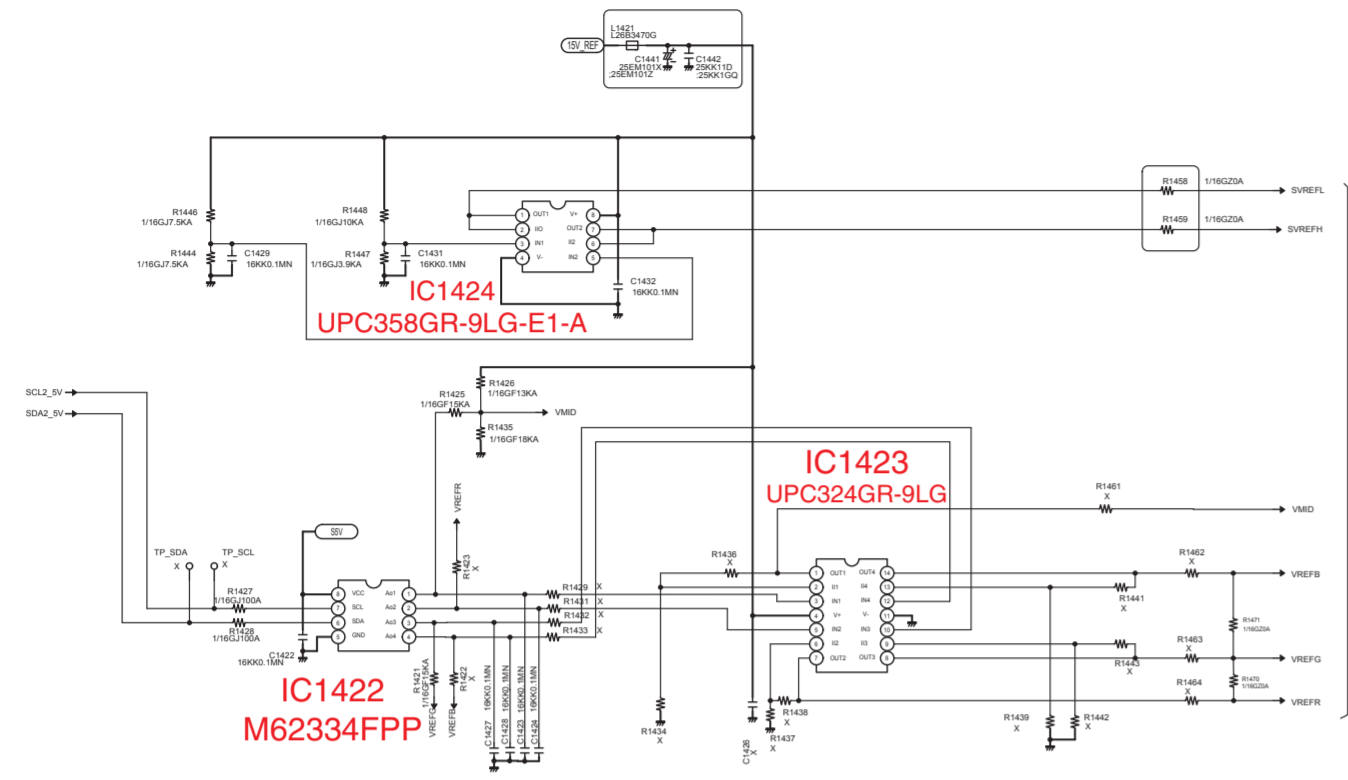
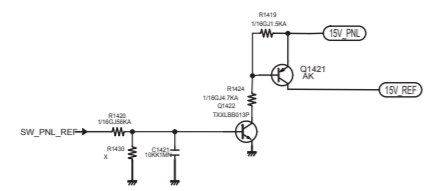
RGB COMMON

IC531(S&H)

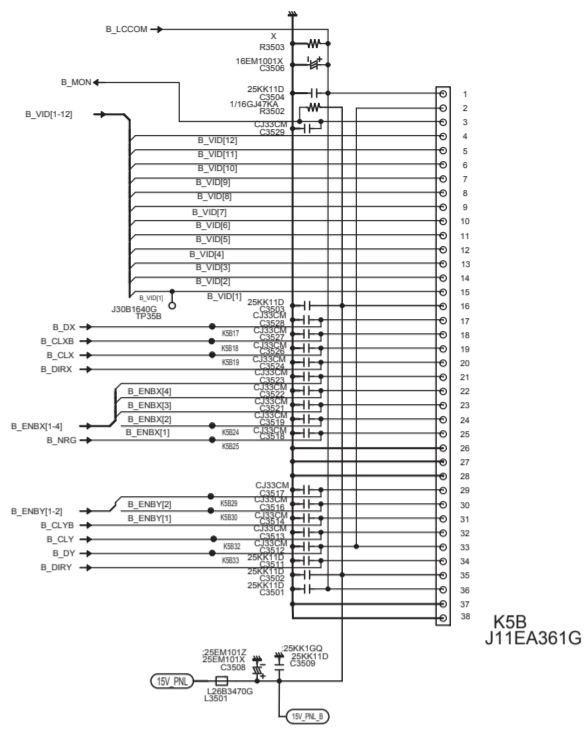
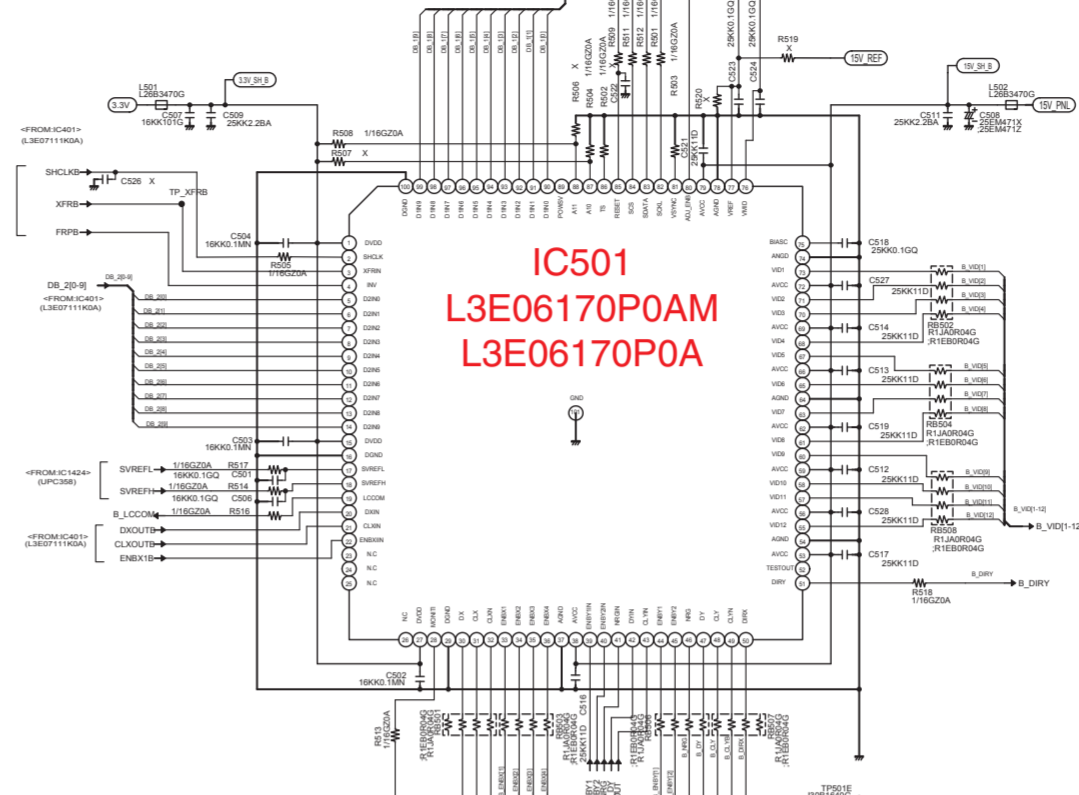
IC501(S&H)

MAIN-4

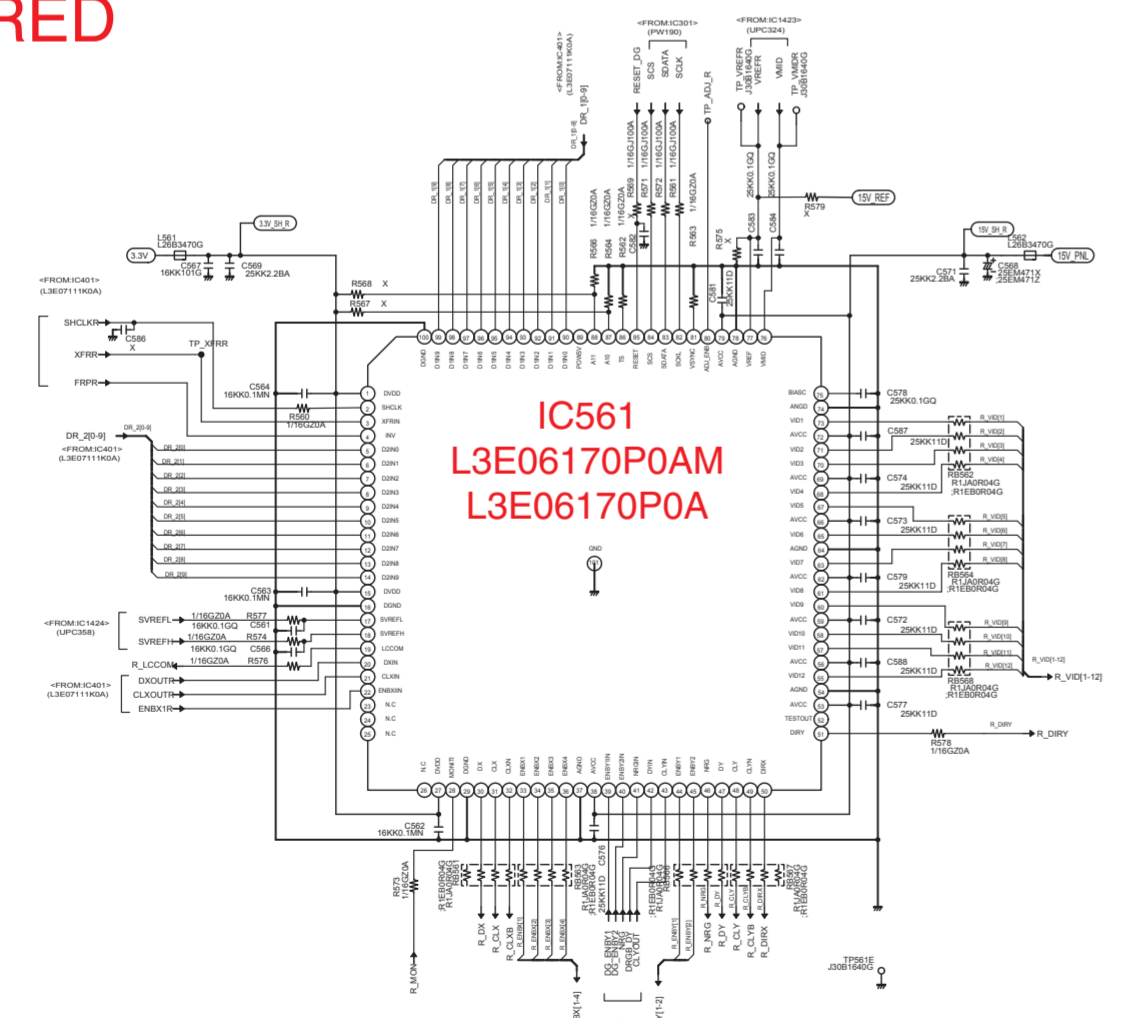




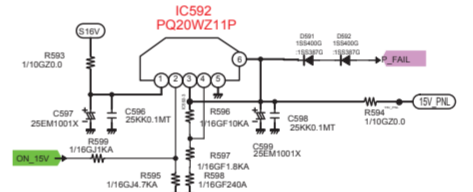
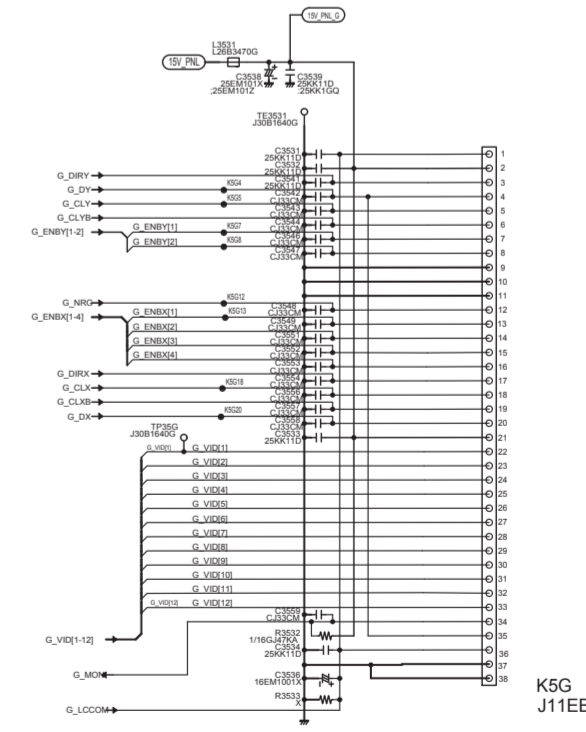
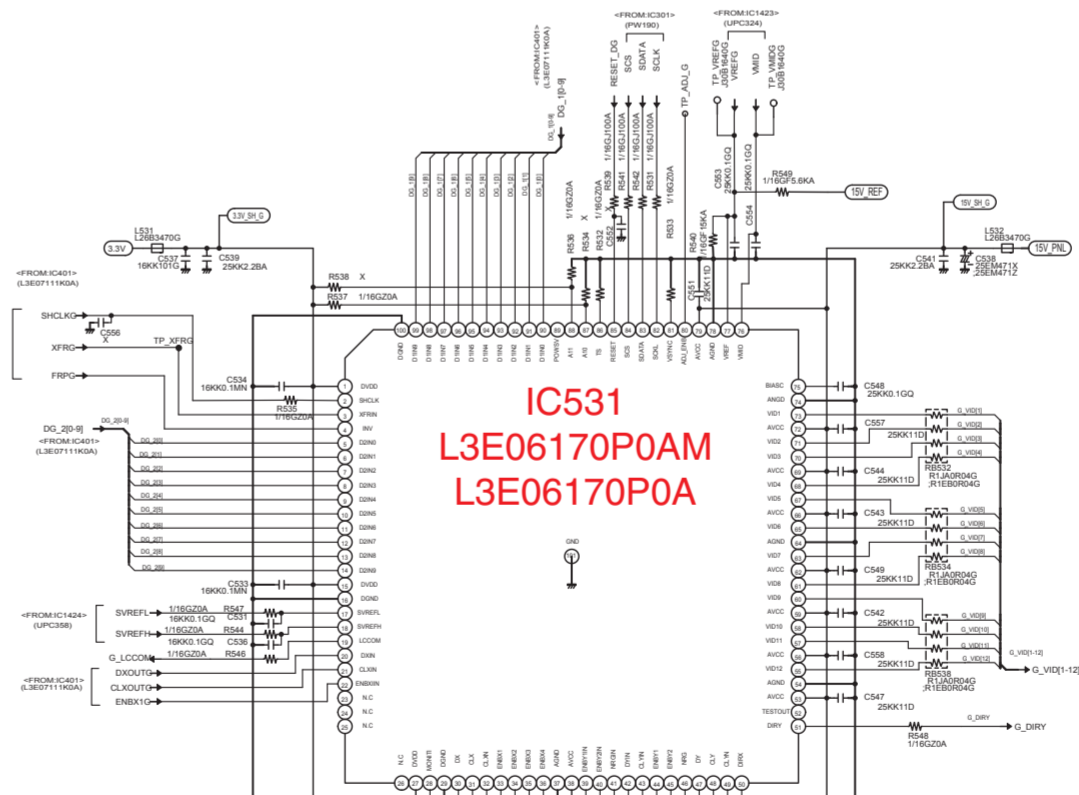
**BLUE**



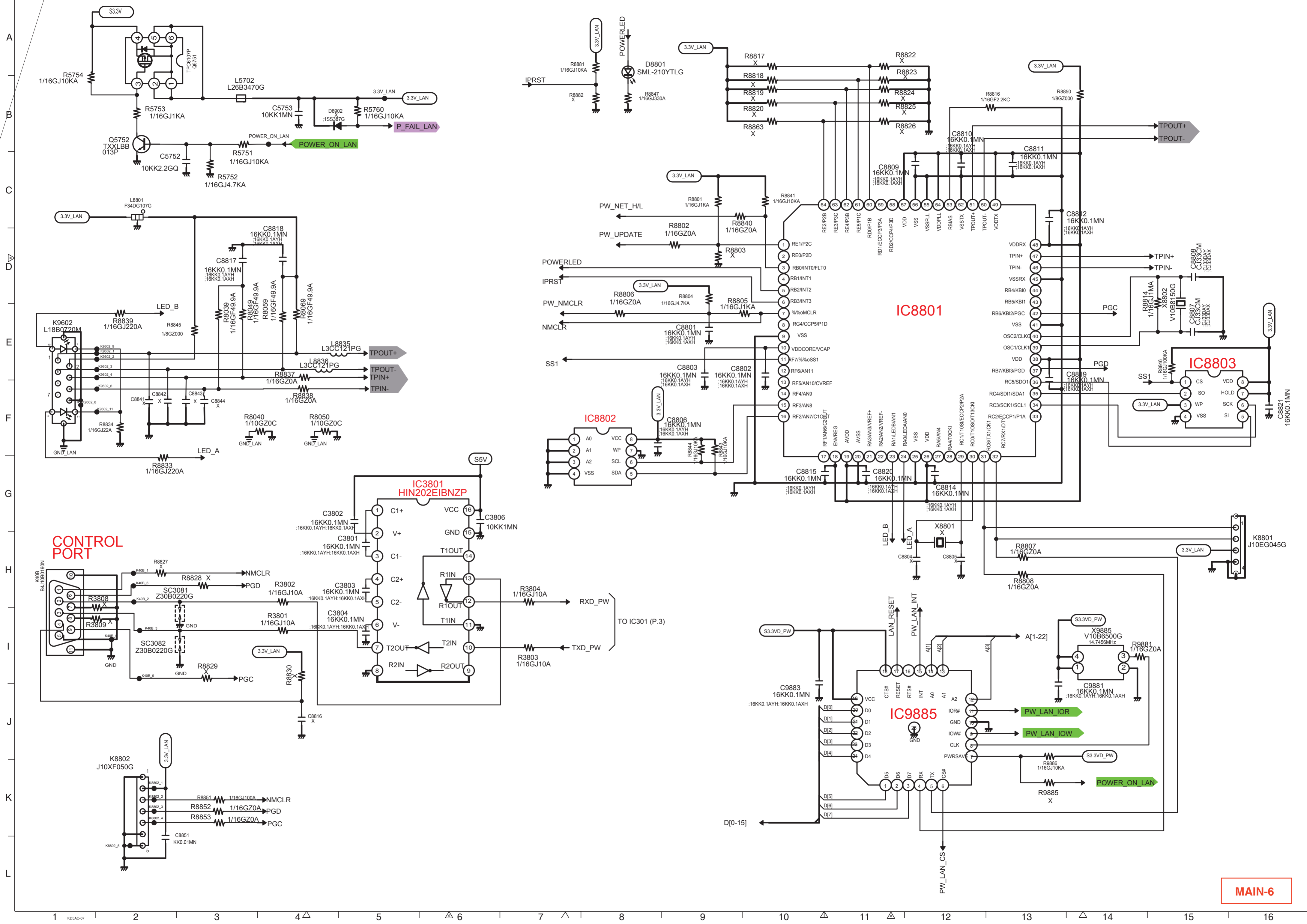
**RED**



**GREEN**



A B C D E F G H I J K L  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16  
KDSAC-06  
A8  
SCH\_KG5BC

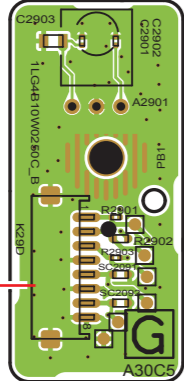


MAIN-6

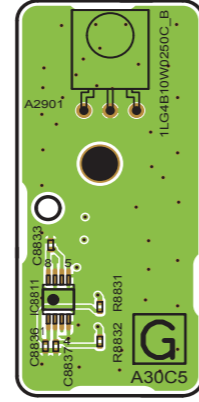
**NO DATA**

# Printed Wiring Board Diagrams

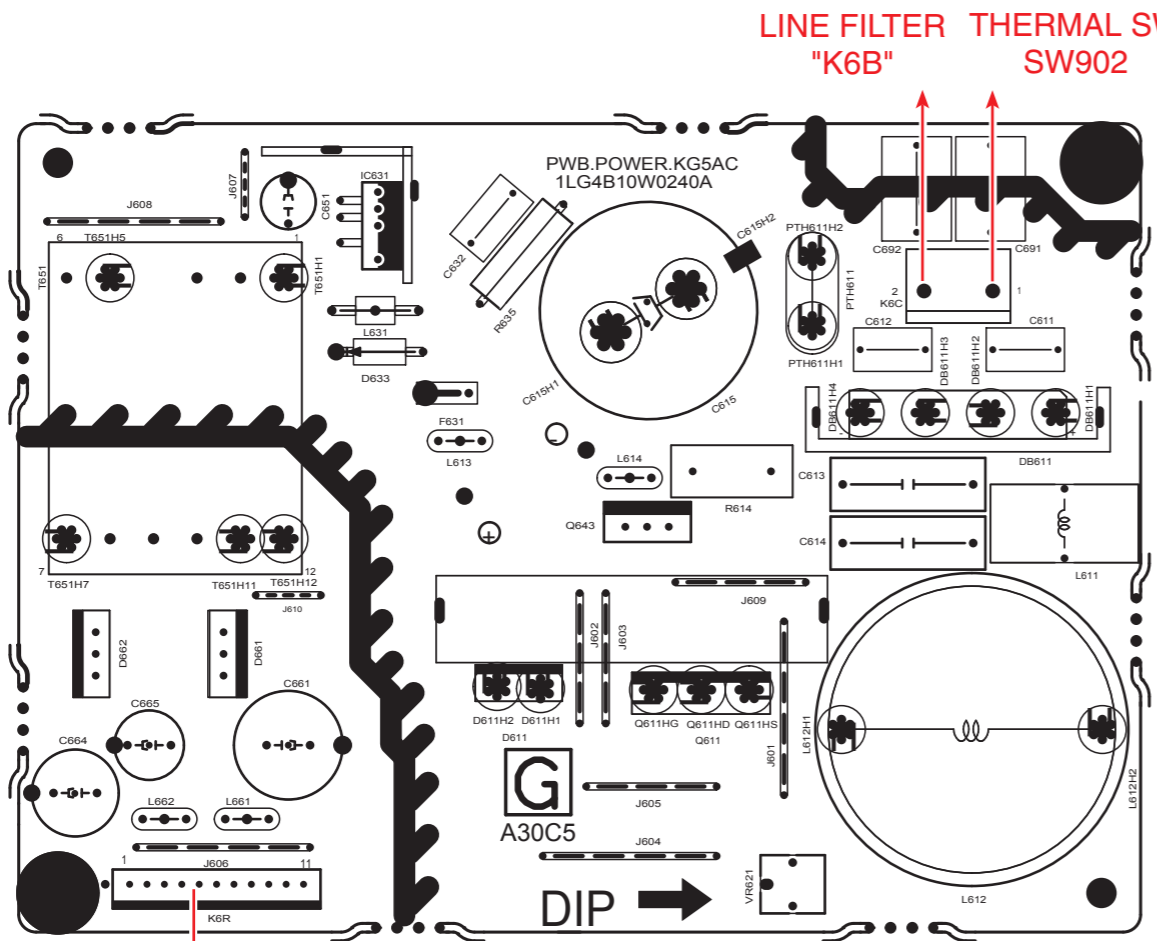
R/C ( SIDE:A)



R/C (SIDE:B)



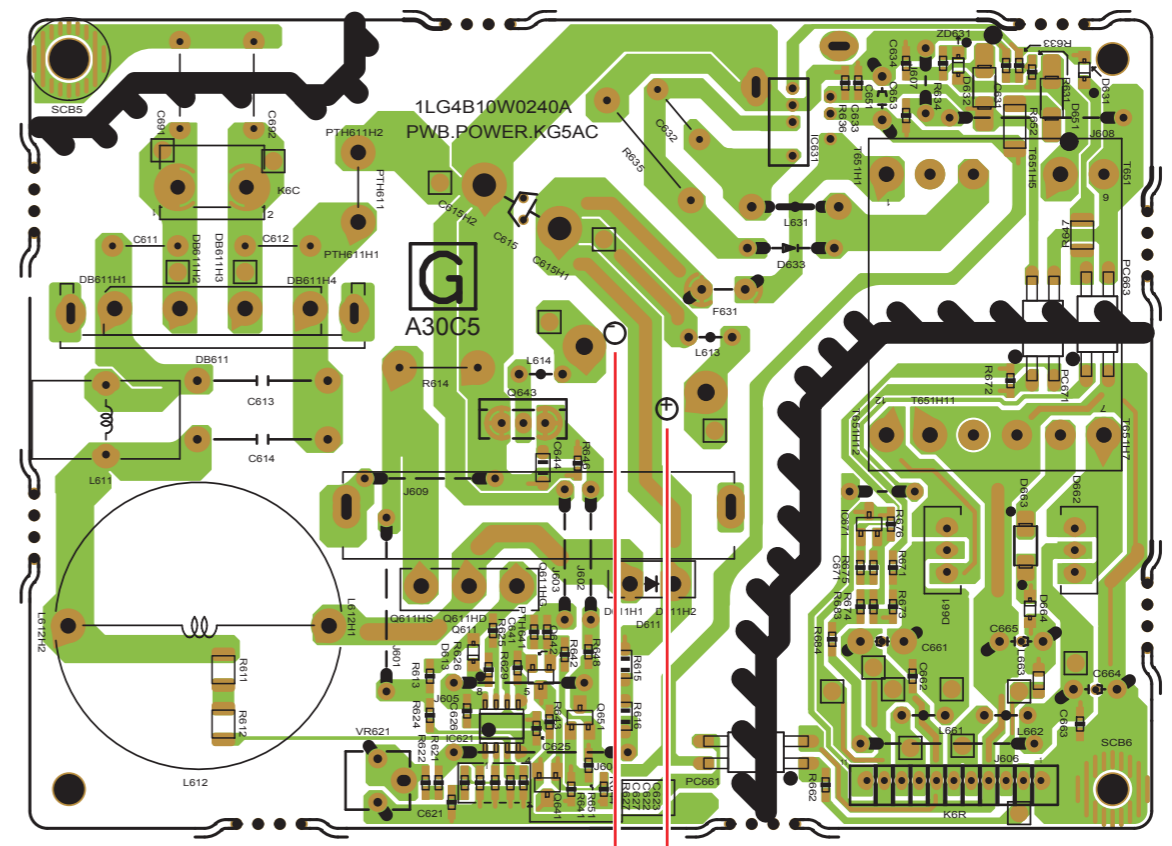
POWER (SIDE:A)



LINE FILTER THERMAL SW  
"K6B" SW902

MAIN  
"K8R"

POWER (SIDE:B)



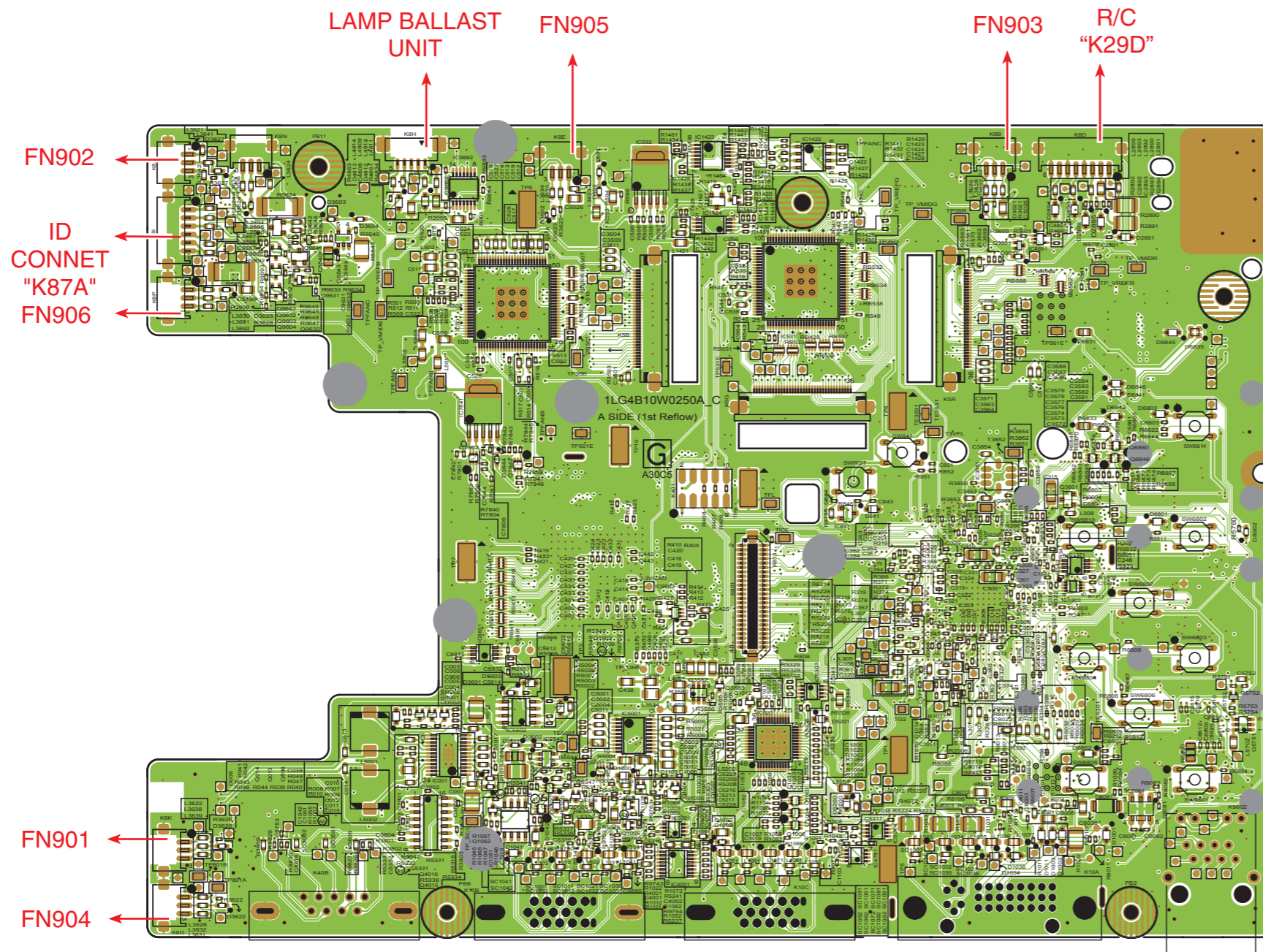
LAMP BALLAST  
UNIT

**CAUTION**

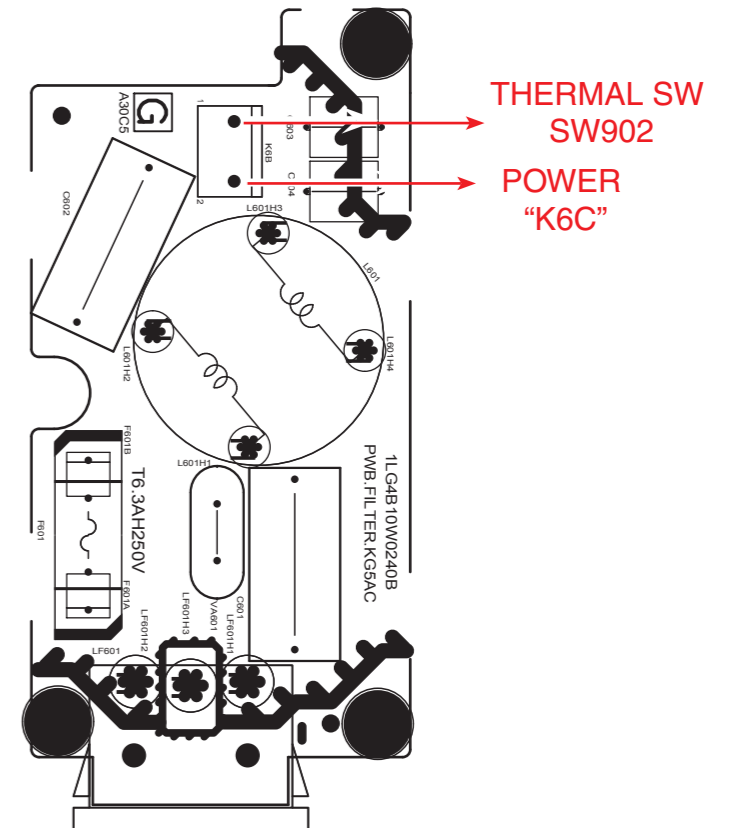
This projector is isolated from AC line by using the internal converter transformer. Please pay attention to the following notes in servicing

1. Do not touch the part on hot side (primary circuit) or both parts on hot and cold sides (secondary circuit) at the same time.
2. Do not shorten the circuit between hot and cold sides.
3. The grounding lead must be connected to the ground of the same circuit when measuring of voltages and waveforms.

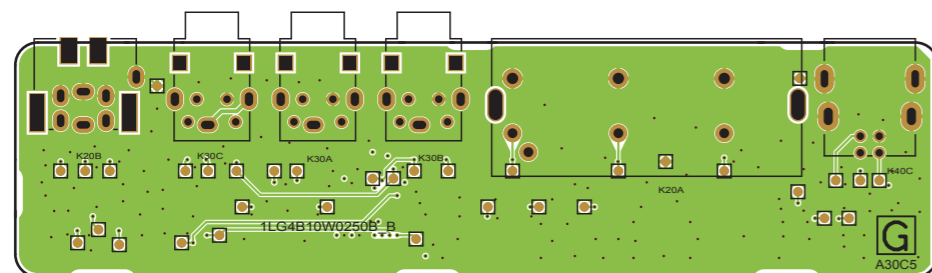
MAIN (SIDE:A)



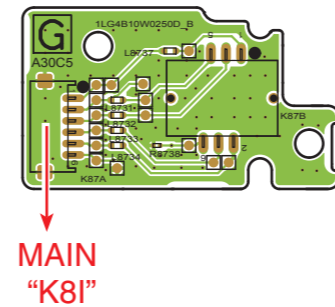
LINE FILTER (SIDE:A)



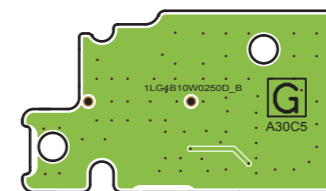
AV (SIDE:A)



ID CONNECT (SIDE:A)

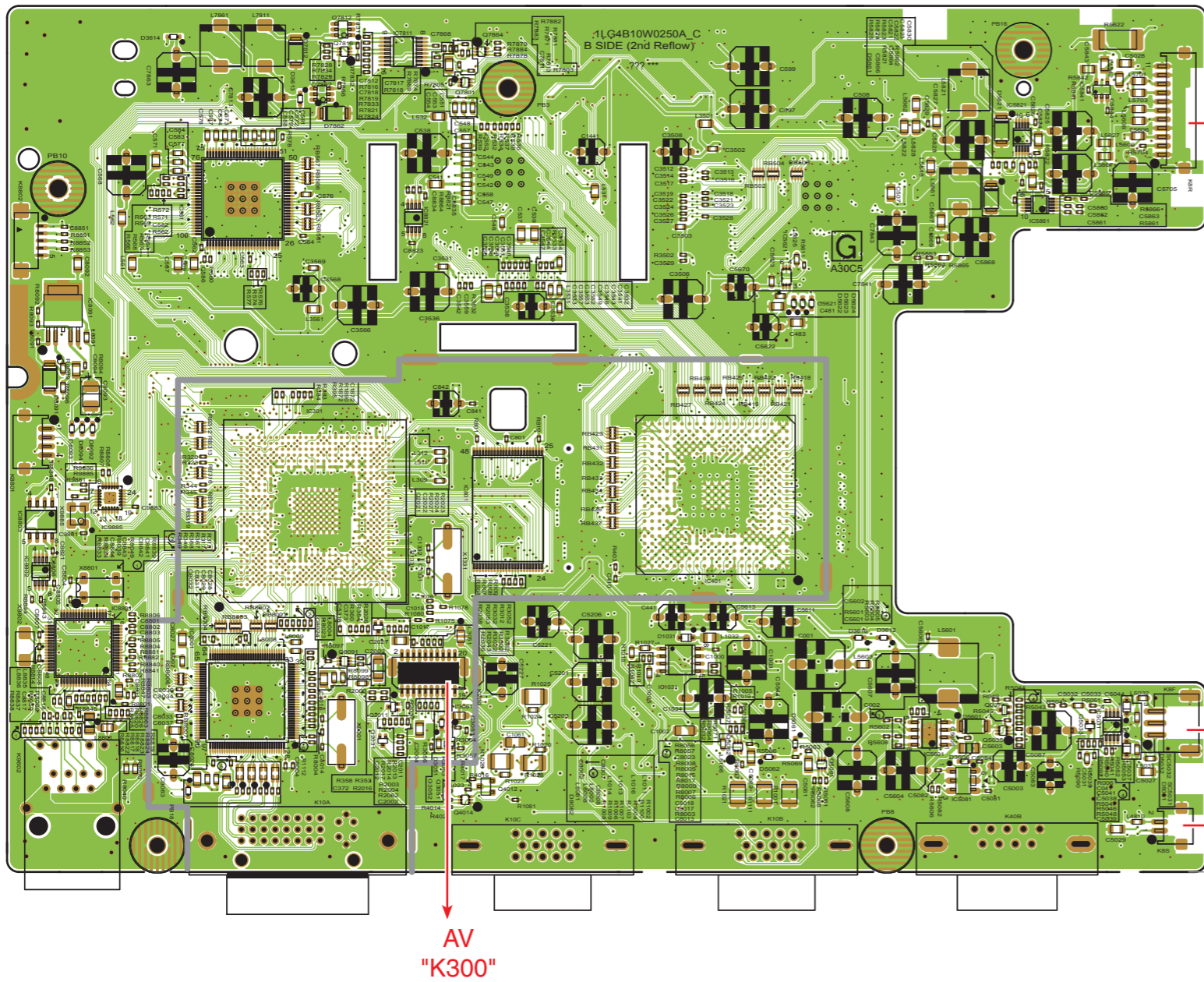


ID CONNECT (SIDE:B)

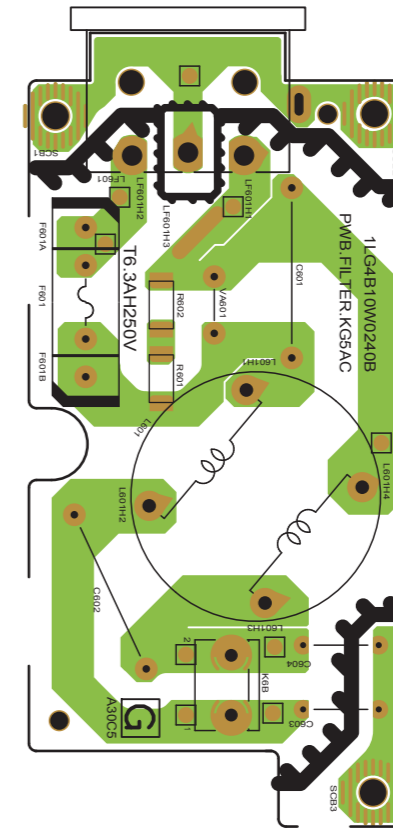




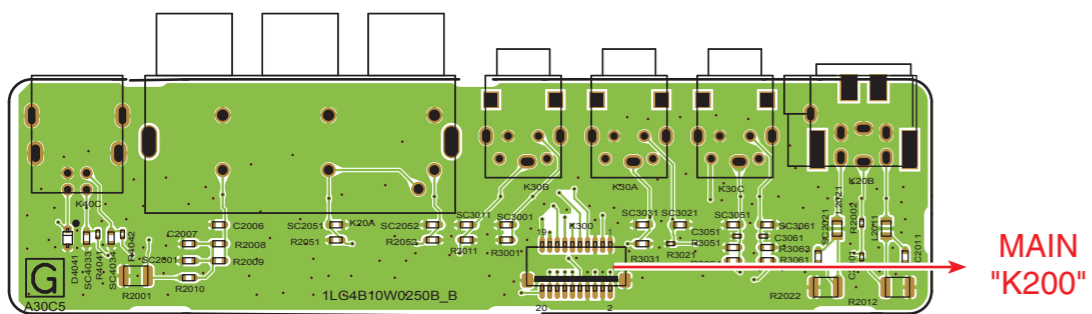
MAIN (SIDE:B)



LINE FILTER (SIDE:B)



AV (SIDE:B)



**NO DATA**