



ZvBox® 180

HD 1080i MPEG2 Encoder / QAM Modulator

Get Going Guide



ZvBox® 180 is a 1U combination HD MPEG 2 Encoder and frequency agile QAM Modulator. It allows you to convert any HD video source, Component or RGB (VGA), in real-time and very high quality into an HDTV cable channel. This channel is placed onto standard COAX wiring, where it can be combined with up to 134 other HDTV channels and distributed over an entire premise.

This guide will take you through a typical installation procedure, and will have you broadcasting your own HDTV channel in less than 10 minutes. **For additional assistance** or more complex installations, please refer to the Zv Support page at www.zeevee.com, where you will find answers to frequently asked questions, and helpful tips from ZeeVee experts. If you still cannot find the answers you need, our technical support hotline at 877-5ZEEVEE (877-593-3833) is here to help.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

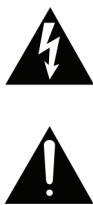
Important Safety Instructions. Save These Instructions.

WARNING: When using electronic products, basic precautions should always be followed, including:

1. Keep these instructions.
2. Heed all warnings.
3. Follow all instructions.
4. Do not use this apparatus near water.
5. Clean only with dry cloth.
6. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
7. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
8. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
9. Power cord must be accessible to allow for the removal of power from the unit.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Unplug the apparatus during lightning storms or when unused for long periods of time.
12. Only use attachments/accessories specified by the manufacturer.
13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
14. **WARNING:** To reduce the risk of fire or electric shock do not place this apparatus in a position where it is exposed to dripping or splashing liquids, rain, moisture, or excessively high humidity. Objects containing liquid shall not be placed in proximity to the unit such that they present a risk of spillage onto the apparatus.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK
DO NOT REMOVE THE COVER (OR BACK).
NO USER SERVICABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

FCC Statement

FCC Compliance and Advisory Statement: This hardware device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed or used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: 1) reorient or relocate the receiving antenna; 2) increase the separation between the equipment and the receiver; 3) connect the equipment to an outlet on a circuit different from that to which the receiver is connected; 4) consult the dealer or an experienced radio/TV technician for help. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Where shielded interface cables have been provided with the product or specified additional components or accessories elsewhere defined to be used with the installation of the product, they must be used in order to ensure compliance with FCC regulations.

What's in the box:



ZvBox® 180 (ZP180-NA)



Rack Mounts



AC Power Cord



USB Cable

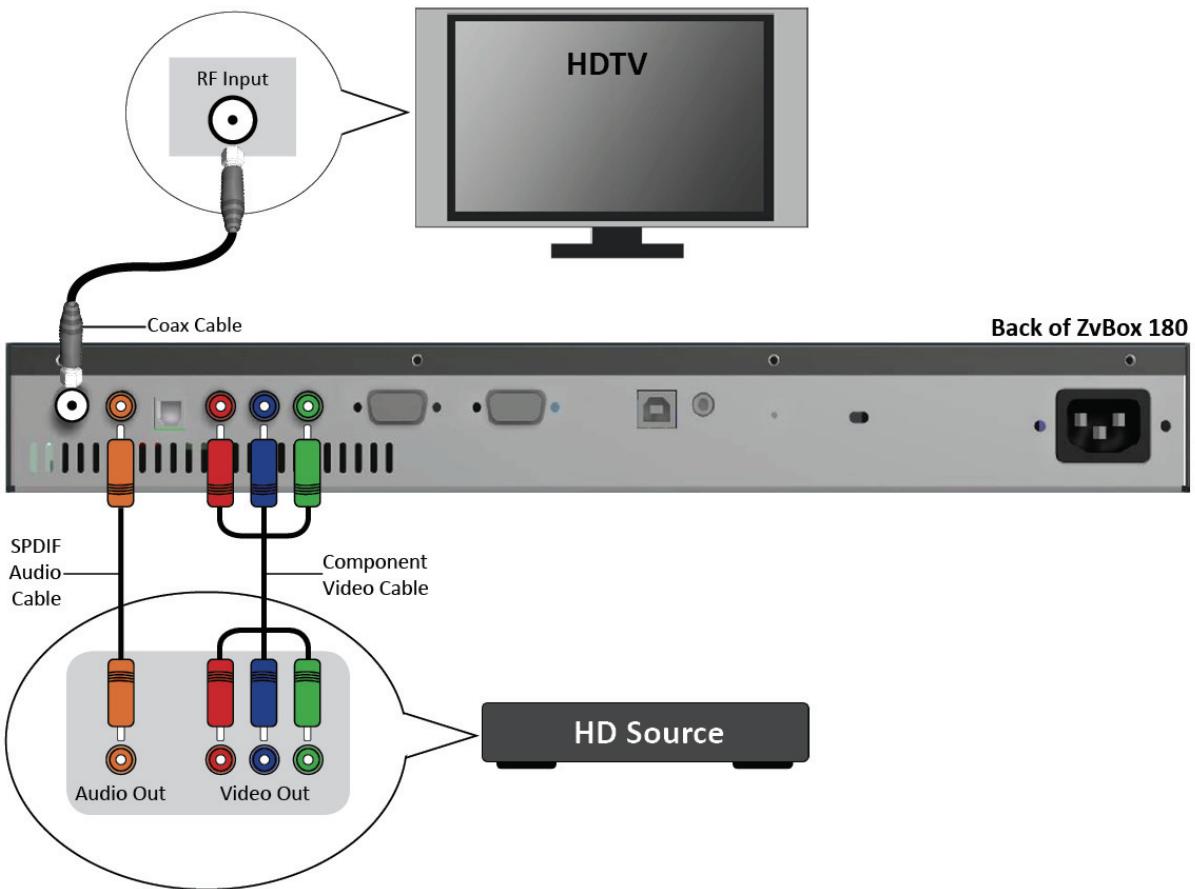


Get Going Guide

Table of Contents

Basic Installation	4
Configuring ZvBox® 180	5
Front and Back Panel Details	6
Contact ZeeVee	7
Warranty Information	7

Basic Installation



Factory default settings in the product allow ZvBox® 180 to broadcast a component HD source with analog audio on channel 2.1 over coax cabling, for reception at connected HDTVs.

1. Plug ZvBox® 180 power cord into AC outlet.
2. Connect Component Video output of HD source to Component Video Input of ZvBox® 180.
3. Connect SPDIF audio output of HD source to Digital Audio Input of ZvBox® 180.
4. Connect coaxial output of ZvBox® 180 to HDTV RF Input.
5. Tune HDTV to channel 2.1.

Configuring ZvBox® 180

In most cases, ZvBox® 180 can be configured using the front panel buttons. Configuration is simple, and usually just involves setting the RF channel on which the ZvBox® will broadcast. Settings are stored in ZvBox® and not lost on power-down.

An example for changing the RF broadcast channel is shown below.

Note – make sure the HDTV connected to your ZvBox® is set to Cable mode, vs. Antenna or Over-the-air mode. ZvBox® broadcasts using QAM – the same standard used by cable companies.

1. Press the **Next** button until **SET CHANNEL** appears in the display
2. Press the + or – key until you see the channel number you want to use – for example **7**.
3. Press the **OK** button



That's it! In this example, your ZvBox® would be broadcasting on RF channel 7, and would be tuned in at your HDTV by entering **7.1**. Note – sometimes a channel scan is required at the HDTV before the new channel is recognized.

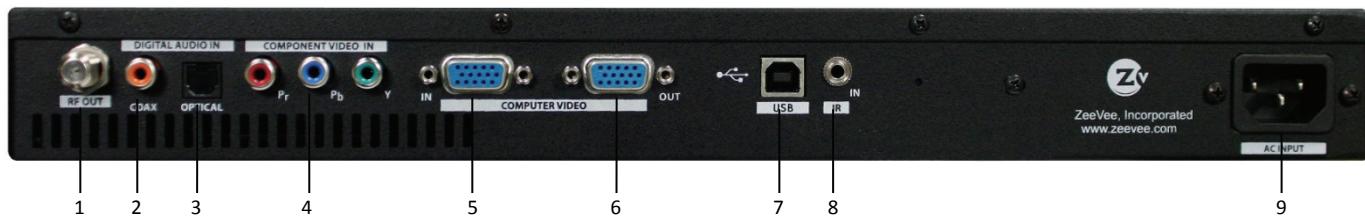
For information on customizing ZvBox® with alternative settings, go to <http://zeevee.com/configuration> and view or download the **ZvBox® 180 Configuration Manual**.

ZvBox® 180 Front Panel



Item	Description	Function
1	Status Display	High-visibility character display for setting and displaying configuration including channel, power, and label configuration; input selection; video output parameters; scanning/system status.
2	Next Button	For scrolling between functions.
3	+/- Buttons	For scrolling between options within a function.
4	OK Button	For selecting functions and options.

ZvBox® 180 Back Panel



Item	Description	Function
1	Coax output	Outputs encoded video as QAM 256 channel
2	SPDIF Digital Audio Input (Coax)	Accepts digital audio input (48KHz PCM or AC3)
3	SPDIF Digital Audio Input (Optical)	Accepts digital audio input (48KHz PCM or AC3)
4	Component Video input, RCA connectors, 75 Ohm	Accepts Component Video input (Pr, Pb, Y)
5	VGA (RGB) input; HD-15 connector	Accepts standard VGA input
6	VGA (RGB) output; HD-15 connector	Looped output from VGA (RGB) input
7	USB audio/control	Operates as USB audio device connection, or control interface
8	IR port; 1/8" mini jack	Accepts IR commands
9	AC input	AC power cord, 120/240 volt

Contact ZeeVee

For support, repairs and warranty service: 877-5ZEEVEE (877-593-3833)

Warranty

Limited One Year Warranty

ZeeVee warrants your ZvBox® 180 (ZP180-NA) against defects in materials and workmanship for a period of one year from the date of purchase.

Visit www.zeevee.com for complete warranty details.

To Get Warranty Service

Warranty service will be provided by ZeeVee. If you believe you need service for your ZvBox® 180 (ZP180-NA), please contact ZeeVee directly by calling ZeeVee Support at (877) 593-3833. If it is determined that the product needs to be returned for service or exchange, you will receive a Return Material Authorization (“RMA”) number. Our agents will help you through the process through which you can return the product. ZeeVee is not responsible for Customer products received without an RMA number and may reject such products.

To Get Out-Of-Warranty Service

To obtain out-of-warranty service for your ZvBox® 180 (ZP180-NA), please contact ZeeVee by calling ZeeVee Support at (877) 593-3833 for information on the possibility of and any costs for repair or replacement of out-of-warranty products. No agent, company, dealer, distributor, or person is authorized to change, modify, or extend the terms of these warranties in any manner.



ZeeVee, Inc • One Monarch Drive • Littleton, MA 01460