

HDbridge 2000

HD Digital MPEG2 Encoder / QAM Modulator Get Going Guide

HDb2640 HDb2620 HDb2540 HDb2520



The HDbridge™ 2000 Series is a combination HD MPEG 2 Encoder and frequency-agile QAM Modulator, all in a 1RU package. There are four different models within the series, which allow you to convert a video source in real-time and very high quality into a digital cable (QAM) channel. This channel is placed onto standard COAX wiring, where it can be combined with hundreds of 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 about 10 minutes.

For additional assistance, specific details for a particular model, or more complex installations, please refer to the ZeeVee 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 877-4ZEEVEE (877-493-3833) 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.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 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.
- Power cord must be accessible to allow for the removal of power from the unit.

- 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.
- 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 ELECTIC 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 A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial 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.

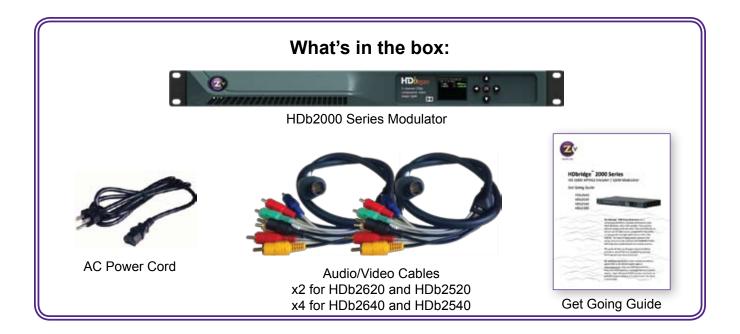
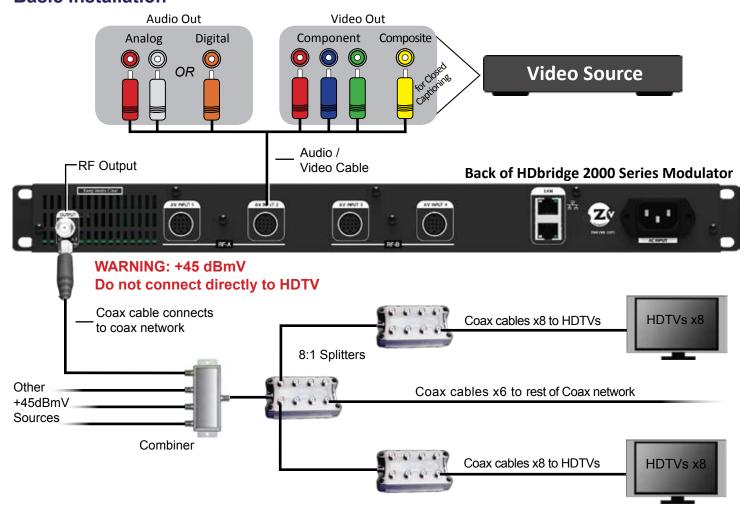


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Basic Installation



Factory default settings in the product allow HDb2000 Series modulators to broadcast up to 4 HD sources on RF channels 2 and 3, for reception at connected HDTVs.

- Apply AC power.
- Connect the Component (Red/Green/Blue) Video connectors on the AV Cable to the corresponding Video Outputs on your video source. Use the Composite (Yellow) connector for closed captioning.
- 3. Connect either the Digital (Orange) or Analog (Red/White) Audio connectors on the AV Cable to the Audio Outputs on your video source
- 4. Connect the Coaxial Output of the HDb2000 to your RF network. CAUTION: The combined RF output power for each channel is +45dBmV, which may overpower an HDTV if directly connected. We recommend that you keep the power at each HDTV below +20dBmV.
- 5. Set the RF input on the TV to Cable Mode (not Air or Antenna).
- 6. Tune HDTVs to cable channels:

 NOTE: Many TVs require a full
 channel scan to find the channels.

HDb2000 RF A	RF Channel 2	HDb2000 RF B	RF Channel
AV Input 1	2.1	AV Input 3	3.1
AV Input 2	2.2	AV Input 4	3.2

Configuring HDb2000

In most cases, HDb2000 modulators will only require setting the RF and HDTV broadcast channels.

- 1. Connect your computer directly to the HDb2000 using a standard Ethernet cable (cross-over cable not required), or connect the HDb2000 to any LAN that has a DHCP server.
- 2. After a few moments, an <u>IP address</u> will appear at the top of the front panel display.



- 3. Using any web browser, go to the IP address to launch Maestro, the configuration tool.
- 4. You will be directed to a login page:

User Name: admin

Default Password: admin

The User Name will always be "admin." The default password is "admin" but it can be changed in the configuration tool. NOTE: Login is case-sensitive.

- Tabs across the top allow for different configuration actions.
 Click on "Channel Plan" to set the RF channels, channel names, etc.
- 6. Click "Apply" to save your changes. Settings are stored in the unit and not lost on power-down.







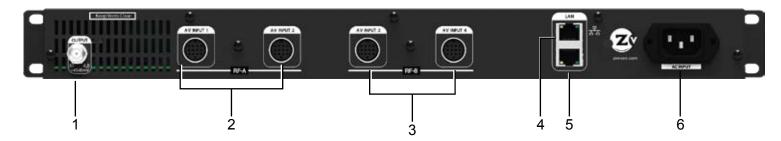


HDb2000 Front Panel



Item	Description	Function
1	Color Display	Displays configuration and system status.

HDb2000 Back Panel



Item	Description	Function
1	Coax Output WARNING: High +45 dBmV power	2 independent, frequency-agile QAM RF CATV output channels for up to 4 video sources.
2	Audio/Video Input for RF Channel A	Video: Component Closed Captioning: Composite Audio: Digital, Analog
3	Audio/Video Input for RF Channel B (HDb2640 and HDb2540 only)	Video: Component Closed Captioning: Composite Audio: Digital, Analog
4	10/100 LAN Port	Configuration and remote management
5	10/100 LAN Port pass-through	For simplified wiring and deployment
6	A/C Power Input	120v power

Contact ZeeVee

For support, repairs and warranty service: 877-4ZEEVEE (877-493-3833)

Warranty

Limited Two Year Warranty

ZeeVee warrants your HDb2000 Series Modulator (MODEL NUMBERS HDB2640-NA, HDB2620-NA, HDB2520-NA) against defects in materials and workmanship for a period of two years from the date of purchase.

Visit <u>www.zeevee.com</u> for complete warranty details.

To Get Warranty Service

Warranty service will be provided by ZeeVee. If you believe you need service for your HDb2000 Series Modulator (MODEL NUMBERS HDB2640-NA, HDB2620-NA, HDB2540-NA, HDB2520-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 HDb2000 Series Modulator (MODEL NUMBERS HDB2640-NA, HDB2620-NA, HDB2540-NA, HDB2520-NA), please contact ZeeVee by calling ZeeVee Support at (877) 493-3833 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.



