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

Important Safety Instructions. Save These Instructions.

WARNING: To reduce the risk of fire or electric shock do not

1. 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.

2. 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 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.

FCC compliance and Advisory Statement:

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.

ZeeVee products convert your video and audio source to a digital cable channel and broadcast it over coax to all your HDTVs. This guide walks you through basic and more enhanced setup for ZeeVee’s HDBridge 2500/2600 Series modulators.

If you run into problems during setup, feel free to contact Technical Support at +1 (877) 4-ZEEVEE (1.877.493.3833).

What’s in the Box

Here’s what you can expect to find when you open the package:

ZeeVee Modulator

AC Power Cord

Hydra Audio/Video Cables

x2 with HDb2640 and HDb2540

x4 with HDb2620 and HDb2520

Contact ZeeVee

Warranty

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Troubleshooting

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HDbridge 2500/2600 Configuration Guide

www.zeevee.com

HDbridge 2500/2600 Configuration Guide

Page 2
Front and Back Panels

1. Model Number
   Name and description of unit
2. Color Display
   Displays configuration and system status
3. 5-Way Control
   Navigate options on front panel display
4. Coax Output
   Up to 2 paired, frequency-agile QAM RF CATV output channels for up to 4 video sources. Output power can be set between +45 to +25 dBmV using the Maestro web interface or the front panel.
5. Audio/Video Inputs
   Full size DIN connector for A/V input
6. 10/100 LAN Port
   Two symmetrical Ethernet ports for configuration and remote management
7. AC Power Input
   100-240VAC / 50-60Hz

Cables and their Connectors

- Composite Video for Closed Captioning Only
- Digital Audio
- Analog Audio
- Component Video
- Hydra A/V Cables
- Hydra VGA A/V Cables (Solid separately)
- Analog Audio 3.5mm Connector
- VGA Connector
- DIN Connector
- MiniDIN Connector
- Component Video for Closed Captioning Only
- Hydra A/V Cables
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- DIN Connector
- MiniDIN Connector

Basic Installation

Factory default settings allow HDb2500/2600 Series modulators to broadcast up to 4 HD sources on RF channels 2, 3, 5, and 6 for reception at connected HDTVs. We recommend using the most updated version of firmware. You can find the latest version on the Support section of our website.

Beginning setup
1. Apply AC power.
2. Connect the component (or VGA) 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.

Tuning your channel at the HDTV (Auto Scan)
1. Connect the Coaxial Output of the HDb2000 to your RF network.
2. Specify Cable (not Air or Antenna) setting in your TV menu.
3. Enter the RF number to tune directly to the channel. (Refer to the Default Channel Lineup for default information.) If you cannot tune directly to the channel at this point, it is because most TVs will require you to run a full Auto Scan.
4. Run the Auto Scan through the menu system of your HDTV to find the channels.

WARNING:
+45 dBmV
Do not connect directly to HDTV

DEFAULT CHANNEL LINEUP

<table>
<thead>
<tr>
<th>AV Input</th>
<th>RF</th>
<th>HDTV Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>AV Input 1</td>
<td>2</td>
<td>3.1</td>
</tr>
<tr>
<td>AV Input 2</td>
<td>3</td>
<td>3.1</td>
</tr>
<tr>
<td>AV Input 3</td>
<td>5</td>
<td>5.1</td>
</tr>
<tr>
<td>AV Input 4</td>
<td>6</td>
<td>6.1</td>
</tr>
</tbody>
</table>

Connecting Component Video Source

- AV Input RF
- Component Video

Connecting VGA Video Source

- AV Input VGA
- Digital Audio

Cables and their Connectors

- Hydra A/V Cables
- Hydra VGA A/V Cables (Solid separately)
- Digital Audio
- Analog Audio
- Component Video

Connecting Component Video Source

- Hydra A/V Cables
- Hydra VGA A/V Cables (Solid separately)
- Digital Audio
- Analog Audio
- Component Video

Connecting VGA Video Source

- Hydra A/V Cables
- Hydra VGA A/V Cables (Solid separately)
- Digital Audio
- Analog Audio
- Component Video
### Setting the RF broadcast channels or power

1. Unlock the panel by pressing/holding together the left and right arrow buttons (▴ ▼) until "Setup" lights up.

2. Press "OK" to enter the Configuration screen.

3. Press "OK" to select "RF Setup".

4. Use the arrow buttons (▴ ▼) to go to each item you want to configure (such as RF Number or RF Power), then press "OK" to edit the highlighted field. Use the up and down (▴ ▼) arrow buttons to scroll through the options for each item.

5. Once you've made changes, press "OK" to accept. You can then select the next item for configuration.

6. When making changes, use the arrow buttons to scroll down and select "Apply," then click "OK" to save your changes. Note: The front panel locks automatically after a few seconds. To make more changes, press/hold the left and right arrow buttons again to unlock front panel capabilities.

### IMPORTANT NOTES

- **RF numbers are required in pairs based on the frequency map.** For instance, if you enter RF # "2," then RF #"3" will be automatically populated.
- **RF channels are not always paired in numerical sequence (as with RF # 6, which pairs with 95, and RF # 99 which pairs with 14).**
- **ZV channels can be set directly adjacent to any other well-formed channel and will not cause interference. No channel spacing is required.**

### Map for configuring RF numbers and virtual channels

The Cable TV Channels vs RF Frequency (MHz) Map shows how the RF channels are paired and matched with RF frequency. You will need to refer to this map when configuring RF numbers and virtual channels.

### Cable TV Channels vs RF Frequency (MHz) Map

<table>
<thead>
<tr>
<th>Ch. (MHz)</th>
<th>Band (MHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>54.55</td>
<td>27</td>
</tr>
<tr>
<td>55.00</td>
<td>28</td>
</tr>
<tr>
<td>55.45</td>
<td>29</td>
</tr>
<tr>
<td>55.90</td>
<td>30</td>
</tr>
<tr>
<td>56.35</td>
<td>31</td>
</tr>
<tr>
<td>56.80</td>
<td>32</td>
</tr>
<tr>
<td>57.25</td>
<td>33</td>
</tr>
<tr>
<td>57.70</td>
<td>34</td>
</tr>
<tr>
<td>58.15</td>
<td>35</td>
</tr>
<tr>
<td>58.60</td>
<td>36</td>
</tr>
<tr>
<td>59.05</td>
<td>37</td>
</tr>
<tr>
<td>59.50</td>
<td>38</td>
</tr>
<tr>
<td>59.95</td>
<td>39</td>
</tr>
<tr>
<td>60.40</td>
<td>40</td>
</tr>
<tr>
<td>60.85</td>
<td>41</td>
</tr>
<tr>
<td>61.30</td>
<td>42</td>
</tr>
<tr>
<td>61.75</td>
<td>43</td>
</tr>
<tr>
<td>62.20</td>
<td>44</td>
</tr>
<tr>
<td>62.65</td>
<td>45</td>
</tr>
<tr>
<td>63.10</td>
<td>46</td>
</tr>
<tr>
<td>63.55</td>
<td>47</td>
</tr>
<tr>
<td>64.00</td>
<td>48</td>
</tr>
</tbody>
</table>

**HRC Frequencies**

- **Standard Frequencies:** minus 1.25 MHz
- **Exception for:**
  - Channel 5 Video = 76.0 MHz
  - Channel 6 Video = 81.0 MHz

**IRC Frequencies:**

- **Same as Standard Frequency**
- **Exception for:**
  - Channel 5 Video = 74.25 MHz
  - Channel 6 Video = 79.25 MHz

---

The highlighted areas in the frequency map show the RF numbers that can be paired together but not sequentially numbered.
Maestro Configuration

Maestro is a configuration tool that you use optionally to customize your system beyond what is allowed in the front panel. For example, using Maestro you can assign a channel number (virtual channel) independent of the RF number and label the channels.

Connecting with Maestro
1. Connect your computer directly to the ZeeVee modulator using a standard Ethernet cable (not a cross-over cable) or connect the unit and your computer to any LAN that has a DHCP server.
2. After a few moments, an IP address will appear at the top of the front panel display.
3. Using any web browser (Chrome or Firefox preferred), enter the IP address to launch Maestro.
4. You will be directed to a login page. Your user name is always "admin." The default password is "admin" but you can change the password. Login is case-sensitive.
5. After you log in, the Maestro Status tab appears. Here you can see the general information status.

Configuring RF numbers and virtual channels
1. Click on the Channel Plan tab.
2. In the RF # field and enter the RF number as you choose from the RF Frequency Map (on page 7). Make sure you’ve reviewed the RF Frequency Map Important Notes before completing this task.
3. Click in the Channel # field and enter a channel number (virtual channel). The channel number is what the TV displays. You can configure a channel number two ways:
   • As a dotted number — Enter the number with a "." following it, for example, "5.1". This is the default display.
   • As a dotless number — Enter the number with a "#" preceding it, for example, "#5".
   Note that you can choose a channel number that is different from the RF#. For instance, if your RF# is 3, you can choose a channel number of 10.1 or #10.
4. Click Apply to save changes. Your unit stores configurations so they are not lost on power-down.
5. Run Auto Scan at TV (see Tuning your channel at the HDTV, page 5) when you have saved configuration changes.

Labeling channels with channel and content information
1. In the Channel Plan tab, click in the Name field and enter the channel short name (up to 7 characters).
2. Click in the Long Name field and enter the long or more descriptive channel name (up to 23 characters). The TV displays these names and descriptions when the channel is changed or info guide information is requested.
3. Click Apply to save changes.

Using the other Maestro tabs
Click on any other Maestro tab to configure your unit as needed. We provide brief information below. Please click on the Help button on each tab or refer to the Support section of our website for further detail on configuration options.

THE RF TAB
Allows you to change the RF power output. You can also change from DVB-T to DVB-C and from CCIR to None.

THE DEVICE TAB
Allows you to change the device password and update firmware.

THE NETWORK TAB
Allows you to assign a static IP address.

THE SUPPORT TAB
Provides technical support contact information and allows you to send logs for troubleshooting.

AV SOURCE TAB
Allows you to specify audio and video sources as well as other configuration options for the sources.

ADMIN TAB
Allows for creating user accounts which limit access to specific parts of Maestro including ZvShow, STB and EAS access.
Audio and video are not synchronized.

If both the audio and video are being sent through the unit to the TV, be sure your firmware is fully updated, later versions of the firmware are available on the FAQ section of our website.

If both the audio and video are being sent through the unit to the TV, be sure your firmware is fully updated, later versions of the firmware are available on the FAQ section of our website.

Troubleshooting

Unable to Connect to Maestro
If it is not possible to connect remotely, try:
- If you are having problems connecting remotely, check your firewall settings to ensure that the ZeeVee unit is not blocked or filtered.
- If you are using a network filtering tool, this may prevent a connection to the ZeeVee unit.
- If you are using a network filtering tool, this may prevent a connection to the ZeeVee unit.

Video Breakup
One reason this may happen is when the unit does not detect any video input. To verify the source, set the input to the unit and verify the signal is received.

Image Breakup
If you are feeding the audio directly from the source into a distributed (whole house) audio system and not through the ZeeVee unit, keep in mind that any cable network or coaxial cable may affect the integrity of the signal. You may see no picture at all, or if the signal is weak, you may see similar issues.

Audio and video are not synchronized.

If both the audio and video are being sent through the unit to the TV, be sure your firmware is fully updated, later versions of the firmware are available on the FAQ section of our website.

If both the audio and video are being sent through the unit to the TV, be sure your firmware is fully updated, later versions of the firmware are available on the FAQ section of our website.

Warranty

LIMITED FIVE YEAR WARRANTY
ZeeVee warrants ZeeVee Equipment to be free from defects in materials and workmanship for a period of five years from the date of delivery to the original end user. This warranty is limited to the original end user or purchaser and is non-transferable. This warranty is only valid to the extent that the ZeeVee Equipment is ZeeVee Equipment. ZeeVee reserves the right to refuse or to charge a fee for any ZeeVee Equipment that is not ZeeVee Equipment. This warranty is void if the ZeeVee Equipment is damaged due to misuse, accident, lightning damage, unauthorized repair, power surges, other causes not within the control of ZeeVee.

To get warranty service, please contact ZeeVee by calling our customer care center at (877)-4ZeeVee; (877)-493-3833 for information on the possibility of and any applicable Return Material Authorization (RMA) numbers. Our agents will help you determine if the problem is covered under warranty and provide you with the necessary instructions for returning the product to ZeeVee. Our customer care center is staffed 24 hours a day, 7 days a week, and is available to help you with any questions you may have about your ZeeVee Equipment.

ZeeVee, Inc. January 1, 2014

ZeeVee, Inc.
ATTN: REGISTRATION
Littleton, MA 01460

For any ZeeVee Equipment that has been returned or missing send name, address and phone number with a description of the problem.

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Littleton, MA 01460

For any ZeeVee Equipment that has been returned or missing send name, address and phone number with a description of the problem.
## Contact ZeeVee

### Support
Contact us for installation and technical support, repairs, and warranty service:

+1 (877) 4-ZEEVEE (1.877.493.3833)
support@zeevee.com

Representatives are available from 9:00 AM to 6:00 PM, Monday through Friday (Eastern Time).

### Sales

**North America:**

+1 (347) 851-7364 Phone
sales@zeevee.com

**EMEA:**

+44 1494 956677 Phone
EMEAsales@zeevee.com

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### Ways to Register

**Maestro:** Click on “ZeeVee Website” in the Support Tab when you begin your configuration

**Mobile:** Click on the QR code with your mobile device’s code reader app

**Online:** Go to zeevee.com/register

**Email:** Send an email with all card info (below) to warranty@zeevee.com

**Mail:** Fill out the form, attach a stamp, and mail to ZeeVee

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### Customer Details

<table>
<thead>
<tr>
<th>Contact Name</th>
<th>Email</th>
<th>Telephone</th>
<th>Company</th>
<th>Sales Representative</th>
<th>US or Canada</th>
<th>End User Address 1</th>
<th>End User Address 2</th>
<th>State / Province</th>
<th>Invoice or PO Number</th>
</tr>
</thead>
</table>

### Product Details

<table>
<thead>
<tr>
<th>End User Company Name</th>
<th>Product Number</th>
<th>Date of Purchase/Installation</th>
<th>Unit Number</th>
<th>Serial Number (an 11 or 12 digit number)</th>
<th>Country</th>
</tr>
</thead>
</table>

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If you choose to register by mail, complete the form below and mail to ZeeVee at the address on the back. Be sure to PRINT CLEARLY and attach a postcard stamp.

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Fill out the form, attach a stamp, and mail to ZeeVee +1.877.493.3833 or warranty@zeevee.com with any questions.