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. Read 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, or 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.

Available Separately

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Welcome to ZeeVee.

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 HD Bridge 2500/2600 Series modulators.

For support, repairs, and warranty service contact the distributor where you purchased the product. For additional questions call +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

Available Separately

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 HD Bridge 2500/2600 Series modulators.

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ZeeVee Modulator

Available Separately
Factory default settings allow HDb2500/2600 Series modulators to broadcast up to 4 HD sources on RF channels 21, 22, 23, and 24 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 Teletext.
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. If the RF power for your network is too high, you will observe video breakup.
2. Set the RF Input on the TVs to DVB-T (default) or DVB-C with the Symbol Rate 6740 KS/sec.
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.

Cables and their Connectors
- Composite Video for Teletext Only
- Digital Audio
- Analog Audio
- Component Video

WARNING: +45 dBmV Do not connect directly to HDTV

DEFAULT CHANNEL LINEUP

<table>
<thead>
<tr>
<th>DVB-T Factory Defaults</th>
<th>Logical Channel #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ch. 21 (474 MHz)</td>
<td>1</td>
</tr>
<tr>
<td>Ch. 22 (482 MHz)</td>
<td>2</td>
</tr>
<tr>
<td>Ch. 23 (490 MHz)</td>
<td>3</td>
</tr>
<tr>
<td>Ch. 24 (498 MHz)</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Optional DVB-C Channel Plan</th>
<th>Logical Channel #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency 88 MHz</td>
<td>1</td>
</tr>
<tr>
<td>Frequency 93 MHz</td>
<td>2</td>
</tr>
<tr>
<td>Frequency 93 MHz</td>
<td>3</td>
</tr>
<tr>
<td>Frequency 93 MHz</td>
<td>4</td>
</tr>
</tbody>
</table>
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 that field.
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 left and right 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.

To update firmware:
• If unit is connected to the internet and can communicate with our servers, select Update Firmware from the Setup screen and press “OK.”

To reset IP address:
• When using DCHP, select Reset IP Address to force a release/renew of your IP address, and press “OK.”

To restore factory defaults or revert firmware:
1. Power down the unit.
2. Hold the left and right arrow buttons down and reapply power. You will be prompted with options: PRESS:
   • UP to reset config
   • DOWN to revert FW
   • OK to boot normally

IMPORTANT NOTES
• RF Channel numbers are applied in pairs based on the frequency map. For instance, if you enter RF Channel # “21” then RF Channel # “22” automatically populates.
• ZV channels can be set directly adjacent to any other well-formed channel and will not cause interference. No channel spacing is required.
• DVB-T defaults to using specific channels and frequency bands on the CCIR table. You can change those settings from CCIR to None and enter a frequency directly using Maestro. For instance, instead of entering RF channel 21, you could enter a frequency such as “474 MHz.”

You can set the RF broadcast channels using the front panel controls. In many cases, your ZeeVee modulator will require only these configurations.
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 (logical 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 logical channel numbers (LCN)

1. Click on the Channel Plan tab.
2. In the RF # field and enter the RF number as you choose from the CCIR Table (on page 7). Make sure you’ve reviewed the CCIR Table Important Notes before completing this task.
3. Click in the LCN field and enter a logical channel number. The LCN is what the TV displays. Note that you can choose a logical channel number that is different from the RF#. For instance, if your RF# is 21, you can choose 3 as your LCN.
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 63 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.
To work around the issue, you can try one of the following:

- If you are feeding the audio directly from the source into a distributed (whole house) audio system and not through the ZeeVee unit, it will arrive to the speakers before the video arrives to the HDTV. This happens because the video is being broadcast on RF while the audio is on the Ethernet. The audio will not be reflected in the audio because it is traveling a shorter path.

- 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 software running on the ZeeVee unit have added additional latency that will add to the latency when the audio and video are being transmitted together.

- Return the unit to the factory for repair if the above steps do not resolve the issue. Some TVs will also show video issues if the signal strength is too high. Try lowering the RF power on the unit to ensure you see similar issues.

The unit is broadcasting in “compatibility mode.” This means it’s receiving a resolution from your VGA/HDMI source that doesn’t match standard 1280x720 or 1920x1080 HDTV picture resolutions. When that happens, the unit fits the incoming video into “compatibility mode.”

If you are combining with a cable service or terrestrial broadcast, keep in mind that they sometimes have extra signals that a ZeeVee unit may pick up. ZeeVee recommends turning on the TV and checking for any issues. If you see any unwanted signals, contact your cable company or service provider to have them removed.

EXCLUSIVE REMEDY FOR ZEEVEE EQUIPMENT

At the option of ZeeVee, the ZeeVee Equipment will be repaired or replaced by ZeeVee. If ZeeVee determines that the ZeeVee Equipment cannot be repaired or replaced, then ZeeVee will refund the purchase price. ZeeVee’s liability will be no more than the purchase price paid by you for the ZeeVee Equipment. ZeeVee will determine whether the ZeeVee Equipment is defective and whether repair, replacement, or refund is appropriate. ZeeVee, at its sole discretion, will refund the original purchase price or replace the ZeeVee Equipment. If ZeeVee cannot reasonably repair or replace the ZeeVee Equipment, ZeeVee will refund the original purchase price.

The ZeeVee Equipment must be returned to ZeeVee for repair or replacement. The ZeeVee Equipment is considered proof of purchase. If the ZeeVee Equipment is returned within the warranty period, ZeeVee will not issue a credit unless the ZeeVee Equipment is returned with the original packaging material and the RMA number.

To receive our Customer Service center's contact information, please go to www.zeevee.com/register or contact sales@zeevee.com. Please keep your sales receipt and any other document supplied to you by an authorized ZeeVee dealer as proof of purchase. No returns of goods will be accepted without a valid RMA number. ZeeVee may require you to return your ZeeVee Equipment to a ZeeVee dealer/reseller. ZeeVee does not warrant or imply warranty on the ZeeVee Equipment. Some countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

IT SUPPORT

To obtain out-of-warranty service for your ZeeVee Equipment, you must contact ZeeVee’s Service Department at 877-383-3633 or warranty@zeevee.com for information on the availability of any repairs, charges, or any other services for your ZeeVee Equipment. All ZeeVee Equipment, including replacement products, are covered only for the original end user purchaser and to no other purchaser or person receiving the ZeeVee Equipment as a gift from the original end user purchaser or any person receiving the ZeeVee Equipment as a gift from the original end user purchaser. ZeeVee does not warranty the ZeeVee Equipment as a gift from the original end user purchaser or any person receiving the ZeeVee Equipment as a gift from the original end user purchaser.

INFORMATION REGARDING WARRANTY

For more detailed information about setting up your product or viewing instructions, refer to the ZeeVee Equipment as a gift from the original end user purchaser or any person receiving the ZeeVee Equipment as a gift from the original end user purchaser.

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DECLARATION OF CONFORMITY

Manufacturer’s Name: ZeeVee, Inc.
1 Monarch Drive, Suite 200
Littleton, Massachusetts
01460   USA

declares that the product

Product Name: HDbridge 2000 Series

Regulatory Product Number:
HDB2312
HDB2380
HDB2640
HDB2540
HDB2620
HDB2520
HDB2840
(all product options on all variants)

conforms to the following Product Specifications:

Safety:
IEC 60065: Audio, Video and similar electronic apparatus

EMC:
RF Emissions per FCC Part 15 / Canada CS-03 / European EN55022: Class A
EN55024: European Union (RF Immunity/Susceptibility)
EN61000-4-2: Electrostatic Discharge
EN61000-4-3: Radio Frequency Interference
EN61000-4-4: Electrical Fast Transients
EN61000-4-5: Surge
EN61000-4-6: Conducted Radio Frequency Interference
EN61000-4-8: Magnetics
EN61000-4-11: Dips and Interrupts

The listed products herewith comply with the requirements of the EMC Directive 2004/108/EC and the Low Voltage Directive 2—6/95/EC and carry the CE-Marking accordingly.

Stephen Metzger
Vice President of Engineering
Direct all specific inquires to the ZeeVee, Inc. Engineering Department
September 2014

All listed products meet the RoHS guidelines for electronic components, and hardware. This complies with the requirements of the RoHS 2 DIRECTIVE 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 8 June 2011 governing the use of the substances: Lead, Mercury, Hexavalent Chromium, Cadmium, Polybromated Biphenyls, Polybromated Diphenyl Ether, Pentabromodiphenyl Ether, Octabromodiphenyl Ether, Decabromodiphenyl Ether.

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September 2014

Contact ZeeVee

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

Sales

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+1 (347) 851-7364 Phone
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