ZvPro 280
HD MPEG2 Encoder / QAM Modulator
Get Going Guide

ZvPro 280 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.

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:

ZvPro 280 (ZP280-NA)
(Shown with rack mount hardware attached)

AC Power Cord  
USB Cable  
Get Going Guide

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## Getting Started

### ZvPro 280 Front Panel

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<tr>
<th>Item</th>
<th>Description</th>
<th>Function</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Power Indicator</td>
<td>Indicates whether unit is powered</td>
</tr>
<tr>
<td>2</td>
<td>Input switch</td>
<td>Switches between Component Video and VGA inputs</td>
</tr>
<tr>
<td>3</td>
<td>Active video source indicator</td>
<td>Indicates which video input is currently selected</td>
</tr>
<tr>
<td>4</td>
<td>Broadcast status indicator</td>
<td>Indicates if video source is being sent to coax output</td>
</tr>
<tr>
<td>5</td>
<td>Active audio source indicator</td>
<td>Indicates which audio input is currently selected</td>
</tr>
<tr>
<td>6</td>
<td>Error indicator</td>
<td>Indicates that system is booting, or system error</td>
</tr>
<tr>
<td>7</td>
<td>IR input window</td>
<td>Sends and receives IR commands</td>
</tr>
</tbody>
</table>

### ZvPro 280 Back Panel

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SPDIF digital audio output</td>
<td>Looped output from SPDIF digital audio input</td>
</tr>
<tr>
<td>2</td>
<td>SPDIF digital audio input</td>
<td>Accepts digital audio input (48KHz PCM or AC3)</td>
</tr>
<tr>
<td>3</td>
<td>Coax output</td>
<td>Outputs encoded video as QAM 256 channel</td>
</tr>
<tr>
<td>4</td>
<td>SPDIF digital audio output, TOSLINK connector</td>
<td>Looped output from SPDIF digital audio input, TOSLINK connector</td>
</tr>
<tr>
<td>5</td>
<td>SPDIF digital audio input, TOSLINK connector</td>
<td>Accepts digital audio input (48KHz PCM or AC3)</td>
</tr>
<tr>
<td>6</td>
<td>Component Video output, RCA connectors 75 ohm</td>
<td>Looped output for video received at Component Video input, RCA connectors, 75 Ohm</td>
</tr>
<tr>
<td>7</td>
<td>Component Video input, RCA connectors, 75 Ohm</td>
<td>Accepts Component Video input</td>
</tr>
<tr>
<td>8</td>
<td>VGA (RGB) input; HD-15 connector</td>
<td>Accepts standard VGA input</td>
</tr>
<tr>
<td>9</td>
<td>VGA (RGB) output; HD-15 connector</td>
<td>Looped output from VGA (RGB) input</td>
</tr>
<tr>
<td>10</td>
<td>Analog audio output, R/L RCA connectors</td>
<td>Looped output for analog L/R audio input, RCA connectors</td>
</tr>
<tr>
<td>11</td>
<td>Analog audio input, R/L RCA connectors</td>
<td>Input for analog L/R audio</td>
</tr>
<tr>
<td>12</td>
<td>USB audio/control</td>
<td>Operates as USB audio device connection, or control interface</td>
</tr>
<tr>
<td>13</td>
<td>IR port; 1/8” mini jack</td>
<td>Accepts IR commands</td>
</tr>
<tr>
<td>14</td>
<td>RS-232 serial control</td>
<td>Console port for system control</td>
</tr>
<tr>
<td>15</td>
<td>AC input</td>
<td>AC power cord, 120 volt</td>
</tr>
</tbody>
</table>
Factory default settings in the product allow ZvPro 280 to broadcast a component HD source with analog audio on channel 2.1, over coax cabling, for reception at connected HDTVs.

1. Plug ZvPro 280 power cord into AC outlet.
2. Connect Component Video output of HD source to Component Video Input of ZvPro 280.
3. Connect L/R analog audio output of HD source to L/R analog audio input of ZvPro 280.*
4. Connect coaxial output of ZvPro 280 to HDTV RF Input.
5. Tune HDTV to channel 2.1 to view Zv channel.

*Default audio input is L/R analog.

For information on customizing ZvPro for alternative audio inputs, changing RF output channel, etc., go to http://www.zeevee.com/configuration and download the ZvConfig utility.

**Important:** ZeeVee regularly makes improvements to video and audio quality, and overall functionality. **Always check for updated firmware** for your ZvBox before deploying the unit. This is done in the ZvConfig utility.
Contact ZeeVee

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

Warranty

**Limited Three Year Warranty**
ZeeVee warrants your ZvPro 280 (ZP280-NA) against defects in materials and workmanship for a period of three years from the date of purchase.

Visit [www.zeevee.com](http://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 ZvPro 280 (ZP280-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 ZvPro 280 (ZP280-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.
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