



Zvpro SERIES

HD Digital MPEG2 Encoder / QAM Modulator

YPrPb VGA In
QAM Out

Get Going Guide

Zvpro620
Zvpro610



ZvPro™ 600 Series is a one or two-channel Component or VGA-to-QAM MPEG 2 Encoder/Modulator, all in a compact package that can be mounted on a shelf, wall, or rack.

ZvPro600s convert your video sources in real-time and very high quality into HD digital cable (QAM) channels. These channels are placed onto standard COAX wiring, where they 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.
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, hot tempers, 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 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.

What's in the box:



ZvPro Series Modulator



AC Power Cord



AC Power Adapter



Get Going Guide

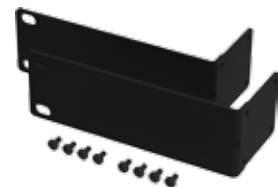
Accessories Sold Separately:



Hydra™ AV Cable*
3-foot & 6-foot lengths



Hydra™ VGA Cable*
6-foot length



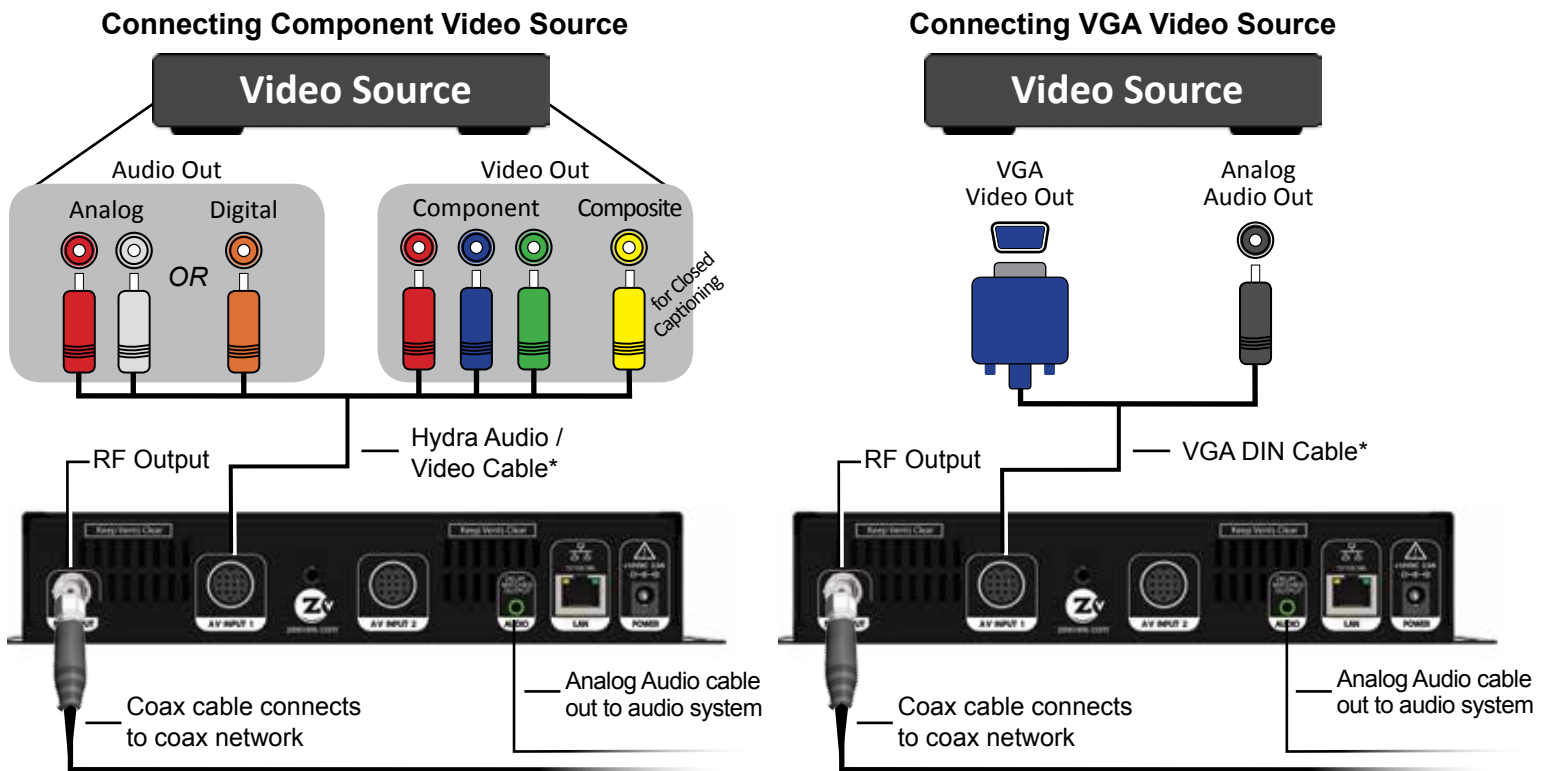
Rack Mount Assembly*

**Available through your distributor.*

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Basic Installation



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

1. Connect the power supply and apply AC power.
2. Using the Hydra™ DIN connector cable*, 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. Connect either the Digital (Orange) or Analog (Red/White) Audio connectors on the AV Cable to the Audio Outputs on your video source. Connect the DIN to the AV Input on the ZVPro.

OR

Using the VGA DIN connector cable*, connect the VGA connector to the corresponding VGA Output on your video source. Use the Analog Audio connector with the corresponding Audio Out port on the Video Source. Connect the DIN to the AV Input port on the ZvPro.

3. Connect the RF Output of the ZvPro to your **RF network**. Default output power of the ZvPro is +25dBmV; it can be increased to +45dBmV using the Maestro configuration interface.
4. Set the RF input on the TV to Cable Mode (not Air or Antenna).
5. Tune HDTVs to cable channels:

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

6. Optional: Go to Advanced Configuration in Maestro to set up Delay Matched Audio.

ZvPro RF A	RF Channel 2	ZvPro RF B	RF Channel 3
AV Input 1	HDTV Channel 2.1	AV Input 2	HDTV Channel 3.1

*Note: Hydra Audio/Video and VGA cables are sold separately and can be purchased from your distributor.

Front Panel Configuration

In most cases, ZvPro modulators will only require setting the RF and HDTV broadcast channels. This can be done using the Front Panel controls.

1. Press/hold together the ◀▶ arrow buttons until “Setup” lights up. Press “OK” to enter the setup screen.
2. Use the the arrow buttons (▲▼◀▶) to go to each item you want to configure (such as RF# or RF Power), then press “OK” to edit the highlighted field. Use the ▲ ▼ arrow buttons to scroll through the options for that field.
3. Once you’ve made changes, press “OK” to accept them. You can then select the next item for configuration.
4. When finished making changes, use the arrow buttons (▲ ▼ ◀ ▶) to scroll down to 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 ◀▶ buttons again to re-enter the setup screen.



Status Screen



Config Screen



Active Config Screen

Cable TV Channels vs RF Frequency (MHz)

RF Ch.	Band (MHz)	RF Ch.	Band (MHz)	RF Ch.	Band (MHz)	RF Ch.	Band (MHz)	RF Ch.	Band (MHz)
2	54-60	27	240-246	57	420-426	87	600-606	122	780-786
3	60-66	28	246-252	58	426-432	88	606-612	123	786-792
4	66-72	29	252-258	59	432-438	89	612-618	124	792-798
5	76-82	30	258-264	60	438-444	90	618-624	125	798-804
6	82-88	31	264-270	61	444-450	91	624-630	126	804-810
95	90-96	32	270-276	62	450-456	92	630-636	127	810-816
96	96-102	33	276-282	63	456-462	93	636-642	128	816-822
97	102-108	34	282-288	64	462-468	94	642-648	129	822-828
98	108-114	35	288-294	65	468-474	100	648-654	130	828-834
99	114-120	36	294-300	66	474-480	101	654-660	131	834-840
14	120-126	37	300-306	67	480-486	102	660-666	132	840-846
15	126-132	38	306-312	68	486-492	103	666-672	133	846-852
16	132-138	39	312-318	69	492-498	104	672-678	134	852-858
17	138-144	40	318-324	70	498-504	105	678-684	135	858-864
18	144-150	41	324-330	71	504-510	106	684-690	HRC Frequencies = Standard Frequencies minus 1.25 MHz	
19	150-156	42	330-336	72	510-516	107	690-696		
20	156-162	43	336-342	73	516-522	108	696-702		
21	162-168	44	342-348	74	522-528	109	702-708		
7	174-180	46	354-360	76	534-540	111	714-720	Except for: Channel 5, Video = 78.0 MHz Channel 6, Video = 84.0 MHz	
8	180-186	47	360-366	77	540-546	112	720-726		
9	186-192	48	366-372	78	546-552	113	726-732	IRC Frequencies = Same as Standard Frequencies	
10	192-198	49	372-378	79	552-558	114	732-738		
11	198-204	50	378-384	80	558-564	115	738-744		
12	204-210	51	384-390	81	564-570	116	744-750		
13	210-216	52	390-396	82	570-576	117	750-756	Except for: Channel 5, Video = 79.25 MHz Channel 6, Video = 85.25 MHz	
23	216-222	53	396-402	83	576-582	118	756-762		
24	222-228	54	402-408	84	582-588	119	762-768		
25	228-234	55	408-414	85	588-594	120	768-774		
26	234-240	56	414-420	86	594-600	121	774-780		



Configuration with Maestro Web-Interface

In most cases, ZvPros will only require setting the RF and HDTV broadcast channels. When other changes are required, the web-based interface (Maestro) should be used.

1. Connect your computer directly to the ZvPro using a standard Ethernet cable (cross-over cable not required), or connect the ZvPro 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, 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.

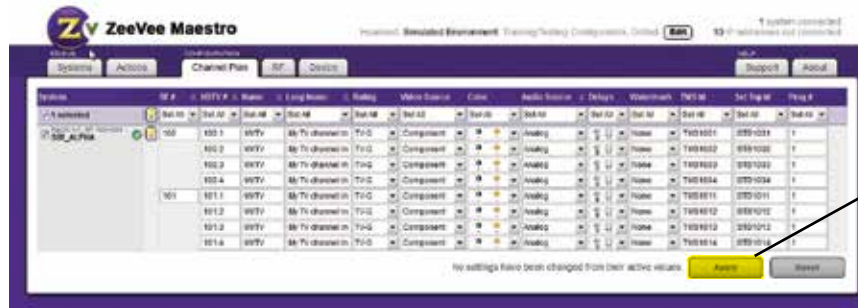
NOTE: Login is case-sensitive.



5. Tabs across the top allow for different configuration actions. Click on "Channel Plan" to set the RF channels, channel names, video source, etc.



6. Click "Apply" to save your changes. Settings are stored in the unit and not lost on power-down.



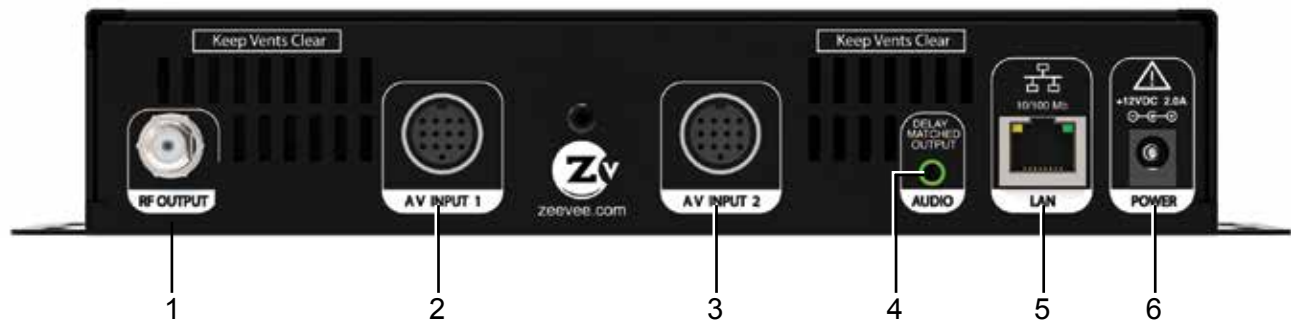
Click **Apply** to save your changes.

ZvPro Front Panel



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

ZvPro Back Panel



Item	Description	Function
1	Coax Output Default +25 dBmV power	Up to 2 paired, frequency-agile QAM RF CATV output channels for up to 2 video sources. Output power can be set between +25 to +45 dBmV using the Maestro web interface.
2	Audio/Video Input 1*	Video: Component or VGA Closed Captioning: Composite Audio: Digital, Analog
3	Audio/Video Input 2* (ZvPro620 only)	Video: Component or VGA Closed Captioning: Composite Audio: Digital, Analog
3	Delay Matched Audio Output	For matching audio to external audio system
4	10/100 LAN Port	Configuration and remote management
5	A/C Power Input	100-240VAC 50-60Hz

*Note: Hydra Audio/Video and VGA cables are sold separately and can be purchased from your distributor.

Contact ZeeVee

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

Warranty

Limited Two Year Warranty

ZeeVee warrants your ZvPro Series Modulator (MODEL NUMBERS ZVPRO820-NA, ZVPRO810-NA, ZVPRO620-NA, ZVPRO610-NA) against defects in materials and workmanship for a period of two years 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 ZvPro Series Modulator (MODEL NUMBERS ZVPRO820-NA, ZVPRO810-NA, ZVPRO620-NA, ZVPRO610-NA), please contact ZeeVee directly by calling ZeeVee Support at (877) 493-3833. 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 Series Modulator (MODEL NUMBERS ZVPRO820-NA, ZVPRO810-NA, ZVPRO620-NA, ZVPRO610-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.

