

# ZvPro600 Series

## HD Digital Encoder/Modulator



The ZvPro600 series encoder/modulator delivers uncompromising digital HD video distribution over your existing coax cabling from your component or VGA HD sources. The ZvPro600 series allows you to easily distribute content up to 1080p resolution to an unlimited number of displays, using the TV's built-in QAM tuner, eliminating the need for cumbersome, expensive set-top-boxes or media players at each display.

Manage ZvPro units can be managed locally through the color LCD screen or via an intuitive web-based, management interface – Maestro. Generate a looping signage channel with ZvShow, deliver messages to any screening using the built-in Emergency Alert System. The ZvPro supports AC-3 audio encoding and the included Closed Captioning makes your installation ADA compliant.

### SUPERIOR VIDEO QUALITY

- Full MPEG-2 implementation
- I, P, and B Frames
- Low latency
- Full motion estimation with a wide search range

### EXTENSIBLE ARCHITECTURE

- Easy downloadable firmware updates
- Future enhancements provided regularly
- Emergency Alert System (EAS)

### MODELS:

#### ZvPro610-NA

1 x DIN input for component video/digital and analog audio or VGA video/analog audio up to 1080i/1080p. MPEG-2 QAM RF output.

#### ZvPro620-NA

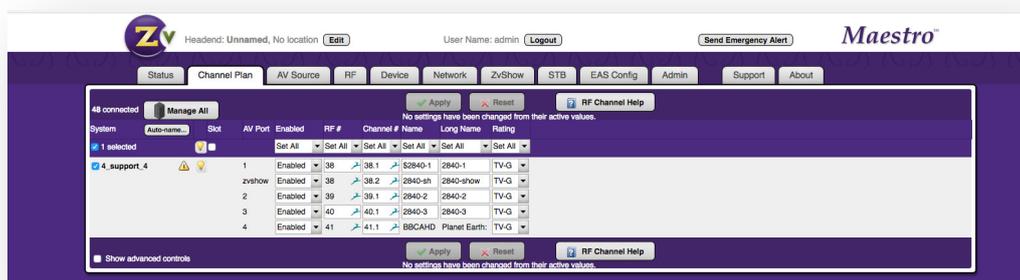
2 x DIN input for component video/digital and analog audio or VGA video/analog audio up to 1080i/1080p. MPEG-2 QAM RF output.

### HIGH RELIABILITY

- Low-stress power system
- Full system instrumentation and monitoring
- Official international regulatory approval
- Forced air cooling for effective thermal control

### EASE OF MANAGEMENT

- Powerful, highly intuitive web interface
- On-site or remote management
- Configure/manage multiple units from front Panel Display for local management



ZvPro 600 Series Web-based Administration Interface

## General

<b>Power:</b> 100-240 VAC 50/60 Hz, 60W max. 30W Typical IEC 60320-C14	<b>Cooling:</b> Dual internal cooling fans, Front inlet, Rear exhaust <b>MBTF:</b> 62,000 hours	<b>Temperature/Humidity:</b> Operating +32 F <sup>0</sup> to +113 F <sup>0</sup> (0 C <sup>0</sup> to +45 C <sup>0</sup> ) / 10% to 80%, non-condensing
<b>Compliance:</b> FCC Class A, IEC60065, EN61000 (see manual 70-00031-00), CE, RoHS, RCM C-Tick	<b>Enclosure Dimensions:</b> 8 in. (H) x 10 in. (W) x 1.75 in. (H) 20.32 cm (H) x 25.4 cm (W) x 4.445 cm (H)	<b>Enclosure Type:</b> Metal <b>Shipping Weight:</b> 5 lbs. (2.3 kg)
<b>Mounting:</b> Rack ears shipped attached, 1RU high	<b>Carton Dimensions (individual):</b> 2.75 in. (H) 14 in. x (W) 12 in. (D) 6.985 cm (H) 35.56 cm (W) x 30.48 cm (D)	<b>Warranty:</b> 5 Years <b>Vibration:</b> NSTA 1A in carton

## Input

<b>Component Video x2 or x1:</b> DIN connector HDbridge end, RCA connectors for HD source up to 1080	<b>VGA Resolutions Supported:</b> 640x480, 720x480, 800x600, 1024x768, 1152x864, 1176x664, 1280x720, 1280x768, 1280x800, 1280x960, 1280x1024, 1360x768, 1440x900 at 60 70, 72, 75, 85 Hz. 1680x1050 and 1920x1080 at 60 Hz. VGA resolutions are broadcast centered in the best vertical fit into 1920x1080p30 or 1280x720p60	<b>Closed Caption:</b> EIA/CEA-608 captions accepted over composite video input
<b>Computer VGA (Analog) x2 or x1:</b> HD15 connector, 75 Ohm RGB 0 to 0.7V, separate H and V sync		<b>ZvShow:</b> Extra digital channel, MPEG2 program stream file, up to 200 MB
<b>Stereo Analog and Digital Audio x4 or x2</b>	Line level input per channel DIN connector HDbridge end, RCA connector or digital SPDIF audio input. 3.5 mm pigtail connector with VGA	

## Video Encoder

<b>Encoder Video Profile:</b> MPEG2 HD: ISO13818-2 MainProfile@HighLevel	<b>Traffic Shaping:</b> Variable Bit Rate	<b>Video Encoding Data Rates:</b> Variable, 10 Mbs - 24 Mbs per channel
<b>Average Encoding Data Rate:</b> 18 Mbs per channel	<b>Encoding Latency:</b> Programmable 200 msec to 400 msec	<b>Color Profile:</b> 4:2:0
Encoder Audio Profile: ATSC A/52, (AC-3)	<b>Video, Audio PID:</b> Programmable starting value	<b>Program Information:</b> Programmable program name, EIT
<b>GOP Size:</b> 16		

## Modulator/Upverter

<b>Modulation Types:</b> QAM 256 and 64 (ITU-T J83 Annex B) <b>Interleaving modes:</b> (64,2) only	<b>Cable Standard:</b> HRC, IRC or STD	<b>Frequency Range:</b> Single or one paired, frequency agile QAM RF CATV channels 2-135
<b>Output Power:</b> +45 dBmV typical	<b>Output Level Adjust:</b> 25 - 45 dBmV in 1dBmV steps	<ul style="list-style-type: none"> <li>• 2kHz resolution</li> <li>• +/- 30 ppm accuracy</li> <li>• +/- 35 ppm stability</li> </ul>
<b>I/Q Amplitude Imbalance:</b> < 1% typical	<b>Spectral Tilt:</b> < /= 1 dB over 6 MHz typical	<b>MER :</b> > 38 dB typical

## Control Setup

<b>Network Interface</b>	10/100 Mb Ethernet via RJ45 connection IP address via DHCP or set by user HTML/Javascript served web interface for easy configuration Telnet connection for CLI scripting Easy firmware updates All settings saved in NV storage
<b>Front Panel Color Display</b>	Quickly obtain status at a glance, basic configurations, software revisions and updates

## About ZeeVee

ZeeVee, Inc., headquartered in Littleton, Mass., and founded in 2007, is a leading global developer of digital technology and products for distributing audio-video content from any source or multiple sources to any number of displays. Manufactured in the U.S. and used primarily in commercial and corporate applications, ZeeVee products are employed worldwide by major organizations in education, government, hospitality, retail, sports, entertainment, broadcasting, healthcare, housing, energy and other industries. For more information visit [www.zeevee.com](http://www.zeevee.com)

ZeeVee products are TAA Compliant. ZeeVee holds GSA Contract # 47QTCA19D00JZ.

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