

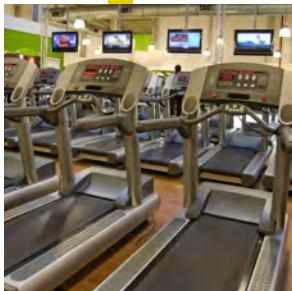
ZvPro600i-NA

HD DIGITAL ENCODER/MODULATOR

HD Video and Digital Signage Over Coax With Simultaneous Video-over-IP Streaming



Restaurants,
Pubs, & Bars



Health &
Fitness Clubs



Corporate

Superior Video Quality

- Simultaneous QAM/IP stream output with no compromise in performance
- Full MPEG2 implementation
- I, P, and B Frames
- Low latency
- Full motion estimation with a wide search range

High Reliability

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

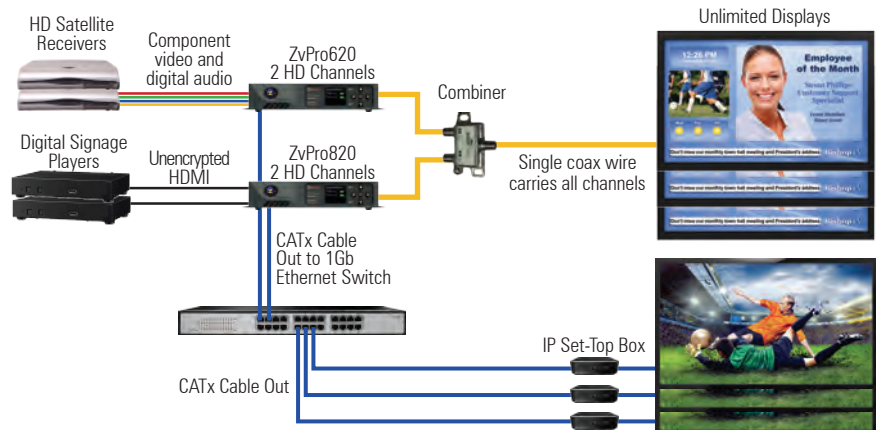
Extensible Architecture

- Easy downloadable firmware updates
- Future enhancements provided regularly
- Emergency Alert System (EAS)
- ZvShow bonus information channel with extended play capability via SD card input suitable for continuous looped messages

Ease of Management

- Powerful, highly intuitive web interface for instrumentation and control
- On-site or remote management
- Front Panel Display for on-site status and management at a glance
- Robust features like set-top-box control and delay-matched audio

Flexible Simultaneous QAM/IP Deployment



Zvpro

Simple Installation
Easy Setup
Quick Rollout
It's Done.

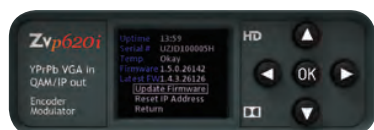


ZvPro600i-NA

HD Digital Encoder / Modulator



ZvPro600i Rear Detail



ZvPro600i Front Detail



Accessories

Rackmount kit and Hydra AV and VGA cables sold separately.



GENERAL	
Model Names	ZvPro600 I-Series ZvPro620i ZvPro610i
Part Numbers	ZvPro620i-NA ZvPro610i-NA
Power	100-240 VAC 50/60 Hz, 60W max. 30W Typical IEC 60320-C14
Cooling	Internal cooling fan, front inlet, rear exhaust
Temperature/Humidity	Operating +32 F° to +113 F° (0 C° to +45 C°) / 10% to 80%, non-condensing
Vibration	NSTA 1A in carton
MTBF	62,000 hours
Compliance	FCC Class A, IEC60065, EN61000 (see manual 70-00031-00), CE, RoHS, RCM C-Tick
Enclosure Type	Metal
Mounting	Shelf mount flange or rack ears (ordered separately), 1RU high
Enclosure Dimensions	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)
System Weight	3.1 lbs. (1.4 kg)
Carton Dimensions (individual)	2.75 in. (H) 14 in. x (W) 12 in. (D) 6.985 cm (H) 35.56 cm (W) x 30.48 cm (D)
Shipping Weight	5 lbs. (2.3 kg)
Warranty	5 years
VIDEO INPUT	
Component Video x2 or x1	DIN connector HDbridge end, RCA connectors for HD source up to 1080
Computer VGA (Analog) x2 or x1	HD-15 connector, 75 Ohm RGB 0 to 0.7V, separate H and V sync 640x480, 720x480, 800x600, 1024x768, 1152x864, 1176x864, 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
VGA Resolutions Supported	
Closed Caption	EIA/CEA-608 captions accepted over composite video input
ZvShow	Extra digital channel, MPEG2 program stream file, up to 200 MB
AUDIO INPUT	
Stereo Analog and Digital Audio x4 or x2	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	
Encoder Video Profile	MPEG2 HD: ISO13818-2 MainProfile@HighLevel
Traffic Shaping	Variable Bit Rate
Video Encoding Data Rates	Variable, 10 Mbs - 24 Mbs per channel
Average Encoding Data Rate	18 Mbs per channel
Encoding Latency	Programmable 200 msec to 400 msec
Color Profile	4:2:0
GOP Size	16
Video, Audio PID	Programmable starting value
Program Information	Programmable program name, EIT
AUDIO ENCODER	
Encoder Audio Profile	ATSC A/52, Dolby® Digital (AC-3)
MODULATOR / UPCONVERTER	
Modulation Types	QAM 256 and 64 (ITU-T J83 Annex B) interleaving modes: (64,2) only
Cable Standard	HRC, IRC or STD
Frequency Range	Up to 2 paired, frequency-agile QAM RF CATV channels 2-135 • 2 kHz resolution • +/- 30 ppm accuracy • +/- 35 ppm stability
Output Power	+45 dBmV typical
Output Level Adjust	25 - 45 dBmV in 1dBmV steps
MER	> 38 dB typical
I/Q Amplitude Imbalance	< 1% typical
Spectral Tilt	< / = 1 dB over 6 MHz typical
IP STREAM OUTPUT	
Stream Details	RJ-45 10/100Mb Ethernet connection • Up to 2 SPTS, one for each encoded video stream • UDP unicast or multicast, IPV4 • User programmable destination address / port
CONTROL SET-UP	
Network Interface	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
Front Panel Color Display	Quickly obtain status at a glance, basic configurations, firmware revisions and updates