

DIGITAL ENCODER/MODULATOR

Headend Ready for High Density Distribution of Video and Digital Signage



Assisted Living



Health Care



RV Parks & Campgrounds

Superior Video Quality

- 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 effective thermal control

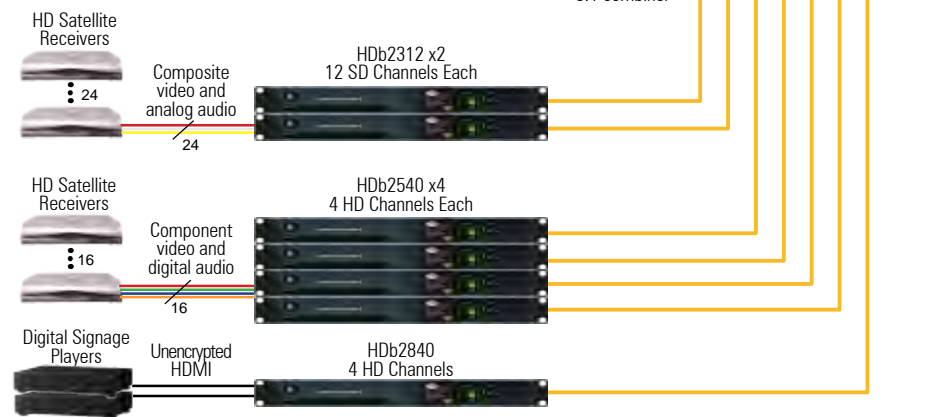
Ease of Management

- Powerful, highly intuitive web interface
- On-site or remote management
- Web accessible instrumentation and management
- Single session configures and manages all connected units
- Front Panel Display for on-site status and management at a glance

Extensible Architecture

- Easy downloadable firmware updates
- Future enhancements provided regularly
- Emergency Alert System (EAS)
- Bonus information channel for use with small video loops

A Clean Headend



HDbridge2000
SERIES

Easy Setup
Simple Installation
Quick Rollout
It's Done.





HDb2312-NA

Digital Encoder / Modulator

HDbridge2000
SERIES



HDb2312 Rear Detail



HDb2312 Front Detail



ZvSync

ZvSync is a digital cable tuner with HDMI, composite, and analog RF outputs. Available in both DVB-T and QAM.

It's small, affordable, and can be used for:

- Projectors
- TVs Without Tuners
- Monitors



GENERAL

Model Name	HDbridge Series 2000, HDb2312
Part Number	HDb2312-NA
Power	100-240 VAC 50/60 Hz, 60W max. 30W Typical IEC 60320-C14
Cooling	Dual internal cooling fans, 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 70-00039), CE, RoHS, RCM C-Tick
Enclosure Type	Metal
Mounting	Rack ears shipped attached, 1RU high
Enclosure Dimensions	1.72 in. (H) x 17.33 in. (W) (without rack mount ears) x 9.9 in. (D) 43.6 mm (H) x 440.2 mm (W) x 251.5 mm (D)
System Weight	6.25 lbs. (2.84 kg)
Carton Dimensions (individual)	4.25 in. (H) 30.875 in. W 12.125 in (D) 108 mm (H) 785 (mm) W 308 (mm) D
Shipping Weight	7.88 lbs. (3.58 kg)
Warranty	5 years

VIDEO INPUT

Composite Video x12	RCA connector, 75 Ohm 0 to 0.7v, 480i input 59.94 fields per second
Closed Caption	EIA/CEA-608 captions accepted over composite video input (HDb2312-NA Only)

AUDIO INPUT

Stereo Audio Input x12	3.5 mm stereo female, line level input per channel
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VIDEO ENCODER

Encoder Video Profile	MPEG2 SD: ISO13818-2 Main Profile @ Main Level
Traffic Shaping	Variable Bit Rate
Video Encoding Data Rates	Variable, 2 Mbs - 12 Mbs per channel
Average Encoding Data Rate	10-12 Mbs per channel
Encoding Latency	Programmable 200 msec to 400 msec
Color Profile	4:2:0
GOP Size	15
Video, Audio PID	Programmable starting value
Program Information	Programmable program name, EIT

AUDIO ENCODER

Encoder Audio Profile	ATSC A/52, Dolby®Digital (AC-3)
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MODULATOR / UPCONVERTER

Modulation Types	QAM 256 only (ITU-T J83 Annex B) Interleaving modes: (64,2) only
Cable Standard	HRC, IRC or STD
Frequency Range	4 paired, frequency agile QAM RF CATV Channels 2-135 <ul style="list-style-type: none"> • 2kHz 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

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, software revisions and updates