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# QMOD-HDMI1.5 HDTV Modulator

### **Applications**

Digital Signage HD/SD Cable Receivers HD/SD Satellite Receivers HD/SD Media Sources



## Sales Support

Need help integrating HDTV localcasting for your application? Our Sales Support staff will be happy to work with you, providing expert integration assistance and a complete systems proposal.

### **Tech Support**

Need tech help? Give us a call. Our tech support staff are experts in the integration industry. We research solutions in the proposal stage, advise on programming requirements, and resolve installation issues.

Our job is to make our solutions work seamlessly with your system, performing as promised.

# **Related Products**

QMOD-YPB2 QMOD-SDI1.5 QCA9-33 Active Combiner QDA4-45 Amp Combiner 232-ATSC+1 Tuner Display Express Employing a totally new HD encoding technology, the QMOD-HDMI1.5 continues the QMOD $^{\text{TM}}$  track record for quality and innovation, setting a new benchmark for features and performance. Users can upgrade operation for digital signage scaling and dual-channel operation by entering optional upgrade key codes.

#### Sources

- One HDMI (non-HDCP) input, up to 1080p video and audio
- One RGBHV/Component input, up to 1080p video
- Two Composite video inputs for encoding, captioning, or EAS use
- Two sets of stereo and SPIDF coax audio inputs

# **Encoding**

- Creates a high-definition 720p/1080i MPEG-2 stream for broadcast
- Accepts stereo, PCM, or pass-through AC-3 audio, can create two MTS sub-channels for each input, supporting two languages each
- Includes captioning from Line 21 data on composite video inputs
- Flex encoding downscales 1080p to 1080i, allows use of 720p/1080p 60Hz sources, and compensates for 60/30 Hz sources such as consumer HD cameras
- Scaling upgrade adds scaling for many VGA resolutions, overscan compensation, and positioning
- 2-channel upgrade allows selection of inputs to create
   2 HD channels

#### Output

- Delivers a fully agile QAM 64/256 digital cable channel 2-135
- Up to 270 HD Programs/Channels per system
- Streams IPTV from GigE Ethernet port
- Distributes channel over an on-site broadband cable system with adjustable output level to 29 dBmV, compatible with all cable format broadband systems

# **Operation**

- Sets up with front-panel buttons and easy to use menus, including inputs, encoding, channel, and RF options.
- Onboard Web page for setup and monitoring
- Control with IP Telnet commands
- Saves power and rack space using efficient design
- Includes compact switching power supply
- Mounts in optional 1RU single (RK1) or dual (RK2EZ) 19" rack kits
- Meets RoHS safety and California energy standards



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# **QMOD-HDMI1.5 HDTV Modulator**



# **Specifications**

Specifications	
Feature	
Physical	8.5" [216mm] wide x 1.73" [62mm] height (1RU) x 6.0" [153mm] deep 1.5 lbs [0.68kg] +32° to 122° F operating temperature, fan cooled Rack mounting for one or two units side-by-side optional (RK1, RK2EZ)
Encoding	MPEG2 Profile:MP@HL for HD, MP@ML for SD Auto-syncs to1080i, 720p, 480p, and 480i resolution, depending on input Compensates for 60/30 Hz Component sources Video Encoding bitrate 11, 13, 15, 18 or 25 Mbps (18 or less for dual-channel) AC-3 (Pass-through or stereo) or MPEG1, Layer 2 audio MTS Dual-language capability Optional scaling accepts VGA resolutions, overscan compensation, and positioning Optional dual-channel operation carries 2 full HD channels
Modulation	Switchable 64/256 QAM, J83 Annex B, Interleaving Modes (128,1) MER 38 dB typical
Compliance	FCC Class B, ROHS, meets California standards
Front Panel	Select and directional buttons for menu setup Menu LCD, 2 lines of 20 white characters each
Back Panel	
Power	2.1mm coaxial jack (inside center conductor positive) 1.1A maximum, 11.5 to 13.5 VDC, 12 VDC typical
EAS	Captive-screw terminal with 3 GPI Pins for momentary or latching control
Ethernet	RJ-45 GigE Ethernet: Web page, control, streaming video
Video Inputs	HDMI (non-HDCP), up to 1080p HD15 RGBHV/Component input up to 1080p, 59.94/60, 29.97/30 Hz Composite Video: RCA female (480i), 29.97 Hz, also used for Line 21 captioning data
Audio Inputs	Two Digital SPDIF Coax RCA, PCM/AC-3 48K sample rate Two 3.5mm stereo analog inputs Inputs assignable to video inputs
RF	'F', female, 75 ohm impedance Agile, channels 2-135 (48-860 MHz), standard, HRC, or IRC spacing 6 MHz bandwidth fits any open channel without interference to adjacent channels 1 KHz resolution, +/- 30 ppm accuracy, +/- 35 ppm stability 29 dB typical output power, attenuated in 5 steps, approx 4 dB
Includes	Compact PS12-1.5 switching power supply, 1.5A 12 VDC, fits power strip Free option to include PS12-4Y power supply with every 2-3 modulators when ordered HD15 to RCA Component adapter cable
Options	RK1 Single Rack Kit RK2EZ Dual Rack Kit
	29 dB typical output power, attenuated in 5 steps, approx 4 dB  Compact PS12-1.5 switching power supply, 1.5A 12 VDC, fits power strip  Free option to include PS12-4Y power supply with every 2-3 modulators when ordered  HD15 to RCA Component adapter cable  RK1 Single Rack Kit

### Warranty

All CR products feature a full two-year warranty.

