Contemporary Research

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QMOD HDTV Modulators

Applications

HD-SDI
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

232-ATSC+ Tuner
Display Express Systems

CR QMOD™ technology is opening the door to new HDTV applications. Innovative in design and value, QMOD™ HDTV Modulators enable cost-effective distribution of digital signage and HD subscriber sources using existing broadband coax cabling in sports, retail and entertainment facilities, corporate offices, colleges, schools and worship centers.

- Create your own on-site HDTV broadband distribution system using a variety digital signage, HD, SD, and AV sources
- Distribute digital signage, satellite, cable, and media as HD digital cable channels over existing broadband wiring
- View HD sources at any destination using HDTV displays or tuners

QMOD-SDI HD-SDI Modulator

- HD/SD-SDI auto-syncs video input with embedded audio
- HD Component, and S-Video/Composite video inputs
- Switchable between SDI, Component, and video

QMOD-HDSC HDTV Scaler Modulator

- In-stream scaler for RGBHV/Component inputs from 480p to 1080p
- Auto-senses resolution, then zoom, shrink, and position to fit
- Scales video to 1080i/720p
- Converts PAL HD video to NTSC
- Buffered RGBHV Out for monitoring RGB input
- HD sources only, 480i Component or Composite cannot be used

QMOD-HD HDTV Modulator

- HD RGBHV, Component, and S-Video/Composite video inputs
- Switchable between RGBHV/Component and composite video
- Auto-senses to input resolution

Shared Features

- Employs pro-grade HD encoding by NTT that minimizes artifacts for motion video and signage "tickers"
- Merges audio with video from stereo, digital optical and coax inputs
- RGBHV and Component share RGB wiring, Component can be fed from HD15
- Switches via GPI inputs to present EAS AV broadcasts
- Creates an HD 720p/1080i or SD 480p/480i MPEG2 stream with MPEG1 stereo audio for broadcast
- Delivers a fully agile QAM 64/256 digital cable channel 2-135
- Amplifies for distribution over an on-site broadband cable system with adjustable output level to 29 dBmV
- Sets up with front-panel buttons and easy to use menus, including inputs, encoding, channel, and RF options
- Fast processing - starts up in less than 4 seconds
- Integrates with RS-232 control and feedback with simple ASCII commands
- Saves power and rack space using efficient design, fan-free cooling, and compact enclosure
- Mounts in optional 1RU single (RK1) or dual (RK2, RK2EZ) 19" rack kits

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QMOD HDTV Modulators

QMOD-SDI Back Panel

QMOD-HDSC Back Panel

QMOD-HD Back Panel

Specifications

Feature	QMOD-SDI	QMOD-HDSC	QMOD-HD
Application	HD/SD-SDI Video	Digital Signage/PAL Video	HD Analog Media
HD Video	SDI: Female BNC (1080i/720p/480i), auto-sync Embedded SDi audio, selectable for 1+2, 3+4, 5+6, 7+8	RGBHV/Component In: RGBHV DB-15 female, auto-sync 480p to 1080p. Check crwww.com for resolution list. RGB Out: DB-15 female	RGB In: RGBHV DB-15 female (1080i/720p/480p/480i), 59.94/29.97 Hz, auto-ync, not intended for VGA operation.
Power	0.8 A maximum	1.1 A Maximum	0.7 A Maximum
Includes	PS12-1.0 switching power supply, 1A 12 VDC	PS12-1.0 switching power supply, 1A 12 VDC	PS12-1.0 switching power supply, 1A 12 VDC
	Shared Features		
Physical	8.5” [216mm] wide x 1.75” [44mm] height (1RU) x 6.0” [153mm] deep 1.5 lbs [0.68kg] +32° to 122° F operating temperature, convection cooled Rack mounting for one or two units side-by-side (RK1, RK2)		
Encoding	MPEG2 Profile:MP@HL for HD, MP@ML for SD 1080i, 720p, 480p resolution, depending on input Video Encoding bitrate 18 or 25 Mbps MPEG1, Layer 2 audio Latency 330ms 720p, 660 ms 1080i		
Modulation	Switchable 64/256 QAM, J83 Annex B, Interleaving Modes (128,1) MER 38 dB typical		
	FCC Class B, ROHS, meets California standards		
Front	Power button Setup, Select and directional buttons for menu setup Menu LCD, 2 lines of 20 blue characters each		
Back			
Power	2.1mm coaxial jack (inside center conductor positive) 11.5 to 13.5 VDC, 12 VDC typical		
Control	DB-9 male, RS-232 data link to control system 300 to 19,200 baud (9600 default), 8 data bits, no parity, 1 stop bit 2 GPI contacts on pins trigger EAS		
Analog Video	RGBHV: HD-15, QMOD-HD1080i/720p 29.97/ 59.94 Hz, QMOD-HDSC up to 1920 x 1080 Component: RCA Y, Pb, Pr (1080i/720p/480p) , 59.94/29.97 Hz S-Video: Y(Composite), C (Blue Pb) 480p, 29.97 Hz Composite Video: 480i, 29.97 Hz (not operational in QMOD-HDSC)		
Audio	Digital SPDIF: Coax and TOSlink optical output, PCM 48K sample rate Analog L and R: 2 stereo RCA female jacks Inputs assignable to video inputs		
EAS	GPI inputs switch AV to composite video and assigned audio		
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 dBmV typical output power, attenuated in 5 steps, approx 4 dB		
Options	RK1 Single Rack Kit , RK1-AC Single Rack Kit with accessory shelf RK2 Dual Rack Kit, RK2 EZ Dual Rack Kit		

Warranty

All CR products feature a full two-year warranty.

RoHS compliance

Contemporary Research • 4355 Excel Pkwy, Suite 600 • Addison, TX 75001
Phone: 972-931-2728 • Toll Free: 888-972-2728 • Fax: 972-931-2765