

## 232-ATSC HDTV Tuner

### Applications

Boardrooms  
Classrooms  
Training Centers  
Broadcast Testing  
Command and Control Centers



### Sales Support

*Need help integrating HDTV tuning 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, so we can 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

AV Tuners  
232-Amp

The 232-ATSC HDTV Tuner is an integrator-friendly HDTV tuner, controllable 2-way RS-232 and discrete IR commands. As a universal TV tuner, the 232-ATSC can receive ATSC, NTSC, and clear QAM cable channels from switchable Off-Air and Cable RF inputs.

Controllable via RS-232 or IR, up to two compact 232-ATSC tuners can fit within two rack spaces.

The tuner displays broadcasts through simultaneous HDMI, RGB/Component, and NTSC composite video or connections. Full-time audio is available from Dolby® 5.1/PCM digital HDMI, optical, and coax ports, as well as variable-level analog stereo audio outputs.

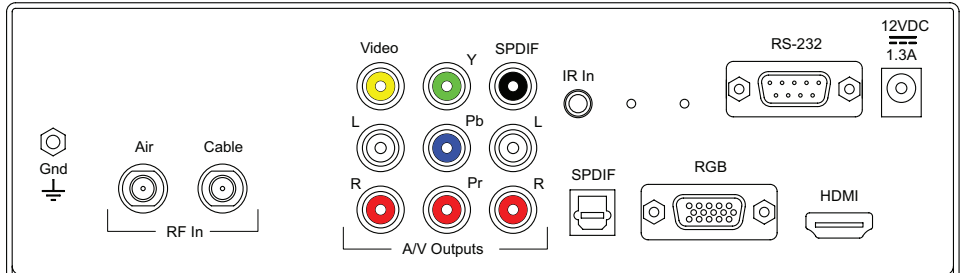
With the 232-ATSC, you can always enjoy the highest quality full-bandwidth local HDTV and multi-channel broadcasts, unaffected by weather, service outages, and compression losses from satellite and cable providers.

### Features

- Tunes ATSC off-air, clear QAM cable, and analog channels
- HDMI and composite video, as well as stereo, and digital coax and Toslink optical audio ports are always active
- VGA or Component outputs switchable from front-panel settings or RS-232 control
- Dolby® 5.1 or PCM/Variable PCM digital audio formats for digital audio ports and HDMI
- Front-panel and IR onscreen menus for tuner setup and scanning
- Independent Cable and Off-Air RF inputs and channel lists, switchable via IR, front panel, and RS-232
- Analog and digital closed captioning
- Upscales SD and analog channels
- Rack-mountable in 2RU, two across
- Full ASCII 2-way RS-232 commands, AMX, Crestron, and RTI modules available, discrete IR commands
- RS-232 can be daisy-chained to control up to 9 tuners from a single RS-232 port
- Works with free Tuner Helper control panel/setup software, operates over RS-232 or Ethernet with IP-232 Interface
- Field updatable for control and HD processing firmware
- Green Machine - meets ROHS and California energy-saving standards



## Specifications



232-ATSC



HD2-RC

### Warranty

All CR products feature a full two-year warranty.



Feature	
<b>Type</b>	Universal NTSC, digital ATSC and clear QAM Tuner
<b>Physical</b>	8.5" [216mm] wide x 2.43" [62mm] height (2RU) x 8.0" [203mm] deep 2.25 lbs [1 kg] Rack mounting for one or two units side-by-side optional (RK1-HD, RK2-HD) RoHS compliant and energy-efficiency meets new California standards
<b>Tuning</b>	Switchable Cable and Off-Air RF inputs Type: ATSC, NTSC and Clear QAM DTV Standards: (1080i/720p/480p/480i) Aspect Ratio: Adjustable, variety of modes for widescreen 16:9 and normal 4:3 broadcasts Captioning: Analog and Digital, set by program or customized for size, font, and attributes Favorites: Favorite channel menu Lock: Parental option for channels and/or rating
<b>Front Panel</b>	RS-232 TX/RX LEDs (Yellow) Power button Volume Up and Down Channel Up and Down Channel Display (Red LED, dot for major/minor separator, dot for Air/Cable tuning) IR Sensor DC Power LED (Green) RS-232 LEDs: RX (Yellow), TX (Red)
<b>Back Panel</b>	
<b>RF Input</b>	Dual RF Cable and Off-Air inputs, 'F', female, 75 ohm impedance User can select either input for channel tuning
<b>HD Outputs</b>	HDMI and switchable RGB/Component outputs operate simultaneously Component: RCA Pr, Pb, Y outputs (1080i/720p/480p/480i) RGB: RGBHV DB-15 female (1080i/720p/480p) HDMI: HDMI receptacle (1080i/720p/480p), version 1.2, PCM digital audio, HDCP Digital Audio S/PDIF: Coax and Toslink optical output, Dolby 5.1, PCM, or PCM variable
<b>AV Outputs</b>	Simultaneous with HD output Composite Video: RCA female jack Audio L and R: 2 stereo RCA female jacks, variable level
<b>RS-232 Control</b>	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
<b>IR Control</b>	3.5 mm stereo input for external IR sensor or wired IR, discrete codes available
<b>Power</b>	2.1mm coaxial jack (inside center conductor positive) 1.3 A maximum, 11.5 to 15 VDC, 12 VDC typical
<b>Includes</b>	HD2-RC IR Remote Switching power supply, 1.5A 12 VDC
<b>Options</b>	IR-RXC External IR Receiver RK-HD1 Single Rack Kit RK-HD2 Dual Rack Kit CC-232 RS-232 Cable PMT-2 PoleCat Projector Pole Mount