

# 232-ATSC 4K HDTV Tuner







The 232-ATSC 4K HDTV Tuner, our 5th-generation ATSC HDTV tuner, adds new capabilities to the industry-standard 232-ATSC series. New features include tuning H.264 programs up to 1080p and output scaling up to 4K. The new tuner is fully compatible with control commands for previous models.

The integrator-friendly HDTV tuner is controllable with 2-way RS-232, IP Telnet and UDP, as well as wireless and wired IR commands. An onboard Web page enables remote Web control. A new menu-driven display simplifies setup.

A full-featured, commercial grade HDTV tuner, the 232-ATSC 4K can receive both analog and digital MPEG-2/H.264 channels, in ATSC, NTSC, and clear QAM formats. Using an optional RF-AB switch, the tuner can switch between antenna and cable feeds.

- Tunes analog and digital channels in ATSC, NTSC, and clear QAM formats
- Decodes MPEG2 and H.264 digital channels up to 1080p 60Hz
- HDMI selectable video output resolutions: 480i, 480p, 720p, 1080i, 1080p, and 4K or Auto
- Analog HD RGBHV and Component video output resolutions: 480i, 480p, 720p, 1080i, and 1080p, or Auto
- Analog HD outputs can operate simultaneously with HDMI depending on colorspace setting
- RGBHV or Component output selection from front-panel settings, Web page, or control commands
- 1080p and 2160p set to 60Hz for more universal applications, 1080i and 720p can be set to 60 or 59.94Hz
- AC-3, PCM, or Variable PCM audio formats for digital audio ports and HDMI
- Simultaneous HDMI, SPDIF, and Analog Stereo Audio output
- Auto or manual DVI compatibility
- Front-panel and on-screen menus for tuner setup
- Web pages for remote setup and configuration
- Decodes analog and digital closed captioning
- Rack-mountable two across in 1RU
- Full ASCII 2-way RS-232/Telnet commands
- RS-232 can be daisy-chained to control up to 9 tuners from a single RS-232 port
- Meets RoHS and California energy-saving standards



# 232-ATSC 4K HDTV Tuner

### **Specifications**

**Physical** 8.5" [216mm] wide x 1.75" [44mm] high (1RU) x 8.0" [203mm] deep

1.81 lbs [822 g]

1RU Rack mounting for one or two units side-by-side (RK1, RK2EZ)

**Tuning** Air/Cable Input 'F', female, 75 ohm impedance, -10 to 25 dBmV typical

ATSC, NTSC, Cable, and Clear QAM (1080p/1080i/720p/480p/480i)

Off-Air 2-69 (NTSC and 8-VSB) and CATV 1-135 (Analog, 64QAM, 256QAM, 8-VSB) Standard, HRC, and IRC

Aspect Ratio 4:3, 16:9, and Zoom

Parental option for channels and/or rating

**Decoding** MPEG2, H.264 - 480i, 480p, 720p, 1080i, 1080p

Video Composite RCA video, 480i, carries closed caption data

Component YPbPr 3 RCA (1080p/1080i/720p/480p/480i) RGBHV HD-15 female (1080p/1080i/720p/480p/480i)

HDMI receptacle, Type A, Version 1.3 (2160p/1080p/1080i/720p/480p/480i)

Audio HDMI AC-3/PCM/PCM variable level

SPDIF Coax and optical output, AC-3/PCM/PCM variable level

Analog Stereo RCA variable level

**Control** RJ-45 10/100 Ethernet for Web page access, Telnet, and UDP control

DB9 male RS-232 1200 to 230K baud, 8 data bits, no parity, 1 stop bit

IR Input 3.5mm stereo jack for optional IR-RXC IR Receiver

A/C 3.5mm control output for optional RF-AB Air/Cable Selector Switch

Front Panel LCD Text display, white text on blue background

Power, Menu, Setup, and Select buttons Up and Down (Channel Up and Down) buttons Left and Right (Volume Up and Down) buttons IR Sensor, Mini USB-B port for future use.

Power In: 2.1mm coaxial jack (inside center conductor positive), 1.1A maximum, 11 to 14 VDC, 12 VDC typical, 13.2W 45

BTU, 15.2 W 52 BTU including power supply, current draw 0.198A@114 VAC with power supply

#### Includes:

PS12-1.5 Power Supply, 1.5A maximum, 12 VDC

**RKU Universal Rack Mount Kit** 

### **Options:**

HD2-RC IR Tuner Remote, 4AAA batteries

PS12-8Y 8A power supply with Y cable may be ordered with every 3-4 tuners in lieu of PS12-1.5 power supplies

RK1 Single Rack Kit, 1RU

RK2EZ Dual Rack Kit, 1RU

 $RF-AB\ Air/Cable\ Selector\ Switch\ (includes\ 3.5mm\ cable,\ connects\ to\ A/C\ control\ port\ on\ tuner)$ 

IR-RXC External IR Receiver

CC-COM-B RS-232 Null Modem Cable

Specifications Subject To Change Without Notice

Rev 06-13

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