



The Contemporary Research ATSC series HDTV Tuners are durable and designed for 24/7 operation. Featuring universal reception, the units can decode MPEG2 and MPEG4 programs from off-air ATSC and cable clear QAM channels, as well as analog channels.

With a focus on integration, the tuners support RS-232, IP Telnet ASCII commands and IR/Wired IR codes. Onboard Web pages allow remote control, setup and monitoring. Full onboard scaling outputs video at a set resolution, up to 1080p.

Full ready-made programming modules are available from AMX, Crestron, Extron, and RTI control systems. The tuners can maintain two channel lists for cable and off-air channels, and the optional RF-AB interface can automatically switch between off-air and cable feeds.

### 232-ATSC 4 HDTV Tuner

- HDMI output, up to 1080p
- Component and RGBHV outputs, up to 1080p
- Composite NTSC Video, output with captioning data
- Analog Stereo, and SPDIF coax and optical audio outputs
- HDMI, Composite and audio outputs are simultaneous
- Either the RGBHV or Component outputs can be switched for active HD analog output

### ATSC-SDI 4 HDTV Tuner with SDI

- SDI output sends the current tuned program, with embedded AES/AC-3 audio, captioning and V-Chip data
- Component output
- Analog Stereo and SPDIF coax and optical audio outputs
- All outputs are simultaneous



**232-ATSC 4**  
**Video** HDMI, up to 1080p  
RGBHV HD-15, up to 1080p  
Component RCA, up to 1080p  
NTSC composite, 480i, captioning data

**Audio** HDMI embedded PCM or AC-3  
SPIDF coax and optical, Stereo RCA L+R

HDMI and NTSC output always active  
Select between RGBHV and Component outputs

**ATSC-SDI 4**  
**Video** SDI, scaled from 480i to 1080p  
Tuned program with caption and V-Chip data  
Component RCA, up to 1080p  
NTSC composite, 480i, captioning data

**Audio** SDI, embedded AES or AC-3 audio  
SPIDF coax and optical, Stereo RCA L+R

All ports active at all times

## Shared Features

**Physical** 8.5" [216mm] wide x 1.75" [44mm] height (1RU) x 8.0" [203mm] deep  
2.25 lbs [1 kg]  
1RU Rack mounting for one or two units side-by-side (RK1, RK2EZ)

**Tuning** Cable/RF input, switchable with optional RF-AB RF A-B Switch  
Type: ATSC, NTSC and Clear QAM DTV Standards: (1080i/720p/480p/480i)  
Aspect Ratio: Adjustable, variety of modes for 16:9 and 4:3 broadcasts  
Captioning: Analog and Digital, set by program for size, font, and attributes

**Front Panel** Power, Menu, Setup and Select buttons  
Up and Down (Channel), Left and Right (Volume) buttons  
Text Display, white text on blue LCD, channel and setup information  
IR Sensor, Mini USB Port for control and drag-and-drop firmware updates

### Back Panel

**RF Input** Air/Cable, 'F', female, 75 ohm impedance, -10 to 25 dBmV typical  
Supports dual Cable and Air tuning with optional RF-AB RF A-B Switch

**Control** **Refresh Rates:** 60 or 59.94 Hz for 1080i/720p, 60 Hz for 1080p  
**RJ-45 10/100 Ethernet:** Ethernet, Web page:  
**RS-232:** 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  
**IR:** 3.5 mm stereo input for external IR sensor or wired IR, discrete codes available

**Air/Cable** 3.5 mm output to operate the optional RF-AB RF A-B Switch

**Power** 2.1mm coaxial jack (inside center conductor positive)  
1 A maximum, 11 to 14 VDC, 12 VDC typical

**Service:** USB port for HD processor firmware upgrades

**Includes** HD2-RC IR Remote  
Switching power supply, 1.5 A 12 VDC, option for 6A supply for up to 3 tuners

**Options** RK1 Single Rack Kit, 1RU  
RK2-EZ Dual Rack Kit, 1RU  
RF-AB RF A-B Switch, self-terminating, closure controlled  
CC-COM RS-232 Null Modem Cable  
IR-RXC External IR Receiver

*CR products feature a full three-year warranty.*