

FOX

RX1 Transcoder

RX1/BAS/FOX/CABLE



Multi Codec Professional Transcoder

The MK RX1 is a multi-codec multi-service professional receiver/transcoder specifically designed to receive HD HEVC content from FOX and transcode that content to either MPEG-4 AVC or MPEG-2 HD outputs for transmission through MVPD plants.

Additionally, the unit is capable of passing through UHD HEVC content when available.

Product Overview

HD Transcoding

The RX1 as configured for FOX can transcode up to 6 HD HEVC 4:2:0 to MPEG-4 AVC or MPEG-2 HD and produce compressed outputs via either ASI or IP.

UHD Pass Through

When present in the transport stream, the Fox RX1 transcoder can also pass through a UHD HEVC signal on either ASI or IP.

HDR and WCG

UHD (4k) services are expected to rapidly evolve to include High Dynamic Range (HDR) and Wider Color Gamut (WCG). RX1 supports the relevant HDR and WCG standards as they are formalized.

Unit Features

The following features are available:

- Satellite or IP input
- Quad 1Gb IP I/O
- ASI output
- Supports HD to HD transcoding or UHD pass through
- HEVC, MPEG-2, MPEG-4 AVC
- Director 128
- Dual CAM slots
- Audio codecs:
 - MPEG-1 Layer II
 - Dolby Digital
 - Dolby Digital Plus
- Transport Stream passthrough (ASI or IP output)
- Web based user interface
- Dual hot swappable power supplies

Configuration



Specifications

Inputs and Control

IP Input	<p>Connector: 4 x RJ 45 — Format: 100/1000BaseT</p> <p>Max. input rate: 208Mbps</p>
Satellite Input	<p>4 independent demodulators</p> <p>Frequency range: 950MHz to 2150MHz DVB</p> <p>FEC decode</p> <p>LNB max. 19V</p> <p>Connector: 4 x BNC (F) 75 Ohm</p> <p>Modulation: DVB-S, DVB-S2, DVB-S2X</p> <p>QPSK, 8PSK, 16PSK*, 32PSK*</p> <p>Packet length: 188/204 byte packets</p> <p>Standard: EN50083-9</p>
External Clock Reference input	<p>Connector: BNC (F) 75 Ohm</p> <p>Standard: EN50083-9</p>
Control	<p>Front panel keypad and confidence LCD</p> <p>Web browser interface</p> <p>REST interface</p>

Outputs

ASI Output	<p>Connector: 4 x BNC (F) 75 Ohm</p> <p>Max. output rate: 208 Mbps</p> <p>Packet length: 188/204 byte packets</p> <p>Standard: EN50083-9</p>
IP Output	<p>Connector: 4 x RJ45 — Format: 100/1000BaseT</p>

*requires additional value pack

Video and Audio Options

Video Formats	2160p50, 2160p59.94 1080p50, 1080p59.94, 1080i25, 1080i29.97, 720p50, 720p59.97
Video Output UHD Pass-Through/HD Transcode	1 x UHD (4k) HEVC Main/Main 10 4:2:0 @ Level 4.2 (pass-through) 6 x HD MPEG-4 AVC Main/High 4:2:0 Profiles @ Level 4.2 6 x HD MPEG-2 Main Profile @ High Level Maximum number of transcoded outputs is 6, can be mixed between MPEG-4 AVC and MPEG-2
HDR -> SDR Conversion	HDR HLG10 or HDR PQ10 to BT.709 conversion** ** available on the monitor port only
Audio Output	MPEG-1 Layer-II Dolby Digital® (pass-through) Dolby Digital® Plus (pass-through) Audio sampling rate: 48 kHz

Content Security

Dual DVB Common Interface	Enables support for all major CAM modules Multi-service decryption Up to 2 CAM modules per option card
BISS Decryption	Decryption of BISS v1 and v2*, Mode 1 and E
Director	A full Conditional Access system to secure delivery of digital content encrypted using rotating keys that are distributed within the transport stream

*requires additional value pack

Physical and Power

Dimensions (W x D x H)	440 x 560 x 44mm (17.2 x 22 x 1.75" approx.)
Weight	10.5 kg (23 lbs) unpopulated
Input Voltage	110 VAC / 240 VAC
Power Consumption	550 Watt max. 175 Watt nominal.
Cooling	Integrated fans

Environmental Condition

Operating Temperature	0°C to 50°C (32° to 122°F)
Storage Temperature	-20°C to 65°C (4° to 150°F)
Relative Humidity	5% to 95% (Non-condensing)

Compliance

Compliance	CE Marked in accordance with all applicable EU Directives
EMC Compliance	EN55032, EN55024 and FCC CFR47 Part 15B Class A
Safety Compliance	EN60950-1 and IEC60950-1



Provided by: Mega Hertz | 800-883-8839 | info@go2mhz.com | www.go2mhz.com

<https://www.go2mhz.com/product/fox-rx1-satellite-transcoder/>