

# 160RM

## Remote Monitoring & Streaming Solution

Evertz® 160RM Remote Monitoring System offers a reliable way to monitor remote sites from a central location. Customers of the 160RM products include Cable, IPTV and Satellite Head Ends. The challenge they face is determining

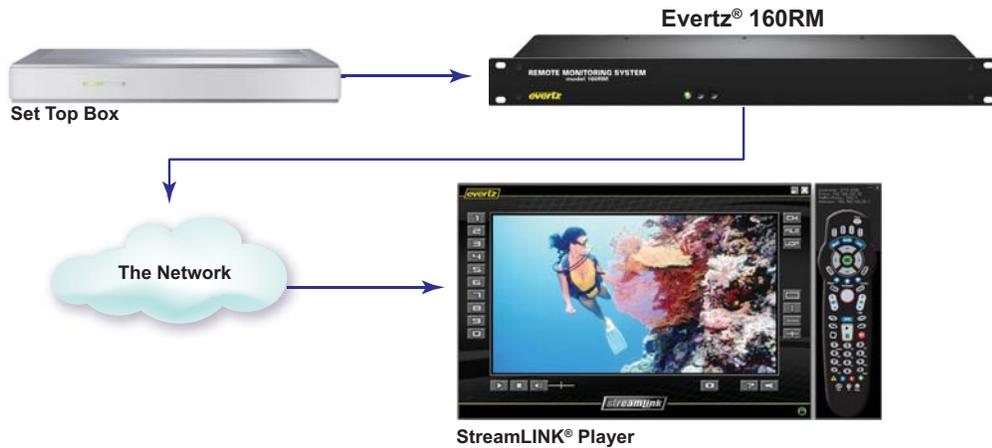
the quality of service at the edges of their network where they don't have any means of viewing their content. The 160RM solves this challenge by offering a simple way to stream the audio/video of any channel on the network back via IP.



### ►The 160RM Platform

The 160RM is outfitted with the ability to easily interface with a consumer STB using standard connectors and an IR interface to replicate the "remote" control of the STB. The IR interface offers a simple way to manually select a channel or scan through hundreds of channels looking for problems. The control protocols for the STB can be learned by the 160RM and can include advanced control such as special menus and VOD services.

The 160RM employs technology from Evertz® extensive and award winning broadcast monitoring family which includes MVP® and VIP™. By utilizing the same industry proven technologies with more than 20,000 installs worldwide, the 160RM is the most advanced and most comprehensive remote monitoring solution available.



### ►Features and Benefits

- Multicast streaming of captured audio and video inputs via IP to a central location or multiple locations using Evertz® StreamLINK® technology
- Optional remote manual tuning of channels for troubleshooting purposes
- Automatic channel cycling, using an advanced cycling algorithm for best coverage and channel line-up
- Optional on-board storage for recording captured content
- IR interface control over a wide range of STBs
- Configurable content analysis of video, audio and metadata
- Optional freeze, black and macro block detection for video quality analysis
- Error reporting via SNMP to a central location or multiple locations

### ►Advanced Monitoring

- Video Loss
- Freeze Detection (Evertz® patented technology)
- Black Detection (Evertz® patented technology)
- Audio Loss
- Audio Over/Distortion Detection
- Audio Under/Quiet Detection

### ►Specifications

#### Analog Video Inputs (user-selectable):

- Composite input (single RCA)
- Component (three RCAs)
- S-Video (DIN connector)

#### Video Formats Supported:

- NTSC/PAL analog video (using composite, S-Video, component input)
- 1080i/50, 1080i/60, 720p/50, 720p/60 (all using component input)

#### Analog Audio Inputs

- Left and Right audio inputs (two RCAs)

#### Audio Formats Supported:

- Left and Right stereo analog audio (uncompressed)

#### IP/Streaming Interface:

- 10/100 Ethernet port
- Multicast / Unicast network topology support (UDP)
- H.264 SD compression
- 800kbps up to 6Mbps (recommended 2Mbps)

#### IR Interface:

- IR blaster interface (included with 160RM)
- 3.5mm plug-style adapter at back of unit
- IR emitter adhered to front of STB

#### Power:

- 30W power consumption
- 12V DC input (unit comes with 110V/240V AC to 12V DC adapter)
- Optional -48V DC input option

#### Physical:

- 19" rack mountable
- 1RU height

### ►Ordering Information

160RM

Remote Monitoring & Streaming Solution  
Supports a single STB connection and control interface with IP streaming (includes AVM monitoring)

#### Ordering Options

- +48V
- +CCA
- +MBD
- 48V DC input option
- Channel Cycling
- Macro Block Detection