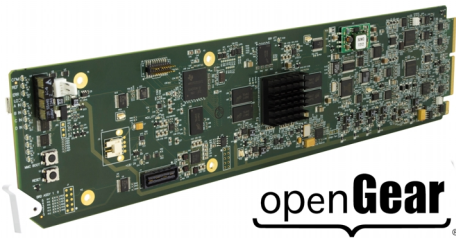


# 9971-MV18-4K • 12G/6G/3G/HD/SD 18-Input Expandable UHD Multiviewer



The Cobalt® 9971-MV18-4K 12G/6G/3G/HD/SD 18-Input Expandable UHD Multiviewer is part of Cobalt's next generation of advanced UHD high-capacity channel multiviewers for the openGear® platform. Full-flexibility design accommodates 12G/6G/3G/HD/SD-SDI and UHD1 3840x2160 Square Division (SDQS) or Two-Sample Interleave (2SI) quad 3G-SDI based formats as I/O, and can output ST 2082 12G-SDI for single-wire 4K transport. Using 12G-SDI "single-wire" inputs, up to 18 discrete PIP images can be supported. With both 12G-SDI and quad 3G-SDI inputs, the 9971-MV18-4K can downconvert 12G and quad UHD. The 9971-MV18-4K provides up to two HDMI 2.0 outputs for economical 4K video monitoring.

The 9971-MV18-4K suite offers unprecedented ease of setup and also offers an unprecedented ease of use. Fully-flexible layouts using any of several one-button template presets or fully customizable layouts using easy to use sizing/positioning custom controls. Any template layout or custom layout changes can be done "on-the-fly" in real time, without tedious setup or layout programs like many other multiviewer products. Graphical overlay features include user

text "burn-in" insertions that can correlate the images displayed with contextual information. Numerous one-button preset layout formats are available, as well as custom layouts as desired. Custom layout and configuration settings can be saved to user presets, allowing the custom settings to be recalled with one click.

Multiple 9971-MV18-4K cards can be cascaded to provide splits greater than the base 18-split. The 9971-MV18-4K PIP18 input can be used in a cascaded chain of 9971-MV18-4K cards that provides multiviewer layouts of up to 8x8 (64:1). The QuickSet grid definer precisely and easily sets up a multiviewer grid where columns and rows of each of the cards PIPs are arranged to work together in a cascaded aggregate arrangement. Low-latency processing allows multiple 9971-MV18-4K cards to be cascaded without significant accumulated delays within the chain. The high-density openGear® design allows for up to five 9971-MV18-4K cards to be installed in one 2RU openGear® frame. Card control/monitoring is available via DashBoard user interface, integrated HTML5 web interface, SNMP, or Cobalt's RESTful-based Reflex protocol.

## FEATURES

High-density openGear comprehensive UHD multiviewer solution

Allows easy, real-time "on the fly" custom layout changes without needing setup or layout programs

Supports Square Division (SDQS) and Two-Sample Interleave (2SI) quad UHD formats

Easy to configure PIP sizing and borders

DashBoard Output Preview function provides display of regularly-sampled screen captures in the device DashBoard page. Provides remote-access program video content/presence and multiviewer layout confidence monitoring via the device's DashBoard display without needing collocation with the device or its input/output video signals.

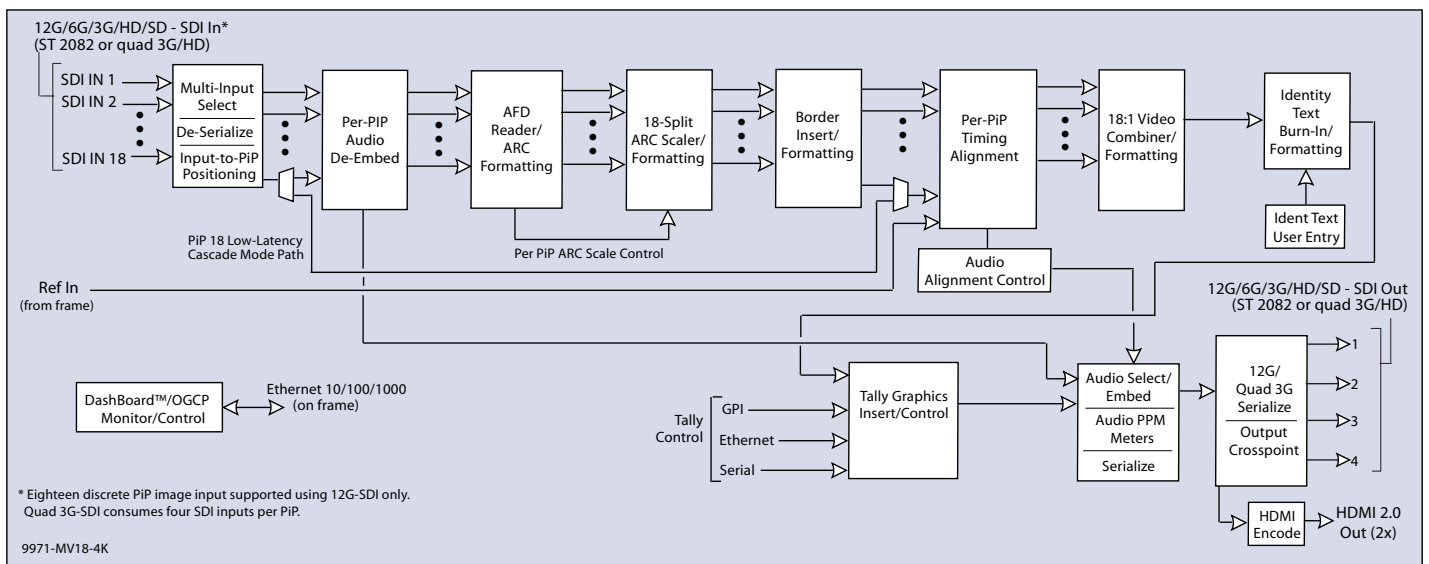
Cascading Mode and QuickSet grid definer offers expanded multiviewer functions using multiple cascaded (daisy-chained) 9971-MV18 cards (up to 64:1). Two cards can provide a 35:1 multiviewer, with just 4 cards providing a 64:1 multiviewer.

Full embedded audio processing with user delay offset

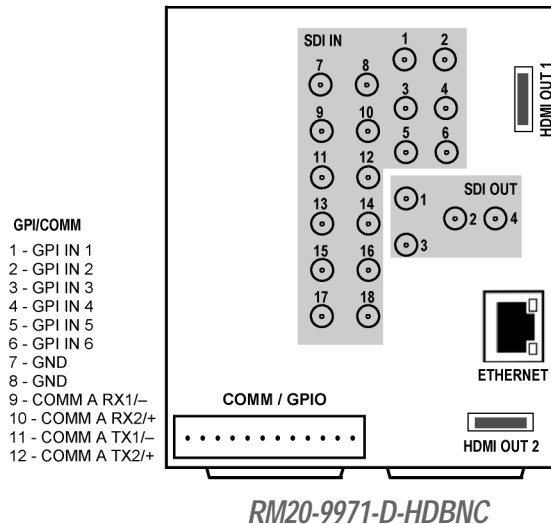
UHD 3840x2160 output raster support

Remote control/monitoring via DashBoard™ software, OGCP-9000 remote control panels, integrated HTML5 web interface, SNMP, or Cobalt's RESTful-based Reflex protocol

Five year warranty



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## SPECIFICATIONS

### 12G/6G/3G/HD/SD-SDI Inputs/Outputs

(18) 75Ω inputs (max)

(4) 75Ω outputs (max)

SDI Formats Supported: SMPTE ST2082-1, ST2082-10, 424M, 292M, SMPTE 259M-C. All inputs/outputs 12G compliant and SDQS/2SI quad 3G compliant.

Return Loss:

- > 15 dB up to 1.485 GHz
- > 10 dB up to 3 GHz
- > 7 dB up to 6 GHz
- > 5 dB up to 12 GHz

Input Cable Length:

- 60m Belden 1694A cable at 11.88 Gbps
- 120m Belden 1694A cable at 2.97 Gbps
- 240m Belden 1694A cable at 1.485 Gbps
- 400m Belden 1694A cable at 270 Mbps

Output Signal Level: 800 mV ± 10%

DC Offset: 0 V ± 50 mV

Rise and Fall Time @ 11.88 Gbps: < 45 ps

Alignment Jitter (12G/3G/HD/SD): < 0.3/0.3/0.2/0.2 UI

### Audio Output

16-ch embedded. Per-PIP select allows routing of PIP input 16-ch embedded audio to combined SDI output. HDMI output tracks with group 1/2 audio as selected for SDI embedded audio output.

### HDMI Output

(2, max) HDMI 2.0 Output; type A standard connector

### Frame Reference Input

(2) reference from frame bus. SMPTE 170M/318M "Black Burst", SMPTE 274M/296M "Tri-Level"

## ORDERING INFORMATION

**9971-MV18-4K** 12G/6G/3G/HD/SD 18-Input Expandable UHD Multiviewer

**RM20-9971-D-HDBNC** 20-Slot Frame Rear I/O Module (Double-Width) (18) 12G/6G/3G/HD/SD/SD-SDI Inputs, (4) 12G/6G/3G/HD/SD/SD-SDI Processed Outputs, GPIO/COMM, (2) HDMI 2.0 Output (type A standard), 10/100/1000 BaseT Ethernet Port (All coaxial connectors HD-BNC.)