

## HD/SD Multi Viewer

# MV-160HS

**The MV-160HS is a multi viewer that supports both HD and SD. It includes title, tally, and audio level display functions. VGA/DVI high-resolution output is also available as an option.**



16-split mode (MODE 1)



Group Outputs (4 groups)

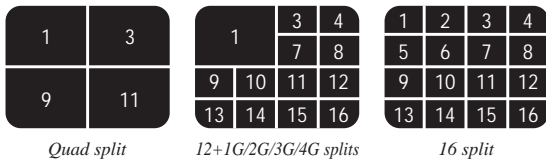


- Supports input of up to 16 HD-SDI or SD-SDI signals (input of asynchronous signals is not supported; mixing of HD/SD signals and different formats is not allowed)
- All input video can be fed to any selected split-screen frame
- Display patterns: 4/12+1G/2G/3G/4G/16 split-screens, 2+8 and 3+4 split-screens also available with menu settings
- Group output: In addition to regular split-screen output, 4-line group output is provided (full or 4 split-screen display)
- Display layout: Selectable from two display types
  - MODE 1: Displays various information outside the input video frame
  - MODE 2: Displays various information inside the input video frame
- Title display function: Up to 8 characters can be displayed as a title on each channel screen
- Tally display function: Frame, title color, and marker can be selected for tally display
- Audio level display function: Enables level display of SDI embedded audio signals (up to four groups can be displayed simultaneously)
- Enables external control over the remote control terminal or RS-232C/485 interface
- In addition to SDI output, DVI and VGA outputs are available as an option
- Redundant power supply unit is available as an option

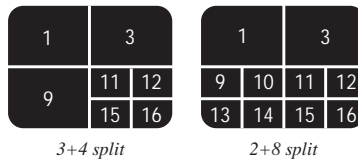
## Specifications

● Standard	HD: 1080i/60, 1080i/59.94, 1080i/50, 720p/59.94, 720p/60 SD: 525/60, 625/50 *HD and SD signals and formats cannot be mixed.
● Sampling Frequency	HD SDI Y: 74.25MHz, 74.25/1.001MHz, C: 37.125MHz, 37.125/1.001MHz SD SDI Y: 13.5MHz, C: 6.75MHz
● Quantization	10-bit
● Video Input	HD SDI: 1.485Gbps or 1.485/1.001Gbps, SD SDI: 270Mbps, 75Ω, 16ea., BNC
● Phase Synchronization Range	1 line (±1/2 line)
● Video Output	HD SDI: 1.485Gbps or 1.485/1.001Gbps, SD SDI: 270Mbps, 75Ω, 6ea., BNC (Split out x 2. Group out x 4)
● Video Output (option)	DVI: DVI-D connector 24-pin (female) digital, 1 output *During HD-SDI input only VGA: D-sub 15-pin (female) analog, 1 output *During HD-SDI input only
● Reference Input	BB: NTSC: 0.429Vp-p/PAL: 0.45Vp-p or Tri-Level Sync: ±0.3Vp-p, 75Ω or loopthrough. 1ea., BNC (termination required)
● Embedded Audio Signal Processing	The embedded audio signals pass through only when the full-size screen is displayed and not when the screen is divided into sections. *No audio muting and cross fading functions are provided during input switching
● I/O Delay	During split-screen display: 2 frames During full-size screen display: Minimum delay (1H or less)
● Display Modes	Presets: Full/4/12+1G/12-2G/12+3G/12+4G/16 split-screens *2+8 and 3+4 split-screens also available with menu settings Group output: Full/4 split-screen
● Display Layout	MODE 1: Displays without overlapping the title and other objects on the video MODE 2: Displays by overlapping the title and other objects on the video
● Title Display	Up to 8 characters (single-byte alphanumeric characters and symbols) for each input, Character colors: 16, Size: 3 levels (MODE 2 only), Position: 8 levels (MODE 2 only)
● Frame Display	Individual settings possible for each input, 16 colors
● Tally Display	Frames: red/green/orange, Marker: red/green/orange, Title color: red/green/orange
● Audio Level Display	Level display of embedded audio signals, up to 4 groups can be displayed for each input
● Interfaces	RS-232C: 9-pin D-Sub (male inch screw), 1 port RS-485: 9-pin D-Sub (female, inch screw), 1 port TALLY IN: 50-pin D-Sub (female, inch screw), 1 port, TTL negative logic level signals or make contact REMOTE: 37-pin D-Sub (female, inch screw), 1 port, TTL negative logic level signals or make contact
● Temperature/Humidity	10°C - 40°C/30% - 90% (no condensation)
● Power/Consumption	100VAC - 240VAC±10%, 50/60Hz/Approx. 180VA (Standard package)
● Dimensions/Weight	430 (W) x 88 (H) x 505 (D) mm, EIA 2RU/Approx. 14kg (Standard package)
● Accessories	Operation manual, AC cord, Rack mount brackets
● Options	MV-1600UT: DVI/VGA output card MV-160PS: Redundant power supply unit

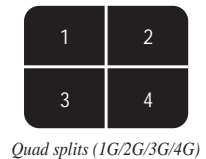
### Display modes (presets)



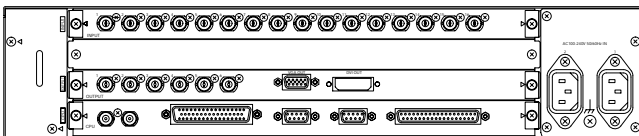
### Display modes (menu settings)



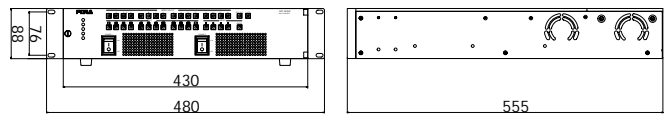
### Display mode (group outputs)



### Rear View



### External Dimensions



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