

GV Matrix

Industry's Most Compact Advanced SDI Router with Integrated Multiviewer



GV Matrix offers the most space efficient platform for clean and quiet SDI hybrid routing with integrated processing, including Kaleido multiviewing for live production, playout and general purpose infrastructure.

Up until now, there has not been a compact router designed for live production in broadcast, which can offer clean and quiet hybrid video and audio switching along with integrated multiviewing. With the introduction of GV Matrix by Grass Valley, a Belden Brand, compact routers reach a new level of functionality with integrated multiviewers and the ability to handle hybrid routing.

GV Matrix delivers a compact cost effective solution to route and monitor audio and video, providing a complete audio and video workflow in a single frame. GV Matrix offers unique clean video and quiet audio routing perfect for live productions in a high density platform. GV Matrix also supports the industry proven, future-ready Kaleido multiviewer to deliver the highest quality monitoring with the most flexible layout available.

Advanced Routing

Grass Valley's GV Matrix offers advanced routing features for SD/HD/3G SDI routing in a compact frame. GV Matrix supports discrete audio routing, including de-embedding and re-embedding of audio signals from embedded sources or MADI I/O. GV Matrix also supports ASI routing.

GV Matrix fits up to 144 inputs and 144 outputs in a compact 4 RU frame, providing an ideal choice for small facilities, trucks or mobile units, stadiums or any location that is space-constrained such as editing suites, post-production and playout facilities.

Quiet Audio Switching

Another broadcast feature built into the GV Matrix is quiet audio switching. The ability to V-fade audio removes the presence of unpleasant "pops" when audio channels are switched, ensuring quiet audio transitions.

Signal Processing

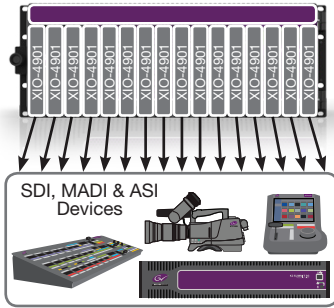
GV Matrix also supports MADI I/O, audio de-embedding/embedding, and monitoring including multiviewing and signal probing. The built-in, high quality multiviewer leverages industry-proven Kaleido technology which is known for its exceptional picture quality, layout flexibility and rich feature set. The advanced monitoring capabilities and signal probing make GV Matrix ideal for production and playout applications.

Simplify Routing & Reduce Cabling

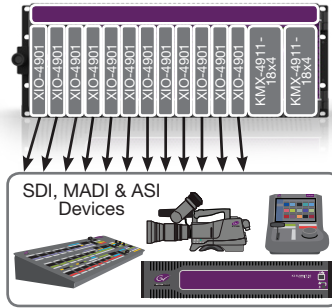
The exceptional functional integration of GV Matrix can streamline your infrastructure by minimizing the number of devices, resulting in less space, weight, power and cabling.

GV Matrix is compatible with NV9000, GV Convergent and other third-party router control systems.

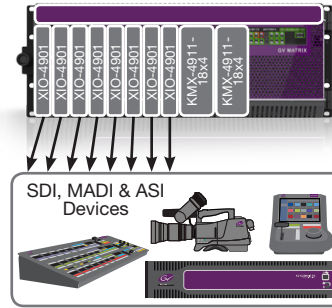
GV Matrix compact hybrid routers are available in the following fully assembled configurations:



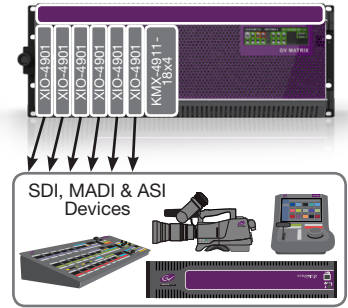
GVM-144: A 144x144 Hybrid SDI Clean/Quiet Router



GVM-108-2M18x4: A 108x108 Hybrid SDI Clean/Quiet Router with two Multiviewers (18x4)



GVM-72-2M18x4: A 72x72 Hybrid SDI Clean/Quiet Router with two Multiviewers (18x4)



GVM-54-1M18x4: A 54x54 Hybrid SDI Clean/Quiet Router with Multiviewer (18x4)

KEY FEATURES

- Provides 3G/HD/SD SDI routing of up to 144x144 signals
- Quiet audio switching of up to 2,304x2,304 audio channels
- Highly compact routing architecture for space constrained infrastructures
- Small 4 RU footprint, typically requiring 40% less rack space than competitive systems with comparable weight reduction
- Compatible with the large installed base of Densité signal processing modules for production in a box
- Functional integration provides superior performance delivering reduced delay, fewer components and a better user experience

- Touchscreen frame controller
- Open control protocol (NP0016/0017)
- Industry proven built-in Kaleido multiviewer for high-quality picture and graphics monitoring
- Designed with live production operations in mind
- Compatible with NV9000, GV Convergent and other third-party router control systems

Multiviewer

- Fastest processing on the market — only 1 field of latency
- Future ready with 4K output for UHD displays
- Playout level probing (black, freeze, silence, captions/subtitles and Dolby-E metering)

SPECIFICATIONS

Mechanical

Dimensions:
4 RU x 485 mm (19 in.) x 286 mm (11.25 in.) with connectors

Weight:
7.1 kg (15.7 lbs.), 1 PSU and 1 controller
~19.5 kg (~43 lbs.), fully populated (16 I/O or processing modules)

Power

Input range:
AC 50-60 Hz, 100-240 V

Rating:
700W

Control and Monitoring

Communication ports:
Dual Gigabit Ethernet

Alarm:
GPI contact

Cooling

Variable speed fans:
2 sets of 3 fans on the rear of the frame
1 on each PSU

Operating temp. range:
0°- 40° C (32°- 104° F)

ORDERING

GVM-144	144x144 Hybrid SDI Clean/Quiet Router
GVM-108-2M18x4	108x108 Hybrid SDI Clean/Quiet Router with 2 Multiviewers (18x4)
GVM-72-2M18x4	72x72 Hybrid SDI Clean/Quiet Router with 2 Multiviewers (18x4)
GVM-54-1M18x4	54x54 Hybrid SDI Clean/Quiet Router with Multiviewer (18x4)
GVM-144-OPT-MDX	Bundle of 16 XIO-4901-OPT-MDX licenses
GVM-108-OPT-MDX	Bundle of 12 XIO-4901-OPT-MDX licenses
GVM-72-OPT-MDX	Bundle of 8 XIO-4901-OPT-MDX licenses
GVM-54-OPT-MDX	Bundle of 6 XIO-4901-OPT-MDX licenses

SFP-3G-20UT-L	Dual HD/3G SDI long reach output SFP with DIN connector
SFP-HDMI-OUT	Single HDMI type D output SFP
HDMI-D-A-2	HDMI type D to type A cable with retention lock (2m)
SFP-T-S13-LC	Single Tx fiber module at 1310 nm with LC connector
SFP-TT-S13S13-LC	Dual fiber Tx (output) cartridge at 1310 nm with LC/PC connector
SFP-TT-W13W15-LC	Single fiber Dual Tx Cartridge at 1310 & 1550 nm with WDM LC/PC connector

Software options are required for every GV Matrix kit that desires to use audio embedding/de-embedding.

Multiple control options for the GV Matrix include GV Convergent, NV9000, iControl or the RCP-200 panel.



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