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AJA
VIDEO SYSTEMS

KUMO 3232
Compact 32 x 32 3G-SDI Router

3232 Connections

RS-422
RS-422 remote control via 9-pin D-connector with basic support for Grass Valley Native Protocol support

LAN Connection
RJ-45 10/100/1000 LAN Connector - internal web server, Bonjour support

USB Connection
USB port to easily configure the router IP address and simplify network configurations

Fully Redundant AC Power Supplies
Two independent 12VDC inputs provide safe operations. Power status can be checked from a LAN attached browser

Reference Input with Loop Through
The Reference Input synchronizes the router switching point per SMPTE specifications. The Reference Input supports Blackburst for SD and tri-level sync for HD

3G/HD/SD-SDI Inputs and Outputs
All inputs and outputs, 3G, HD-SDI, or SD-SDI (SMPTE-259/292/424)

KUMO 3232 offers increased capacity for larger configurations while maintaining a mere 2RU profile. Built to the same quality standards as all AJA KUMO products, KUMO 3232 is the ideal choice for any situation where a balance of size and capacity are critical such as mid-sized post facilities and mobile trucks.

Compact Routing

Just 1RU, 2RU or 4RU high and less than 2" deep, KUMO fits in the most space constrained locations, offering flexible routing with support for 12G-SDI or 3G-SDI I/O that exceeds SMPTE specifications.

The powerful crosspoint routing matrix allows the mapping of any input to any output. Signals can also be sent to multiple outputs without the need for additional patch panels or distribution amplifiers.

Designed for critical broadcast, production and post environments, KUMO hardware uses premium components coupled with dual redundant power supplies to ensure uptime in the unlikely event of a power supply failure.

Simple Configuration

KUMO's USB ports easily configure the router's IP address and simplify the initial setup of network configurations.

KUMO routers are network ready and support powerful HTTP control and monitoring via a web browser without the need for any additional software.

KUMO's auto-detect Bonjour®/Zeroconf protocols mean that network configuration is automatic, connect KUMO to your network and the system will self configure, ready for use. Alternatively, standard network configuration allows access to each KUMO via its assigned IP address. Once connected to KUMO using a web browser, you can configure the full TCP/IP settings, select and name KUMO routers, name sources and destinations, and perform all operational functions.

KUMO Control Panels

KUMO CP control panels offer up to 32 source and 32 destination buttons for direct access to all KUMO inputs and outputs. Salvos support simplifies switching operations by recalling multiple sources to specific destinations. Salvos are stored in the KUMO router and can be recalled via the KUMO router's Web UI, Grass Valley Native Protocol over Ethernet, RS-232, and/or directly on the KUMO CP/CP2 Salvos buttons.

Connecting via Ethernet to the same network as KUMO routers, KUMO CPs enable full control from any location and up to four KUMO routers can be controlled from a single control panel. For stand-alone configurations, KUMO hardware can be connected directly via RJ-45 cables and KUMO software will automatically assign routers to control panel delegations.

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Tech Specs

Video Format
- 270 Mbps, 1.5 Gbps, 3 Gbps SDI
- 270 Mbps DVB-ASI
- Format agnostic, 125 Mbps - 3 Gbps

Video Input Digital
- 3G-SDI Inputs
- 32x BNC, SMPTE-259/292/424

Video Output Digital
- 3G-SDI Outputs
- Noninverting
- 32x BNC, SMPTE-259/292/424

Ancillary Data
- Passes all SDI embedded ancillary data including audio

Salvo
- Up to 8 Salvos can be configured and saved in each KUMO router

Cable Equalization (Belden 1694A)
- 3 Gbps, up to 140m
- 1.5 Gbps, up to 200m
- 270 Mbps, up to 400m
- Automatic operation

Reclocking
- 270 Mbps, 1.483 Gbps, 1,485 Gbps, 2.966 Gbps, 2.970 Gbps - Auto Select
- All other rates are passed through and not reclocked

Switching Modes
- Single, Dual, and Quad Link modes
- Switches in vertical blanking per SMPTE RP-168

Control Panel Compatibility
- AJA KUMO CP – 1RU X-Y Ethernet control panel
- AJA KUMO CP2 – 2RU X-Y Ethernet control panel

Reference Input
- External, 2x BNC
- Looping, nonterminating
- Blackburst or tri-level sync

Network Interface
- 1x RJ-45, 10/100/1000 Ethernet
- Supports AJA KUMO Ethernet control panels, direct connect or networked
- Grass Valley Native Protocol
- Embedded web server for remote control

Machine Interface
- 1x DB-9 Female, RS-422
- Grass Valley Native Protocol
- 9-pin D-connector pinout is as follows:

1	GND
2	TX-
3	RX+
4	GND
5	No Connection
6	GND
7	TX+
8	RX-
9	GND
Shell	GND

Size (w x d x h)
- 2RU - 17.4" x 1.54" x 3.5" (441.96 x 39.12 x 88.9 mm)

Weight
- 4.6 lb (2.1 kg)

Power
- 10-14VDC regulated, 18 W typ, 43.2W max, power supply required, included with purchase
- AC Adapter: 100-240VAC, 50/60 Hz, universal input