

Magenta Research 2330001-01 Matrix switch scalable to 160x160 (simplex)/ I/O 160 (Duplex)

This listing is for 2330001-01 Switcher only. Use description below as a general reference.

Each configured Voyager transmitter and receiver is also compatible with all Voyager Series matrix switchers. The VG-Matrix 160x delivers a modular and scalable full crosspoint matrix switching platform which can be field configured in increments of 8 inputs and/or outputs up to a maximum of 160x160.

Fiber I/O cards connect seamlessly to the fiber inputs or outputs of Voyager transmitters and receivers delivering matrix switching and long distance extension in one platform.

Fully populated, a 160x Voyager VG-Matrix operates as a 160x160 in simplex mode. In duplex mode, which supports two-way RS-232 and HDCP, the switch can operate as 1x159, 2x158, 159x1, 158x2, or *any possible combination in between*, thanks to Magenta's Flex I/O technology.

An optional, integrated touch-screen controller can also be factory installed (as pictured above) in a VG-Matrix 160x for additional ease of use. The switch can also be controlled via Magenta's proprietary MaGUI software from a PC using an RS-232 port.

Features

- Full-matrix crosspoint switching with Fiber I/O or Fiber I/O with HDCP
- Modular & scalable from 8x8 to 160x160
- Switching and fiber extension in one platform
- *FiberMAX* Engine for high-bandwidth multi-signal transmission from source to display over fiber
- Uncompressed multi-format digital & analog video at 1920x1200 (HDMI, DVI, VGA, YUV, Y/C, Composite) determined by connected VG-TX, VG-RX
- Multi-format audio and RS-2322 determined by connected VG-TX, VG-RX
- Auto format conversion between video & audio signal types
- Distance range of up to 18.75MI/30KM3 determined on input and output
- Mixed singlemode and multimode fiber support4
- Advanced EDID management and full HDCP compliance
- Dual redundant, hot swappable power supplies with dual AC inputs
- Optional touch screen control panel
- Hot plug support
- Magenta quality and reliability for 24/7 operation

Distance Range:

Multimode: 1000ft/300m (50um), 3300ft/1KM (OM3), 6600ft/2KM (OM4)

Singlemode: 18.75MI/30KM

Modes of Operation:

Simplex: Requires only one LC Fiber

- Video (without auto-DDC or HDCP)
- Audio, Unidirectional RS-232 and IR

Duplex: Requires duplex LC fiber (two strands)

- Video with auto DDC and HDCP (with HDCP I/O boards)
- Audio and Bidirectional RS-232

Configurations and modularity:

Simplex mode:

- Configurations - 8x8 - 160x160
- I/O upgradability - 8x8 (each I/O card adds 8 inputs and 8 outputs; maximum 20 cards)

Duplex mode:

- Inputs and output are interchangeable and are auto-detected
- Configurations - I+O = 8 - 160 (Inputs + outputs should be less than the total number of duplex ports (e.g. 5x3, 70x50, 80x80, 120x40 etc)
- I/O upgradability - 8 duplex ports, I+O = 8 (each I/O card adds 8 duplex ports each of which can be used as an input or output; e.g. 0x8, 3x5, 7x1 etc.; maximum 8 cards)

Footnotes:

1. Simplex mode configurations. Duplex modes are half the configuration but inputs and output modules are interchangeable in non-HDCP applications E.g. an 8x I/O card is 8x8 in simplex mode but can be configured as 4x4, 2x6, 5x3 etc. in duplex mode
2. Bidirectional RS-232 requires duplex fiber. Bidirectional RS-232 and audio is supported in 1:1 and 1:n distribution modes.
3. 300m (50um cable), 3300ft/1KM (OM3 cable), 6600ft/2KM (OM4 cable), Operating distances are approximate and base on typical distances. The maximum distance may vary due to many factors including fiber type, bandwidth, connector splicing, losses and dispersion

4. Determined by receiver type. The attached receiver includes an extra MM or SM fiber module for the transmitter side fiber output.