Magenta Research 2330002-01 Matrix switch scalable to 48x48 (simplex)/ I/O 48 (Duplex)

This listing is for 2330002-01 Switcher only. Use description below as a general reference.

The Voyager VG-Matrix 48x is a high performance full crosspoint matrix switching and extension platform for uncompressed hi-definition video audio and RS-232 control signals over fiber optic cabling. When combined with Voyager series transmitters and receivers, the VG-Matrix can enable any end to end configuration for AV signal distribution.

The VG-Matrix 48x is modular and scalable and can be field configured in increments of 8 inputs and/or outputs up to a maximum of 48x48. 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 48x Voyager VG-Matrix operates as a 48x48 in simplex mode. In duplex mode, which supports two-way RS-232 and HDCP, the switch can operate as 1x47, 2x46, 47x1, 46x2, or *any possible combination in between*, thanks to Magenta's Flex I/O technology.

Features

- Full-matrix crosspoint switching with Fiber I/O or Fiber I/O with HDCP
- Modular & scalable up to 48x481
- 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 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
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 or DA includes an extra MM or SM fiber module for the transmitter side fiber output.