

MX48^{router}

6.22 Gbps Router and Non-Blocking Matrix Switch



- **Fiber Optic Non-Blocking Matrix Router**
- **Configurations include; 16 x 16, 32 x 32, 48 x 48**
- **Compatible with all Thinklogical's Video and KVM extension systems**
- **Each Connection Supports 6.22 Gbps and can handle digital video resolutions up to 3840 x 2400 @ 60 Hz.**
- **Single-Mode and Multi-Mode Fiber Optic Capability**
- **Redundant, Hot-Swappable, and Current Sharing Power Supplies Modules**
- **Hot Swappable, 16 Port Scalability for In and Out Cards**
- **Hot Swappable SFP+ Optical Port Connections**
- **Protocol Agnostic - route a variety of signals DVI, Dual-Link DVI, 3G, HD, SD SDI, Dual -Link SDI, USB HID, USB 1.1, USB 2.0 (high speed, full 480 Mbs), FireWire, serial, PS/2, and audio**

A Protocol Agnostic Router In a Compact 3RU Frame

The MX48 is a compact, high performance router and non-blocking matrix switch for complete, end-to-end routing of video and peripheral signals over multi-mode or single-mode fiber optic cable. Being protocol agnostic the router supports a variety of formats, DVI, Dual-link DVI, 3G, HD, SD SDI, Dual-link SDI, USB HID, USB 1.1, USB 2.0 (high speed, full 480 Mbs), FireWire 800, serial, PS/2 and bi-directional audio. This highly reliable and resilient router is expandable from 16 x 16 up to 48 x 48. This allows for flexible deployment configurations for a variety of small to medium sized computing environments such as corporate conference rooms, hospital or higher education presentation rooms, regional or local broadcast facilities, or small post production houses.

The MX48 Provides Performance and Reliability for Mission Critical Applications

Designed to improve operational efficiency and maximize resources, the MX48 offers unrivalled scalability, signal integrity, and control flexibility. The unmatched 6.22 Gbps signal capability supports high resolution digital video formats. In addition, the MX48 is a protocol agnostic solution, therefore it supports all high data rate signals.

The System – Hot-Swappable and Redundant

The inspired modular approach of the MX48 allows for all critical system components including power supplies, cooling fans and pluggable optics (SFP+) to be hot-swappable, thus minimizing business impact in the unlikely event a component should fail. The hot-swappable I/O boards also provide excellent in-service expansion capabilities in convenient steps of 16, thus allowing the MX48 to be reconfigured without interrupting signal processing by powering down the router.

The MX48 is controlled via an external Linux or Windows computer. This allows for customization as well as ease of control and administration with access provided via a network connection (browser), or a serial port for 3rd party controller integration (such as Crestron, AMX, or Grass Valley interfaces). Moreover, the MX48 is equipped with industry-standard LC type fiber connectors. The MX48 offers unprecedented integration with Thinklogical's Velocity Series of fiber optic KVM and video transmitters and receivers, as well as the SDI Xtreme extension line.

True Non-Blocking Fiber Matrix Architecture

The MX48 Router provides users with non-blocking switching capability. The obvious advantage to this is greater switching flexibility in one chassis, allowing for multiple input signals to be available at one output. In addition, this configuration offers even greater flexibility than a standard non-blocking switch, since the fiber optic links support bi-directional capabilities. The MX48 is also configurable with a mix of multi-mode and single mode versions SFPs, which support both short and long haul applications.

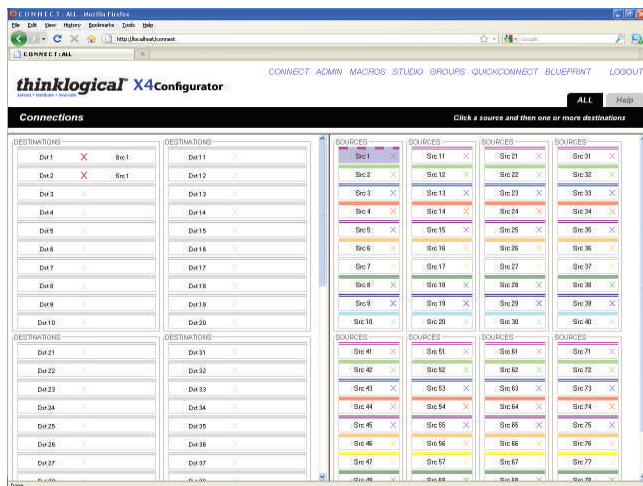
Enhanced diagnostics and alarms

The MX48 provides extensive real-time monitoring and diagnostics of the internal product operating temperature, power supply voltages, I/O fiber links, fans, and other critical functions of the router. Redundant controllers have LED indicators to provide active and fault monitoring, while the system alarms can be configured to trigger an external control system, SNMP notifications, or generate email notifications.

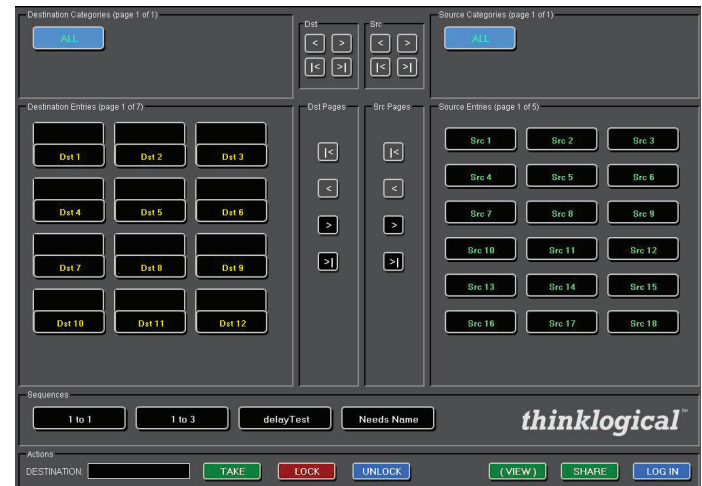
Comprehensive Control Features using Thinklogical's X4 Configurator Control Software

The MX48 is engineered with a range of innovative Thinklogical control features designed to simplify operation in mission critical visualization environments. Thinklogical's X4 Configurator is an advanced GUI which provides convenient user interface to the router from remote locations.

The X4 Configurator allows for easy and intuitive setup and control of the switching between source computer or video entities and user display destinations such as desktops, theaters, conference rooms, editing suites, control consoles, video walls, biomedical imaging arenas, satellite mapping, etc. In addition, single video sources may be multi-cast (one to more than one) or broadcast (one to all) to desired destinations. Macro presets may be created for saving and recalling commonly used input and output ties.



Standard X4 Configurator GUI Option



Studio X4 Configurator GUI Option

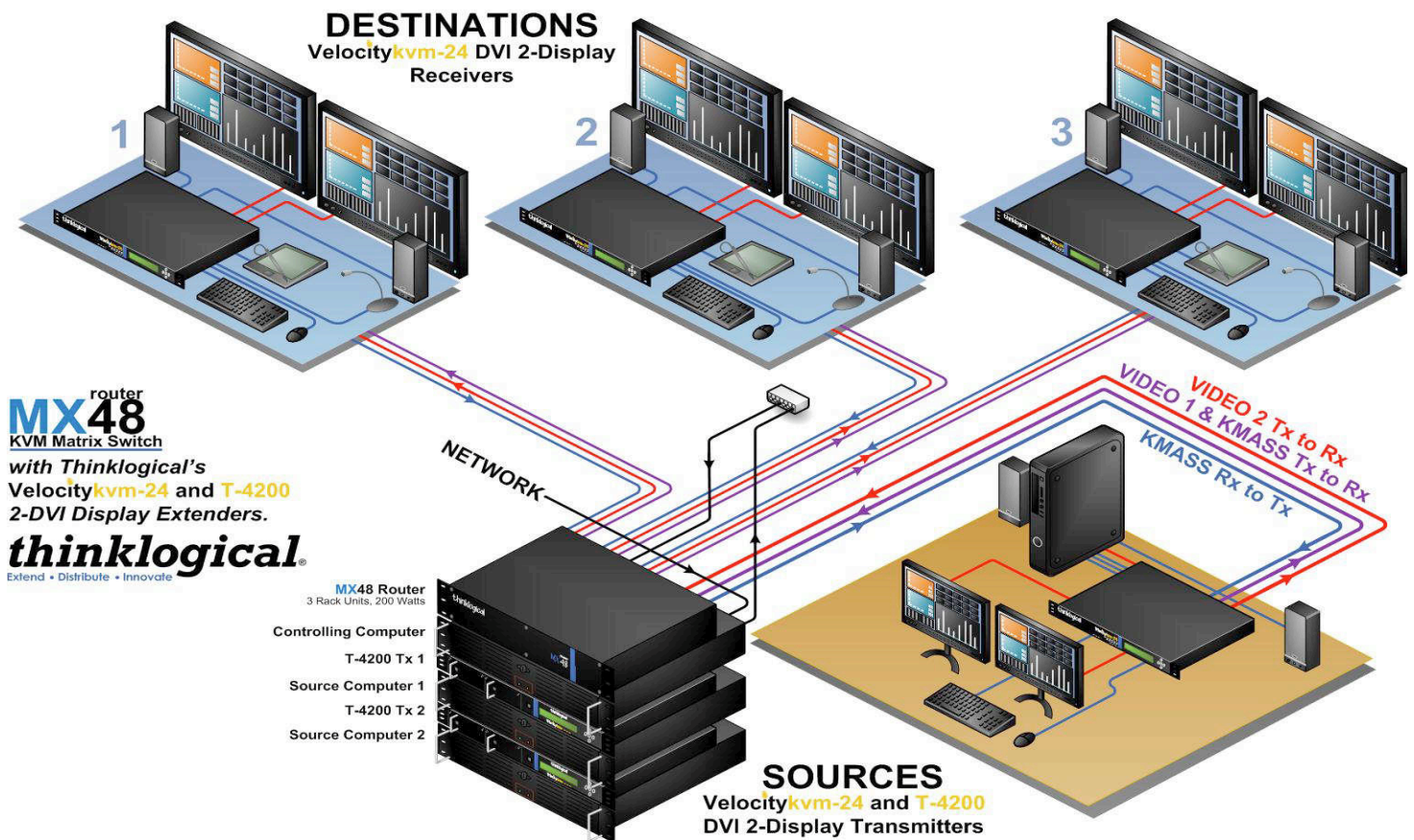
Touch Panels

Thinklogical also provides users with control touch panels. With several sizes to choose from (5.7", 8.9", and 17"), they provide tremendous flexibility in external routing control. The touch panel simply connects to your network and provides the X4 Configurator interface, in a variety of locations, right at your fingertips.



Shown: 5.7" and 17"

MX48 Router System KVM Routing and Extension Application Example - Up to a 48 x 48 Bi-Directional Configuration Routing Data and Video



System Design: MX48 Router, KVM Extension provided by VelocityKVM-24 (supports two DVI Displays)

Key Features

- Expandable in blocks of 16 up to 48 x 48
- Protocol Agnostic - route a variety of signals DVI, Dual-Link DVI, 3G, HD, SD SDI, Dual -Link SDI, USB HID, USB 1.1, USB 2.0 (high speed, full 480 Mbps), FireWire, serial, PS/2, and audio
- 16 port scalability for In and Out cards, hot swappable
- Each connection is 6.22 Gbps
- Bi-directional configuration capability for routing data, audio and video
- Compatible with Velocity KVM and Video Extenders from Thinklogical
- Compatible with SDIXtreme Video Extenders from Thinklogical
- Redundant, current sharing power supply modules, hot swappable with additional modules
- Single fan tray with annunciator port (for alarms) hot swappable
- Controllable via LAN or serial connection
- SNMP control protocol
- Comprehensive control management system with Thinklogical's X4 Configurator software
- Multi-casting and macros supported
- Single-mode and multi-mode capability

Technical Specifications

Humidity	5-95% RH, non-condensing	Ports	16 x 16 minimum configuration – Up to 48 x 48
Operating Temperature	0-50° C (32-122° F)	Power Requirements	AC Input: 100-240VAC, 47-63 Hz Universal AC Power Supply
Physical Dimensions	Rack Size: EIA 19" (48.26 cm) Height: 5.22" 3 RU (13.3 cm) Width: 17.49" (43.7 cm) Depth: 14.93 (37.9 cm) Weight: 20 lbs. (9.1 kg) Shipping Weight: 50 lbs. (22.7 kg)	Power Consumption	200 Watts (Fully Loaded)

Ordering Information and Part Numbers

MXR-000048	MULTI-MEDIA 48 ROUTER CHASSIS WITH ONE 16 PORT MULTI-MODE DATA INPUT/OUTPUT CARD
MXM-000001	MULTI-MEDIA 48 ROUTER CONTROLLER CARD
MXM-000002	MULTI-MEDIA 48 ROUTER FAN TRAY
MXM-000003	MULTI-MEDIA 48 ROUTER POWER SUPPLY
MXM-D00016	MULTI-MEDIA 48 ROUTER DATA INPUT/OUTPUT CARD, 16 PORTS, SFP+, MULTI-MODE
MXM-D00S16	MULTI-MEDIA 48 ROUTER DATA INPUT/OUTPUT CARD, 16 PORTS, SFP+, SINGLE MODE

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