

MAXIOM

Lighting Relay Panel

LUMISYS

BUILT FOR INTEGRATION

Overview

Leverage the Power of BAS Integration

The MAXIOM Series UL Listed, Lighting Control Panel provides the capability to control high voltage lighting circuits via a two-wire RS-485 network, occupancy sensors, light level sensors, momentary override switches, and other input devices.

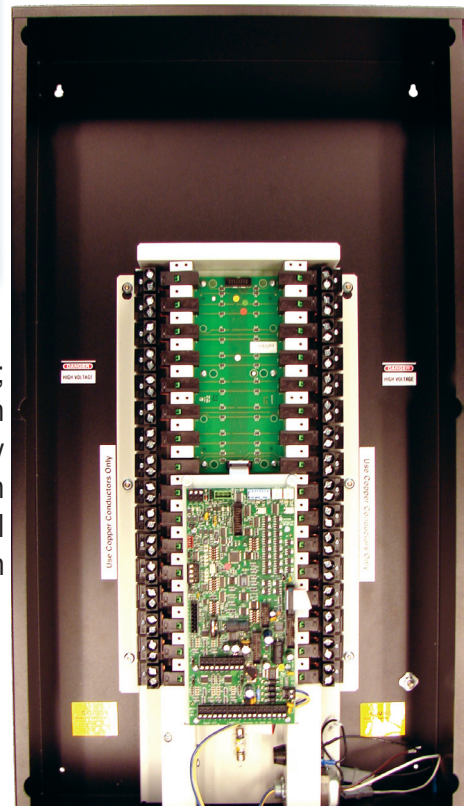
The standard Maxiom series panels have an extra capacity high-voltage compartment with ample space for the electrical contractor to add multi-pole contactors if desired. MAXIOM panels with “Tru-lock” feature cannot be opened without a key. Standard LTR relays have a manual override lever for operation of the relay without power to the electronics and each relay terminal block can accommodate up to size 8AWG load wires.

The standard MAXIOM panel sizes are based on relay capacity of 16, 32, and 48 relays. In addition, the MAXIOM “mini” panel has a capacity of only 8 relays and the MX60 extends the MX48’s interior relays chassis into the extra capacity area effectively using the space for 60 LTR relays.



Exterior with Surface Mount Trim

MAXIOM MX32



Interior with voltage separation removed

MAXIOM with LX5 technology integrates with most building automation systems; reducing frustration for the building engineer by eliminating the need to learn to operate and maintain a separate lighting control system. LX5 technology features native BACnet for MSTP and ARCnet, N2 direct, Apogee Open Processor direct, Lumisys, and Triatek Lighting open protocols. In addition, all MAXIOM panels have on-board DDN (Digital Device Network) communication to Digi-Touch addressable switches.



Specifications

Native Communications

Building Automation System

Dip switch selectable - BACnet MS/TP, N2, Lumisys Open, Triatek Legacy.
Members of Lumisys' Partner Program may offer additional native communication options.

Digi-Touch Subnet

Transient protected two-wire differential signaling on a daisy-chain topology network.
Two wires for communication & two wires for power. Belden # 1502P or equivalent.

Electrical

Switch Inputs

Software configurable switch input types
Momentary – two-wire ON / OFF alternating switch action
Momentary ON – two-wire or three wire ON only
Momentary OFF – three-wire OFF only
Maintained – two-wire, open = OFF closed = ON
State Change – two-wire ON / OFF alternating system action
Jumper select for:
dry contact or
12 to 24VDC external power.

Analog Inputs

Six Analog Inputs (0-5 VDC) - typically used for Light Level Sensors (See Lumisys LS5 Sensors)

Power Supply

Primary : 115/277 VAC, 30 VA, 60 Hz \pm 10% (dual-tap) See Power Supply Wiring
Secondary : 24VAC minimum \pm 10%

Relay Type

SPST latching with manual override lever, UL Recognized Component

Relay Rating

Tungsten 20 amp @ 277 VAC
Ballast 20 amp @ 277 VAC
Ballast 20 amp @ 347 VAC
Resistive 20 amp @ 277 VAC
Resistive 20 amp @ 347 VAC

Relay Terminals

Each slotted screw box clamp terminal accepts #14 - #8 AWG or two #10 AWG.
Solid or stranded wire, copper only

Relay Drive Signal

Staggered, energize pulse

S.C.C.R.

Short Circuit Current Rating - 20KA @277V

Environmental

Operating Temperature

32° to 125° F (0° to 50° C)

Operating Humidity

20% - 95%RH, non-condensing

System Certification






Electronics meet or exceed IEC Level 3 standards:
Radiated Emissions, IEC 55022, Class A
Conducted Emissions, IEC 55022, Class A
Quasi-Stationary Current Harmonics, IEC 6100-3-2
Voltage Fluctuation and Flicker, IEC 6100-3-2
Electrostatic Discharge, IEC 61000-4-2
Electrical Fast Transient/Burst, IEC 6100-4-4
Surge Immunity, IEC 6100-4-5
Immunity to Conducted Disturbance, IEC 6100-4-6
Immunity to Voltage Dips, Short Interruptions, Voltage Variations, IEC 6100-4-11
Electromagnetic Compatibility Generic Immunity Standard. Part 1, IEC 6100-6-1
ISO 9001
RoHS Compliant

Regulatory – Electronic assemblies shall meet or exceed standards
Underwriters Laboratories UL 916, Standard for Energy Management Equipment
FCC, Part 15, Class A Radiated Emissions
FCC, Part 15, Class A Conducted Emissions
CEC Title 24

Mechanical

Enclosure Type

NEMA 1

	MX08	MX16	MX32	MX48	MX60
Panel					
Dimensions (Width x Height x Depth)	13" x 16" x 4"	18" x 25" x 5 3/4"	18" x 33 3/4" x 5 3/4"	18" x 42 1/2" x 5 3/4"	18" x 42 1/2" x 5 3/4"
Contacting Mounting Space	N/A	8.0" x 8.0" x 5.0"	8.0" x 8.0" x 5.0"	8.0" x 8.0" x 5.0"	N/A
Trim Style	Screw on	Tru-lock	Tru-lock	Tru-lock	Tru-lock
Controller	Lx5	Lx5	Lx5	Lx5	Lx5
Flash Upgrade	Yes	Yes	Yes	Yes	Yes
Approximate Shipping Weight	20lbs	31lbs	44lbs	58lbs	70lbs
Native Protocols Selectable via Dip Switch					
BACnet MS/TP	Yes	Yes	Yes	Yes	Yes
N2 Open	Yes	Yes	Yes	Yes	Yes
Lumisys Open	Yes	Yes	Yes	Yes	Yes
TRIA TEK legacy	Yes	Yes	Yes	Yes	Yes
Other Protocol Options					
Lumisys' Partners offer additional native communication options	Yes, varies by partner	Yes, varies by partner	Yes, varies by partner	Yes, varies by partner	Yes, varies by partner
Inputs					
Digital Subnet for Switches and Occupancy Sensors	Digi-Touch Native	Digi-Touch Native	Digi-Touch Native	Digi-Touch Native	Digi-Touch Native
Binary inputs available without option card	24	24	56	88	120
Analog Inputs available without option card	6	6	6	6	6
Optional Telephone Override Card	No	Yes	Yes	Yes	Yes
Outputs					
Relay Panel Capacity	8	16	32	48	60
Latching Relay with manual override on relay	Yes, Lumisys True Relay (LTR)	Yes, Lumisys True Relay (LTR)	Yes, Lumisys True Relay (LTR)	Yes, Lumisys True Relay (LTR)	Yes, Lumisys True Relay (LTR)

Warranty

24 months from date of shipment.

Refer to Lumisys Terms and Conditions of Sale for additional details.

Ordering Information

Ordering an MX08

Catalog #	Description
MX08PXX	MAXIOM Series MX08 Lighting Control Panel - Factory assembled Number of Factory Installed Relays: Limited to relay capacity (8). 1 to 8 available.

Ordering an MX16, MX32, MX48 or MX60

Catalog #	Description
MXXX XX	Interior for MAXIOM Series Lighting Control Panel Number of Factory Installed Relays: Limited to Relay Capacity Selection below Relay Capacity Selection Options: 16, 32, 48 or 60 Relay Capacity
MXXXE	Enclosure for MAXIOM Series Lighting Control Panel Relay Capacity Selection Options: 16, 32, 48 or 60 Relay Capacity
MXXXTS	Surface Mount Trim with Key Lock Trim Size Selection options: 16, 32, 48 or 60 (relates to relay capacity)

NOTES

The Relay Capacity selection for **Interior**, **Enclosure** and **Trim** need to match or the panel will not fit together properly. A correctly ordered MX16, MX32, MX48 or MX60 product will have all three components: **Interior**, **Enclosure** and **Trim**

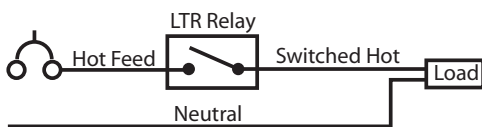
Example:

Quantity	Part#	Description
1	MX32I27	MAXIOM Interior with 32 relay capacity and 27 relays factory installed
1	MX32E	MAXIOM Enclosure with 32 relay capacity
1	MX32TS	MAXIOM Surface mount trim for with 32 relay capacity enclosure

Power Supply Wiring



Relay Wiring Detail



Network Architecture

