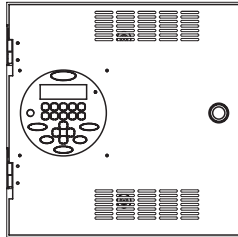
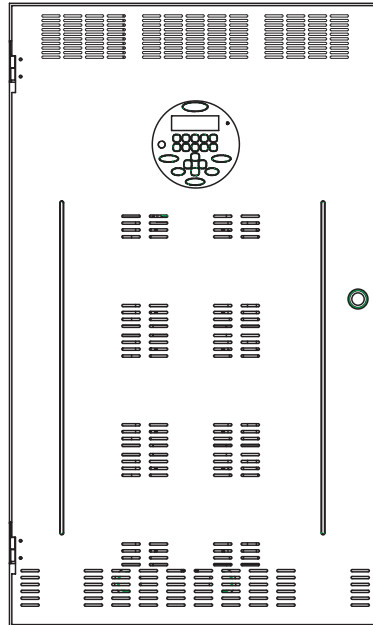


### Z-MAX™ 8, 24, 48 Network Relay System



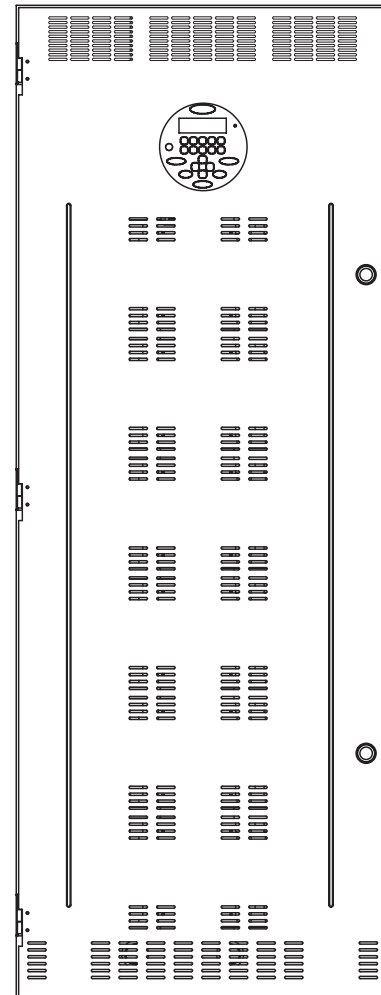
**Z-MAX 8**  
All Voltages  
Up to 8 Relays  
Single Pole and  
Two Pole Relays

Master Network  
Control Module



**Z-MAX 24**  
All Voltages  
Up to 24 Relays  
Single Pole and  
Two Pole Relays

Master and Slave  
control Modules  
(Slave not shown)



**Z-MAX 48**  
All Voltages  
Up to 48 Relays  
Single Pole and  
Two Pole Relays

Master and Slave  
control Modules  
(Slave not shown)

#### DESCRIPTION:

Leviton Z-MAX network relay cabinets enable lighting applications of all sizes to be easily controlled as a complete system, integrated into a comprehensive system with Leviton Dimensions™ D4200 and D8000 controls, or operated independently. With 8 or 12 discrete inputs, these cabinets readily incorporate occupancy sensors, photocells, low voltage switches, and a variety of other input devices. Eight different digital switch models are available for control from multiple locations, offering added flexibility. Designed for intuitive programming and operation, Z-MAX cabinets feature a large keypad and 2-line, 16 character LCD screen, as well as USB port.

#### APPLICATIONS:

- Office spaces – large and small
- Schools
- Churches
- Convention centers
- Parking lot lighting
- Ballpark lighting – professional and recreational
- Municipal parks
- Residential lighting

Z-MAX Lighting Control Relay Cabinet

# Product Specifications

## FEATURES

- Integrated astronomical time clock
- Relays are rated for all light sources as well as motors
- Relays are individually replaceable
- Single pole and two pole relays fit in the same location. Same density regardless!
- Normal or Emergency cabinet capability
- Cabinet is prewired and tested
- Standard transformer has inputs for 120 V, 277 V or 347 V power
- Cabinets may be surface or recess mounted
- Master and Slave Cabinet configurations

## SPECIFICATIONS:

### Z-MAX Cabinets work with:

- Z-MAX Digital Entry Stations
- Dimensions D4200
- Dimensions D8000
- DMX Controllers
- Analog Controllers
- Low Voltage Switches
- Discrete and Analog Photocells
- Occupancy Sensors

## POWER

- Input Power: 120 V, 277 V and 347 V. All voltages 50/60Hz, phase to neutral
- Lifetime power failure memory: restores lighting to levels prior to power interruption
- User adjustable for either sequential or non sequential cycling of relays

## SOURCES

- Incandescent (Tungsten) and Halogen
- Magnetic Low Voltage Transformer
- Electronic Low Voltage Transformer
- Neon or Cold Cathode
- Magnetic and Electronic Fluorescent Lamp Ballasts
- HID
- Motor Loads (1 HP at 120V, 2 HP at 277V, 2 HP at 480V)

## RELAYS

- Several relays to choose from:
  - Z-MAX standard relay card, 120-277V, 20A, N/O or N/C, single pole
  - 347V 20A relay card, single pole
  - 2 Pole 208-480V, 20A, N/O or N/C relay card
  - Latching 277V, 20A continuous use relay card
- Relays rated at 20A for N/O or N/C continuous use lighting loads
- Z-MAX zero cross circuit eliminates arcing at mechanical contacts when loads are switched. Prolongs relay life to an average of 10,000,000 cycles (on/off). Handles 50 times steady-state current inrush. Rated for resistive, inductive, or capacitive sources.
- 10 year warranty on relay cards

## WIRING

- Internal: Factory prewired and tested
- System Communications: Low voltage Class 2 (PELV) wiring connects cabinets to external controls
- Line (mains) voltage: Feed (for Control Electronics) and Load wiring only. No other wiring or assembly required.

## PHYSICAL DESIGN

- Enclosure: NEMA-Type 1, IP-20 protection; #16 U.S. Gauge Steel. Indoors only.
- Dimension: (see page 4)
- Weight: (see page 4)

## MOUNTING:

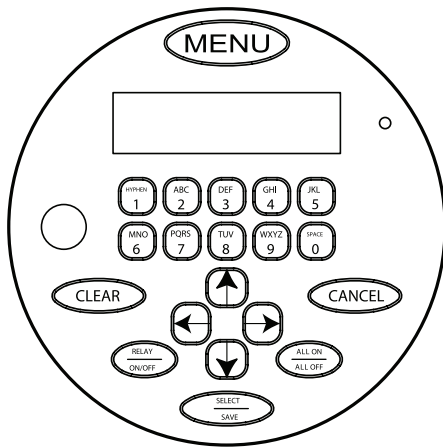
- Surface mount or recess
- Recessed mounting flanges available

## ENVIRONMENT

- 32-104° F (0-40° C) relative humidity less than 90% non-condensing.

## STANDARDS

- UL 924
- UL and CUL Listed (Reference: UL File E123072)
- CEC Title 24 Compliant
- ASHRAE 90.1 Compliant



## CONTROL MODULE

### Control Module Overview

The control module is used to configure the entire system. The controller features an LCD user interface to facilitate programming of all switching system and astronomic time clock (ATC) parameters.

### Control Module Features

- Integrated astronomic time clock (ATC) automates switching with up to 999 user-defined events and 999 holiday schedules.
- ATC events may be triggered by time of day or by a time offset from either sunrise or sunset.
- System location is programmable by specifying your location.
- ATC automatically adjusts for daylight savings time and leap year (where applicable).
- Programmable "blink warn" and user programmable refresh time.
- Overrides available at cabinet for controls, time clock, and relays.
- Located in the cabinet for easy access.
- 8 (8 cabinet) or 12 (24 and 48 cabinet) low voltage switch inputs (24 V DC) (additional 36 discrete inputs are available for the 24 and 48 cabinets – See accessories data sheet for details)
- Emergency sensing control power loss circuitry
- Astronomic time clock
- Daylight harvesting
- Prioritization of switch inputs and TOD schedules
- Switch input timers
- Timed overrides
- Master override (On/Auto/Off)
- Individual override switch per relay

## ASTRONOMIC TIME CLOCK

- Capable of up to 999 events
- Capable of 999 holidays
- Holiday schedules are programmable one year in advance
- Astronomic time clock programmable by entering your location
- California Energy Code Title 24 compliant

## SWITCH INPUTS

- 8 or 12 (depending on cabinet) Switch inputs
- Inputs can control the following:
  - Low Voltage Switches
    - Maintained
    - Momentary
    - Toggle
  - Occupancy Sensors
  - Analog Photocells
  - Discrete Photocells
  - Analog Inputs
  - Contact Closures
- May be configured as pull up to 24 VDC (externally supplied) or pulled down to common

## NETWORK CONNECTIONS

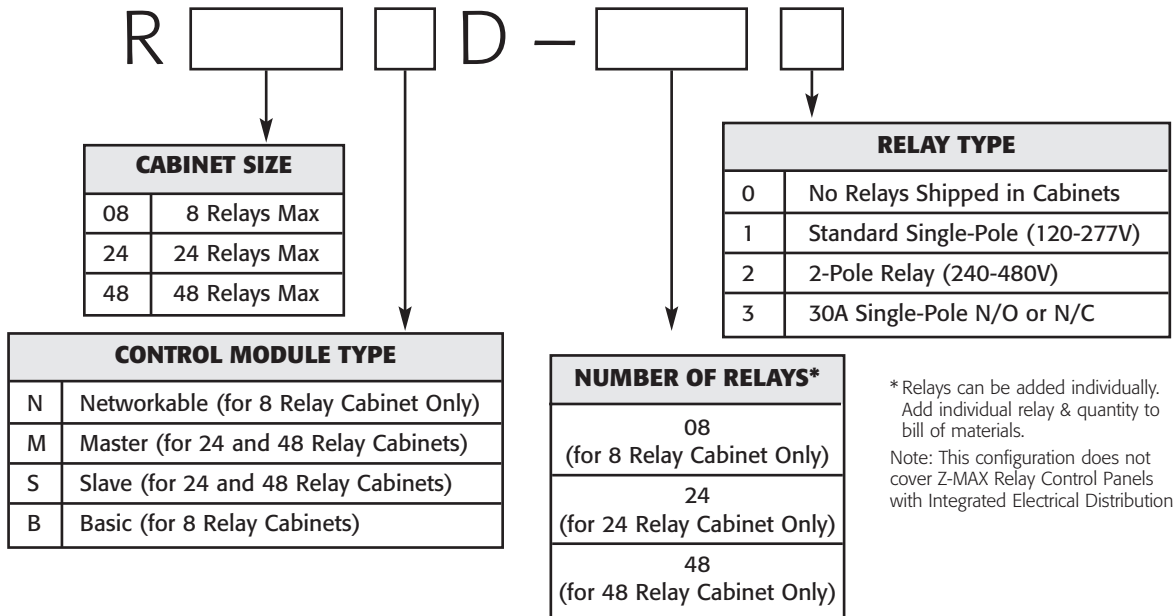
- Luma-Net (for Z-MAX switches Digital and tie into a networked system with D8000 or D4200)
- DMX
- Slave Cabinet Control
- USB serial interface for programming via a PC
- RJ-45 for Optional TCP/IP Ethernet Board
- Optional modem and touch tone interface board
- Bacnet
  - Standard MSTP
- Optional
  - Lonworks
  - ModBus
  - Bacnet IP
  - Metasys

## MAIN UNIT/SLAVE UNITS

The Z-MAX 24 and 48 cabinets are available in slave versions. This allows costs to be cut from a project and minimizes the amount of setup work at each cabinet.

- Main control module can handle 252 relays
- Utilizes CAT 5, low voltage wiring as the cabinet interconnect
- Main control module can handle 252 inputs
- Slave cabinet can have optional switch input board

# Product Specifications



RELAY MODULES	
RELAY- ST2	Single-Pole N/O Relay Card, 20A , 120-277V
RELAY-2PL	2-Pole, N/O Relay Card, 20A, 208-480V
RELAY-1NC	Single-Pole N/C Relay Card, 20A , 120-277V
RELAY-2NC	2-Pole N/C Relay Card, 20A, 208-480V
RELAY-347	347V Relay Card, 20A, 347V
RELAY-LAT	Latching Relay Card, 20A, 347V
RELAY-030	Single-Pole N/O or N/C Relay Card, 30A, 120-277V

ACCESSORIES	
RAC00-SIB	Switch Input Board - 36 Discrete Inputs
RAC00-MOD	External Modem with Touch Tone Input Capability – Consult Factory
RAC00-ETH	Ethernet Module – Consult Factory
RAC00-08F	Flush Trim Kit for 8 Relay Cabinet
RAC00-24F	Flush Trim Kit for 24 Relay Cabinet
RAC00-48F	Flush Trim Kit for 48 Relay Cabinet
RAC00-VBR	Voltage Barrier between Relay cards
RAC00-485	Z-MAX Expansion Module for Bacnet MSTP
RAC00-BUS	Z-MAX Expansion Module for ModBus or Lonworks
RAC00-BIP	Z-MAX Expansion Module for Bacnet IP
RAC00-JSC	Z-MAX Expansion Module for Johnson Control Metasys

Cabinet	Length	Height	Depth	Weight – Fully Loaded	Suggested Mounting Height to bottom of cabinet
8 Relays – Networked	13" (330.20 mm)	13" (330.20 mm)	4 11/32 " (110.55 mm)	16 lbs (7.26 kg)	53" (1,358.9 mm)
24 Relay Cabinet	20" (514.35 mm)	34" (863.60 mm)	4 11/32 " (110.55 mm)	44 lbs (19.96 kg)	32" (825.5 mm)
48 Relay Cabinet	20" (514.35 mm)	54" (1371.60 mm)	4 11/32 " (110.55 mm)	65 lbs (29.48 kg)	12" (317.5 mm)