860 SERIES RELAY MODULE

Installation Guide

DESCRIPTION

Dry relay contacts on the 860 Module are programmable and controlled from panel annunciator outputs. The module includes one Form C (SPDT) relay rated for 1 Amp at 30 VDC. The 860 Module also provides three additional sockets for Model 305 Plug-In Output Relays (12 VDC).

Relays can be used for electrical isolation between systems or for switching 5, 12, or 24 Volts to control various functions within a building or around its perimeter.

Compatibility

- XT30/XT50 Series panels
- XR150/XR550 Series panels

What is Included?

- One 860 Relay Module
- One Model 330 Dual-Ended 4-Wire Harness
- Hardware Pack

1. MOUNT THE MODULE

The module can be mounted in a DMP enclosure using the standard 3-hole mounting pattern. Refer to Figure 2 as needed during installation.

1. Hold the plastic standoffs against the inside of the enclosure side wall.
2. Insert the included Phillips head screws from the outside of the enclosure into the standoffs. Tighten the screws.
3. Carefully snap the module onto the standoffs.

2. WIRE THE MODULE

Caution: Disconnect all power from the panel before wiring the module. Failure to do so may result in equipment damage or personal injury.

Refer to Figure 3 as needed during wiring. For power connections, use 22 AWG or larger wire.

1. Connect the included 4-wire harness from the module RELAY COILS header to the panel OUTPUTS header.
2. Connect a wire from the 860 Power Terminal (+12) to panel Terminal 7 (RED) or 505-12 (DC+).
3. To install additional Model 305 relays, line up the relay with the PCB pins and gently press the relay into the socket.
4. Connect relay terminals NO, C, and NC to devices as needed for each installed relay. Refer to Applications for more information.
ADDITIONAL INFORMATION

Wiring Specifications
DMP recommends using 18 or 22 AWG for all LX-Bus and Keypad Bus connections. The maximum wire distance between any module and the DMP Keypad Bus or LX-Bus circuit is 1,000 feet. To increase the wiring distance, install an auxiliary power supply, such as a DMP Model 505-12. Maximum voltage drop between a panel or auxiliary power supply and any device is 2.0 VDC. If the voltage at any device is less than the required level, add an auxiliary power supply at the end of the circuit.

To maintain auxiliary power integrity when using 22-gauge wire on Keypad Bus circuits, do not exceed 500 feet. When using 18-gauge wire, do not exceed 1,000 feet. Maximum distance for any bus circuit is 2,500 feet regardless of wire gauge. Each 2,500 foot bus circuit supports a maximum of 40 LX-Bus devices.

For additional information refer to the LX-Bus/Keypad Bus Wiring Application Note (LT-2031) and the 710 Bus Splitter/Repeater Module Installation Guide (LT-0310).

Applications
The panel annunciator outputs are switched ground and switch each of the four Model 860 relay coil voltages to ground. These outputs can be programmed to respond to any of the conditions listed below:

- Zone condition
- Fire alarm or fire trouble
- Manually from the keypad
- Ambush alarm
- Communication failure
- Exit and entry timers
- Armed area annunciation
- System ready
- Ground start activation
- Burglary alarm
- Schedules
- Other system conditions

See the appropriate panel programming guide for information about voltage limitations and programming annunciator outputs.

Compliance Listing Specifications
ULC Commercial Burglary (XR150/XR550 Series Panels)
If installed in another enclosure, place the relay module with at least one zone expander in a listed enclosure. Connect a DMP Model 307 Clip-on Tamper Switch to the enclosure and program it as a supervisory zone in Zone Information (SV). For more information, refer to the appropriate panel installation and programming guides.

860 SERIES RELAY MODULE
 Specifications
Operating Current 12 VDC
Operating Current
One Relay 34 mA
Two Relays 69 mA
Three Relays 104 mA
Four Relays 138 mA
Weight 3.2 oz (0.09 kg)
Dimensions 4.25” W x 2.50” H
10.8 cm W X 6.4 cm H

Ordering Information
860 Relay Output Module (one relay included)
860-4 Relay Output Module (four relays included)

Accessories
Model 305 Plug-in Output Relay (12 VDC Form C SPDT)

Compatibility
XT30/XT50 Series Panels
XR150/XR550 Series Panels

Certifications
California State Fire Marshal (CSFM)
New York City (FDNY COA #6167)
Underwriters Laboratory (UL) Listed
ANSI/UL 365 Police Station Alarm Units
ANSI/UL 609 Local Burglary Alarm Units and Systems
ANSI/UL 864 Fire-Protective Signaling Systems
ANSI/UL 985 Household Fire Warning System Unit
ANSI/UL 1076 Proprietary Burglary Alarm Units and Systems
ANSI/UL 1610 Central Station Burglary Alarm Units
ULC Subject-CI023 Household Burglar
ULC/ORD-CI076 Proprietary Burglar
ULC S304 Central Station Burglar
ULC S545 Household Fire