Cautions, Warnings, and Regulatory Information

READ AND SAVE THESE INSTRUCTIONS Follow the instructions in this installation manual. These instructions must be followed to avoid damage to this product and associated equipment. Product operation and reliability depend upon proper installation.

DO NOT INSTALL ANY AUTOCALL™ PRODUCT THAT APPEARS DAMAGED Upon unpacking your Autocall product, inspect the contents of the carton for shipping damage. If damage is apparent, immediately file a claim with the carrier and notify an authorized Autocall product supplier.

ELECTRICAL HAZARD Disconnect electrical field power when making any internal adjustments or repairs. All repairs should be performed by a representative or an authorized agent of your local Autocall product supplier.

STATIC HAZARD Static electricity can damage components. Handle as follows:

- Ground yourself before opening or installing components.
- Prior to installation, keep components wrapped in anti-static material at all times.

Introduction

This publication describes installing and wiring the A006-9803 Expansion Relay Module. This module provides ten programmable relays.

Figure 1 identifies the mounting location for the Expansion Relay Module on the Main System Board (MSB).

Table 1: Power specifications

Voltage	- 24 VDC
Current	10 mA plus 10 mA for each energized relay.

Table 2: Environmental specifications

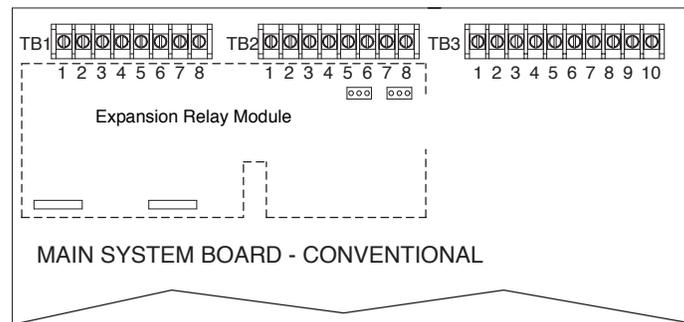| Location	Intended for indoor installation in typical commercial environment.
Temperature	32 °F to 120 °F (0 °C to 49 °C)
Humidity	10% to 90% Relative Humidity from 32 °F to 100 °F (0 °C to 38 °C)

Fig 1: Location of A006-9803 Relay Module

Installing the Expansion Relay Module

Installing the Expansion Relay Module is a four-step process. Refer to the following sections for specific information about performing these steps.

1. Remove the LCD Display/Keypad to gain access to the Expansion Relay Module mounting location.
2. Attach the mounting bar to the Main System Board.
3. Install standoffs to the MSB and secure the Expansion Relay Module to the mounting bar and to the MSB.
4. Re-install the LCD Display/Keypad.

Removing the LCD Display/Keypad
1. The LCD Display/Keypad mounts to the MSB using three T15 Torx screws. Remove these three screws. Refer to Figure 2 for the location of these screws.
2. Disconnect the harness running from the keypad to the MSB at the MSB.
3. Pull the LCD assembly away from the MSB. Pay attention to the header and connector that attach the LCD to the MSB, making sure not to bend the header pins.

Fig 2: Mounting expansion relay
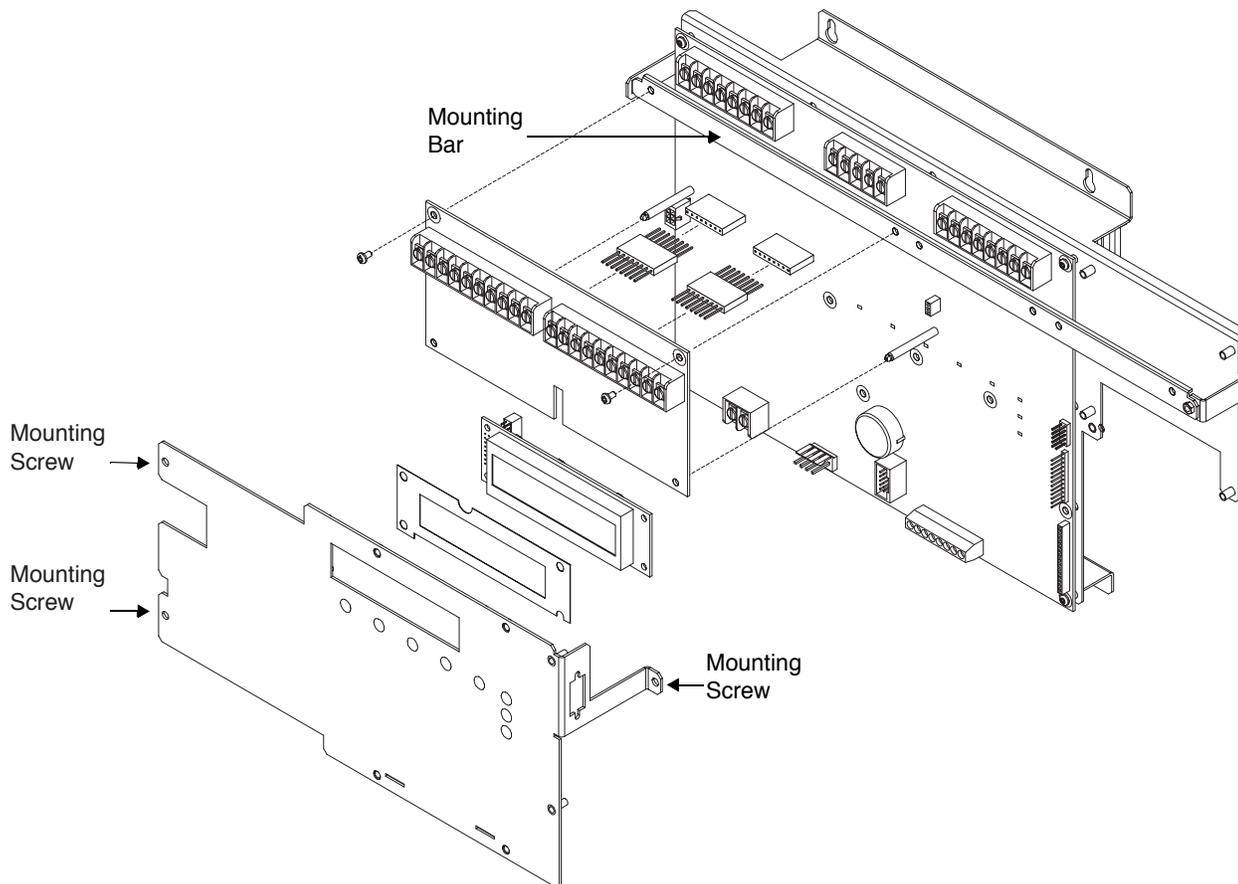
Attaching Mounting Bar
1. The mounting bar attaches to the metal posts located on each side of the MSB.
2. Slide the end of the mounting bar with the tab into the slot on the left post.
3. Place the end of the bar with the round hole over the threaded portion of the right post. Use the nut included with the stabilizing bar to secure the bar to the right post. See Figure 2.

Attaching Expansion Relay Module to MSB

1. Attach two standoffs to the MSB in the locations shown in Figure 2.
2. Attach two dual-sided headers (532-624) into connectors J1 and J2 on the Expansion Relay Module.
3. Align the holes on the bottom corners of the Expansion Relay Module with the standoffs.
4. Align the header pins on the Expansion Relay Module with the connectors J4 and J5 on the panel's main system board. Align the standoff holes on the Expansion Relay Module with the standoffs mounted on the MSB.
5. Carefully press down on the Expansion Relay Module, making sure that the header pins and standoffs are aligned.

Wiring Relays

All wiring to the panel and its peripherals must be performed in accordance with NFPA 70, NFPA 72, all local codes, and per the technical requirements listed in each section below.

Wiring guidelines

- Use a voltmeter (VOM) to verify no stray voltages are applied to the field wiring. Test for AC and DC voltages across each pair of wires and from each wire to earth.
- Use a VOM to verify that all wiring tests free of grounds. Each conductor should test "open" against earth (chassis)
- All wiring must be 18 AWG (minimum) to 12 AWG (maximum).
- Contact rating: 2A @ 30VDC (pilot duty, .35 power factor).
- Each relay is selected for normally closed or normally open operation. Shunt jumper setting (see Figure 3) selects desired contact.

JUMPERS TO SELECT NORMALLY OPEN OR CLOSED RELAY CONTACTS. ONE JUMPER PER RELAY.

NORMALLY OPEN (Jumper Left)

NORMALLY CLOSED (Jumper Right)

JUMPER CENTER

Fig 3: Wiring relays