DS7488 Octal Relay Module
Installation Instructions

1.0 Description
The DS7488 is an Octal Relay Module that provides eight Form “C” relay outputs for the DS7400 Series Control/Communicators and DS9400 AddressiFire™ 255 Series Fire Alarm Control Panels (FACP). It connects to the panels via the options bus. The outputs are fully programmable and can be activated by several system events. Each output operates individually of the other seven outputs for complete flexibility.

2.0 Specifications

- **Control Panel Requirements**: The DS7488 is designed to work with the following control panels:
  - A DS7400, DS7400X, DS7400Xi, DS7400Xi Rev 3 or DS7400Xi Rev 4. The control panel ROM version must be 1.03 or higher.
  - All versions of the DS9400 AddressiFire™ 255 Series Fire Alarm Control Communicator.
- **Current Draw**:
  - 10 mA + 40 mA for each energized relay when connected to a DS7400Xi.
  - When connected to a DS9400 AddressiFire™ 255 Series FACP, the DS7488 draws 8 mA + 30 mA for each energized relay (the module operates on 12 V option bus power which is derived from the 24 V battery).
- **Contacts**: Rated 5.0 A @ 28 VDC (maximum for resistive loads).

3.0 Installation

3.1 DS7400Xi Installation

1) The DS7488 should be mounted within the DS7400Xi enclosure. Install the panel enclosure as described in its Reference Guide.
2) Disconnect power from the panel before installing the DS7488. This can be done by unplugging the transformer or turning off the AC supply circuit and removing the red battery lead.
3) Mount the DS7488 in the enclosure using the supplied screws (2) and mounting clips (2) (see Figure 1).

**Important**
Non-inherently power-limited wiring must be routed through a separate enclosure knockout and tied away from other power-limited wiring.

![Figure 1: DS7488 - DS7400Xi Installation](image)

If it is necessary to mount the DS7488 in another area of the enclosure and the mounting requires the use of the top two mounting holes on the DS7488, be sure to use a nylon (nonmetallic) washer between the screw head and the circuit board. Failure to insulate the screw from the circuit board will cause ground faults. See Figure 1.

The DS7488 is wired to the DS7400Xi’s option bus. See Figure 2.

![Figure 2: DS7488 - DS7400Xi Connections](image)
3.2 DS9400 Installation

1) Before installing the DS7488, disconnect power from the DS9400 by turning off the AC supply circuit and removing the red battery lead.

2) Remove the two optional transformer studs from the enclosure using either pliers or a hammer to rock them loose. Push the studs back through the enclosure. If the enclosure is already mounted, pull the studs forward through the back of the enclosure instead of pushing them back. See Figure 3 for details.

3) Place mounting clips in the enclosure as shown in Figure 3.

4) Insert the upper length of the DS7488 board underneath the lips of the lower mounting clips holding the DS9400 board in place. See Figure 3.

5) Fasten screws through the lower mounting holes on the DS7488 and mounting clips from Step 1. See Figure 3.

The DS7488 is wired to the DS9400’s option bus. See Figure 4.

4.0 Wiring

There are three terminals for each of the eight relays: Normally Open (NO), Common (C) and Normally Closed (NC).

To wire the contacts, see Figure 5.

5.0 Selecting the Option Address

The DS7488 must be selected as an option address 1-15. Use the Option Address Pins to select an option address with the jumper plugs provided (see Figure 6).

Each optional device connected to the options bus must have a different address.

Beginning with DS7400Xi Version 3.0 firmware, Addresses 1-10 may be used by the DS7488 even if there are keypads already installed on the keypad bus using those addresses. Addresses 11-15 may not be used by the DS7488 if keypads are installed at those addresses.

6.0 Programming the DS7488

The DS7488 must be programmed through the panel that controls it. See your panel’s Reference Guide for output programming information.