# 4010 Suppression Release Kits Installation Instructions

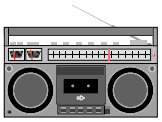
## Cautions and Warnings

**DO NOT INSTALL ANY SIMPLEX PRODUCT THAT APPEARS DAMAGED.** Upon unpacking your Simplex product, inspect the contents of the carton for shipping damage. If damage is apparent, immediately file a claim with the carrier and notify Simplex.

**ELECTRICAL HAZARD -** Disconnect electrical power when making any internal adjustments or repairs. Servicing should be performed by qualified Simplex Representatives.

**STATIC HAZARD -** Static electricity can damage components. Therefore, handle as follows:

1. Ground yourself before opening or installing components (use the 553-484 Static Control Kit).
2. Keep uninstalled component wrapped in anti-static material at all times.



**RADIO FREQUENCY ENERGY -** This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

## Overview

This publication shows how to install the 4010-9814 (120V) and the 4010-9824 (240V) Suppression Release Kits into a 4010 Fire Alarm Control Panel (FACP). Refer to the *4010 Fire Alarm - Installation Instructions* (574-052) for configuration information. Refer to the 842-058 Field Wiring Diagram for additional wiring information.

## In this Publication

This publication discusses the following topics:

# 4010-9814 and -9824 Suppression Release Kits

## Overview

When the suppression function is controlled by the 4010 Fire Alarm Control Panel, a Suppression Release Kit (power supply 565-793) can be added to supply power for this function. The suppression release kit provides filtered/regulated 24VDC, 4A power for Notification. When controlling the suppression release function, a Notification Appliance Circuit is limited to driving a single valve.

Terminals 1 and 2 are rated at 2A, 24VDC "A Tap" and Terminal 3 and 4 are rated at 2A, 24VDC "B Tap." Maximum wire length is 3,270 feet. Be sure to include Auxiliary 24VDC in battery standby considerations. See Figure 1 for connector locations.

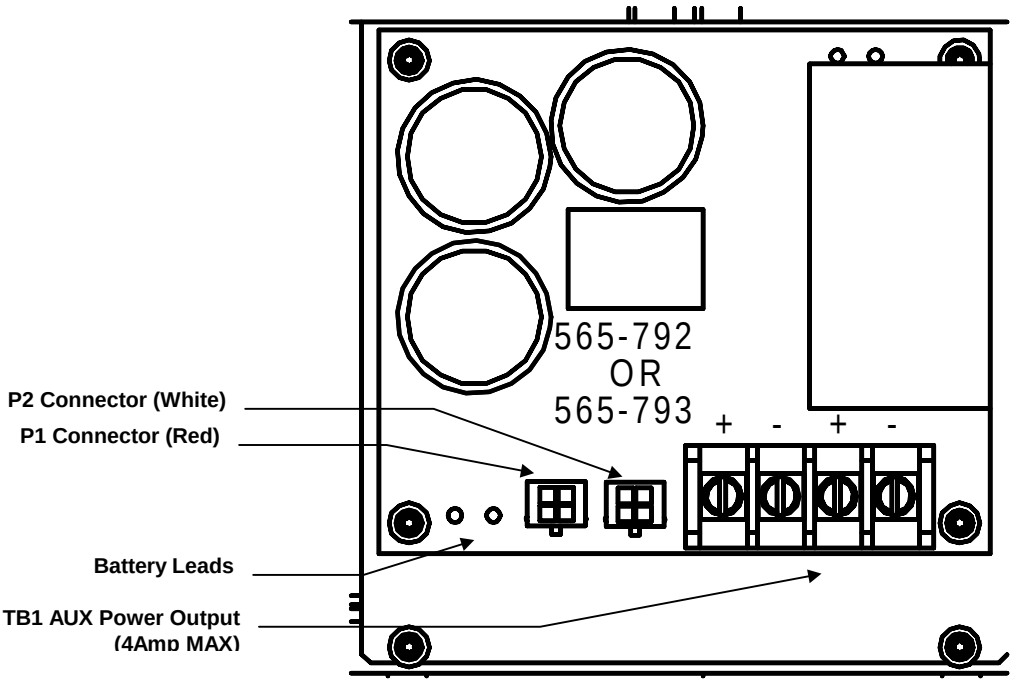



**Figure 1. 4010 Suppression Release Kit**

# Installation

## Mounting

The 4010-9814 and -9824 Suppression Release Kits install in their own hardware slot located to the right of the 4010 SFI/O module (see Figure 2). Use Steps 1 through 3 to mount the suppression release kit.

1. Disconnect battery and then AC power from the FACP.
2. With TB1 of the suppression release kit in the bottom position, slip the top hole of the suppression release kit's metal bracket over the flanges located on the 4010 chassis.
3. Use the supplied slotted TORX screws (Part No. 441-002) and lock washers to secure the other end of the suppression release kit's bracket to the chassis.

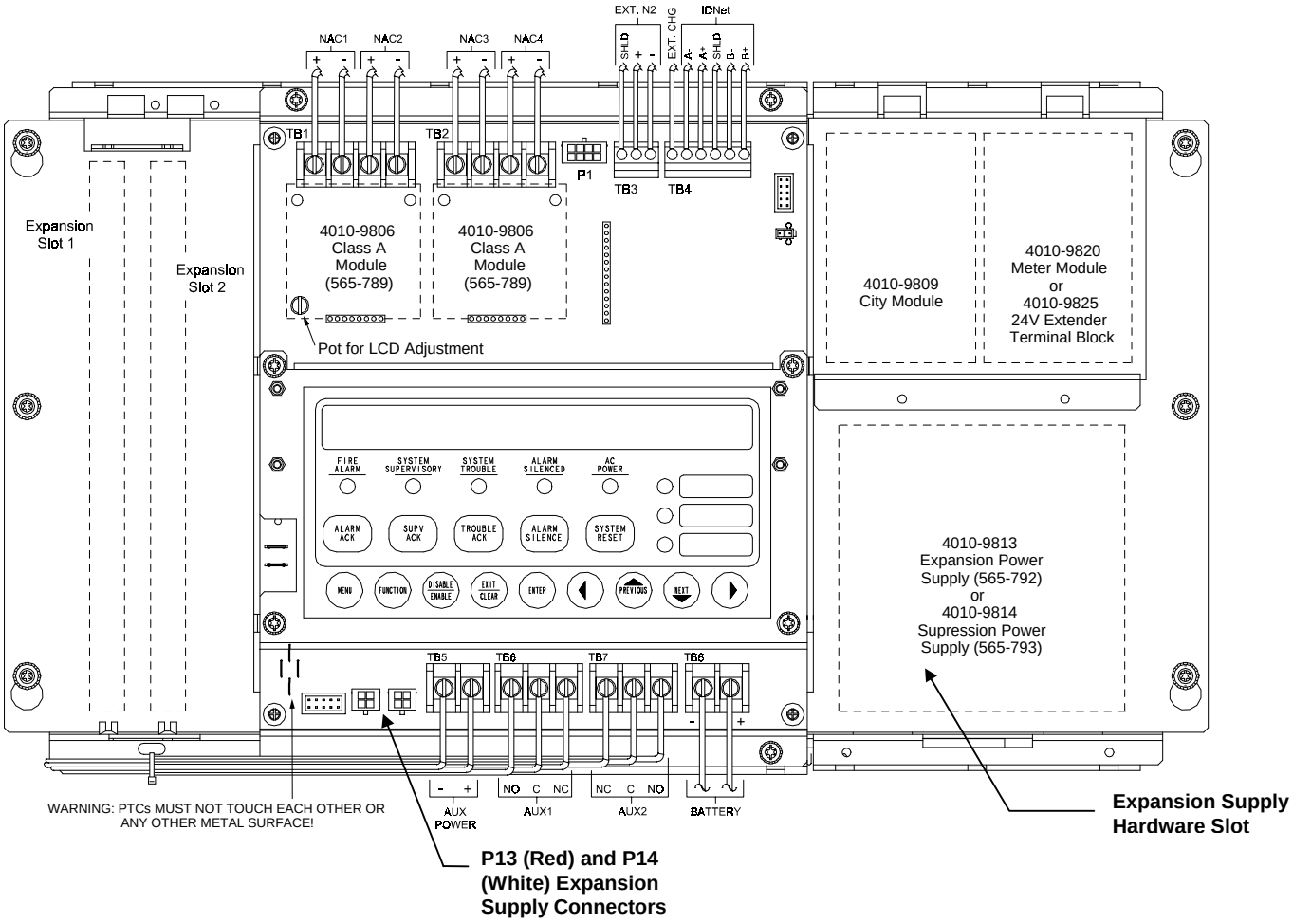



**Figure 2. 4010 Suppression Release Kit**

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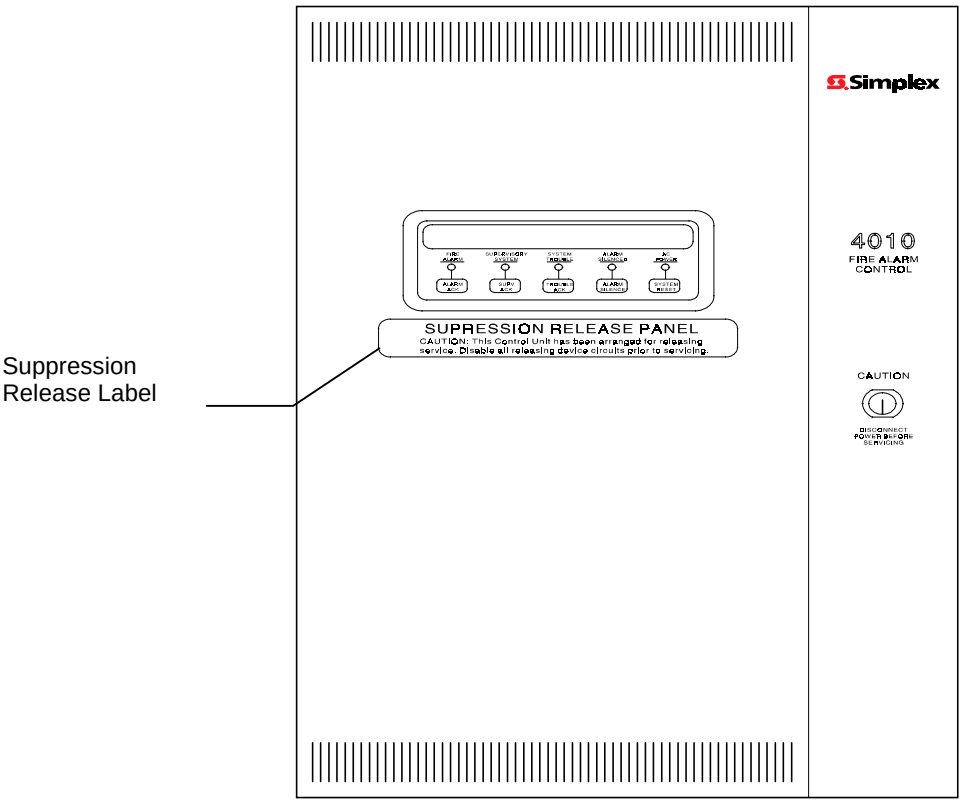
### Applying the Suppression Release Label

When the suppression function is controlled by the 4010 Fire Alarm Control Panel, the panel must be labeled to indicate this fact. The label lets all persons servicing the system know that the panel is configured for suppression release and that they must disable all releasing device circuits before servicing the panel. To apply the label, do the following:

1. Refer to Figure 3 and locate the LCD Display and the Touch Pad keys below it.




2. Notice the placement of the label below the LCD Display and the Touch Pad keys in Figure 3.

3. Place the Suppression Release Label on the 4010 Fire Alarm Control Panel door in the same position as that shown in Figure 3.

## Wiring

### Overview

Use the following information, the 526-407 and 526-408 labels inside the FACP, and the 842-058 Field Wiring Diagram to wire the suppression release kit.

**CAUTION: Pay careful attention to the routing for Power-Limited and Non-Power Limited wiring. You must maintain a 1/4-inch separation between these two types of wiring.**

### AC Wiring

Follow Steps 1 through 4 to wire AC power to the 4010-9814 or -9824 suppression release kit.

1. Disconnect battery and then AC power from the FACP.
2. Remove the existing AC harness from the FACP. Remove the Quick-Disconnect connector from the chassis by firmly gripping the release tabs and pulling it free. The Quick-Disconnect connector is located directly below the chassis.

**IMPORTANT: The Quick Disconnects on the AC Harnesses are not rated for Quick Disconnect while power is applied. Power should be turned OFF at the breaker box before disconnecting the AC Power Quick Disconnect connectors.**

3. Remove the harness wiring from the AC terminal block located in the lower right corner of the 4010 back box.
4. Wire the 733-949 (4010-9814-120V supply) or the 733-955 (4010-9824-240V supply) harness to the back box terminal block. Match incoming Neutral and Hot wires to their corresponding wires leading from the terminal block located in the lower right corner of the back box to the appropriate harness and screw into place.

**WARNING: DO NOT APPLY POWER TO THE 4010 AT THIS TIME! DO NOT connect the quick-disconnect AC connectors to either the suppression power supply or the main chassis. Refer to the "Power-Up and Checkout" section of this publication.**

*Continued on next page*

## Wiring, *Continued*

### Communication and Power Wiring

The suppression release kit requires power and communications connections to the 4010 SFI/O board. Use Steps 1 through 3 to connect a power and communications harness from the suppression release kit to the 4010 FACP. Both harness connectors are keyed for correct connection.

1. Connect the 733-950 (white) harness from P1 of the suppression release kit to P14 of the SFI/O board.
2. Connect the 733-951 (red) harness from P2 of the suppression release kit to P13 of the SFI/O board.
3. Neatly dress the wiring behind the 4010 chassis using the holes provided to tie-wrap the harnesses.

### Battery Wiring

The suppression release kit requires connection to the battery terminals (TB8) on the 4010 SFI/O board.

- Connect the red battery lead from the suppression release kit to the (+) terminal of TB8 on the SFI/O.
- Connect the black battery lead from the suppression release kit to the (-) terminal of TB8 on the SFI/O.

# Power-Up and Checkout

### Connect AC and Battery Power

Use the following steps to apply AC and battery power to the 4010 FACP.

1. Connect the appropriate dual AC harness to the bottom of the suppression release kit first and then to the bottom of the main FACP chassis.
2. Connect the crimped ends of the 733-945 battery harness to the batteries. Observe polarity (red to +, black to -) when connecting batteries.

**WARNING: Battery contains sulfuric acid which can cause severe burns to the skin and eyes, and can destroy fabrics. Replace any leaking or damaged battery. If contact is made with sulfuric acid, immediately flush skin or eyes with water for 15 minutes and seek immediate medical attention.**

After applying power to the system, use the following list to check the 4010 for proper operation.

- Check that the green AC Power LED is ON.
- Check that all yellow and red LEDs are OFF.
- Use the Lamp Test procedure in the Operation Chapter of this publication to verify that all 4010 LEDs and LCD segments work properly.