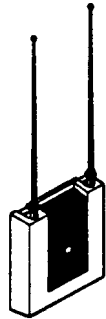# Radionics"

D208RF and D216RF Point Expansion Modules Installation Instructions

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About This Document

This document describes how to install, program, wire, and test the D208RF and D216RF Point Expanders.
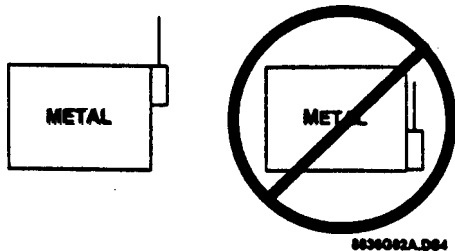
Introduction

The RF Point Expander allows you to use up to 8 (D208RF) or 16 (D216RF) ITI Learn Mode wireless devices with the Radionics D2212 panel.

Installation Guidelines

Observe the following guidelines when installing the Expander:

- Leave 10" above the Expander for the antennas.
- Avoid areas that are likely to expose the Expander to moisture.
- Avoid areas with excessive metal or electrical wiring, including furnace and utility rooms.

or-- If unavoidable, mount on metal with the antenna extending above the metallic surface (see Figure 1).

Figure 1. Mounting on Metal Surfacer

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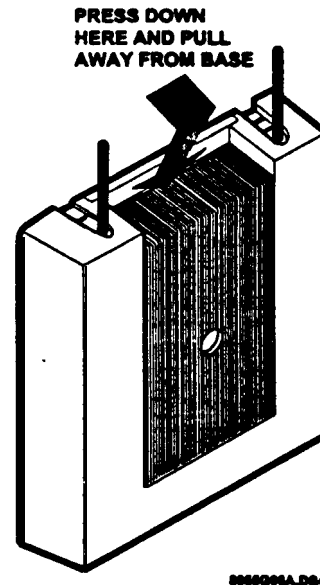
Installing the Expander

CAUTION: You must be free of static electricity before handling circuit boards. Touch a bare metal surface or wear a grounding stmp to discharge yourself.

To install the Expander:

1. Test the Expander at the desired location to evaluate performance in the particular environment.

2. Remove the Expander cover by pressing down on the top center of the cover (see Figure 2).

PRESS DOWN HERE AND PULL AWAY FROM BASE

Figure 2. Removing the Expander's Cover

3. Press down on the lower-right comer of the bass until the latch releases the circuit board (see Figure 3). Gently lift the circuit board by the terminal block to remove it from the base. Place the circuit board in the cover while you mount the base.

4. Hold the base against the mounting surface and mark the three mounting holes (see Figure 4). Remember to leave at least 10" above the base for the antenna.

5. Remove the base and install the provided anchors, If studs are not present.

6. Place the base on the wall and secure it using the provided screws.

CAUTION: When installing the Expander, only use screws that match the specifications of the provided screws (Type AB, #6 x 1" tapping screws).
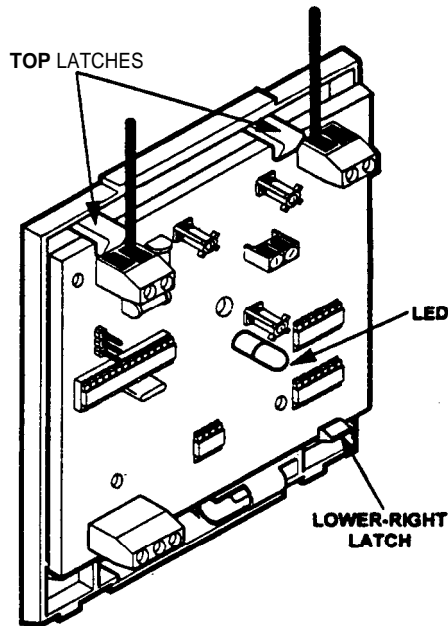

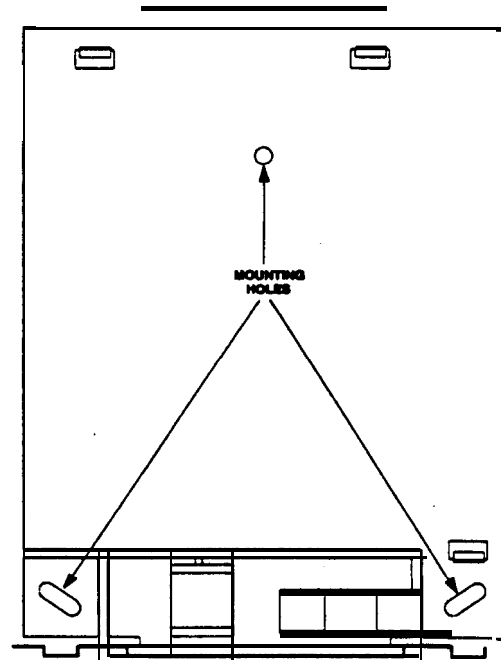figure 3. Removing the Circuit Board

Figure 4. Mounting with Circuit Board Removed

Connecting the Antennas to the Expander

To connect antennas to the Expander:

1. Loosen the inside terminals of the left and right antenna terminal blocks.
2. Insert an antenna into each inside terminal.
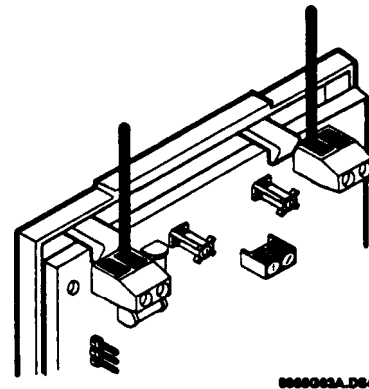3. Tighten the terminal screws (see Figure 5).

Figure 5. Connecting Expander Antennas

Programming

CAUTION: You must **be free of Static electricity before handling circuit boards. Touch a bare metal surface or wear a grounding strap to discharge yourself.**

To program the Panel for the Expander:

1. Select an address (7 or 8) by setting the address jumper to 7 or 8 (see Figure 8).
2. Follow the programming procedure described in the Radionics documentation for adding an RF Point Expander to the D2212 panel. Make sure you make the correct selection at the Address 7 or Address 8 prompt in the address configuration group (see the *D2212 Progamming Entry Guide).*
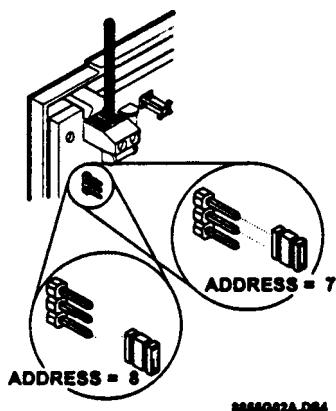

Figure 8. Setting the Address

Learning Points

See the *D2212 Keypad Diagnostics Manual* for instructions on learning points.

Wiring Connections

To wire the Expander:

1. Make sure the panel is powered down.
2. Connect panel terminals 10, 9, and 8 to Expander terminals -, +, and D, respectively (see Figure 7).
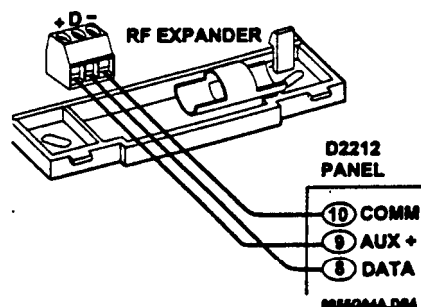

Figure 7. **Connecting the Expander to the D2212**

Testing

After wiring the Expander to the panel, you can determine the Expander's status by observing the L E D .

To determine the Expander's status:

1. Check the panel and Expander connections.
2. Power up the panel.
3. The Expander's LED shows the system's status (see Table 1).

Table **1. RF Point Expander's Status LED**

LED	Indicates
Turns on steady	Expander is functioning normally.
Remains off	Expander is not properly wired.
Blinks continuously	Expander failed the power-up test.
Blinks off momentarily	Expander acknowledged receiving an RF message.

Central Station Reports

The D2212 panel sends Modem II receiver reports for D208/D216 receiver tamper and receiver trouble conditions.

RF Point Expander Specifications

Compatibility:
Radionics D2212 panel

External Power:
7.5 - 14.0 VDC Class II Transformer

Current Dmw:
50 mA maximum

Operating Temperature Flange:
10" to 120°F

DImenslons:
4-1/16" x 5-1/4" x 1" (Lx W x H)

FCC Notice

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference that may be received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by lnteractlve Technologies, Inc. can void the user's authority to operate the equipment.

UL985 Household Fire (pending)

UL1023 Household Burglary (pending)

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