

Introduction

Note: The 4098-9791, 4098-9794, 4098-9795, and 4098-9796 are **not compatible** with the 2120 CDT.

4098 TrueAlarm® Smoke/Heat Sensor and Sounder Bases are connected to a 2120 Multiplex Communication Device Transponder (CDT), 4010, 4020, 4100+, or 4120 Fire Alarm Panel by a single wire pair (MAPNET II® or IDNet™). The 4098-9789, -9791, -9792, -9794, and -9796 sensor bases and their sensors obtain both power and data over MAPNET II or IDNet wiring. Additionally, the 4098-9791 sensor base requires 24VDC power for relay operation. The 4098-9794 sensor base with sounder and 4098-9795 Multi-Sensor sounder base require 24VDC or Notification Appliance Circuit (NAC) power.

This document covers only the information necessary to mount and wire these sensor base configurations. Before installing these devices, make a survey of the area to be covered in accordance with information provided in NFPA 72, Chapter 5. For specific applications, refer to Simplex publication *Common Code Requirements for Fire Alarm Systems* (Publication No. FA2-91-010). For additional information, refer to NFPA 72 and the NEMA Guide for Proper Use of System Smoke Detectors.

Important: Refer to the **4098 Detectors, Sensors, and Bases Application Manual 574-709** that was shipped with the fire alarm system for compatibility and specification data, address settings, maintenance, and correct application of these Smoke/Heat Sensor Bases.

Installation

CAUTIONS: Install the bases described in this instruction in accordance with applicable NFPA standards, local codes, and the authorities having jurisdiction. Failure to follow these instructions may result in failure of the sensor to initiate an alarm condition. Simplex is not responsible for sensors that have been improperly installed, tested, or maintained.

The smoke sensors come with dust covers to protect them from contamination during completion of building construction. Sensors will not operate with dust covers in place.

Mounting

The 4098 smoke/heat sensor bases mount to a 4-inch square, single-gang, or 4-inch octagonal electrical box. Install the sensor base using Figure 1 as a reference.

Note: Sensor bases with Relay Modules 2098-9737 and 4098-9822 require an 1 1/2-inch extension ring (not supplied) mounted to the 4-inch square or octagonal electrical box (relay module(s) cannot be used in single-gang electrical box installations) to meet the space requirement of the relay cube and its wires. The Relay Module 4098-9822 **must** be installed in the electrical box directly behind the sensor base.

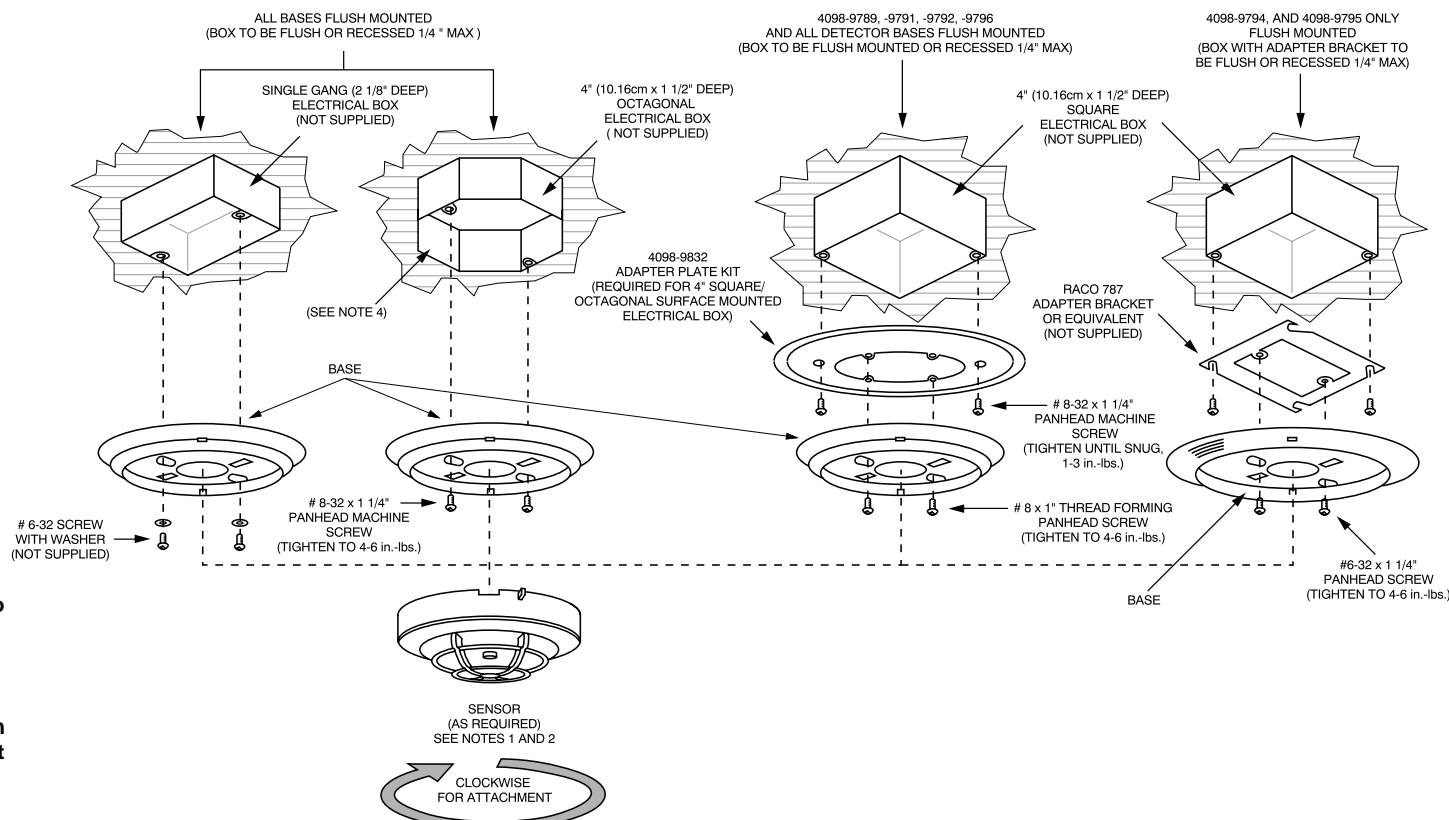
Suffix "C" or "CA" following an eight-Digit Product ID number denotes ULC-listed product.

Suffix "E" following an eight-digit Product ID number denotes Global product. The 2nd suffix identifies market country; models with this suffix are not UL Listed.

MAPNET II® Communication Net is protected by U.S. Patent No. 4,796, 025.

TrueAlarm® is protected by U.S. Patent No. 5,155,468.

IDNet™ is a trademark of Simplex Time Recorder Company.



Notes:

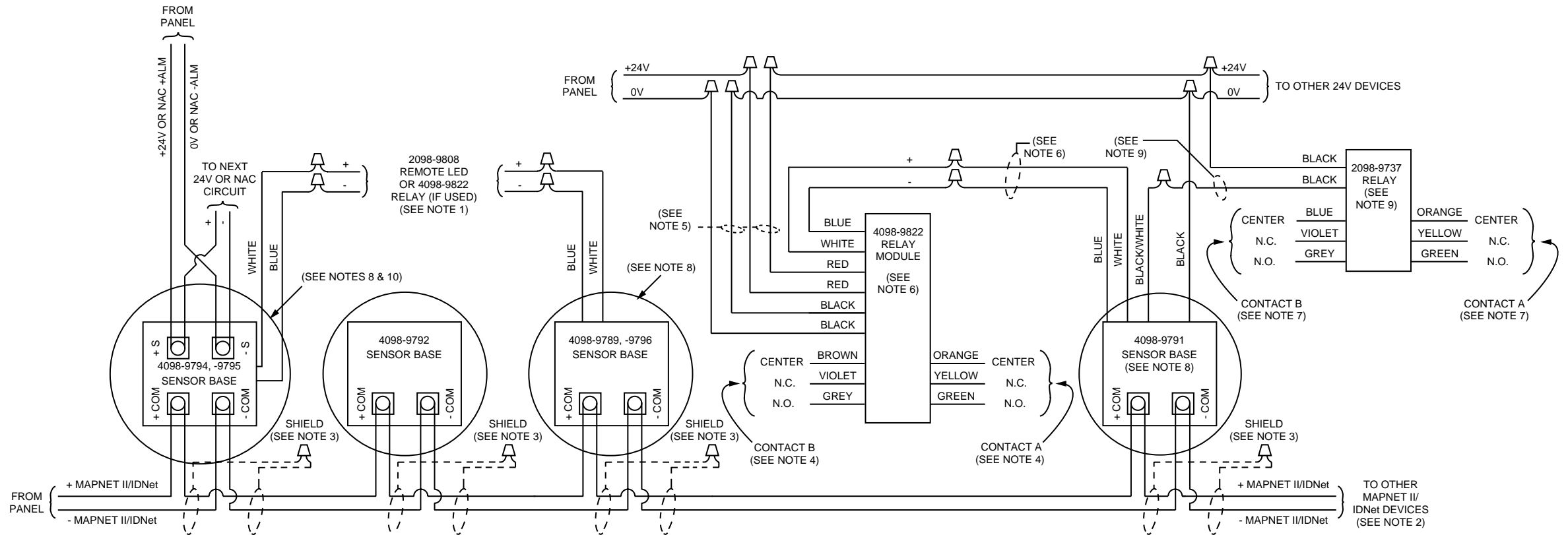
1. Break off plastic lock tab to engage locking mechanism. To lock sensor into base, turn unit until the locking tab clicks into place. To unlock sensor, insert the blade of a screwdriver into this slot and then pull down on handle. This action allows the sensor to be turned and removed.
2. Refer to the *4098 Detectors, Sensors, and Bases Application Manual 574-709* for detailed information on compatible Sensor(s) and DIP Switch Address Settings.
3. Use the slotted hole indicated for the first screw when mounting the sensor base.
4. Use Adapter Plate Kit 4098-9832 when mounting the 4098-9794 and 4098-9795 to a surface mounted 4-inch square or octagonal box. Adapter plate must be installed with textured side towards the electrical box for this installation only.

Figure 1. Typical Base Mounting

Wiring

Figure 2 illustrates the wiring connections for the different smoke/heat sensor base configurations. All screw terminals accept 14 to 18-gauge AWG solid or stranded wire. **Maximum torque should not exceed 12-inch-pounds.** Connect wiring to terminals as illustrated in Figure 2.

CAUTION: Do not loop wire under terminals. Break wire runs to provide supervision.



Notes:

1. Remote LED and relay wires are not supervised.
2. Maximum quantity of devices per circuit is 127 for 4020, 4100+, or 4120, 128 for the 2120 CDT panel, and 250 for the 4010 panel. Maximum quantity of 4098-9795 and 4098-9796 Multi-Sensor bases is 63 with 4020, 4100+, and 4120, and 124 for the 4010 panel. If 4098-9795 output is coded (Temporal code, etc.) via MAPNET II/IDNet control see note 10.
3. If shield is used, twist shield wires together and cap with wire nut. Shield should be insulated from electrical box.
4. Contact A or B: Dry, Form C - each rated 2 amperes at 24VDC/0.5 amperes at 110VAC, resistive.
5. 18 to 32VDC, .008 amperes typical/.013 amperes max.
6. Do not use remote LED if the 4098-9822 relay module is used.
7. Contact A or B: Dry, Form C - Each rated at 3 amperes at 28VDC/115VAC, resistive.
8. 4098-9791, 4098-9794, 4098-9795, and 4098-9796 are not compatible with 2120 CDT.
9. Maximum wire length between 4098-9791 sensor base and 2098-9737 relay module is 100 feet.
10. Maximum quantity of sensors with 4098-9794 or 4098-9795 sounder bases limited to 43 if output is coded (Temporal code, etc.) via MAPNET II/IDNet control. If coding is performed via 24VDC or NAC circuit, see note 2.

Figure 2. 4098 Smoke/Heat Sensor Base Connections