507378-01
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Supersedes 5/2014

THIS MANUAL MUST BE LEFT WITH THE HOMEOWNER FOR FUTURE REFERENCE

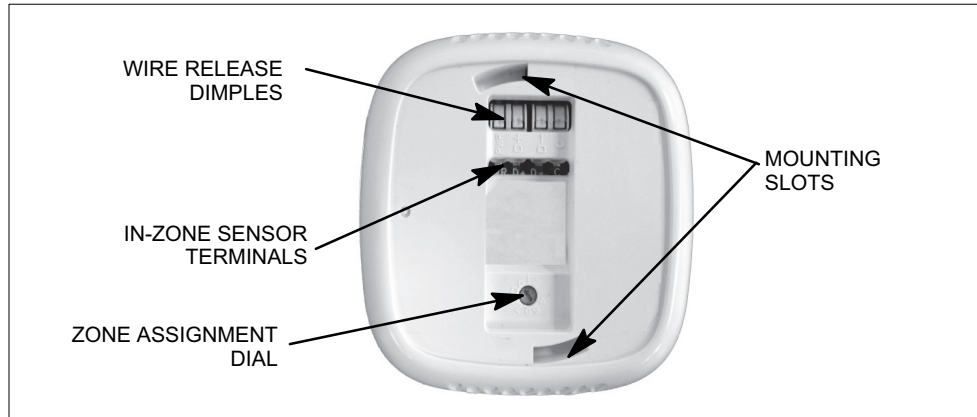## In-Zone Sensor (1.851400) for Comfort Sync™ Zoning System

Figure 1. In-Zone Sensor—Backside

⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life.

Installation and service must be performed by a licensed professional HVAC installer (or equivalent) or service agency.

Shipping and Packaging

- In-Zone Sensor
- Mounting base plate
- 2 screws with wall anchors
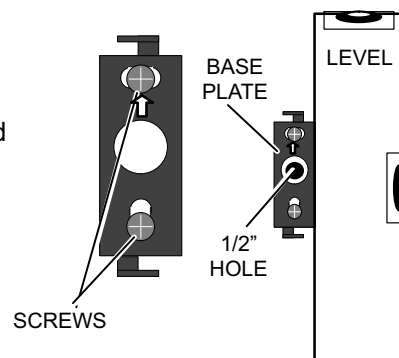- Wire nuts (4)
- 4-conductor thermostat cable

Installation

Install the In-Zone Sensor on an inside wall approximately in the center of the conditioned area and 5 feet (1.5m) from the floor. It should not be installed on an outside wall or where it can be affected by sunlight or drafts.

MOUNTING WALL BASE PLATE AND MAKING CONNECTIONS

NOTE - Field-provided thermostat wiring does not need to be twisted pair or shielded.

1. Drill a hole large enough to feed through a 4-wire, 18 AWG thermostat cable for the In-Zone Sensor.

2. Mount the base plate to wall using provided screws and anchors. Mounting base must be positioned with screw at the top and bottom and aligned vertically. Use of level is recommended.

3. Pull enough thermostat cable through the wall to strip 3 inches of outer sheathing and then strip each thermostat wire 3/16".

4. **Making Connections**:

   Option 1 -18AWG Thermostat Wiring

   Recommend using the 20 AWG thermostat cable and wire nuts included in the kit when using 18 AWG thermostat wiring (see figure 2, option 1). Usage will allow for easy disconnection of the In-Zone Sensor from the 18 AWG thermostat wiring without damaging the In-Zone Sensor wire release dimples.

   Option 2 - 20 AWG Thermostat Wiring

   If smaller gauge wire (20AWG) is used then direct connection to the In-Zone Sensor terminals is recommended. Connect the 4 wires from the wall directly to the In-Zone Sensor as illustrated in figure 2, option 2.
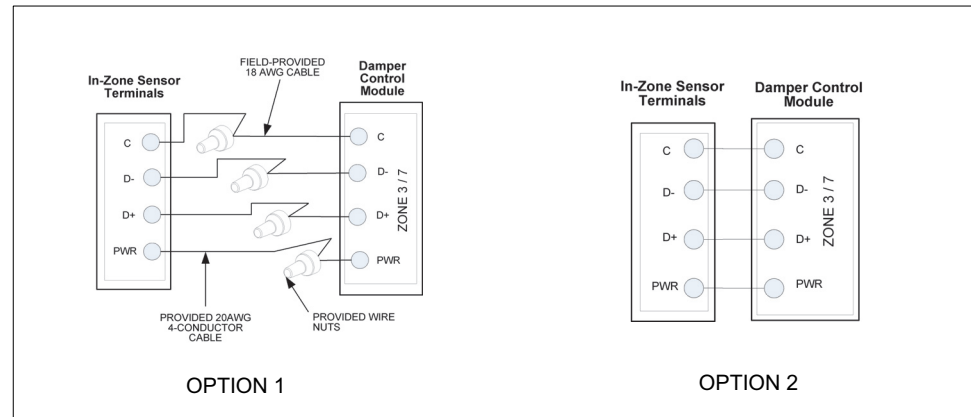

Figure 2. Options 1 and 2

NOTE - In-Zone Sensors are 12VDC devices that are powered by the damper control module.

DISCONNECTING THERMOSTAT WIRING FROM IN-ZONE SENSOR

If 18 AWG wiring is directly connected to the In-Zone Sensor and removal is required, ensure the thermostat wiring is not bent and as straight as possible before attempting removal from the In-Zone Sensor terminal tabs. The wire terminals are friction fit. Wires can be released by gently pressing down on the wire release dimples with a small screwdriver. Carefully remove the wires.

CONFIGURING IN-ZONE SENSOR

1. When powered on, the In-Zone Sensor will display the default zone setting for 2 seconds (see figure 5) before displaying the heating and/or cooling temperature setting. If the device is unable to communicate with the damper control module, two dashes will appear (see figure 8, display A).

2. Using a screwdriver, set zone number assignment by turning the dial on back of In-Zone Sensor to the desired zone number (2, 3 or 4) (see figure 3). Each In-Zone Sensor **MUST** be set to a unused zone number.

NOTE - Zone 1 temperature setting is controlled by the Comfort Sync™ thermostat. Temperature settings for zones 2, 3, and 4 are controlled by individual In-Zone Sensors.

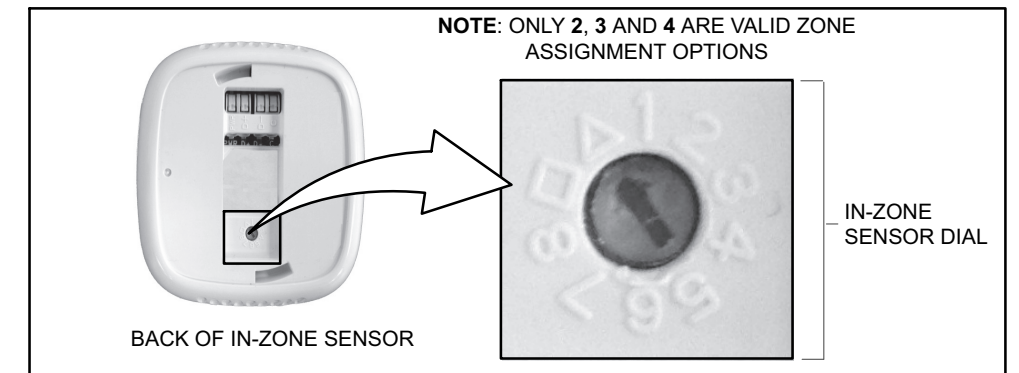*NOTE - Dial settings 1, 5, 6, 7, 8, square and triangle are for future use.*

Figure 3. In-Zone Sensor — Zone Setting Dial

MOUNTING IN-ZONE SENSOR TO WALL BASE PLATE

Mount the In-Zone Sensor onto the base plate tabs. There are slots (see figure1) on the backside of the In-Zone Sensor that will receive the mount base tabs (see figure 4). Rotate the In-Zone Sensor 1/4" to the right (about 15 degrees); and listen for a **click** which indicates the In-Zone Sensor has snapped into place. The In-Zone Sensor should be square on the wall. If not square, adjust the base plate for vertical (portrait) alignment (see figure 4).
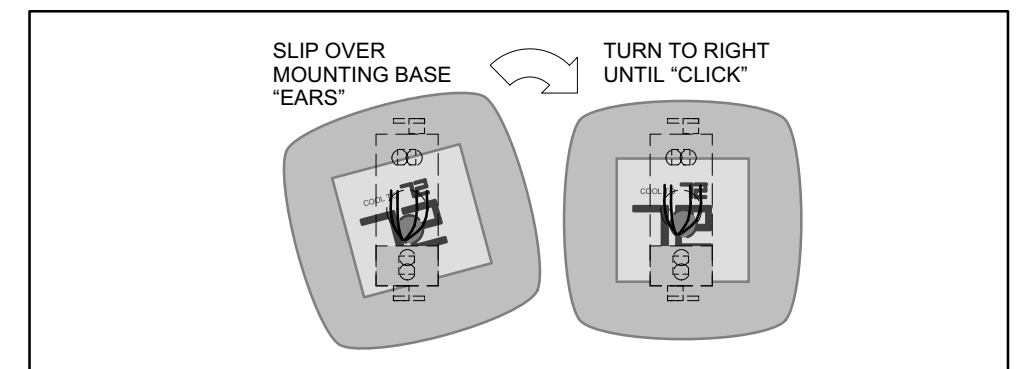

Figure 4. Attach In-Zone Sensor to Base Plate

ATTENTION INSTALLER: DO NOT remove protective film covering the front surface of the In-Zone Sensor until installation is completed. It is used to protect the device during shipping and installation.

OPERATING THE IN-ZONE SENSOR

Displaying Zone Assignment

The zone assignment number can be displayed by pressing the **up** and **down arrows** at the same time for approximately 4 seconds. The device will reboot and display the zone assignment for 2 seconds and then revert to current temperature display and temperature setting options.
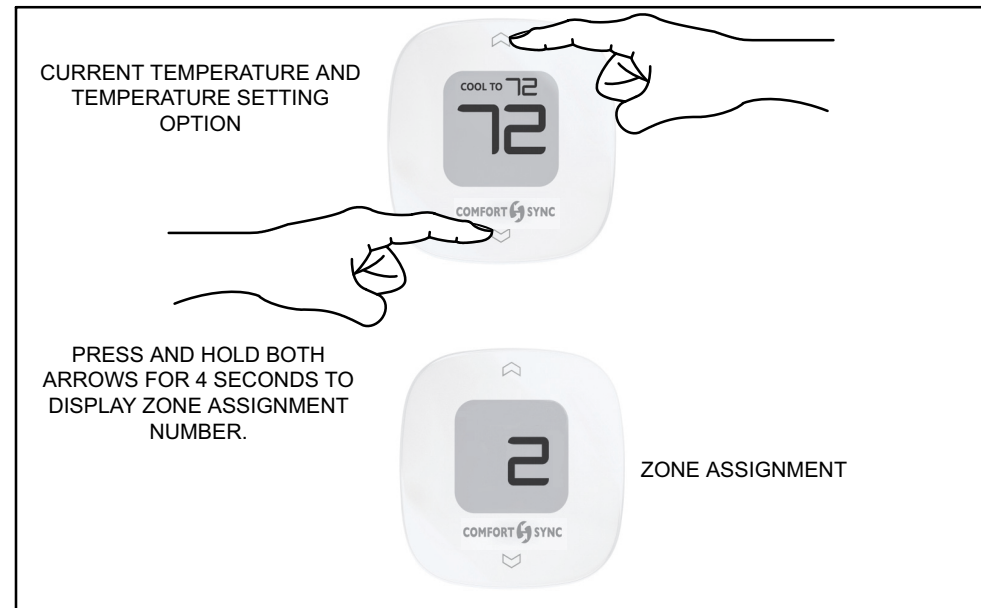
CURRENT TEMPERATURE AND TEMPERATURE SETTING OPTION

PRESS AND HOLD BOTH ARROWS FOR 4 SECONDS TO DISPLAY ZONE ASSIGNMENT NUMBER.

ZONE ASSIGNMENT

Figure 5. Displaying Zone

Changing between Heating and Cooling Temperature Settings

1. If **heat and cool** option has been enabled for the specific zone at the *Comfort Sync™* thermostat, then **press** and **hold** both arrows simultaneously for 1 second until either a red or blue light appears. Red light indicates heating temperature setting can be adjusted and blue light indicates cooling temperature setting can be adjusted.

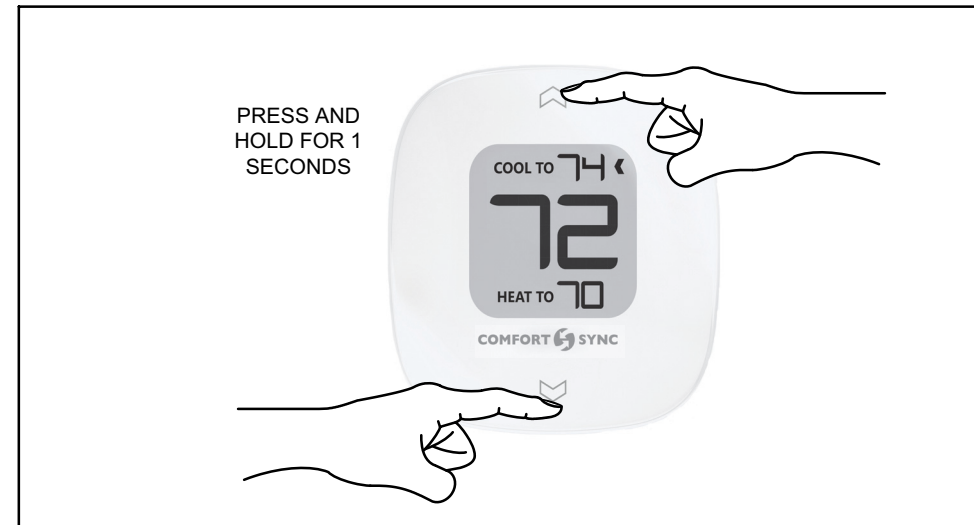2. **Press** and **hold** both arrows again to change to the opposite setting (heating or cooling).

PRESS AND HOLD FOR 1 SECONDS

Figure 6. Toggling Between Heating and Cooling Temperature Setting

Changing Temperature Setting

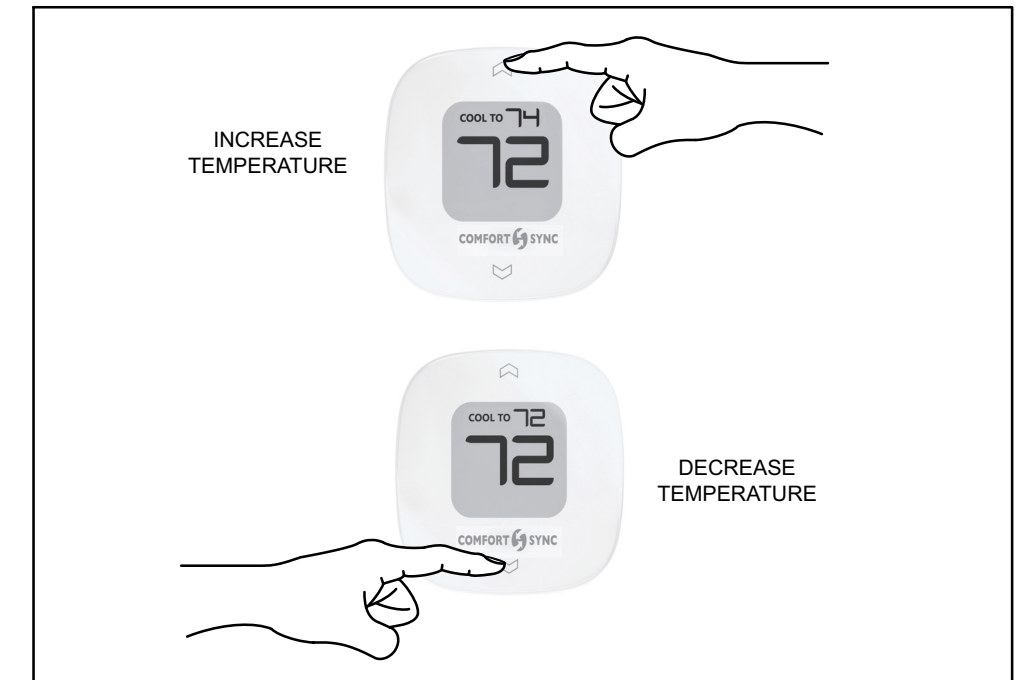Push either the **up** or **down arrow** to change the temperature setting.

INCREASE TEMPERATURE

DECREASE TEMPERATURE

Figure 7. Changing Temperature Setting

A
This display indicates either the In-Zone Sensor is attempting to communicate or is unable to communicate with the damper control module or zone settings at the *Comfort Sync™* thermostat are incomplete. Check wiring to confirm connections are correct.

B
This display indicates the system can operate automatically in either heating or cooling modes. The left arrow ◀ indicates that specific temperature setting is enabled and can be adjusted.

C
This display indicates the system zoning is OFF. The *Comfort Sync™* 🏠 logo is displayed.

NOTE - Zoning must be turned on at the *Comfort Sync™* thermostat.

D
When either the up or down arrow is pressed, the up and down arrows will illuminate **BLUE** to indicated the cooling temperature setting can be adjusted. In addition, a left pointing arrow will appear next to the **COOL TO** temperature.

E
When either the up or down arrow is pressed, the up and down arrows will illuminate **RED** to indicated the heating temperature setting can be adjusted. In addition, a left pointing arrow will appear next to the **HEAT TO** temperature.

F
This display indicates the system is in **AWAY** mode. The touchscreen can be used to adjust either heating or cooling temperature settings only.

G
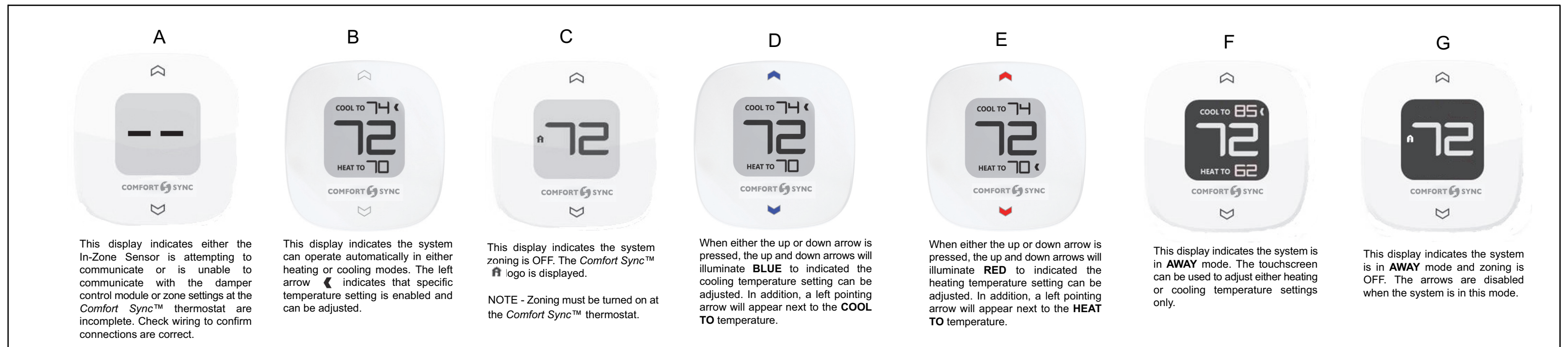This display indicates the system is in **AWAY** mode and zoning is OFF. The arrows are disabled when the system is in this mode.

Figure 8. Various In-Zone Sensor Displays