

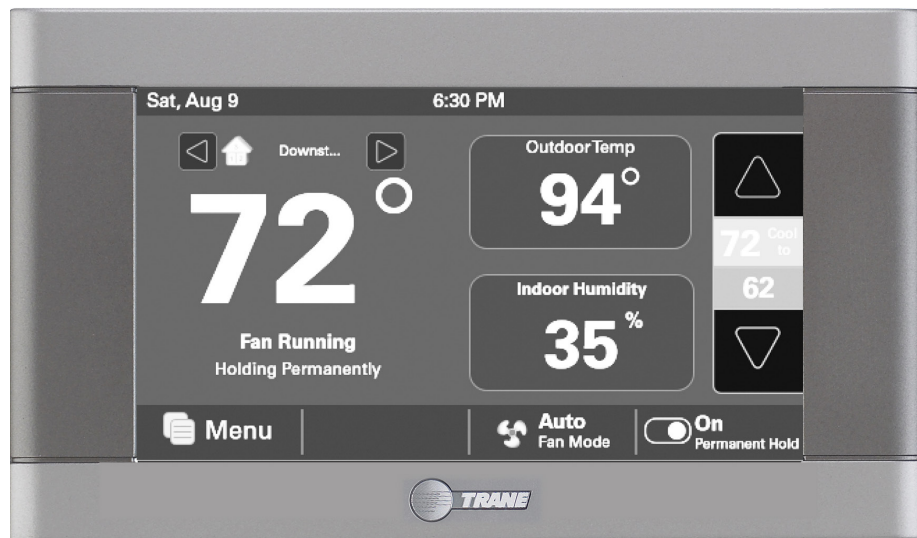
# ComfortLink™ II XL 1040

## TZON1040 Zone Sensor Installation & User Guide



**TRANE®**

This guide will help you install and configure your TZON1040 zone sensor quickly and easily.



The 1040 is an easy to use communicating zone sensor with a color touch screen.

18-HD88D1-1D-EN

# ComfortLink™ II

## TZON1040

Communicating Zone Sensor with touch screen interface

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## Welcome!

This guide will introduce you to the 1040's many features and get you started using your Zone Sensor.

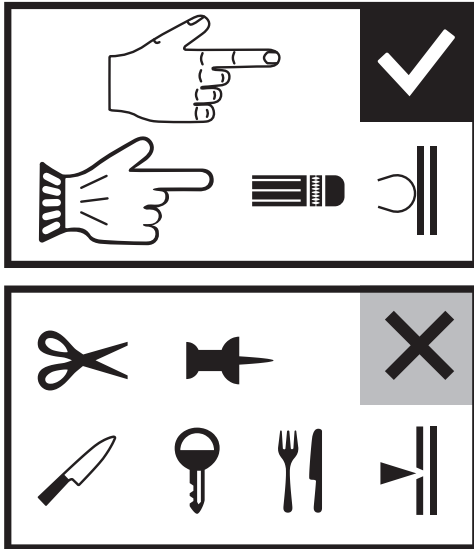
The intuitive interface and powerful features incorporated into the compact design of the color touch screen zone sensor represent the ultimate in climate control and comfort technology from the industry's leader in residential HVAC systems.

NOTE: 1050 software version 5.7 or later is required.

# User Guide

## Touch Screen

The 1040 utilizes a resistive touch screen, which allows you to apply light pressure with your finger or any non-sharp object in order to interact with the device.

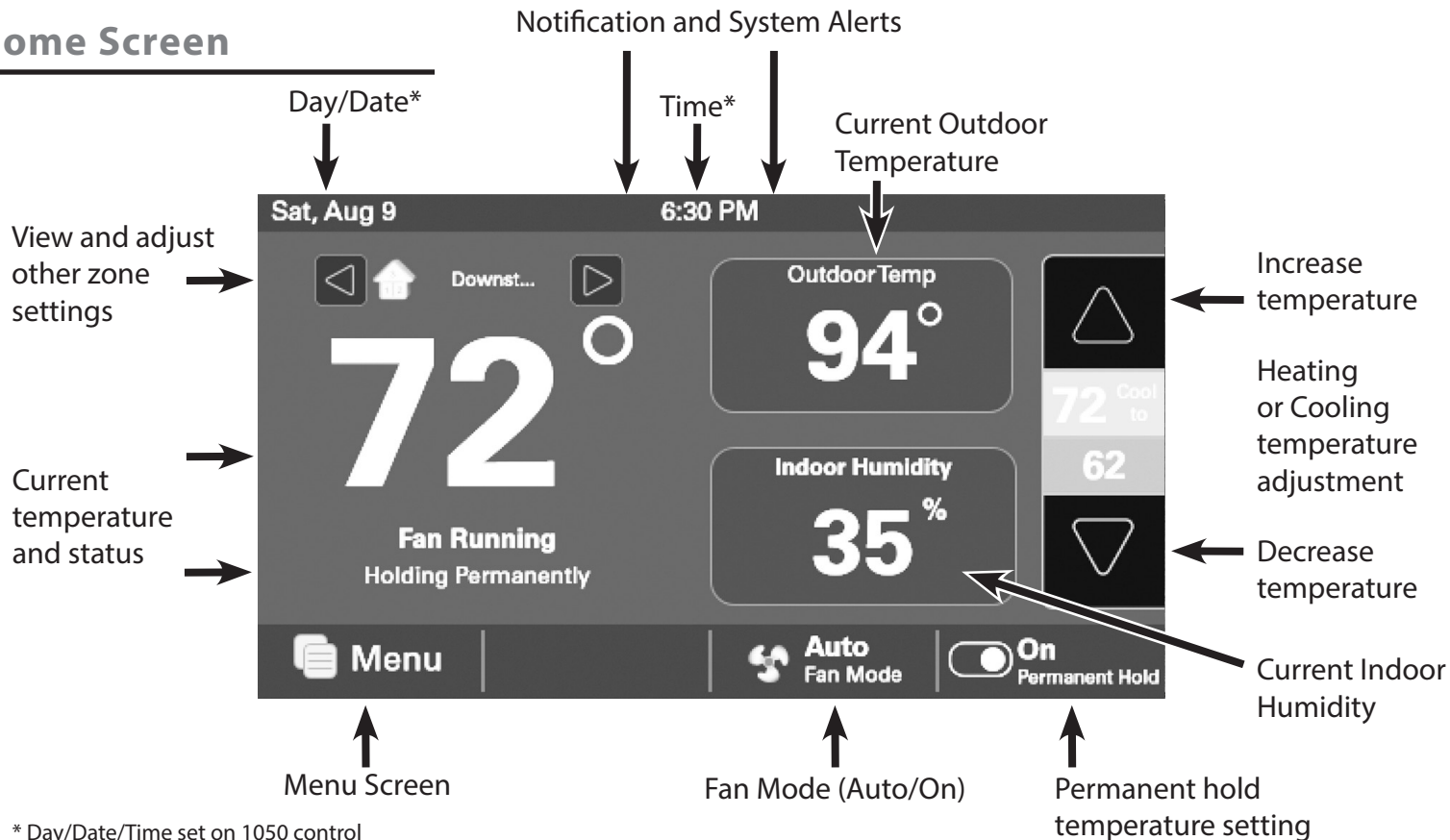


**CAUTION:**  
Do not use hard or sharp objects to touch the screen.



# User Guide

## Home Screen

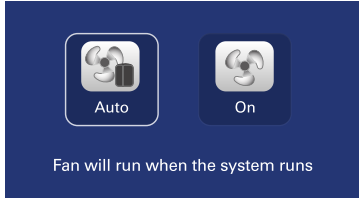


\* Day/Date/Time set on 1050 control

# User Guide

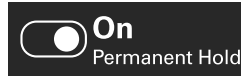
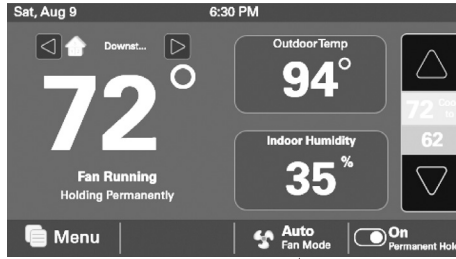
## Home Screen

The 1040 System Mode is bound to the 1050 System Mode and cannot be modified from the 1040 zone sensor.



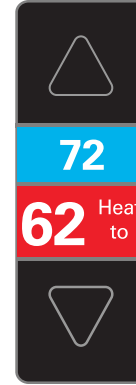
The **Fan Mode** button allows you to choose between Auto or On fan modes.

- \* **Auto Fan Mode** turns the fan off and on with the heating and cooling system operation.
- \* **On Fan Mode** runs the fan continuously. If enabled, the Smart Continuous Fan feature may disable fan operation when the indoor humidity level rises above the humidity setpoint.



Select the **Permanent Hold** button to toggle between On/Off options.

- \* **ON**: maintains current temperature setpoint until you manually change the setpoint.
- \* **OFF**: resumes scheduling if enabled. A zone schedule may be created or modified from the 1050 control's **Schedules & Presets** screen.

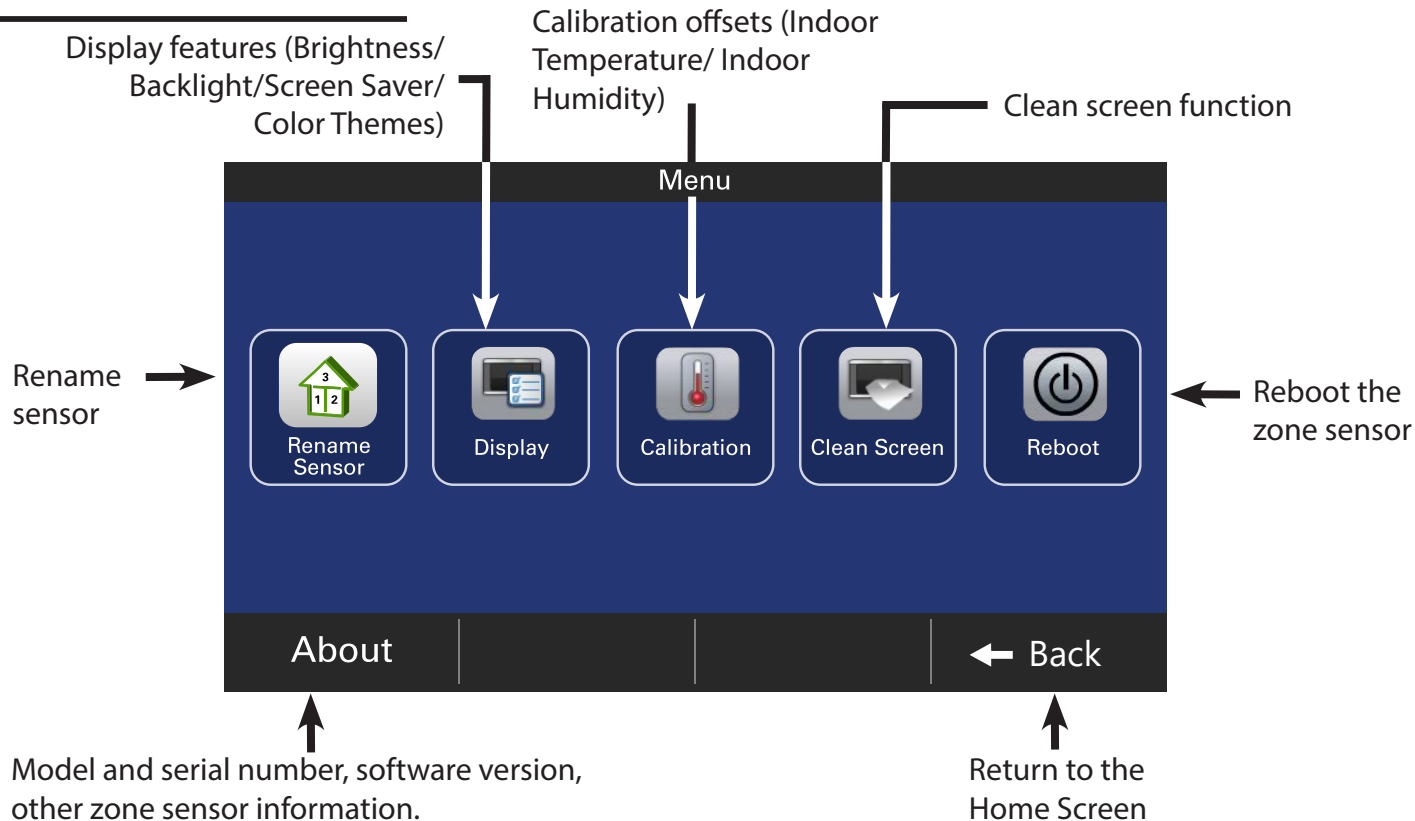


Heating & Cooling Setpoints:

- Select a setpoint to modify
- Use the arrows to increase or decrease the highlighted setpoint

# User Guide

## Menu Screen



## Name Sensor Screen

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Navigate to Name Sensor Screen by selecting:  
**Home Screen > Menu > Rename Sensor**



This screen allows you to assign a unique name to the 1040 zone sensor.

On first boot-up this screen will appear to allow you to set a name for the 1040 zone sensor.

The sensor name may include up to 20 characters. Select **Done** to apply the changes.

# User Guide

## Brightness

Navigate to Screen Settings by selecting: **Home Screen > Menu > Screen Settings > Brightness**

The screenshot shows the 'Screen Settings' interface. On the left is a vertical menu with four tabs: 'Brightness' (selected), 'Backlight', 'Screen Saver', and 'Color Themes'. An arrow points from the text 'Select a tab to view different screen setting options' to the 'Brightness' tab. The main area is titled 'Active and Standby:' and contains two vertical sliders. The 'Active' slider is set to 100% and the 'Standby' slider is set to 60%. An arrow points from the text 'Adjust the screen active and standby brightness' to these sliders. At the bottom, there are two buttons: 'Apply' and 'Cancel'. An arrow points from the text 'Apply changes' to the 'Apply' button, and another arrow points from the text 'Return to the Menu without saving' to the 'Cancel' button.

Select a tab to view different screen setting options

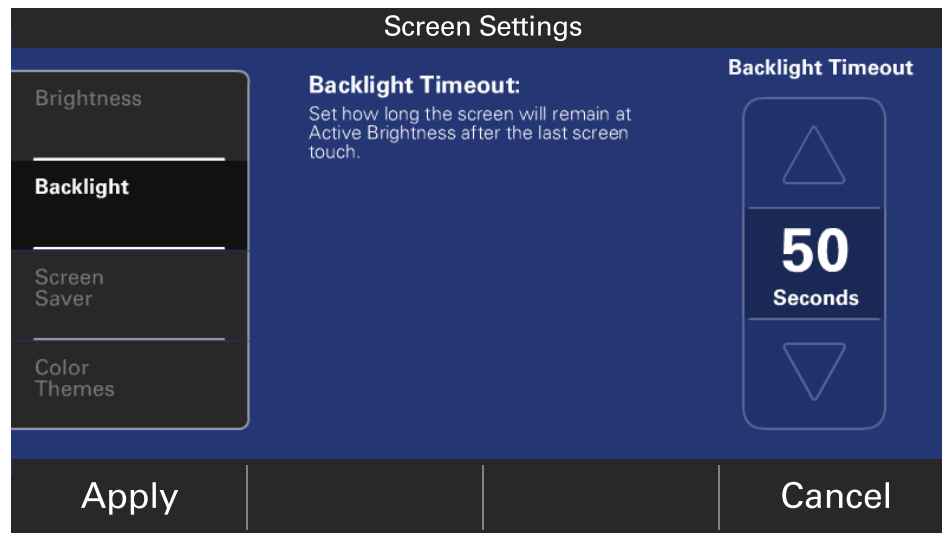
Adjust the screen active and standby brightness

Apply changes

Return to the Menu without saving



Navigate to Screen Settings by selecting: **Home Screen**  
> **Menu** > **Screen Settings** > **Backlight**



← Adjust how long the screen will remain active after the last screen touch

↑  
Apply changes

↑  
Return to the Menu without saving

# User Guide

## Screen Saver

Navigate to Screen Settings by selecting: **Home Screen**  
> **Menu** > **Screen Settings** > **Screen Saver**

Adjust how long the zone sensor will wait to display screen saver

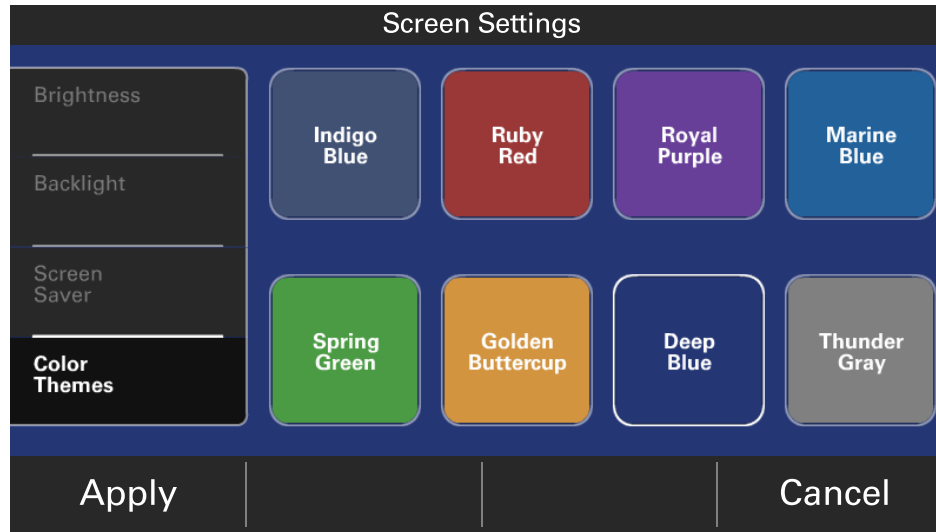
The screenshot shows the 'Screen Settings' interface. On the left is a sidebar with options: Brightness, Backlight, Screen Saver (highlighted), and Color Themes. The main area is divided into three sections: 'ScreenSaver:' with a description 'The Indoor temperature will display on the screen.', 'Wait Duration' showing '10 Minutes' with up and down arrow controls, and 'Screen Saver' with three options: 'None', 'Black', and 'Indoor Temperature'. The 'Indoor Temperature' option is selected, indicated by a black arrow from the right. At the bottom are 'Apply' and 'Cancel' buttons. An arrow points to 'Apply' with the text 'Apply changes', and another arrow points to 'Cancel' with the text 'Return to the Menu without saving'. A large arrow from the top text points to the 'Wait Duration' section.

Select the screen saver you would like displayed during standby mode

Apply changes

Return to the Menu without saving

Navigate to Screen Settings by selecting: **Home Screen**  
> **Menu** > **Screen Settings** > **Color Themes**



Select a custom color theme for the zone sensor

↑  
Apply changes

↑  
Return to the Menu without saving

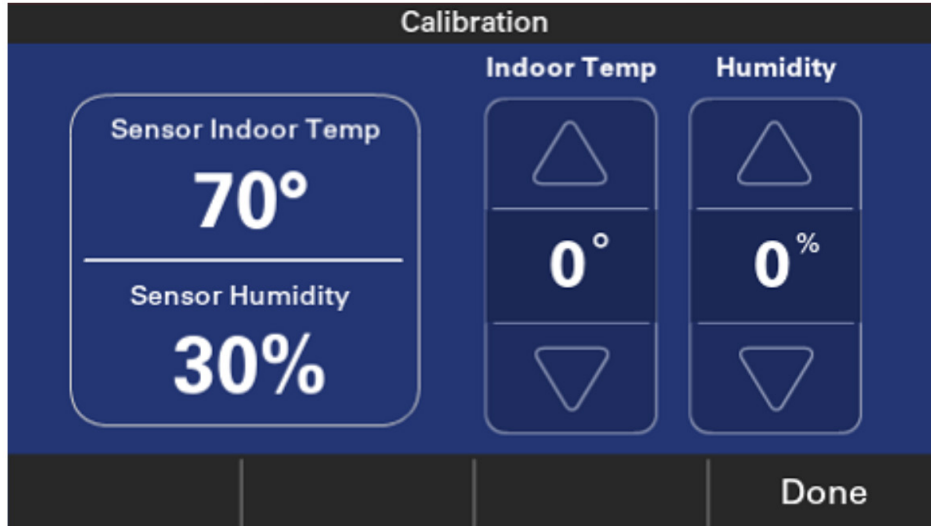
# User Guide

## Calibration

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Navigate to the Calibration screen by selecting:  
**Home Screen > Menu > Calibration**

Adjust the Indoor Temp and Humidity values

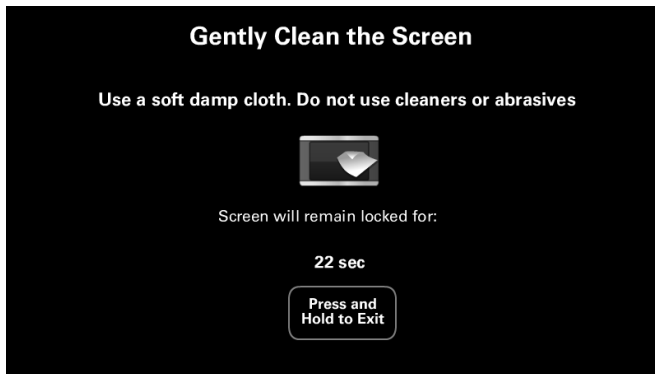


Return to the Menu

## Clean Screen

Navigate to Clean Screen by selecting: **Home Screen > Menu > Clean Screen**

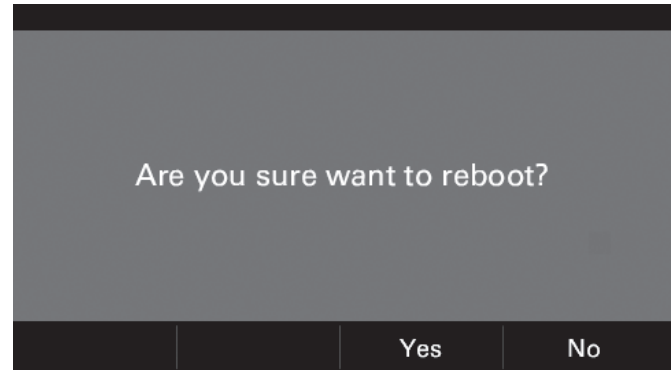
The Clean Screen feature temporarily locks the screen for 30 seconds to allow the display to be cleaned.



Navigate to the Reboot screen by selecting: **Home Screen > Menu > Reboot**

From the Reboot screen, you can reboot the zone sensor with the push of a button. When you select this option you will be prompted to ensure you would like to reboot your zone sensor.

NOTE: The HVAC system will not stop operation while the zone sensor reboots.



# Installation

## Safety

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This information is intended for use by individuals possessing adequate backgrounds of electrical and mechanical experience. Any attempt to repair a central air conditioning product may result in personal injury and/or property damage. The manufacturer or seller cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.

NOTE: Use 18-gauge color-coded thermostat cable for proper wiring. Shielded cable is not typically required. Keep this wiring at least one foot away from large inductive loads such as electronic air cleaners, motors, line starters, lighting ballasts and large distribution panels.

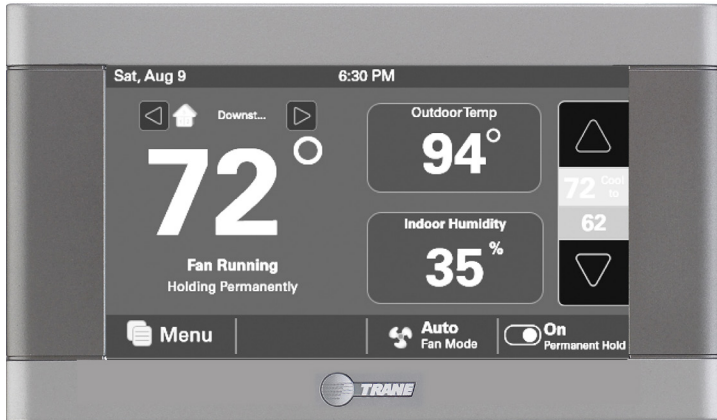
Failure to follow these wiring practices may introduce electrical interference (noise) which can cause erratic system operation. All unused thermostat wire to be grounded at indoor unit chassis ground only. Shielded cable may be required if the above wiring guidelines cannot be met. Ground only one end of the shield to the system chassis.



LIVE ELECTRICAL COMPONENTS!

During installation, testing, servicing, and troubleshooting of this product, it may be necessary to work with live electrical components. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

The 1040 Connected Zone Sensor has a 4.3" color touch screen and offers a full-featured and easy-to-use interface.



### Box Contents

- 1 Control
- 1 Sub-base
- 2 #6 18x1 Phillips slotted head mounting screws
- 2 #6x1 Nylon Drywall Anchors
- 1 Installation and User Guide
- 1 USB "On-the Go" Adapter Cable (Micro USB plug to Standard USB receptacle)

# Installation

## Location

The 1040 is designed for installation in climate controlled living spaces when applied with Trane's ComfortLink™ II zone control system. Place the zone sensor in a central location with good circulation.

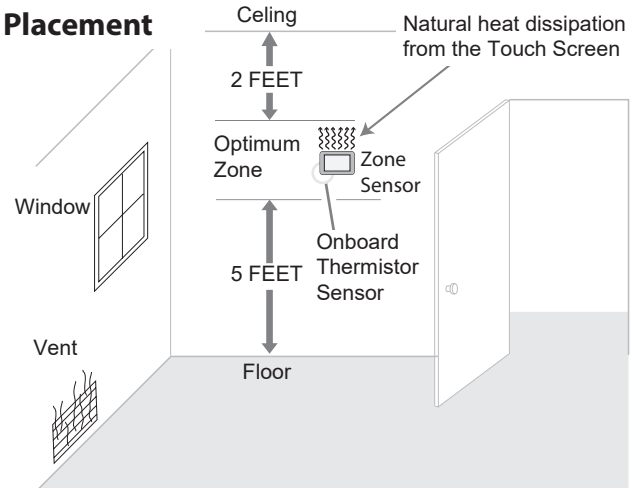
For proper temperature sensing, avoid exposing the 1040 to heat radiated from lamps, sun light, fireplaces or any other radiant heat source.

Avoid locations close to windows, behind doors or alcoves with poor air circulation, adjoining outside walls, or doors that lead to the outside.

Select a location that prevents the 1040 from being directly exposed to air currents from supply registers or ceiling fans.

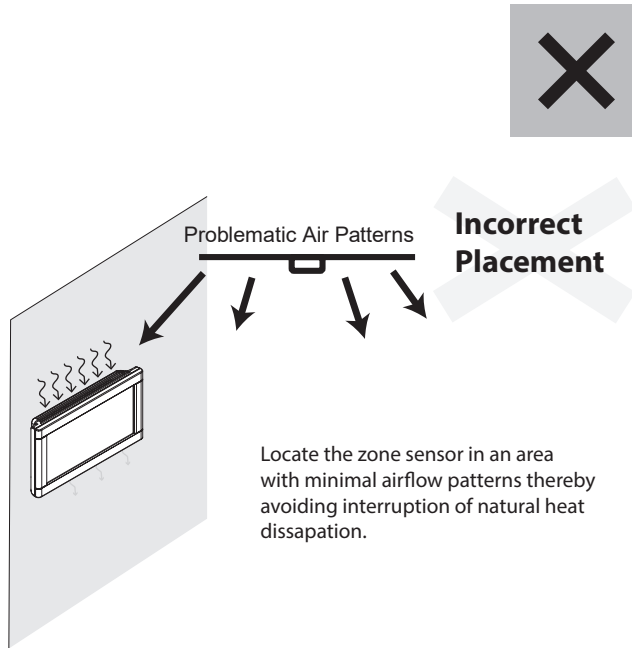


### Correct Placement



Installation Figure 1





**Installation Figure 2**

Mount the zone sensor on a section of interior wall that does not contain hot or cold water pipes or duct work.

**IMPORTANT:** The 1040 zone sensor utilizes a 4.3" color touch screen. This screen generates heat which is vented out the top of the zone sensor utilizing natural convection. If an air source is directed at or from above, heat from the screen can be trapped within the zone sensor and may cause the indoor temperature to be biased. (Installation Figure 1 & 2)

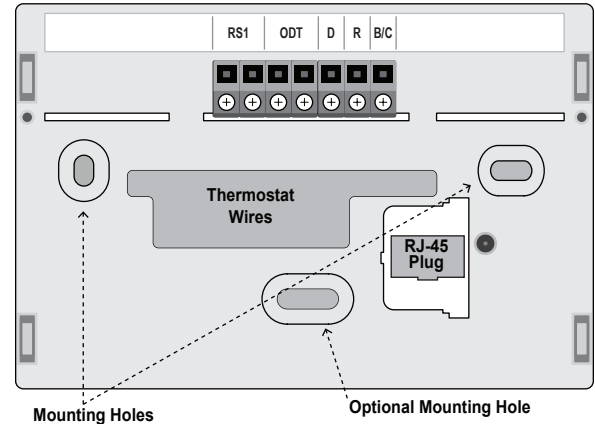
# Installation

## Mounting

1. Turn OFF all power to heating and cooling equipment.
2. If an existing zone sensor is being replaced:
  - a. Remove the existing zone sensor from the wall.
  - b. Disconnect the wires from the existing zone sensor being careful not to allow them to fall back into the wall.
3. Carefully pry the sub-base away from the 1040 using a small flat-blade screwdriver. Note that the tight fit is normal and ensures that the sensor is held securely to the sub-base when mounted on the wall.
4. Route the wires through the opening on the sub-base.

NOTE: RS1 and ODT terminals are disabled. They are not compatible with the 1040 zone sensor.

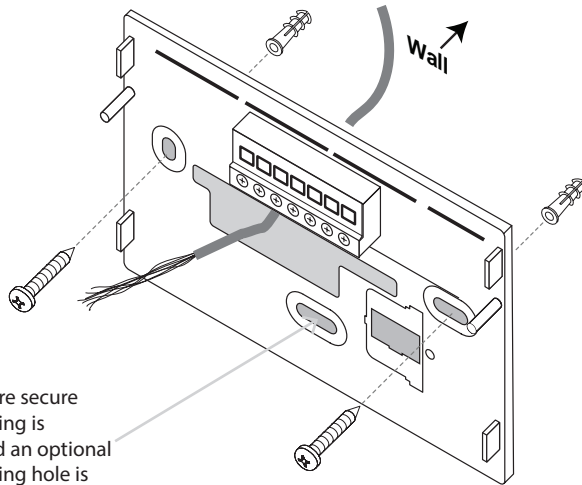
NOTE: RJ-45 plug is disabled. It is not compatible with the 1040 zone sensor.



**Installation Figure 3**

## Mounting

5. Drill the holes in the wall where marked.
6. Mount the sub-base to the wall using included mounting screws and drywall anchors. Make sure all wires extend through the hole in the sub-base (Installation Figure 4).



Installation Figure 4

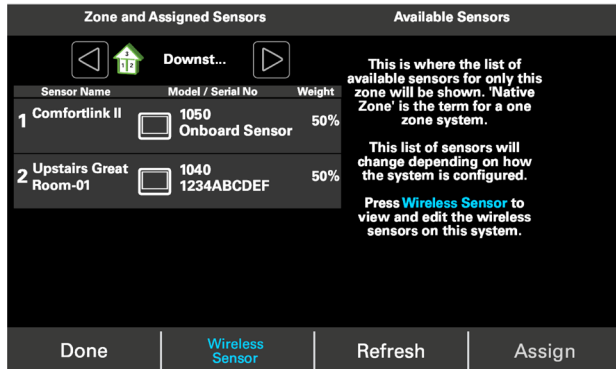
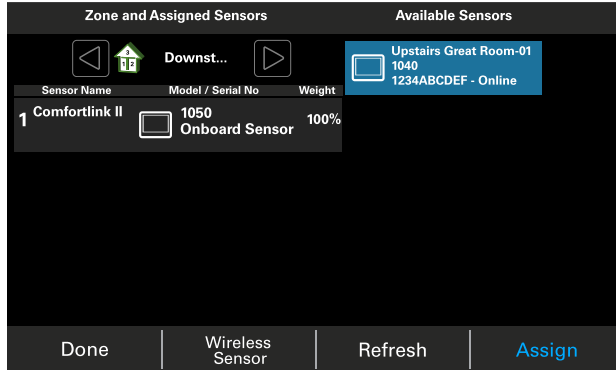
1. Adjust the length and position of each wire to reach the proper terminal on the connector block of the sub-base. Strip 1/4" of insulation from each wire. Do not allow adjacent wires to short together when connected.
2. Match and connect zone sensor wires to the proper terminals on the connector block. Refer to Field Wiring Diagrams included in the Zone Panel document.
3. Push excess wire back into the wall and seal the hole to prevent air leaks.

NOTE: Air Leaks coming through the wiring hole may bias the ability of the zone sensor to accurately measure and display the zone temperature.

4. Attach the 1040 zone sensor to the sub-base.
5. Turn ON power to the heating and cooling equipment.

# Installation

## Zone Assignment

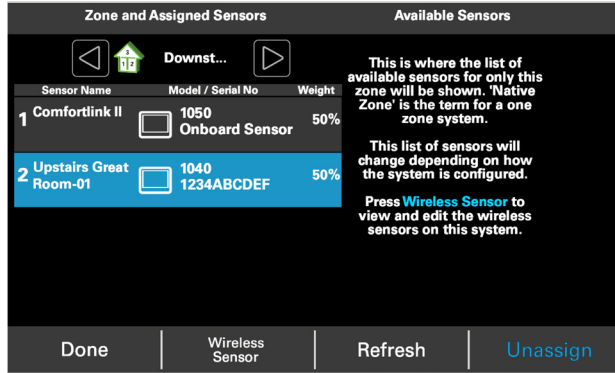


Navigate to **Indoor Sensor Setup** on the 1050 control from the **Service Menu**.

This is the Indoor Sensor Setup screen on the 1050 control. When setting up zoning it will ask you if you have zone sensors to assign and take you to this menu. When the 1040 is powered and wired into the zone system you should see it in the list of available sensors. Navigate to the selected zone on the top left, then select the 1040 on the right column and select **Assign**.

Once assigned, the sensor will move over to the left column and average with the other sensors assigned in that zone. You can assign up to 4 sensors per zone.

NOTE: 1050 software version 5.7 or later is required. Features may differ depending on software version.



To unassign the 1040, select the desired sensor and then select **Unassign**. The sensor will move back to the list of Available Sensors.

# Installation

## Power-Up Sequence

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When the 1040 zone sensor is installed to the sub-base, the zone sensor initiates a 90-120 second power-up sequence. During the power-up sequence, the Screen Calibration option is available for five seconds.

NOTE: Screen Calibration is available for five minutes if the screen has never been calibrated.

If the screen is not pressed within five seconds, the zone sensor will default to previously stored Screen Calibration settings. The 1040 is factory calibrated and can be recalibrated at any time by rebooting the zone sensor.

NOTE: Temperature display may be inaccurate until the 1040 zone sensor acclimates to ambient room conditions, which may take up to one hour.

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Representative-only illustrations included in this document.

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