

# UbiquiSTAT

Commercial BACnet Controller



## Introduction

Congratulations on choosing the UbiquiSTAT™ room controller! The UbiquiSTAT series of controllers are feature rich, multifunction touchscreen devices providing extensive controls across a wide range of HVAC applications.

This guide will explain the initial setup of the UbiquiSTAT and guide you step-by-step through the built-in Startup Wizard, with which you can enter the basic configuration settings.

Refer to the [UbiquiSTAT Installation Manual](#) for instructions on installing, powering, and wiring the unit into your system. Refer to the [UbiquiSTAT Configuration Guide](#) for instructions on configuring the device, the communications network, and other devices that may be connected to this controller. Refer to the [UbiquiSTAT BACnet Explorer Guide](#) for advanced information on using the built-in BACnet Explorer to edit the device's BACnet programming objects directly.

If you have any questions regarding your UbiquiSTAT room controller, contact TCS Technical Support at 800-288-9383, ext. 2. Our Technical Support Department hours are Monday – Friday, 7:00 a.m. to 7:00 p.m. (CST).

## Setting Up the UbiquiSTAT

The UbiquiSTAT can be set up with or without any connections to an RS-485 network or other devices. However, because the face of the unit is not powered until the unit is assembled, it is usually simpler to complete all power and network wiring connections before setting up the unit (refer to the [UbiquiSTAT Installation Manual](#) for more information.)

Use the Startup Wizard when setting up the UbiquiSTAT for the first time or after resetting it to factory defaults. All controls and communications are disabled until after completing the Startup Wizard.

The Startup Wizard will guide you through the following settings:

- **Display Settings:** Select temperature measurement (Fahrenheit or Celsius), clock type (12-hour or 24-hour), and display backlight preference (low, medium, or high).
- **Date & Time:** Set to the current time.
- **Thermostat Type:** Select whether the thermostat is controlling a conventional or heat pump HVAC system.
- **System Mode:** Select between automatic, heating, cooling, or fan plus recirculation.
- **Occupied Fan Mode:** Determine the status of the HVAC system's fan when the room is occupied.
- **Communication Mode:** Wired models allow for selecting between TCSbus or BACnet MS/TP communication modes. Wireless models allow additional selections for BACnet Wi-Fi or none, for use in stand-alone situations.
- **Network Address:** This must be unique for each controller on the RS-485 network. The valid address range is from 1 – 127. If you desire an address value of 0, you can enter this after completing the Startup Wizard.
- **Baud Rate:** Select the desired baud rate for your network. The baud rate defaults to 9,600 bps for TCSbus, and 38,400 bps for BACnet MS/TP. All controllers on the network must use the same baud rate.
- **Device Instance:** This number must be unique across the entire BACnet network. The initial value shown is a combination of the TCS BACnet vendor ID (496) and the previously entered network address. This is done in an attempt to create a unique value. However, we encourage users to create their own numbering system for all controllers on the BACnet network.
- **Wi-Fi Configuration:** If BACnet Wi-Fi is available on your UbiquiSTAT, a series of screens will allow you to configure your UbiquiSTAT to the desired Wi-Fi network.

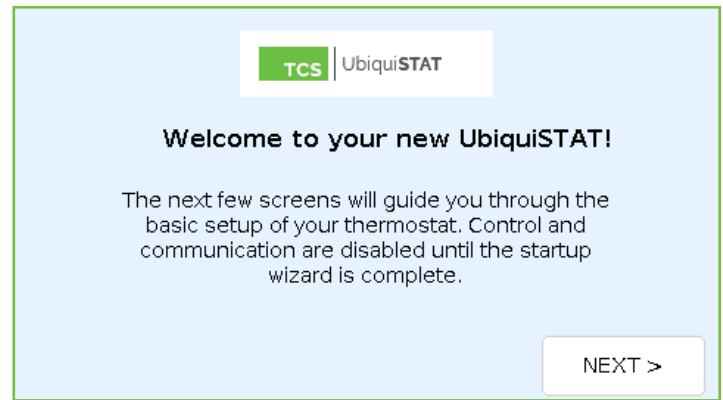
## Using the Startup Wizard

After applying power to the UbiquiSTAT and assembling it for the first time, you will see the INITIAL SETUP screen directing to you touch the screen in order to continue.

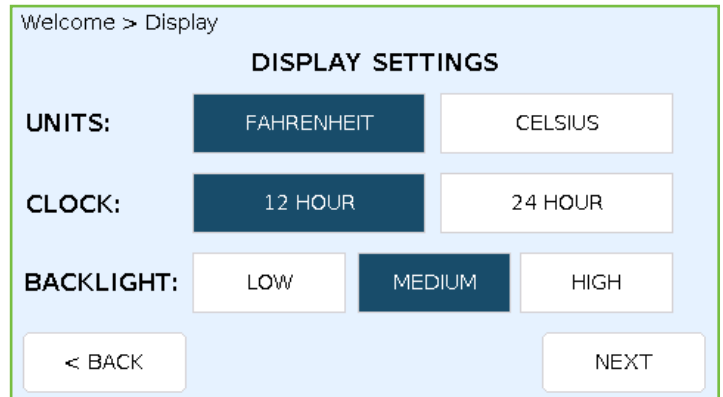
**STEP 1** Touch the INITIAL SETUP screen. This will advance you to the next screen.



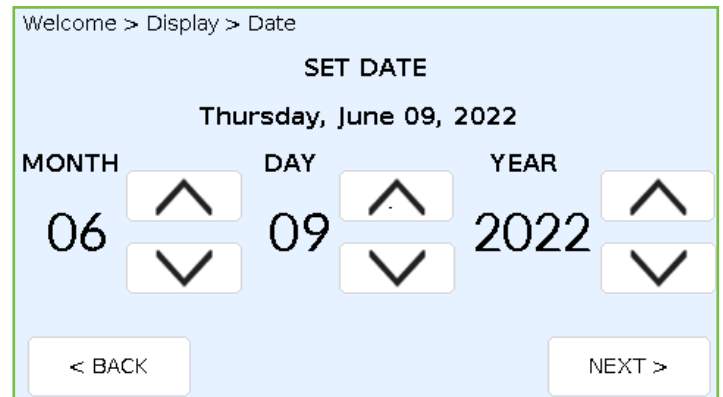
**STEP 2** On the WELCOME screen, press the **NEXT** button to advance you to the next screen.



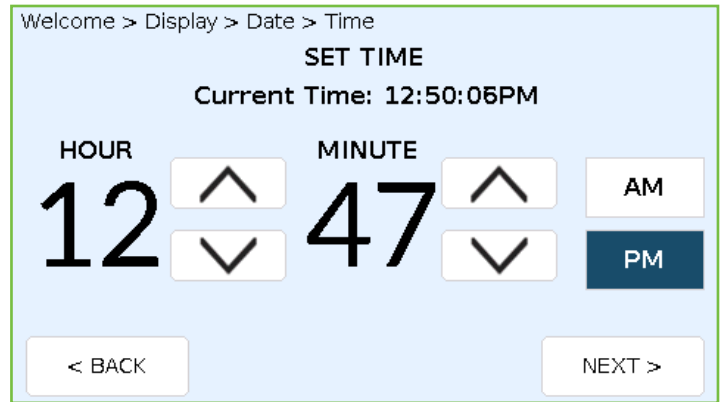
**STEP 3** On the DISPLAY SETTINGS screen, select the desired Temperature **UNITS** (Fahrenheit or Celsius), **CLOCK** configuration (12-hour or 24-hour), and **BACKLIGHT** setting (Low, Medium, or High). Press the **NEXT** button to save the settings and advance you to the next screen.



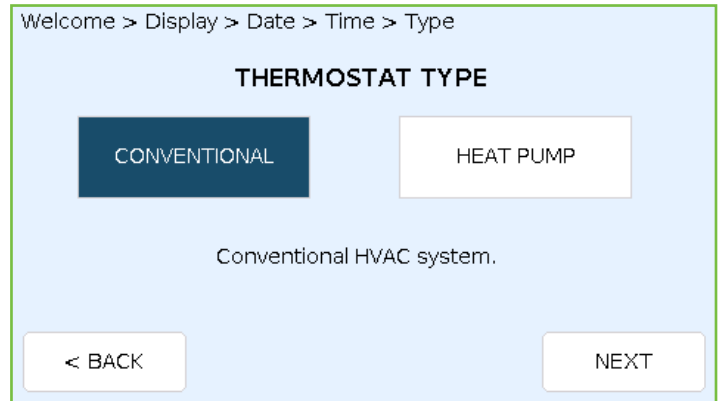
**STEP 4** On the SET DATE screen, advance the settings to reflect the current date (**MONTH, DAY, YEAR**). Press the **NEXT** button to save the settings and advance you to the next screen.



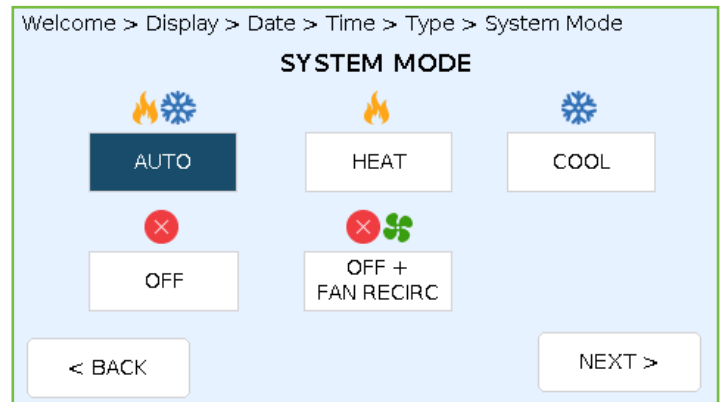
**STEP 5** On the SET TIME screen, advance the settings to reflect the current time (**HOUR, MINUTE, AM** or **PM**). Press the **NEXT** button to save the settings and advance you to the next screen.



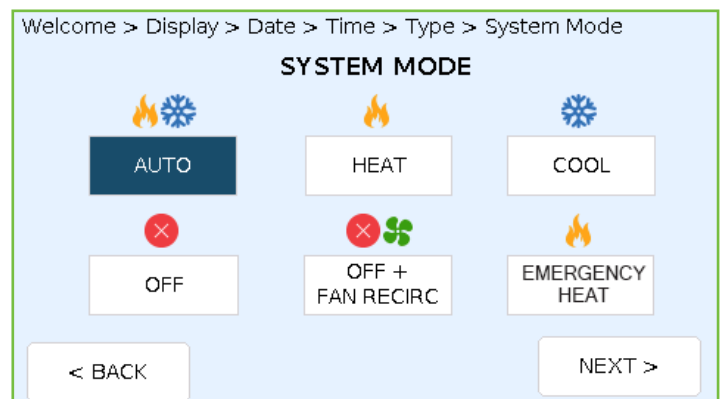
**STEP 6** On the THERMOSTAT TYPE screen, select whether the UbiqiSTAT is controlling a **CONVENTIONAL** thermostat or a **HEAT PUMP**. Press the **NEXT** button to save the settings and advance you to the next screen.



**STEP 7** On the SYSTEM MODE screen, select among **AUTO, HEAT, COOL, OFF,** or **OFF + FAN RECIRCULATION**. Press the **NEXT** button to save the settings and advance you to the next screen.

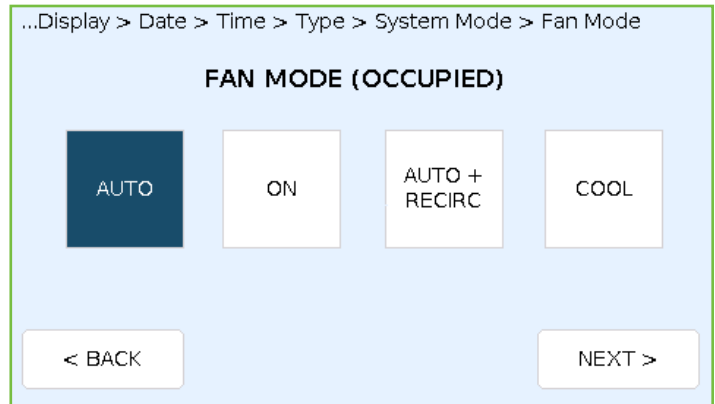


System Mode: Conventional HVAC System

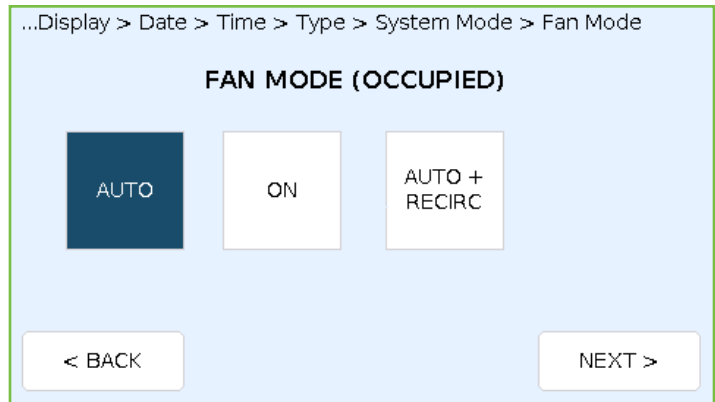


System Mode: Heat Pump System

**STEP 8** On the FAN MODE screen, select among **AUTO**, **ON**, **AUTO + RECIRCULATION**, or **COOL** (conventional only). Press the **NEXT** button to save the settings and advance you to the next screen.



Fan Mode (Conventional HVAC System)



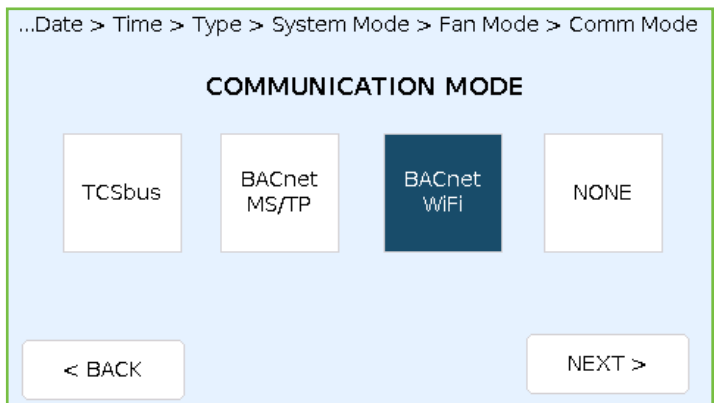
Fan Mode (Heat Pump HVAC System)

**STEP 9** On the COMMUNICATION MODE screen, select among **TCSbus**, **BACnet MS/TP**, **BACnet Wi-Fi**, or **NONE** (the **BACnet Wi-Fi** option is only available on wireless UbiquiSTATs).

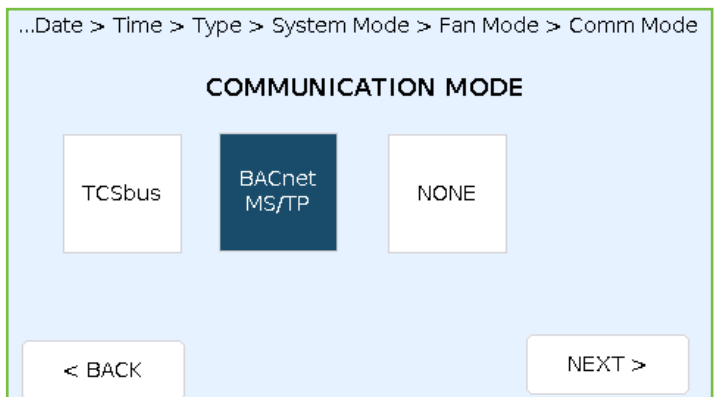
If you selected **TCSbus** or **BACnet MS/TP**, pressing the **NEXT** button will save the settings and advance you to [STEP 10](#).

If you selected **BACnet Wi-Fi**, pressing the **NEXT** button will save the settings and advance you to [STEP 12](#).

If you selected **NONE**, pressing the **NEXT** button will save the settings, exit the Startup Wizard, and return you to the HOME screen.

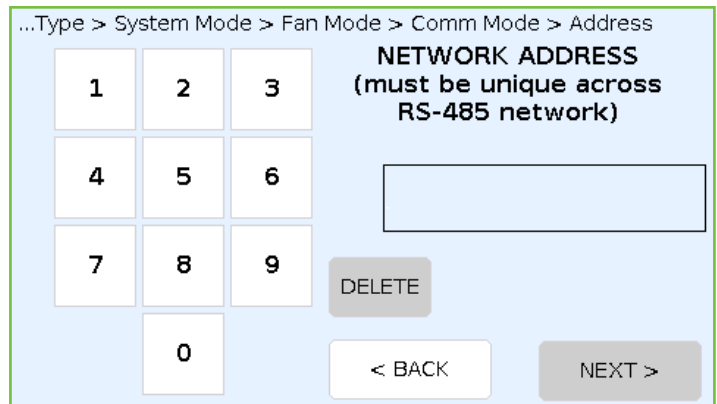


Communication Mode (Wi-Fi Models)



Communication Mode (Wired Models)

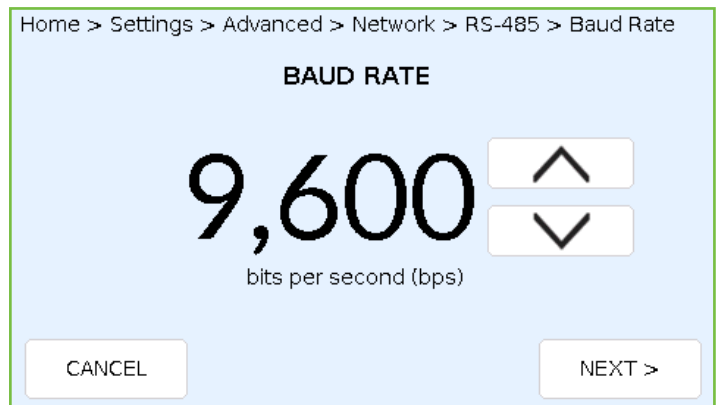
**STEP 10** If you selected **TCSbus** or **BACnet MS/TP** in [STEP 9](#), you will see the NETWORK ADDRESS screen. Use the keypad to enter a unique network address for the UbiquiSTAT. **This number must be unique across the entire network.** Press the **NEXT** button to save the settings and advance you to the next step.



**STEP 11** On the BAUD RATE screen, select the communication speed your network requires. The baud rate choices are 9,600, 19,200, 38,400, 57,600, 76,800, and 115,200 bps.

If you selected **TCSbus** in [STEP 9](#), pressing the **NEXT** button will save the settings, exit the Startup Wizard, and return you to the HOME screen.

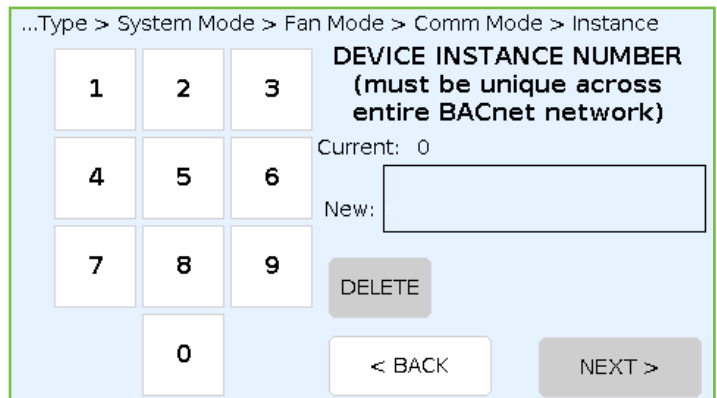
If you selected **BACnet MS/TP** or **BACnet Wi-Fi** in [STEP 9](#), pressing the **NEXT** button will save the settings and advance you to the DEVICE INSTANCE NUMBER screen.



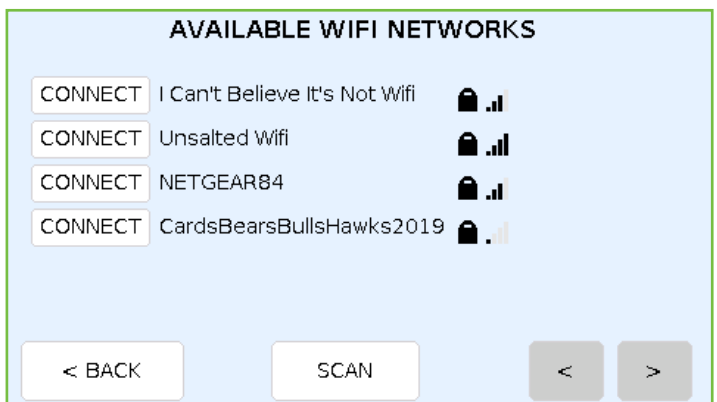
**STEP 12** In the DEVICE INSTANCE NUMBER screen, use the keypad to enter a unique instance number or network address for the UbiquiSTAT. **This number must be unique across the entire network.**

If you selected **BACnet MS/TP** in [STEP 9](#), pressing the **NEXT** button will save the settings, exit the Startup Wizard, and return you to the HOME screen.

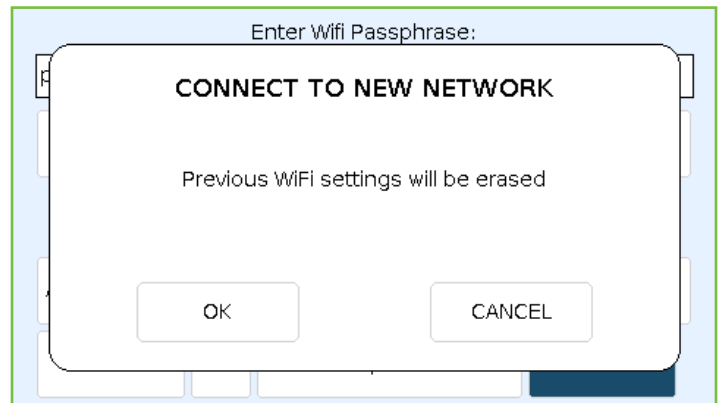
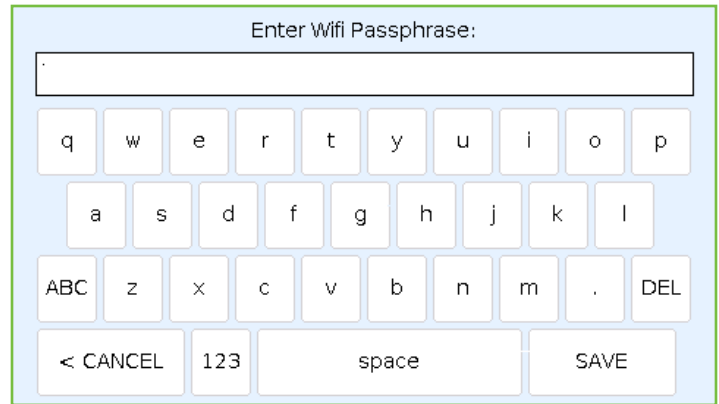
If you selected **BACnet Wi-Fi** in [STEP 9](#), pressing the **NEXT** button will save the settings and advance you to the AVAILABLE WI-FI NETWORKS screen.



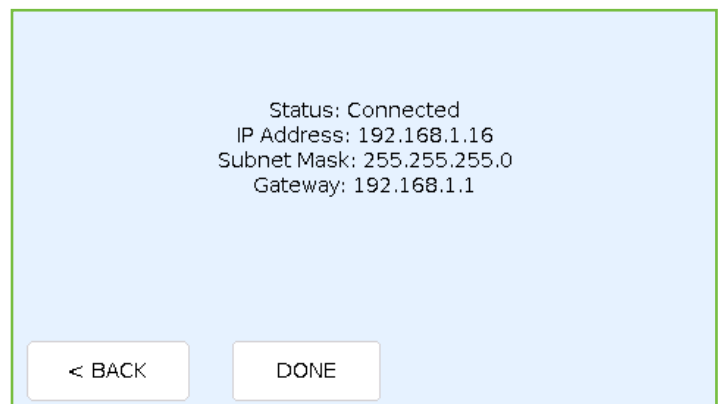
**STEP 13** On the AVAILABLE WI-FI NETWORKS screen, press the **CONNECT** button which corresponds to your desired Wi-Fi network. (The < and > buttons will allow you to scroll through the list of available networks.) If the desired network does not show up, press the **Scan** button to scan for other available networks. Pressing the **CONNECT** button will advance you to the next screen



**STEP 14** On the ENTER WI-FI PASSPHRASE screen, use the keypad to enter the selected network's passphrase. Press the **SAVE** button to save the passphrase. You will then be prompted with a message advising you that the previous Wi-Fi settings will be erased. Press the **OK** button to confirm your changes.



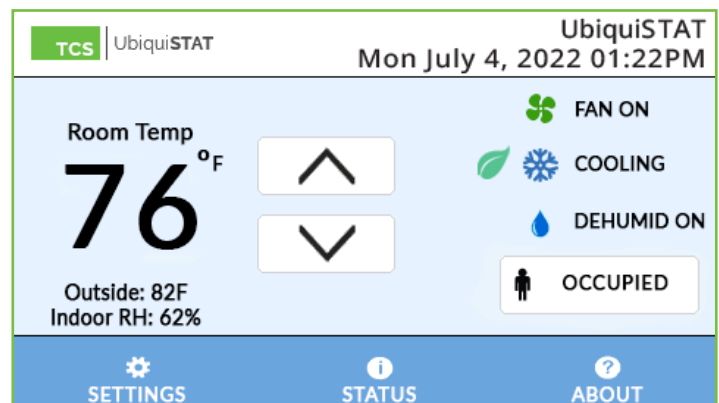
**STEP 15** After pressing the **OK** button in the previous screen, you will see the CONNECTION STATUS screen. When the UbiquiSTAT has successfully connected to the network, a **DONE** button will appear. Press the **DONE** button to exit the Startup Wizard and return you to the HOME screen.



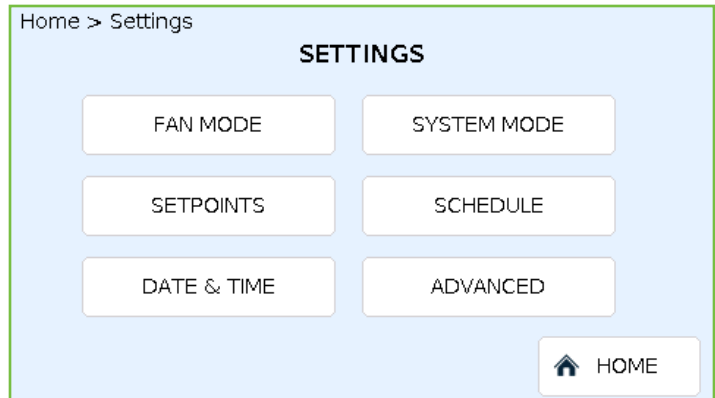
## Restoring to Factory Defaults

To restore the UbiquiSTAT to factory default settings, perform the steps outlined in this section. **This procedure will reset all programming changes and cannot be undone.**

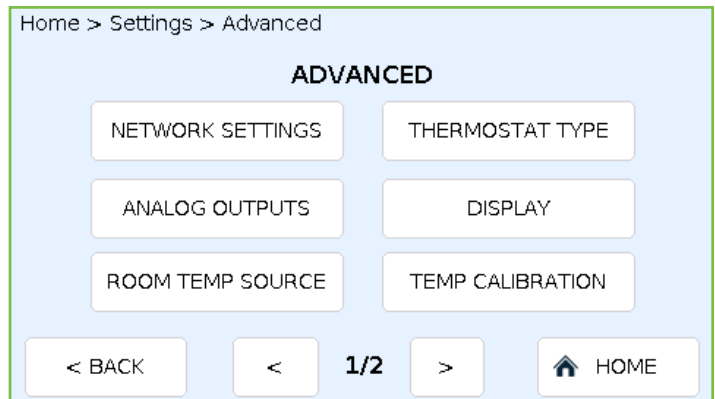
**STEP 1** On the HOME screen, Press the **SETTINGS** button in the main menu.



**STEP 2** On the SETTINGS screen, press the **ADVANCED** button to advance you to the next screen.

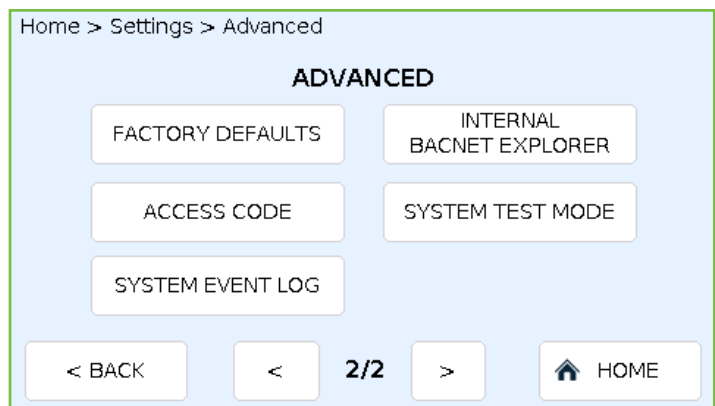


**STEP 3** On the ADVANCED (1/2) screen, press the > button to advance you to the ADVANCED (2/2) Screen.



**STEP 4** On the ADVANCED (2/2) screen, press the **FACTORY DEFAULTS** button.

**NOTE:** Depending on the model, your screen may vary slightly in appearance.



**STEP 5** You will then be prompted with a warning message advising you that loading the factory defaults will reset any programming changes you have made. Press the **LOAD** button to confirm your desire to reset the UbiquiSTAT (**this cannot be undone**). You will then return to the ["INITIAL SETUP"](#) screen.

