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This is a legacy product document supported by Resideo. It is no longer manufactured

Quick Start Guide

Touchscreen Thermostat

RTH8580ZW

Welcome

Getting set up and ready is simple.

1 Install your thermostat.

2 Setup your thermostat

3 Connect thermostat to the Z-Wave network.

Before you begin

Gather
• Small screw driver
• Drill (if needed)

Need Help?
For assistance with this product please visit **http://yourhome.honeywell.com** or call Honeywell Customer Care toll-free at **1-800-468-1502**.

1 Install your thermostat

1.1 Switch OFF power to your heating/cooling system

1.1a **Important!** To protect your equipment, switch OFF the power to your heating/cooling system at the breaker box or the system switch.

1.1b Confirm power is OFF. Try to turn on heating/cooling equipment by changing temperature on your old thermostat. Your power is OFF if your system does not turn ON.

Circuit breaker box   or   Heating/cooling system power switch

⚠ **This thermostat works with common 24 volt systems such as forced air, hydronic, heat pump, oil, gas, and electric.**
It will not work with millivolt systems, such as a gas fireplace, or with 120/240 volt systems such as baseboard electric heat.

1.2 Remove old thermostat faceplate and leave wires connected

1.2a Take a picture of the wire connections for later reference.

1.2b If no wire is connected to a terminal labeled C or no C terminal exists on the old thermostat, call 1-800-468-1502 for wiring assistance.

Important! C wire is required and is the primary power source for your thermostat. Without a C wire, your thermostat will not power up.

⚠ If you have an older thermostat with a sealed mercury tube, see warning page for proper disposal instructions.

1.3 Label wires

Do not label by wire color.
Use the supplied sticky tags to label each wire as you disconnect it. Label wires according to old thermostat terminal designations, not by wire color.

Note: If no tag matches a terminal designation, write the appropriate letter on a blank sticky tag.

Sticky tag

Blank sticky tag

1.4 Remove wallplate

Remove the old wallplate from the wall after all wires are labeled and disconnected.

Terminal designation

‖‖‖‖‖‖‖ 33-00012-01

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1.5 Separate Z-Wave thermostat and its wallplate

On your new thermostat, grasp the finger holds on the top and bottom of the wallplate with one hand and the thermostat (front) with the other hand. Pull pieces apart.

Thermostat   Finger holds

Wallplate (back view)

1.6 Mount wallplate for Z-Wave thermostat

Mount your new wallplate using screws and anchors included with the thermostat.

If necessary:
• Drill 3/16-in holes for drywall
• Drill 7/32-in holes for plaster

Note: You may be able to use your existing wall anchors. Hold the wallplate up to the existing anchors to check for alignment.

Wallplate

UP

1.7 Connect wires

1.7a Starting with the C Wire, match the sticky tag on the wire to the terminal labels.

Important! C wire is required and is the primary power source. Without a C wire, your thermostat will not power up.

1.7b Loosen screw, insert wire on inside edge of terminal, then tighten screw.

1.7c Verify wire is firmly secured by gently pulling on wire.

1.7d Repeat steps 1.7a–1.7c for all other wires.

1.7e Push any excess wire back into the wall opening after all wires are installed.

❓ **Labels don't match or have heat pump system?** See *User Guide*.

Remove metal jumper **only** if you have both **R** and **RC** wires

HEAT PUMP — CONVENTIONAL

Insert wires here

Note: The wiring for your application might be different than the wiring from above.

1.8 Remove battery tab

The thermostat is shipped from the factory with the coin cell installed. To keep the battery from discharging during shipment and storage, the thermostat is shipped with a plastic tab inserted in the battery holder. Simply pull the plastic tab out of the battery tray. Make sure that the battery tray is fully inserted into the thermostat.

Remove tab.

1.9 Attach thermostat to wallplate

Align the thermostat onto wallplate and snap into place.

Wallplate

Thermostat

1.10 Switch heating/cooling system ON

Important!

1.10a Verify that the C wire is connected at the thermostat and at the heating/cooling system.

1.10b Make sure the heating/cooling system door is firmly secured.

1.10c Switch power back ON for your heating/cooling system at the breaker box or its power switch.

Circuit breaker box   or   Heating/cooling system power switch

1.11 Set date and time

1.11a Touch ▲ or ▼ buttons to change displayed time and date.

1.11b Press and hold an arrow to quickly change a setting.

1.11c Press **DONE** to save changes.

YEAR, MONTH, DAY(TOP)

Day

Year

Month

SET TIME

Time

Turn over ▷

1.12 Determine your heating/cooling system type

Important! Heating/cooling system type must be set so that your thermostat operates properly and does not damage your system.

If you have a traditional system (single stage heating and cooling), your thermostat is set up by default to control this system. However, you will still need to connect your thermostat to a Z-Wave network. To do this, enter system setup (see step 2.1) and then proceed to Step ③

If you DO NOT have a single stage heating and cooling system, You MUST change the system type by setting system function 0170. See page 40 in the User Guide for a list of options. Go to Step ②

? Not sure of your heating/cooling system type?
Visit **yourhome.honeywell.com** or call Honeywell Customer Care toll-free at **1-800-468-1502**.

② Setup your thermostat

2.1 Accessing system setup

You can change options for a number of system functions. Available functions depend on the type of system you have. The functions, designated with four-digit numbers, along with their available options are described on pages 38–48 of the user guide.

2.1a Press **SYSTEM**. You'll see several blank buttons on the bottom of the display.

2.1b Press and hold the buttons on either side of the center button until the screen changes (approximately 5 seconds).
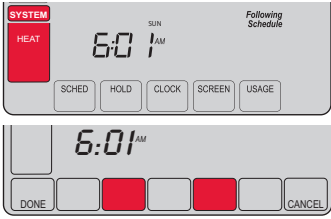
2.2 Setting the date

2.2a Function **0120** appears first by default. It sets the first two digits of the year, e.g., **20**13. Press ▲▼ next to the option number to select the first two digits of the year.

2.2b Press ▲ next to the function number to select function **0130**. Function **0130** sets the last two digits of the year, e.g., 20**13**.

2.2c Press ▲▼ next to the option number to select the last two digits of the year.
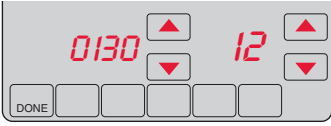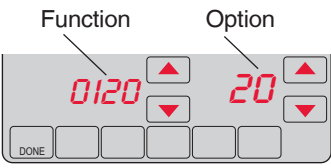
2.2d Press ▲ next to the function number to select function **0140**. Function **0140** sets the month.

2.2e Press ▲▼ next to the option number to select the month.

2.2f Press ▲ next to the function number to select function **0150**. Function **0150** sets the date.

2.2g Press ▲▼ next to the option number to select the date.

2.3 Selecting a schedule format

Function **0160** sets the schedule format. You can select between nonprogrammable and programmable.

2.3a Press ▲ next to the function number to select function **0160**.

2.3b Press ▲▼ next to the option number to change the schedule format.

0 Program schedule is off. Thermostat cannot be programmed.

4 Program schedule is on (7-day programmable).

2.4 Restore schedule defaults

2.4a Press ▲ next to the function number to select function **0165**.

2.4b Press ▲▼ next to the option number to restore schedule defaults.

0 Continue using programmed schedule.

1 Restore thermostat program to energy saving settings.

2.5 Selecting system type

Function **0170** sets your heating/cooling system type.

2.5a Press ▲ next to the function number to select function **0170**.

2.5b Press ▲▼ next to the option number to select your system type. Option **1** (default) is a single stage heating and cooling system. For a list of other system types, see page 40 in the User Guide.

2.5c Press ▲ next to the function number to scroll through the remaining functions. For a list of functions and their options, see pages 38–48 in the user guide.

2.5d Press ▲ next to the four digit function number to scroll to function **rf10**. Go to Step ③
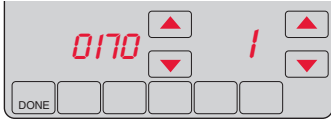
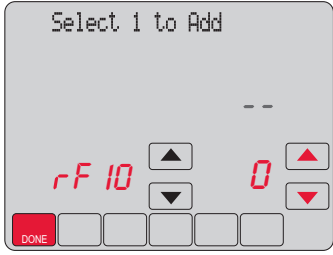## ③ Join Z-Wave network

3.1 Connect to other Z-Wave enabled devices

The RTH8580ZW is powered by Z-Wave technology so it is compatible with Z-Wave enabled devices from other manufacturers.

With a separate Z-Wave controller, for example, you can change your thermostat settings from your bedroom or elsewhere in the house.

3.1a To join a Z-Wave network, set the Z-Wave controller to INCLUDE mode.

3.1b On the thermostat, be sure function **rf10** is selected. If it is not selected, see Step ②

3.1c Press ▲ next to the option number to select option **1** to add thermostat to Z-Wave network.

3.2 Share Z-Wave network

3.2a To share the thermostat Node information with additional Z-Wave devices, press ▲ next to the function number to select function **rf20**.

3.2b Press ▲ next to the option number, and select option **1**.
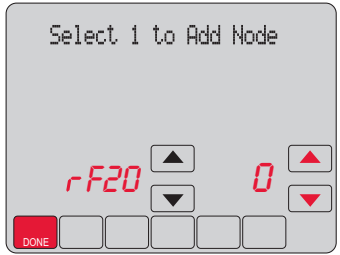
3.3 Exit system setup

When you have made all changes, press **DONE** to save and exit.

⚠ This thermostat contains a Lithium battery which may contain Perchlorate material. Perchlorate Material—special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate

⚠ **MERCURY NOTICE**: Do not place your old thermostat in the trash if it contains mercury in a sealed tube. Contact the Thermostat Recycling Corporation at www.thermostat-recycle.org or 1-800-238-8192 for information on how and where to properly and safely dispose of your old thermostat.

⚠ *NOTICE*: To avoid possible compressor damage, do not run air conditioner if the outside temperature drops below 50°F (10°C).

Need more help?
For assistance with this product please visit yourhome.honeywell.com or call Honeywell Customer Care toll-free at 1-800-468-1502 before returning the thermostat to the store.