

# Operation Guide CT20e

# Radio Thermostat

Radio Thermostat Company of America

The CT20e is a high-quality thermostat with radio capability for communicating with power companies and/or home automation.

**Statement of use:** The CT20e is compatible with all popular single stage heating systems (not heat pumps) including gas, oil, electric, hydronic, and gas millivolt as well as single stage cooling systems. The CT20e can be powered by batteries and/or 24VAC (C wire) or an external 24VAC adapter.

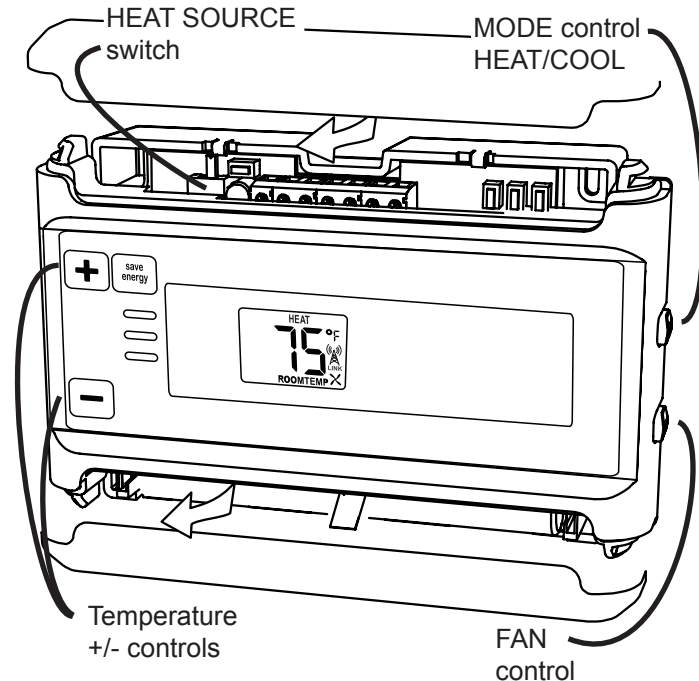
## CHANGE THE MODE

Push the MODE button to select the desired mode; HEAT or OFF or COOL. This turns your thermostat on or off for heating or cooling.

## CHANGING THE TARGET TEMPERATURE

(Select either heat or cool)

Push the + or - button once; the room temperature display changes to the target temperature.



ENGLISH

If you wish to change that target, push the + or - button again once for each degree change. Once you have the target you wish stop pushing as that is now your new target. After you wait about 4 seconds; the room temperature will again be displayed.

### SAVE ENERGY Button

The “Save Energy” feature on the CT20e provides a simple, easy-to-use way to help you manage your energy use. SAVE ENERGY automatically adjusts your target temperature up in COOL or down in HEAT by 4°F.

To use Save Energy:

Press the Save Energy button in the upper left corner of the unit.

The screen will now read “SAVE ENER”.

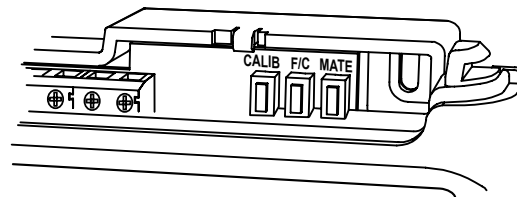
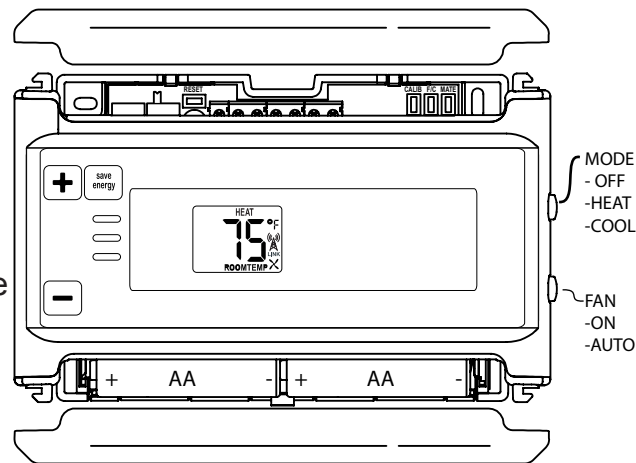
To return to normal operation, press the “Save Energy” button again.

### F/C

If you wish to change the temperature display from F to C  
Move the F/C switch under the top cover on the right.

### RESET button

The RESET button re-boots the CT20e processor.



## CALIBRATE

Your thermostat was accurately calibrated at the factory to  $\pm 1^{\circ}$  F of actual ambient temperature. You do have the option however to change the displayed temperature to match that of a previous thermostat, or to match another thermostat already in your home. The range of change is from -6F to +6F or -3C to +3 C.

### To change your Thermostat Calibration:

Move the CALIBRATION switch under the top cover on the right to CALIB.

Use the + / - to adjust the displayed temperature up or down, as desired.

The range is -6F to +6F.

Move the calibration switch back to off when finished.

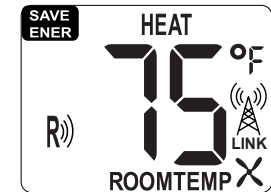
## LCD DISPLAY

The LCD displays the room temperature and the mode (HEAT or off or COOL). It also shows the FAN status, Radio status, TARGET TEMP, and REMOTE control status.

## MANUAL FAN

To turn on the FAN manually, push the FAN button and the fan icon will come on. This will close the fan relay and turn your HVAC system fan ON continuously [ if you have G wire connected]

Push it again to shut off the manual control of the fan and return to automatic control by the HVAC or the thermostat.



## COMPRESSOR PROTECTION

The CT20e has a minimum cycle time of 4 minutes to protect your compressor in cool.

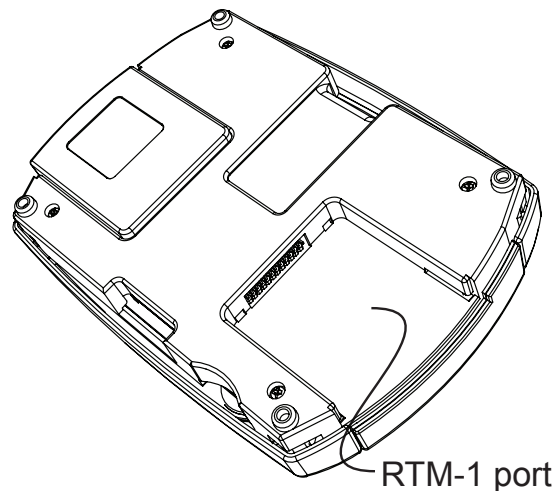
## LOW BATTERY

We recommend the batteries be changed once a year and if you will be gone for an extended period. When the batteries are getting low, “LO-baT” will blink on the screen in place of temperature. Pushing the + or - buttons will clear the “LO-baT” display to give you time to get new alkaline batteries. The next time the LO baT comes back on, it stays on screen until the batteries are replaced. The thermostat will shut off all control of the HVAC. That could cause your house to freeze in the winter or overheat in the summer.

## COMMUNICATING THERMOSTAT

You can connect your CT20e to an AMI network for In Home Display of electric grid status or connect to a Home Automation network for HA functionality with remote access to your HVAC system and home conditions. Refer to your radio module instructions for operation.

The CT20e has 2 RTM-1 radio ports. These allow your thermostat to communicate with other systems. Depending on your area Power Company, programs may be available to connect your thermostat to power grid status information. This can make it easy for you to moderate



your energy use at peak hours and use power when it is less expensive.

The RTM-1 ports also allow you to connect your CT20e to your home WiFi network. This can give you access to your home's HVAC system even when you are away. It can also give you access to web based efficient energy management sites that can help you save money and protect the environment.