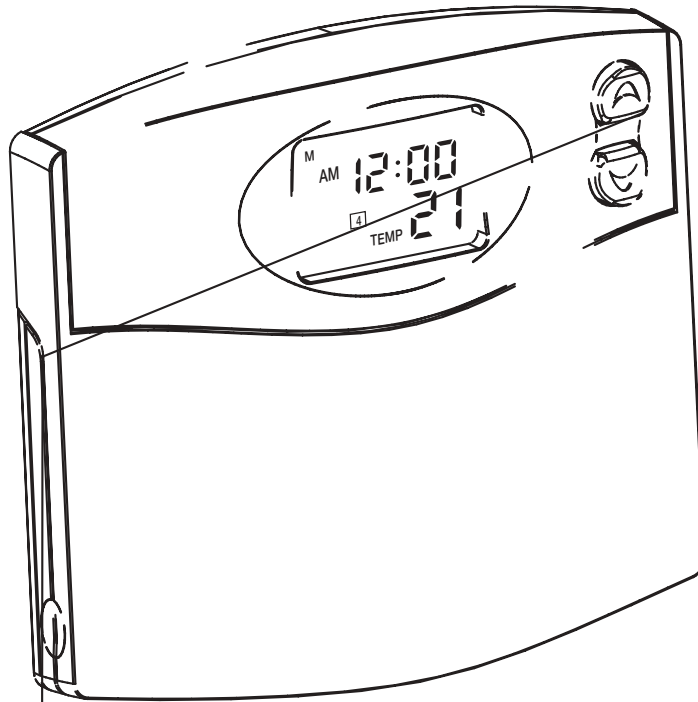# Set & $ave

Programmable Thermostat

Owners Manual

Model 47200A

Congratulations!

Your new Hunter thermostat will provide years of reliable service. By saving energy, your thermostat will pay for itself during its first season of use. Thank you for buying a Hunter product!

Please read this manual for complete instructions on installing and operating your thermostat. If you require further assistance, call Hunter Technical Support at 1-866-268-1936 from 8am to 5pm Central Time.

Before starting, remove the mylar label from the LCD display.

IMPORTANT INFORMATION

1. This thermostat is designed to work on the following systems:

Gas - Standing Pilot	Single-Stage Heat Pumps - with no auxiliary heat
Gas - Electronic Ignition	Electric Furnace
Gas - Fired Boilers	Electric Air Conditioning
Gas - Milivolt Systems	
Oil - Fired Boilers	This thermostat will NOT control single-stage or multi-stage
Oil - Fired Furnace	heat pumps or 110/220 V baseboard electric heating systems.

2. Temperature Range

This thermostat can be programmed between 7°C and 35°C (45°F and 95°F). It will display room temperatures from 0°C and 37°C (30°F to 99°F). "HI" will be displayed if the temperature is higher than 37°C (99°F), and "LO" will be displayed if the temperature is lower than 0°C (30°F).

This thermostat will automatically cut-off in Heat mode if the temperature rises above 35°C (95°F), and automatically cut-off in Cool mode if the temperature drops below 4°C (40°F).

3. Compressor Protection

This thermostat provides a 3.5 minute delay after shutting off the cooling system before it can be restarted. This feature will prevent damage to your compressor caused by rapid cycling. It does not prevent a rapid compressor restart due to short power outages.

4. Battery Warning

Two fresh AA alkaline batteries should provide well over one year of service. However, when the batteries become drained, the Low Battery Indicator will flash on the display. When this message occurs, install new alkaline batteries. You have approximately 1 minute to change the batteries and keep thermostat's clock and program settings. Once the batteries have become too low to ensure proper operation, your system will be turned Off, and the display will be cleared except for flashing Low Battery Indicator on the LCD display.

⚠ **CAUTION: When only the battery icon flashes on the display, the thermostat is shut down, and your system will no longer operate. In this condition, there is no temperature control of your dwelling.**

NOTE: If you plan to be away from the premises over 30 days, we recommend that you replace the old batteries with new alkaline batteries prior to leaving.

FEATURES

Front Door: Covers keys when not used for neat appearance. Open by lifting from the bottom

LCD Display: Shows Time, Day, Temperature, Program Number, and other feature information as required.

Low Battery Indicator: Flashes when batteries need to be replaced.

System Switch: Selector switch for Heat, Cool, and Off

Fan Switch: Fan switch for Automatic or Continuous fan operation.

Battery Compartment: Front access allows easy insertion of two AA 1.5V batteries.

Reset: Press with a paper clip to reset the thermostat and return to power-up settings.

Battery Release Lever: Push to pop batteries loose.

Day / Time Key: Used for entering the Clock setting mode. Use with the Up and Down keys to set the time and day.

Up and Down Keys: Keys for changing the Temperature setting. Also used for increasing and decreasing selections in the Time, Program, and Span functions.

Program Key: Used for entering and modifying Programs. Use with the Up and Down keys to set times and temperatures. Press when in Clock setting mode to select between 12 and 24 hour clock modes.

Filter Key: Resets filter change counter to zero.

Hold / Return Key: Used for setting a permanent (vacation) hold, and for returning to the normal display from Day & Time setting, Programming, or Span setting modes.

ENERGY STAR® PARTNER

As an ENERGY STAR® Partner, Hunter Fan Co. has determined that this programmable thermostat meets the ENERGY STAR® guidelines for energy efficiency.

INSTALLATION

What You Need

This thermostat includes two #8 slotted screws and two wall anchors for mounting. To install your thermostat, you should have the following tools and materials.

- Slotted Screwdriver(s)
- Small Philips screwdriver
- Hammer
- Electric drill and 3/16" bit
- Two 1.5 V (AA) size alkaline batteries

Remove Old Thermostat

CAUTION: Do not remove any wiring from existing thermostat before reading the instructions carefully. Wires must be labeled prior to removal.

- IMPORTANT! Turn off the power to the furnace at the main power panel or at the furnace.

- Remove existing thermostat cover and thermostat. See Figure 1. Some thermostats will have screws or other locking devices that must first be removed. Once the wall mounting plate is exposed, look for wires.

  If wires are not visible, they may be connected to the back of the wallplate. Again, look for screws, tabs, etc. Some models have doors that open to expose wires and mounting screws. See Figure 1.
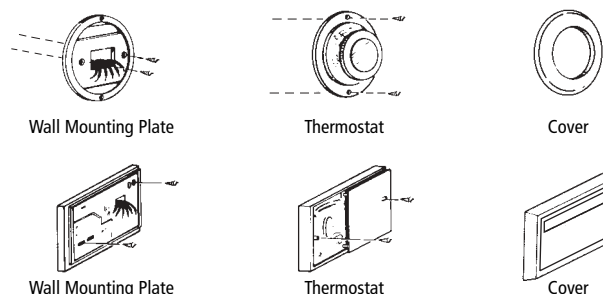
Typical Home Thermostats

Wall Mounting Plate   Thermostat   Cover

Wall Mounting Plate   Thermostat   Cover

Figure 1

Wire Labeling

- Each wire coming from the wall to the existing thermostat is connected to a terminal point on that thermostat. Each of these terminal points is usually marked with a code letter as shown in Table A below.

- Note that this thermostat has multiple function terminals that allow Single-Stage Heat Pump capability. Standard systems use: Rh, Rc, G, W. [Single-Stage Heat Pumps use: Rh, Y1, G, and O or B.] Table A below shows the multiple functions of the terminals. Use the terminals that match your system.

- The number of wires in your system can be as few as two (for heat only systems), as many as eight, or any number in between. If you follow the labeling procedures correctly, you do not have to be concerned about how many wires there are.

- There is often no terminal marking on the existing thermostat of two wire, heat only systems. Just connect either of the wires to the RH terminal, then connect the other wire to the W terminal to complete the circuit.

- IMPORTANT! BEFORE DISCONNECTING ANY WIRES, APPLY THE SELF-ADHESIVE LABELS PROVIDED TO THE WIRE AS SHOWN IN TABLE A BELOW. (For example, attach the label marked W to the wire that goes to the W or H terminal on your existing thermostat.) IGNORE THE COLOR OF THE WIRES since these do not always comply with the standard.
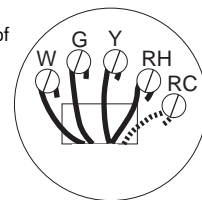
(Continued)

Wire Labeling *(Continued)*

■ After labeling wires, disconnect them from the existing thermostat terminals.

■ Remove existing wallplate. To make sure wires do not fall back into wall opening, you may want to tape them to the wall.

■ If hole in wall is larger than necessary for wires, seal this hole with insulating material so that no hot or cold air can enter the back of the thermostat from the wall. This air could cause a false thermostat reading.
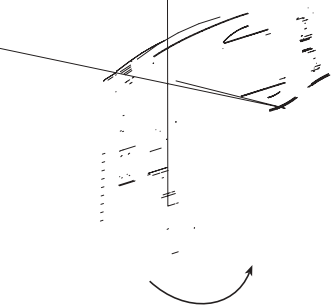
If the code letter on your existing thermostat is	then mark the wire with label shown	and connect to thermostat terminal shown
RH, R, VR or 4 24 Volt	RH	RH
RC, VC 24 Volt Cool	RC	RC
G or F Fan	G	G
Y, C or M Air Conditioning Compressor - or - O Reversing Valve operating in Cool mode. (Single Stage Heat Pumps ONLY.)	Y/O	Y/O
W or H Heating - or - B Reversing Valve operating in Heat mode. (Single Stage Heat Pumps ONLY.)	W/B	W/B
Y1 Heat Pump compressor (Single Stage Heat Pumps ONLY.)	Y1	Y1

Table A

NOTE: Do not connect a "Common" wire (sometimes labeled "C") to any terminal on this thermostat. Tape up the wire and do not use. This wire provides electricity to non-battery powered thermostats.
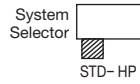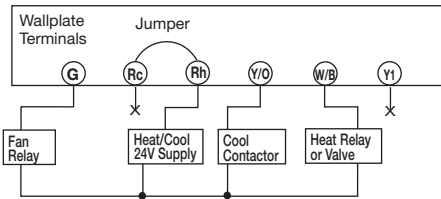
Mount Wallplate and Thermostat

■ Remove the wallplate from your thermostat by pressing the release tab on the bottom of the thermostat. See Figure 2.
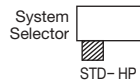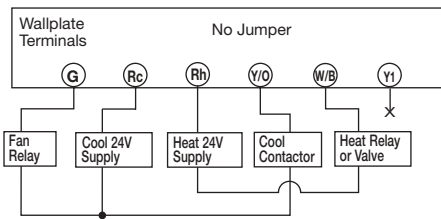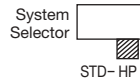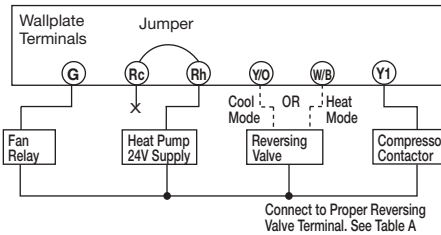
Wiring Diagrams

4-wire Heat/Cool System

Wallplate Terminals | Jumper

G | Rc | Rh | Y/O | W/B | Y1

System Selector
STD – HP

Fan Relay | Heat/Cool 24V Supply | Cool Contactor | Heat Relay or Valve

5-wire Heat/Cool System

Wallplate Terminals | No Jumper

G | Rc | Rh | Y/O | W/B | Y1

System Selector
STD – HP

Fan Relay | Cool 24V Supply | Heat 24V Supply | Cool Contactor | Heat Relay or Valve

Single-stage Heat Pump System

Wallplate Terminals | Jumper

G | Rc | Rh | Y/O | W/B | Y1

System Selector
STD – HP

Fan Relay | Heat Pump 24V Supply | Reversing Valve | Compressor Contactor

Cool Mode OR Heat Mode

Connect to Proper Reversing Valve Terminal. See Table A

2-wire Heat Only System

Wallplate Terminals | Jumper

G | Rc | Rh | Y/O | W/B | Y1

System Selector
STD – HP

Heat 24V or Millivolt Supply | Heat Relay or Valve

3-wire Heat Only System

Wallplate Terminals | Jumper

G | Rc | Rh | Y/O | W/B | Y1

System Selector
STD – HP

Fan Relay | Heat 24V Supply | Heat Relay or Valve

3-wire Cool Only System

Wallplate Terminals | Jumper

G | Rc | Rh | Y/O | W/B | Y1

System Selector
STD – HP

Fan Relay | Cool 24V Supply | Cool Contactor

X - No Connection

Selector Switches

In order for this thermostat to control your system, the system type must be specified by the selector switches on the printed circuit board inside the thermostat.

■ **Heating System Selector (HG - HE switch)**

The factory position for this switch is in the "HG" position. Leave it in this position if you have a gas furnace or an oil burner. If you have an electric furnace, test to see whether the Heat and Fan come on as expected after installation. If the Fan operation is normal, leave it in the "HG" position. If the Fan does not come on within a minute of the thermostat calling for heat, change the switch position to "HE". The system selector has no effect in the cooling mode.

NOTE: "HG" position is for gas and most other systems. "HE" position is for certain electric systems having a fan relay.

■ **System Selector (STANDARD - HEAT PUMP switch)**

The factory position for this switch is in the STD position. Leave it in this position if you have ANY system that uses gas, oil, electric, or hot water heating. If you have a single-stage Heat Pump (no auxiliary or emergency heat source), then slide the switch to the HP position. Be sure the reversing valve wire is connected to the correct terminal for your heat pump (Y/O) or (W/B).

■ **Auto Recovery selector (DISABLE / ENABLE)**

Your thermostat is set from the factory with the Auto Recovery Feature enabled, which complies with the EPA ENERGY STAR® Program. If you prefer to use normal recovery, slide the switch to the DISABLE position.
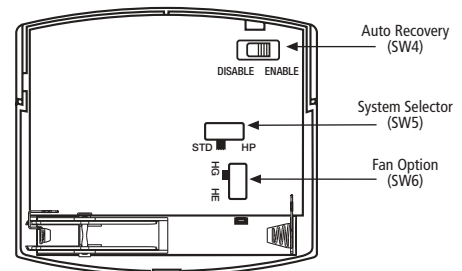
Auto Recovery (SW4)
DISABLE ENABLE

System Selector (SW5)
STD HP

Fan Option (SW6)
HG HE

Figure 7

C° / F° Selection (Celcius / Fahrenheit)

Your thermostat is set for C° mode from the factory. To change to F° mode, follow these steps:

■ Press and hold the Up key.

■ Use a paper clip to press the reset key.

■ Once all the LCD segments turn on, release the Up key.

NOTE: To return to C° mode, press the reset key with a paper clip. Do not press any other keys during the reset process.

All programs and settings will be lost when pressing RESET.

OPERATION

Setting Day and Time

■ The LCD will show this information when batteries are first installed, or after the Reset button is pressed. The temperature will update after a few seconds.

M
AM 12:00
4
TEMP 21

■ During time and day setting mode, the temperature and program displays will go blank.

■ Example: Set the Thermostat to the current time of 2:16 pm on Saturday. Refer to the Steps below.

STEP 1:

day/time

■ Press to enter time and day setting mode. The current hour and the AM / PM indicator will be flashing.

M
AM 12:00

■ Press to change the Hour up or down to the current hour.
Note the AM / PM indicator, as the display will change at 12 AM and 12 PM.

(Continued)

Setting Day and Time *(Continued)*

STEP 2:

day/time

■ Press again to change from hour setting to minute setting. The current minute will be flashing.

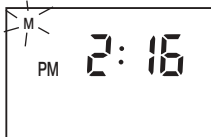■ Press to change the Minute up or down to the current minute.

M
PM 2:00

STEP 3:

day/time

■ Press again to change from minute setting to day setting. The current day will be flashing.
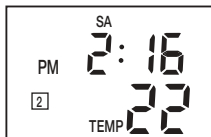
■ Press to change the Day up or down to the current day.

M
PM 2:16

STEP 4:

day/time

or

hold
/return

■ Press again to change back to the normal display.

SA
PM 2:16
2
TEMP 22

NOTE: You may press hold /return at any time during Day and Time setting to return to the normal display.

12 Hr. / 24 Hr. Time Format

Your thermostat is set from the factory in normal 12 (AM / PM) time format. To change to 24 hour (military) time, press program at any time while the Hour, Minute, or Day is flashing to toggle between the 12 hour and 24 hour formats. The AM / PM indicator will not be displayed in 24 hour mode. Both the current time and all programs will automatically change to the selected format.

PROGRAMMING

The following time and temperature settings are pre-programmed into the thermostat:

Program Number	Time	Temperature in C˚ (F˚)	
		Heat	**Cool**
1	6:00 am	20˚C (68˚F)	26˚C (78˚F)
2	8:00 am	16˚C (60˚F)	29˚C (85˚F)
3	4:00 pm	20˚C (68˚F)	26˚C (78˚F)
4	10:00 pm	16˚C (60˚F)	28˚C (82˚F)

■ All 7 days of the week have the same default programs.

Personal Program Schedule

■ You can revise the factory programs to match your own schedule. Use this Personal Program Schedule to determine which times and temperature settings match your comfort and energy saving requirements. Use a pencil so you can revise your records each time you change your program settings.

Heating

Day	Program 1	Program 2	Program 3	Program 4
Monday – Friday	Time Temp	Time Temp	Time Temp	Time Temp
Saturday	Time Temp	Time Temp	Time Temp	Time Temp
Sunday	Time Temp	Time Temp	Time Temp	Time Temp

Cooling

Day	Program 1	Program 2	Program 3	Program 4
Monday – Friday	Time Temp	Time Temp	Time Temp	Time Temp
Saturday	Time Temp	Time Temp	Time Temp	Time Temp
Sunday	Time Temp	Time Temp	Time Temp	Time Temp

Revising Programs

■ Familiarize yourself with manually changing programs, so that you can easily modify the programs as your comfort needs change. Follow the steps below to change the program times and temperatures.

NOTE: 1) The program time can be set in 10-minute increments.

2) The program temperature can be set in increments of 1˚C (1˚F).

3) After 15 seconds without a key press, the thermostat will return to normal display mode.

4) When setting the program time, note the AM / PM indicator.

STEP 1:

system
off | heat
cool
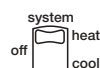
■ Slide the System Switch to the HEAT or COOL position to program the corresponding system.

NOTE: If the System Switch is in the OFF position, the last position used will be programmed.
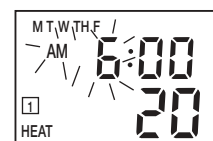
SA
PM 2:34
2
TEMP 21
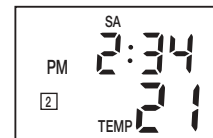
STEP 2:

program

■ Press to enter program mode. HEAT or COOL will be displayed on the LCD.

M T W TH F
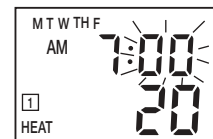AM 6:00
1
HEAT 20

STEP 3:

■ The Program hour and AM or PM indicator are flashing. Press to change the hour.

STEP 4:

program

■ Press again to change to the minute position. The current minute will be flashing.

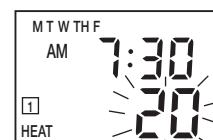■ Press to change the minute.

M T W TH F
AM 7:00
1
HEAT 20

STEP 5:

program

■ Press again to change to the program temperature. The current temperature will be flashing.

■ Press to change the temperature.

M T W TH F
AM 7:30
1
HEAT 20

STEP 6:

program

■ Press again to move to the next program number.

■ Repeat Steps 3 through 5 to change the remaining Weekday, Saturday, and Sunday programs. (There are a total of 12 programs.)

program

■ After cycling through all 12 programs, press again to return the display to normal.

hold
/return

■ Press at any time to exit the Program Mode.

Reviewing Programs

To review your program settings, press ⟨program⟩ repeatedly to cycle through the programs. You can also make changes at any time.

System Selector Switch

The System Selector switch on the front of the thermostat determines the operating mode of the thermostat. You may select COOL, OFF, HEAT.

NOTE: Anytime you install or remove the thermostat from the wallplate, slide the System Selector to the OFF position to prevent the possibility of a rapid system On-Off.

system
off — heat — cool
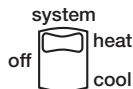
Fan Switch

The Fan switch should normally be located in the AUTO position. The Fan will be turned on along with normal operation of your system. In a normal gas or oil furnace, the Fan will be turned on by your furnace after its warm-up delay. For electric heat, air conditioning, and heat pump operation, the Fan will turn on with the system.

To run the Fan on continuously, slide the Fan switch to the ON position.

fan
auto — on

Temporary Manual Override

To temporarily change the current set temperature without affecting your program:

⟨⌃⟩ or ⟨⌄⟩
- Press and hold for about 1 second to enter Manual Override mode. When display flashes, you can release the key.

⟨⌃⟩ or ⟨⌄⟩
- Press again to change to your desired Set Temperature. Hold the key for 2 seconds to fast-advance the Set Temperature.

SET TEMP 24
3 COOL TEMP 26
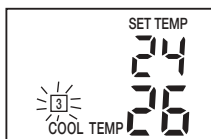
⟨hold /return⟩
- Press to return to normal mode, or wait 5 seconds for it to return automatically.

- The current program number will flash to signify the Temporary Override.

- At the next program change time, the Temporary Override is cancelled, and the next program temperature becomes the setpoint temperature.

SA
PM 4:29
3 COOL TEMP 26
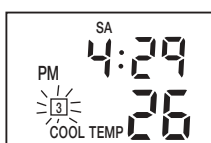
To end the Temporary Manual Override:

⟨hold /return⟩
- Press, then press again. This will return the set temperature to the current program set temperature.

Permanent Override

To hold your Manual Override for vacation or just an extended period of time:

⟨hold /return⟩
- Press to make the current program temperature the HOLD temperature. HOLD will be displayed on the LCD, and the Program number will disappear.

- Follow the Temporary Manual Override instructions above to change the Permanent Manual Override temperature.

TH
PM 5:60
HOLD TEMP 18
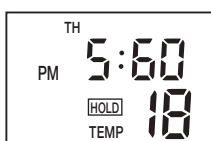
⟨⌃⟩⟨⌄⟩
- You can confirm the held set temperature by pressing for less than 1 second.

To end the Permanent Manual Override:

⟨hold /return⟩
- Press again. The thermostat will return to the current program, and the HOLD display will be canceled.

Filter Monitor

Your thermostat measures the number of hours your heating and cooling system has been in use. To maximize your system's performance and energy efficiency, change or clean your filter regularly.

- When the total system runtime for heat and cool reaches 400 hours, the Filter Change Indicator will flash as a reminder to check your system's filter.

TH SET TEMP
PM 3:51
FILTER
2
COOL TEMP 25

⟨filter⟩
- Press to review total filter usage. After 15 seconds, the display will return to normal mode, or you can press the HOLD/RETURN key to exit immediately.

- After changing or cleaning the system's filter, press and hold the Filter Key for 3 seconds. The display will blink, and the timer will be reset to zero.

4 29 HR
36 MIN
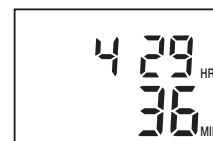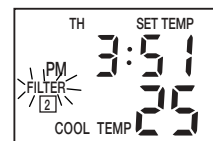
SPAN Setting Mode

Your thermostat is set at the factory to cycle at 0.5°C (1°F) above and below the set temperature. (Span = 2) This setting has been designed to provide a comfortable room temperature under most all conditions. However, if you find your system cycling too fast or too slow, then the Span can be adjusted to modify the cycle time.

⟨⌃⟩⟨⌄⟩
- Press and hold BOTH for three seconds. The display will flash, and SPAN will be displayed on the LCD.

SPAN
2

⟨⌃⟩
- Press to raise the Span to 3. This setting INCREASES the cycle time by allowing your system to run LONGER.

⟨⌄⟩
- Press to lower the Span to 1. This setting DECREASES the cycle time by causing your system to run SHORTER.

The Span settings remain the same for both HEAT and COOL.

The Span can be changed at any time, and is independent of program times or temperatures.

When batteries are installed in the thermostat, or the Reset key is pressed, the Span is reset back to setting 2.

Low Battery Warning

Your thermostat has a two-stage low battery warning system. When the batteries are first detected to be weak, the first stage low battery warning is indicated by battery symbol flashing on the LCD display. At your earliest convenience, you need to replace the batteries with 2 new AA alkaline batteries.

When the batteries become too weak for normal operation, the thermostat enters the second stage low battery warning which shuts down the thermostat. In this condition, "BATT" flashes alone on the display, and the thermostat will turn your system Off. Your system will remain shut-off until the batteries are replaced.

T
PM 10:05
3
HEAT TEMP 19
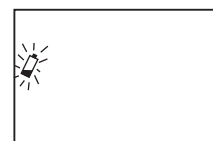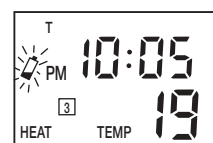
Note: The thermostat will still keep the current time and your programs in memory until new batteries are installed. After confirming that new batteries have been inserted, the thermostat will return to normal operation.

Auto Recovery

Hunter's Auto Recovery feature meets the ENERGY STAR® guidelines for energy efficiency by allowing the heating or cooling system to recover gradually from an energy-saving setpoint temperature to a comfort setpoint temperature.

Auto Recovery calculates how early to turn your system back On, so that the room temperature is already comfortable by the start of the comfort temperature program period. Auto Recovery works in both Heat and Cool modes.

- When the thermostat is in Auto Recovery mode, the display will alternate "RECO" with time, and the program indicator will flash.
- Auto Recovery can be disabled by sliding the Recovery switch on the circuit board.
- Auto Recovery will not operate if Permanent hold or Temporary hold is in operation.
- Auto Recovery can be canceled manually if HOLD / RETURN is pressed during the recovery process.
- Auto Recovery will be canceled and change to Temporary Manual Override mode if the setpoint is adjusted during the recovery process.
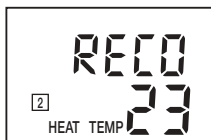
Error Mode

If the thermostat is unable to control your system due to an unexpected battery problem, the thermostat will enter Error Mode. In this condition, the thermostat flashes "Err" on the LCD display, and shuts off your system. To correct this problem, replace the batteries with 2 new AA alkaline batteries, even if you have recently replaced them. Next, use a paper clip to press the RESET button next to the keypad. You will need to reprogram your thermostat and confirm normal operation.

If Error Mode returns, please call Hunter Technical support at 1-866-268-1936 for further information.
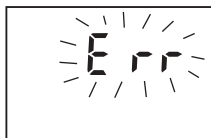
Auto Cut Off

Your thermostat will automatically cut-off in Heat mode if the room temperature rises above 35°C (95°F). It will cut-off in Cool mode if the room temperature drops below 4°C (40°F).

Note that if your system has malfunctioned and no longer responds to thermostat controls, the Auto Cut-Off will have no effect.

TROUBLESHOOTING

Problem	Solution
No Display	1. Check battery connections and batteries.
	2. Press RESET button with a small pin and hold in for two seconds.
Entire Display Dims	1. Replace Batteries
Program Does Not Change at your Desired Setting	1. Check that the time is set properly to "AM" or "PM".
	2. Check that the thermostat is not in Permanent HOLD mode.
	3. Check for the correct day setting.
Auto Fan Does Not Turn On Properly	1. Move HG/HE selector to correct position.
Heating or Cooling Does Not Go On or Off	1. Check that the function switch is in the correct position ("HEAT" or "COOL").
	2. There may be as much as 4-minute delay before the system turns On – wait and check. (Compressor protection delay.)
	3. Check your circuit breakers and switches to ensure there is power to the system.
	4. Replace batteries.
	5. Make sure your furnace blower door is closed properly.
	6. If your non-heat pump system only uses 4-wires, be sure the jumper wire is installed between the RC and RH terminals.
	7. Check the position of the System Selector switch: Standard or Heat Pump.
Erratic Display	1. Press the reset button once with a small pin and hold for two seconds. Then reprogram.
If unit continues to operate in the Off position	1. Replace unit.
Thermostat permanently reads "HI", "LO", or "ERR"	1. Replace unit.

If you experience any other problems, call 1-866-268-1936 from 8 AM to 5 PM Central Time for technical assistance.