

QUADRA-FIRE®

UNIVERSAL PROGRAMMABLE THERMOSTAT KIT

Part:

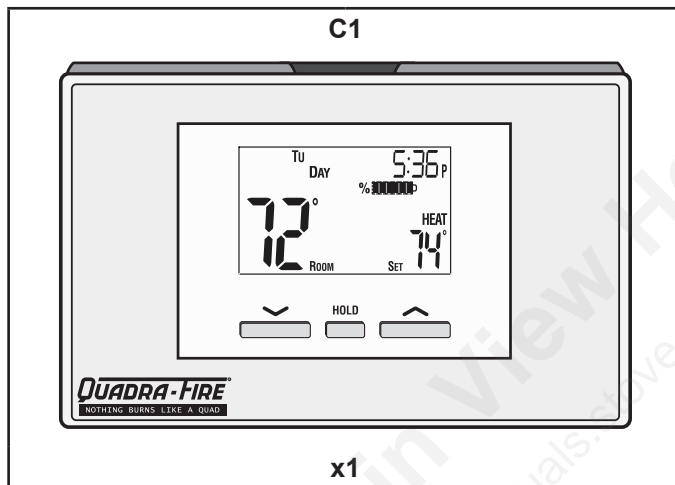
PROG-STAT

FOR APPLIANCES:

Adventure II Wood Stove
Adventure III Wood Stove
Castile Pellet Stove
Castile Pellet Insert
Classic Bay 1200 Pellet Stove
Classic Bay 1200 Pellet Insert

Mount Vernon E2 Pellet Stove
Mount Vernon E2 Pellet Insert
Pioneer III Wood Fireplace
Santa Fe Pellet Stove
Santa Fe Pellet Insert

Included in Kit:



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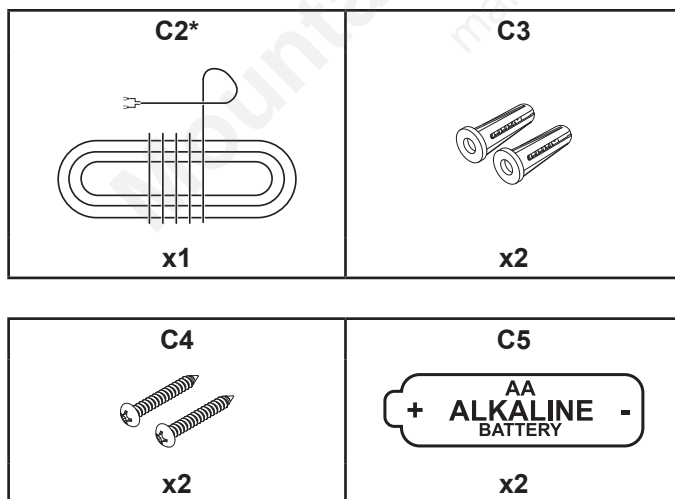
One programmable thermostat (C1), one thermostat wire (C2), two #6 wall anchors (C3), and two #6 screws (C4), and two AA Alkaline batteries (C5).

Tools Required:

Level, drill, 3/16 drill bit for drywall or 7/32 drill bit for plaster, hammer, and Phillips head screwdriver

Thermostat Key Features

- 7 day or 5/2 day programming (weekdays and weekends can be programmed separately)
- 2 or 4 user-selectable events per day
- User-selectable programmable or manual operation
- Keypad lockout for unauthorized users
- Manual temperature hold
- Temporary temperature override
- Adjustable temperature differential
- User temperature calibration
- Battery-free memory storage
- F/C temperature display
- 12/24 hour clock display
- 5/2 minute selectable time delay for equipment protection



*Thermostat wire (C2) not included in thermostat box it is packaged separately.

Before Installation

The kit comes with a programmable wall thermostat (**C1**) and 25' of thermostat wire (**C2**). If you need to run more than 25' make sure you use a continuous strand of 18 to 22 gauge thermostat wire. For optimum performance your thermostat should be:

- Mounted on an inside wall, approximately 5' above the floor
- Do not locate where there is poor air circulation such as in a corner, alcove, behind doors, bookcase or other objects
- Located away from drafts, direct sunlight, above a lamp, television, radiator, a wall next to a window, or direct heat from the appliance
- Avoid damp environments as this can lead to corrosion that may shorten thermostat life
- If painting or construction work around, cover the thermostat completely or wait until work is complete before installation.

Wall Thermostat Installation

1. Separate the body of the thermostat from the mounting plate by gently pulling the two pieces apart (**Figure 1**)

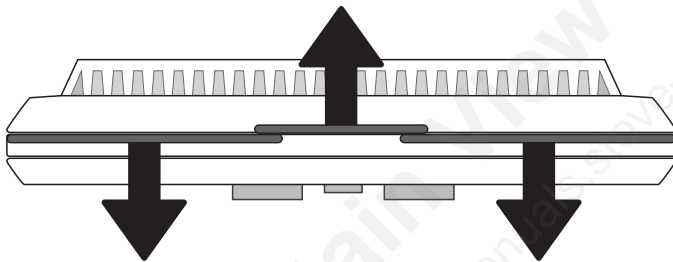


Figure 1

2. Use a drill with either a 3/16 drill bit for drywall or a 7/32 drill bit for plaster drill holes.
3. Using a hammer tap in wall anchors.
4. Route the wires through the opening in the base plate, and hold the base against the wall while aligning up to the holes. Attach base plate using a Phillips head screwdriver and two screws (**C2**).
5. Connect your thermostat wire to the W and R terminals (**Figure 2**).

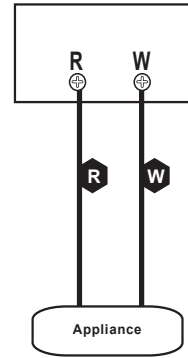


Figure 2

NOTE: Ensure bare wire ends are held ALL the way into the terminal block while the screws are being tightened.

6. There are two **AA ALKALINE ONLY** batteries already installed into the thermostat; to activate, remove black plastic tab that is located inside the battery compartment.

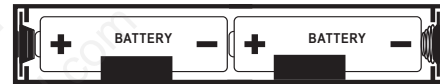


Figure 3

7. Snap the thermostat to the base plate.

NOTE: See installation manual for instructions to connect thermostat wire to your appliance.

Thermostat Controls

TEMPERATURE (HEAT / OFF) SWITCH:

Set this switch to HEAT to control your appliance. The OFF position will disable the appliance.

SET (MULTI- FUNCTION) SLIDE SWITCH:

This provides easy access to common settings, and should always remain in RUN unless items are being adjusted.

NOTE: When thermostat is set to "Manual" non-programmable mode, all positions of the SET slide switch will act like RUN.

UP / DOWN BUTTONS:

The UP and DOWN buttons are used to control the set temperature, or adjust any other on-screen items. An items flashing, is the item currently being adjusted.

HOLD BUTTON:

This button activates and deactivates the manual Temperature HOLD feature, which maintains a fixed set temperature indefinitely without following a program routine.

COPY BUTTON:

This is used to copy temperature program items from one day to the next. Also used to access the menu setup.

NEXT BUTTON:

This is used when setting items such as software options, and temperature programs when they are flashing on the screen. Pressing the NEXT button will cycle through which item is flashing.

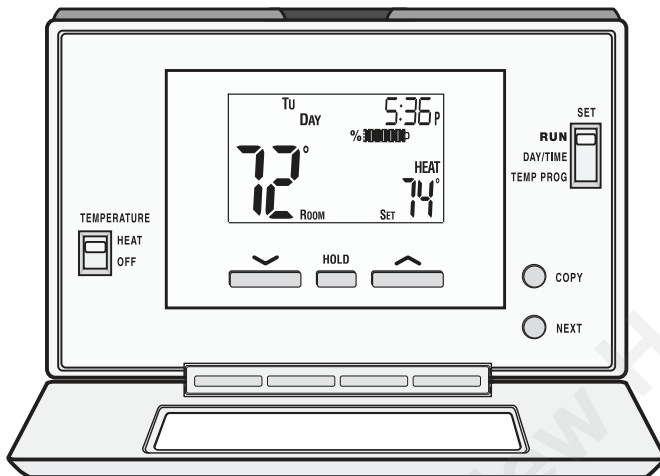


Figure 4

Thermostat Setup Options

Setup options for how the thermostat will function are performed using a menu on the display screen.

TO ACCESS THE SETUP MENU:

Move the System Mode Switch into the OFF position, and then hold down the COPY button for approximately 5 seconds until the screen changes. The menu will always start with item #01, and is advanced to each following item by a single press of the NEXT button. The options for each item are changed using the UP or DOWN buttons.

ITEM #01 (CLK = CLOCK FORMAT):

- 12Hr. default: This displays the clock times using standard AM and PM values.
- 24Hr: This displays the clock times using the military-time format (example 22:00 hours, without using AM or PM).

ITEM #02 (TMP = TEMPERATURE SCALE):

- F, default: Shows all temperature values in Fahrenheit.
- C: Shows all temperature values Celsius.

ITEM #03 (PROGRAMMING STYLE):

- 7 Day, default: This style uses a separate program routine for each of the 7 days in the week.
- 5/2 Day: This style uses a weekday program routine for Monday, Tuesday, Wednesday, Thursday, Friday, and a separate weekend program routine for Saturday and Sunday.
- Manual Non-Programmable: In this setting, there are no program routines for the thermostat to follow and the temperature control will be set only by the UP and DOWN buttons on the front panel.

ITEM #04 (PERD = EVENT OR PERIOD QUANTITY):

- 4P, default: Thermostat uses four Events per day (called MORN, DAY, EVE, and NITE).
- 2P: The thermostat uses two Events per day (called DAY and NITE).

NOTE: Event or Period Quantity feature is not accessible during Manual Non-Programmable mode.

ITEM #07 (DLAY = DELAY TIME):

- 5, default: Thermostat waits 5 minutes before turning the system back on after it was last run. This internal delay prevents the appliance from turning on too quickly after shutting down. The 5 minute setting is fine for most applications.
- 2: Same operation as above but reduced to 2 minutes between state changes. **NOTE:** This delay does not happen when the thermostat is manually turned up and down.

ITEM #08 (TEMPERATURE DIFFERENTIAL):

- The thermostat works by turning your heating system on and off whenever the room temperature varies from the desired set-point temperature.
- Use the UP/DOWN buttons to change the number value between 1 and 9. Generally your system should cycle on about 3 to 6 times per hour. A smaller differential number makes the system cycle more frequently, so the room temperature is more precise and constant. A larger differential number will make the system remains on for a longer duration each time and decreases the number of cycles per hour.
- Default is set to 4.

Operating Instructions

SET DAY AND TIME:

Place the SET switch into the DAY/TIME position. With the day flashing press UP or DOWN to set the day or the week. Press NEXT and the clock time will start flashing. Use UP or DOWN to set the time; verify the AM/PM indicator is correct. Return the SET switch to RUN position when finished.

HEATING:

Basic operation of the thermostat can be obtained with the SET switch in the RUN position. The temperature can be adjusted using the UP and DOWN buttons. When the thermostat is first powered on, it will follow a default temperature routine that is preset from the factory (**Figure 5**).

Event	Time	Temperature
MORN	6:00 AM	70°F (21°C)
DAY	8:00 AM	62°F (17°C)
EVE	6:00 PM	70°F (21°C)
NITE	10:00 PM	62°F (17°C)

Figure 5

LCD DISPLAY BACKLIGHT:

The display screen is lighted to assist viewing at nighttime, or in locations with low light levels. Press any button on the front panel to activate the approximate 10 second backlight.

TEMPERATURE OVERRIDE:

While thermostat is in RUN mode, the set temperature can be temporarily changed by pressing UP or DOWN. The temporarily changed set temperature will return to the programmed value stored in memory when start time of the next upcoming scheduled event is reached (MORN, DAY, EVE, OR NITE). While the temporary changed set temperature is in effect, the word OVERRIDE will be shown on the display screen. To cancel, move TEMPERATURE switch to OFF and back to HEAT again.

TEMPERATURE HOLD:

Temperature hold is used for maintaining a fixed set temperature; once a HOLD is initiated, the thermostat will maintain the set temperature indefinitely. To enter a HOLD state, press the HOLD button one time and the word HOLD will appear on the display. To cancel, press the HOLD button once again.

STATIC NOTICE

Thermostat is protected against normal static electric discharges, however to minimize the risk of damaging the thermostat in extremely dry weather, please touch a grounded metal object before touching the thermostat.

Temperature Programs

The thermostat by default has 4 separate program events they are: MORN, DAY, EVE, and NITE. Each event ends at the start time of the following event.

NOTE: If the thermostat is set for 2 events a day instead of 4, the thermostat will only use the DAY and NITE events.

SET TEMPERATURE PROGRAMS:

1. Move TEMPERATURE switch to HEAT.
2. Move SET switch to TEMP PROG position.
3. Starting with Monday, use the UP or DOWN buttons to adjust the start time and set temperature for the MORN event, and then press NEXT button to advance.
4. Adjust the start time and set temperature of the DAY event then press NEXT button.
5. Continue in this same manner to adjust the start time and set temperatures for the EVE and NITE events for Monday.

NOTE: When the last event is finished for each day or group of days, the thermostat will advance forward into the next day or group of days.

6. Use steps 3 through 5 to set up the events for the rest of the week or group of days.
7. Return the SET switch back to RUN.

COPY PROGRAM FEATURE:

Using similar instructions as **SET TEMPERATURE PROGRAMS** the COPY button will allow a whole day of set program events to be copied to another day.

1. Move TEMPERATURE switch to HEAT as well as move SET switch to TEMP PROG position.
2. Starting with Monday, use the UP or DOWN buttons to adjust the start time and set temperature for the MORN, DAY, EVE, and NITE events. Press the COPY button and then press the NEXT button to advance to Tuesday.
3. With Tuesday displayed press COPY button. As all programs events from Monday will be copied to Tuesday (this will advance automatically to the next day; Wednesday, as the word COPY will appear on the screen for one second).
4. Continue in this pressing COPY button to set desired days with original setting.

NOTE: The word COPY will not appear on the display for Monday, but will display each day afterwards for approximately one second and the day of the week will automatically advance forward to the next day.

Other Features

NOTE: All other features need to be completed in a timely manner as the thermostat will time out after 10 seconds.

TEMPERATURE CALIBRATION:

The internal temperature sensor in this thermostat is accurately calibrated at the factory, and in most cases alterations to this setting should not be needed. The temperature calibration feature allows you to manually offset the measured temperature by as much as plus or minus 5°F (3°C) from its original value. If several thermostats are used in the same house, this feature can be used to synchronize this thermostat to the others.

Change the temperature calibration:

1. Move TEMPERATURE switch to OFF.
2. Move SET switch to RUN.
3. Press and hold both UP and DOWN buttons together for at least 5 seconds; the words SET and CAL will appear on the display along with a single flashing temperature digit.
4. Use the UP or DOWN buttons to change the number of degrees desired for adjustment; 0° is the default value and also means no correction will be applied.
5. Press the NEXT button to accept the setting.

KEYPAD LOCKOUT:

There is the option to lock the front panel buttons to prevent unauthorized tampering of your thermostat settings.

To Lock the Keypad:

6. Move TEMPERATURE switch to HEAT.
7. Move SET switch to RUN.
8. Perform a single press of each button in the following sequence:
 - NEXT, NEXT, NEXT, HOLD

A padlock will appear on the display screen.

To Unlock the Keypad:

1. Move TEMPERATURE switch to HEAT.
2. Move SET switch to RUN.
3. Perform a single press of each button in the following sequence:
 - NEXT, NEXT, NEXT, HOLD

A padlock will no longer be present on the display screen.

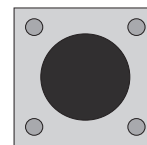
HARDWARE RESET:

The hardware reset button; labeled HW RST, is a small round push button that is located in the middle of the circuit board, just below the battery holder (**Figure 6**).

Pressing this button will:

- Cause the LCD display screen to become fully populated
- Thermostat to perform an internal system check of its components

If the thermostat appears to be acting in an erratic manner, pressing the HW RST button may remedy this behavior. The temperature programs are not erased when a hardware reset is performed, however the clock will have to be changed to match the current day and time.



**HW
RST**

Figure 6

SOFTWARE RESET:

Software reset is used to erase ALL temperature events, and to return all user-adjustable software settings back to their original factory default settings.

To Perform a Software Rest:

1. Verify the thermostat's keypad is not locked.
2. Move TEMPERATURE switch to OFF.
3. Press and hold the UP, DOWN, and NEXT buttons all at the same time for at least 5 seconds. When the LCD display screen will become fully populated let go of all buttons at that point the screen will return to normal.

The clock will have to be changed to match the current day and time.

Battery Replacement

This thermostat is powered by two "AA" Alkaline batteries. The batteries should be replaced AT LEAST once per year to ensure reliable operation or sooner if the LO BATT appears on the display screen. The batteries are located on the back of the thermostat's circuit board. The front portion of the thermostat can be removed from the back half by using the tabs on the top edge of the thermostat housing (**Figure 1 on page 2**).

When installing new batteries, it is recommended using only brand new "AA" size alkaline batteries. Please verify the polarity markings shown in the battery compartment before adding batteries to the compartment. When finished, line up the front of the thermostat to the base, and firmly press together to securely latch the front and back halves together properly.

BATTERY GRAPHIC:

Anytime time the batteries are physically present in the thermostat, there will be a visual indicator showing the life of the battery. This will appear on the display screen (**Figures 7 & 8**).



Figure 7 - Full battery icon



Figure 8 - Low battery icon