

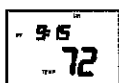
- If the system selector is in AUTO mode, the current operating mode will be used for programming.
- After 15 seconds without a key press, the thermostat will return to normal display mode.
- When setting the program time, note the AM/PM indicator.
- With the Auto Recovery feature enabled, you do not need to set your comfort program times early. Auto Recovery will turn your system on so that the room is comfortable at the program time.

Weekday/Weekend Programming

Weekday Programs

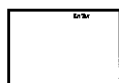
Display Reads

- Normal display of time, temperature, and day of the week.



Step 1

- Presses **PROG DAY** to select days Mon. to Fri. for same set of 4 programs each day.



Step 2

- Presses **PROG** to display program indicator (1).
- 68°F is displayed.
- Mon. to Fri. is displayed.



Step 3

- Presses **HOUR** and holds until 6:00 is displayed.
- Note AM/PM.



Step 4

- Press **▲** once to change temperature to 69°F.
- Weekday program 1 is complete.
- Press **PROG** to move to program 2, 3, and 4 and follow the same steps.

Use **HOUR**, **MIN**, **▼**, **▲** to insert or change time and temperature of other programs.

- Presses **PROG DAY** to select weekend days Sat. and Sun. for same set of 4 programs each weekend day.
- Follow steps 2-4 to enter programs.



Similar to weekday programming.

Use **PROG**, **HOUR**, **MIN**, **▼**, **▲** to insert weekend programs.

Individual Day Programming

To program each individual day separately by a different set of programs, first select day by displaying the day of program, then insert the desired times and temperatures.

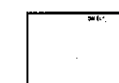
Press

Reads

- Presses **PROG DAY** to select Mon. to Fri. will have same programs.



- Presses **PROG DAY** to select Sat. to Sun. will have same programs.



- Presses **PROG DAY** to select Mon. is selected, program for Mon. only.



Use **PROG**, **HOUR**, **MIN**, **▼**, **▲** to enter programs for Monday.

- Similarly, Tue. to Sun. can be selected.



Display the day to be programmed and use

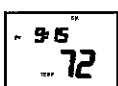
PROG, **HOUR**, **MIN**, **▼**, **▲** to enter programs.

NOTE: Another approach to programming is to first program all weekdays Mon. through Fri. and Sat. and Sun. as same programs. Then, display and change the programs of only those days which will have different programs.

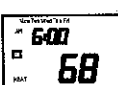
Reviewing Programs

You may want to review the programs to see that the settings are compatible with your lifestyle.

- Normal display of current time, day of week, temperature, and day of week.



- 1st weekday program is displayed.
- Program indicator (1) appears.
- Mon to Fri indication appears.



- Continue pressing **PROG DAY** to view each day.

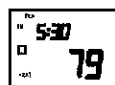
- Continue pressing **PROG** to view each period.

If you are armchair programming the thermostat, turn the System Selector to the OFF position

Reviewing the Current Temperature Setting

Current time and temperature.

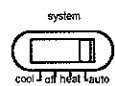
- Press less than 1 second.
- Set temperature is shown above current room temperature.



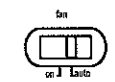
OPERATION

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, or AUTO. In order to take full advantage of this thermostat's features, we recommend using the AUTO mode. Refer to the **Auto Season Changeover** information for using this feature.



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.

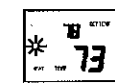


Fan Switch

The Fan switch should normally be set 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 continuously, slide the Fan switch to the ON position.

Temporary Manual Override

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



- Press and hold **▲** or **▼** for less than 1 second to enter Manual Override mode.
- Press **▲** and **▼** to change to your desired new temperature.

- Press **HOLD/RUN** to return to normal mode or wait 15 seconds for it to return automatically.

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

At the next program change, the Temporary Override is canceled, and the next program temperature becomes the setpoint temperature.

To end the Temporary Manual Override:

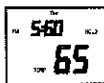
- Press and wait for **HOLD** to display on the LCD.
- Press **HOLD** key twice. This will return the set temperature to the current program set temperature.

NOTE: The Auto Season Changeover feature will not operate while the thermostat is in Temporary Manual Override. Refer to the Auto Season Changeover feature for more information.

Permanent Override or a Designated Day Override

To hold your Manual Override for vacation or until a Designated Day.

- Press **HOLD/RUN** 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.
- You can confirm the setpoint by pressing **HOLD/RUN** for less than 1 second.
- Press again. Hold day will be displayed on the LCD and the clock will disappear.
- Press **DAY** key to add override days. Press **Hour** key to reduce override days.
- Follow the Temporary/Designated Day Override instructions above to change the Permanent Manual Override temperature.



To End Override:

Under Permanent Override press hold/return key twice. Under a Designated Day Override press the hold once. The thermostat will return to the current program, and the **HOLD** display will be canceled.

NOTE: The Auto Season Changeover feature will not operate while the thermostat is in permanent Manual Override. Refer to the Auto Season Changeover feature for more information.

Auto Season Changeover

When the System Selector is in AUTO position, the thermostat will automatically change between heating and cooling systems, depending on your program. We recommend keeping your programmed heating and cooling temperature at least 4°F (2°C) apart to allow the Auto Season Changeover to occur when the appropriate temperature span has been reached. If your heating and cooling programs have setpoints that are close, there is a built-in program to prevent the thermostat from going into Temporary, Designated Day Override, or Permanent Override, as these overrides are energy saving settings. Auto Season Changeover will still function in Home Today mode, as this is a comfort setting.

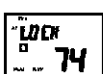
For example, you may have the following temperatures programmed at a given time: Heat Set Temp=68°F, Cool Set Temp=78°F.

If the room temperature rises above 78°F, then the thermostat will automatically change to cool mode and turn on the air conditioner.

- Auto Recovery can be disabled by sliding the Recovery switch on the circuit board to disable.
- Auto Recovery will not operate if Permanent Hold or Temporary Hold is in operation.
- Auto Recovery can be canceled manually if HOLD is pressed during the recovery process. If a recovery process is canceled manually then the recovery process will not start again until the next program period starts (an exception is that if time or program is changed then the thermostat will check Auto Recovery conditions immediately).
- Auto Recovery will be canceled and change to next period.
- Auto Recovery will be canceled and change to Home Today mode if HOME TODAY is pressed during the recovery process.

Keyboard lock

The keyboard can be locked to prevent unauthorized changes to the thermostat.



To lock or unlock the keyboard, press and hold hold/run key for 3 seconds. The keyboard is locked when LOCK appears on the display.

- When all keys are locked, LOCK will appear on the display for 1 second any time a key is pressed.

Backlighting

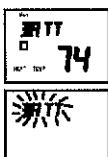
Your thermostat has an electroluminescent lamp that backlights the display for easy viewing in the dark. When any key is pressed the display is illuminated.

The display will remain illuminated for 8 seconds after the last key is pressed. This allows the light to stay on if you need to operate several keys.

NOTE: If the thermostat is in Low Battery warning condition, the backlight will not operate. Replace with 2 new AA alkaline batteries to restore the Backlight function.

Low Battery Warning

Your thermostat has a two-stage lower battery warning system. When the batteries are first detected to be weak, the first stage low battery warning is indicated by BATT flashing on the LCD display. Replace the batteries with 2 new AA alkaline batteries.

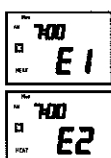


When the batteries become too weak for normal operation, the thermostat enters the second stage low battery warning which shuts down the thermostat. In this condition, BATT flashes alone on the display, and the thermostat will turn your system off. Your system will remain off until the batteries are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

NOTE: The thermostat will still keep the current Set Temperature and Filter run time in memory until new batteries are installed. After confirming that new batteries have been inserted, the thermostat will return to normal operation.

Error Mode

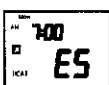
If the thermostat is unable to control your system due to an unexpected battery problem, the thermostat will enter Error Mode. In this condition, the thermostat flashes E1, E2, E3 or E4 on the LCD display, and shuts off your system. To correct this problem, replace the batteries with 2 new AA alkaline batteries, even if you have recently replaced them. Press the reset button once with a small pin and hold for two seconds then reprogram.



If Error Mode returns, please contact us for further information.

Warning Mode

If the Malfunction Input (L) from the heat pump is active, the thermostat flashes E5 on the LCD display.



Auto Cut Off

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

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

Likewise, the thermostat will automatically change to heat mode and turn on heat when the room temperature falls below 68°F.

HOME TODAY

This feature allows you to quickly and temporarily override your energy saving program setting on days when you are normally away from home with one key press.



- Press to enter the Home Today override. The highest program temperature for today will be selected from your programs in Heat mode and become the set temperature. In Cool mode, Home Today will select the lowest program temperature for today to be the set temperature.



- The display will alternate between HOME and the current time.



- When pressed during the day, the thermostat will remain in Home Today mode until the first program of the next day.
- If the system is changed between Heat and Cool modes (either manually or by Auto Season Changeover) during the Home Today Override period, the setpoint temperature will be automatically update. It will automatically change from the lowest cool program setpoint to the highest heat program setpoint.

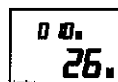


- Press to exit Home Today mode before the schedule ending time. HOME is no longer displayed on the LCD screen, and the thermostat returns to the current program.
- You can manually change the setpoint temperature while in Home Today mode. Refer to the Temporary Manual Override instructions. Manually changing the set temperature while in Home Today mode will not affect the Home Today ending time, however, the set temperature will not change automatically with a manual or automatic change between heating and cooling.

Energy Monitor



- The Energy monitor feature measures and stores the amount of time the heating and air conditioning system operates. Usage can be displayed for Today (since 12 am), Yesterday, This Week (since Monday), Last Week (last Monday through Sunday), and Total (up to 999 Hrs). By monitoring your energy usage, you see how much the setback periods are saving, and you can test program adjustment to save even more. To review energy usage, press to cycle through Today, Yesterday, This Week, Last Week, and Total. Press again to return to normal mode, or wait 15 seconds for the display to return to normal mode. You can also return to normal mode at any time by pressing RUN.



- For example: This LCD display shows Today's usage to be 10 Hours, 26 minutes.
- Press and hold for 3 seconds to reset the Energy Monitor's counters.

The display will blink, and counters will be cleared to zero.

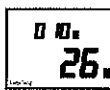
NOTE: Clearing the Energy Monitor counter will also clear the Filter Monitor counter, as Filter usage and Total Energy usage are the same. Also, clearing the Filter Monitor counter will clear ALL Energy Monitor counters as well.

Filter Monitor

Your thermostat also keeps a record of the number of hours your filter has been in use. To maximize your system's performance and energy efficiency, change or clean your filter regularly.



- When the total system run time for heat and cool reaches 500 hours, you need to clean or change your system's filter. FILT will continue to flash until the counter is set back to zero.
- Press FILTER to review total filter usage. The display will blink FILT, then show the Filter Monitor counter. After 15 seconds, the display will return to normal mode, or you can hit RUN to exit immediately.



The Filter Monitor will display up to 999 hours and 59 minutes of usage.

- To reset the Filter Monitor counter, depress FILTER for 3 seconds. The display will blink, and the counter will be reset to zero.

NOTE: Clearing the Filter Monitor counter will also clear ALL Energy Monitor counters, as Filter usage and Total Energy usage are the same. Also, clearing the Energy Monitor counters will clear the Filter Monitor counter as well.

Auto Recovery

Auto Recovery calculates how early to turn your system back on, so that the room temperature is already comfortable by the start of the 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.

TROUBLESHOOTING	
Problem	Solution
SCRAMBLED OR DOUBLE DISPLAY (numbers over numbers)	1. Remove clear mylar sticker.
NO DISPLAY	1. Check battery connections and batteries. 2. Press the reset button once with a small pin and hold for two seconds then reprogram.
ENTIRE DISPLAY DIMS	1. Replace batteries.
PROGRAM DOES NOT CHANGE AT YOUR DESIRED SETTINGS	1. Check that the time is set properly to AM or PM. 2. Check that the thermostat is not in HOLD or Home Today mode. 3. Check for the correct day settings.
AUTO/FAN DOES NOT TURN ON	1. Move Elec/Gas selector to opposite position. 2. The thermostat may be in Auto mode. Look for AUTO on the LCD display. If the heat or cool program temperatures are close, the thermostat requires a larger temperature change before switching systems. 3. There may be as much as 4 minute delay before the heat or cool system turns on. Wait and check. (Compressor protection delay) 4. Check your circuit breakers and switches to ensure there is power to the system. 5. Replace batteries. 6. Make sure your furnace blower door is closed properly. 7. If your system only uses 4-wires, be sure the jumper wire is installed between the Rc and Rh terminals. 8. Check the position of the Furnace or Heat Pump selector switches: Normal/O/B.
ERRATIC DISPLAY	1. Press the reset button once with a small pin and hold for two seconds then reprogram.
UNIT CONTINUES TO OPERATE IN THE OFF POSITION	1. Replace unit.
THERMOSTAT PERMANENTLY READS E1, E2, E3, E4	1. Replace unit.

If you experience any other problems, contact Technical Support at: www.invensyscontrols.com or (800) 445-8299

Two Year Limited Warranty

Invensys Controls warrants to the original contractor installer or to the original consumer user that each new Robertshaw Product shall be free from defects in materials and workmanship under normal use and service for a period of two (2) years from the date of manufacture ("Warranty Period"). If any Product fails within the applicable Warranty Period, Invensys Controls shall, at its sole option, repair or replace the Product, provided that the Product is returned to Invensys Controls' facility or designated agent within the Warranty Period, with transportation charges prepaid, and that the Product, upon examination by Invensys Controls, is found to conform to this warranty. The above warranty does not apply to: i) batteries; ii) improper installation; iii) Products that have been damaged, misused, neglected, mishandled, or altered in any manner whatsoever, and/or; iv) defects or damage that result from use of the Product in other than its normal and customary manner or in any manner not in accordance with Invensys Controls' recommendations and/or instructions. Any and all costs of labor, thermostat removal, or reinstallation are not covered under this warranty and shall be the sole responsibility of the consumer or installer, as applicable.

THE FOREGOING WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, WHETHER VERBAL OR WRITTEN, EXPRESS OR IMPLIED INCLUDING, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL INVENSYS CONTROLS BE LIABLE TO CONSUMER, CONTRACTOR OR ANY THIRD PARTY FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL OR PUNITIVE DAMAGES ARISING FROM OR RELATING TO USE OF THE PRODUCT INCLUDING, BUT NOT LIMITED TO, LOSS OF GOODWILL, LOSS OF PROFIT OR REVENUE, AND PROPERTY DAMAGE, REGARDLESS WHETHER SUCH LOSS OR DAMAGE IS BASED IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY, INDEMNITY, PRODUCT LIABILITY, OR OTHERWISE AND EVEN IF INVENSYS CONTROLS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.