LUX*PRO*

PSP721U

SMART TEMP® UNIVERSAL PROGRAMMABLE THERMOSTAT

FOR __BOTH__ CONVENTIONAL AND HEAT PUMP SYSTEMS   52033

INSTALLATION AND OPERATING INSTRUCTIONS

IMPORTANT!
- **Please read all instructions carefully before beginning installation**
- **Label the terminal designations on your existing wiring before removing your existing thermostat**
- **Ignore the color of the wires since they may not comply with any standard.**

Thank you for your confidence in our product. To obtain the best results from your investment, please read these instructions and acquaint yourself with your purchase. Follow the installation procedures carefully, and one step at a time. This will save you time and minimize the chance of damaging either the thermostat or the systems that it controls. These instructions may contain information beyond that required for your particular installation.

WARNING: Use Energizer® or DURACELL® Alkaline Batteries Only.
Energizer® is a registered trademark of Eveready Battery Company, Inc.
DURACELL® is a registered trademark of The Gillette Company, Inc.

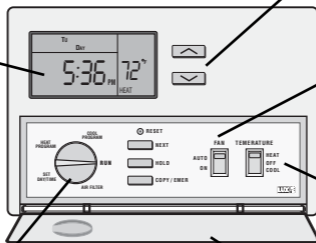ENERGY STAR

PSP721U

- LCD Display Screen
- Up / Down Buttons
- Fan Mode Switch
- System Mode Switch
- LUX Rotary Speed Dial®
- Quick Reference Instructions

1. SYSTEM COMPATIBILITY

The electrical rating for this thermostat is 1.5A per terminal, with a maximum of 2.0A for all terminals combined.

COMPATIBLE WITH:
- Most 24-volt heating and cooling systems
- 1 or 2 stage Heat / 1 stage Cool: Gas, Oil or Electric systems
- 1 or 2 stage Heat / 1 stage Cool: Heat Pump systems
- 3-wire hydronic (hot water) zone valves
- Gas Millivolt heaters

NOT COMPATIBLE WITH:
- 120/240 VAC line voltage systems without a transformer, ask your LUXPRO dealer for thermostats to control these systems.

2. THERMOSTAT FEATURES

• Universal Compatibility (Conventional or Heat Pump)
• 7 Day Programming
• 4 Periods per Day
• Quick Copy Programming
• Exclusive LUX Speed Dial®
• Luxlight® EL (Electro-Luminescent) Illuminated Display
• Filter Monitor
• Programmable Keypad Lock
• Optional Smart Recovery
• Temperature Hold
• Temporary Temperature Override
• Energy Star Compliant
• Battery Free Memory Storage
• F/C Temperature Display
• 12/24 Hr Clock Display
• Adjustable Temperature Differential / Cycle Rate
• User Temperature Calibration
• System or Battery Powered
• 5/2 Minute Selectable Minimum Run/Off Time for
  Equipment Protection

Please read all of these instructions carefully before beginning installation, and save this manual for future reference.

3. TOOLS REQUIRED

• #1 Phillips screwdriver
• Drill with 3/16 in. (4.8mm) bit
• Wire Stripper / Cutter

CAUTION:
This thermostat is protected against normal static electric discharges; however touching a grounded metal object before touching your thermostat will minimize the risk of damaging the unit in extremely dry weather.

4. SELECTING A LOCATION

On replacement installations, mount the new thermostat in place of the old one unless the conditions listed below suggest otherwise. On new installations, follow the guidelines listed below.

1. Locate the thermostat on an inside wall, about 5 ft. (1.5m) above the floor, and in a room that is used often.
2. Do not locate where air circulation is poor, such as in a corner or an alcove, or behind an open door.
3. Do not install it where there are unusual heating conditions, such as: in direct sunlight; near a lamp, television, radiator, register, or fireplace; near hot water pipes in a wall; near a stove on the other side of a wall.
4. Do not locate in unusual cooling conditions, such as: on a wall separating an unheated room; or in a draft from a stairwell, door, or window.
5. Do not locate in a damp area. This can lead to corrosion that may shorten thermostat life.
6. If painting or construction work has yet to be completed, cover the unit completely or do not install it.

WARNING:
• Read instructions carefully before removing any wires from your existing thermostat.
• All wiring must conform to the local codes and ordinances that are in your particular location.

• Your thermostat is a precision electronic instrument; please handle it with care to avoid damage.

5. REMOVE OLD THERMOSTAT

1. Turn OFF the electricity to all heating and cooling components. Do not turn the electricity back on until all work is completed.

2. Remove the cover and front portion of your old thermostat to expose the wiring connections.

3. Write down the letters printed near each wire terminal that is used, and the color of the wire that is connected to it. Using the enclosed labels, attach a label to each of your wires so that the letter matches the marking on your existing thermostat.

4. When they are all labeled, carefully remove the wires one at a time, making sure that they do not fall back inside the wall. Do not allow any of the bare wire ends to touch each other, or any parts on the thermostat.

5. Loosen all of the screws on the old thermostat and remove it from the wall.
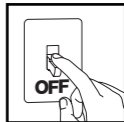
6. MOUNT THE NEW THERMOSTAT

1. Strip insulation leaving 3/8 in. (9.5mm) bare wire ends and clean off any corrosion.

2. Fill wall opening with non-combustible insulation to prevent drafts from affecting the thermostat.

CAUTION:
Be careful not to drop the unit or disturb electronic parts. Leave the door closed while the body is being removed from the base.

3. Remove the body from the thermostat's base by pressing the thumb latch at the bottom center of the unit and swinging the body away from the base.

NOTE:
If you are mounting the base to soft material like plasterboard or if you are using the old mounting holes, the screws may not hold. Drill a 3/16 in. (4.8mm) hole at each screw, and insert the plastic anchors provided.

4. Hold the base against the wall. Route the wires through the hole below the terminal block. Position the base for best appearance (to hide any marks from an old thermostat). Attach the base to the wall with the two screws provided.

7. WIRING INFORMATION AND DIAGRAMS

CONNECTING THE WIRES

5. Wires must be trapped between the black clamps and the brass terminals as shown here.

6. Securely tighten all of the electrical terminal screws, including any unused ones.

WIRING DIAGRAM NOTES:
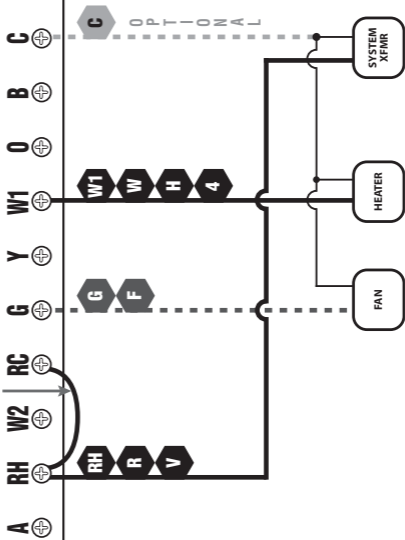*(Important, please read all notes before connecting wires)*

• If the information provided does not clearly represent your system configuration, please refer to the "TECHNICAL ASSISTANCE" section of this manual, and contact our support department *__before__* removing any of your existing thermostat wiring.

- All of the dashed wires shown in the following wiring diagrams are either optional, or their usage depends upon your specific system type or brand. For example: Diagram #1 shows the fan wire as optional. If your system does not have a fan, than this terminal will not be used.

- The optional "C" terminal is used for powering the thermostat by the 24 Volt system power. This can be used alone, or in addition to installing batteries.

- If "Y" and "C" wires are both present, then "C" is most likely a system common wire.

- For Heat Pump systems, use either the "O" terminal or the "B" terminal, but not both. If an "O" and a "B" wire are both present, "B" is likely a system common and may be connected to the "C" terminal. Connecting system common power to this thermostat's "B" terminal may damage the thermostat, and also your system.

- If replacing a Honeywell TM-11, tape off the "R" wire. Connect the "B" wire to the "RH" terminal.

- If replacing an old thermostat that has a mechanical clock, there may be <u>two</u> wires labeled as "C" for the clock power. Tape off these wires and do not connect them to the "C" terminal of this thermostat.

TYPICAL 24-VOLT, 2 OR 3 WIRE, CONVENTIONAL,
1-STAGE, HEATING ONLY SYSTEMS (INCLUDING MILLIVOLT)

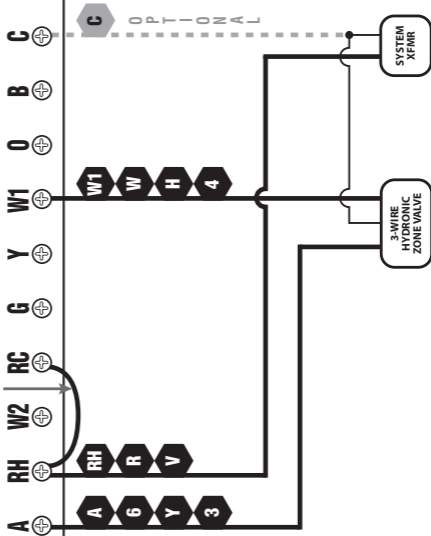#1

Factory RH-RC Jumper Wire Installed

A   RH   W2   RC   G   Y   W1   O   B   C

RH R V

G F

W1 W H 4

C OPTIONAL

SYSTEM XFMR

HEATER

FAN

TYPICAL 24-VOLT, CONVENTIONAL, 1-STAGE, HOT WATER HEAT ONLY SYSTEMS WITH A 3-WIRE ZONE VALVE

#2

Factory RH-RC Jumper Wire Installed

C — OPTIONAL

SYSTEM XFMR

3-WIRE HYDRONIC ZONE VALVE

C | B | O | W1 | Y | G | RC | W2 | RH | A

W1 | W | H | 4

RH | R | V

A | 6 | Y | 3

#3

TYPICAL 24-VOLT, 3 WIRE, CONVENTIONAL,
1-STAGE COOLING ONLY SYSTEMS

Factory RH-RC Jumper Wire Installed

A RH W2 RC G Y W1 O B C

RC R 5

G F

Y C* 6

C OPTIONAL

SYSTEM XFMR

A/C UNIT

FAN

10
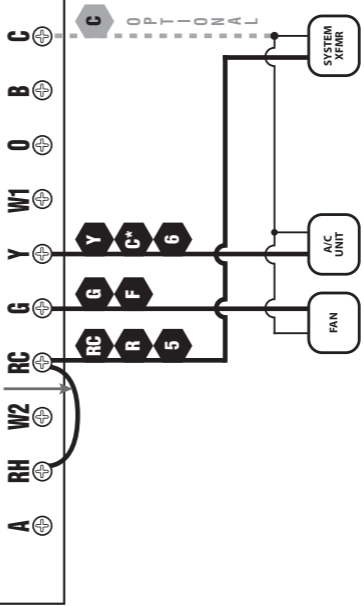
TYPICAL 24V, 4 WIRE, CONVENTIONAL HEATING AND COOLING SYSTEMS WITH 1 STAGE HEAT AND 1 STAGE COOL

#4

Factory RH-RC Jumper Wire Installed

A   RH   W2   RC   G   Y   W1   O   B   C

OPTIONAL

RH   R   V

G   F

Y   C*   6

W1   W   H   4

SYSTEM XFMR

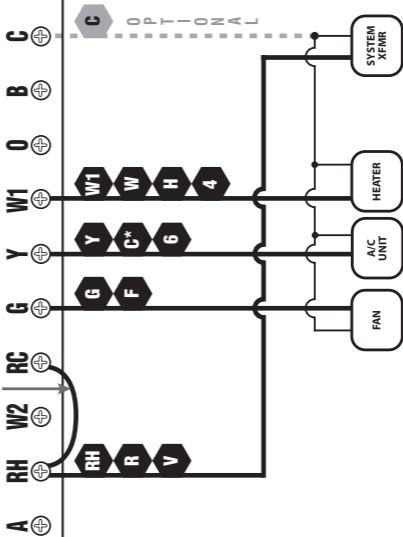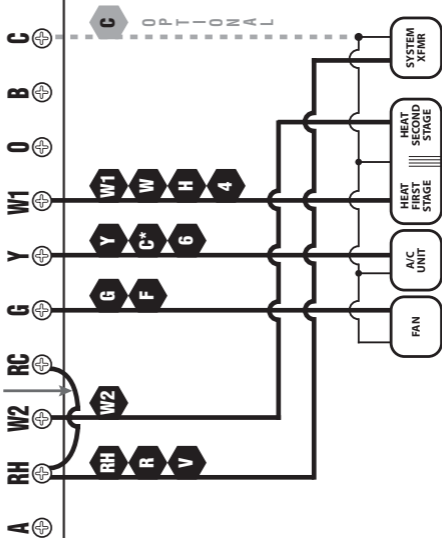HEATER

A/C UNIT

FAN

TYPICAL 24V, 5 WIRE, CONVENTIONAL HEATING AND COOLING SYSTEMS WITH 2 STAGE HEAT AND 1 STAGE COOL

#5

Factory RH-RC Jumper Wire Installed

A RH W2 RC G Y W1 O B C

C OPTIONAL

RH R V
W2
G F
Y C* 6
W1 W H 4

SYSTEM XFMR
HEAT SECOND STAGE
HEAT FIRST STAGE
A/C UNIT
FAN

TYPICAL 24V, 4 WIRE, HEAT PUMP SYSTEMS
WITH 1 STAGE HEAT AND 1 STAGE COOL

** Use either "O" or "B"
Terminal, Never Both

Customer Supplied
Jumper Wire Installed

Factory Supplied RH-RC
Jumper Wire Installed

A   RH   W2   RC   G   Y   W1   O   B   C

RC R 5
G F
Y C* 6
O   B   C   OPTIONAL

SYSTEM XFMR
CHANGE-OVER VALVE
HEAT PUMP UNIT
FAN

#6

13
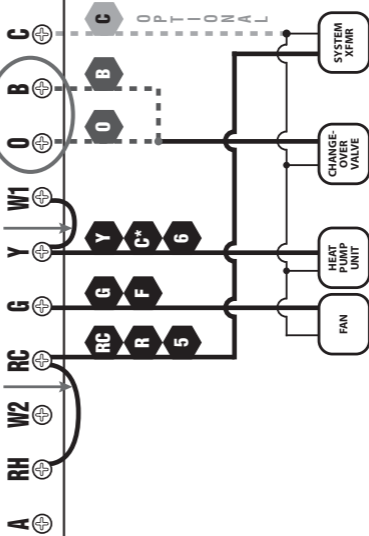
TYPICAL 24V, 5 WIRE, HEAT PUMP SYSTEMS WITH 2 STAGE HEAT AND 1 STAGE COOL

#7

** Use "O" or "B" Terminals, Never Both

OPTIONAL

C
B
O
W1
Y   C*   6
G   F
RC   R   5
W2

A   RH   W2   RC   G   Y   W1   O   B   C

Factory Supplied RH-RC Jumper Wire Installed

Customer Supplied Jumper Wire Installed
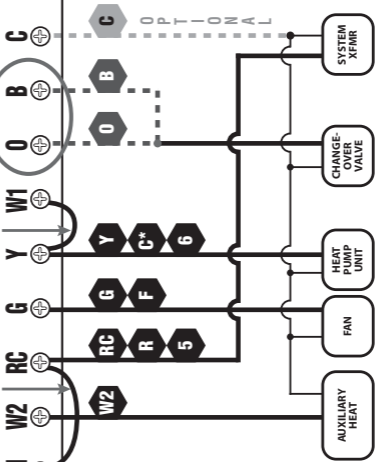
SYSTEM XFMR

CHANGE-OVER VALVE

HEAT PUMP UNIT

FAN

AUXILIARY HEAT

#8

TYPICAL 24V, 5 WIRE, CONVENTIONAL HEATING AND COOLING SYSTEMS WITH 1 STAGE HEAT AND 1 STAGE COOL, WITH TWO 24-VOLT TRANSFORMERS

* *Factory RH-RC Jumper Wire REMOVED

| A | RH | W2 | RC | G | Y | W1 | O | B | C |

RH R V

RC R 5

G F

Y C* 6

W1 W H 4

C OPTIONAL

HEAT XFMR

HEATER

A/C UNIT

FAN

COOL XFMR
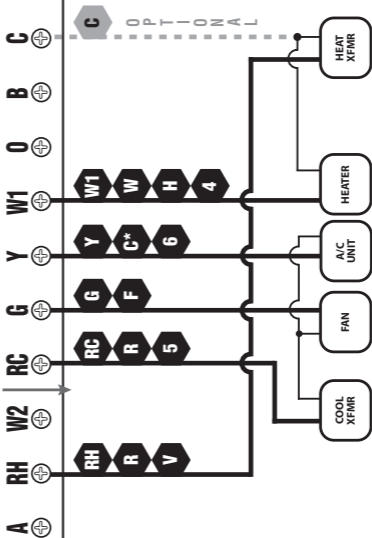
8. HARDWARE SETUP OPTIONS

NOTE:
All of the settings, options, and components listed in the following section are located on the rear of the thermostat, on the circuit board.

GAS/ELEC. FAN OPERATION
This is a plastic jumper cap, which is labeled as JP2. This jumper must remain installed, and can be in one of two positions, GAS or ELECTRIC.

ELECRIC
JP2
GAS
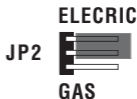
This setting changes how the system's blower fan (if applicable) is controlled while in HEAT mode, and with the Fan switch in the AUTO position. This setting does not affect fan operation while in COOL mode. When set to "Gas", the fan is controlled solely by the heating system itself. When set to "Electric", the fan is controlled directly by the thermostat. NOTE: If your blower fan does not operate properly after installation, move the Gas / Electric option to the "Electric" setting.

OPTION SWITCHES:

The following option settings are all located within a group of small switches labeled 1 through 6 as shown, and are located in the center of the circuit board. Changes made to any of these switches are recognized on initial power up, or when the front panel Temperature Mode switch position has been altered in any direction if the thermostat is already being powered by batteries.

[1] SYSTEM MODE
This setting tells the thermostat about the type of heating and cooling equipment that it is controlling, so that the system is operated properly. This switch needs to be in the OFF (NON-HP) position if you have a furnace or conventional heating and air conditioning system. If you have a Heat Pump system, the switch needs to be in the ON (HP) position; this is applicable even if your heat pump system has an auxiliary heat stage that is a gas furnace.

[2] RECOVERY
The Early Recovery feature affects how the thermostat transitions from an energy saving setback temperature, to a comfort temperature. Normally the change in temperature only starts to occur at an upcoming period's start time.

With Early Recovery Disabled: If you have programmed your thermostat for 70°F at 5:00PM, the thermostat will only begin to heat your home back up when the time reaches 5:00PM. With Early Recovery Enabled: Using the same scenario as above, the thermostat will calculate the best time to turn on the heater, so that the temperature in your home reaches 70°F as close to 5:00PM as possible. During the time that the thermostat is performing a recovery, the words "IN RECOVERY" will flash in the temperature portion of the display screen. Switch position OFF is Recovery Disabled, and ON is Recovery Enabled.

[3] DELAY
This sets the minimum length of time that Heat or Cool must remain either On or Off, before it will automatically switch to the alternate On or Off state. This Delay prevents rapid cycling of your system and provides equipment protection for cooling units. Switch position OFF is a 5 minute delay, and ON is a 2 minute delay. 5 minutes is the default setting, and is good for most applications. If you feel that your system is trying to cycle more rapidly than every 5 minutes, you may try the 2 minute setting.

[4] SCALE
This setting determines how the thermostat displays all temperatures on the screen. Switch position OFF is F°, and ON is C°.

[5] TIME
This setting determines how the thermostat displays the clock and all other time values on the screen. Switch position OFF is 12 HR (US Standard), and ON is 24 HR (Military Time).

[6] BATTERY MONITOR
This determines whether the internal battery voltage monitor watches the condition of the batteries that are installed in the thermostat. This setting should always remain enabled unless the thermostat is being powered by System Power alone, without any batteries present. Switch position OFF is Battery Monitor On (Enabled), and Switch position ON is Battery Monitor Off (Disabled).

WARNING:
Undesired operation may result if the battery monitor is set to "Disabled" while this thermostat has batteries installed.

9. COMPLETING THE INSTALLATION

Once all hardware option settings are performed, install two new Energizer® or DURACELL® "AA" size alkaline batteries before continuing further. Ensure that the batteries are installed in the proper direction as per the markings shown in the battery tray. If batteries were already installed before setting changes were performed, simply change the Temperature Mode switch on the front panel to any other position so that the new settings may be recognized by the thermostat.

When you are finished performing your installation and setup options, please remove the thin plastic film that is protecting the LCD display screen on the front of the thermostat. This plastic may or may not be present, and is evident by the appearance of fake digits appearing on the display screen.

10. FRONT PANEL ITEMS

RESET
The RESET button is a small recessed push button that is located right above the NEXT button behind the front door. This button can be pushed with a pencil or the end of a paper clip. This reset returns the heating and cooling programs to their default Energy Star values, resets the filter counter, and all other user changeable software options to their default values. It is recommended that you write down your current heating and cooling program start times and temperatures prior to pressing the software reset button.

MODE SWITCHES
There are two mode switches on the front, a TEMPERATURE Mode switch and a FAN Mode switch.

The TEMPERATURE Mode switch has three positions: HEAT, OFF, and COOL. In the winter, set the switch to HEAT to control your heating system. In the summer, set the switch to COOL to control your cooling system. In the spring and fall or when the windows are open, you can set the switch to OFF to prevent heating or cooling operation.

The FAN Mode switch has two positions, AUTO and ON. Setting the Fan switch to AUTO automatically runs your system's blower fan as required, only during heating or cooling activation. Setting the Fan switch to ON, runs your system's fan continuously, even if heating or cooling is not

needed. With the Fan switch in the ON position, the fan will operate even when the Temperature Mode switch is in the OFF position to provide air circulation only. When the fan is running, the word "FAN" is displayed in the temperature portion of the display screen.

NOTE:
The Fan Mode switch only works if your system provides a wire for the thermostat's "G" wire terminal, to control a blower fan. The Fan Mode switch has no effect in systems that do not have a blower fan (such as a hot water radiator system).

PUSH BUTTONS
There are five primary push buttons on the front of the thermostat: The UP and DOWN arrow keys, the NEXT button, The HOLD button, and the COPY/EMER button.

ROTARY DIAL
The LUX Speed Dial® provides an easy way to quickly navigate between the different programming areas. This rotary dial has five individual positions and should always remain in the RUN position, unless a specific action is being performed in one of the other positions.

11. OPERATING INSTRUCTIONS

SET DAY/TIME
Rotate the dial to the SET DAY/TIME position. You should see the word SET appear in the upper left corner of the display, along with the clock and a day of the week that is flashing. With the day flashing, press either the UP or DOWN buttons to make the current day flashing. Press the NEXT button; this should cause the time to start flashing and the day to remain on steady. Using either the UP or DOWN

buttons, adjust the clock to the current time, and make sure that the proper AM or PM indication is observed as appropriate. To assist with large adjustments, the clock digits will increment rapidly in either direction if the UP or DOWN buttons are held pressed for more than a few seconds.

HEATING AND COOLING
Basic operation of your heating or cooling system can be obtained by ensuring that the rotary dial is in the RUN position, and simply moving the Temperature Mode switch to either the HEAT or COOL position. Manual adjustment of the set temperature can be performed at any time by using the UP/DOWN buttons. While the words "SET TEMP" are being displayed, you are able to adjust the set temperature to any desired value within the normal operating range.

Prior to being set initially with your custom temperature programs, the thermostat will follow the default Energy Star® approved temperature programs that are preset within the thermostat's memory. A table of the default heating and cooling programs is shown below:

PERIOD	HEAT MODE	COOL MODE
MORN	6:00 AM 70 °F (21 °C)	6:00 AM 78 °F (26 °C)
DAY	8:00 AM 62 °F (17 °C)	8:00 AM 85 °F (29 °C)
EVE	6:00 PM 70 °F (21 °C)	6:00 PM 78 °F (26 °C)
NITE	10:00 PM 62 °F (17 °C)	10:00 PM 82 °F (28 °C)

WAIT ICON
On the far right edge of the display screen, the words "WAIT" may show up flashing from time to time. This Wait indicator appears if there is currently a demand present for heating or cooling activation, but the minimum off time delay has not yet been satisfied. This provides protection for your heating and cooling equipment, but lets you know that the system will turn on shortly if it is required.

TEMPERATURE OVERRIDE

A Temperature Override occurs in Run mode, in either Heat or Cool, anytime the user adjusts the set temperature to a value that differs from the stored program temperature for that day and time. When the thermostat is in an Override, the word "OVERRIDE" will appear in the temperature area of the display. The thermostat will temporarily maintain thermal control using this new set temperature, until the start time of the next program period is reached. At the start of the next program period, the set temperature will return to its programmed value for that period. To enter an Override in either Heat or Cool mode, push either the UP or DOWN buttons once and the set temperature will begin to flash. Push either the UP or DOWN buttons again to the new desired set temperature value. An Override may be cancelled at any time by rotating the dial, changing the Temperature Mode switch, or by initiating a Temperature Hold.

TEMPERATURE HOLD

A Temperature Hold is similar to an Override, but is used for maintaining a constant set temperature for a longer duration. Once a Hold is initiated, the thermostat will maintain the Hold set temperature indefinitely. A Temperature Hold may be used for days, weeks, or even months at a time. Press the HOLD button once to enter a Hold, and the word "HOLD" will appear in the temperature portion of the screen, along with the set temperature flashing. While the set temperature is flashing, press either the UP or DOWN buttons to adjust the desired set temperature value. To cancel a Hold, press the HOLD button once again, turn the rotary dial, or change the Temperature Mode switch position. If a power loss occurs while in a state of manual Temperature Hold, the thermostat will return to Temperature Hold and maintain its Hold set temperature after the power comes back on.

EMERGENCY HEAT (Heat Pump Configuration Only)
While in normal Heat mode with the rotary dial in the RUN
position, one single press of the COPY/EMER button will
activate Emergency Heat mode. A single press again will end
Emergency Heat mode, and return back to normal Heat
mode. While in Emergency Heat mode, the word "EMER"
will be shown in the temperature portion of the display
screen. If a power loss occurs while in Emergency Heat
mode, the thermostat will continue to remain in Emergency
Heat mode even after the power comes back on.

Emergency Heat mode will prevent the first stage of your
heat pump system from turning on, and use only the "W2"
second stage heat terminal (Auxiliary Heat) as the primary
heating source. It may become too cold in some climates
for a heat pump alone to provide adequate heating without a
secondary heating device. As every heat pump has different
operating characteristics, you should refer to your heat
pump manufacturer's recommendations for when to disable
the heat pump and run in Emergency Heat mode.

NOTE:
This special Emergency Heat mode of operation only exists if
your System Mode hardware option is set to the HP (Heat
Pump) setting.

DISPLAY BACKLIGHT
Any button press will illuminate the display screen for about
12 seconds, even if the Keypad Lock is activated. Any
button press, mode switch change, or dial change while the
backlight is already illuminated, will reset the initial 12
second timeout.

AIR FILTER MONITOR

In systems that have a blower fan and air ducts, this feature is to assist you with proper maintenance and periodic replacement of the filter located in your heating or cooling system. The Air Filter Monitor counts the duration of filter usage that has occurred, since the last time the Filter Monitor has been reset. The Air Filter Monitor is for information only, and does not affect the operation of your heating or cooling equipment. When the filter usage duration has expired, the words "CHANGE FILTER" will appear at the bottom of the display as a reminder while in Run mode.

To set and use the Air Filter Monitor, turn the dial to AIR FILTER. The display will show the amount of filter usage remaining. To reset the usage counter, or change the filter usage duration, press the NEXT button. "SET: FILTER DAYS" will be displayed on the screen, along with a number of days. The available settings are: OFF, 30, 60, 90, 120, 180, or 365 days. If your system does not have a filter, setting the value to OFF will prevent the "CHANGE FILTER" from showing up on the screen. Return the rotary dial to the RUN position when you are finished adjusting the Air Filter Monitor settings.

12. ADVANCED FEATURES

SWING AND OFFSET SETTINGS

SWING: A thermostat works by turning your heating or cooling system on and off whenever the room temperature varies from the set-point temperature. The amount of this variation is called the swing. Your system should cycle on about 3 to 6 times per hour. A smaller swing number increases the number of cycles per hour, so the room temperature is more precise and constant. A larger swing number decreases the number of cycles per hour, but can

save energy in some cases. There is only one Swing setting, and this determines the cut-in and cut-out points for both the first and second stages (if present), and affects both heating and cooling. To change the Swing setting, ensure that the System Mode switch is in the OFF position and the rotary dial is in RUN. Press the HOLD button for at least 2 seconds. The words "SET:" and "SWING" will appear on the screen with a single digit shown. Use the UP/DOWN buttons to change the number value between 1 and 9 (0.25F to 2.25F, in 0.25F degree increments). Number 1 is the default setting. Press the NEXT button to accept the swing setting and proceed to the OFFSET setting.
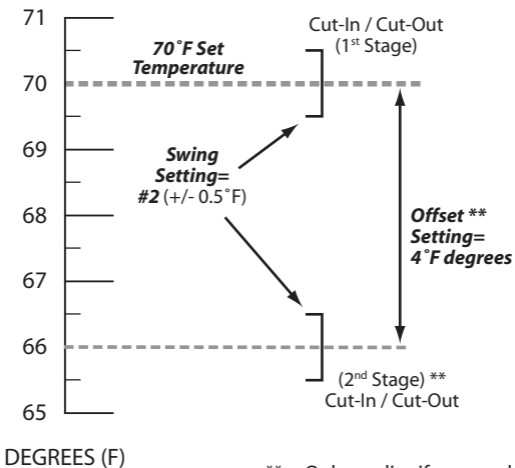
DEGREES (F)

** = Only applies if a second heat stage is present

OFFSET: After the swing value has been accepted, the words "SET:" and "OFFSET" will be shown on the screen. This setting is shown as a number of degrees, and is similar in nature to the swing however it only effects the operation of the second (auxiliary) heating stage, if present. The setting range for Offset is from 0 to 9 degrees. When set to 0 degrees, the second heating stage is disabled. A value from 1 to 9 degrees will determine the number of degrees from the set point that will be required for the second heating stage to turn on. This setting can be used to conserve energy in cases where the second heating stage is costly to operate when compared to the first stage.

USER TEMPERATURE CALIBRATION
The internal temperature sensor in this thermostat is accurately calibrated at the factory and should not need to be adjusted. The Temperature Calibration feature allows you to manually offset the measured temperature by as much as plus or minus 5°F (3°C) degrees from its original value. This feature can be useful to match this thermostat to another one or more, if multiple thermostats are used in the same home. To change the Temperature Calibration: ensure that the System Mode switch is in the OFF position, and the rotary dial is in RUN. Press the COPY/EMER button for at least 2 seconds. The words "SET:" and "CAL" will appear on the screen with a single temperature digit shown. Use the UP/DOWN buttons to change the number of degrees of adjustment. 0° degrees is the default value. Press the NEXT button to accept the setting.

PROGRAMMABLE KEYPAD LOCK
NOTE: The following examples use the default lock code of "0000". If you have altered the lock code to use your own code, use that in place of "0000" in the following instructions.

To prevent tampering with any of your settings, the front panel buttons and rotary dial can be locked out, requiring a

four-digit code to unlock them. You may use either the default lock code of "0000", or your own code number (see "TO CHANGE THE LOCK CODE:").

TO LOCK THE THERMOSTAT: Ensure the rotary dial is in the RUN position. Press the NEXT button for at least 2 seconds. The words "ENTER CODE" will appear on the screen, above "0000". Enter the correct code by using the UP/DOWN buttons to change the flashing digit, and the NEXT button to advance to the next digit. Press the NEXT button again for at least 2 seconds. A padlock should appear on the screen to confirm that the thermostat is now locked.
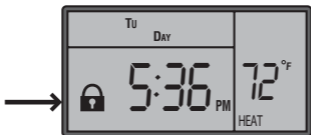
TO UNLOCK THE THERMOSTAT: Ensure the rotary dial is in the RUN position. A single press of any button will cause the words "ENTER CODE" to appear on the screen, above "0000". Enter the correct code by using the UP/DOWN buttons to change the flashing digit, and the NEXT button to advance to the next digit. Press the NEXT button again for at least 2 seconds. The padlock should disappear, and the thermostat should now be unlocked.

If you try to unlock the thermostat by entering a code that is not correct, a padlock and the digits "88:88" will flash on the screen and you will have to try again to enter the correct code. If a different lock code was used other than the default of "0000", this will need to be entered by using the UP/DOWN buttons, and the NEXT button to advance to the next digit. Once the correct code is entered, press the NEXT button for at least 2 seconds. The padlock should disappear, and the thermostat should now be unlocked.

TO CHANGE THE LOCK CODE: First ensure that the thermostat is unlocked and the rotary dial is in the RUN position. Press the NEXT button for at least 2 seconds. The words "ENTER CODE" will appear on the screen, above "0000". Now press the HOLD button for at least 2 seconds. The words "SET CODE" will appear on the screen, along with "0000". Enter your desired code by using the UP/DOWN buttons to change the flashing digit, and the NEXT button to advance to the next digit. Press the NEXT button again for at least 2 seconds. Enter your new code to lock the thermostat, or you may wait for 12 seconds to exit automatically without locking the thermostat.

13. PROGRAMMING

SET HEAT PROGRAM
Rotate the dial to HEAT PROGRAM. You will be programming the heat periods for all seven days, one after the other starting with Monday. The first period is MORN. Using the UP and DOWN buttons, set the start time for this period, and then push the NEXT button to proceed. Now set the desired set temperature for the MORN period using the UP and DOWN buttons, and push NEXT to proceed. Now set the start time and set temperature for the DAY period, pushing NEXT after each to advance. Continue with these same steps to set the start time and set temperature for the EVE, and NITE program periods.

When you are finished setting all four periods, you may continue pushing the NEXT button through all four periods of Tuesday, Wednesday, and so on. Once you have reached the Sunday NITE period, you have completed all of the heat programs. To review your entries, keep pressing the NEXT button through the four periods of every day, or turn the dial to RUN if you are finished.

SET COOL PROGRAM
Rotate the dial to COOL PROGRAM. You will be programming the cool periods for all seven days, one after the other starting with Monday. You will begin with the start time of the MORN period, and use the same procedures that were performed while setting the HEAT PROGRAM periods described above, using the NEXT button to advance through the values. Return the dial to the RUN position when you are finished.

QUICK COPY FEATURE
The Copy feature allows you to copy all of the program information from any one single day, to any other day. With the rotary dial in either HEAT PROGRAM or COOL PROGRAM, press the COPY button once. The words "COPY"

will appear on the screen, with one of the days flashing above. Using the UP/DOWN buttons, select the day that you want to copy from. Press the NEXT button once. Your "copy from" day should be on steady with the following day flashing. Use the UP/DOWN buttons to select the day that you would like to copy to. A single short press of the COPY button will perform the copy, and the flashing day will advance to the next following day. You may continue to perform short single presses of the COPY button to also copy to the remaining days, one after the other (certain days may be skipped by pressing the UP button to advance past them). To exit the Copy feature, and return to the programming screen, press and hold the NEXT button for more than 1 second.

14. BATTERIES AND MAINTENANCE

This thermostat can be powered by either two "AA" alkaline batteries, a 24VAC common wire from your heating or cooling system, or a combination of both. If you are using either batteries alone, or a combination of 24VAC system power with batteries as a backup, the batteries should be replaced AT LEAST once per year, or sooner if the "LOW BAT" battery symbol appears in the lower left portion of the display screen as shown below.

To replace the batteries in the thermostat, remove the thermostat's body from the base plate attached to the wall by pressing the thumb latch at the bottom center of the unit and

swinging the body towards you, up and away from the base. Remove the used batteries from the battery tray and discard appropriately.

Install two new Energizer® or DURACELL® "AA" size alkaline batteries into the battery tray. Observe the polarity markings shown in the battery compartment to ensure proper installation. When finished, hang the top of the unit by the tabs at the top corners of the base, and then snap the bottom of the unit into place. Do not use unnecessary force. If the body does not snap into place easily, remove the body, re-hang it from the tabs and try again.
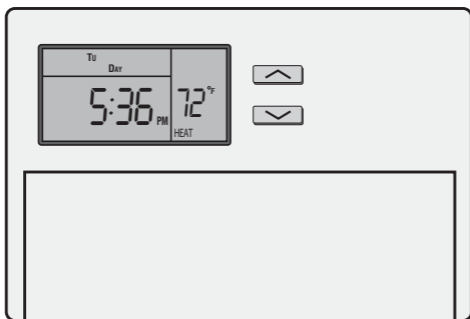
15. TECHNICAL ASSISTANCE

If you have any problems installing or using this thermostat, please carefully and thoroughly review the instruction manual. If you require assistance, please contact our Technical Assistance department at 856-234-8803 during regular business hours between 8:00AM and 4:30PM Eastern Standard Time, Monday through Friday. You can also receive technical assistance online anytime day or night at http://www.luxproducts.com. Our web site offers you answers to the most common technical questions, and also permits you to email your questions to our technical support staff at your convenience.

16. WARRANTY

Limited Warranty: If this unit fails because of defects in materials or workmanship within three years of the date of original purchase, LUX will, at its option, repair or replace it. This warranty does not cover damage by accident, misuse, or failure to follow installation instructions. Implied warranties are limited in duration to three years from the date of original purchase. Some states do not allow

limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Please return malfunctioning or defective units to the location from which the purchase was made, along with proof of purchase. Please refer to "TECHNICAL ASSISTANCE" before returning thermostat. Purchaser assumes all risks and liability for incidental and consequential damage resulting from installation and use of this unit. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. Applicable in the U.S.A. and Canada only.

LUX PRODUCTS CORPORATION