LENNOX

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- Tabbed user interface with touch screen interaction
- White backlighted screen with adjustable brightness
- Equipment maintenance reminders

- Humidification measurement and control
- Programmable or non-programmable options
- Automatically changes between heating cooling

HOMEOWNER'S MANUAL

ComfortSense™ 7000 Series

Model L7742U Touch Screen Programmable Thermostat

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ComfortSense Model L7742U Thermostat

The ComfortSense™ Model L7742U thermostat is an electronic 7-day, universal, multi-stage, programmable, touch screen thermostat. It also offers enhanced capabilities including humidification / dehumidification / dewpoint measurement and control, Humiditrol® EDA (Enhanced Dehumidification Accessory) control, and equipment maintenance reminders.

- Large, clear display with backlight shows the current and set temperature, day/date/time, indoor relative humidity and outdoor temperature (if optional outdoor sensor is used).
- Dehumidification measurement and control
- Humiditrol® EDA capability
- Dew point adjustment control
- Menu-driven programming guides user through the scheduling process showing only necessary information on each screen.
- Ergonomic design.
- Smooth Setback Recovery starts system early to achieve setpoint at start of program period.

- Compressor short-cycle protection (5 minutes).
- Real-time clock keeps time during power failures and automatically adjusts for daylight savings time and leap year.
- Maintenance reminders let user know when to service or replace filters, humidifier pads, ultraviolet lamps, plus two user or installer defined custom reminders.
- Program Hold options allow user to override the program schedule as desired by time and date.
- Select individual days or groups of days to set programming.
- Programmable fan offers increased air quality when combined with a whole house air indoor air quality product.
- Outdoor temperature display (with optional outdoor sensor) shows current outdoor temperature.

Your installer has set up your thermostat based on the type of heating and cooling system and accessories that you thermostat connects to. This booklet details user settings available to you that will give you as much or little functionality and control as you want.

Display Fields & Touch Screen Points

A Selection Tab touch screen points - Press to select HOME screen (normal display). Press SCHEDULE for programming. Press OPTIONS to set alerts, service reminders, and other settings.
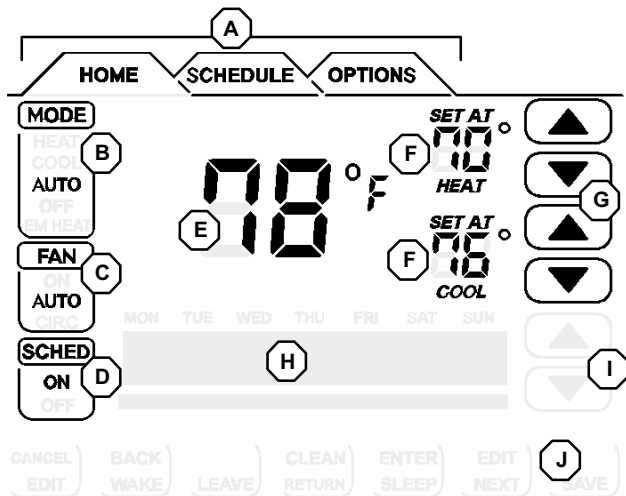

Figure 1. Display fields and touch screen points

B MODE. Press to cycle through HEAT, COOL, AUTO (autochangeover), OFF, EM HEAT (emergency heat) system operations.

C FAN. Press to cycle through ON, CIRC (circulate), AUTO fan operations.

D SCHED (schedule) controls whether or not the schedule is being used. Press to change between ON and OFF.

E Display field shows the room temperature.

F Displays the current operation's SET AT point; if in AUTOchangeover, both HEAT and COOL SET AT points are shown.

G Up/down arrow touch points. Press to adjust temperature up or down; if in AUTOchangeover mode, 2 sets of up down arrows.

**H** Displays different information depending on the tab selected:
- HOME tab: displays outdoor temperature (if outdoor sensor is installed), indoor humidity (RH), which equipment is running, hold settings information, service reminders, etc. (see Page 4).
- SCHEDULE tab: displays the event being programmed (see Page 7);
- OPTIONS tab: displays a scrolling list of adjustable parameters, including filter and service reminder periods, etc. (see Page 9).

I Up/down arrow touch points for scheduling adjustments and for making setting adjustments on the OPTION screens:
- HOME screen: only accessible except when executing a HOLD SETTING.
- SCHEDULE and OPTION screens: used to adjust schedule and option settings.

J Dynamic touch points - not visible in HOME screen unless executing a HOLD SETTING. For SCHEDULE and OPTIONS settings, these boxes appear and change depending on the selection. See the schedule (Page 7) and options (Page 9) sections for details.

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Home Screen—Current Conditions & Temperature Settings
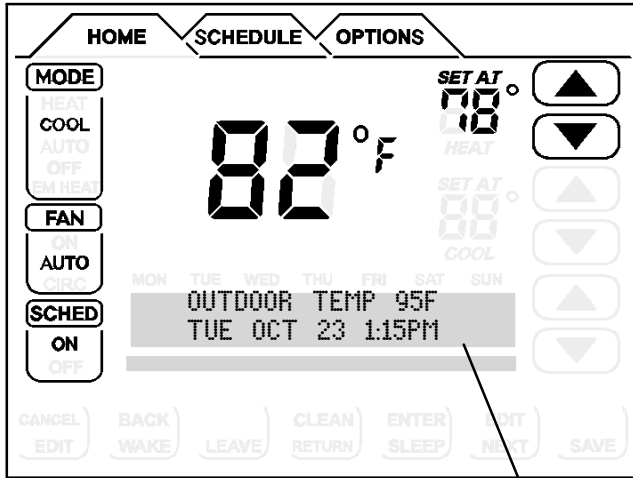
INFORMATION
DISPLAY AREA

Figure 2. Home Screen

The HOME screen (figure 2) displays indoor temperature and outdoor temperature (if outdoor sensor is installed and if turned on in user set-

tings). Other system operational information, such as indoor relative humidity (if turned on in user settings), dehumidifying, cooling or heating, will alternately be displayed in the information display.

The home screen displays temperature and the temperature settings in large fonts. The INFORMATION DISPLAY shows the present day, time, and operational information in a smaller font.

The menu tabs along the top of the screen are used to access the SCHEDULE screen (for program setup) and the OPTIONS screen (to access user/installer settings including, change to 24 hour clock, change Fahrenheit to Celsius, set filter and service reminders, and many other settings.

Equipment operation information appears in the boxes along the left side of the home screen to indicate fan operation setting, cooling or heating equipment operation setting, and whether or not scheduled programming is ON or OFF. From these boxes, users can change the unit's mode to HEAT, COOL, AUTO (autochangeover - default), EM HEAT (emergency heat - for heat pump applications including dual fuel and HP with Electric Heat), or OFF.

Also, the user can change the fan between ON (fan runs continuously whether or not cool or heat equipment is running), AUTO (fan runs according to the schedule), or CIRC (circulate - user sets percentage of fan run time).

The user can also decide whether or not to operate the unit per the programmable schedule, or in a manual mode using the SCHED box.

Controlling the Heat/Cool Modes of Operation

Press the screen anywhere - the first press turns on the backlight.
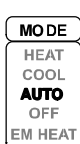
While in the HOME screen, press MODE field; repeated presses scroll through all the modes. AUTO (autochangeover) mode allows the thermostat to switch between Heating and Cooling, whichever mode is dictated by the indoor temperature. EM HEAT (emergency heat) bypasses the first stage of heating (any stage[s] of heat pump heating) and goes directly to the heat stage used for maximum heating to more quickly warm a very cold house.

When the indoor temperature decreases or increases, the HEATING or COOLING cycle will turn on based on the displayed mode. When the HVAC system is on, the information display (shown in figure 3) will display one or several operational messages (listed in the table below). If the outdoor sensor is connected, and is turned on in both installer and user settings, outdoor temperature will be included in the displays. The table below summarizes the information messages.

When the faults, errors, and service information displays appear, action

boxes will appear under the second line entries, REMIND, CLEAR, SERVICE, or RESET. Press the box to perform the action.
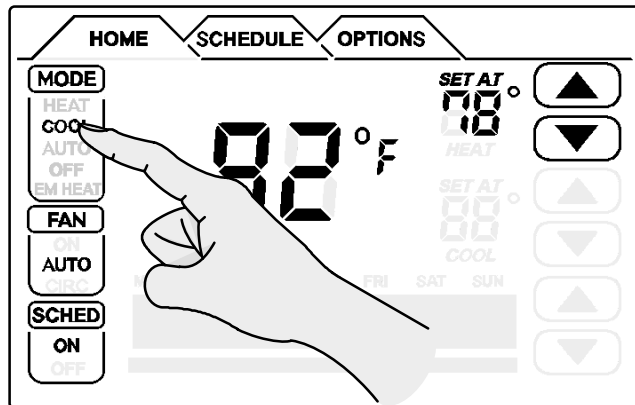
Figure 3. Selecting Mode of Operation

Information Displays:

Faults, Errors and Service Information		Operating Information	
TEMP SENSOR ERROR, MEMORY ERROR CALL FOR SERVICE	Top line: fault./error Bot. line: action	SET DATE/TIME Default DATE/TIME <MON JAN 1 12:00 PM>	[First time start up message]
NO OUTDOOR SENSOR REMIND CLEAR SERVICE	Top line: fault./error Bot. line: action	HEATING, COOLING, HUMIDIFYING, DEHUMIDIFYING, SYSTEM OFF, OUTDOOR TEMP xxF, INDOOR RH xx%, MON SEP 24 3:00 PM	Top line: operation messages Bottom line: date and time
REPLACE: MEDIA FILTER; UV LAMP; HUM PAD; METAL INSERT REMIND RESET	Top line: serv. req'd Bot. line: action	SCHEDULE ON, SCHEDULE OFF, WAIT, FAN ON, FAN CIRC MON SEP 24 3:00 PM	Top line: add'l operation msgs Bottom line: date and time
ROUTINE SYS CHECK-UP REMIND RESET	Top line: serv. req'd Bot. line: action	HOLD SETTING UNTIL PRESS SCHED TO MON SEP 24 3:00 PM RESUME PROGRAM	[Alternating messages during a held schedule]
NO OUTDOOR SENSOR, HUM SENSOR ERROR, HVAC ERROR DETECTED REMIND SERVICE	Top line: fault./error Bot. line: action		

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Controlling the Fan Operation

Press the screen anywhere - the first press turns on the backlight.

FAN
ON
AUTO
CIRC

From the HOME screen press the FAN field; repeated presses scroll through all the modes, AUTO, ON, and CIRCulate.

Fan Modes

Fan Modes (ON, AUTO and CIRC) can be changed either from HOME screen or from the SCHEDULE screen when programming the thermostat. The three settings work like this:

- If FAN mode displays AUTO on the HOME screen, this means that the FAN is following the schedule.
- If FAN mode displays ON on the HOME screen, this means that the fan is NOT following the schedule and that the fan will run continuously until it is changed from the HOME screen.
- If FAN mode displays CIRC (circulate) on the HOME screen, this means that the fan is NOT following the schedule and that the fan will cycle during periods of equipment inactivity. The cycle time is dependant on user settings FAN CIRCULATE (Page 10).

If FAN mode displays AUTO (HOME) and ON or CIRC was selected during scheduling for the current period, the thermostat will indicate the current fan mode in the information display (FAN ON or FAN CIRC).

In the CIRC mode, the user can cycle the fan for a programmed percentage of active time per hour, during periods of equipment inactivity (i.e., heating or cooling equipment not running). The fan is ON for 5 minutes at a time. The user may change the percentage of ON time that the fan is on (see FAN CIRCULATE [Page 10]):

Fan Program

The user can program the fan to be ON, AUTO, or CIRC during a program event period. While scheduling the event, if the fan is set to ON, it will remain on during the entire event. If it is set to CIRC, it will circulate during equipment inactivity per user programmable cycles (see FAN CIRCULATE, Page 10). If set to AUTO, the fan will come with the equipment to serve the heating/cooling demand and go off accordingly. Using the fan continuously or circulating the fan during the occupied times may better improve the indoor air quality.

NOTE - When the HOME screen FAN mode is changed to ON or CIRC, whatever was scheduled is ignored - the fan will either be ON or it will CIRCULATE per the user-programmed intervals (USER SETTINGS - FAN CIRCULATE [Page 10]). When FAN - AUTO is selected in the HOME screen, the schedule IS followed.

Controlling the Schedule

Turn schedule on and off

Press the screen anywhere - the first press turns on the backlight.

From the HOME screen press SCHED; repeated presses toggle the schedule ON and OFF. If ON, the system follows the program developed by the user (Page 7). If OFF, the system operates as a non-programmable thermostat—the user must make changes when desired. The autochangeover feature will continue to operate based on the manual user inputs.

Schedule screen

Press the SCHEDULE tab along the top of the screen. The display changes to programming mode (figure 4) and shows the current settings. The thermostat may be programmed for two or four (default) events per day. The names for the events are: WAKE, LEAVE, RETURN, and SLEEP. The selected time for an event to occur is based on when you want the event to **begin**. Four events are common for working households.

Programming may be performed in groups of days or individual days, as follows:

- **A** MON TO SUN - allows every day to be set the same.
- **B** MON TO FRI (weekday programming) and
  SAT TO SUN (weekend programming).
- **C** MONDAY through SUNDAY allows individual days of the week to be programmed separately.

NOTE - After using one of the groups of days described above, the program does allow you to subsequently change individual days to suit your needs.

To select the groupings or individual days, scroll through the selections pressing NEXT.

Programming Complexity

The programming process for groups of days or individual days is the same, except in the amount of times required to go through the process.

Full Week—The least complex program is the full week "MON TO SUN" program, wherein the events for every day of the week are the same. This requires one time through the event programming process.

Work Week—Next in complexity to the full week program is the work week program wherein the events are set for a typical work week (MON TO FRI) and different events are set for the weekend (SAT TO SUN). This requires two times through the events.

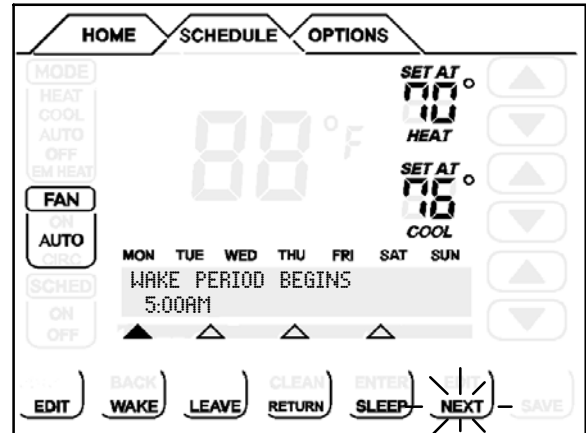**Day by Day**—Most complex because this requires going through the programming process 7 times.

Figure 4. Schedule Screen

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Schedule Screen—Programming

Days & Events Programming process

	Action	Display shows...
1	Press SCHEDULE tab	SCHEDULE screen
2	Press EDIT	UP/DOWN arrows on right-hand side of screen; EDIT changes to CANCEL
3	Press NEXT to highlight the desired grouping of days	Days change to match selected group, e.g. **MON TUE WED THU FRI**
4	Press an event: WAKE (default), LEAVE, RETURN, & SLEEP to select for programming	Filled triangle above event indicates which event is selected for change
5	Press UP/DOWN arrows to select desired temperature	After change is made, SAVE appears in the bottom right-hand of the screen
6	Press FAN repeatedly to select desired fan mode	Fan indicator displays selection (ON, AUTO, or CIRC)
7	Press UP/DOWN arrows to adjust start time for selected event	Information area displays start time

8   Repeat steps 4 - 7 for all remaining events.

(If you selected other than **MON TUE WED THU FRI SAT SUN**), continue; otherwise, skip to step 11.

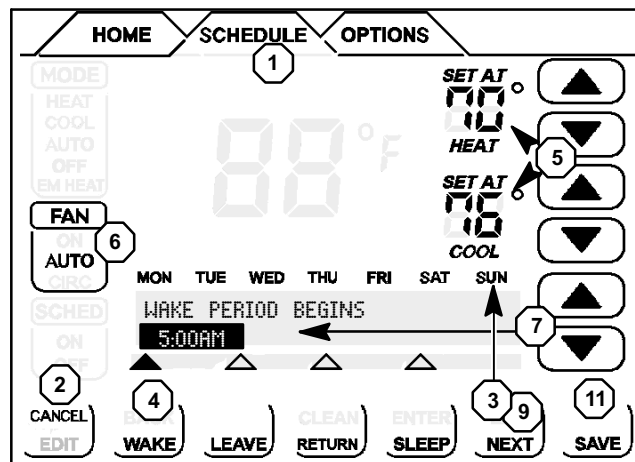|		
9	Press NEXT for the next group or the next day	Days change to match selected group, e.g. **SAT SUN**
10	Repeat steps 3 through 8 for the remaining days, if necessary.	
11	Press SAVE when all events and days are programmed as desired	The changes are made and the schedule screen reappears.

Figure 5. Programming days and events

Options Screen—Reminders & User Settings

CLEAN button

When you select the OPTIONS tab, two buttons appear near the bottom of the screen labeled CLEAN and ENTER. Press the CLEAN button to deactivate the "touch" points for 30 seconds. Clean the screen with a soft cloth moistened with a mild glass cleaning solution.

The Options screen provides user and installer access to the various features for setup and access to the reminders. **Installer settings MUST BE SET BY A QUALIFIED PERSON.**
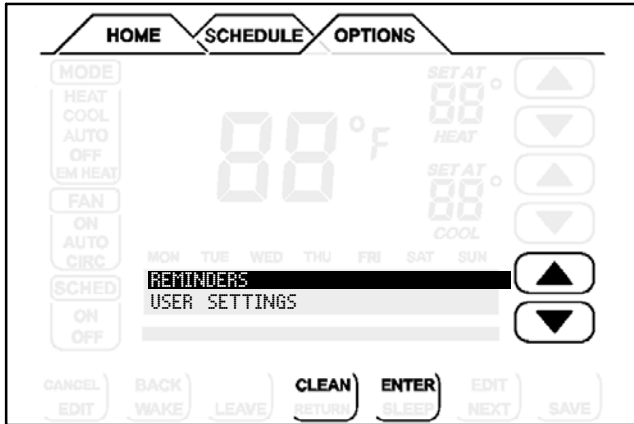

Reminders [OPTIONS TAB > REMINDERS > [ENTER]]

Set timers from 1 to 24 months in either calendar time or system run time. Reminders appear when it is time to service the following (for more details on REMINDERS, see Page 14):

| REPLACE MEDIA FILTER DUE THU APR 10 08	REPLACE METAL INSERT DUE SUN MAR 16 08
REPLACE HUM PAD DUE THU APR 10 08	REPLACE UV LAMP DUE SUN MAR 16 08
ROUTINE SYS CHECK-UP DUE IN 2160 HOURS	CUSTOM REMINDERS DUE SUN MAR 16 08

User Settings [OPTIONS TAB > USER SETTINGS > [ENTER]]

Press the OPTIONS tab; use the arrows to select USER SETTINGS. Press ENTER.

```
USER SETTINGS
INSTALLER SETTINGS
        CLEAN   ENTER
```
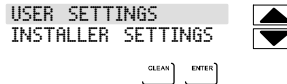
The following items are available for modifying. Follow the instructions for each parameter.

DATE/TIME—Set month, day, year, hour, and minute using DATE/TIME option. Select DATE/TIME; press ENTER. Small, filled up-arrow is selected column; use up/down arrows to adjust; press box below each small up-arrow to select each column. Adjust; press SAVE.
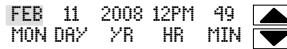
```
FEB  11  2008 12PM  49
MON DAY  YR   HR   MIN
 ▲    △    △    △    △
CANCEL  __|  __|  __|  __|  __|  SAVE
```

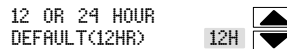**F/C**—default is Fahrenheit; to change to Celsius, scroll to F/C; press ENTER. Use arrows to change to C; press SAVE.

```
F OR C
DEFAULT(F)         F
```

12 OR 24 HOUR clock—default is 12H; to change, scroll to 12 OR 24 HOUR; press ENTER. Use arrows to change to 24H; press SAVE.

```
12 OR 24 HOUR
DEFAULT(12HR)     12H
```

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EVENTS DAILY 2 OR 4—default is 4; to change, scroll to EVENTS DAILY 2 OR 4; press ENTER. Use arrows to change to 2; press SAVE.

        EVENTS DAILY 2 OR 4   ▲
        DEFAULT(4)   2   ▼

DISPLAY INFO—controls some of what is displayed in the field below the temperature and above the time on the HOME screen; it may display OUTDOOR TEMP, INDOOR RH (relative humidity), or neither if TEMP and RH are turned OFF. Scroll to DISPLAY INFO; press ENTER. Use arrows to select TEMP or RH; press ENTER.

        DISPLAY INFO   ▲
           OUTDOOR TEMP   ▼
           INDOOR RH

NOTE - When accessing the OUTDOOR TEMP option "OUTDOOR SENSOR REQUIRED" will display if not turned ON by the installer. Also, the home screen will display "NO OUTDOOR SENSOR" if the physical sensor was not installed.

For INDOOR RH, use arrows to select ON or OFF; then press SAVE.

        INDOOR RH   ▲
        DEFAULT(OFF)   ON   ▼

For OUTDOOR TEMP, select ON or OFF; then press SAVE.

        OUTDOOR TEMP   ▲
        DEFAULT(OFF)   ON   ▼

HUMIDITROL ADJUST—See Humidification - Humiditrol® EDA section (appears only when Humiditrol setup in installer settings).

FAN CIRCULATE—As an option to running the fan all the time, CIRCulate allows the user to decide how much the fan will run during periods of equipment inactivity. The fan ON time is always set to 5 minutes. This option will cause the fan to come on more or less frequently. The default is 35%; to change, scroll to FAN CIRCULATE; press ENTER. Use arrows to change to 15, 25, or 45%; press SAVE.

        FAN CIRCULATE   ▲
        DEFAULT(35%)   25% ▼

15% (9 minutes fan runtime per hour)
25% (15 minutes fan runtime per hour)
35% (21 minutes fan runtime per hour)
45% (27 minutes fan runtime per hour).

COOLING LIMIT—default is 45º; to change to any degree between 45ºF and 99ºF, scroll to COOLING LIMIT; press ENTER. Use arrows to change to desired temperature; press SAVE.

        COOLING LIMIT   ▲
        DEFAULT(45°F)   55°F ▼

HEATING LIMIT—default is 90º; to change to any degree between 45ºF and 90ºF, scroll to HEATING LIMIT; press ENTER. Use arrows to change to desired temperature; press SAVE.

        HEATING LIMIT   ▲
        DEFAULT(90°F)   85°F ▼

SECURITY LOCK—default - no locks at all - this provides two methods of locking the thermostat - NO prevents others from making any changes at all or YES prevents others from making changes other than temperature setpoints. Scroll to SECURITY LOCK and press ENTER; ALLOW TEMP ADJUST screen appears; press box below YES or NO. The ENTER LOCK CODE screen appears.

    ALLOW TEMP ADJUST   ENTER LOCK CODE   ▲
    YES   NO   0   0   0   ▼

     ▲   ▲   ▲   ▲   ▲
    _| _| _| _| _| SAVE

To enter lock code, press box below each small up-arrow to select each column. Use up/down arrows to enter a number, then press the box below the next number and repeat to enter a 3-digit lock code; write down the number for future reference; press SAVE.

NOTE - If the user settings security code is forgotten or misplaced for some reason, the universal code "864" may be used to unlock.

HUMIDITY SETTING—See Humidification/Dehumidification sections that follow.

BACKLIGHT SETTING—default is POWER SAVE; scroll to BACK-LIGHT SETTING; press ENTER. Use arrows to change to CONTINU-OUS; press SAVE.

```
BACKLIGHT SETTING        ▲
DEF(SAVE)  POWER SAVE     ▼
```

BACKLIGHT INTENSITY—default is 100%; scroll to BACKLIGHT IN-TENSITY; press ENTER. Use arrows to change to 20 to 100% in 20% increments; press SAVE.

```
BACKLIGHT INTENSITY      ▲
DEFAULT(100%)    80%     ▼
```

Humidification

If your system is set up to humidify the air, this adjustment controls the relative humidity (RH) between 15 and 45%.

Scroll to HUMIDITY SETTINGS; press ENTER. Press the box below HUMIDIFY.

```
   HUMIDITY SETTINGS
 HUMIDIFY   DEHUMIDIFY
  ▲                ▲
 __|              __|
```

Use up/down arrows to change the humidity setpoint (between 15 and 45%); press SAVE.

```
HUM SETPOINT             ▲
DEFAULT(45%)     35%     ▼
```

DEWPOINT—If your system is set up to adjust the DEWPOINT, this adjustment (only when in heating mode) will change the humidification setpoint based on the outdoor temperature and a user-defined dew point adjustment setting. When humidifying, if condensation forms on the windows, the dewpoint should be adjusted in the -15 to -5%; if the home feels dry, set dewpoint upward between +5 and +15%.

Scroll to HUMIDITY SETTINGS; press ENTER. Press the box below HUMIDIFY.

```
   HUMIDITY SETTINGS
 HUMIDIFY   DEHUMIDIFY
  ▲                ▲
 __|              __|
```

Use up/down arrows to change the dewpoint (between +15 and -15%); press SAVE.

```
DEW POINT ADJ            ▲
DEFAULT(0%)      -5%     ▼
```

NOTE - Dewpoint adj available only when outdoor sensor is attached.

OFF—If your system is set up for neither humidifying or dehumidifying the air, this message appears when HUMIDITY SETTING is pressed:

```
HUMIDITY MODES OFF
```

If your system is set up for dehumidifying but not humidifying, the dehumidification menu appears when HUMIDITY SETTING is pressed (this setpoint adjust has NO effect on humidification):

```
DEHUM SETPOINT           ▲
DEFAULT(50%)     45%     ▼
```

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Dehumidification

If your system is set up to control dehumidification, this adjustment controls the relative humidity (RH) between 45 and 60%. Scroll to HUMIDITY SETTINGS; press ENTER. Press the box below DEHUMIDIFY.

```
   HUMIDITY SETTINGS
 HUMIDIFY   DEHUMIDIFY
   ▲              ▲
 __|            __|
```

Use up/down arrows to change the humidity setpoint (between 45 and 60%); press SAVE.

```
  DEHUM SETPOINT
  DEFAULT(50%)    45%  ▲▼
```

OFF—If your system is set up for neither humidifying or dehumidifying the air, this message appears when HUMIDITY SETTING is pressed:

```
  HUMIDITY MODES OFF
```

If your system is set up for humidifying but not dehumidifying, the humidification menu appears when HUMIDITY SETTING is pressed (this setpoint adjust has NO effect on <u>dehumidification</u>):

```
  HUM SETPOINT
  DEFAULT(45%)    45%  ▲▼
```

Humiditrol® Enhanced Dehumidification Accessory (EDA)

If your system includes a Humiditrol® Enhanced Dehumidification Accessory, if an outdoor sensor is installed, and if Humiditrol mode is selected in the installer settings, the following setting is available:

Scroll to HUMIDITY SETTINGS in user settings to confirm that you can control the DEHUMIDIFY setting.

```
   HUMIDITY SETTINGS
 HUMIDIFY   DEHUMIDIFY
   ▲              ▲
 __|            __|
```

HUMIDITROL ADJUST is available in the user settings. The default setting is MAX dehumidification but can be changed to MID or MIN. Use arrows to scroll to MID or MIN; then press SAVE.

```
  HUMIDITROL ADJUST    ▲▼
  DEFAULT (MAX)    MIN
```

Temporary Temperature Change—Pause the Schedule

Two types of temperature changes may be made: temporary (while in the SCHEDule ON mode) or permanent (while in SCHEDule OFF).

NOTE - If autochangeover is enabled at the time a temperature hold is invoked, the thermostat MAY CHANGE OVER from heating to cooling and vice versa, to maintain the temperature hold setpoint. The auto-changeover deadband (minimum separation between the heat and cool set points) is still used to determine whether changeover occurs. This applies to all of the following hold modes.

Temporary Temperature Changes (schedule ON)

While the system is running with the schedule ON, any change to the temperature settings may be made for the default time (approximately 3 hours) or for as long or short a time as you wish. Therefore, following the procedure will set a HOLD on the schedule for a few hours or for up to 45 days. Figure 6 shows a typical screen set in the AUTOchangeover mode. If the SYSTEM were set in HEAT, COOL, or EM HEAT mode, only one set of arrows would appear near the top.

1. On the home screen, press the UP or DOWN arrow to adjust to the desired temperature.

2. A set of arrows appears to the right of the information display; use these arrows to adjust the hold period for as long as desired, or, if not changed, this setting will hold for approximately 3 hours.

3. Press SAVE.

4. After saving, ON in the SCHED field flashes, and the information display alternates between the following:

```
HOLD SETTING UNTIL
WKD MMM DD HH:MMMM
```

and

```
PRESS SCHED TO
RESUME PROGRAM
```

5. After the 3 hours expires, the scheduled programming will resume, OR, press SCHED to cancel the hold.

Permanent Temperature Changes (schedule OFF - non-programmable operation)

To make a change for an undefined time span, the schedule must be turned OFF. The setpoint is maintained indefinitely.

1. From the home screen, press SCHED to turn the scheduled programming OFF.

2. Press the UP or DOWN arrow to set the temperature to the desired temperature.

The information display field continues to display the active mode, outdoor temperature, indoor relative humidity. Turning the schedule back ON (press SCHED box on home screen) will cancel a permanent hold and return to the event-programmed mode.
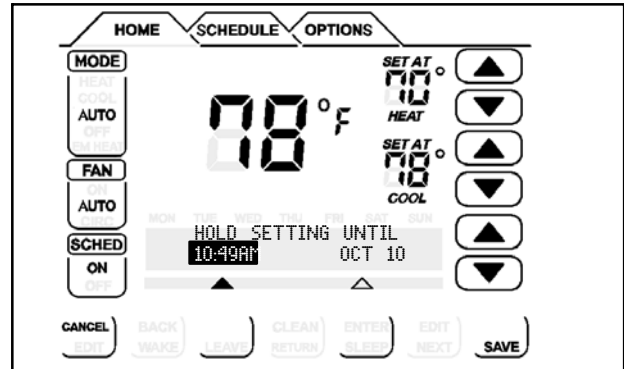

Figure 6. Setting a Hold on the Schedule

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Optional Remote Outdoor Sensor

The outdoor sensor (X2658) may be required, especially when using Humiditrol® EDA applications. In addition to measuring and displaying outdoor temperature, the outdoor sensor provides dew point adjustment and control for all models. If used with this thermostat, the sensor enables optimal heating equipment operation via programmable balance points. The screen will display NO OUTDOOR SENSOR until the outdoor sensor is installed, the feature is turned on in the installer setup, and if the user turns it on in the DISPLAY INFO option in user setup. The outdoor temperature is displayed in the information display (lower center of the screen).

NOTE - For proper operation of Humiditrol® EDA applications, the outdoor sensor MUST be installed.

In many applications, the ComfortSense™ Model L7742U thermostat will display the temperature sensed by the remote outdoor sensor. With the heat pump system, the remote outdoor sensor helps determine when to turn on the second stage of heating for optimal comfort.

When the outdoor sensor is connected, the temperature displays in the information display area (below the indoor temperature display).

Memory Protection

The thermostat stores all the information concerning its programming (state, mode, program information, last temperature measured) in a nonvolatile memory.

This function avoids the loss of the state of the thermostat when a power-down occurs. The only thing that might be lost is the clock, however, a lithium battery will remember clock information for as long as it has charge (approximately 30 days). When power down occurs (due to a power outage) the thermostat is able to switch off all relays. The O and B relay will maintain their last state.

Service Reminders

The user may turn on and turn off the following service reminders (all of which default to OFF) in either chronological time and/or run time and may be reset (to default) or delayed (snooze) at any time:

Replace Media Filter
Routine Sys (System) Check-up
Replace Hum (Humidifier) Pad
Replace UV Lamp
Replace Metal Insert for Pure Air

NOTE - When chronological time is selected, the timer runs based on the calendar. When time is selected in run time, the timer runs based on the time the specific output is ON (e.g. Fan output for Media Filter).

When the reminder time (either calendar time or run time) has elapsed, the system displays a screen from which the user can either RESET or DELAY the reminder.

The user can reset the timer either before is has expired (i.e. reminder is set to 6 months and user decides to reset it to 6 months or change it to different value at the end of 4th month) or when the time has expired and a reminder messages has been displayed.

When a reminder is turned off, the indicator will not be activated even if the timer is expired. Note that setting filter reminder to 0 (OFF) will not reset the timers, but will deactivate the filter indicator.

In the case of a power interruption:

- lithium battery has charge—the total accumulated time is maintained (i.e. the counter does not recycle to zero).

- *lithium battery has NO charge*—the due date of reminders is maintained.