

Smart Energy

Programmable Thermostat + Energy Monitor



EE542-1Z | User Manual



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1.0 Welcome

Congratulations on the purchase of your new Smart Energy Thermostat! The thermostat is designed to help you save money and conserve energy. When connected to a smart meter, you can use the product to get real-time access to information about energy consumption in your home so you can make more informed decisions and better manage your energy use.

This thermostat may have been installed in conjunction with a plan from your utility designed to help you save money and/or to ensure grid reliability. Two prevalent utility plans are:

• DIRECT LOAD CONTROL PLAN

In a Direct Load Control (DLC) plan, you voluntarily allow your utility company to control major appliances in your home when demand for electricity peaks. These instances of peak demand are called “utility events” and when they occur, the utility will take action, such as adjusting the thermostat temperature or cycling your air conditioner on and off, for the duration of the event. These events are relatively infrequent and under most circumstances, you will have the option to opt in or opt out of the event. (To view thermostat features exclusive to Direct Load Control plan customers, see page 24-26.)

• TIERED PRICING PLAN

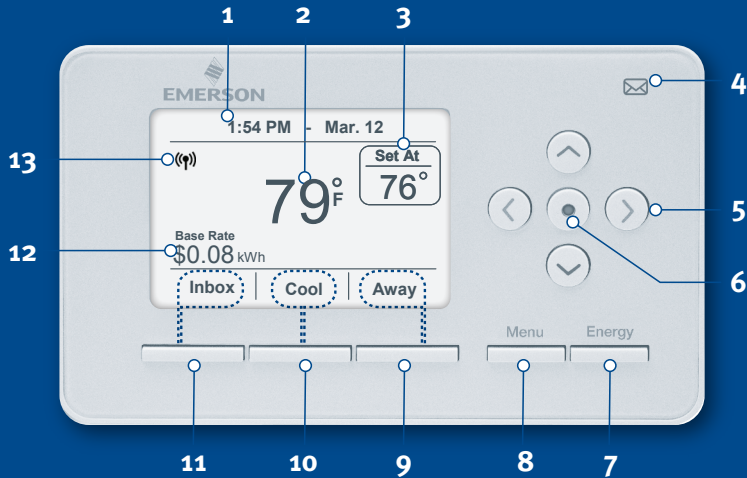
In a tiered pricing plan, electricity rates fluctuate with demand during the course of each day. You can determine - in advance - how you want your thermostat to respond when prices change. You may decide it's worth giving up a few degrees of comfort to save money when rates reach a certain level. (To view thermostat features exclusive to Tiered Pricing plan customers, see page 20-23.)

For more information about this product:

 **Customer Service: 1-888-725-9797**

2.0 Get to Know Your Thermostat

Before setting up your thermostat, familiarize yourself with its features and user interface.



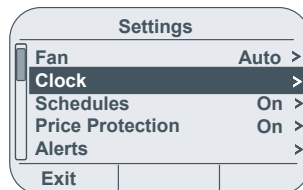
1. Current time and date
2. Current room temperature
3. Desired temperature
4. Message icon
Lit when an unread message is in the inbox
5. Navigation pad
Up/Down ⬆️⬆️
Left/Right ⬅️➡️
Enter (⊙)
(see section 2.1 for details.)
6. Tri-color LED
Lit during utility events and price tiers
7. Energy key
Use to access whole-home energy use information
8. Menu key
Use to configure thermostat settings
9. Away "soft" key
Use to set one-touch temperature hold
10. Heating/cooling "soft" key
(Indicates current mode, press to change.)
11. Inbox "soft" key
use to view messages
12. Current electricity rate
when in a tiered pricing plan
(see section 7.0 for details.)
13. Wireless icon
appears when thermostat has established a wireless connection



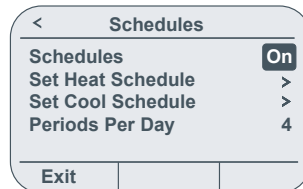
2.1 Use the Navigation Keypad

When on a menu screen, the five-way navigation pad functions as follows:

- Use the arrows to move through the displayed menu listings
- Use the arrows to advance to the next screen or return to a previous screen.
- Use the key to confirm a selection or advance to the next screen. (similar to the key.)

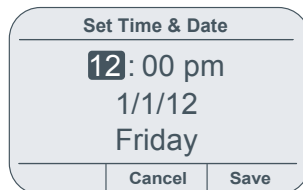


- The key is also used to toggle back and forth between options, such as On/Off, as shown in the Schedules menu.



When setting preferences for a specific menu option:

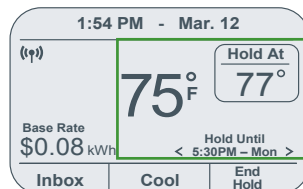
- Use the arrows to change the setting of the highlighted item.
- Use the arrows to tab between values.
- Use the three “soft keys” at the bottom of the screen to complete a step.



2.2 Initiate a Temporary Hold

TEMPORARY HOLD lets you override a programmed heating/cooling schedule for a brief period of time.

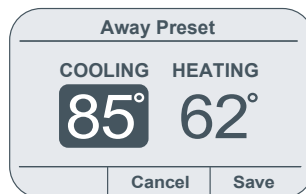
To initiate a TEMPORARY HOLD, adjust the temperature by pressing the arrows. To change the duration of the temporary hold, press the arrows.



2.3 Set One-touch Away Preset

With just one touch, the AWAY preset will instantly change your desired temperature to a set point that will save you money. This is a convenient feature when you're leaving home unexpectedly or intend to be away from home for an extended period of time. The unit has been shipped with "Away" settings based on Energy Star recommendations of 85° in the summer and 62° in the winter, but those temperatures can easily be changed with the touch of one key.

To change the default setting, press and hold the AWAY key for three seconds, adjust settings, then press SAVE.



2.4 Get Messages

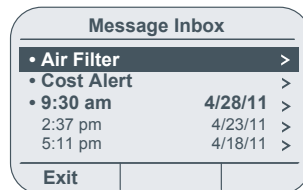
In the upper right corner of the unit, an envelope icon will be illuminated when an unread message is in your INBOX.

- Messages may be sent from your utility or software service provider. As an example, the utility may send an alert that "Crews will be working in your neighborhood and you may experience an intermittent outage between 2:00 pm and 4:00 pm."
- Messages may also be generated by the thermostat itself. "It's time to replace the air filter."

To view a message:

STEP 1 Press INBOX key in the lower left corner of the thermostat display.

STEP 2 From the MESSAGE INBOX menu, use the ⏮ ⏭ arrows to select a message, then press ⏭.



STEP 3 The resulting screen displays the message details.



3.0 Customize Thermostat Settings

3.1 Program a Heating/Cooling Schedule

By programming a thermostat schedule, you can save energy while maintaining comfort. The thermostat was installed with the following pre-programmed, energy-efficient schedule. If this schedule meets your needs, no further action is required.

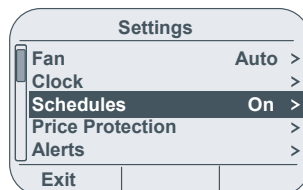
Heating					Cooling				
	MORN	DAY	EVEN	NITE		MORN	DAY	EVEN	NITE
Period	6:00am 8:00am	8:00am 6:00pm	6:00pm 10:00pm	10:00pm 6:00am		6:00am 8:00am	8:00am 6:00pm	6:00pm 10:00pm	10:00pm 6:00am
Mon-Fri	70°F	60°F	70°F	62°F	Mon-Fri	78°F	85°F	78°F	82°F
Sat-Sun	62°F	70°F	70°F	62°F	Sat-Sun	82°F	78°F	78°F	82°F

To run the thermostat as a non-programmable model:

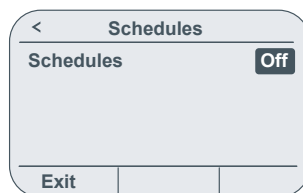
Menu > Settings > Schedules

STEP 1 Press the MENU key.

STEP 2 From the Settings menu, use the
 ⏪ ⏩ arrows to select **SCHEDULES**.
 Press ⏩ .



STEP 3 If the SCHEDULES feature is ON, press the  key to turn it OFF.







To customize the heating/cooling schedule:

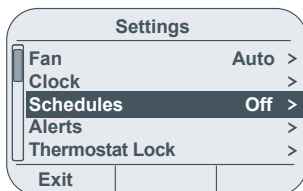
Menu > Settings > Schedules

You can easily change the day, time period or temperature settings of the pre-programmed schedule.

STEP 1 Press the MENU key.

STEP 2 From the Settings menu, use the   arrows to select SCHEDULES. Press .

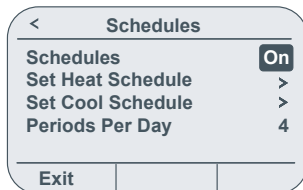
STEP 3 If the SCHEDULES feature is OFF, press . You should now see options to set a schedule for heating, cooling and periods per day.



Start by deciding how many times during the day you want the temperature to change.

- If you want to set one temperature for daytime and one temperature for night time, select 2.
- If you want to set four temperature settings throughout the day (morning, day, evening, night) select 4.

To make your selection, use the   arrows to select PERIODS PER DAY. Press  to select either 2 or 4.



To set a schedule:

Menu > Settings > Schedules > Set Heat (or Cool) Schedule

STEP 1

From the SCHEDULES menu, use the ⏮ ⏭ arrows to select SET HEAT SCHEDULE. Press ⏭.

Schedules	
Schedules	On
Set Heat Schedule	>
Set Cool Schedule	>
Periods Per Day	4
Exit	

STEP 2

From the HEAT SCHEDULE screen, you can either:

- Set one schedule for weekdays and one for the weekend.
- Make edits to the schedule of any individual day.

Use the ⏮ ⏭ arrow keys to make your selection. Press ⏭.

Heat Schedule	
Weekdays / Weekend	>
Individual Days	>
Exit	

STEP 3

The first day part should be highlighted. Using the ⏮ ⏭ arrows, adjust the start time for the first temperature setting.

Times adjust in increments of 15 minutes. Once the start time is selected, press ⏭ to move to the HEAT TO column.

Mon - Fri		
Period	Starts At	Heat To
Morning	6:00 AM	70°
Day	8:00 AM	60°
Evening	6:00 PM	70°
Night	10:00 PM	62°
Days ➡	Cancel	Save

STEP 4

With the HEAT TO field highlighted, use the ⏮ ⏭ arrows to set the temperature for your first day period. Once the temperature is selected, press ⏭ to proceed to the next day period.

Mon - Fri		
Period	Starts At	Heat To
Morning	6:00 AM	68°
Day	8:00 AM	60°
Evening	6:00 PM	70°
Night	10:00 PM	62°
Days ➡	Cancel	Save

STEP 5 Repeat steps 3 and 4 until all day periods are complete. When finished, press **DAYS** → to advance to the weekend schedule where you will repeat steps 3 and 4.

STEP 6 When finished, press **SAVE** to save both schedules.

STEP 7 To make edits to any individual day or if you just want to view your current schedule by day, select **INDIVIDUAL DAYS** by pressing the ⏻ arrow.

STEP 8 To set the cool schedule, return to the **SCHEDULES** menu, select **SET COOL SCHEDULE**, and repeat steps 2-7.

Mon - Fri		
Period	Starts At	Heat To
Morning	6:00 AM	68°
Day	8:00 AM	60°
Evening	6:00 PM	70°
Night	10:00 PM	62°
Days → Cancel Save		

< Heat Schedule	
Weekdays / Weekend	>
Individual Days	>
Exit	

3.2 Set Thermostat Clock

Menu > Settings > Clock

If the thermostat is connected to a smart meter, the time will be automatically set and maintained, but you may still make adjustments to the time zone and daylight savings if necessary. If the thermostat is not connected to a smart meter you can manually set the clock using this feature.

To set the time and date:

Menu > Settings > Clock > Set Time & Date

STEP 1 Press the **MENU** key.

STEP 2 From the Settings menu, use the ⏻⏮ arrows to select **CLOCK**. Press ⏻.

STEP 3 Use the ⏻⏮ arrows to select **SET TIME AND DATE**. Press ⏻.

STEP 4 Use the ⏻⏮ arrows to change the value in each field, and ⏻⏮ to toggle between fields.

Settings	
Fan	Auto >
Clock	>
Schedules	Off >
Alerts	>
Thermostat Lock	>
Exit	

< 12:39PM - 1/1/12	
Set Time & Date	>
Time Zone	>
Daylight Savings	On
Exit	

STEP 5 When finished press **SAVE** to save settings.

Set Time & Date		
12:00 pm		
1/1/12		
Friday		
Cancel	Save	

To set your time zone:
Menu > Settings > Clock > Set Time Zone

STEP 1 From the **CLOCK** screen, use the ⬅➡ arrows to scroll through the menu listings until **TIME ZONE** is highlighted. Press ➡.

< 12:39PM - 1/1/12	
Set Time & Date	>
Time Zone	>
Daylight Savings	On
Exit	

STEP 2 Use the ⬅➡ arrows to select a time zone, then press ⏺.

< Set Time Zone	
Newfoundland Std Time	
Eastern Standard Time	
Central Standard Time	
Mountain Standard Time	
Pacific Standard Time	

Your thermostat can be set to automatically adjust the clock for daylight savings.
Menu > Settings > Clock > Daylight Savings

From the **CLOCK** screen, use the ⬅➡ arrows to select **DAYLIGHT SAVINGS**. Press ➡.
To disable the feature, press ⏺ to select **OFF**.

< 12:39PM - 1/1/12	
Set Time & Date	>
Time Zone	PST >
Daylight Savings	On
Exit	

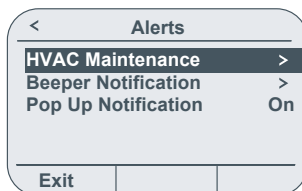
3.3 Set Alerts

Menu > Settings > Alerts

The thermostat is designed to alert you to important information about your energy use. You can set the unit to notify you - with an auditory beep or with a pop-up message - when a new load control or pricing event takes place, or when it's time to perform routine maintenance such as changing the filter on your heating/cooling system. To enable alerts, take the following steps:

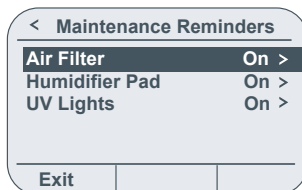
To set an a HVAC maintenance reminder:

STEP 1 From the ALERTS screen, you can choose to be alerted when it's time to perform routine HVAC maintenance. Use the ⏪ ⏩ arrows to select HVAC MAINTENANCE. Press ⏩.



STEP 2 From this screen, you can choose to be reminded to change the air filter, humidifier pad and UV lights on your HVAC unit.

- Highlight the reminder of interest, then press the ⏩ arrow to configure its settings.



STEP 3

- Use the ⏩ key to turn the reminder ON.
- Use the ⏪ ⏩ arrows to select REMIND ME IN, then press ⏩.



STEP 4 Use the ⏪ ⏩ arrows to select the number of months from today that you'd like to be reminded to perform the routine maintenance. Press ⏪ to return to the HVAC MAINTENANCE menu.

STEP 5

Repeat steps 2-4 for any other equipment maintenance reminders of interest. Press to return to the ALERTS menu.

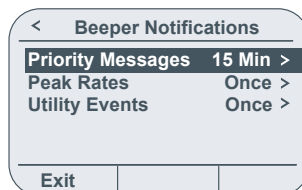


To identify the manner in which you'd like to be alerted to utility events, rate changes or messages
Menu > Settings > Alerts > Beeper Notifications

STEP 1

From the BEEPER NOTIFICATIONS screen, you can choose the manner in which you want to be alerted when you receive priority messages or notification of a utility event or peak rate.

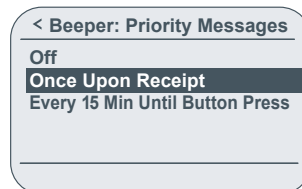
- Use the arrows to make a selection and press .



STEP 2

To change the default setting, use the arrow keys to select whether you would like to turn the alert off, be alerted once when the message is received, or you acknowledge the alert. Make your selection then press .

Repeat steps 1-2 until all BEEPER NOTIFICATIONS are set. Press to return to the main ALERTS menu.

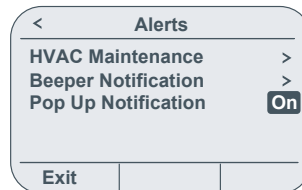


STEP 3

Some alerts can be configured to “popup” and occupy the thermostat home screen until the user presses any key. The following alerts will “popup” when this menu item is set to the ON position:

- Monthly electricity budget has been exceeded
- Pending peak rate event
- Important messages

To be alerted by text which pops up on your thermostat display, use the arrow to select POPUP NOTIFICATIONS, then press to select either ON or OFF.



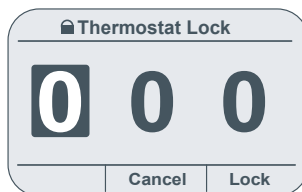
3.4 Set Thermostat Lock

Menu > Settings > Thermostat Lock

Thermostat lock lets you prevent unwanted users from changing thermostat settings.

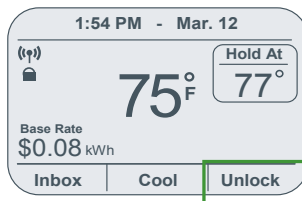
To lock the thermostat display:

From the THERMOSTAT LOCK screen, enter a three-digit combination that will be required to unlock the thermostat. Write down the code for safekeeping, then press LOCK.

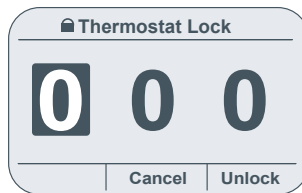


To unlock the thermostat display:

STEP 1 Press UNLOCK.



STEP 2 Enter the three-digit combination you set, then press UNLOCK.



KEEP IN MIND:

Forgot your combination? Simultaneously press the 3 soft keys at the bottom of the display for 20 seconds to unlock and reset the code to 000.

3.5 Set Vacation Hold

Menu > Settings > Vacation Hold

Vacation Hold lets you override your thermostat's programmed schedule while you're away, yet ensures that you return to a comfortable home.

To set vacation hold:

Menu > Settings > Vacation Hold

STEP 1

From the VACATION HOLD screen, select the desired vacation hold temperature and press SET.

< Vacation Hold

Heating Set Point

55°

Set

STEP 2

Vacation hold can remain in effect for up to one year. Select the date and time on which you'd like the thermostat to return to its programmed schedule, then press SAVE to initiate the hold.

< Hold Until...

12:00 pm

FRI 1/1/12

Cancel Save

KEEP IN MIND:

Energy Star recommends vacation hold temperatures be set to 85° in the summer and 62° in the winter.

3.6 Activate Fan

Menu > Settings > Fan

When the fan is set to AUTO, it will only turn on with heat and cool. By setting the fan to ALWAYS ON, you can circulate air in the home even when the HVAC unit isn't running. The fan can help to reduce hot and cold spots, remove humidity or help dry carpet after a cleaning.

3.7 Advanced Settings

Adjust Backlight:

Menu > Settings > Advanced Settings > Backlight

The thermostat backlight has two settings. It can be set to illuminate only when the keypad is touched (AUTO), or it can be set to illuminate continuously (ALWAYS ON).

Select Fahrenheit or Celsius:

Menu > Settings > Advanced Settings > °F or °C

Set Point Limits:

Menu > Settings > Advanced Settings > Set Point Limits

This feature lets you establish low and high temperature limits that cannot be exceeded. This can be particularly helpful if you want to prevent children or tenants from adjusting the thermostat beyond a level acceptable to you. The unit has been shipped with default set point limits of 45° minimum cooling and 99° maximum heating.

Temperature Display Adjustment:

Menu > Settings > Advanced Settings > Temp Display Adjust

Your thermostat was accurately calibrated at the factory. But if you'd like the displayed temperature to be higher or lower than the actual temperature, this feature lets you adjust the displayed temperature.


Key Pad Beeper:

Menu > Settings > Advanced Settings > Key Pad Beeper

This feature activates a sound each time a thermostat key is pressed. This feature is OFF by default. To turn the feature ON, select KEY PAD BEEPER from the menu and press the  key.

Comfort Recovery:

Menu > Settings > Advanced Settings > Comfort Recovery

The COMFORT RECOVERY feature activates heating or cooling in advance of the set schedule. If, for example, you set the 7:00 am temperature to 68°, COMFORT RECOVERY begins the process of heating or cooling in advance, so the room temperature reaches 68° by 7:00. This feature is OFF by default. To turn the feature ON, select COMFORT RECOVERY from the menu and press the  key.

4.0 Monitor Whole-Home Energy Use When Connected to a Smart Meter

When the thermostat is connected to a smart meter, it will help you track your entire home's energy use - not just the electricity being used by your heating and cooling equipment. And by giving you a detailed view of usage in real time, you can take action to increase your level of energy efficiency - preserving resources and saving money. In this section, you'll learn how to set a monthly target for energy use and how to track your use against that target.

KEEP IN MIND:

To take advantage of the energy monitoring features, the thermostat must establish communication with your utility. In most instances this will mean that your home must be equipped with a ZigBee enabled smart meter. If you aren't sure if you have this type of meter, contact your utility company.

If you have established a wireless connection with the meter but certain features listed below do not appear in the Energy menu, or you see an error message reading "data not available", then chances are the meter doesn't support the specific data set required for the feature.

4.1 Set Monthly Budget Target

The first step toward monitoring your energy use is to set a monthly budget target or cost threshold, that when met will generate an alert. Think about how much would you like to spend each month for electricity. Say, for example, your target is \$100 per month. The thermostat is capable of monitoring your energy use and notifying you when you have exceeded this monthly threshold. To establish a monthly target, take these steps:

Set a monthly budget target start date:

Energy > More > Set Monthly Budget > Billing Cycle Start Date

From the **START OF BILLING CYCLE** screen, use the ⏪ ⏩ arrows to identify the date of the month that you'd like a target cycle to begin. When your date is selected, press ⏹.

< Start of Billing Cycle

Day of the month that my billing cycle starts

1

KEEP IN MIND:

The product will start measuring your energy consumption immediately upon connecting it to a smart meter or other data source. By default, the counter will reset to 0 on the first calendar day of every month. For a closer approximation of how you're tracking against your monthly bill, you can change the start date to correspond with the first day of your billing cycle (which can usually be found on your utility bill).

Set a monthly budget dollar target:

[Energy](#) > [More](#) > [Set Monthly Budget](#) > [Monthly Budget](#)

Ideally, how much would you like to spend each month for electricity?

From the MONTHLY BUDGET screen, use the ⏪ ⏩ arrows to set the dollar value of the monthly target budget.

When the dollar value is selected, press ⏩.

< Monthly Budget

For Electricity Usage:

\$100

(excluding regional fees/taxes)

Help

KEEP IN MIND:

You may want to set the target slightly lower than the total amount you'd like to pay, to accommodate fees and taxes that may be added to your electricity bill.

To change the beeper settings for this alert:

[Energy](#) > [More](#) > [Set Monthly Budget](#) > [Alert Beeper](#)

From the ALERT BEEPER screen, determine if and how you want to be alerted that you have reached your target budget threshold. The beeper can be off, set to beep once when the alert occurs, or every 15 minutes until you press a key. Use the ⏪ ⏩ to highlight your selection then press ⏩.

< Alert Beeper

Off

Once Upon Receipt

Every 15 Min Until Button Press

If you have enabled popup message alerts, the following screen will appear on your display when your target budget has been exceeded.

A message will also be sent to your INBOX.



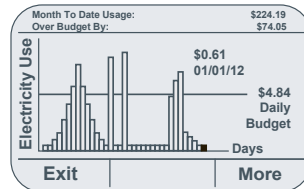
4.2 Track Energy Use Against A Budget Target

Once you have set a budget target, the following features are designed to help you track energy use against it.

To view month-to-date usage:
Energy

STEP 1 Press the ENERGY key.

STEP 2 The month-to-date usage chart shows energy use for each day of the current month. The top line shows you how much energy you have consumed so far this month. The second line shows if you are above or below your targeted month to date usage. Use ⏮ ⏭ to scroll through the days. As you do so, the actual cost per day will appear on the display.



KEEP IN MIND:

To take advantage of the budget tracking feature, your meter must be configured to provide electricity rate information. If your meter does not support rate information, then this screen will simply show your energy usage measured by kWh. To estimate your month-to-date energy costs, you will need to multiply the kWh value shown on the product display by your kWh rate which can likely be found on your electricity bill.

To view current cost estimates:
Energy > More > Current Cost Per Hour

Want to know how much it costs to run your dryer? The CURRENT COST PER HOUR feature will allow you to figure out how much it costs to operate any electrically powered appliance or device in your home. This feature shows your whole home's energy use in real time. First, take a look at the screen and note your energy use. Then, start the dryer and check back to see the cost difference. Unless other appliances turned on while you were starting the dryer, you can infer the difference between the original and new "cost per hour" values is what it costs you per hour to run the dryer.

From the CURRENT COST PER HOUR screen, you'll see the current cost per hour kWh, the rate at which you're currently using electricity and the cost per kWh.

< Current Cost Per Hour		
Cost Per Hour	\$0.41	
Current Use	3.4 kWh	
Current Rate	\$0.12 kWh	
Exit		

To view HVAC cost estimate:
Energy > More > HVAC Cost Estimate

Heating, ventilation and air conditioning (HVAC) account for almost half of all residential energy consumption. The HVAC COST ESTIMATE screen lets you see how much you're spending on electricity to run your HVAC equipment and how much it contributes to your total electricity costs.

From the HVAC COST ESTIMATE SCREEN, you'll see the percentage of your home's total electricity usage devoted to cooling and heating.

< Electricity Cost Estimate		
	Cooling	Heating
Month To Date	\$78.21	\$0
% of Total	65%	0%
Exit		

5.0 Tiered Pricing Plan Exclusive Features

We define a “Tiered Pricing Plan” as one where your electricity rates change based on the time of day. The following features are only pertinent to users who are enrolled in this type of utility pricing plan.

Utilities are increasingly looking to “time-of-use” rates as a way to help them balance load and maintain grid reliability when capacity is scarce. By shifting your consumption to off peak hours you may significantly lower your energy costs.

If you are enrolled in this type of pricing plan, the thermostat can protect you by automatically changing the temperature of your home when rates are high.

Specifically, you can determine - in advance - how you want your thermostat to respond when prices change. You may decide it's worth giving up a few degrees of comfort to save money when rates reach a certain level.

KEEP IN MIND:

To take advantage of the tiered pricing plan features offered by this thermostat, your home must be equipped with a smart meter or a gateway that is in communication with your utility and you must be enrolled in a tiered pricing program.

5.1 Enable Price Protection

The “Price Protection” feature is designed to save you money by letting you automate how your heating and cooling system responds to peak rates. First, determine how you want your thermostat to respond to each price tier. The product will always display the lowest price tier first and each tier that follows is more expensive than the one before it.

You can then assign how many degrees warmer or cooler you’d like your home to be when each tier is active. The thermostat only lets you make adjustments that save you money (regardless if you’re in a heating or cooling program) so don’t worry about the direction of the adjustment.

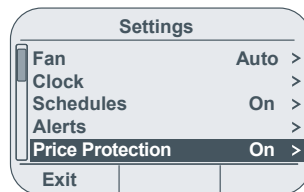
When rates increase, the home screen of the thermostat will indicate that Price Protection is active and whatever temperature adjustment was previously defined will take effect. To cancel Price Protection when rates are high, simply press the “Cancel” key.

For more information on your utility’s specific rate structure, visit their website.

To set your Price Protection preferences:

Menu > Settings > Price Protection > Set Cooling (or Heating) Response

- | | |
|---------------|--|
| STEP 1 | Press the MENU key. |
| STEP 2 | From the Settings menu, use the ⏮ ⏭ arrows to select PRICE PROTECTION . Press ⏭. |
| STEP 3 | If the PRICE PROTECTION feature shows OFF , press ⏮. You should now see a listing titled SET COOLING RESPONSE . If you have a Heat Pump you will also see a SET HEATING RESPONSE option. Select COOLING RESPONSE and press ⏭. |



STEP 4 On the **PRICE RESPONSE: COOLING** screen, the pricing tiers offered by your utility will be listed. Indicate how you want your thermostat to respond when each tier is active. Use the ⬅ ➡ arrows to select a tier, then press ➡.

STEP 5 Use the ⬅ ➡ arrows to select the temperature adjustment you'd like to have in place when that tier price is active. In **COOLING** mode, for example, an adjustment of 2° will result in the room being two degrees warmer for the duration of that rate.

STEP 6 If you want to change the Alert Beeper setting, press ➡ to advance to the next field and using the ⬅ ➡ arrows, select how you want to be alerted when this pricing tier is active. Press ⬅ twice to return to the tier menu.

STEP 7 Repeat steps 5-6 until temperature adjustments are set for each of the cooling price tiers.

STEP 8 To set temperature adjustments for heating price tiers, return to Step 4 and select **SET HEATING RESPONSE**. Repeat steps 5-8.

NOTE When the price of electricity exceeds your base rate, the words **PRICE PROTECTION ACTIVE** will appear at the top of your thermostat display and the active price tier will be displayed in the lower left corner.

The Ⓢ key light will also blink according to the level of the rate: Red = high, Yellow = medium, Green = above base rate, but not as high as yellow and red.

< Price Response: Cooling

Tier 2:	\$0.12 kWh	2° >
Tier 3:	\$0.18 kWh	2° >
Tier 4:	\$0.24 kWh	3° >
Tier 5:	\$0.28 kWh	3° >
Tier 6:	\$0.35 kWh	4° >
Tier 7:	\$0.75 kWh	5° >

Exit

< Tier 2

When this rate is active, adjust temperature:

2°

Alert
Beeper

Off

Price Protection Active

(1P)

75°F

Tier 2
\$0.16 kWh

Active Until
6:00PM

Inbox

Cool

Cancel

To disable Price Protection when active:
When rates are high and Price Protection is active, you can always override the feature by either pressing the CANCEL key or by using the ⌂⌂ arrows to change the set point.

- STEP 1

To opt out at any time during a pricing event, press the CANCEL key.
- STEP 2

The system will ask you to confirm your decision to opt out.

Price Protection Active

(19)

75°F

Tier 4
\$0.25 kWh

Active Until
6:00PM

InboxCoolCancel

Cancel Price Protection

Changing the set point temperature will cancel Price Protection for this event. Are you sure you want to do this?

NoYes

5.2 View Scheduled Rate Changes

Most utilities can anticipate in advance when rates will fluctuate. When scheduled, pending rate changes will be displayed on the thermostat so you are aware of every opportunity to save money.

To view scheduled rate change details:
Energy > More > Scheduled Rates

From the SCHEDULED RATES menu, use the ⌂⌂ arrows to scroll through the list of scheduled rates. To view the details of any rate, press ⌂.

Details of the rate change are presented in the display.

< Scheduled Rates

2:00PM Wed - 01/01/12 >

2:00PM Thu - 01/02/12 >

Exit

< Scheduled Rate

Date Wed - 01/01/12

Tier 2 \$0.16 kWh

Start Time 2:00PM

Duration 4 hours

Exit

5.3 View Costs by Rate

This feature of the thermostat is designed to show you the impact of higher rates on your total monthly energy costs.

To view cost by rate:

Energy > More > Costs by Rate

STEP 1	Press the ENERGY key.
STEP 2	Press MORE at the bottom of the display.
STEP 3	From the Energy Monitor menu, use the ⏪ ⏩ arrows to select COSTS BY RATE. Press ⏩.
STEP 4	In this example, the COSTS BY RATE screen shows that while you may have consumed only a fraction of your total energy under the highest rate, that cost represents a significantly higher portion of your total energy spent.
STEP 5	To view the proportion by percentage, press the % key.

Energy Monitor

- Scheduled Utility Event >
- Scheduled Rate >
- Current Cost Estimates >
- Block Rate Usage >
- Costs By Rate >**

Exit

< **Month To Date Cost Est.**

	Rate	kWh	Cost
Tier 1	\$0.08	1171	\$93.72
Tier 2	\$0.16	105	\$16.82
Tier 3	\$0.85	11	\$9.61

%

< **Month To Date Cost Est.**

	Rate	kWh	Cost
Tier 1	\$0.08	91%	78%
Tier 2	\$0.16	8%	14%
Tier 3	\$0.85	1%	8%

kWh / \$

6.0 Direct Load Control Plan Exclusive Features

In a direct load control (DLC) plan, you voluntarily allow your utility company to control major appliances in your home when demand for electricity peaks. These instances of peak demand are called "utility events" and when they occur, the utility will take action, such as adjusting the thermostat temperature or cycling your air conditioner on and off, for the duration of the event. Under most circumstances you can opt in or opt out of a utility event.

6.1 View Scheduled Utility Events

Utility events are most likely to happen on the hottest weekday summer afternoons when the electric grid is under pressure. Many utilities can anticipate and will schedule an event at least one day in advance.

To opt out of a utility event:

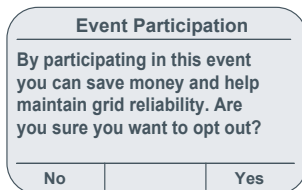
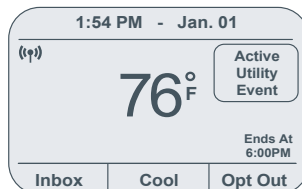
When a utility event is active, the words **ACTIVE UTILITY EVENT** will appear on the thermostat display along with the time when the event is expected to end.

The ENTER key light will also illuminate based on the level of criticality:

- Green = Low
- Yellow = Medium
- Red = High (Mandatory Participation)

STEP 1 To opt out at any time during the utility event, press **OPT OUT** key.

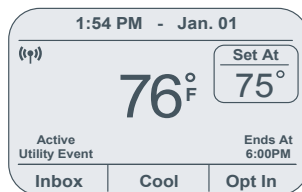
STEP 2 The system will ask you to confirm your decision to opt out.



To opt back into an active utility event:

STEP 1 To opt in to an active utility event, press **OPT IN** key

STEP 2 The phrase **ACTIVE UTILITY EVENT** will now be prominently displayed in the upper RIGHT area of the screen.



KEEP IN MIND:

Under the most critical circumstances - such as, a potential blackout – the ☉ key light will illuminate in RED. If at all possible, try not to Opt Out of these types of events.

To view the details of any scheduled utility event:
[Energy](#) > [More](#) > [Scheduled Events](#)

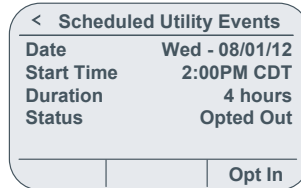
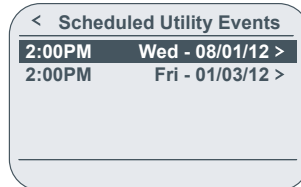
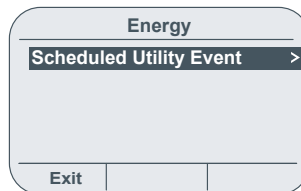
STEP 1 Press the ENERGY key.

STEP 2 Press MORE at the bottom of the display.

STEP 3 From the Energy Monitor menu, select SCHEDULED EVENTS and press ⏮.

STEP 4 To view the details of any event, select the event then press ⏮.

STEP 5 The date, start time and duration of each event is presented in the display. You may opt in to this event in advance by pressing OPT IN.



7.0 Support

For more information about this product:

 **Customer Service: 1-888-725-9797**



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