

-
2. Immediately after installation, it is normal for the red indicator light to flash several times until the black mark on the disk passes the Sensor Head for the first time, as seen in the diagram on the previous page. After the black mark on the disk has passed by the Sensor Head, the red indicator light should only flash once each time the disk completes a full revolution.
 3. Watch for 10 passes of the black mark. **The red indicator light should only flash when the black mark on the disk passes by the Sensor Head.**

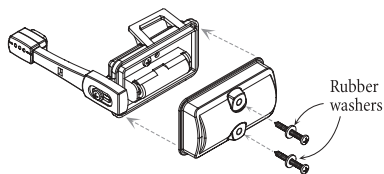
If the indicator light does not flash when the black mark passes, or if it flashes while the black mark is not visible, then the Sensor Head is not properly aligned and must be adjusted.

To adjust the Sensor Head, gently move it up or down a few millimeters with your forefinger and thumb to align it with the meter disk. Then repeat Steps 1-3 above. Continue to do this until the red indicator light consistently flashes only when the black mark passes the Sensor Head.

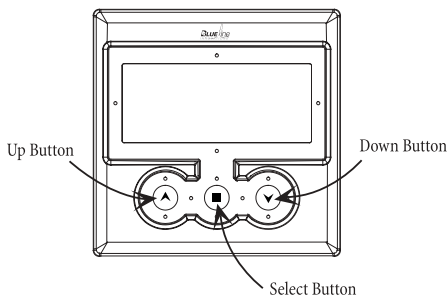
***NOTE:** After 50 flashes the sensor light will cease to flash. This is to extend the battery life. If you do not get the Sensor Arm aligned within 50 flashes simply remove the battery and re-insert it into the Sensor Unit. Then continue as above.*

Once the Sensor Head is properly aligned, carefully tighten the Sensor Arm screw with the Philip's Head screwdriver until the screw is snug. Be careful not to move the Sensor Head while you are tightening the screw.

-
4. Ensure rubber washers are on the screws and then replace the cover to the Sensor Unit as shown below. ***Do not over-tighten the screws!***



5 USING THE DISPLAY UNIT



Your Power Cost Monitor can display:

- Electricity cost-per-hour in dollars and cents
- Total cost of energy in dollars and cents
- Predicted cost of energy in dollars and cents
- Greenhouse Gas (CO₂) emissions (optional)
- kWh consumption
- Outside Temperature
- Clock with Time and Date

The following diagrams explain each screen and the features that are displayed.

5.1 Start Up

Once the *PowerCost Monitor*™ is plugged in, the screen should display “BLUE” and then “LINE” for 1.5 seconds each.



5.2 Demand in \$/hr

This screen is the first one you will see after Start Up is complete. Exact values displayed will vary.



If your Display Unit and Sensor Unit are synchronized: The screen shows the current demand in dollars per hour. The screen above shows the current demand as \$0.68 per hour. The Disk Emulator spins at the same rate as the disk on your Utility Meter. The faster the Disk Emulator spins, the greater the rate of energy consumption and the higher the dollars per hour value you will see on the screen.

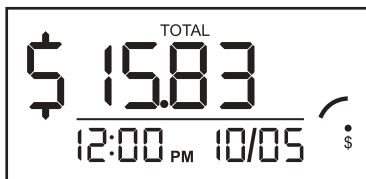


If your Display Unit and Sensor Unit are NOT synchronized: If the value displayed is \$0.00/h and the Disk Emulator is not spinning after a few minutes, either the Display Unit and Sensor Unit are too far apart or they are not synchronized. First, try moving the Display Unit closer to the Sensor Unit. If this does not work, then you will have to resynchronize your ***PowerCost Monitor™***. To do this go to *Section 4.4: Synchronizing the Display Unit with the Sensor Unit*.

Press the **DOWN** button to move to the next screen.

5.3 Total Dollars

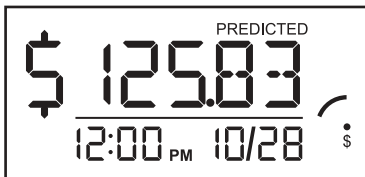
This screen shows the Total Dollars consumed since the value was last reset. According to the screen below you have used \$15.83 worth of electricity since the Total was last reset.



To reset Total values go to *Section 6: Editing And Changing The Settings*. Press the **DOWN** button to move to the next screen.

5.4 Predicted Dollars

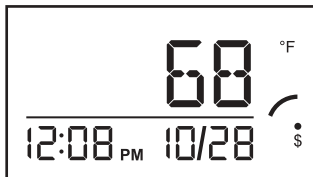
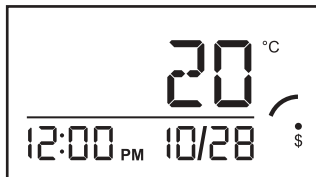
This screen shows the Predicted amount of electricity in dollars that will be consumed for the time period you select between 1 - 60 days. According to the screen below, your electricity bill is predicted to be \$125.83 at the end of the time period you selected.



Note: The *PowerCost Monitor*[™] needs to be running for at least 24 hours before the Predicted value is accurate. If the value seems high immediately after installation, do not worry. It will correct itself within a day.

To change the number of days for prediction go to *Section 6: Editing And Changing The Settings*. Press the **DOWN** button to move to the next screen.

5.5 Temperature

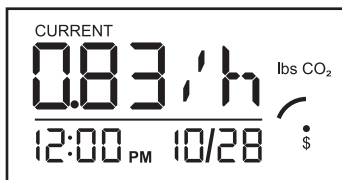


Displays the temperature reading at the location of the Sensor Unit. The first screen shows the temperature outside in °C. Press the **DOWN** button again and it displays the temperature in °F. Press the **DOWN** button to move to the next screen.



5.6 Current CO₂ Emissions (optional)

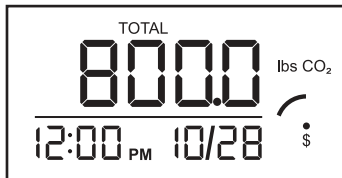
Every kWh of energy you consume releases approximately 0.5 lbs of CO₂ and other greenhouse gasses into the atmosphere. According to the screen below, you are currently emitting 0.83 lbs of CO₂ per hour.



Press the **DOWN** button to move to the next screen.

5.7 Total CO₂ Emissions (optional)

This screen shows the Total CO₂ emitted by the household since the value was last reset.



To reset Total values go to *Section 6: Editing And Changing The Settings*. Press the **DOWN** button to move to the next screen.

5.8 Predicted CO₂ Emissions (optional)

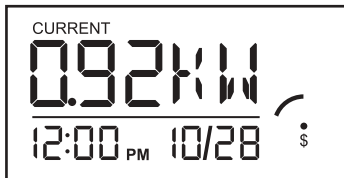
This screen shows the Predicted amount of CO₂ you will emit for the time period you select between 1-60 days. According to the screen below, your household will emit 834.0 lbs CO₂ over the number of days you have selected for prediction.



To change the number of days for prediction go to *Section 6: Editing And Changing The Settings*. Press the **DOWN** button to move to the next screen.

5.9 Current kW

This screen shows the kilowatts (kW) that your home is currently consuming. As you consume more energy in your home the number of kW will increase. According to the screen below, your household is currently consuming 0.92 kW.

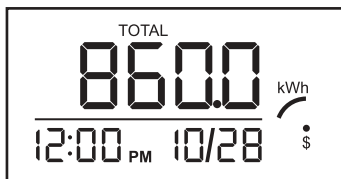


Press the **DOWN** button to move to the next screen.



5.10 Total kWh

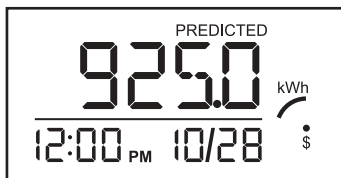
This screen shows the Total kWh consumed by the household since the value was last reset. According to the screen below, your household has consumed 860.0 kWh since the Total was reset.



To reset Total values go to *Section 6: Editing And Changing The Settings*. Press the **DOWN** button will move to the next screen.

5.11 Predicted kWh

This screen shows the Predicted amount of kWh you will consume for the time period you select between 1-60 days. According to the screen below, your household will consume 925.0 kWh over the number of days you have selected for prediction.



To change the number of days for prediction go to *Section 6: Editing And Changing The Settings*. Press the **DOWN** button to move to the next screen.

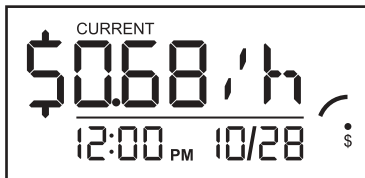
6 EDITING AND CHANGING THE SETTINGS __

You may from time to time have to adjust saved values in the *PowerCost Monitor™*. To change values, please follow the steps below.

6.1 Changing the kWh rate

Whenever your utility notifies you of a rate change, you will need to adjust the cents per kWh.

To change the cents per kWh press the UP or DOWN button to go to the screen from *Section 5.2 Demand in \$/hr*. Actual values displayed will vary.



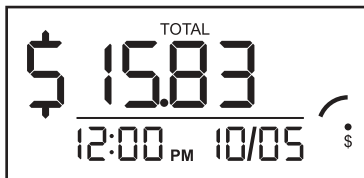
Once in this screen, press and release **SELECT** button to enter editing mode.



Use the UP or DOWN button to change the cents per kWh value so that the rate increases or decreases depending on the rate change that was provided by your utility company. Press the **SELECT** button again to exit.

6.2 Resetting the Total Values

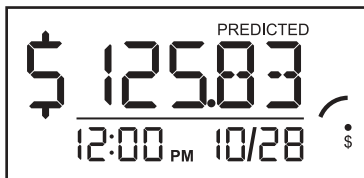
Use the **UP** or **DOWN** button to go to the screen from *Section 5.3 Total Dollars*. Actual values displayed will vary.



To reset the Total for all values - including Total Dollars, Total CO₂, and Total kWh - hold down the **SELECT** button for 5 seconds. When the unit beeps, release the **SELECT** button. The total values will return to zero. Press the **SELECT** button again to exit.

6.3 Changing the Days in Prediction

Use the **UP** or **DOWN** button to go to the screen from *Section 5.4 Predicted Dollars*. Actual values will vary.



Once you have reached this screen, you can change the number of days used for Predicted Dollars, Predicted CO₂ emissions and Predicted kWh consumption. To change the number of days press and release the **SELECT** button. The LCD screen will display the number of days in a value between 1 and 60 days.



Use the **UP** or **DOWN** button to increase or decrease the number of days. Then press the **SELECT** button again to exit.

6.4 Changing the Time and Date

Simultaneously hold down the **UP** and **DOWN** buttons for 3 seconds. When you release the buttons, your screen will show "TM" with a clock/calendar display across the bottom.

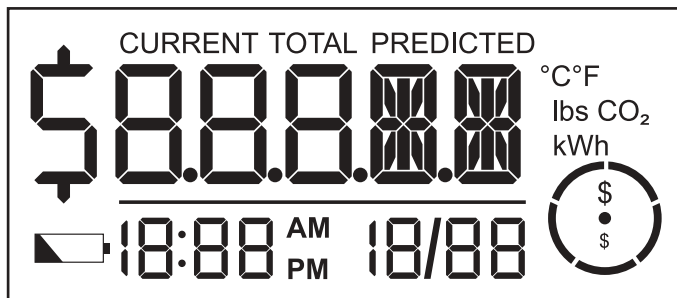


The clock hour will be flashing. To change the hour press the **UP** or **DOWN** button until the number is correct. Then press the **SELECT** button to move to minutes which flashes when selected. To change the minutes press the **UP** or **DOWN** button until the number is correct. Repeat this step until the correct time and date have been set. Then press the **SELECT** button once again to exit editing mode.





7 READING DISPLAY UNIT SYMBOLS _____

The Display Unit shows a variety of information about your home related to the Current, Total and Predicted cost, CO₂ emissions and kWh for your home's electricity use. The diagram and key below can help you determine what each symbol means.



SYMBOL	DESCRIPTION
CURRENT	This symbol accompanies the real-time Display of energy cost, CO ₂ emissions and kWh per hour (kW).
TOTAL	This symbol indicates you are displaying the cumulative amount of dollars spent, CO ₂ emitted and kWh consumed since TOTAL values were last reset.
PREDICTED	This symbol indicates the predicted amount of dollars spent, CO ₂ emitted and kWh consumed based on the number of days you have set in your prediction.

SYMBOL	DESCRIPTION
\$	Indicates that the unit of measure is in dollars.
°C	Temperature in Celsius at Utility Meter.
°F	Temperature in Fahrenheit at Utility Meter.
lbs CO ₂	Indicates that the unit of measure is in pounds of CO ₂ .
kWh	Indicates that the unit of measure is in kilowatt hours. Note: When CURRENT kWh is selected the symbol kW (for kilowatt) is displayed not kWh/h
	Symbol constantly on: Sensor Unit battery needs to be replaced. Symbol flashing: Display Unit is not receiving transmissions from Sensor Unit.
\$	Large dollar sign indicates you are in peak consumption period.
\$	Small dollar sign indicates you are below peak consumption period.
18:88 ^{AM} PM 18/88	The current time and date in hour:minute, AM or PM, month/day format.
	This is the Disk Emulator. It spins at the same rate as your Utility Meter's disk. The slower its apparent speed the less energy you are consuming and the more money you are saving.



8 WARRANTY

LIMITED ONE YEAR WARRANTY

Blue Line Innovations warrants that this product will be free from defects in materials and workmanship for a period of one (1) year from the date of purchase. Within this period, simply take the product and your proof of purchase to dealer and the product will be repaired without charge for parts and labor. Blue Line Innovations reserves the right to charge for transportation. *Any product which has been subject to misuse or accidental damages is excluded from this warranty.*

This warranty is only applicable to a product purchased through a Blue Line Innovations licensed dealer and to a product that is presented for repair in a country where Blue Line Innovations offers the product for sale. While this warranty does not confer any legal rights other than those set out above, you may have additional statutory rights which will vary under the laws of various countries, states, provinces, and other governmental entities in which Blue Line operates. This warranty is subject to all statutory rights you may have in the country of purchase.

MANUFACTURED IN CANADA

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E-Mail: pcm@bluelineinnovations.com
Toll Free: 1-866-607-2583

9 SPECIFICATIONS

Power	
Display Unit	9.0V AC/DC Adapter
Sensor Unit	1 Lithium 3.6V AA battery

Wireless Communication	
Frequency	433 Mhz
Range	30 meters line of sight (decreases with obstacles such as walls) Updates from Sensor to Display Unit approximately every 30 seconds

Operating Temperature	
Display Unit	10°C to 45°C (50°F to 113°F)
Sensor Unit	-40°C to 60°C (-40°F to 140°F)

Accuracy	±10%
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