

# Quick-Start Guide

## Energy Display – INSTEON® In-Home Display

Model: 2448A2



### Introduction

Energy Display reads power consumption information from devices plugged into INSTEON devices and presents current power use, average energy use per month, and average cost per month based on your monthly billing rate.

NOTE: Energy Display requires an INSTEON meter device (e.g., iMeter™ Solo).

### Installation

NOTE: Energy Display uses 2 AAA batteries and will provide approximately one year of use per pair.

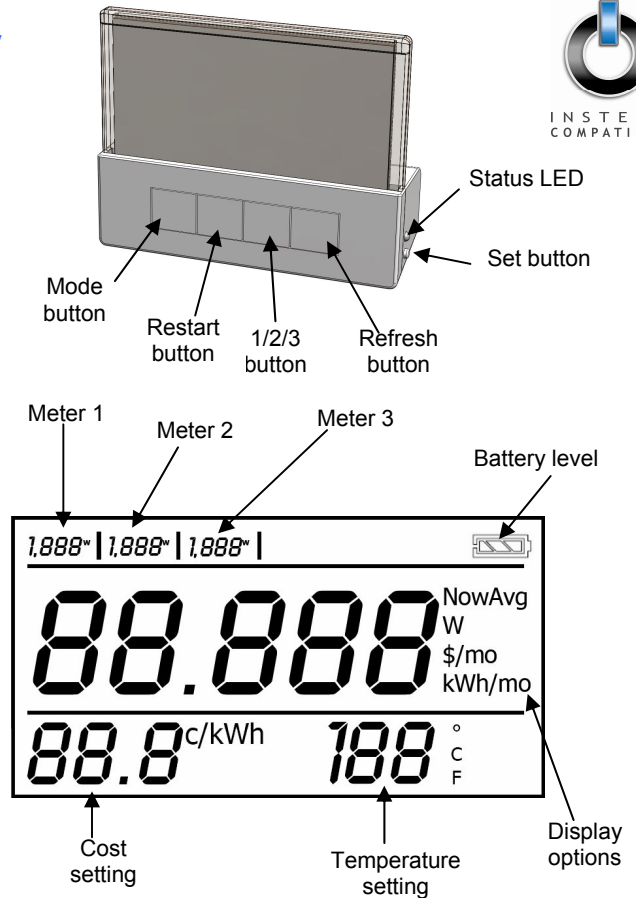
- 1) Energy Display requires at least one Access Point (#2443) or dual-band INSTEON device for communication. For the best INSTEON network performance, be sure you have properly installed at least two dual-band INSTEON devices. Search for dual-band INSTEON devices at: [www.smarthome.com/dualband](http://www.smarthome.com/dualband)
- 2) Remove the battery compartment from the rear of Energy Display
- 3) Observe the polarity markings, install two AAA batteries, and then replace the battery compartment door

*The Energy Display screen should turn on and all LCD segments should turn on*

*After a few seconds, Energy Display should beep and its screen should be in Display Mode*

*Energy Display should attempt to gather data. While gathering data, Energy Display should show a series of hyphens along the top of the screen.*

Energy Display is now ready to use. See *Linking Energy Display to an INSTEON Device* to begin receiving energy information about your appliances.



### Using Energy Display

Data is retrieved when:

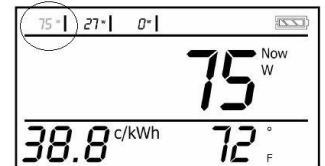
- Energy Display is first Linked to a meter device
- Refresh button is tapped while Energy Display is in Display Mode
- Any button is tapped in Standby Mode

Energy Display will exhibit power-related information for one minute after the last button press, and then enter Standby Mode to prevent unnecessary traffic on the network and save battery energy. When in Standby Mode, no items will display on the screen except the temperature settings. Tap any button to exit Standby Mode. When Energy Display exits Standby Mode, it will return to the previous Display Mode.

### Display Mode

NOTE: Circled text indicates blinking text on the Energy Display screen.

Button	Action
Mode	<ul style="list-style-type: none"> <li>• Tap to cycle between display setting options                             <ul style="list-style-type: none"> <li>• Instantaneous Watts used (Now   W)</li> <li>• Average cost per month (Avg   \$/mo)</li> <li>• Average energy used per month (Avg   kWh/mo)</li> </ul> </li> <li>• Press &amp; hold for 3 seconds to enter Setup Mode</li> </ul>
Up	N/A
1/2/3	<ul style="list-style-type: none"> <li>• Tap to cycle between each meter device to be displayed (Meter 1, 2, or 3)</li> <li>• Press &amp; hold for 10 seconds to reset the energy value for the currently displayed meter device (for calculating average energy used and cost/month)</li> </ul>
Refresh	Tap to read current information for all meter devices
Set button	Press & hold for 3 seconds to Link a meter device to the current meter position on Energy Display (Meter 1, 2, or 3). See <i>Linking Energy Display to an INSTEON Meter Device</i> .



### Linking Energy Display to an INSTEON Meter Device

- 1) Make sure the meter device is properly installed with the appliance you wish to monitor
- 2) Tap the 1/2/3 button until the desired meter position is blinking (Meter 1, 2, or 3)
- 3) Set Energy Display to Linking Mode\* by pressing & holding the Refresh button until it beeps (3 seconds)  
*The Energy Display Status LED should begin blinking green*
- 4) On the meter device, press & hold the Set button for 3 seconds  
*Energy Display should beep and its Status LED should stop blinking and turn off*
- 5) Confirm that Linking was successful by checking the Energy Display screen  
*The Energy Display screen should display information for the meter device you just Linked to*

### Setup Modes

NOTE: Circled text indicates blinking text on the Energy Display screen.  
To enter Setup Mode, press & hold the Mode button for 3 seconds.  
To exit Setup Mode:

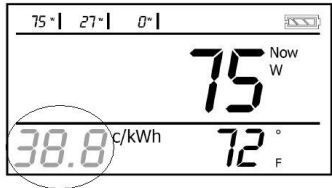
- Tap the Refresh button to accept the current value
- Wait for Energy Display to time out and automatically accept the current value (~1 minute)
- Tap the Mode button to accept the current value and move to the next Setup Mode

Once Energy Display exits a setup mode, it will return the screen to Display Mode.

### Cost Mode

Range is 0.1 to 999 cents/kWhr (\$9.99/kWhr). Once the counter reaches 99.9¢, it will reset to 100¢. The default is 10.0¢.

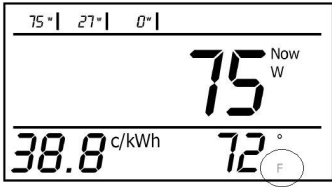
Button	Action
Mode	Tap to cycle to the next setting mode (Temperature Format)
Up	Tap to increase the cost by 0.1¢ until cost exceeds 99.9¢. If cost is 100¢ or greater, cost increases by 1¢.
	Press & hold to continuously increase cost
Down	Tap to decrease the cost by 0.1¢ if cost is between 0.1¢ and 99.9¢. If cost is 100¢ or greater, decreases by 1¢.
	Press & hold to continuously decrease cost
OK	Tap to accept current Cost setting and exit Setup Mode
Set button	N/A



### Temperature Format Mode

Range is 0 to 199 degrees. The default is Fahrenheit.

Button	Action
Mode	Tap to cycle to the next setting mode (Display Mode)
Up	Tap to toggle the temperature display between Celsius and Fahrenheit
Down	
OK	Tap to accept current Temperature Format setting and exit Setup Mode
Set button	N/A



### Calibrating the Temperature

- 1) Set Energy Display to Temperature Calibration Mode\*\* by pressing & holding the Mode and Refresh buttons simultaneously until the temperature setting begins blinking (3 seconds)
- 2) Use the Restart and 1/2/3 buttons to set the local temperature (based on a thermostat or other device)
  - Tapping the Restart button will increase the temperature by one degree
  - Tapping the 1/2/3 button will decrease the temperature by one degree
- 3) When you reach the correct temperature, tap the Refresh button to accept the local temperature  
*The temperature setting should no longer be blinking*

### Complete Instructions, Troubleshooting, and Tech Support

Owner's Manual: [www.smarthome.com/manuals/2448A2.pdf](http://www.smarthome.com/manuals/2448A2.pdf)

Call: INSTEON Gold Support Line at 800-762-7845

\*Setup Modes will automatically time out after 4 minutes.

\*\*Temperature Calibration Mode will automatically time out after 1 minute.

### FCC & Industry Canada Compliance Statement

This device complies with FCC Rules Part 15. Operation is subject to two conditions:

(1) This device may not cause harmful interference, and  
(2) This device must accept any interference that may be received or that may cause undesired operation. The digital circuitry of this device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio and television reception. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause such interference, which can be verified by turning the device off and on, the user is encouraged to eliminate the interference by one or more of the following measures:

- Re-orient or re-locate the receiving antenna of the device experiencing the interference.
- Increase the distance between this device and the receiver.
- Connect the device to an AC outlet on a circuit different from the one that supplies power to the receiver.
- Consult the dealer or an experienced radio/TV technician.

**WARNING!** Changes or modifications to this device not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of that device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.