iGateway™

INSTEON® Web-Based Internet Gateway

Model : 2423A4

INSTEON COMPATIBLE

SMARTHOME™

INSTEON

iGateway Owner's Manual

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ABOUT iGATEWAY

With iGateway, you will able to access the INSTEON portal, Smarthome Connect. Register iGateway and your other INSTEON devices on Smarthome Connect and you will be able to control your INSTEON system from any computer with Internet access.

Pass-through outlet

Set button

Status LED

Ethernet jack LED

Ethernet Status LED

Ethernet jack
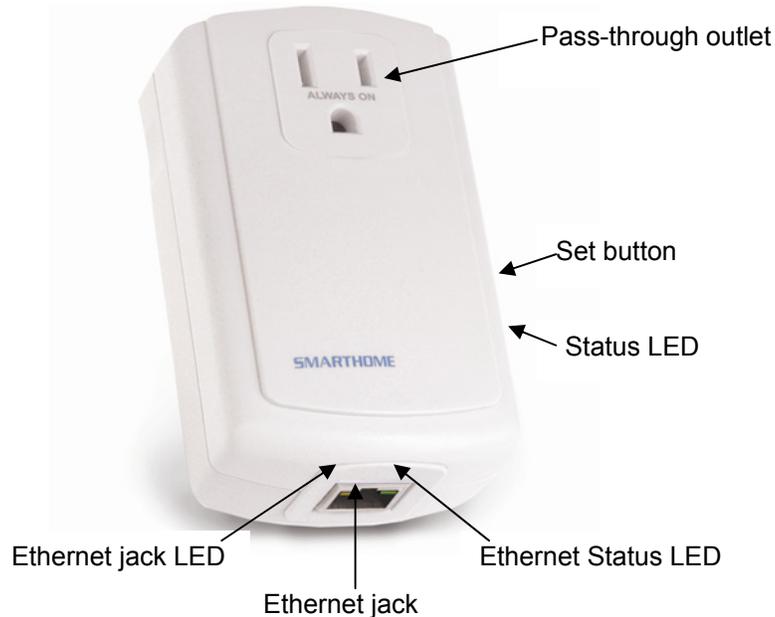
Key iGateway Features

- Installs and Links to controlled INSTEON devices in minutes
- Indicates INSTEON setup mode activity and operational states with a Status LED
- Stores setup state in memory so settings aren't lost during power outages
- Two-year warranty

What is Included with iGateway

- iGateway – INSTEON Web-Based Internet Gateway
- Ethernet cable
- Quick-Start Guide

WHAT IS INSTEON?

Since its inception in 2005, INSTEON has become a best-selling home-control networking technology, offering more reliability and flexibility than any other home management system on the market. INSTEON systems are simple, reliable, and affordable. Simple, because each device takes mere minutes to install. Reliable, because every INSTEON device works as a network repeater, ensuring your commands will not be lost. Affordable, because INSTEON can be integrated into any number of devices easily and at a very low cost. An INSTEON home grows in value with each added INSTEON device, making life more convenient, safe, and fun.

How Does INSTEON Work?

What makes INSTEON the most reliable home automation network is its dual-mesh network. INSTEON devices use both radio frequency (RF) signals and the home's existing wiring to talk to each other. In an INSTEON network, every INSTEON device also acts as a repeater, receiving and sending every message to all other devices in the network. So by integrating more INSTEON devices you will strengthen the network and ensure no commands will be lost.

No central controller or networking setup is required with an INSTEON network. Simply install your devices and then use a series of button presses or taps to Link your devices together. Throughout this Owner's Manual, you may see the terms "Controller" or "Responder". These generic INSTEON terms refer to the components of an INSTEON scene, and are used on a scene-by-scene basis.

- **Controller** – sends INSTEON commands to other devices

- **Responder** – reacts to commands sent out by another INSTEON device

An INSTEON device may act as a Controller, Responder, or sometimes both.

INSTEON networks are also extremely secure. Each INSTEON device is assigned a unique INSTEON ID, so unless neighbors or would-be hackers have access to your particular device's INSTEON ID, they won't be able to control your home, even if they are using similar products.

INSTALLATION

Preparing to Install iGateway

CAUTION

Read and understand these instructions before installing and retain them for future reference.

iGateway is intended for installation in accordance with the National Electric Code and local regulations in the United States or the Canadian Electrical Code and local regulations in Canada. Use indoors only. iGateway is not designed nor approved for use on power lines other than 120V 60Hz, single phase. Attempting to use iGateway on non-approved power lines may have hazardous consequences.

Prior to installing iGateway, please review the entire installation procedure and take the following precautions:

- Use indoors or in a properly insulated and weatherproof electrical box only

- Don't plug iGateway into an outlet controlled by a switch because if the switch is inadvertently turned off, iGateway won't have power

- Don't plug iGateway into a filtered power strip or AC filter

- Don't stack INSTEON home automation devices together by plugging them into each other. Stacked devices may overheat and stop functioning. Also avoid using the pass-through outlets on INSTEON devices for other heat-generating power supplies.

- Don't use iGateway to control devices that preserve, maintain, or contribute to human or animal safety or life support

If you have any questions, please call:

INSTEON Gold Support Line

800-762-7845

Installing iGateway

1) Be sure to record the INSTEON ID of iGateway (located on the label in the XX.XX.XX format)

2) Plug one end of the included cable into your Internet router and the other end into the jack at the bottom of iGateway

3) Plug iGateway into an unswitched outlet

    The iGateway Status LED will turn on solid blue

    The Ethernet Status LED will turn on solid green and the Ethernet jack will blink yellow

4) OPTIONAL: You can use the pass-through outlet on the *front* of iGateway as you would an ordinary uncontrolled wall outlet. However, due to heat build-up and the potential for causing damage to iGateway, it is strongly recommended that you avoid using the pass-through outlet for stacking INSTEON devices. Also avoid using this pass-through outlet for other heat-generating power supplies.

LED Activity

LED	LED Activity	Device Status
Status LED (blue)	Solid blue	Powered on
	Blinking blue	Setup Mode
Ethernet jack LED (yellow)	Blinking yellow (once per 3 seconds)	Connected to the server
Ethernet Status LED (green)	Solid green	Connected to the router
	Blinking green	Receiving commands via the Internet connection

Registering iGateway on Smarthome Connect

1) Go to https://connect.smarthome.com to log onto Smarthome Connect. If you do not have a User Name and password, click "Create New Account" and follow the website prompt to create them.

2) On Smarthome Connect, go to Settings → iGateways and click "Add New iGateway"

3) Enter the appropriate information and click "Add"

    Smarthome Connect will register iGateway (this may take up to one minute). Once registered, the screen will display "iGateway has been successfully added".

4) Click the Devices tab and follow the instructions on Smarthome Connect to add Responders to iGateway

    HINT: It may be easier to add additional INSTEON devices to iGateway when they are right next to each other and then remove after registration and place the devices into the desired locations. Each device will remember settings even while unplugged.

ADVANCED FEATURES

Restoring Power to iGateway

iGateway stores all of its settings, such as Links to other INSTEON devices, with non-volatile memory. Because settings are saved in this non-volatile memory, they will not be lost in the event of a power failure.

Resetting iGateway

There are two separate reset procedures to reset iGateway: Database Reset and Registration Reset. Each reset procedure clears different information from the device and can be performed independently. However, to reset iGateway to the full factory default settings, both reset procedures must be carried out, starting with the database reset.

- **Database Reset** – erases the iGateway memory, clearing the device of all Links to other INSTEON devices

- **Registration Reset** – deletes the registration ID, removing Smarthome Connect information from iGateway

Database Reset

A database reset is recommended if you wish to eliminate all existing scenes or Links to controlled devices from iGateway. Database reset is also advised if you are unable to manually Unlink a Responder from iGateway (i.e., the Responder is lost or no longer in operation).

1) If there are any devices Linked to iGateway through Smarthome Connect, remove these devices. See Smarthome Connect to delete those devices.

2) Unplug iGateway for about 10 seconds

3) While holding down the Set button on iGateway, plug it back in, making sure not to let go of the Set button

   The blue iGateway Status LED will turn on solid

4) Continue to hold down the Set button for 3 seconds and then release

   After a few seconds, the blue iGateway Status LED will flash once and then turn on solid

Performing a Registration Reset

Once iGateway is registered on Smarthome Connect, iGateway creates a registration ID in its memory to enable communication with the portal. However, this registration ID must be manually deleted from the iGateway memory. (Deleting iGateway from Smarthome Connect does not remove the registration ID). A registration reset is recommended if iGateway has already been deleted from Smarthome Connect and you wish to re-register it on the portal.

1) Unplug iGateway for about 10 seconds and then plug it back in

2) Press & hold the Set button on iGateway for 3 seconds

3) Tap the Set button on iGateway five times quickly

4) Wait 10 seconds and unplug iGateway

5) Wait 10 seconds and then plug iGateway back in

ABOUT INSTEON

Using Dual-Band INSTEON Devices to Upgrade Your Network

What are phases?

The majority of single-family homes in North America have two phases (or "legs") of 110 Volts coming into their electricity panels. From the panel, they are distributed throughout the home, providing power to outlets and wall switches. These phases come together in some parts of the home to provide 220 Volts of power to large appliances, such as an electric oven or pool pump.

Why do I need to bridge these phases?

Single-band power line devices send commands via the home's electricity, but only on a single phase. If the command is intended for a device on the opposite phase, there is a good chance the command will go unnoticed. Installing dual-band INSTEON devices, such as Access Points (#2443), on each phase will allow for devices to communicate between the two phases via RF.

Dual-band INSTEON devices embody the full potential of a true INSTEON mesh network. Taking the power line band signal and working in conjunction with the RF band signal, its dual-band function plays out in two ways:

- Phase bridger – a receiver of commands, reacting to and translating signals sent from one power phase to the opposite via RF

- Signal repeater – a participant in an INSTEON network, repeating commands intended for other devices whether those commands are generated from RF or power line-only devices. To ensure reliability, every INSTEON device confirms that it has received a command. If a Controller does not receive this confirmation, it will automatically retransmit the command up to five times.

While using at least one dual-band device is required when using an RF-only device, at least two dual-band devices are recommended to ensure reliable communication across two-phase home wiring systems. For larger applications, it is recommended to install at least one dual-band device for every 750 – 1,000 square feet.

Search for dual-band INSTEON devices at: www.smarthome.com/dualband

Important Note about INSTEON Networks; Split Single-Phase vs. 3-Phase Installation

For the best INSTEON network performance, be sure you have properly installed at least two dual-band INSTEON devices. INSTEON has only been officially tested in a split single-phase residential environment but has been known to work in many 3-phase systems, where three dual-band devices are used (one on each phase). However, due to the potential complexity of its troubleshooting, the INSTEON Gold Support Line is unable to support INSTEON in 3-phase environments.

Further Enhancing Reliability

As signals travel via the power line or RF throughout the home, they naturally become weaker the farther they travel. The best way to overcome weakened signals is to increase the coverage of the mesh network by introducing more INSTEON devices.

It is possible that some audio-video devices, computers, power strips, or other electrical equipment may attenuate INSTEON signals on the power line. You can temporarily unplug suspected devices to test whether the INSTEON signal improves. If it does, then you can plug in filters that will permanently fix the problem.

ADDITIONAL RESOURCES

Find home automation solutions, helpful tips, interactive demos, videos, user forums, and more at the Smarthome Learning Center: www.smarthome.com/learningcenter.html

TROUBLESHOOTING

Problem	Possible Cause	Solution
The Status LED on iGateway is not turning on at all.	iGateway may not be getting power.	Make sure iGateway is not plugged into a switched outlet that is turned off.
iGateway is not recognizing a Responder.	The Responder may not be getting power.	Make sure the Responder's built-in switch is in the on position or that it is not plugged into a switched outlet that is turned off.
iGateway is locked up.	A surge or excessive noise on the power line may have glitched it.	Unplug iGateway for 10 seconds and then reinstall.
		If the above doesn't work, perform a factory reset. See *Resetting iGateway.*
Sometimes the Responders take a long time to respond to commands sent from iGateway.	When iGateway has been idle for an hour or more, it will renegotiate a secure socket connection to the Internet.	When iGateway is used after it has been idle for an hour or more, the initial command may take 15-20 seconds to execute and show a response on the computer. After the initial command, iGateway will return to the normal operation time of 6-10 seconds to execute a command and show the response in Smarthome Connect.

If you have tried these solutions, reviewed this Owner's Manual, and still cannot resolve an issue you are having with iGateway, please call:

INSTEON Gold Support Line
800-762-7845

SPECIFICATIONS, CERTIFICATION, AND WARRANTY

Specifications

View specifications for iGateway at: www.smarthome.com/2423A4.html

Certification

iGateway has been thoroughly tested by ITS ETL SEMKO, a nationally recognized independent third-party testing laboratory. The North American ETL Listed mark signifies that the device has been tested to and has met the requirements of a widely recognized consensus of U.S. and Canadian device safety standards, that the manufacturing site has been audited, and that the manufacturer has agreed to a program of quarterly factory follow-up inspections to verify continued conformance.

Limited Warranty

Seller warrants to the original consumer of this product that, for a period of two years from the date of purchase, this product will be free from defects in material and workmanship and will perform in substantial conformity to the description of the product in this Owner's Manual. This warranty shall not apply to defects or errors caused by misuse or neglect. If the product is found to be defective in material or workmanship, or if the product does not perform as warranted above during the warranty period, Seller will either repair it, replace it, or refund the purchase price, at its option, upon receipt of the product at the address below, postage prepaid, with proof of the date of purchase and an explanation of the defect or error. The repair, replacement, or refund that is provided for above shall be the full extent of the Seller's liability with respect to this product. For repair or replacement during the warranty period, call the INSTEON Gold Support Line at 800-762-7845 with the Model # and Revision # of the device to receive an RMA# and send the product, along with all other required materials to:

Smarthome, Inc.
ATTN: Receiving Dept.
16542 Millikan Ave.
Irvine, CA 92606-5027

Limitations

The above warranty is in lieu of and Seller disclaims all other warranties, whether oral or written, express or implied, including any warranty or merchantability or fitness for a particular purpose. Any implied warranty, including any warranty of merchantability or fitness for a particular purpose, which may not be disclaimed or supplanted as provided above shall be limited to the two-year of the express warranty above. No other representation or claim of any nature by any person shall be binding upon Seller or modify the terms of the above warranty and disclaimer.

Home automation devices have the risk of failure to operate, incorrect operation, or electrical or mechanical tampering. For optimal use, manually verify the device state. Any home automation device should be viewed as a convenience, but not as a sole method for controlling your home.

In no event shall Seller be liable for special, incidental, consequential, or other damages resulting from possession or use of this device, including without limitation damage to property and, to the extent permitted by law, personal injury, even if Seller knew or should have known of the possibility of such damages. Some states do not allow limitations on how long an implied warranty lasts and/or the exclusion or limitation of damages, in which case the above limitations and/or exclusions may not apply to you. You may also have other legal rights that may vary from state to state.

INSTEON Technology Patent

U.S Patent No. 7,345,998, International patents pending

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