INSTEON®

INSTEON Hub
Owner's Manual

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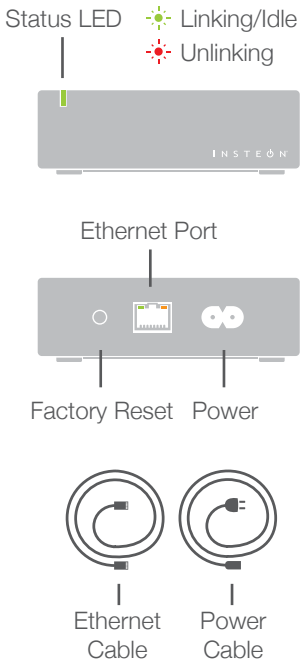
Getting Started

Everything you need to quickly get up and running.

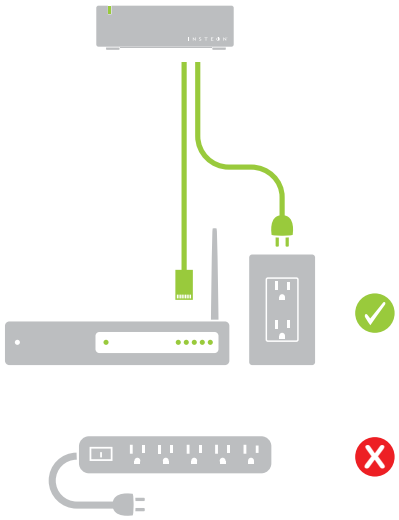
INSTEON Hub

Device Overview



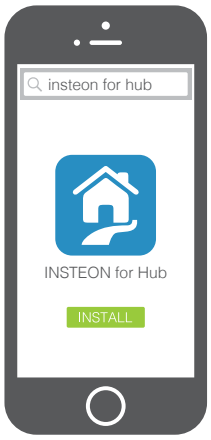
Installation

Connect your Hub to the internet and a power outlet using the cables provided. Avoid switched outlets or filtered power strips.



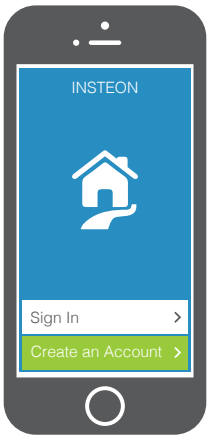
Download the App

From your mobile device, download and install **INSTEON for Hub** from your device's app store.



Create an Account

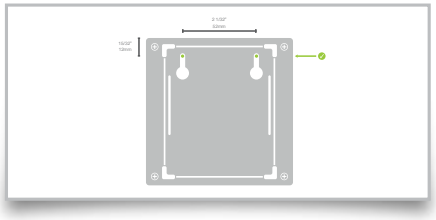
Launch the App and follow the on-screen instructions to create an account and setup the INSTEON Hub.



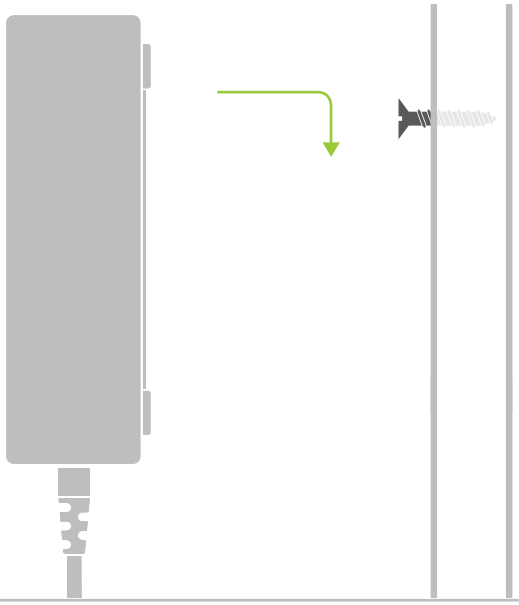
✓ You're done setting up your INSTEON Hub; now start adding devices.

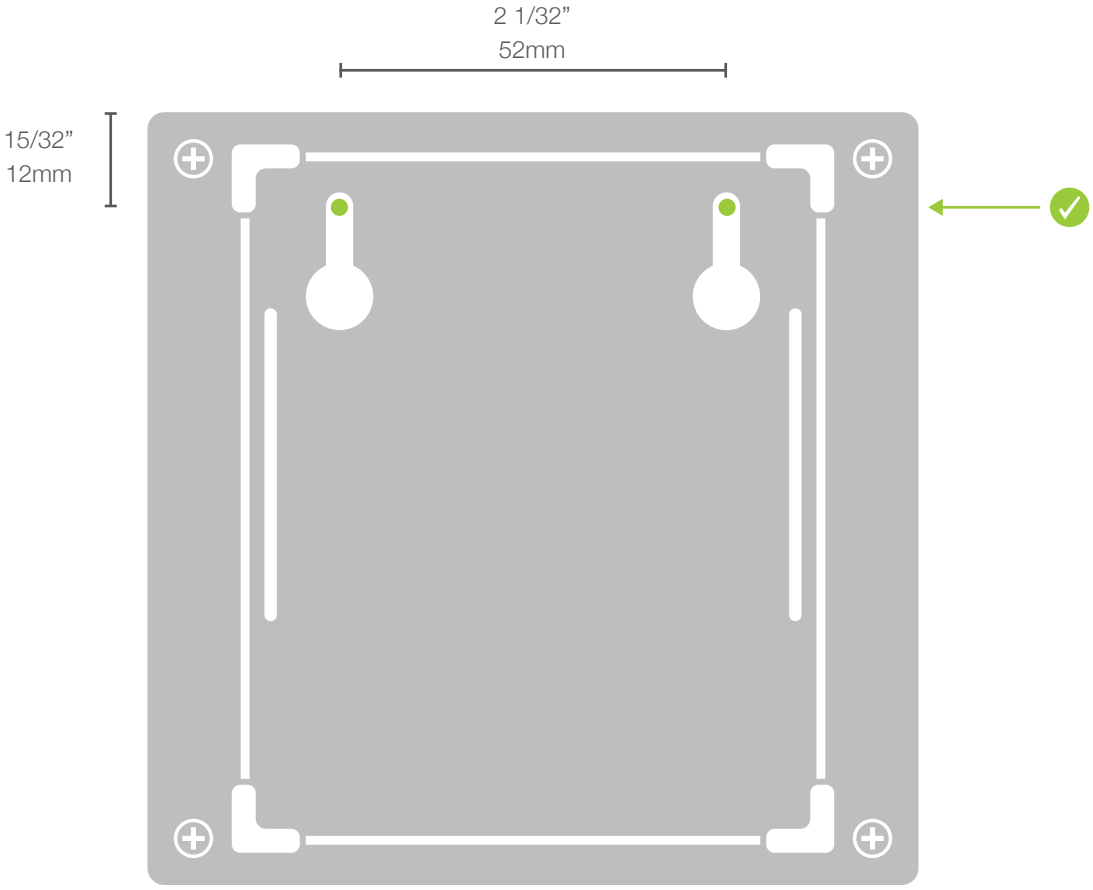
Optional Wall Mounting

1. Print out this page and use it as a template to drill mounting holes.



2. Hang the Hub on two screws by aligning the hanger slots and sliding down.





INSTEON App

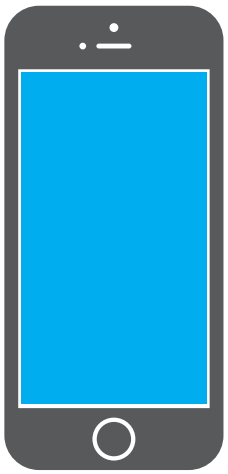
Use the INSTEON App to configure and control your INSTEON Hub. Everything from adding a device to controlling your thermostat is handled through your mobile device.

INSTEON App on iOS

The INSTEON app on iOS uses a right-hand drawer to navigate between Check-In, Favorites, Rooms, Scenes, Thermostats and Settings. You can also add and edit devices, rooms and scenes from the drawer.

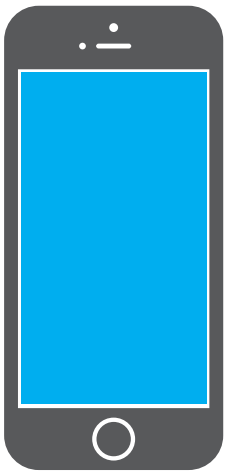
Check-In

An at-a-glance overview of all of your INSTEON sensors. Sensors are white when closed and red when triggered.



Favorites

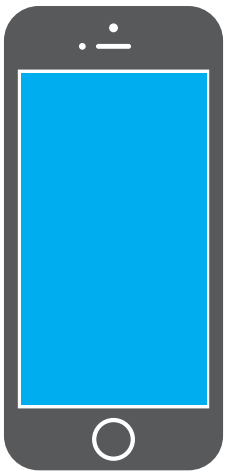
A customizable screen where you can place your most used devices, scenes and sensors.



INSTEON App on iOS

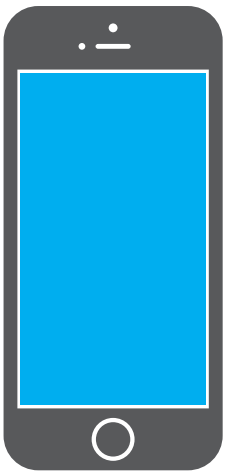
Rooms

Let's you group devices into rooms for easier navigation.



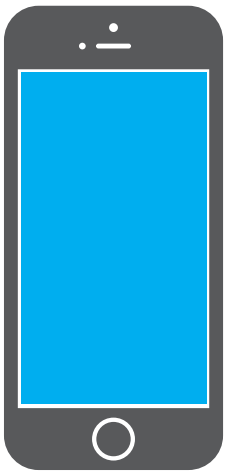
Scenes

Automatically displays all of the scenes that have been created.



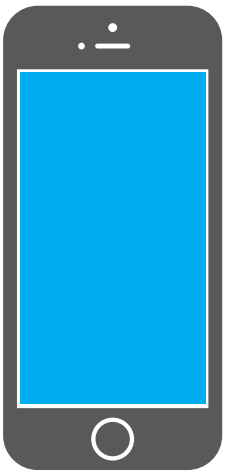
Thermostat

Displays your INSTEON Thermostat. For homes with multiple thermostats, you can configure the default from settings.



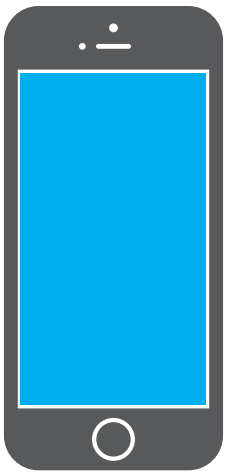
Settings

Your one-stop-shop for Hub and INSTEON account settings and configuration. You can also find in-app help here.



INSTEON App on iOS

Controlling a Device

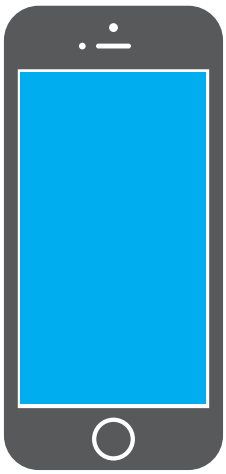


Tap the arrows to adjust in 10% increments

Adjust the brightness in 1% increments

Turn a device on or off, regardless of brightness

Monitoring a Sensor



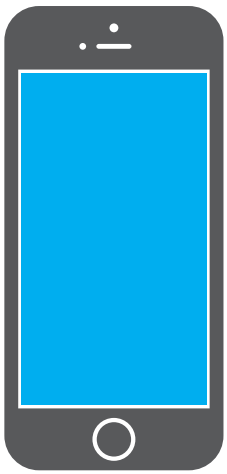
Indicates that your sensor is OK

Indicates that your sensor has been triggered

Indicates that the Hub has lost contact with your sensor

INSTEON App on iOS

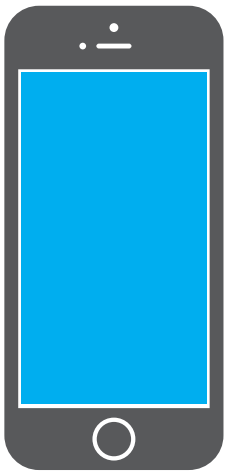
Controlling a Scene



Tap to turn the scene on or off

Tap to edit the scene

Controlling a Camera



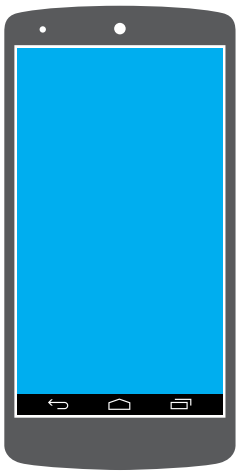
Use the arrows to pan and tilt your camera

INSTEON App on Android

The INSTEON app on Android uses tabs to navigate between Check-In, Favorites, Rooms, Scenes, Thermostats and Settings. You can add and edit devices, rooms and scenes from the settings button.

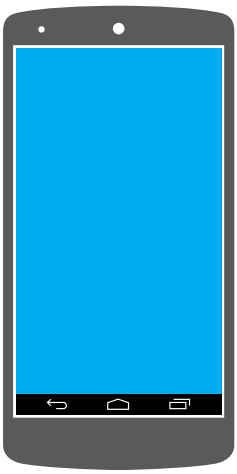
Check-In

An at-a-glance overview of all of your INSTEON sensors. Sensors are white when closed and red when triggered.



Favorites

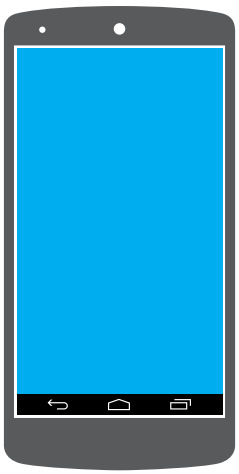
A customizable screen where you can place your most used devices, scenes and sensors.



INSTEON App on Android

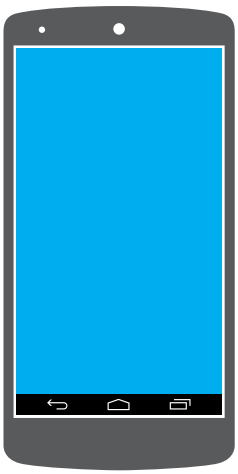
Rooms

Let's you group devices into rooms for easier navigation.



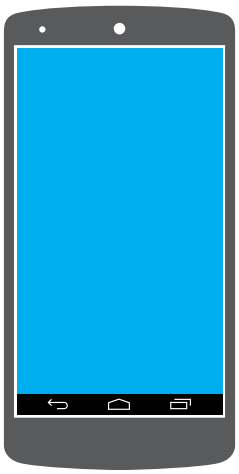
Scenes

Automatically displays all of the scenes that have been created.



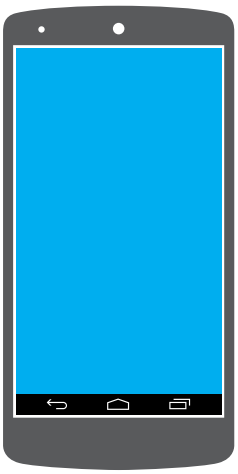
Thermostat

Displays your INSTEON Thermostat. For homes with multiple thermostats, you can configure the default from settings.



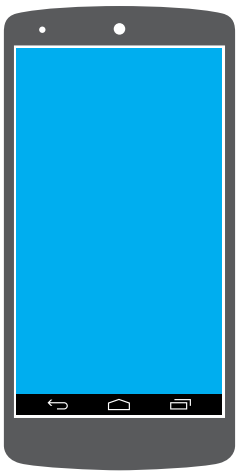
Settings

Your one-stop-shop for Hub and INSTEON account settings and configuration. You can also find in-app help here.



INSTEON App INSTEON App on Android

Controlling a Device

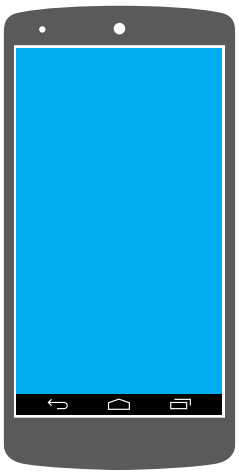


Tap the arrows to adjust in 10% increments

Adjust the brightness in 1% increments

Turn a device on or off, regardless of brightness

Monitoring a Sensor



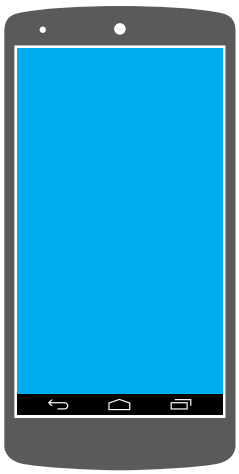
Indicates that your sensor is OK

Indicates that your sensor has been triggered

Indicates that the Hub has lost contact with your sensor

INSTEON App on Android

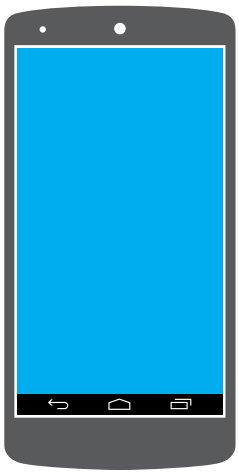
Controlling a Scene



Tap to turn the scene on or off

Tap to edit the scene

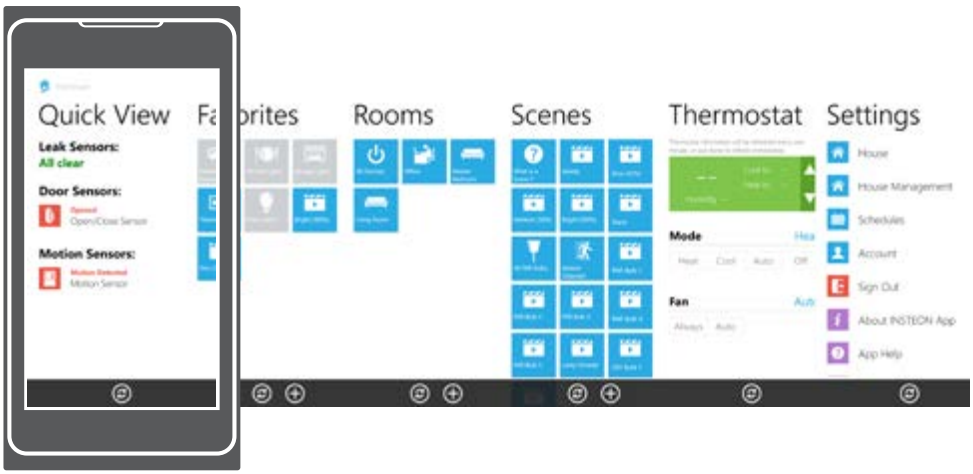
Controlling a Camera



Use the arrows to pan and tilt your camera

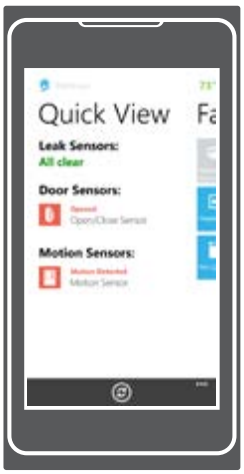
INSTEON App on Windows

The INSTEON app on Windows Phone uses a six-screen carousel to switch between Quick View, Favorites, Rooms, Scenes, Thermostats and Settings.



Quick View

An at-a-glance overview of all of your INSTEON sensors. Sensors are green when closed and red when triggered.



Favorites

A customizable screen where you can place your most used devices, scenes and sensors.

INSTEON App on Windows

Rooms

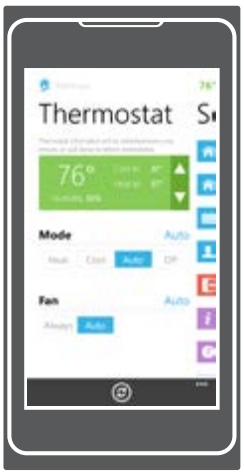
Let's you group devices into rooms. Also the location for **All Devices** which displays every device added to your house.

Scenes

Automatically displays all of the scenes that have been created.

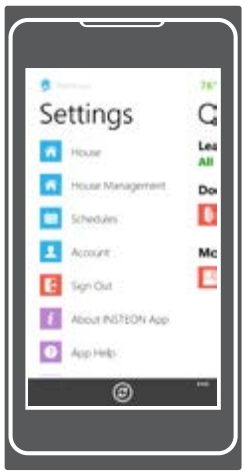
Thermostats

Displays your INSTEON Thermostat. For homes with multiple thermostats, you can configure the default from settings.



Settings

Your one-stop-shop for Hub and INSTEON account settings and configuration. You can also find in-app help here.



INSTEON App on Windows

Controlling a Device

Tap the arrows to adjust in 10% increments

Adjust the brightness in 1% increments

Turn a device on or off, regardless of brightness

Monitoring a Sensor

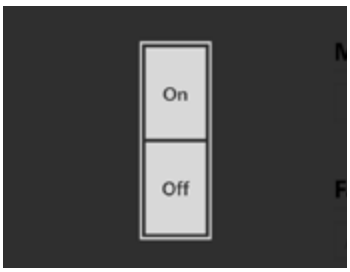
Indicates that your sensor is OK

Indicates that your sensor has been triggered

Indicates that the Hub has lost contact with your sensor

INSTEON App on Windows

Controlling a Scene



Tap to turn the scene on or off

Tap to edit the scene

Controlling a Camera

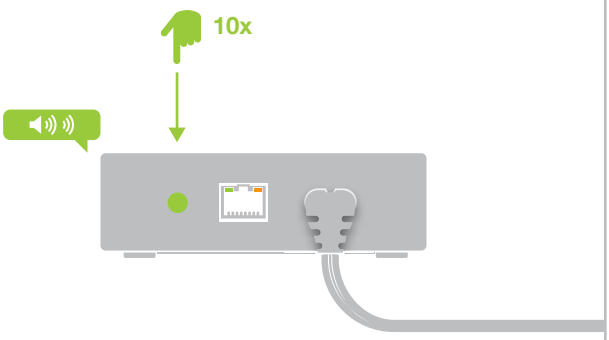
Use the arrows to pan and tilt your camera

Hardware Reset

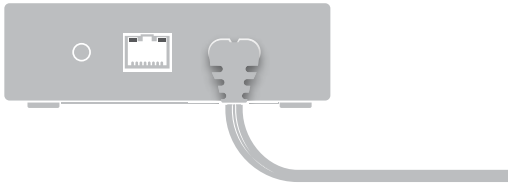
A network reset will restore the default network configuration to the Hub. A factory reset will erase all links stored in the device's database as well as any customized properties.

Network Reset

1 Slowly tap the set button ten times. The Hub will double-beep.



2 The ethernet port status LEDs will briefly turn off and then return to normal.

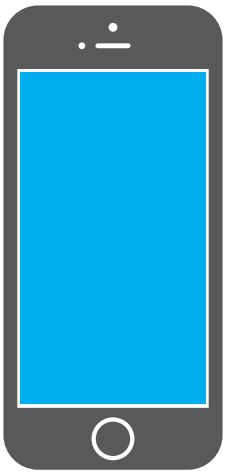


✓ Your Hub has been restored to default network settings.

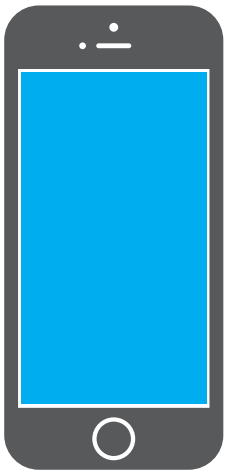
Factory Reset

1. Prior to performing a factory reset, you must delete your user account from INSTEON Connect.

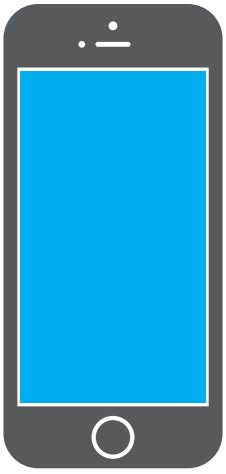
   Navigate to settings



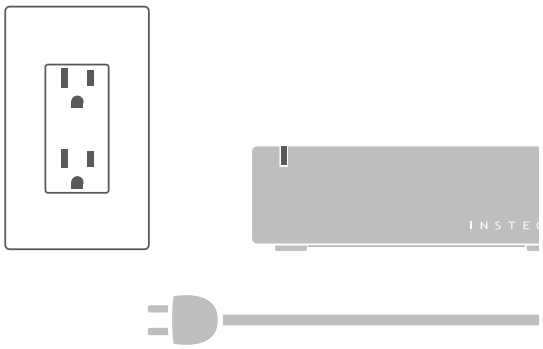
2. From Settings, tap Account



3. Tap Delete Account. **This cannot be undone and will erase your home from INSTEON Connect.**

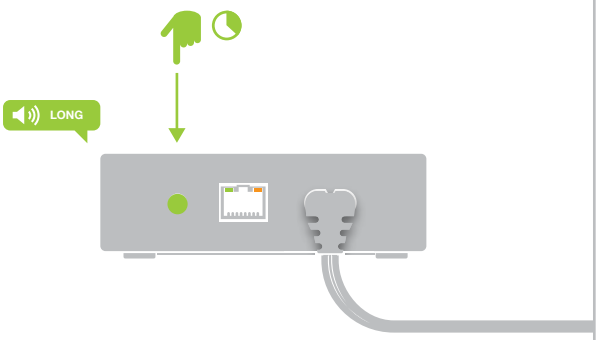


4. Disconnect power from the Hub

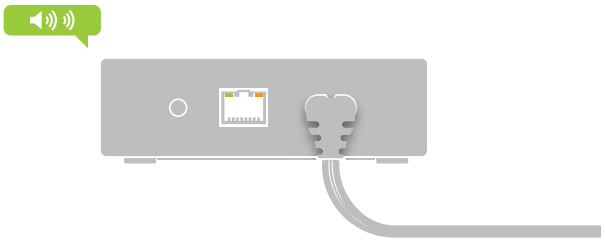


Factory Reset

5 Press and hold the set button while reconnecting power. The Hub will emit a long beep.



6 When the long beep ends, release the set button. The Hub will double-beep.



✓ Your Hub has been restored to factory settings.

Appendix

Everything else you might need to know about your INSTEON product.

INSTEON Glossary

Controller	The INSTEON transmitter
Responder	The INSTEON receiver
Blinking	LED turning on and off repeatedly
Dual-Band	An INSTEON device that can send and receive both INSTEON powerline signals and INSTEON radio frequency signals
Ramp Rate	The speed at which the load fades on or off
On-Level	The preset brightness level a device will return to when turned on
INSTEON	A dual-band, mesh networking technology developed by Smarthome/INSTEON. The world's most reliable, expandable and simple home automation and control technology.
Link	A one way association between a controller and responder
Linking	A method for associating INSTEON controller buttons with groups of INSTEON responders such that the responders instantly return to a memorized state when the button is pushed. Links can be made manually with the set button or using software.
Unlinking	The process by which an INSTEON device can remove stored links. Just as with linking, unlinking is a one-way process and should be performed in both directions for devices that are both controllers and responders of each other, as in a 3-way switch scenario.
Multi-Linking / Unlinking	A special mode that allows more than one link to be either created or removed simultaneously, without laborious set button presses. When in linking or unlinking mode, an INSTEON device will continue to link to other devices until the set button is tapped or four minutes have elapsed, whichever occurs first.
Factory Reset	A process that erases all stored links and reconfigures the device to factory defaults.
Load	The device that you are controlling (e.g. a light bulb, ceiling fan, etc.)
On/Off	A device that can control its connected load to turn on and off but cannot dim. Usually a relay-based device.
Retry	A 2nd (or subsequent) attempt by a controller to send an INSTEON signal, usually after an acknowledge is not received from the responder in the expected time-slot.
Scene	Multiple devices respond to memorized states. For example, a dinner time scene turns on the dining table light, dims the kitchen lights to 10%, backyard lights turn off and the thermostat adjusts to 72º.
Set Button	A button on an INSTEON device that is used for setting or changing its properties
Simulcast	A method for increasing the reliability of message delivery in a network. When a node in a network sends a message, every other node that hears the message retransmits it at precisely the same time based on a global clock, provided that the message has not already been retransmitted some maximum number of times. Message propagation is more robust because each node adds its energy to the signal, much like voices in a choir. Simulcasting is much simpler than message routing because there are no routing tables to maintain and nodes can join the network without any installation procedure.
X10	A legacy powerline networking technology. Many INSTEON devices are backwards compatible with X10 devices by setting a house and unit code.

Specifications

General

Available Colors	White
Brand:	INSTEON
FCC ID	
Industry Canada	
Manufacturer Product No.:	2245-222 US 2245-422 France 2245-432 Germany 2245-442 UK 2245-522 Australia/New Zealand
Patent No.:	Protected under US and Foreign Patents (see www.insteon.com/patents)
UPC:	813922XXXXXX US 813922XXXXXX France 813922XXXXXX Germany 813922XXXXXX UK 813922XXXXXX Australia/New Zealand
Warranty:	2 years, limited

Operation

Audio Alert	Beeper, can be disabled through software
Local Control	No
Setup Memory	Non-volatile EEPROM
Status LED	Red/Green LED

INSTEON Features

INSTEON Device Category	0x03
INSTEON Device Subcategory	0x33 North America 0x34 United Kingdom 0x35 Europe 0x36 Australia/New Zealand
INSTEON ID	1
INSTEON Links	417
INSTEON Messages Repeated	Yes
INSTEON Minimum Receive Level	10 mV
INSTEON Minimum Transmit Level	3.2 Vpp into 5 Ohms

INSTEON Powerline Device	Yes	
INSTEON Powerline Frequency	131.65 KHz	
INSTEON RF Device	Yes	
Maximum Controlled Scenes	400	
Maximum Scene Memberships	400	
Multi-Link Support	Yes	
Multi-Unlink Support	Yes	
RF Beacon	Yes	
Radio Frequency	915 MHz US 869.85 MHz Europe 869.85 MHz UK 921.00 MHz Australia/New Zealand	
Radio Frequency Range	150 feet	
Scene Commands Supported as Controller	On	Off
	Fast-On	Fast-Off
	Begin Brighten	Begin Dim
	End Brighten	End Dim
Scene Commands Supported as Responder	None	
Software Configurable	Yes	

Mechanical

Beep on Button Press	No
Beeper	Yes
Dimensions	1.5” H x 3.75” W x 3.75” D 38mm H x 95mm W x 95mm D
Enclosure Material	UV stabilized plastic
Mounting	Tabletop
Operating Environment	Indoors
Operating Humidity Range	0-90% relative humidity

Operating Temperature Range	32º to 104º F 0º to 40º C
Set Button	Yes
Storage Temperature Range	-4º to 158º F -20º to 70º C
Weight	5.2 oz

Electrical

Power Consumption	<0.75 Watts
Supply Voltage	120-277 Volts AC, 50/60 Hertz, single phase
Surge Resistance	Surges over 1000 volts
Power Connector	IEC C8
Certification	FCC ID Part 15B & 15C IC RSS-210 Issue 8 Intertek ETL CE C-Tick

Troubleshooting

Unable to create an INSTEON Connect account using your smartphone

There is most likely an internet connection issue between your mobile device and the INSTEON Hub

Try this:

- Make sure your internet connection is working by trying to browse a website on your mobile device
- Look for any typos in your email address that might prevent the account from creating; if you are missing the “@” symbol or “.com,” add them. INSTEON connect requires a full, valid email address.

INSTEON App is unable to find your INSTEON Hub

A number of factors can impact the initial setup but most of them are internet connection related.

Try this:

- Check all of the cables going into the Hub and make sure they are firmly seated. Trace the ethernet cable from the Hub back to the router and make sure it is connected properly there, too.
- Look for signs of life from the INSTEON Hub. Even if not properly connected, you should see a blue LED glow on the front of the Hub. If the LED doesn’t illuminate, check the power outlet. There should also be a blinking green and orange light on the Hub’s ethernet port. If both ethernet LEDs are off, try a different port on your router.
- For the initial connection, your mobile device must be connected to the WiFi network being generated by the same router to which the Hub is connected. While some routers create a “guest” network, you most often need to be connected to the main WiFi network being created by your router for the initial setup to work correctly.
- You can check to see if the INSTEON Hub was able to properly “phone home” to INSTEON Connect. This will at least tell you that the Hub is up and running, even if a network configuration problem is preventing you from connecting to the Hub. On a computer, visit connect.insteon.com/getinfo.asp. Any detected INSTEON Hubs will be displayed on this page.

Certifications and Warnings

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

This product is not designed or approved for use on powerlines other than 120-277VAC, 50Hz or 60Hz, single phase. Attempting to use this product on unapproved powerlines may have hazardous consequences.

- Use only indoors or in outdoor rated box
- This product may feel warm during operation. The amount of heat generated is within approved limits and poses no hazards. To minimize heat buildup, ensure the area surrounding this product is as clear of clutter as possible.
- Each INSTEON product is assigned a unique INSTEON I.D., which is printed on the product's label.
- Changes or modifications to the hardware not expressly approved by INSTEON may void the user's authority to operate the equipment in a licensed manor.
- For pluggable equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible.

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

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

DECLARATION OF CONFORMITY

Hereby, INSTEON declares that this device is in compliance with the essential requirements and other relevant provisions of the following Directives:

1) Electromagnetic Compatibility Directive 2004/108/EC
2) Hazardous Substance Directive 2005/95/EC

Technical data and copies of the original Declaration of Conformity are available and can be obtained from INSTEON; 16542 Millikan Ave, Irvine, CA, USA.

Product Warranty

Limited Warranty

Seller warrants to the original consumer purchaser 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 Seller's liability with respect to this product. For repair or replacement during the warranty period, call 866-243-8022 with the Model # and Revision # of the device to receive an RMA# and send the product, along with all other required materials to:

INSTEON
ATTN: Receiving
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.

Protected under U.S. and foreign patents (see www.insteon.com/patents)
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