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INSTEON Range Extender Owner's Manual

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Getting Started Everything you need to quickly get up and running.

INSTEON Range Extender

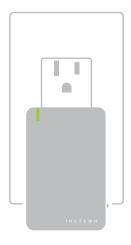
Device Overview

Buttons

See Bridging Electrical Legs for functionality

Installation

Plug Range Extender into an unswitched wall outlet.



Placement

When extending the reach of your INSTEON network, locate Range Extender near your INSTEON RF device.





Extending Your Network

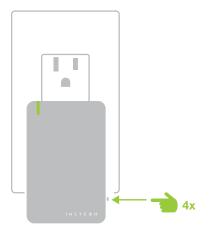
Use Range Extender to bridge the two legs of your home's electrical supply for increased reliability.

Bridging Electrical Legs

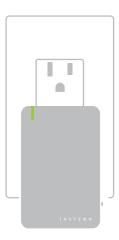
Split-Single Phase

Tap the set button four times.
Range Extender will begin to beep.





Range Extender A



Range Extender B

- Inspect the status LED of a second Range Extender or any Dual-Band INSTEON device.
 - **✓** * * *

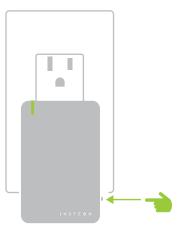
Phases are correctly bridged

Try a different outlet; phases are not correctly bridged



Range Extender B

Tap the set button on the first Range Extender.

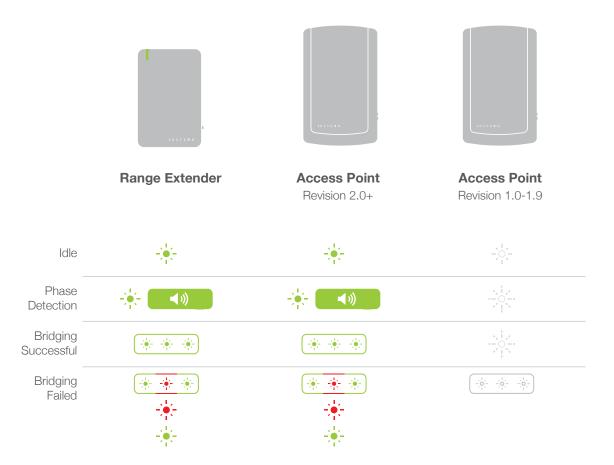


✓ Your electrical service legs are now bridged.

Functionality with INSTEON Access Points

Split-Single Phase

LED behavior with Range Extender may be inconsistent with LED behavior demonstrated by previous INSTEON Access Point products. Range Extender utilizes a dual-color, red and green LED. Later model Access Points also utilized a dual-color red and green LED. First generation Access Points only utilized a white LED that may blink or illuminate bright or dim. Use the table below to compare LED and beeper behavior for the four Range Extender and Access Point modes when deploying differing generations of devices.



Range Extender is not compatible with INSTEON SignaLinc products. An INSTEON network that utilizes SignaLinc devices should replace them with Range Extenders or other dual-band INSTEON devices. Simultaneous use of SignaLinc products and Range Extenders may cause unexpected operation of your INSTEON network.

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

Specifications

General

Available Colors	White
Brand:	INSTEON
FCC ID	SBP2992A
Industry Canada	5202A-2992A
Manufacturer Product No.:	2992-222
Patent No.:	Protected under US and Foreign Patents (see www.insteon.com/patents)
UPC:	813922013467
Warranty:	2 years, limited
Operation	
Audio Alert	Beeper, can be enabled/disabled through software
Setup Memory	Non-volatile EEPROM
Status LED	Red/Green LED
INSTEON Features	
INSTEON Messages Repeated	Yes
INSTEON Messages Repeated INSTEON Minimum Receive Level	Yes 10 mV
INSTEON Minimum Receive Level	10 mV
INSTEON Minimum Receive Level INSTEON Minimum Transmit Level	10 mV 3.2 Vpp into 5 Ohms
INSTEON Minimum Receive Level INSTEON Minimum Transmit Level INSTEON Powerline Device	10 mV 3.2 Vpp into 5 Ohms Yes
INSTEON Minimum Receive Level INSTEON Minimum Transmit Level INSTEON Powerline Device INSTEON Powerline Frequency	10 mV 3.2 Vpp into 5 Ohms Yes 131.65 KHz
INSTEON Minimum Receive Level INSTEON Minimum Transmit Level INSTEON Powerline Device INSTEON Powerline Frequency INSTEON RF Device	10 mV 3.2 Vpp into 5 Ohms Yes 131.65 KHz Yes
INSTEON Minimum Receive Level INSTEON Minimum Transmit Level INSTEON Powerline Device INSTEON Powerline Frequency INSTEON RF Device RF Beacon	10 mV 3.2 Vpp into 5 Ohms Yes 131.65 KHz Yes
INSTEON Minimum Receive Level INSTEON Minimum Transmit Level INSTEON Powerline Device INSTEON Powerline Frequency INSTEON RF Device RF Beacon Radio Frequency	10 mV 3.2 Vpp into 5 Ohms Yes 131.65 KHz Yes Yes 915.0 MHz
INSTEON Minimum Receive Level INSTEON Minimum Transmit Level INSTEON Powerline Device INSTEON Powerline Frequency INSTEON RF Device RF Beacon Radio Frequency Radio Frequency	10 mV 3.2 Vpp into 5 Ohms Yes 131.65 KHz Yes Yes 915.0 MHz
INSTEON Minimum Receive Level INSTEON Minimum Transmit Level INSTEON Powerline Device INSTEON Powerline Frequency INSTEON RF Device RF Beacon Radio Frequency Radio Frequency Radio Frequency Range	10 mV 3.2 Vpp into 5 Ohms Yes 131.65 KHz Yes Yes 915.0 MHz 150 feet 3.24" H x 2.08" W x 1.06" D

Operating Environment	Indoors
Operating Humidity Range	0-85% relative humidity, non-condensing
Operating Temperature Range	32° to 104° F 0° to 40° C
Set Button	Yes
Storage Temperature Range	-4° to 158° F -20° to 70° C
Weight	2.24 oz 63.5 g

Electrical

Pass-through Outlet	No
Power Consumption	<0.75 Watts
Supply Voltage	120 Volts AC ± 10%, 60 Hertz, single phase
Surge Resistance	Surges over 1,000 volts

Troubleshooting

Range Extender LED does not turn on

It is possible your Range Extender is not receiving power.

Try this:

• Test Range Extender in a different power outlet. If the LED illuminates when using a different outlet, check the original outlet for power. Some outlets are controlled by a switch elsewhere in the room. Avoid switched outlets as they disable your INSTEON device when turned off.

When bridging electrical legs, the second Range Extender's LED is steady or blinking red and green

The two Range Extenders may be out of range of one another or something may be unusually affecting the Range Extenders' wireless signals.

Try this:

- Check to see if you have connected Range Extender to a power strip, surge suppressor, backup battery or AC line filter. These devices often filter out the INSTEON powerline signal. Relocate the Range Extender to a standard AC outlet.
- Large appliances like refrigerators or air conditioners may be generating powerline noise that is disrupting
 the INSTEON signal. If the issue only appears to happen when one of these large appliances is running,
 install a noise filter at that device. If you are uncertain of the device generating the noise, disconnect the
 potentially offending devices from power and test your Range Extender again. If the issue is resolved, install
 noise filters at each offending appliance.
- Some small electronics devices that include an AC/DC power supply can generate substantial electrical
 noise, in some cases, enough to disrupt an entire house of INSTEON devices. Search your home for
 speaker docks, small stereos, etc. and disconnect them from power to perform testing. If removing these
 devices from your powerline resolves the issue, install a noise filter at each offending small electronic
 appliance.
- Your Range Extender may be too far from another INSTEON device to receive a signal. Try locating the Range Extender closer to another INSTEON device.

Certifications and Warnings

This product is not designed or approved for use on powerlines other than 120VAC, 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.

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.

CAUTION - To reduce the risk of overheating and possible damage to other equipment do not install to control a receptacle, a motor-operated appliance, a fluorescent lighting fixture, or a transformer-supplied appliance. Gradateurs commandant une lampe a filament de tungstene – afin de reduire le risqué de surchauffe et la possibilite d'endommagement a d'autres materiels, ne pas installer pour commader une prise, un appareil a moteur, une lampe fluorescente ou un appareil alimente par un transformateur.

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.

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