vizia rf +™

Plug-In Serial Interface Module
Cat. No. VRC0P-1LW
Rated: 120VAC, 60Hz
INSTALLATION INSTRUCTIONS

LEVITON

DI-000-VRC0P-02A-X1

WARNINGS AND CAUTIONS:

- To be installed and/or used in accordance with appropriate electrical codes and regulations.
- If you are unsure about any part of these instructions, consult an electrician.

WARNINGS AND CAUTIONS:

- Save this instruction sheet. It contains important technical data along with testing and troubleshooting information which will be useful after installation is complete.

INTRODUCTION

Leviton's Vizia RF +™ components are designed to communicate with each other via Radio Frequency (RF) to provide remote control of your lighting. Using RF technology allows Leviton to provide the greatest signal integrity possible. Each module in Leviton's Vizia RF +™ component line is a Z-Wave® enabled device. In a Z-Wave® network, each device is designed to act as a router. These routers will re-transmit the RF signal from one device to another until the intended device is reached. This ensures that the signal is received by its intended device by routing the signal around obstacles and radio dead spots.

CAUTION:

Remember to exercise good common sense when using the Timer features of your remote, especially when scheduling unattended devices. There can be some unexpected consequences if not used with care. For example, an empty coffee pot can be remotely turned on. If that should happen, your coffee pot could be damaged from overheating. If an electric heater is turned on by remote control while clothing is draped over it, a fire could result.

FEATURES

- RS232 - ASCII
- Scene capable
- Two way communication
- RF reliability
- Ease of installation – No new wiring
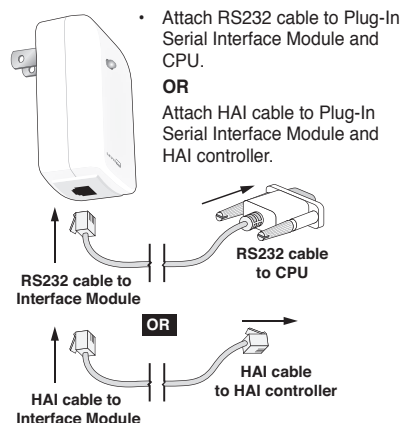- Compatible with other Z-Wave® enabled devices

NOTE: This product requires the use of third party software to function, along with a relatively high level of programming skill.
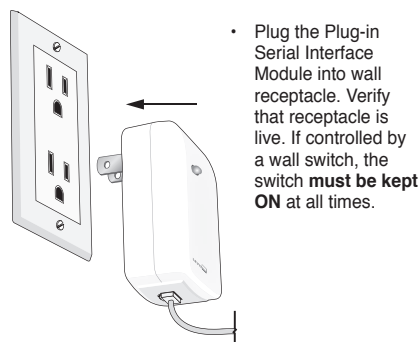
INSTALLING YOUR INTERFACE MODULE

NOTE: Use check boxes ☑ when Steps are completed.

Step 1 — Attaching Serial-RS232 Cable or HAI Cable to Plug-In Serial Interface Module:

NOTE: In order to use your Vizia RF +™ Plug-In Serial Interface Module in a Z-Wave® network, it must be Included into the network using a Primary Programmer/Remote, such as Leviton's Cat. No., VRCPG. Before Including your module, please refer to the Primary Programmer/Remote instruction sheet for complete information. **Refer to Step 3 for further details**.

- Attach RS232 cable to Plug-In Serial Interface Module and CPU.
  OR
  Attach HAI cable to Plug-In Serial Interface Module and HAI controller.

RS232 cable to Interface Module

RS232 cable to CPU

OR

HAI cable to Interface Module

HAI cable to HAI controller

Step 2 — Attaching Plug-In Serial Interface Module to Wall Receptacle:

- Plug the Plug-in Serial Interface Module into wall receptacle. Verify that receptacle is live. If controlled by a wall switch, the switch **must be kept ON** at all times.

Step 3 — Including Plug-In Serial Interface Module into Z-Wave™ Network:

NOTES:
- If using a non-Leviton Programmer/Remote, refer to the Programmer/Remote instruction sheet.
- Plug-In Serial Interface Modules included into a Z-Wave® network must be updated after you have included all other devices.
- If using VRCPG Installation Checklist feature, go to Step B.

A) If using a Leviton Z-Wave® Programmer/Remote, Cat. No. VRCPG, press the Menu button and scroll down to System. Press the center button to select System Menu. Choose Advanced. Press the center button to select Advanced Install. Press the center button to <Include Node>.
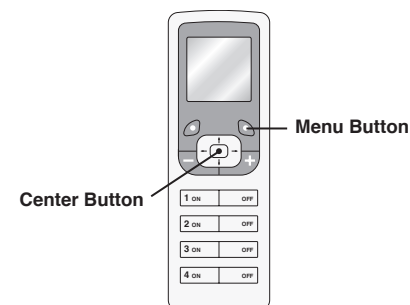
B) If using VRCPG Programmer/Remote, you will be prompted to prepare device for inclusion. To do this you must put the Plug-In Serial Interface Module into programming mode.

C) To access Program mode, press and hold programming button until the LED turns Amber. Release the button and the LED will blink Amber. You are now in Programming mode.
NOTE: If the LED on the Plug-In Serial Interface Module turns solid Red while excluding, there has been a communication error.

D) While standing close to the Plug-In Serial Interface Module (approximately 1 ft.), press the center button on the Programmer/Remote to <Include> device in the network. **NOTE:** Only one device may be included at any time.

Programmer/Remote Cat. No. VRCPG

Center Button

Menu Button

Step 3 cont'd

E) The Primary Programmer/Remote will assign a Home ID, Node ID, and Name for this device.
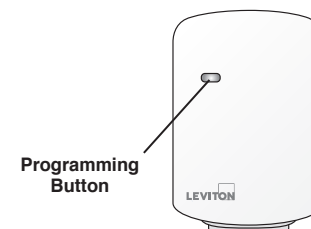**NOTE:** This information will be stored in the Programmer/Remote to be used for future reference.
NOTE: You may name or edit your device at this time.

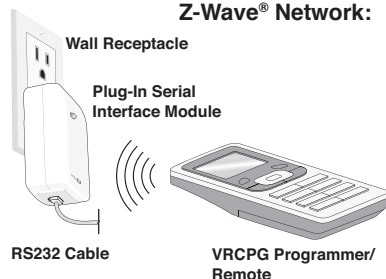**F)** **The Plug-In Serial Interface Module is now installed in the network**.

G) After all devices are included into the network, the Plug-In Serial Interface Module must be updated to allow proper network function. To update Plug-In Serial Interface Module proceed as follows:

- If using a non-Leviton Programmer/Remote, refer to the Programmer/Remote instruction sheet for updating Plug-In Serial Interface Module.
- If using a Leviton Z-Wave® Programmer/Remote, Cat. No. VRCPG, press the Menu button and scroll down to System. Press the center button to select System Menu. Choose Advanced. Press the center button to select Advanced Install. Scroll down and select Update Controller. When prompted, press button on the Plug-In Serial Interface Module.
- Wait until the VRCPG Programmer/Remote confirms completion. Update is done.

NOTE: If the Plug-In Serial Interface Module has been successfully Included in the network and the user tries to Include it again without first excluding it from the network, the controller will retain the first node ID it had received and ignore the second.

Programming Button

Step 3 cont'd — Including Plug-In Serial Interface Module into Z-Wave® Network:

Wall Receptacle

Plug-In Serial Interface Module

RS232 Cable

VRCPG Programmer/ Remote

NOTE: Programmer/Remote must be in close proximity (approx. 1 foot) to Plug-In Serial Interface Module when including into network

Step 4 — Excluding Plug-In Serial Interface Module from Network:

NOTE: It is very important to accurately Exclude devices from the network when moving or removing a device from a Z-Wave® network. This ensures that all information has been removed from your Primary Programmer/ Remote's information table and is not counted on to be a part of the mesh network.

A) If using a Leviton Z-Wave® Programmer/ Remote, Cat. No. VRCPG, press the Menu button and scroll down to System. Press the center button to select System Menu. Choose Advanced. Press the center button to select Advanced Install. Scroll down to <Exclude Node> and press the center button.

B) If using VRCPG Programmer/Remote you will be prompted to prepare device for exclusion. To do this, you must put the Plug-In Serial Interface Module into programming mode.

C) To access Program mode, press and hold programming button until the LED turns Amber. Release the button and the LED will blink Amber. You are now in Programming mode.

NOTE: If the LED on the Plug-In Serial Interface Module turns solid Red while excluding, there has been a communication error.

D) While standing close to the Plug-In Serial Interface Module (approximately 1 ft.), press the center button to <Exclude> device from the network.

Step 4 cont'd

Factory Default:

If your module is not responding, or you are unable to control it after you have tried to Include/ Exclude it multiple times, it may be necessary to reset the module to its original factory settings. To accomplish this, proceed as follows:

• Press and hold the programming button until the LED turns Amber and then turns Red. Release the button and wait until the LED starts blinking Green. **NOTE:** This can take up to a minute. The module is now reset. Once the module is reset, it will be necessary to Re-Include it to a network before it can be used.

CAUTION: SETTING A DEVICE TO A FACTORY DEFAULT DOES NOT EXCLUDE THAT DEVICE FROM A NETWORK. THE EXCLUSION PROCEDURE MUST STILL BE FOLLOWED TO REMOVE THE DEVICE FROM THE PRIMARY REMOTE'S INFORMATION TABLE. FAILURE TO DO SO MAY RESULT IN SYSTEM THAT IS SLOW TO RESPOND, OR MAY FAIL TO RESPOND TO SOME DEVICES. IF YOU HAVE TO RESET THE CONTROLLER WITHOUT EXCLUDING IT GO TO THE REMOVE FAILED MENU AND REMOVE THIS DEVICE FROM YOUR VRCPG REMOTE. REFER TO VIZIA RF+ APPLICATION GUIDE (WWW.LEVITON.COM).

OPERATION

NOTE: For complete details on operating the Primary Programmer/Remote, refer to the instruction guide for that particular device.

The VRC0P is intended for use by developers who want to develop products that can transmit signals to and receive signals from Vizia RF +™ products on a Z-Wave® network. A relatively high level of programming knowledge is required to develop products that use these interfaces. The interface uses a simple ACSII protocol to communicate to the controlling equipment. If you are an end user who has purchased this product to work with another product that was designed for this purpose, please refer to that product's owner's manual for operating instructions.

If you are a developer who has purchased this interface to develop a Vizia RF +™ compatible product, you will need the VRC0P Tech Note, which contains the information needed to allow proper interface communication. Please visit our website listed below to download the VRC0P Tech note.

www.ViziaRFplus.com

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COMMUNICATION SETTINGS

NOTE: The following general information applies to the RS232 Interface.

To configure your device to communicate with the interface, use the following data conventions:

9600 BAUD
8 DATA
1 STOP
NO PARITY

If you wish to send these commands from a PC, run the Microsoft Windows® Hyper Terminal program or an equivalent program. Then select Local Echo, Line Feed and Carriage Return inbound and outbound. This allows you to see the characters that you are typing as well as keep the responses from overwriting typed characters.

RJ11 – – DB9 PIN-OUTS	
4 (BLACK) – – – – – – – – – – – – 2 (TX)	
3 (RED) – – – – – – – – – – – – – (Not used)	
2 (GREEN) – – – – – – – – – – – 3 (RX)	
1 (YELLOW) – – – – – – – – – – 5 (SGND)	

RJ11 – – RJ11 HAI PATCH CORD PIN-OUTS	
4 (BLACK) – – – – – – – – – – – – 1 (TX)	
2 (GREEN) – – – – – – – – – – – 2 (RX)	
3 (RED) – – – – – – – – – – – – – (Not used)	
1 (YELLOW) – – – – – – – – – – 4 (SGND)	

TROUBLESHOOTING

• **Plug-In Serial Interface Module is functioning improperly**

  - Confirm that the device is being supplied from a 120V, 60Hz AC source ONLY.

  - Confirm that the unit is programmed properly. Repeat "INSTALLING YOUR INTERFACE MODULE" section to verify that it has been included into the Z-Wave® network.

• **Programmer/Remote does not operate lights**

  - Check association.

  - Ensure that Plug-In Serial Interface Module was properly updated.

FCC COMPLIANCE STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

This equipment 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 a residential installation. 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 communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving Antenna.
• Increase the separation between the equipment and the receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/ tv technician for help.

FCC CAUTION

Any changes or modifications not expressly approved by Leviton Manufacturing Co., Inc., could void the user's authority to operate the equipment.

DI-000-VRC0P-02A-X1

ARTWORK PRINT SPECIFICATIONS

LEVITON®

PART NUMBER DI-000-VRC0P-02A-X1 **REV** _____ **DESCRIPTION** Instruction sheet

SPECIFICATIONS :

Dimensions: 8.5" x 9.75"
*Thickness: 40 lb.
*Material: _____
*Finish: _____
: _____

* For manuals - designates cover specifications

*Color(s): __1__ over __1__
1: Black
2: _____
3: _____
4: _____

[✓] Spot
[ ] CMYK

*Fonts:
1: _____
2: _____
3: _____
4: _____

Die Line Key: — · · — Perforate
——— Die Cut - - - - Fold Line —·—·— Kiss Cut : : : : : Cellophane ≡≡≡ Glue

MANUAL INTERIORS / BINDERY / FOLD SCHEME :

Body Material: _____
Thickness: _____

Bindery
[ ] Die cut [ ] Fold [ ] Saddle Stitch
[ ] Perfect Bind [ ] Drill [ ] Trim

Color(s): _____ over _____
1: _____
2: _____
3: _____
4: _____

[ ] Spot
[ ] CMYK

Fonts:
1: _____
2: _____
3: _____
4: _____

PROCESS :

[✓] Offset [ ] Flexo
[ ] Other _____
Line Screen: _____
Angle: _____
Resolution: _____

FOLD SCHEME / BINDERY DIAGRAM

9.75"
8.5"
← Part No. (Top right)

2.44"
4.25"
→ Part No. (Top right)

——— Die Cut - - - - Fold Line ● Punch/Drill Hole

COMMENTS :

_____
_____

FOR LEVITON USE ONLY

Approvals:
[✓] Plant 08 J. Tang
[ ] Mktg _____
[ ] Cust _____

[✓] CQA A. Steele
[✓] Eng B. Hamlitsch/P. Patel
[ ] Other _____

[✓] PM A. Mancuso
[✓] S & A J. Lowe
[ ] Other _____

ARN: 1636
ECO Number: _____
Pilot Rev: _____

Artist: Dave Hunt
Artwork Release Date: _____

Notes: _____