



## Models: SPR-1, SPR-3, SPR-4 Split-Phase Repeaters

## Installation Guide and Owner's Manual



### FUNCTION

The SPR Split-Phase Repeater is a small electronic device that is designed to enhance the communication reliability between devices using the Universal Powerline Bus (UPB™) method of communication (such as PulseWorx™ devices). It is designed to be used in a typical residential 120/240VAC split-phase electrical environment. The SPR comes in both plug-in and wire-in models. The main purpose of the SPR is to increase powerline communication reliability by taking UPB™ messages transmitted on one phase (leg) of the electrical system and strongly repeating them on to the other phase (leg).

### Wire-in and Plug-in Models

The SPR is available in both plug-in and wire-in models. The SPR-1 is designed to install in a suitable junction box and wire to two phases (circuits) and neutral of the circuit breaker panel. The SPR-3 is designed to plug into any 3-socket 240V electrical outlet. The SPR-4 is designed to plug into any 4-socket 240V electrical outlet.

### INSTALLATION

#### Installation of the SPR-3 & SPR-4

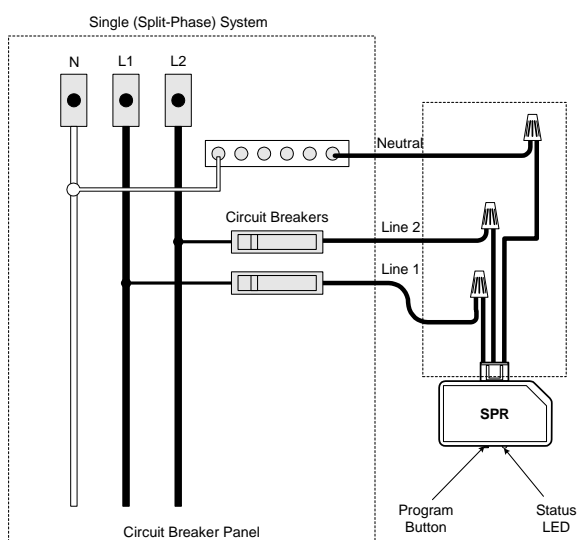
The SPR works best when plugged or wired in as close to the main circuit breaker panel as possible. Installation of the SPR-3 and SPR-4 is simple:

1. Unplug any appliance that is plugged into the 240V electrical outlet.
2. Plug the SPR-3 into the 3-socket 240V electrical outlet or plug the SPR-4 into the 4-socket 240V electrical outlet.
3. Plug the appliance into the pass-thru socket on the front of the SPR.

#### Installation of the SPR-1

**Note:** Installation must be carried out by a qualified electrician only. The main breaker must be turned off during installation and the repeater must be installed in a suitable junction box or equivalent enclosure. Installation must be carried out in accordance with all applicable codes and requirements, including, but not limited to, the National Electrical Code (NEC).

1. Turn off the power at the main breaker panel.
2. Install the repeater into a suitable workbox or equivalent enclosure using the wiring nipple to insert in any ½" knock-out (if necessary).
3. Connect the black wire to phase A, and the red wire to phase B, using wire nuts. Connect the white wire to neutral (see illustration below). Check that there are no bare wires protruding and cover the wire nuts with insulating tape if necessary.
4. Check all wiring and connections, and turn on the main breaker.
5. The LED will light up if all connections are proper.



### OPERATION

The Split-Phase Repeater is designed to be "plug-and-play" – just install it and forget about it. It will automatically repeat all multi-packet messaging transmissions that it hears in order to enhance the UPB™ communication reliability of your network. All PulseWorx™ devices (and most other UPB™ devices) are pre-configured at the factory to use multi-packet messaging. Refer to the SPR documentation on the PulseWorx website ([www.PulseWorx.com](http://www.PulseWorx.com)) for more information.

### LIMITED WARRANTY

Seller warrants this product, if used in accordance with all applicable instructions, to be free from original defects in materials and workmanship for a period of five years from the date of purchase. Refer to the warranty information of the PulseWorx website ([www.PulseWorx.com](http://www.PulseWorx.com)) for exact details.