The Passive Phase Coupler (PPC) is a small electronic device that is designed to enhance the reliability between devices that use Universal Powerline Bus (UPB™) technology for communication.

A properly designed residential 120/240VAC split-phase electrical environment will have one (1) Phase Coupler in each electrical panel with lighting control for appropriate communication.

The PPC-1 provides a path (couples) for a signal generated on one phase (L1), in a typical split-phase (single-phase) 120/240 VAC residential system to cross over to the other phase (L2) of the power line.
It is a passive coupler and does not amplify UPB signals. This means the signals coupled onto the receiving phase will only be as strong as the signals on the transmitting phase.

Most homes are wired with 120/240V single-phase (split-phase) power that splits into two separate 120V legs; on occasion command signals have a hard time making the transition from one leg to the other.

In homes less than 1500 Sq. Ft. and within 200 feet of the electrical transformer, phase coupling may not be needed for UPB systems. That being said, without a phase coupler signals may have to travel out to the electrical transformer and return into the house on the opposite phase; depending on the distance it may be a weaker signal. A properly designed system will have a Phase Coupler in every main breaker panel and sub-panel to ensure maximum signal strength.

FEATURES
- Simple two-wire installation
- Red LED displays proper operation
- Ensures UPB signals cross over from Line 1 to Line 2
- Designed to be used in residential 120/240VAC, 60 Hz split-phase electrical environment
- Recommended on every electrical panel that has UPB lighting control products connected
- Should be installed in an external junction box outside the circuit breaker panel
- 5 Year Warranty
- Designed and Made in the USA
MODEL
PPC-1 Passive Phase Coupler

SPECIFICATIONS

ELECTRICAL
Power Requirements Primary: 120 Volts AC, 50/60Hz
Maximum Load N/A
Transmission Channels N/A
Connections 16 AWG Gauge 105° Insulation
            Wire Wire to each Phase
Standby Power < .8 Watts
Environmental Recommended for Indoor Use or
            water-proof enclosure next to
            circuit breaker panel
Temperature: -40° to 194°F (-40° to 90°C)
Humidity: 10% to 90% RH (non-condensing)
Certifications ETL

OPERATION
Status LED Modes Not programmable/Illuminated
            Red LED indicates proper operation
During Power Outage Power is off
Set-Up Mode N/A

MECHANICAL
Color Black
Program Button N/A
Mounting Single Gang or multiple-ganged
            junction box
Height 4.10 in
Width 1.75 in
Depth: 1.20 in
Weight 2.88 oz
Warranty 5 years
US Patent No. 6,734,784; 6,784,790; 7,265,654;
            7,688,183. U.S. and foreign patents
            may be pending.

DIMENSIONS

WIRING DIAGRAM

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