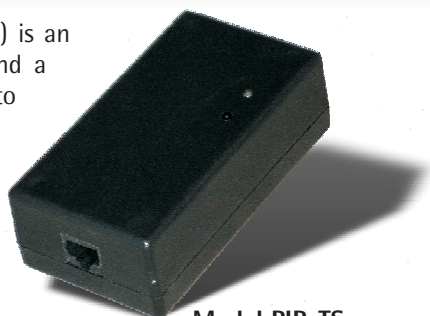


## PIP-TS – Powerline Interface Powerpack



### Product Overview

The Powerline Interface Powerpack (PIP-TS) is an addressable powerline interface module and a power supply all in one unit. It is designed to provide both the 12VDC power and the UPB™ communication capabilities for the TouchScreen Timer (TSTD or TSTW) to control lights, appliances, and set heating/air conditioning systems remotely over the existing powerline.



Model PIP-TS

UPStart Setup software will allow the PIP-TS to be added to any UPB network as well as perform communication testing or adjust its receive sensitivity in noisy environments.

The PIP-TS is simple to install – just plug it in to any wall outlet and connect a CAT-5 cable (up to 50' long) between it and the TouchScreen Timer.

PCS is the leading developer of Universal Powerline Bus UPB™ technology. The PIP-TS incorporates the very latest Gen II advancements, *PowerPulse*, a dual-transmitter circuit which allows every transmission signal to have 50% or more power to even further improve communication reliability.

Although specifically designed for the PulseWorx TouchScreen Timer, the PIP-TS will also be used by developers of software or hardware-based automation controllers, as the standard UPB™ powerline interface device and power supply. This will allow any other device that has an RS-232 serial port and meets similar power requirements to be UPB compliant.

The PIP-TS has an output of 12VDC unregulated at 500mA maximum. It operates at 4800 baud and communicates the exact same simple ASCII-based command/report protocol found in the **Message Mode** of our PIM-R Powerline Interface Module. This enables a simple solution for developers to become a PulseWorx Partner and create UPB™ Enabled devices without having to become a Licensee or embed a chip and bring high voltage into their device.

For those developers who do not need a power supply, PCS also offers a new Addressable Powerline Interface Module (PIM-A) which performs the same function as the PIP-TS but without the power supply.



Model PIM-A

### Features

- **Addressable Interface**  
Provides Unit ID for any controller in UPStart
- **Developer Friendly**  
UPB communication interface and 12VDC in one unit
- **Improved Communication**  
PowerPulse Dual-Transmitter circuitry 50% more transmitting power
- **Simple Installation**  
Just plug into an electrical outlet
- **Feedback**  
True two-way UPB communication to touchscreen or processor
- **Adjustable Receive Sensitivity**  
If powerline noise is severe the sensitivity can be adjusted to filter out most noise
- **LED Power Indicator**  
LED used for night-light, programming and powerline signal monitoring
- **Perfect For Retrofit**  
Transmits signals over existing power wiring so there is no need for expensive hard wiring.
- **UPStart Configurable**  
Use UPStart to add PIP-TS or PIM-A to the network, perform communication tests and adjust sensitivity
- **5-year Limited Warranty**  
Backed by an industry leading Limited Warranty to be free from original defects in materials and workmanship for a period of five years from the date of purchase.

## PIP-TS – Powerline Interface Powerpack

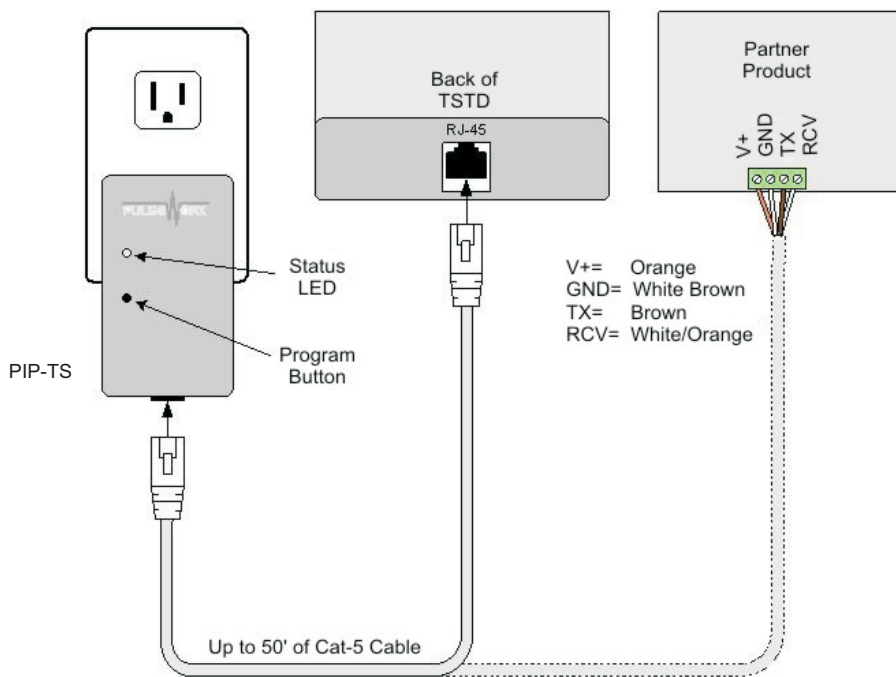


### Ordering Information

- Part Number

PIP-TS Powerline Interface Powerpack  
 PIM-A Powerline Interface Module- Addressable

### Wiring Diagram



### Installation

- Plug into 120VAC electrical outlet

- RJ-45 Pin Configuration

- 1 = Transmit
- 2 = V+ (12VDC)
- 3 = V+ (12VDC)
- 4 = Gnd
- 5 = V+ (12VDC)
- 6 = Gnd
- 7 = Gnd
- 8 = Receive

### Additional Information

- Warranty  
Five-Year Limited Warranty
- UL/ETL Listing  
Pending

#### Colors

**BLACK**

#### Specifications

#### PIP-TS

Baud, Bits, Stop Bit, Parity	4800, 8, 1, None
Input	120/VAC 60 Hz .05A
Output	12VDC Unregulated 500mA
Mounting	3-Prong Plug with Ground
Dimensions	4" x 2 1/8" x 1 3/8"
Weight	.56 oz.
Operating Temp	-40 F to 104 F
UPC Code	81197601-TBD