**PLLC Three Phase Repeater (TPR)**

**WARNING**: INSTALL/REMOVE DEVICE ONLY WITH POWER TURNED OFF. DO NOT EXCEED RECOMMENDED POWER RATINGS. TO BE INSTALLED/REMOVED BY QUALIFIED ELECTRICIAN. MUST BE IN A VENTILATED POSITION. TO NOT ATTEMPT TO REMOVE COVER. FAILURE TO ADHERE TO THESE WARNINGS WILL VOID ALL WARRANTY OBLIGATIONS BY THE MANUFACTURER.

**Diagram 1**

**INSTALLATION**:  
- Turn off power at main breaker panel  
- Connect Repeater as per Diagram 1, Black – Neutral, L1-Red, L2-Blue, L3-White  
- Check wiring and turn on main breaker  
- All 3 LED’s will light up if connected correctly  
- Highly recommended TPR is added to network using UPSTART  
- Place TPR in Setup mode. Tap Program Button (Black) 5 times  
- Now ADD as normal to the network, assign a Room and Device Name for Identification  
- To put TPR into Default, tap button 5 times then 10 times then 2 times. This will place TPR back to default

**PERFORMING COMMUNICATIONS TESTS:**

UPSTART has a Repeater Communications test that will test how well each device communicates to the TPR and how well the TPR communicates to all devices. The Repeater Communications test will show a record of the signal strength, noise level, and phase at all the devices

**RECEIVER SENSITIVITY:**

Default parameters are set for the TPR to be set to HIGH. We suggest to keep sensitivity to High, however if there is excessive noise on the Network, use UPSTART to select LOW sensitivity

**IMPORTANT:**

- The TPR is designed to automatically repeat all multi-packet messaging transmissions which it receives in order to enable UPB communications on a 3 Phase Network. If any of your UPB devices are configured to use uni-packet transmissions then the TPR WILL NOT REPEAT THEM!

**UPSTART and the TPR:**

When a TPR is connected to UPSTART, UPSTART will indicate that it has switched to two-time multi-packets by displaying TX=2 in the status bar. Next to this indication UPSTART will also display which phase (A, B, or C) the PIM is plugged into

**LIMITED WARRANTY**

Seller warrants this product, if used in accordance with all applicable instruction, to be free from original defects in materials and workmanship for a period of 12 months from the date of purchase. If the product should prove defective in material or workmanship within that period, Seller will repair or replace the product, at its sole discretion. Service under this warranty can only be obtained by delivering or shipping the product (with all shipping or delivery charges prepaid) to: PowerLINE Lighting Control, 12/28 Vore Street Silverwater, NSW 2128 Australia. Seller will pay return shipping charges.

This warranty does not apply to normal wear or to damage resulting from accident, misuse, abuse or neglect. Seller makes no express warranties other than those expressly set forth herein. Except to the extent prohibited by applicable law, all implied warranties, including any warranties of merchantability or fitness, are limited in duration to the warranty period set forth above; and this warranty expressly excludes all incidental and consequential damages. (Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitations of incidental or consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other rights that vary from jurisdiction to jurisdiction.)