PIM-R to OMNI Adapter

Available from PCS is an adapter to connect a PCS PIM-R to the OMNI controller to improve communication to the UPB system. The OMNI PIM-R Adapter (P/N: OPA) can be purchased by any registered PCS dealer.

The PCS PIM-R interface has a transmitting “double-cap” circuit. This circuit transmits messages about 50% stronger than the conventional single capacitor transmitters. This special circuit is only incorporated in the PCS PIM-R, PIM-U, SPR and TPR.

The PIM is the most important part of an UPB Installation because it is the transmitting and receiving point for controllers such as HAI OMNI, ELAN, HomeSeer, ELK, etc. It is important to get the best possible communication from the central controller and repeaters to ensure control of all devices. See the product sheet for the PIM on the PCS web site for more information about transmission levels.

One other special feature that is included in the PCS PIM (and all other PCS PulseWorx products) is the high/low receiving level setting. If the signals in a house are very high, it is useful to set the PIM and all other devices to receive at the “low” setting to prevent future possible noise sources from affecting the communication.

This setting can be adjusted using UPStart, the UPB configuration program, when the PIM is connected to a computer. The PIM can then be powered down, connected to the Adapter, and attached to the OMNI. As the receiver sensitivity setting is stored in nonvolatile memory, the receiver level as set by UPStart will be used by the PIM when part of the OMNI system.

To change the receive sensitivity, open the PIM Configure menu.
Press the **Settings** button.

**UPB Interface Setup**

- **Interface Type:** USB PIM (virtual serial port)
- **Serial Port:** Comm 4

**Powerline Interface Setup**

- **UPStart** can monitor the powerline interface to see if it remains connected and working during your UPStart session. If it becomes disconnected, an alert appears and you can reconnect the PIM. There are circumstances where this detection may not work well and you get erroneous disconnect alerts. In this case you should disable this feature.

  - Enable PIM disconnection watch

- When UPStart exits leave the PIM in:
  - **Message mode**
  - **Pulse Mode**
  - The same mode as it was when UPStart started

- UPStart can adjust the PIM receiver sensitivity to suit its environment. In an environment of high powerline noise you might want to drop its sensitivity down lower. If you are having trouble getting the PIM to receive far away (weak) signals then you might want to raise its sensitivity higher.

  - **Receive Sensitivity:** High
Once the adapter is connected to the PIM, the same cable that was used with the Leviton/HAI PIM is used to connect to the OMNI at the same serial port plug-in location that you were using with the Leviton/HAI PIM.
The 6-wire cable used is often called a “reverse cable” and should look like this:
In the PC-Access software, you must configure the serial port for UPB use (Function = “UPB”) and with the correct baud rate (Rate = “4800”).

It is very important that only one serial port is designated for UPB. Change any other ports function, except the one you are using, to “Omni-Link”

##end##