Model XPW713 X-10 to UPB Converter

Installation Guide and Owner's Manual

FUNCTION

The X10 to UPB Converter (model XPW713) is a plug-in home automation interface that is capable of receiving X-10 messages on the existing powerline and transmitting corresponding UPB (Universal Powerline Bus) messages onto the same power wiring to remotely turn on, off, and dim other UPB devices. The XPW713 can be freely located anywhere a wall outlet exists throughout the home. No additional wiring is required and no radio frequency signals are used for communication.

FEATURES:

- Simple plug-in installation.
- Adds UPB ultra reliability to any X-10 compatible system.
- Converts A-1 thru P-15 to UPB Links 1-255.
- Flexible configuration of command mapping.

IMPORTANT SAFETY INSTRUCTIONS

When using electrical products, basic safety precautions should always be followed, including the following:

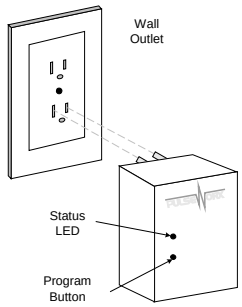
1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
2. Keep away from water. If the product comes in contact with water or other liquid, turn off the circuit breaker and unplug the product immediately.
3. Never use products that have been dropped or damaged.
4. Do not use this product outdoors.
5. Do not use this product for other than its intended purpose.
6. Do not cover this product with any material when in use.
7. This product uses grounded plugs and sockets to reduce the risk of electric shock. These plugs and sockets fit only one way. If they do not fit, consult an electrician.

SAVE THESE INSTRUCTIONS.

INSTALLATION

The XPW713 is designed for indoor use with devices that plug into a grounded power outlet. To install the XPW713 module:

1. Locate any free wall outlet throughout the home.
2. Plug the XPW713 into the wall outlet (see illustration).
3. Optionally, the device can be secured to the wall outlet by screwing the wall plate center screw through the device's mounting tab.



OPERATION

Once installed and configured your XPW713 will operate on the stored configuration settings without further user intervention. All programmed data is protected by nonvolatile memory and can only be changed or deleted by reprogramming, regardless of power outage durations.

Device Code Mapping

In the X-10 world devices are selected to be operated upon using the Device Code Message. The Device Code Message contains two fields: the X-10 House Code (A – P), and the X-10 Unit Code (1 – 16) that are intended to identify a device (or set of devices) to act upon the upcoming Function Code message. In the UPB world devices are selected to be operated upon using the Link ID. Link IDs can range from 0 to 255 and they are intended to identify a device (or set of devices) to act upon the upcoming Message Data.

Note: All PulseWorx™ dimmers come from the factory assigned with Link IDs 1 – 6 & 8. All PulseWorx™ switches come from the factory assigned with Link IDs 1 and 2.

The XPW713 uses the received X-10 Device Code Message to map to a UPB Link ID as shown in Table 1 below.

X-10 Device Codes	UPB Link IDs
A1 – A16	1 – 16
B1 – B16	17 – 32
C1 – C16	33 – 48
D1 – D16	49 – 64
E1 – E16	65 – 80
F1 – F16	81 – 96
G1 – G16	97 – 112
H1 – H16	113 – 128
I1 – I16	129 – 144
J1 – J16	145 – 160
K1 – K16	161 – 176
L1 – L16	177 – 192
M1 – M16	193 – 208
N1 – N16	209 – 224
O1 – O16	225 – 240
P1 – P15	241 – 255
P16	0

Table 1: XPW713 Device Code Mapping

PCS Powerline Control Systems

The Inventors Of: UPB™ UNIVERSAL POWERLINE BUS

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Function Code Mapping

In the X-10 world devices are commanded to perform an operation using the Function Code message. In the UPB world devices are commanded to perform an operation using UPB Commands.

The XPW713 uses the received X-10 Function Code Message to map to a UPB Command as shown in Table 2.

X-10 Command Code	UPB Command Name
On	Activate
Off	Deactivate
Bright	Fade Up
Dim	Fade Down
All Units Off	Snap Off
All Lights On	Fade Up
All Lights Off	Fade Down
Preset Dim 0	Blink Slow
Preset Dim 1	Blink Fast
Hail Request	Snap On
Hail Acknowledge	Snap Off
Extended Code	Activate
Extended Data	Deactivate
Status=On	Goto 25%
Status=Off	Goto 50%
Status Request	Goto 75%

Table 2: XPW713 Command Code Mapping

Note: The above Device Code and Command Code mappings can be modified using UPStart Software.

CONFIGURATION

Network ID

In the case where your neighbor has a PulseWorx™ system installed you will need to move your PulseWorx™ devices to a different Network ID. Although the UPStart Setup Software can be used to easily change your Network ID the XPW713 also has the ability, using its Program Button, to change its own Network ID and teach it to your other devices.

Changing the Network ID

The user can manually change the Network ID of his XPW713 using the following procedure:

1. Tap the Program Button **5** times. The XPW713 status LED will blink green.
2. Tap the Program Button **5** more times. The PW513 status LED will blink blue/red to indicate that a new Network ID has been chosen.
3. Tap the Program Button **1** more time. The XPW713 status LED will stop blinking.

Teaching the Network ID

The user can teach the Network ID of the XPW713 to other PulseWorx™ devices using the following procedure:

1. Tap the XPW713 Program Button **5** times. The XPW713 status LED will blink green.
2. Place any other PulseWorx™ devices into Setup Mode. Consult the product documentation for how to do this. Note: Most devices enter Setup Mode by tapping the device's pushbutton or rocker switch **5** times.
3. Each device's status LED will start blinking to indicate that it is in Setup Mode. **Note**: PulseWorx™ devices automatically time out of Setup Mode after 5 minutes.
4. Tap the XPW713 Program Button **3** more times. The status LED of the XPW713 (and all other devices) will stop blinking to indicate that it is done teaching (and they are done learning) the Network ID.

UPStart Configuration

PCS has developed a Powerline Interface Module (PIM) and free software (UPStart) to help you configure all of your PulseWorx Lighting System devices. User's Guides are available on the PulseWorx web site: www.PulseWorx.com to explain how to configure your system.

SETUP Mode

When configuring a UPB system, it will be necessary to place the XPW713 in SETUP mode. To do this, press the Program Button (see illustration) **5** times rapidly. The Status LED will continuously blink Blue when the device is in SETUP mode. To exit SETUP mode, press the Program Button **twice** or wait five minutes for it to time out.

Factory Default Settings

To restore the following default settings put the XPW713 into SETUP mode and then press the Program Button**10** times rapidly. The Status LED will blink red to indicate that factory defaults have been restored. Tap the Program Button **2** more times to stop the blinking.

Network ID:	255
Unit ID:	30
Network Password:	1234
Device Code Mapping:	See Table 1
Function Code Mapping:	See Table 2

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 on the PulseWorx website (www.PulseWorx.com) for exact details.

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