FUNCTION

The ICM Input Control Module is a high quality plug-in home automation controller that is capable of transmitting UPB (Universal Powerline Bus) digital commands over the existing power wiring. The ICM transmits preconfigured commands to turn on and off (or blink) other UPB devices whenever a contact closure is made or a low voltage is present on any of its two separate inputs. The ICM can be freely located anywhere a wall outlet exists throughout the home. Only limited additional wiring is required and no radio frequency signals are used for communication.

FEATURES:

- Senses on two separate contact closure inputs.
- Senses dry-contact switch closures or low voltage inputs.
- Command lights to flash when an alarm is tripped, a pressure mat is stood upon, a doorbell rings, etc.
- Ability to remotely enable/disable the input sensing mechanism.

INPUT SENSING MODES

Each of the ICM’s two input channels can be configured for one of two different input sensing modes: contact closure or low voltage. The two jumpers under the Terminal Connector should be positioned to select the desired mode as shown in the table below:

<table>
<thead>
<tr>
<th>Sensing Mode</th>
<th>Channel #1</th>
<th>Channel #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Closure</td>
<td><img src="image1" alt="Contact Closure" /></td>
<td><img src="image2" alt="Contact Closure" /></td>
</tr>
<tr>
<td>Low Voltage</td>
<td><img src="image3" alt="Low Voltage" /></td>
<td><img src="image4" alt="Low Voltage" /></td>
</tr>
</tbody>
</table>

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. To avoid any risk of fire, burns, personal injury or electric shock, install this product out of the reach of small children.
8. 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.
9. SAVE THESE INSTRUCTIONS.

INSTALLATION

The ICM is designed for indoor use. To install the ICM module:

1. Locate any free grounded wall outlet throughout the home. Plug the ICM into the wall outlet (see illustration).
2. Optionally, the ICM can be secured to the wall outlet by screwing the wall plate center screw through the ICM’s mounting tab.
3. Remove the supplied Terminal Block from the ICM’s Terminal Connector (see illustration).
4. Connect two wires from the first Switch (or Sensor) to the Terminal Block. Terminate the two wires to blocks 1 and 2 using the clamping screws provided.
5. Connect two wires from the second Switch (or Sensor) to the Terminal Block. Terminate the two wires to blocks 3 and 4 using the clamping screws provided.
6. Plug the Terminal Block into the Terminal Connector (see illustration).
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 Guide (available on the PulseWorx web site: www.PulseWorx.com) explains how to configure your system using the UPStart Software.

**UPStart Configuration**

Follow the steps described below to configure your ICM:

**Step 1: Add the ICM to your UPB Network**
Add the ICM to your UPB Network by selecting the Device ➔ Add menu item in the UPStart Setup Software. UPStart will find your ICM and allow you to name it.

**Step 2: Start ICM Configuration**
Double-click the ICM icon to begin configuration. Select the Transmit Components tab to begin configuring what to control.

**Step 3: Specify the Link(s) to Control**
On the Transmit Components tab, select one link to be controlled for each channel.

**Step 4: Specify the Sensing Mode**
On the Transmit Components tab, press the Mode button and select a Sense Mode that you desire.

**Step 5: Specify a Suspend Link (optional)**
A sense channel can be configured to be enabled (active) or disabled (suspended) by a UPB Link command received by the ICM. To configure a sense channel to be controlled by a Link, select the Receive Components tab and specify the Link to control the sensing channel. The channel will be suspended when a DEACTIVATE (or GOTO 0%) command is received for the specified link and activated when an ACTIVATE or (GOTO > 0%) command is received.

**Step 6: Program the ICM**
Once you have specified the desired configuration, press the Program Device button to program the information into the ICM.

**SETUP Mode**
When configuring a UPB system, it will be necessary to place the ICM into SETUP mode. To do this, press the Program Button (see illustration) five 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.

**OPERATION**
Once installed and configured your ICM will operate on the stored configuration settings without further user intervention. When the doorbell switch is pressed the doorbell should ring and the ICM should transmit the configured UPB command onto the powerline.

**Factory Default Settings**
To restore the following default settings place the ICM into SETUP mode and then press the Program Button ten times rapidly. The Status LED will blink red to indicate that factory defaults have been restored. Press the Program Button twice more to stop the blinking.

- Network ID: 255
- Unit ID: 11
- Network Password: 1234
- Transmit Channel #1: Link #1 Activate/Deactivate
- Transmit Channel #2: Link #2 Activate/Deactivate
- Suspend Links: All Unused

**TYPICAL USES**
The ICM is perfect for interfacing off-the-shelf motion sensors, light sensors, occupancy sensors, pressure mats, RF remote controls, pushbuttons, etc. to the PulseWorx Lighting Control System to trigger actions such as:

- Flash a light for the hearing impaired
- Turn off a vacuum or appliance
- Automatically turn on porch lights
- Automatically turn on security cameras

**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.