Quick Start Guide

PowerLinc Modem™ – INSTEON® Serial Interface (Dual-Band)
Model: 2413S

Install PowerLinc Modem

1) Ensure PowerLinc Modem is not plugged into your computer
2) Plug PowerLinc Modem into an AC wall outlet
3) Plug clear end of included DB-9 serial cable into PowerLinc Modem’s interface port
4) Plug black end of cable into an available serial port on your PC

PowerLinc Modem is now ready

Connector Specifications

<table>
<thead>
<tr>
<th>Pin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RS232 to PC pin 2 (Rx)</td>
</tr>
<tr>
<td>2</td>
<td>Not connected</td>
</tr>
<tr>
<td>3</td>
<td>TTL output (from PLM)</td>
</tr>
<tr>
<td>4</td>
<td>Not connected</td>
</tr>
<tr>
<td>5</td>
<td>Not connected</td>
</tr>
<tr>
<td>6</td>
<td>TTL input (from PLM)</td>
</tr>
<tr>
<td>7</td>
<td>Common ground</td>
</tr>
<tr>
<td>8</td>
<td>RS232 from PC pin 3 (Tx)</td>
</tr>
</tbody>
</table>

Communications

The RS 232 serial communications to PowerLinc Modem are:
- 19,200 baud
- 8 data bits
- No parity
- 1 stop bit

NOTE: each byte sent to PowerLinc Modem will be echoed back to the host.

Tips for Using PowerLinc Modem

- Do not use a serial cable longer than 10’ (6’ or less is recommended)
- Do not plug PowerLinc Modem into a power strip or AC line filter
- Use only one PowerLinc Modem per computer
- Do not place near large metal objects, such as refrigerators or TVs
- Some computers and their accessories can absorb PowerLinc Carrier (PLC) signals off the powerlines. Since PowerLinc Modem will be close to the computer, the power strip for the computer should be filtered. Use an INSTEON FilterLinc (#1626-10) on the computer’s power strip to keep PowerLinc Modem signals from getting absorbed by the computer equipment
- If computer’s serial port is shared with another hardware device (scanner, PDA, etc.) be sure to turn off that device’s program on the PC. If left running, the home automation software will not be able to communicate with PowerLinc Modem.
- To reset PowerLinc Modem to its original factory settings, unplug from wall outlet and wait 10 seconds. Press and hold Set button; while continuing to press and hold, plug back in. A long beep will sound; continue holding Set button until beep stops, then release.

After several seconds, status LED will turn on to indicate reset is complete

Use PowerLinc Modem as a Phase Bridge

1) Install additional dual-band INSTEON devices if they are not already installed
2) Start Phase Detection Mode by tapping the Set button on PowerLinc Modem four times quickly

PowerLinc Modem will begin beeping and status LED will turn on solid green
3) Check the LED behavior of the other dual-band devices to see if they are on the opposite phase

If at least one of the dual-band device LEDs is blinking green or is bright solid white or blue, the device is on the opposite phase. Continue on to step 4.
4) Tap PowerLinc Modem Set button

PowerLinc Modem will stop beeping

Owner’s Manual and Tech Support

Call: INSTEON Support Line at 800-762-7845

This device complies with FCC Rules Part 15. Operation is subject to two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference that may be received or that may cause undesired operation. The digital circuitry of this device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio and television reception. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause such interference, which can be verified by turning the device off and on, the user is encouraged to eliminate the interference by one or more of the following measures:

- Relocate or relocate the receiving antenna of the device experiencing the interference.
- Increase the distance between this device and the receiver.
- Connect the device to an AC outlet on a circuit different from the one that supplies power to the receiver.
- Consult the dealer or an experienced radio/TV technician.

WARNING! Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.