Wireless Power Pack Load Controller

Line Voltage

Overview

Intelligent Lighting Controls wireless power pack controllers switch on/off power to a connected lighting load as directed by wirelessly linked sensors and wall controls. Additionally, the unit’s 0-10V dimming option greatly simplifies applications where dimming control from multiple switch locations is required. For applications where a hybrid wireless/wired architecture is desired, this wireless power pack can also be ordered with auxiliary low voltage connections.

The ILC wireless power pack is rated to switch fully loaded circuits and utilizes a powerful microprocessor to optimize its switching timing, ensuring long relay life even when controlling high-inrush LED lighting. As with all ILC products, these power packs are easy to install and incorporate features which reduce contractor labor time. An elongated chase nipple with snaps for quick installation and an optional snap-on low voltage wire chamber make for a hassle free contractor experience. All ILC-SWX products are proudly made in the USA.

Basic Operation

A received wireless message indicating occupancy from one or more wirelessly linked sensors will trigger the pack’s integrated relay to close. When configured for Vacancy operation, an ON switch message is required from a wirelessly linked wall station to initially trigger lights. Once closed, line voltage will flow through the relay and turn on the connected lighting load. The wireless power pack maintains a master time delay that is reset every time a linked sensor reports occupancy. Lights will be switched off once there hasn’t been an occupancy message reported for the duration of the time delay.

Features

- Wirelessly Links to Sensors & Wall Stations
- Pairs in Seconds up to 50 Remote Devices
- Switches Up to 20A Line Voltage Loads
- Electronically Timed Switching Ensures Long Relay Life
- Integrated Test/Programming Button
- Plenum Rated (UL 2043)
- Configurable Time Delays and Operational Modes (e.g. Occupancy/Vacancy)
- Optional 0-10V Dimming Output for Partial On & Partial Off Operation
- Optional Low Voltage Sensor & Wall Station Wired Connectivity

Specifications

**Electrical**

Operating Voltage
120/277 VAC, Single Phase, 50/60 Hz

Class 2 Output Ratings
18 VDC, 150 mA (-AX version)

Relay Current Reqs
55 mA

Load Ratings
- 20A @ 120 VAC - General Purpose Plug Load
- 20A @ 120/277 VAC - General Purpose, Tungsten, Magnetic Ballast
- 16A @ 120/277 VAC - Electronic Ballast, LED Driver

DC Load Ratings
- 20A @ 28 VDC (MAX)
- 1A @ 5 VDC (MIN)

Dimming Load
50mA, (0-10 VDC ballasts or drivers compliant with IEC 60929 Annex E.2)

Motor Load
1 HP

ESD Immunity
Tested to withstand electrostatic discharge without damage or memory loss

Environmental

Operating Temp
32°F to 122°F (0°C to 50°C)

Relative Humidity
0-95% Non-Condensing

Indoor Use Only

Wireless

Range
80’ line of site w/o obstruction (walls)
40’ with obstruction (walls/floors)

Frequency
915 MHz ISM Band

Wireless Linking
Simple 3 sec. Push Button Process

Security
All Wireless Data is Encrypted

Physical

Size
3.00” H x 2.25” W x 1.88” D (7.62 cm x 5.72 cm x 4.78 cm)

Weight
6.00 oz.

Color
Blue

Mounting
1/2” Knockout

Relay Test Button

LED Status Indicator
Bi-color White & Blue

Operation

Operating Modes
Occupancy & Vacancy Partial On/Off (-D option)

Time Delay Options
1, 5, 10, 15, 20, 30 min.

Code Compliance
These power packs can be used to meet ASHRAE 90.1, IECC, & Title 24 energy code requirements
ORDERING INFO

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>FUNCTIONALITY</th>
<th>VOLTAGE</th>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILC-SWX</td>
<td>Power Pack 9 Wireless Power Pack Load Controller, 20A</td>
<td>120/277 V</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Auxiliary Hybrid Wired Connections</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dimming Control (0-10V)</td>
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</tbody>
</table>

ACCESSORY

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>ILC-SWX-999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snap-On Low Voltage Wiring Chamber</td>
<td></td>
</tr>
</tbody>
</table>

APPLICATIONS

COMPATIBLE WIRELESS DEVICES

The below chart lists the devices that can be used in an ILC wireless application. Note that sensors and remote switch & dimmer devices are transmit only devices and therefore must be linked to a load controller for switching or dimming of lighting.

<table>
<thead>
<tr>
<th>MODEL #</th>
<th>DESCRIPTION</th>
<th>WIRELESS TYPE</th>
<th>POWER TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILC-SWX-201-B</td>
<td>Small Motion 360° Sensor, PIR</td>
<td>Transmit</td>
<td>Battery</td>
</tr>
<tr>
<td>ILC-SWX-401-B</td>
<td>Wide View Sensor, PIR</td>
<td>Transmit</td>
<td>Battery</td>
</tr>
<tr>
<td>ILC-SWX-402-B</td>
<td>Long Range Hallway Sensor, PIR</td>
<td>Transmit</td>
<td>Battery</td>
</tr>
<tr>
<td>ILC-SWX-851-xx</td>
<td>Wall Switch Load Controller, No Neutral Required, &lt;xx = color&gt;</td>
<td>Transmit &amp; Receive</td>
<td>120-277 VAC</td>
</tr>
<tr>
<td>ILC-SWX-852-B-xx</td>
<td>Remote Switch (On/Off), &lt;xx = color&gt;</td>
<td>Transmit</td>
<td>Battery</td>
</tr>
<tr>
<td>ILC-SWX-854-B-xx</td>
<td>Remote Dimming Switch (On/Off, Raise/Lower), &lt;xx = color&gt;</td>
<td>Transmit</td>
<td>Battery</td>
</tr>
<tr>
<td>ILC-SWX-950</td>
<td>Power Pack Load Controller, 20A</td>
<td>Receive</td>
<td>120/277 VAC</td>
</tr>
<tr>
<td>ILC-SWX-950-D2</td>
<td>Power Pack Load Controller, 20A, 0-10V Dimming</td>
<td>Receive</td>
<td>120/277 VAC</td>
</tr>
<tr>
<td>ILC-SWX-950-AX</td>
<td>Hybrid Wireless/Wired Power Pack Load Controller, 20A</td>
<td>Transmit &amp; Receive</td>
<td>120/277 VAC</td>
</tr>
<tr>
<td>ILC-SWX-950-AX-D2</td>
<td>Hybrid Wireless/Wired Power Pack Load Controller, 20A, 0-10V Dimming</td>
<td>Transmit &amp; Receive</td>
<td>120/277 VAC</td>
</tr>
</tbody>
</table>

WIRING

MODEL #: ILC-SWX-950

MODEL #: ILC-SWX-950-D2

MODEL #: ILC-SWX-950-AX

MODEL #: ILC-SWX-950-AX-D2
**INSTALLATION OPTIONS**

**POWER PACK LOW VOLTAGE WIRING CHAMBER**

- Provides 3 knockouts for conduit connections.
- Chase nipple has snaps that enable quick installation through any 1/2” knockout.
- Test/programming button.
- LED indicator.
- Snap directly to main housing.

**LOW VOLTAGE WIRING CHAMBER [OPTIONAL]**

- Connects low voltage chamber to conduit before connecting to power pack. Conduit should be appropriately supported by other means and not use the low voltage chamber for support.
- Snap-on cover.
- Wiring chamber.

**WIRELESS LINKING (PAIRING)**

Linking a wireless power pack to a wireless sensor or remote wall station is quickly done via the following procedure:

**Step 1.** Enter pairing mode by holding down the power pack’s button for 3 seconds until the LED starts alternating white then blue, then release.

**Step 2.** At the sensor or remote wall station, hold down the programming button for 3 seconds until the LED starts alternating white then blue. Releasing will link the sensor with any wireless power packs in pairing mode (see note 1 below).

**Step 3.** Repeat step 2 to link another sensor or device.

**Step 4.** When all devices have been linked, exit pairing mode on the power pack by pressing the button 1 time. Pairing will also be automatically closed after 15 minutes of no new devices being linked.

**Note 1:** When in pairing mode, the alternating LED colors on the power pack will periodically pause and blink out the total number of linked devices. There will be no blinks during the pause until the first device is linked.
FCC INFORMATION (FCC ID: 2AVRY-SWX0003)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:
1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.
Changes and Modifications not expressly approved by BLP Technologies can void your authority to operate this equipment under Federal Communications Commission’s rules.

INDUSTRY CANADA INFORMATION (IC: 26012-0003)

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d’Industrie Canada applicables aux appareils radio exempts de licence. L’exploitation est autorisée aux deux conditions suivantes : (1) l’appareil ne doit pas produire de brouillage, et (2) l’utilisateur de l’appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d’en compromettre le fonctionnement.