

Intellect™ Power Control Module

Cat. No. ZL027-Nxx

IMPORTANT SAFEGUARDS READ AND FOLLOW ALL SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

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

- Do not use outdoors.
- Do not mount near gas or electric heaters.
- Equipment should be mounted in locations and at heights where it will not be subjected to tampering by unauthorized personnel.
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- Do not use this equipment for other than its intended use.

WARNINGS

- **TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING, SERVICING, OR REMOVING FIXTURE OR CHANGING LAMPS!**
- **RISK OF ELECTRIC SHOCK** - More than one disconnect switch may be required to de-energize the equipment before servicing. Disconnect both normal and emergency sources within this unit before servicing any equipment connected to this unit.
- "EMERGENCY CIRCUITS" enclosed label should be placed in a location visible after installation so as to be readily identifiable as a component of the emergency system.

CAUTIONS

- To be installed and/or used in accordance with electrical codes and regulations.
- If you are not sure about any part of these instructions, consult an electrician.
- To avoid electrical overload, total connected fixture load shall not exceed output rating.
- To be used for indoor applications only.

- Use this device with **copper or copper clad wire only**.
- Maximum distance between Sensor Head and Power Control Module is 10 feet (3m).
- Use only Intellect™ cable for connection between Sensor Head and Power Control Module. Alternate lengths are available should the one provided be too short or long.

NOTE: Power Control Module may be installed into your fixture by the fixture manufacturer, or, with some fixture types, like downlights, the Sensor Head will be installed adjacent to the fixture. When the fixture is pre-installed into the fixture, please refer to the fixture documentation for replacement information.

NOTE: Suitable for Use in Other Environmental Air Space (Plenums) in Accordance with Section 300.22, (C) of the National Electrical Code.

DI-000-ZL027-02C

INSTALLATION INSTRUCTIONS

ENGLISH

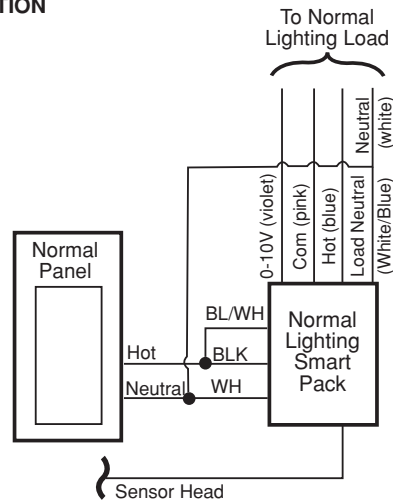
DESCRIPTION

This Intellect™ Power Control Module is designed to be used within an Intellect system and, in concert with Intellect Sensor Heads and Intellect enabled Room Controllers. There are several basic system components:

- **Room Controllers:** These are used to coordinate and control multiple Lumina RF fixtures and sensors within a room, specifically those with Intellect™ enabled technology. It manages all energy management functionality both as required by code and as desired by the user.
- **Sensor Heads:** Detects occupancy, light level, and wirelessly communicates to Room Controllers & other fixtures to coordinate activities within a room providing energy management and architectural controls functionality. Connects via the Intellect™ cable to load controls.
- **Power Control Modules:** Controls On/Off/Dimming state of load and provides metrology data to system and end user via the app.

All aspects of the system can be configured to meet the specific needs of the end-user and their application. An initial configuration can be created without any special tools using only the room controller and installed devices within the room. System refinements can be made using the Leviton Intellect app from your smartphone or other Bluetooth enabled Android or iOS device.

INSTALLATION



NOTE: Depending on date of manufacture, the pink 0-10V wire may be gray

- WARNING: TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING!**
- Mount the Power Control Module to the fixture junction box using the nipple and provided mounting nut.
- Connect input power, relay power, and 0-10V control lines as appropriate per your application by following instructions below.

Line and Relay Connections:

Remove 5/8" (1.6 cm) of insulation from each circuit conductor. Make sure that ends of conductors are straight. Connect lead wires from Power Control Module per appropriate WIRING DIAGRAM: Twist strands of each lead tightly and, with circuit conductors push firmly into appropriate wire connector. Screw connectors on clockwise making sure that no bare conductor shows below the wire connectors. Secure each connector with electrical tape.

CLASS 1/CLASS 2 INSTALLATION NOTE:

0-10V Dimming Control Connections

The low voltage 0-10 VDC dimmer control circuit can be installed using Class 1 or Class 2 wiring methods.

For Class 1 Installation: The 0-10V control wires shall be connected using typical building type wire per NEC Code NFPA 70.

For Class 2 Installation: All devices within the circuit must be Class 2 rated and the 0-10V dimming control wiring must be wired per the following Class 2 instructions, which are in accordance with NEC Code NFPA 70, paragraph 725.136 (d). The 0-10V control wires can be connected to CL3, CL3R or CL3P rated control cables (or permitted substitute) that connect all Class 2 devices within the building. CL3x cable does not need to be installed in conduit. The silicone tubing provided (or other non-conducting sleeve) shall be installed over the CL3x cable starting from the wire connectors to the point where they extend out of the electrical box. The sleeving over the CL3x cable allows a mechanical separation from Class 1, line, neutral and ground lines.

- Silicone tubing shall be NRTL (UL/CSA/ETL) recognized or equivalent to provide mechanical separation equal to .25" in air.
- Connectors joining 0-10V control wires shall be approved LISTED connectors.
- Wire connectors and wire tubing shall be provided by the installation contractor.

- Line Voltage Wiring:** Remove 5/8" (1.6 cm) of insulation from each circuit conductor. Make sure that ends of conductors are straight. Connect lead wires from Power Control Module to LINE circuit per appropriate WIRING DIAGRAM as follows: Twist strands of each lead tightly and, with circuit conductors push firmly into appropriate wire connector. Screw connectors on clockwise making sure that no bare conductor shows below the wire connectors. Secure each connector with electrical tape.
- Connect the Power Control Module to a Sensor Head using a Leviton Intellect sensor head cable, part number ZLAEX. Ensure the cable is firmly seated into connection both in the Sensor Head and the Power Control Module.
- Restore power at circuit breaker or fuse. **INSTALLATION IS COMPLETE.**

Wire Designations

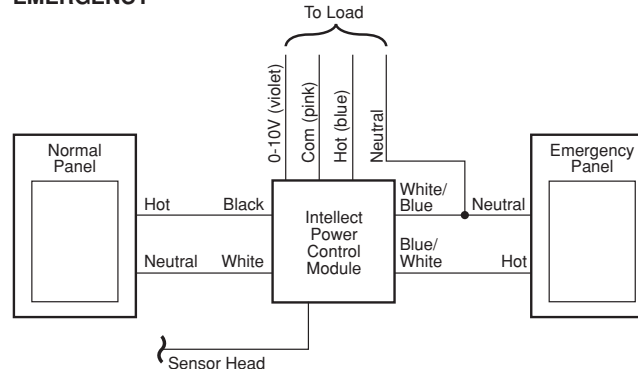
Control Power In: 120-277VAC	Black
Control Neutral	White
Load (Load IN)	Blue/White
Load (Load OUT)	White/Blue
0-10VDC Control	Violet
0-10VDC Common	Pink

• All wires rated at 105C, 600V insulation.

OPERATION

- When power is applied, and the Sensor Head is connected, the system will operate in the out-of-box state where daylighting is active to an automatically calibrated target, and light turns ON upon occupancy and OFF upon vacancy. Prior to connection to sensor head, the Power Control Module will cycle through a manufacturing test.
- Upon initial connection to a room controller, fixtures will coordinate their operation together within their daylighting zones. See Room Controller Instruction Sheet for information as to how to initiate this configuration process.
- Custom Configuration & System Refinement:** System Configuration may be refined using the Leviton Intellect™ application, downloadable from Google Play or the Apple Store, using any Bluetooth enabled Android or iOS Device. Use the application to:
 - Manually add/remove fixtures from the room
 - Add additional keypads to the room
 - Change sensor parameters like Sensitivity, Timeout, Target Light Level
 - Create user defined groups of fixtures
 - Define scenes (Meeting, Presentation, Lunch, Dinner, Test, etc.)
 - Monitor Energy Usage and view Energy Usage Trend
- For additional Information about Leviton's Intellect™ enabled products including information about installation, use case diagrams, solution sheets, and other related products, please visit www.Leviton.com/intellect.

EMERGENCY



Note: Depending on date of manufacture, the pink 0-10V wire may be gray

The Intellect Power Control Module can be used as a UL 924 emergency bypass device ensuring that the relay is closed during a power failure condition and the 0-10V lines go to high impedance ensuring the load is at maximum output. Availability of input power to energize the load must be provided by connection to emergency panel.

When used for emergency lighting, the provided "Emergency Circuits" label shall be applied to the Intellect Power Control Module to be seen after device is installed. Also, the "Emergency Circuit Breaker" label shall be placed next to circuit breaker that is feeding the Power Control Modules so user is aware this breaker is an emergency lighting circuit.

When used for emergency lighting, the control input wires are connected to normal power, and the Load In for the relay is connected to Emergency Power from an EM Panelboard. Upon loss of normal power, the relay closes, and the 0-10V lines go to high impedance allowing the load to go to full output powered from the EM Source. Upon restoration of normal power, Power Control Module will automatically resume normal operation.

General FCC Statements:

Any changes or modifications not expressly approved by Leviton Manufacturing Co., could void the user's authority to operate the equipment"

FCC Statement:

This equipment 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 a residential installation. 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 communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna. —Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

IC Statement:

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device."

To ensure compliance with FCC's and ISED Canada's RF exposure requirements this device must be installed to provide a minimum of 20cm between the device and people.

SdoC Statement

FCC Suppliers Declaration of Conformity (sDoC): Model ZL027-Nxx manufactured by Leviton Manufacturing, Inc., 201 N Service Road, Melville, NY, <http://www.Leviton.com>. This device complies with part 15 of the FCC Rules. Operation is subject to the following two 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.

Use herein of third party trademarks, service marks, trade names, brand names and/or product names are for informational purposes only, are/may be the trademarks of their respective owners; such use is not meant to imply affiliation, sponsorship, or endorsement.

TECHNICAL SUPPORT

For Technical Assistance Call: 1-800-824-3005 (USA Only) or 1-800-405-5320 (Canada Only) www.leviton.com

FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at **Leviton Manufacturing of Canada ULC to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9** or by telephone at **1 800 405-5320**.

LIMITED 5 YEAR WARRANTY AND EXCLUSIONS

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Leviton is free of defects in materials and workmanship under normal and proper use for five years from the purchase date. Leviton's only obligation is to correct such defects by repair or replacement, at its option. **For details visit www.leviton.com or call 1-800-824-3005.** This warranty excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. **There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to five years. Leviton is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation.** The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.

REVISION