Intellect™

Wireless Intelligent Fixture Controller



WC, 0-10V, DALI Cat. Nos. ZL070-B00, B0A; ZL070-B20, B2A; ZL0D0-B00, B0A

WARNINGS

· READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

- TO AVOID FIRE, SHOCK, OR DEATH: TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING!
- To be installed and/or used in accordance with appropriate electrical codes and regulations.
 Controller is intended to be installed by the fixture manufacturer, but in some cases may be installed in the field. Field installation must use approved electrical enclosures **NOTE**: Suitable for use in air handling spaces (plenums).
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- For indoor applications only. DO NOT use outdoors
- · DO NOT use this equipment for other than intended use
- 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.

 Use this device with COPPER OR COPPER CLAD WIRE ONLY.
- · SAVE THESE INSTRUCTIONS.

PK-A3378-10-00-2A-X3

INSTALLATION INSTRUCTIONS

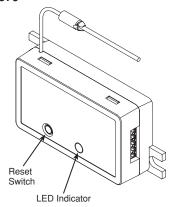
ENGLISH

Product Description

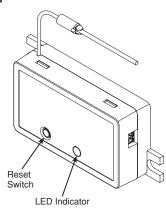
Product Description

The Intellect™ Wireless Intelligent Fixture Controller integrates wireless control technology directly into lighting fixtures. The controller is designed to be installed into the wiring compartment of the fixture and interface to the driver via 0-10V or DALI, depending on the model. The fixture controller interfaces with Leviton's wireless systems using its built-in radio. The controller is designed to be powered from the driver and in the case of 0-10V, requires a dim-to-off driver to be used. The controller may be installed into your fixture by the fixture manufacturer or may be added in the field if all requirements are met. When the controller is pre-installed on a fixture refer to fixture documentation for installation methods, means a fixture, refer to fixture documentation for installation methods, means, and requirements.

ZL070



ZL₀D₀



NOTE: Antenna applies to B0A and B2A models only.

Installation Requirements

- Installation and servicing should always be performed by qualified personnel.
- Mounts within fixture wiring compartment.
- Dim-to-OFF LED driver with 12-24V AUX power supply and 0-10V or DALI control.

Installation

WARNING: TO AVOID FIRE, SHOCK, OR DEATH: TURN OFF POWER at circuit breaker or fuse and test that power is off before wiring

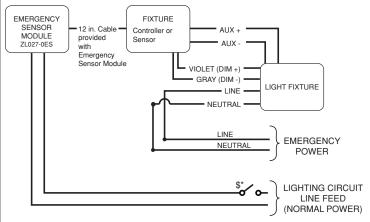
- Secure the controller within the wiring compartment using the included mounting screws.
- Remove 4 to 5 mm of insulation from each circuit conductor.
- 3. Make sure ends of conductor are straight.
- 4. Push conductor firmly into appropriate wire connector.
- For controllers with external antenna (ZL070-B0A, B2A, ZL0D0-B0A): The grommet on the end of the antenna wire is designed for installation into a 2 mm diameter hole to provide stability for the antenna wire outside the fixture. Locate a 2 mm hole as needed on the fixture housing. Thread antenna wire through hole. Push grommet into hole until secure.
- 6. If installing with Emergency Sense Module (ZL027-0ES): Connect the Emergency Sense Module to the Controller using the cable included with the ZL027-0ES.
- 7. Connect the Emergency Sense Module to Normal Power.
- **8.** Restore power at circuit breaker or fuse.
- Proceed to device enrollment per the included sheet and configuration per your system requirements. Installation is complete.

Emergency Wiring

Emergency Wiring
When used for emergency lighting, the ZL027-0ES Emergency Sense
Module is required and shall be connected using the supplied cable.
The control input wires for the emergency light fixture are connected
to emergency power, and the Emergency Sense Module is connected
to normal power. Upon loss of normal power, the relay closes, and the
controller or sensor 0-10V lines go to high impedance allowing the load to
go to full output powered from the EM Source. Commands to change the
device output from full are ignored when the Emergency Sense Module is
in this mode. Upon restoration of normal power, the controller or sensor
will automatically resume normal operation. will automatically resume normal operation

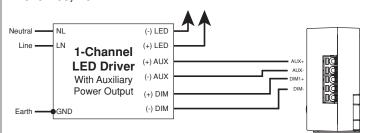
Emergency Self-Test: NFPA 101 Life Safety Code and NEC (Article 700.3(B)) requires regular testing of all emergency equipment. To perform a test of these products, a Test Switch that is a normally open, momentary-break type, that returns the equipment to normal status when released can be installed locally to interrupt normal power and perform emergency system test.

*The diagram below depicts a "Momentary-Break Type Test Switch" (\$) on the normal power line to trigger the emergency systems test. Clarify requirements with all local authorities.

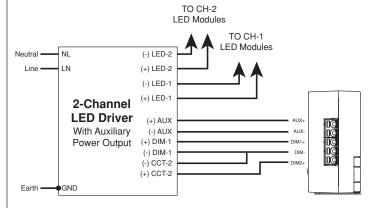


Wiring Diagrams

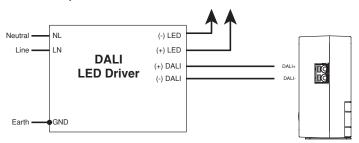
ZL070-B00, B0A



ZL070-B20, B2A



ZL0D0-B00, B0A



Operation

Factory Default (Out-of-the-Box) Operation:

- At first power-up or after factory reset, the controller will bring the load to 100% in approximately 1 second and then dim down to 0% in approximately 1 second.
 This process will repeat once and then the load will return to 100%
- The controller will be in auto-join mode and attempting to connect to a network.

- Press and hold the reset button for 1 to 3 seconds to initiate
- The controller will bring the load down to 0% within 1 second and back up to 100% within 1 second and then repeat once.
- The controller will then return to normal operation.

Factory Reset:

- Press and hold the reset button; LED will turn WHITE.
 Release reset button after at least 5 seconds, but no longer than 10.
- LED will blink WHITE 4 times per second until reset completes

Changes to Default Operation:
• System must be configured. See "Configuration" section.

INDICATOR LIGHT DESCRIPTIONS			
LED	Action / Definition		
No activity	Enrolled in network/ normal operation		
Slow blink GREEN	Searching for network		
Rapid blink BLUE 2X, pause, repeat	Bluetooth connection active		
Solid BLUE	Emergency sense input active		
Blink GREEN 4X per second	Software update in progress		
1X blink AMBER (Enrolled in Zigbee network)	Status (press reset less than 5 sec.)		
2X blink AMBER (Enrolled in Zigbee network, incorrectly commissioned)	Status (press reset less than 5 sec.)		
Blink WHITE 4X per second	Factory reset (press reset more than 5 seconds)		

SPECIFICATIONS		
Catalog Numbers	ZL070-B00, B20, B0A, B2A	ZL0D0-B00, B0A
Input Rating	12-24VDC	DALI
Control Output	0-10V, 5mA sinking	DALI
Operating Temperature	32°F to 185°F (0°C to 85°C)	
Storage Temperature	-4°F to 185°F (-20°C to 85°C)	
Mounting	Fixture wiring compartment	
IP Rating	IP20	
Purpose of Control	Energy Management Equipment	
Action Control Type	1	
Pollution Degree	2	
Impulse Voltage	800V	
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Configuration

- System Configuration may be refined using the Leviton GreenMAX DRC application, downloadable from Google Play™ or the Apple Store®, using any Bluetooth™ enabled Android™ or iOS Device. Use the application to:
 - a. Manually add/remove fixtures from the room.
 - b. Add additional keypads to the room.
 - c. Change sensor parameters like sensitivity, timeout, and target light level. $% \label{eq:continuous}%$
 - d. Create user-defined groups of fixtures.
 - e. Define scenes (meeting, presentation, lunch, dinner, test, etc.).
- 2. 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.

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.

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

RF EXPOSURE AND CO-LOCATION

To ensure compliance with FCC's and ISED Canada's RF exposure requirements, this device must be installed to provide a minimum of 20 cm. between the device and people. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

FCC SUPPLIERS DECLARATION OF CONFORMITY

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.

Trademark Disclaimer

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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 2 YEAR WARRANTY AND EXCLUSIONS

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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 two 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 two 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.