

DALI Distributed Room Controller Gateway

Cat. No. DRCCDD-L0

PK-A3267-10-00-5A AR3128

INSTALLATION INSTRUCTIONS

ENGLISH

WARNINGS

- 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.
- If you are unsure about any part of these instructions, consult an electrician.

CAUTIONS

- Use this device with **copper or copper clad wire only**.
- For indoor applications only.
- Save these instructions.

Introduction

DRCCDD-0L0 is the highly integrated LumaCAN gateway device capable of communicating with DALI lighting systems. It is developed with an innovative approach for all types of commercial and domestic use. Up to 64 ballasts can be connected to each channel and 16 group addresses can be created per one channel.

The extensive functions of DRCCDD-0L0 will enable multiple lighting scenarios. Follow this guide to install and connect the DRCCDD-0L0 gateway to the automation system.

Installation

Before installation, consider the items noted below.

- Determine power supply strategy and requirements.
- Determine LumaCAN device address and channel assignments. This may be defined on your system submittal drawings.

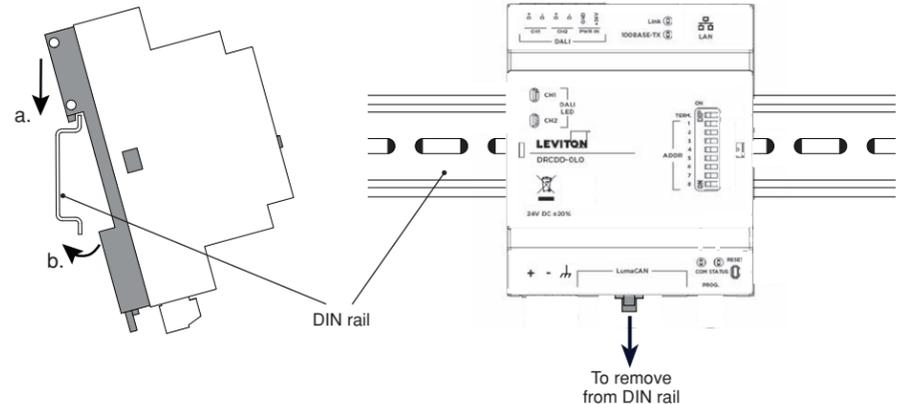
WARNING: TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER at circuit breaker or fuse and test that power is off before wiring!

1. Mount the controller on the DIN rail.

NOTE: To remove the controller from the DIN rail, pull down on the tension spring and lift off.

2. Choose the appropriate wiring for your application.

LumaCAN to DALI gateway requires Class 2 (LPS) power which ordinarily will be received over the LumaCAN network; however, in cases where power isn't available over LumaCAN, an external supply may be used. DALI networks require power which is typically provided at the controller. If a power supply is provided external to your gateway, for example if a CN100 is used, then the DALI Power In terminals should remain disconnected. If however no power supply is provided, it can be provided by the controller.



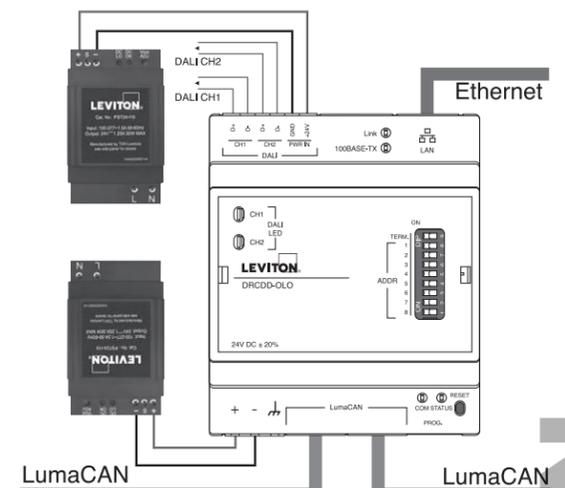
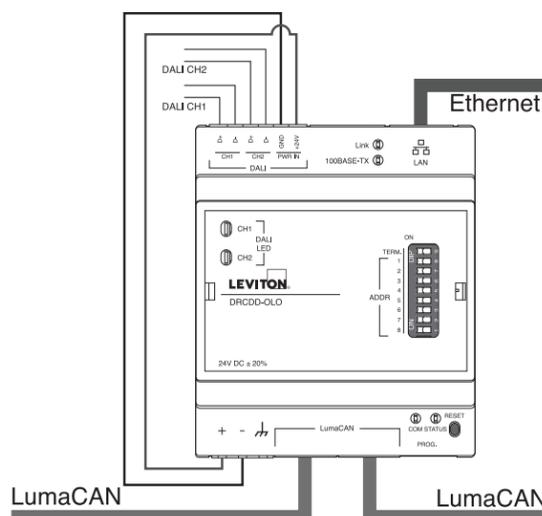
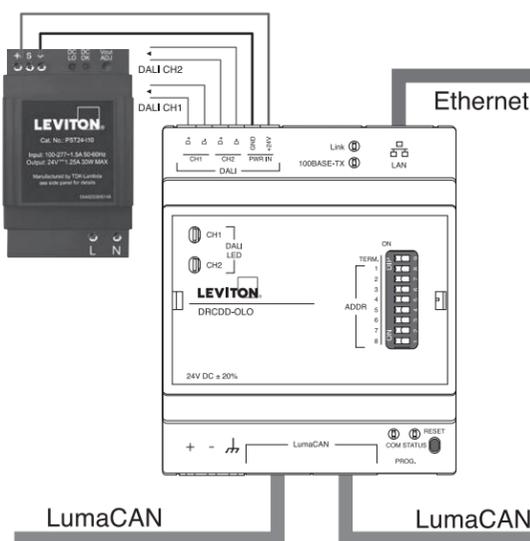
NOTE:

- DALI is NOT a PELV/SELV interface. Under some codes, DALI must use an isolated PSU.
- DALI Power Supply voltage must NOT exceed the maximum value (Refer to Product Specifications).

- a. When to use LumaCAN powered with isolated DALI power supply:
 - When DALI requires a separate isolated power supply.
 - When DALI network is wired as Class 1 or 2.
 - In this application the total draw from LumaCAN is 60mA for the gateway.
 - In this application the total draw from DALI power supply is 250 mA per DALI channel, 500mA max.

- b. When to use LumaCAN powered:
 - When DALI network is wired as Class 2 and all power can be provided from the LumaCAN network.
 - In this application the total draw from LumaCAN is:
 1. 250mA or each DALI channel in use
 2. 60mA for the gateway
 - For single channel DALI, 250mA + 60mA = 310mA
 - For dual channel DALI, 2(250mA) + 60mA = 560mA

- c. When to use LumaCAN Data ONLY, isolated DALI power supply, isolated gateway power supply:
 - When DALI requires a separate isolated power supply.
 - When DALI network is wired as Class 1 or 2.
 - In this application there is no power draw from LumaCAN.
 - In this application the total draw from DALI power supply is 250 mA per DALI channel, 500mA max.
 - In this application the total draw from the gateway power supply is 60mA.

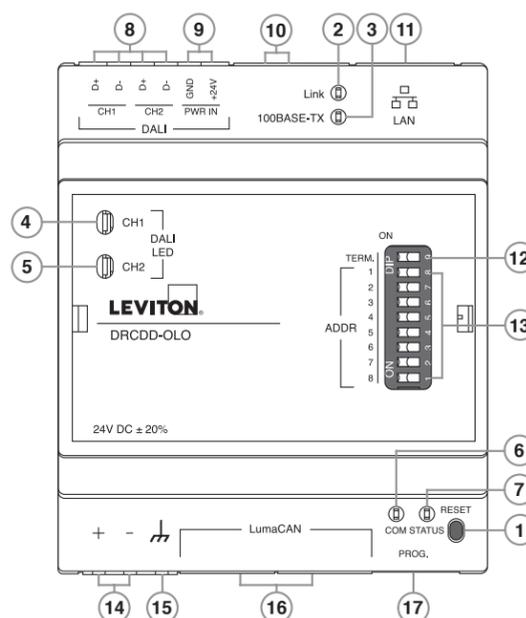


Operation

1. Reset Switch (1): to return device Ethernet settings to factory defaults, press and hold reset switch for 20 seconds until the status indicator light begins to blink rapidly.

2. LED indicator light functions:

LED Indicator Light	Action	Indicates
Ethernet Link Indicator Light (2)	Intermittent Blink	Rx and Tx Ethernet Traffic
Ethernet Speed Indicator Light (3)	Steady	Ethernet Speed is 100Mbps
	Off	Ethernet Speed is 10Mbps
DALI CH1 Indicator Light (4)	Intermittent Blink	Rx and Tx on the DALI channel
DALI CH2 Indicator Light (5)	Intermittent Blink	Rx and Tx on the DALI channel
Communication Indicator Light (6)	Steady	Power
	Rapid Blink	Duplicate LumaCAN Node ID
Status Indicator Light (7)	Blink once/350ms	Normal Operation
	Rapid Blink	Indicated Bootloader Mode



3. Other features:

- DALI output CH1 and CH2 (8)
- DALI power input (9)
- Not in use (10)
- Ethernet jack (11)
- Termination resistor switch (12)
- LumaCAN address (13)
- Power input (14)
- Device ground (15)
- QTY 2 LumaCAN jacks RJ45 (16)
- Micro USB - factory use ONLY - (17)

WEB VERSION

Configuration

All configuration is done through the HTML configuration interface. To enter the configuration interface from your web browser, navigate to a web page using the following IP address and the default username/password credentials.

- Default IP address: 192.168.0.11
- Default web link: http://192.168.0.11
- Default user: admin
- Default password: admin

1. Configure IP settings.

- Update IP address setting from the INTERFACE MENU.
- Only fixed IP addresses are supported at this time.
- In this application the total draw from LumaCAN is 60mA for the gateway.
- IP communication is only required for setup and configuration, it is not required for day to day operation.

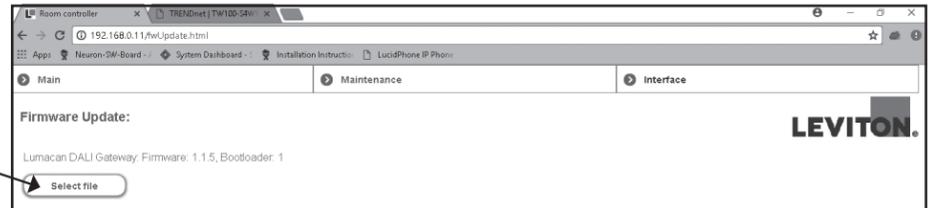
Replace the IP address in the web link at LEFT with whatever IP address you configure below. In order to connect directly from your PC you will need to ensure your PC and the device are on the same subnet.

NOTE: Configuration steps may be performed in any order; however, the process below is recommended.



2. Update Firmware.

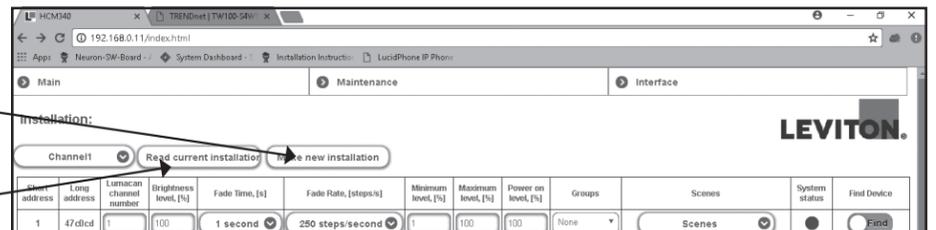
- Current firmware release can be found on Leviton's field service FTP site. Contact Tech Support for details if needed.
- Update firmware on the maintenance menu. Select the firmware and proceed through the update process.



3. Configure your DALI Networks.

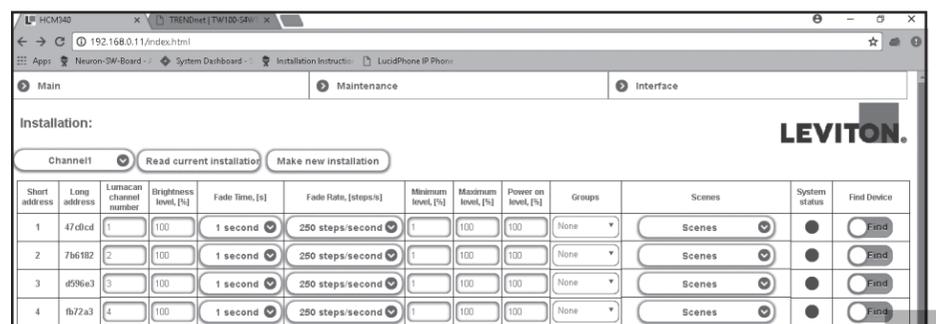
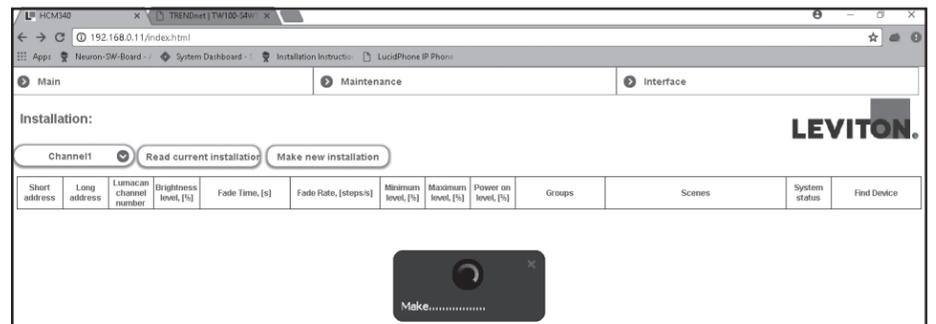
- Select the channel you want to configure (Channel 1 or Channel 2).
- Choose MAKE NEW INSTALLATION or READ CURRENT INSTALLATION. This initiates the process of creating and forming a DALI network and assigning short addresses to all of the devices. Any device that currently has a short address may be reset. MAKE NEW INSTALLATION should be selected only the first time a network is created. All future network changes/updates should be done by selecting READ CURRENT INSTALLATION.

NOTE: When selecting READ CURRENT INSTALLATION, short addresses are not changed and all existing programmed parameters remain. This option should be selected on all networks after first configuration.



4. Configure Installation.

- Each of the properties below can be set for each device on the network. Parameters are set by entering data into the fields.
- LumaCAN Channel Numbers - each channel number must be unique for each device on the network.
- Brightness Level - indicates the current dimmed level of this device. Can be used to temporarily set a test level for the device and validate communication.
- Fade Time/Rate - fixed fade time for this device. LumaCAN fade times are ignored and the fixed fade time is used for all commands. This is so that DALI network is not overly congested.
- Minimum/Maximum Level - the minimum/maximum control level. Default = 1/100%.
- Groups - not used at this time.
- Scenes - not used at this time.
- System Status
 1. Green - Device is online and communicating.
 2. Red - Device is offline.
- Find - used to trigger device identify. Each device determines its own identify response, but typically light fixtures will turn on and off and sensors/switches will blink their LED indicator lights



Specifications	
Power Input: Gateway	VDC 24V ±20% 60mA (Provided through LumaCAN or Power Input Terminal)
Power Input: DALI	23 - 30V VDC
	250mA - Single DALI Channel in use
	500mA - Two DALI Channels in use
Physical Interfaces	1x CAN, 2x DALI, 1x Ethernet
Communication Protocols	LumaCAN, DALI
DALI Load Capability	max 250mA per channel
DALI Devices	64 per channel
Max Cable Length (DALI)	300m (984 ft)
Ethernet	1x 10/100 Base T on RJ-45 Connection
Operating Temperature Range	0°C - 45°C (32°F - 113°F)
Storage and Transportation Temperature	-10°C - 70°C (14°F - 158°F)
Maximum Air Humidity	0-90%, non-condensing
Dimensions (W x H x D)	70 x 86 x 59mm (2.76 x 3.39 x 2.32 in)
Protection Level	IP20

FCC AND INDUSTRY CANADA COMPLIANCE STATEMENT:

FCC & IC Statement - This device complies with Part 15 of the FCC Rules and ISSED License-exempt RSS standard(s). 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. Changes or modifications not expressly approved by Leviton could void the user's authority to operate the equipment.

These limits are designed to provide reasonable protection against harmful interference in a commercial 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 an 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.

This Class A digital apparatus complies with Canadian CAN ICES-3(A)/NMB-3(A).

FCC SUPPLIER'S DECLARATION OF CONFORMITY:

Model DRCCD - 0L0 is Manufactured by Leviton Manufacturing Inc. 201 N Service Rd, Melville, NY 11747.

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.

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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 Ltd 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.