

LFXC076XA&DBTT

Bluetooth controllable 2ch 0-10V Analog/DALI controller



Description

LFXC076XA&DBTT is a Bluetooth controllable, 2 channel 0-10V/DALI controller. LFXC076XA&DBTT has a universal 100- 277 VAC input voltage range,

LFXC076XA&DBTT can control one or two 0-10V controllable LED drivers, or it can control a tunable white LED driver with two 0-10V control interfaces. The product can also be configured into a DALI mode where it can be connected to a DALI LED driver or DALI sensor for presence and/or daylight harvesting functions.

LFXC076XA&DBTT can be controlled with mobile app which can be downloaded free of charge from Apple App Store and Google Play Store.

Different Lafit Bluetooth products can be used from a simple one luminaire direct control to a complete and full featured light control system where up to 250 units form automatically an intelligent mesh network.



Compatible devices:

iPhone 4S or later
iPad 3 or later
iPod Touch 5th gen or later

Android 4.4 or later devices produced after 2013 with full BT 4.0 support

Installation

Make sure that the mains voltage is switched off when making any connections. Use 0.5-1.5 mm² solid or stranded conductor electrical wires. Strip the wire 6-7 mm from the end. Insert the wires into the corresponding holes and tighten the connector screws.

If the connected LED driver cannot be turned off completely from the control interface, an external relay with 12 VDC coil can be connected to channel 2. Make sure the relay is protected against flyback voltage, e.g. do not use a PCB relay without the flyback diode. A suitable fixture configuration must be selected in order to control a relay.

LFXC076XA&DBTT, as any other Lafit Bluetooth product, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block radio signals which are crucial to the operation of the product. A thorough connectivity testing is strongly recommended in the installation site.



1. Wiring diagram for single driver, 0/1-10V Analog or Dali Dimmable

Warning!
Do not connect the output channels in parallel. This may cause permanent damage to the product.

Profiles Name :
a) For 0/1-10V : CBU-A2D 0/1-10V (ON/OFF)
b) For Dali : CBU-A2D DALI/ BC/Sensor

4. Wiring diagram, DALI sensor

Profile Name : CBU-A2D DALI/BC/Sensors

Warning!
Do not connect the output channels in parallel. This may cause permanent damage to the product.

2. Wiring diagram, one driver (0/1-10V Analog or Dali Dimmable) and relay

**Profiles Name : a) For 0/1-10V : CBU-A2D 0-10V + Relay
b) For Dali : CBU-A2D Dali Relay**

Warning!
Do not connect the output channels in parallel. This may cause permanent damage to the product.

5. Wiring diagram, Push Button

Profile Name : CBU-A2D Push Push button + Relay

Warning!
Do not connect the output channels in parallel. This may cause permanent damage to the product.

3. Wiring diagram, two drivers (only 0-10V Analog dimmable)

Profile Name : Analog 0/1-10V 2CH

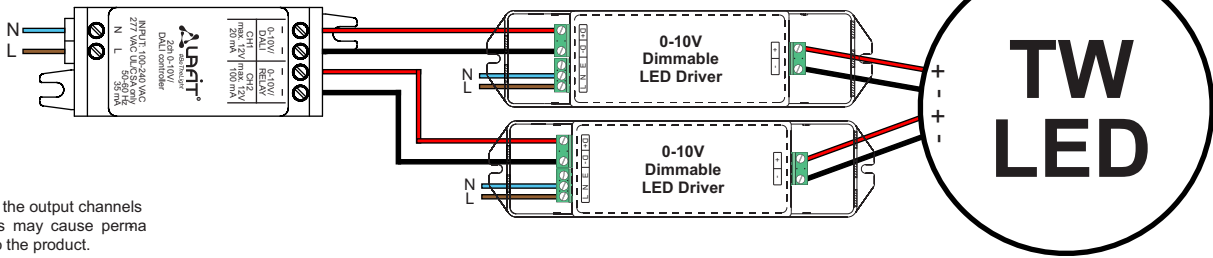
Warning!
Do not connect the output channels in parallel. This may cause permanent damage to the product.

Dimensions

Wire info:
Solid and stranded:
0,5-1,5 mm²/16-20 AWG
Strip length: 6-8 mm (.25")

6. Wiring diagram, two drivers (only 0-10V Analog dimmable) for tunable white LED Light

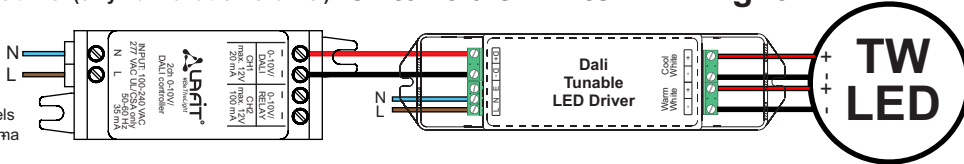
Profile Name : 0-10V TW



Warning!
Do not connect the output channels in parallel. This may cause permanent damage to the product.

7. Wiring diagram for Single driver (only Dali Tunable 2 channel) for tunable white LED Light

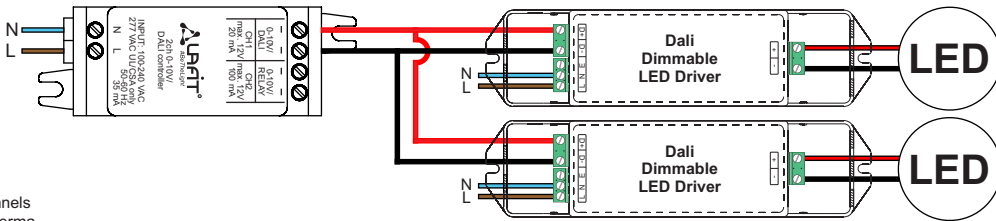
Profile Name : DALI DT8 TW



Warning!
Do not connect the output channels in parallel. This may cause permanent damage to the product.

8. Wiring diagram, two drivers (only Dali dimmable)

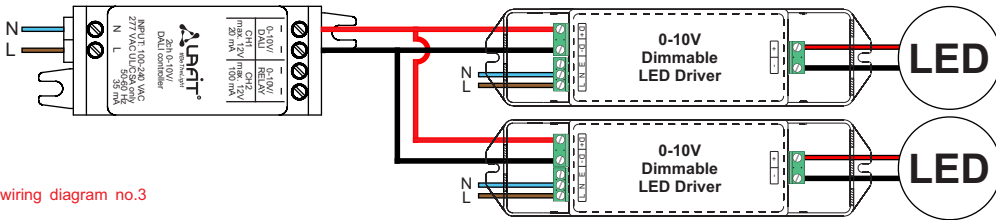
Profile Name : CBU-A2D DALI 2CH



Warning!
Do not connect the output channels in parallel. This may cause permanent damage to the product.

9. Wiring diagram, two drivers (only 0-10V Analog dimmable)

Profile Name : Analog 0/1-10V (ON/OFF)

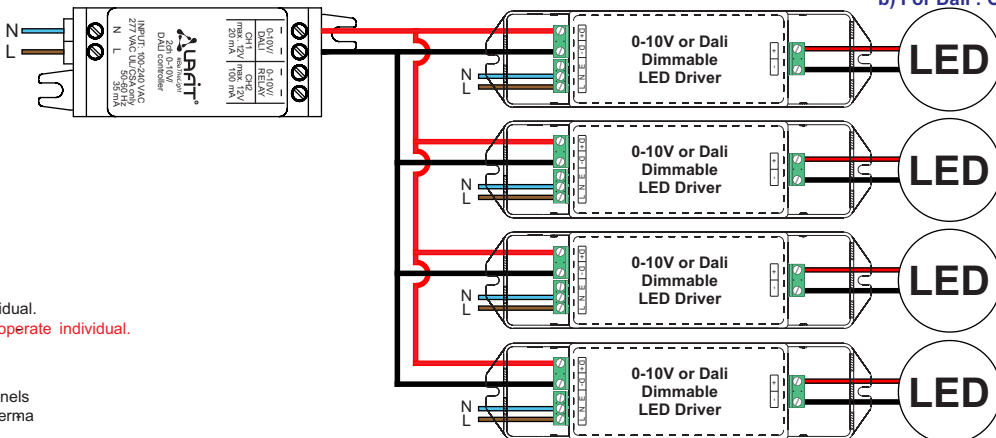


Note:
Can not operate individual.
For individual operation refer wiring diagram no.3

Warning!
Do not connect the output channels in parallel. This may cause permanent damage to the product.

10. Wiring diagram, four drivers (0-10V Analog dimmable or Dali dimmable)

Profiles Name :
a) For 0/1-10V : Analog 0/1-10V (ON/OFF)
b) For Dali : CBU-A2D DALI 4CH

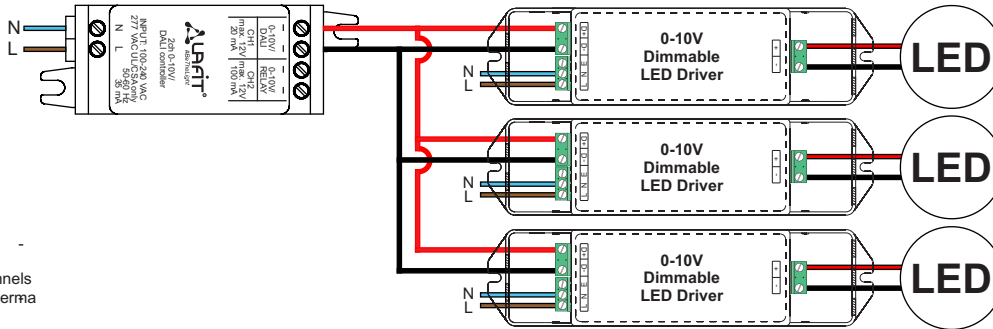


Note:
Dali driver can be operate individual.
0-10V Analog driver can not operate individual.

Warning!
Do not connect the output channels in parallel. This may cause permanent damage to the product.

11. Wiring diagram, three drivers (only 0-10V Analog dimmable)

Profile Name : Analog 0/1-10V (ON/OFF)

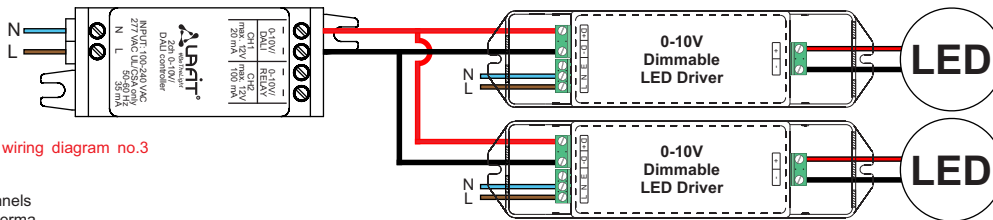


Note:
Can not operate individual.

Warning!
Do not connect the output channels in parallel. This may cause permanent damage to the product.

12. Wiring diagram, two drivers (only 0-10V Analog dimmable)

Profile Name : Analog 0/1-10V (ON/OFF)



Note:
Can not operate individual.
For individual operation refer wiring diagram no.3

Warning!
Do not connect the output channels in parallel. This may cause permanent damage to the product.

Technical data

Input		Operating conditions	
Voltage range:	100-240 VAC	Ambient temperature, ta:	-20...+45°C (-4...+113°F)
Frequency:	50-60 Hz	Max. case temperature, tc:	+70 °C (+158°F)
Max. mains current:	35 mA	Storage temperature:	-25...+70 °C (-13...+158°F)
No-load standby power:	< 0,5 W	Max. relative humidity:	0...80%, non-cond.
Channel 1 output		Connectors	
Output voltage, 0-10V	0-10 VDC, max. 7 mA (sinking)	Wire range, solid & stranded:	0,5-1,5 mm ² / 16-20 AWG
Output voltage, DALI	12 VDC, max. 20 mA (sourcing)	Wire strip length:	6-7 mm (.25")
Maximum number of drivers:	As mentioned in the wiring diagram only	Tightening torque:	0,4 Nm/4 Kgf.cm/2,6 Lb-In
Channel 2 output		Mechanical data	
Output voltage, 0-10V:	0-10 VDC, max. 7 mA (sinking)	Dimensions:	76,0 x 26,0 x 23,0 mm 3.0 x 1.0 x 0.9 inch
Output voltage, relay control:	12 VDC, max. 100 mA (sourcing)	Weight:	40 g
Maximum number of drivers:	1	Degree of protection:	IP20 (indoor use only)
Radio transceiver		Protection class:	Built-in Class II
Operating frequencies:	2,4...2,483 Ghz	FCC ID:	LFXC076XA&DBTT
Maximum output power:	-4 dBm		

Range

The range between two LFXC076XA&DBTT units or between a LFXC076XA&DBTT and a smart phone can vary a lot depending on obstacles and surrounding material. In open air the range between two LFXC076XA&DBTTs can be in excess of 200 ft, but if the unit is encapsulated into a metal structure, the range can be only few feet. Therefore, thorough testing is highly suggested.

Lafit bluetooth products uses mesh network technology so each LFXC076XA&DBTT acts also as a repeater. When testing the network, it is important to test that each unit can be controlled from any point of the network covered area.

Compliance Statement

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.

Radiation Exposure Statement for FCC

This device complies with FCC radiation exposure limits for an uncontrolled environment. This device shall be installed and operated with a minimum distance of 8" (20cm) between users or bystanders and the device.

Warning

Changes or modifications not expressly approved by Lafit lighting Pvt. Ltd. could void the user's authority to operate the equipment.

FCC Interference 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 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.

Information in this document is subject to change.