

2 Channel DALI to Zigbee+C4 User Manual



Introduction

The Confio Dual Channel DALI Controller (CT2DALIZB) is designed to operate with AC mains power. It enables seamless communication between a mobile application and DALI-compatible lighting devices

Technical Specifications

Power Input	110 to 240 VAC, 50/60 Hz
Operating Temperature	-10° to +55°C
Relative Humidity	5% - 95%
Dimensions	50mm x 50mm x 17mm
RF Frequency	2.4GHz
Power Consumption	<1 watt
Surge Protection	4kv
Typical Line of Sight Range	Up to 10 m indoor / 10-20 m outdoor
Plastic Housing	Fire Retardant ABS

Supported Load Types	DALI supported Devices (12V, 250mA Max)
Supported Load Type for LED indicators	110 to 240 VAC, 8A, 150W Max
DALI Communication	DALI Broadcast,(DT8,DT6)
Supported number of Ballasts	32 ballasts (drivers) per DALI channel.

Warnings & Considerations

WARNING!

Turn OFF electrical power before installing or servicing this product. Improper use or installation can cause SERIOUS INJURY, DEATH, or LOSS/DAMAGE OF PROPERTY.

WARNING!

This Device must be protected by a Circuit Breaker (20A max).

WARNING!

Ground this Device in accordance with the National Electric Code (NEC) requirements. DO NOT rely solely upon the yoke plate's contact with a metal wall box for adequate grounding. Use the Device's ground wire to make a secure connection to the safety ground of the Electrical System.



IMPORTANT!

This Device must be installed by a licensed Electrician in accordance with all national and local electrical codes.



IMPORTANT!

If you are unsure about any part of these instructions, consult a qualified Electrician.



IMPORTANT!

Use this Device only with copper or copper-clad wire. Do not use aluminum wiring. This product has not been approved for use with aluminum wiring.



IMPORTANT!

This product generates heat during normal operation.



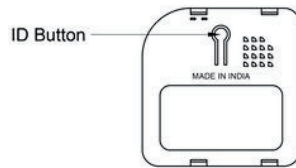
IMPORTANT!

Using this product in any manner other than described in this document voids the warranty. Confio is not liable for damage caused by misuse.

Safety Measures

- Before installation, ensure that the power supply (mains) is turned OFF.
- If multiple loads are connected to a single terminal, use appropriate connectors to avoid a short circuit.
- Use wires of minimum 1.5 sq mm and maximum 2.5 sq mm cross-sectional area for all connections.
- This device requires a Neutral connection to operate.

ID Button Location on the Device



ID Button Functions & LED Indication

Operation	ID Button Presses	Function/Mode	LED Indications	Notes
Normal Operation	4	Joining to Zigbee Network (Started identify process)	Both LEDs toggle on every 1 second	The joining process will take 15 seconds.
	9	Factory Reset	Both LEDs keep glowing until the factory reset completes.	Parameters will be set to default state
	13	Leave Network & Reset	Red LED Toggle on every 1 second	
	15	Restart		Device power cycle

Note:

- All settings will be reset to their factory defaults after the Device is left from Zigbee Network by the ID Button.
- If the device is connected to the Zigbee network, the user needs to press the node button, and the green LED will toggle.

Button Behaviour

Button Behaviours can be changed using Button Setup in Confio Puck Driver's properties.

Button 1 Behavior	4 - Toggle Load
Button 2 Behavior	0 - Load On
Button 1 On Level	1 - Load Off
Button 2 On Level	2 - Toggle Load (Latch)
	3 - Keypad (Latch)
	4 - Toggle Load
	5 - Keypad
	100

- Load On** – When the Switch detects voltage the corresponding load turns ON.
- Load Off** – When the Switch detects voltage the corresponding load turns OFF.
- Toggle Load** – When the Switch detects voltage the corresponding load will toggle.

Keypad – Adding a keypad connection to the driver will allow it to operate the load.

Toggle load (Latch) – The load will toggle only when the switch is in the ON state.

Keypad (Latch) – When the Switch detects voltage the keypad connection is triggered on, when the switch is turned off the keypad is turned off.

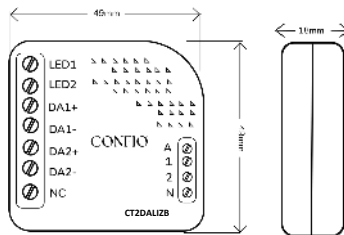
Note: Default Switch Behaviour is Toggle Load.

Configuration

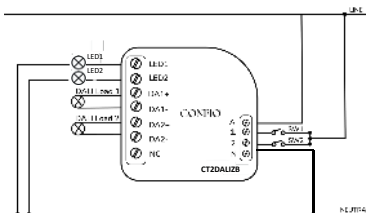
Function	ID Button	Input 1 (SW1)	Inputs 1 & 2 (SW1 & 2)
Identify	4	4	NA
ZigBee Channel	7	7	NA
Reboot Device	15	15	NA
Factory Reset	9	22	9-4-9
Leave Mesh & Reset	13	30	13-4-13

- Identify** – Join the Device to the Zigbee Network. **Zigbee Channel** – Device's current Zigbee channel is identified as the number of times LEDs blinks. **Reboot Device** – The Device will be rebooted and the relays will return to their previous state. **Factory Reset** – All Device application parameters will be reset to the factory defaults, except Zigbee Network parameters. The Device will remain connected to the Zigbee Network.
- Leave Mesh and Reset** – All Device parameters will be reset to the factory defaults including Zigbee Network parameters. The Device will be removed from the Zigbee Network.

Device Dimensions



Wiring Diagram



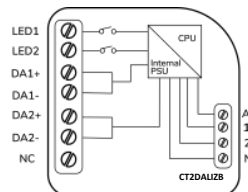
Note: Power Input is 110 to 240 VAC, 50/60 Hz, LED1 and LED2 are for Indicators

Important Instructions

Wear standard personal protection equipment to give protection to the installer.

- Position the antenna far away from metal elements to avoid interference.
- DO NOT cut or shorten the antenna, as its length is matched to the band in which the system operates.
- DO NOT over-tighten the terminal block. It can cause serious malfunction after installation.

Internal Block Diagram



Trouble Shooting

- If the load does not turn ON/OFF:
 - Ensure that the circuit breaker is not turned off or tripped.
 - Ensure that the load is not burned out and is screwed in properly.
 - Ensure that the Device is in working condition. (Red/Green LED blinks)
 - Check for proper wiring (see "Wiring Diagrams").
- If the Switches connected to the input contacts do not operate the load, check for proper wiring (see "Wiring Diagrams").
- If the device is not identifying to the Zigbee Network:

Confirm that the Control4 Controller and the Device are within the 10m distance while adding to the Zigbee Network.

Recommendations

For multiple loads connected to a single device, confirm that the total load does not exceed the rated capacity specified in the Technical Specifications

- Check adequate space behind the switch box before installation.
- Turn OFF the MCB before installing the Puck Module.
- Use only minimum 1.5sqmm wires and maximum 2.5sqmm wires for connections.
- Strictly follow the wiring diagram for connections.
- If there are signs of water seeping into the Switch Box, disconnect the power supply to avoid short circuits.

Warranty

Confio provides a standard 24-month warranty from the date of supply for all products.

- The warranty SHALL NOT cover below conditions:
- Mechanical damage caused by impact, dropping or improper use or used in a manner inconsistent with the usage defined in the Operating Manual.
 - Damage resulting from external causes, for example - floods, storms, fires, lightning or power surges. Damage resulting from surges in the power and/or Telecommunication, Network, improper connection to the grid in a manner inconsistent with the Operating Manual, or from connecting other Devices NOT recommended by the Manufacturer. Damage resulting from the use of spurious spare parts or accessories improper for the given model, repairing and introducing alterations by unauthorized persons.
 - Defects caused by operating in-operable devices or accessories.

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For any technical and support queries, please contact the Manufacturer

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