

CURTAIN CONTROLLER USER MANUAL



Introduction

Confio Curtain Controller designed to control high-wattage blind. It works with motorized roller blinds, CTCZB is powered by a single-phase AC and provides precise positioning of blinds, so they can be set to the position you choose.

The 4-Channel Relay can be used in one of four Operating Modes:

- 4-Channel Relay Controller -Controls up to 4 Relay-Controlled Devices.
- Dual-Channel Curtain Controller - Controls up to 2 Dual Channel Curtains or Blinds.
- Single-Channel Curtain Controller - Controls a Single High-Wattage Curtain.
- Fan-Light Controller - Controls a Three-Speed Fan and Light.

Technical Specification

Protocol	Zigbee Wireless Mesh Network, 2.4 GHz
Power Input	100VAC-240VAC +/-10%, 50/60Hz
Maximum Load/Relay	300W Inductive load at 250VAC

Power Ratings:

Load Type	Single Channel	2 Channel Muxed	3 Channel Muxed	4 Channel Muxed
Incandescent	400W	500W	750W	1000W
MLV	200W	250W	375W	500W
LED	100W	125W	185W	250W
Inductive	150W	185W	280W	375W

QR Codes

This document includes details for the Curtain Controller Mode. Please refer to the following documents for details for additional Operating Modes.

Please Scan the QR code below for the 4 Channel Relay Module



Operating Temperature	10C to +55C
Relative Humidity	8-80%
Dimensions	49mm x 49mm x 18mm
Surge Protection	12kv
Plastic Housing	Fire Retardant ABS
Supported Load Types	WT AC motors

Please Scan the QR code below for the 2 Channel Curtain Controller Module.



Please Scan the QR code below for the Fan-Light Controller Module.



Warnings and 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 a manner other than outlined in this document voids your warranty. Further, Confio is NOT liable for any damage incurred with the misuse of this product.

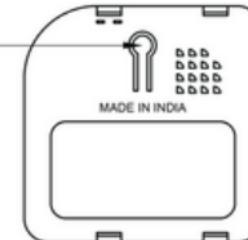


Safety Measures

1. Before installation, make sure that the power supply mains is turned off.
2. If multiple loads are connected to a single terminal, use appropriate connectors to avoid short circuits.
3. Use only a minimum 1.5sqmm wires and a maximum of 2.5sqmm wires for connections.
4. This Device requires a Neutral connection to operate.

ID Button Location On the Device

ID Button



Changing Modes

By default, the Device is configured to operate as a 4-Channel Relay. The operating mode can be changed using one of two methods.

- ID Button press sequence as referred to in the table, this must be done before adding the device to the Zigbee Network.
- Change Mode function is available in the Confio Puck Driver's Actions Tab. This function will allow you to choose one of the four Operation Modes. After changing modes once, the mode cannot be changed again unless the Device is removed from the Zigbee Network and reset to defaults.

Note: If the Device is added to Zigbee Network, pre-configured parameters, and mode in the Device will be overwritten by the Confio Puck Driver.

Note: Please refer to the Confio Puck Driver documentation for additional details

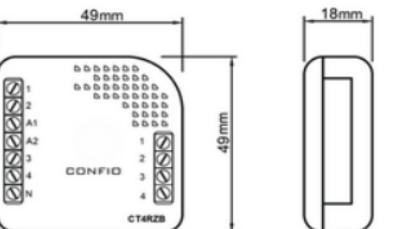
ID Button Functions and LED Indications

Operation	ID Button Presses	Function/Mode	LED Indications	Notes
Normal Operation	4	Join 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 & Reboot	Red LED Toggle on every 1 second	
	15	Restart		Device power cycle
	5	Device Mode Selection	Both LEDs toggle on every 500 milliseconds	Refer below Note 3
Device Mode Selection	1	To select 4-Channel Relay Mode	Red LED toggle on every 2 second until the Device joins to Zigbee Network	Refer 4-Channel Relay Controller Manual for more details
	2	To select Dual Curtain Controller Mode	Red LED toggle on every 2 seconds until the Device joins to Zigbee Network	Refer Dual Curtain Controller Manual for more details
	3	To select Single Curtain Controller Mode	Red LED toggle on every 3 seconds until the Device joins to Zigbee Network	Refer Curtain Controller Manual for more details
	4	To select Fan Controller Mode	Red LED toggle on every 5 seconds until the Device joins to Zigbee Network	Refer Fan Controller Manual for more details

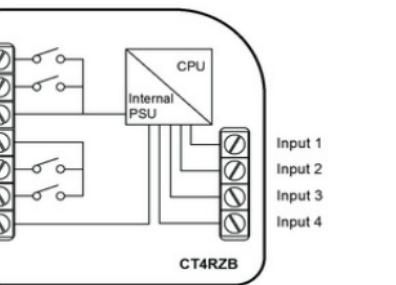
Note:

- If no Device Mode is selected within 30 seconds the Device will return to the previous application mode.
- 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 joined to Zigbee Network Green LED toggle on every 500 milliseconds

Device Dimensions



Internal Block Diagram



Note: As indicated Power 2 is NOT tied to the Neutral or Input Terminals, care MUST be taken if power is sourced from a different "Circuit Breaker" to alleviate tripping.

Configurations

Function	Node_SW	Aux. Contact 1 (SW_1)	Aux. Contact 1 & 2 (SW_1 & SW_2)
Identify	4	4	N/A
ZigBee Channel	7	7	N/A
Reboot Device	15	15	N/A
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.

Note: If the Device is disconnected from Confio Puck Driver, Parameters and mode in Device won't change.

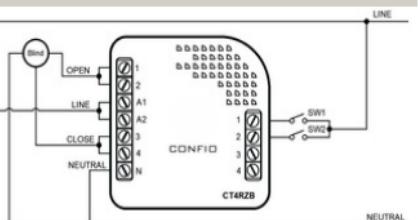
Define Open & Close Time

Blind Up Time (Seconds)	30.0
Blind Up Time Sync	Sync...
Blind Down Time (Seconds)	30.0
Blind Down Time Sync	Sync...

Before defining open/close time, Calculate open/close time of blind using stopwatch

- Default Open/close time of the Device is 30sec.
- Add Blind Drivers: ->Actions->Add Devices.
- Make sure Blind is in a fully opened position before setting the Open time or Close time.
- In the Blind Driver set the Open/Close time as shown in the above image.
- After setting Blind positions will show as 100% (i.e.,fully opened).

Circuit Connection



SW1->Blind Open, SW2->Blind Close

Output Side: Mux 1 & 2 terminals and connect to Blind Open and Mux 3 & 4 terminals and connect to Blind Close.

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.

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/Gree 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 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 connecting multiple loads on a single device, ask the Electrician to calculate the total load and confirm that it does not exceed the ratings mentioned under the Technical Specification section.

- When outputs are muxed and connected to an AC or a Geyser, appropriate switches automatically get disabled.
- Check the space behind the Switch Box for placing the Device.
- Turn off the MCB before the installation of Puck Module.
- Use only minimum 1.5sqmm wires and maximum 2.5sqmm wires for connections.
- Strictly follow the wiring diagram for connections.
- Do not connect higher loads (more than 8A) to single channel.
- Make sure parameters and configurations for muxing are set before connecting higher loads.
- If there are signs of water seeping into the Switch Box, disconnect the power supply to avoid sh

Warranty

A standard warranty of 24 months from the date of supply is applicable for all products

The warranty **SHALL NOT** cover below conditions:

- Mechanical damage caused by impact, falling, or dropping the device, unauthorized use, or use in a manner inconsistent with the usage defined in the Operating Manual.
- Damage resulting from external causes, for example - floods, storms, fires, lightning, and any other natural disasters.
- 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.

MEDHA
By Confio

For any technical and support queries,
please contact the Manufacturer

CONFIO TECHNOLOGIES PRIVATE LIMITED
#3500/A, 80 Feet Road,
Raghuvanahalli, Bangalore - 560062
Karnataka, India

Email: support@confiolabs.com
www.confiolabs.com