

Fan & Light Controller User Manual



Introduction

The Fan and Light Controller is a miniature Micro Module which is remotely controlled and designed to operate in AC mains. This Device enables 4 Step Fan Speed Control and ON/OFF control of one light. The Fan Speed is controlled by Mobile App or Rotary Step Switch. The Fan + Light controller also operates as a repeater within the Z-Wave Network it is associated and uses the latest Z-Wave plus chip.

Technical Specification

| | |
|--|---|
| Power Input | 240VAC, 50Hz |
| Maximum Load per Channel @240VAC | Fan - Max 120W (4 Speed) |
| Cumulative Load - 4 Channels Muxed @240VAC | 8A (LED Strip- Max 40W, LED-100W Incandescent Max 200W) |
| Operating Temperature | -10° to +55°C |
| Temperature Sensing | NA |
| Relative Humidity | 8% - 80%RH |

| | |
|-----------------------------|----------------------------|
| Dimensions | 49mm x 49mm x 17mm |
| Radio Frequency | 865.2MHz (IN) |
| Surge Protection | 1.2kv |
| Typical Line of Sight Range | 10-15m Indoor /30m Outdoor |
| Plastic Housing | Fire Retardant ABS |
| Supported Load Type | AC based Fan @240VAC |

Warnings & Considerations



CAUTION

READ INSTRUCTIONS IN FULL BEFORE USE

The Wiring Connection Diagram and Parameters to use are mentioned in the Manual. The Manufacturer, Confo will not be held responsible for any loss or damage resulting from not following the instructions of Operating Manual.



CAUTION

Do not connect the Device to Loads exceeding recommended values

Connect loads to the Module below the Load ratings to work normally. Do not connect over Load, this may lead to Module failure.



CAUTION

Follow User Manual for Circuit Connection

Connections must be made according to the instructions available on Operational Manual, faulty connection leads to manual failure.



DANGER

DANGER OF ELECTRIC SHOCK

All works on the Device may be performed only by a trained installers. If the installation done by an unauthorised Installers the Manufacturer will not be held responsible. Contact support@confiolabs.com or call +91-9606030659 for list of authorised installers.



DANGER

DANGER OF ELECTRIC SHOCK

Any works introducing changes to the configuration of connections or the load must be always performed with disconnected voltage. Since there are high chances of voltage occurrence at the terminals even after Device turn off. (Turn off the MCB)



DANGER

DANGER OF ELECTRIC SHOCK

Faulty connection or use may result in fire or Electric Shock .

Safety Measures

1. Before installation, make sure that the power supply mains are turned off.
2. Remove the Switch Board cover frame and the Switch Frame to access the Switches.
3. Select the Loads to be connected on particular terminals.
4. If multiple Loads are connected to a single terminal, use appropriate connectors to avoid short circuit.
5. Use only minimum 1.5mm² wires and maximum 2.5mm² wires for connections.
6. This Device requires a neutral lead to operate.

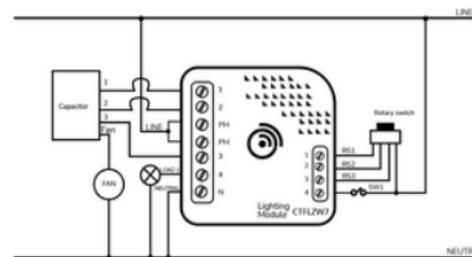
Circuit Connections

The below wiring diagrams explain the possible combinations that are available

Option 1: Connection Diagram for Rotary Step Switch

Follow the below Circuit Connection for connecting Rotary Switch for Fan Speed Controller

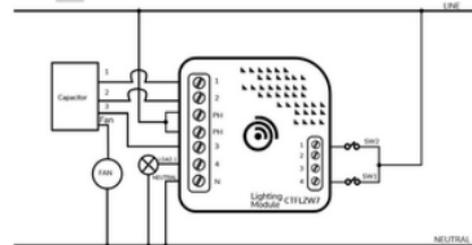
Need to set a Parameter for connecting Rotary Switch



Option 2: Connection Diagram for Bell Switch

Follow the below Circuit Connection for connecting Bell Switch for Fan Speed Controller.

Need to set a parameter for connecting bell switch.



Circuit Connections

PH - Input Phase Terminal.

N - Input Neutral Terminal.

CL - Terminal to connect CL from Capacitor.

CM - Terminal to connect CM from Capacitor.

CH - Terminal to connect CH from Capacitor.

L1 - Terminal to connect Light Load.

FAN - Connection to FAN.

RSL - Terminal to connect RSL from Rotary Step Switch/Bell Switch.

RSM - Terminal to connect RSM from Rotary Step Switch.

RSH - Terminal to connect RSH from Rotary Step Switch.

SW1- Terminal to connect Switch of Light Channel.

Operating the Fan & Light Controller

The Fan and Light may be operated using the following:

- Rotary step switch connected to RSL, RSM, RSH for controlling Fan speed. OR
- Bell Switch connected to RSL (Keep the Bell Switch pressed speed of the Fan varies). OR
- Mechanical ON/OFF Switch connected to RSL (Only ON/OFF of the Fan is possible and Speed control has to be done through APP)
- Toggle Switch connected to SW1 to control L1.

Activating the Device

1. Installing the Device
 - Make sure that the power supply mains are turned off.
 - Connect the Device in accordance with the Wiring Diagram
 - Connect the Phase, Neutral, Capacitor Circuit (CL, CM, CH), Fan and Light Load.
 - Replace the existing Fan Regulator with Rotary Step Switch (RSL, RSM, RSH) or Bell Switch (RSL)
 - Connect the Light Switch to SW1
 - Complete all the connections and check the pairing before sealing the Electrical Box.

2. Managing the Device through Z-Wave Network

It is recommended to place the micro module within 3 meters Line of Sight, as adding mode requires direct communication with the Controller.

Move the Module near to the Primary Controller during this step, if required.

Inclusion Methods

Method 1

Press the Node ID Button (at the back of the Module), to start Pairing the device to the Gateway.

Method 2

Toggle SW1 3 times within 4 seconds to start pairing to the Gateway. (Sequence: ON-OFF ON-OFF ON-OFF).

Exclusion Methods

Method 1

Press the Node ID Button (at the back of the Module), to start Unpairing the device to the Gateway.

Method 2

Toggle S1 3 times within 4 seconds to start Unpairing the device from the gateway.(Sequence: ON-OFF ON-OFF ON-OFF).

Resetting Device

For resetting the Micro Module, press and hold the Node ID Button behind the Module for 10 seconds. Then the Device will be restored to default.

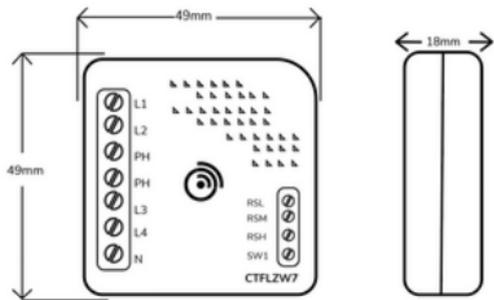
Important Instructions

- 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 malfunctioning after installations.

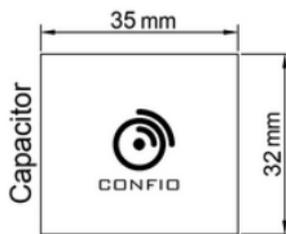
Setting Additional Parameters

- Log on to Z-Wave Gateway from the App.
- Click Device Options >> Add Configuration Settings.
- Enter the Parameter Number in the Variable Box and enter the desired Parameter value.
- Click "SET".
- Close the dialog box and click Update Button.

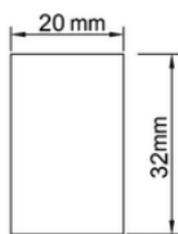
Device Dimensions



Front View



Side View



LED Indications

| LED Indication | Status |
|----------------|-----------------|
| Red Blinking | Excluded |
| Green Blinking | Included/Paired |
| Red and Green | In Pairing Mode |

Additional Parameters

| | |
|---------------------|---|
| Parameter 01 | Fan Switch Selection |
| Range | 1 to 7 1 = Bell Switch 2 = Rotary Switch 3 = Bell Switch(Speed change for every press) 4 = ON to ON/OFF to OFF Switch 5 = Increment for every ON state of Switch 6 = Toggle Switch(Toggle to change state) 7 = Toggle Switch(Increment with each toggle) |
| Default | 2 = Rotary Switch |
| Description | This Parameter allows user to select required Switch for Fan control. It supports Bell Switch, Mechanical Switch, Toggle Switch as well as Rotary Switch. All new products will come with default Switch as Rotary Switch. |
| Parameter 02 | Fan state at power ON (applicable only when the Rotary Switch selected in Parameter #1). |
| Range | 1 to 2 1 = Set back to the state before powering OFF 2 = Set to current Rotary Switch Position |
| Default | 2 = Set to current Rotary Switch Position |

Description

This Parameter allows user to select the power ON state of fan. It supports two options,
a) Select to restore to previously set value after power ON, or
b) Select to set to current Rotary Switch Position. All new products will come with default option as "option b: set to current Rotary Switch Position". this parameter works only if Parameter No.1 is set to value 2 i.e. Rotary Switch select. For Bell Switch Device always restores it to previously set value.

Parameter 03

| | |
|--------------------|---|
| Range | Switch State (CH1) at power ON. 1 to 2 (1 = Set back to the state before power OFF 2 = Set to current Switch Position) |
| Default | 1 = Set back to the state before power OFF |
| Description | This Parameter allows user to select the power ON state of channel-2. it supports two options, a)Select to restore to previously set value after power ON, or b)Select to set to current Switch Position. |

Parameter 04

| | |
|--------------------|---|
| Range | Speed changing time while using Bell Switch Size: 1 byte(Decimal or hex) 2 to 5 2 = 2 sec delay for every step changes 3 = 3 sec delay for every step changes 4 = 4 sec delay for every step changes 5 = 5 sec delay for every step changes |
| Default | 2 = 2 sec delay for every step changes |
| Description | This Parameter allows user to select the speed changing time while using Bell Switch. |

Operating Fan+Light Module

- To control the speed using Rotary Step Switch, **use only the Rotary Step Switch provided by Confio.**
- The Speed of the fan can be controlled via Bell Switch also by connecting the Bell Switch to RSL only.
- This Device can only 4 step speed i.e., Low, Medium, High & Full.
- Connect the terminal of Capacitor to appropriate terminals of CTFL.
- Follow the Wiring Diagram for connection.

Common Issues

Pairing not working: Confirm that the Gateway and the Fan & Light Controller are within 3 meters from each other while adding to the Gateway. Check Node ID Button is pressed properly, Red and Green LED will appear if the Device goes to Inclusion/Exclusion Mode.

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.

- Check the space behind the Switch Box for placing the Device.
- Turn off the MCB before the installation of Puck Module.
- Use only minimum 1.5mm² wires and maximum 2.5mm² wires for connections.
- Strictly follow the wiring diagram for connections.
- Do not connect higher loads (more than 8A) to single channel.
- If there are signs of water seeping into the Switch Box, disconnect the power supply to avoid short circuits.
- Inclusion has to be done within 3 meters.

Warranty

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

The warranty shall not cover:

- Mechanical damages caused by impact, falling or dropping the Device or their object, unauthorized use or not observing the Operation Manual.
- Damages resulting from external causes, for example, flood, storm, fire, lightning, natural disasters.
- Damages 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.
- Damages resulting from the use of spurious spare parts or accessories improper for given model, repairing and introducing alterations by unauthorized persons.
- Defects caused by operating inoperable devices or accessories.

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For any technical and support queries,
please contact the Manufacturer

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