

## FAN SPEED CONTROLLER USER MANUAL



### Introduction

Fan Speed Controller is a miniature Micro Module which is remotely controlled and designed to operate in AC mains. This Device enables 4/5 Step Fan Speed Control. The Fan Speed is controlled by Mobile App or Rotatory Step Switch. The Fan 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
CumulativeLoad - 4 Channels Muxed @240VAC	NA
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 be used are mentioned in the manual. The Manufacturer, Confiol 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 overload, this may lead to module failure.



**CAUTION**  
**Follow Instruction 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 is done by an unauthorized Technician the Manufacturer will not be held responsible. Contact support@confiolabs.com or call +91-9606030659 for a list of authorized Technicians.



**DANGER**  
**DANGER OF ELECTRIC SHOCK**  
Faulty connection or use may result in fire or Electric Shock.

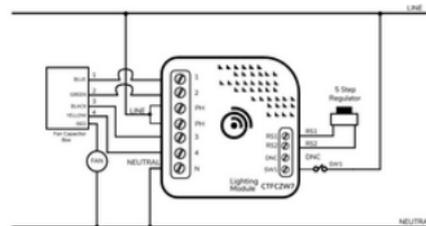
### Safety Measures

1. Before installation, make sure that the power supply mains are turned off.
2. Remove the switchboard 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 1.5mm<sup>2</sup> wires and maximum 2.5mm<sup>2</sup> wires for connections.
6. This Device requires a neutral lead to operate.

### Circuit Connections

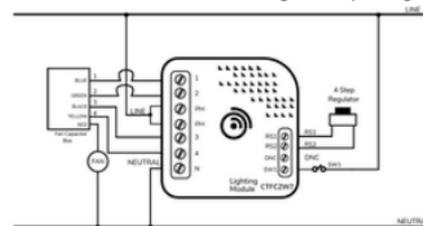
The below wiring diagrams explain the possible combinations that are available.

**Option 1:** Connection Diagram for 5-Step Fan  
Set the **Parameter 5 to value 5** for connecting the 5-step fan regulator.



**Option 2:** Connection Diagram for 4-Step Fan  
Follow the below Circuit Connection for connecting Bell Switch for Fan Speed Control.

Set the **Parameter 5 to value 4** for connecting the 4-step fan regulator.



**Notes:**

#### Learning Regulator Speed Level

If Regulator Speed Levels are not working as expected, learn the Key Levels from Parameter 1 to 4 for a 5-step fan regulator and 1 to 3 for a 4-step fan regulator.

**Procedure:**

Manually keep the Regulator Speed level to 1 then set the Parameter : 1  
Range : 1  
Follow the same steps for all the Speed Levels.

### Operating The Fan Controller

The Fan Module may be operated using the following:

- Fan regulator connected to RS1, RS2 for controlling Fan Speed. OR
- Toggle Switch connected to SW1 to control ON/OFF fan.

### Parameters

#### 1. Installing the Device

- Make sure that the power supply mains are turned off.
- Connect the Device following the Wiring Diagram.
- Connect the Line, Neutral, Capacitor Circuit (1,2,3,4).
- Connect RS1 and RS2 for as regulator and SW1 for ON/OFF switch.
- 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 the device 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 from 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).

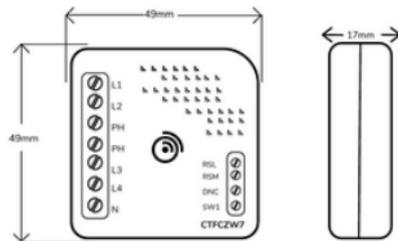
### Resetting Device

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.

### Setting Additional Parameters

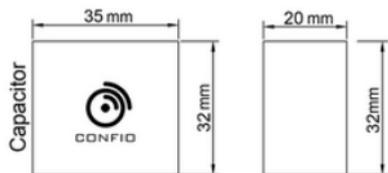
- Log on to Z-Wave Gateway from the App.
- Click Device Options >> Add Configuration Settings.
- Enter the Parameter Number in the Variable Box and enter the desired Parameter Value.
- Click "SET".
- Close the dialog box and click Update Button.

## Device Dimensions



Front View

Side View



## Important Instructions

- Wear standard personal protection equipment to give protection to the technician.
- 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 installation.

## LED Indications

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

## Additional Parameters

<b>Parameter 01 Range</b>	Learn step 1 Value 0 to 1 0 = Not learned 1 = Keep 1 to learn
<b>Default Description</b>	0 = Not learned This Parameter allows the user to learn the step 1 from the Regulator.

<b>Parameter 02 Range</b>	Learn step 2 Value 0 to 1 0 = Not learned 1 = Keep 2 to learn
<b>Default Description</b>	0 = Not learned This Parameter allows the user to learn the step 2 from the Regulator.

<b>Parameter 03 Range</b>	Learn step 3 Value 0 to 1 0 = Not learned 1 = Keep 3 to learn
<b>Default Description</b>	0 = Not learned This Parameter allows the user to learn the step 3 from the Regulator.

<b>Parameter 04 Range</b>	Learn step 4 Value (For 5 Step regulator) 0 to 1 0 = Not learned 1 = Keep 4 to learn
<b>Default Description</b>	0 = Not learned This Parameter allows the user to learn the step 4 from the Regulator.

<b>Parameter 05 Range</b>	Select Regulator type (4 or 5 steps) 4~5 (4 - 4 Step Regulator, 5 - 5 Step Regulator)
<b>Default Description</b>	5 = 5 steps Fan Speed Regulator This Parameter allows the user to select the Fan Speed values either 4 steps or 5 steps Regulator.

<b>Parameter 06 Range</b>	Power On thevalue 0~4 0-Memory Level 1-Switch Position (OFF-0: ON-Memory value) 2-Switch Position (OFF-0: ON-Rotary value) 3-Switch Position (OFF-0: ON-5) 4-Only Rotary Level
<b>Default Description</b>	0 = Memory Level This Parameter allows the user to select the power ON value with different types of Switches connected.

<b>Parameter 07 Range</b>	Input type 0-SW1+Rotary (OFF-0: ON-Rotary Level) (default) 1-Rotary Only 2-SW only (OFF-0: ON-Previous NON zero) 3-SW only (OFF-0: ON-5) 4-SW only (Increment Level on Event ON) 5-SW only (Bell Type-Hold Increment Level) 6-Toggle SW only (Toggle Event-> 0/Previous NON zero) 7-Toggle SW only (Toggle Event-> 0/5) 8-Toggle SW only (Toggle Event-> Increment level on Event) 9-Toggle SW1 + Rotary (OFF-0: ON-Rotary Level)
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<b>Default Description</b>	0-SW1+Rotary (OFF-0: ON-Rotary Level) This Parameter allows the user to select the different input types of Switches.
<b>Parameter 08 Range</b>	On board LED indications enable/disable 0 to 1 (0: disable, 1: enable)
<b>Default Description</b>	1 = enable This Parameter makes on-board LED indication enable/disable. By default, this Parameter is set to 1 (Enable LED indications).

## Important Note

- This Device can only work on 4/5 Step Speed regulators.
- Connect the terminal of capacitor to the appropriate terminals of CTFZW7.
- Follow the wiring diagram for connection.
- RS1 and RS2 should connect to fan regulator terminals only but not Phase, Neutral and Load.

## Common Issues

**Pairing not working:** Confirm that the Gateway and the Fan Controller are within 3m 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 loads on the 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 1.5mm<sup>2</sup> wires and maximum 2.5mm<sup>2</sup> wires for connections.
- Strictly follow the wiring diagram for connections.
- Do not connect higher loads to single channel.
- If there are signs of water seeping into the Switch Box, disconnect the power supply to avoid short circuits.

## 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 an unauthorized person.
- Defects caused by operating inoperable devices or accessories.

**MEDHA**  
*By Confio*

For any technical and support queries, please contact the Manufacturer

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