# BINARY SENSOR USER MANUAL



CTBSZW7

## Introduction

4-Channel Binary Sensor is a Wireless Module that allows improvement of the functionality of any Wired Sensor with a binary output by adding Z-Wave Network Communication. It can service up to four Binary Sensors.

## Technical Specification

The specifications and permissible maximum Load ratings are tested at +25°C.

| Power Input | 240VAC, 50Hz |
|---|---|
| Maximum Load per Channel @240VAC | NA |
| 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 18mm |

| Radio Frequency | 865.2MHz (IN) |
|---|---|
| Surge Protection | 1.2kv |
| Typical Line of Sight Range | 10~15m Indoor /30m Outdoor |
| Plastic Housing | Fire Retardant ABS |
| Sensors | Motion Sensor, Door Contact, Gas Sensor, Vibration Sensor, Perimeter Sensor |

## Warnings & Considerations

**CAUTION**

**READ INSTRUCTIONS IN FULL BEFORE USE**
The wiring Connection Diagram and Parameters to use are mentioned in the Manual. The Manufacturer, Confio 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 in the 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 into 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 the Device turn off. (Turn off the MCB).
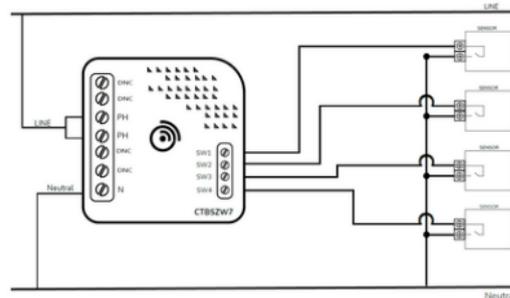
## DANGER

**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 is turned off.
2. Remove the switchboard cover frame and the switch frame to access the switches.
3. Use only minimum of 1.5mm² wires and maximum 2.5mm² wires for connections.
4. This Device requires a neutral lead to operate.

## Circuit Connections

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



The Manufacturer, Confio will not be held responsible for any loss or damage resulting from not following the instructions of Operating Manual.

## Activating Binary

1. **Installing the Device**
- Make sure that the power supply mains is turned off.
- Connect the Device following the wiring diagram.
- Connect the Phase, Neutral and the Sensors on SW1, SW2,SW3, SW4.
- 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.

## Exclusion Methods

**Method 1**
Press the Node ID Button (at the back of the Module), to start Unpairing the device from the Gateway.

## LED Indications

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

## 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 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.

## 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 Installation.

## Additional Parameters

| Parameter 01 | Binary Sensor state for Channel1. |
| --- | --- |
| Range | 0 to 1 |
| | 0: INPUT_NO (Normal Open) |
| | 1: INPUT_NC (Normal Close) |
| Default | 0: INPUT_NO (Normal Open) |
| Description | This parameter decides the Input type. |

| Parameter 02 | Binary Sensor state for Channel2. |
| --- | --- |
| Range | 0 to 1 |
| | 0: INPUT_NO (Normal Open) |
| | 1: INPUT_NC (Normal Close) |
| Default | 0: INPUT_NO (Normal Open) |
| Description | This parameter decides the Input type. |

| Parameter 03 | Binary Sensor state for Channel3. |
| --- | --- |
| Range | 0 to 1 |
| | 0: INPUT_NO (Normal Open) |
| | 1: INPUT_NC (Normal Close) |
| Default | 0: INPUT_NO (Normal Open) |
| Description | This parameter decides the Input type. |

| Parameter 04 | Binary Sensor state for Channel4. |
| --- | --- |
| Range | 0 to 1 |
| | 0: INPUT_NO (Normal Open) |
| | 1: INPUT_NC (Normal Close) |
| Default | 0: INPUT_NO (Normal Open) |
| Description | This parameter decides the Input type. |

## Recommendations

- Inclusion has to be done within 3 meters.
- If there are signs of water seeping into the Electrical Box, turn off the MCB and disconnect the power supply to avoid short circuits.
- Strictly follow the wiring diagram for connections.

## Common issues

**Pairing not working:** Confirm that the Gateway and the Module are within 3 meters from each other while adding to the Gateway.

## Warranty

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.

# MEDHA
*By Confio*

For any technical and support queries,
please contact the Manufacturer

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