

Connect Mesh 4-Channel Interface Version 2.0

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1. Change history

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Version	Date	Changes
1.0	06/2020	Initial Documentation
2.0	05/2021	Added New functions

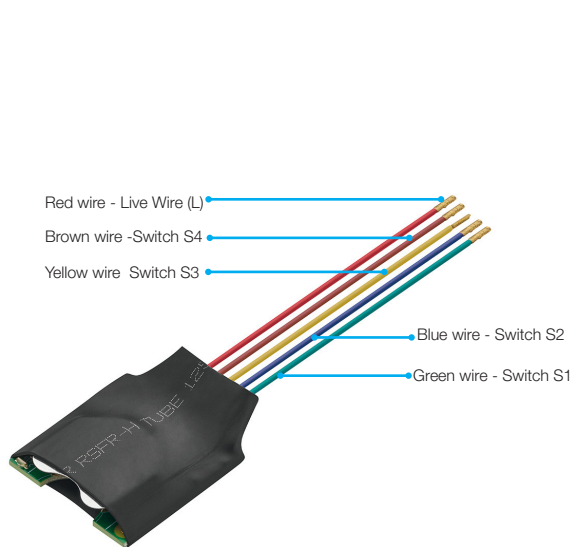
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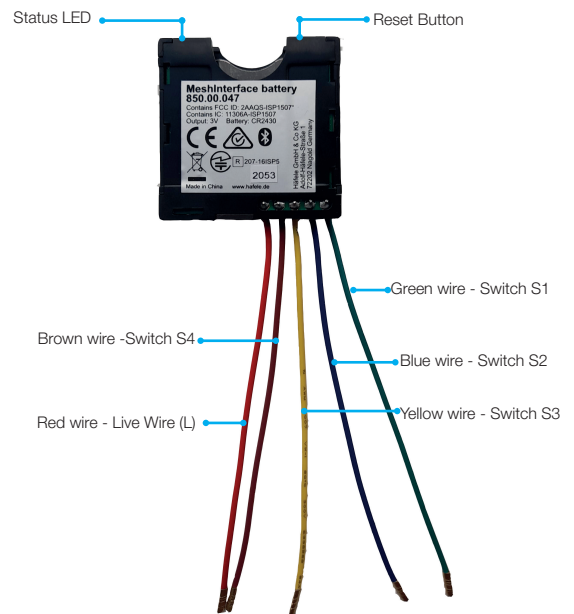
2. Connect Mesh 4-Channel Interface

2.1. General Information:

The Connect Mesh 4-Channel Interface is an installation device which can be used to integrate existing wall switches from other manufacturers that are already on site into your Bluetooth® Mesh Network.



[Image 1]
Connect Mesh 4-Channel Interface
Hardware Version 1 (Without Reset Button)



[Image 2]
Connect Mesh 4-Channel Interface
Hardware Version 2 (With Reset button)

With Bluetooth® Mesh, several Bluetooth® devices are combined to a meshed network. This means that each device (node) in the network is connected to one or more devices and can communicate. Devices that belong to a network work even if they are not in direct range of one another. It just has to be ensured that a member of the network is within range to forward the data packages.

2.2. Setup

To use the Connect Mesh 4-Channel Interface, please insert a battery into the Battery Compartment. The device will sleep initially and only wakes up by pressing one button. The status LED will flash to identify that the mesh Interface is ready. Afterwards, it can be provisioned as described within the Connect Mesh App. After its initial provisioning, the device will go to sleep 5 seconds after the last button interaction and wakes up by the next interaction.

2.3. Switching a group

The Connect Mesh 4-Channel Interface can be provisioned in the Connect Mesh App. After provisioning, you can start configuring the four physical buttons within the 4-Channel Interface settings. Possible configuration in 4-Channel Interface are "Toggle On/Off", "Turn Group On", "Turn Group OFF", Scenes A,B,C or user-defined scene. We recommend to use "Turn Group On" and "Turn Group OFF". For further details, please refer to Connect Mesh App Operational Manual.

2.4. Dimming

To change the brightness, press the button which is connected to the group and hold it. The brightness of your lights will increase until you release the press or the maximum brightness is reached. Repeat the long press will reduce the brightness of the connected group.

2.5. Update Mode

In case the firmware is outdated, the user will be notified in the Connect Mesh App. Then the user can start and perform the firmware update of the mesh device. (more information in the specific *Häfele Connect Mesh App*).

Option 1: Update via App

If the Mesh device is provisioned the update can be done by:

1. Click on Mesh device and click on edit icon and scroll down to the bottom of the page. You can find the "Update Device icon".
2. Click on this icon to update the Firmware.

Option 2: Manual Update via Power On/Off (Version 1 only)

1. Insert the battery to start the device and the LED will start blinking.
2. Remove the battery and insert it again.
Repeat this 4 times of consistent intervals of 2 seconds each .
3. The first group LED will start blinking faster to signify the device in Update Mode and can be updated using the Häfele Connect Mesh App.
4. Press "Menu" icon, click on "Settings" and click on "Extended Settings" and then click on "Search device in Update Modus". The mesh device will be displayed. Select Mesh device to start the Firmware Update.

Option 3: Manual Update via Reset Button (Version 2 only)

1. Press and hold the Reset Button on the Mesh device and at the same time, connect the Mesh Device into Power supply. This will bring the Mesh device in OTA- Update mode.
2. Press "Menu" icon, click on "Settings" and click on " Extended Settings" and then click on "Search device in Update Modus".
3. The Mesh device will be displayed. Select Mesh device to start the Firmware Update.

2.6. Reset

Option 1: Reset via App

If the Mesh device is provisioned and the reset can be done by:

1. Click on Mesh device and click on edit icon and scroll down to the bottom of the page.
2. You can find the "Delete Device" icon.
3. Click on this icon and select "Reset" option to reset the mesh device.

Option 2: Manual Reset by Power On/Off (Version 1 only)

1. Remove the battery and insert it again, while continuously pressing a button.
Repeat this 8 times at consistent intervals of 2 seconds.
2. The Mesh device will be reset and ready for Provisioning again.

Option 3: Manual Reset by Reset Button (Version 2 only)

1. Press the Reset button for at least 8 seconds and release it.
2. The Mesh device will be reset and ready for Provisioning again in the Häfele Connect Mesh App.

2.7. Status LED

Status LED Behaviour	Meaning
Off	The Connect Mesh 4-Channel Interface is either in normal operation mode or its power is off. Waiting for 10 seconds and pressing a button will blink the status LED once. In case this does not happen, the battery is empty.
Blinking	The Connect Mesh 4-Channel Interface is in provisioning mode and is ready to be added to an existing Connect Mesh network.
Fast Blinking	The Connect Mesh 4-Channel Interface is in OTA update mode and is ready to be updated. It will remain in OTA update mode for 60 seconds or until the power is uninterrupted.
Double Blinking (Attention Modus)	The Mesh App doesn't let the Battery-driven Mesh devices to activate the energy-saving mode (Sleep-mode) and it helps to transmit the data

3. Standalone Mode

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3.1. Standalone Mode with 4-Channel Interface as Provisioner

To configure a network without the App, you can use the 4-Channel Interface as the provisioner (controller). By this you can provision mesh boxes with monochrome, multi-white lights or RGB lights.

Attention: Only one wall switch can be used to control the network. In case more 4-channel interfaces are required, please use the Remote Control Standalone Mode or use the Connect Mesh App.

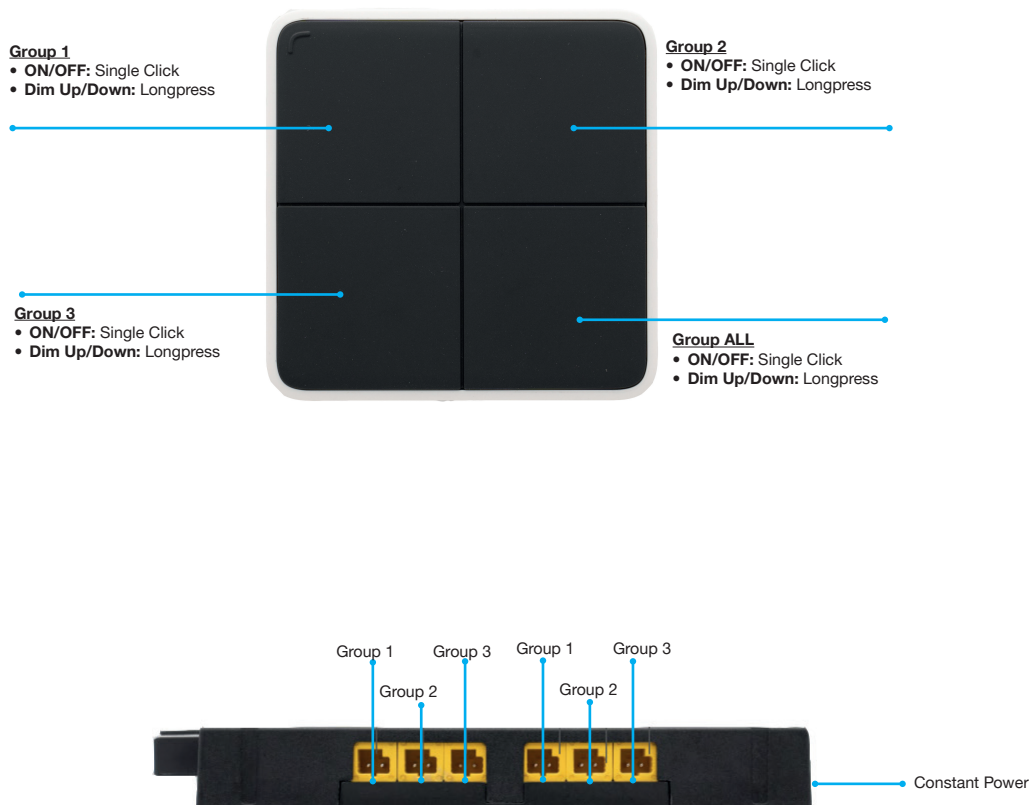
3.1.1. 4-Channel Interface Standalone Mode with Monochrome Lights

To start, the 4-Channel Interface needs to contain a firmware version of at least 4.4.6 (otherwise please update) and needs to be reset (status led blinks).

1. Start the search for mesh boxes by pressing the two upper buttons for 4 seconds. The led will start blinking (slowly).
2. Find and configure Mesh Box: When the led starts to blink fast, a mesh device is found and will get configured.
3. To stop searching for other mesh boxes, press any button of the switch. To start searching again, continue with step 1.

The buttons of the switch will control the mesh box in the following way:

- First button: Controls port 1 and 4 (on/off, dimming)
- Second button: Controls port 2 and 5 (on/off, dimming)
- Third: Controls port 3 and 6 (on/off, dimming)
- Forth button: Controls all ports (on/off, dimming)



[Image 3]
Configuration same like Connect Mesh Wall Switch

3.1.2. 4-Channel Interface Standalone Mode with Multi-White Lights

To start, the 4-Channel Interface needs to contain a firmware version of at least 4.4.6 (otherwise please update) and needs to be reset (status led blinks).

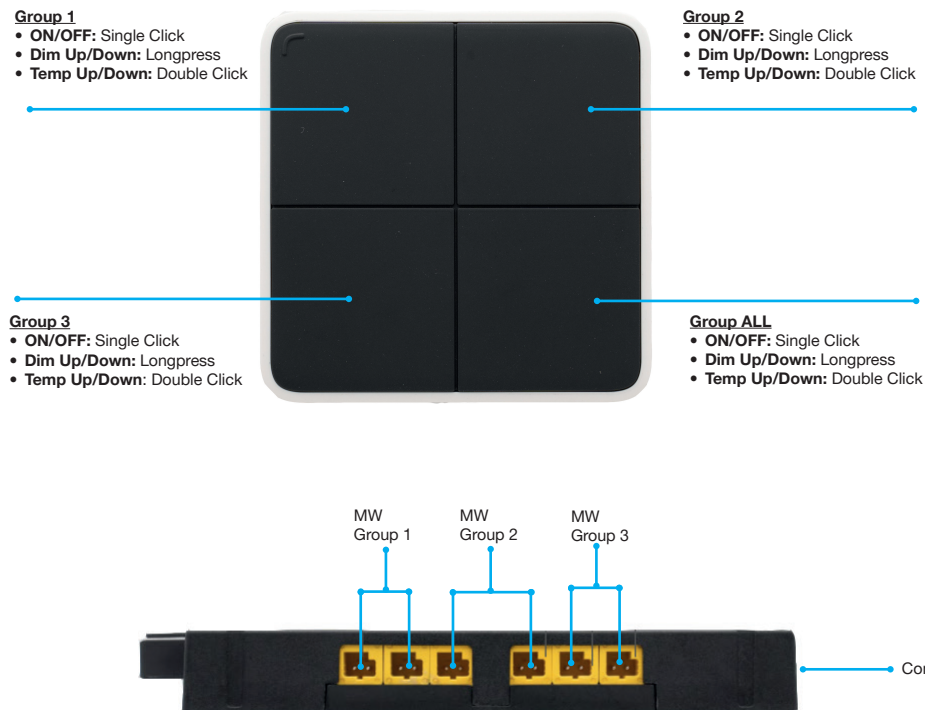
1. Start the search for mesh boxes by pressing the upper left and lower left buttons for 4 seconds. The led will start blinking (slowly).
2. Find and configure Mesh Box: When the led starts to blink fast, a mesh device is found and will get configured.
3. To stop searching for new mesh boxes, press any button of the switch. To start searching again, continue with step 1.

The buttons of the switch will control the mesh box in the following way:

- First button: MW Light connected to port 1 and 2
- Second button: MW Light connected to port 3 and 4
- Third button: MW Light connected to port 5 and 6
- Forth button: All lights connected

Controls are:

- Single tap: On/Off
- Long press: Dim up/down
- Tap and long press: Temperature up/down



[Image 4]
Configuration same like Connect Mesh Wall Switch

3.1.3. 4-Channel Interface Standalone Mode with RGB Lights

To start, the 4-Channel Interface needs to contain a firmware version of at least 4.4.6 (otherwise please update) and needs to be reset (status led blinks).

1. Start the search for mesh boxes by pressing the upper left and lower right buttons for 4 seconds. The led will start blinking slowly.
2. Find and configure Mesh Box: When the led starts to blink fast, a mesh device is found and will get configured.
3. To stop searching for other mesh boxes, press any button of the switch. To start searching again, continue with step 1.

The buttons of the switch will control the mesh box in the following way:

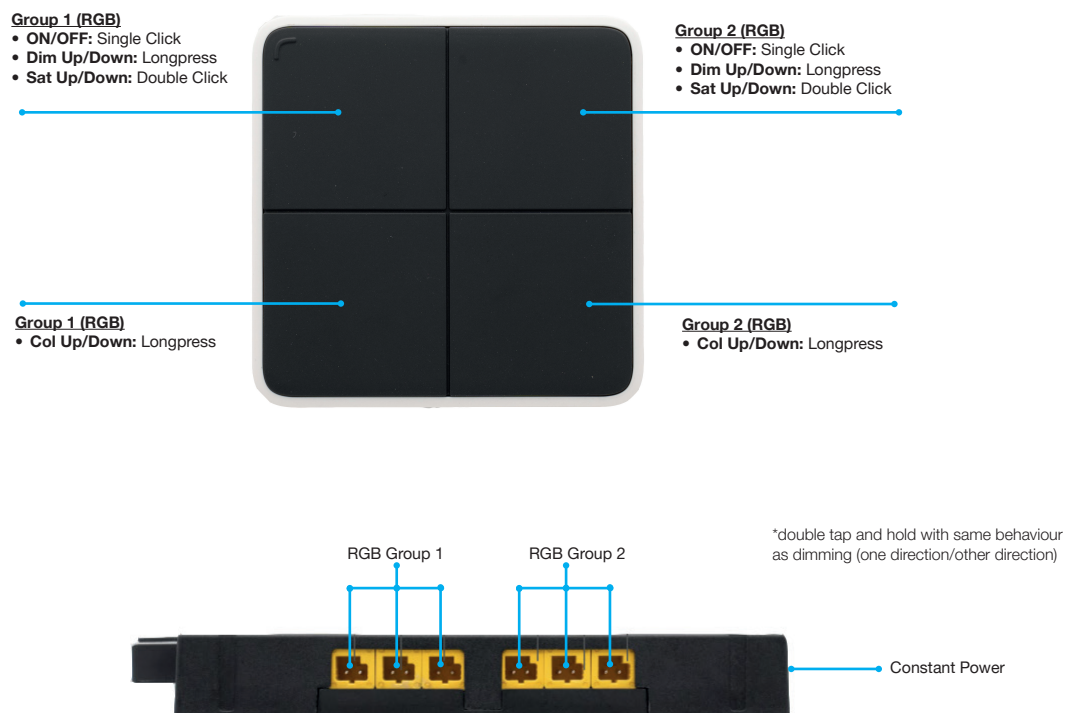
- Control RGB Light 1, connected to port 1, 2 and 3: Controlled by first and third button
- Control RGB Light 2, connected to port 4, 5 and 6: Controlled by second and fourth button

Upper button:

- Single tap: On/Off
- Long press: Dim up/down
- Tap and long press: Saturation up/down

Lower button:

- Long press: Change Color



[image 5]
Configuration same like Connect Mesh Wall Switch

3.2 Standalone Mode with Remote Control as Provisioner

When using the Remote Control as Provisioner for the Standalone Mode, the 4-Channel Interface can be added as a provisioned device.

3.2.1. Remote Control Standalone Mode functions 4-Channel Interface

The 4-Channel Interface will be added when the Remote Control is searching for new devices in the Standalone Mode. This happens when the Remote Control is searching for Mesh Boxes to be provisioned (with Monochrome-, Multi-White- or RGB-Lights), as described in section 3.2 of the Remote Control technical documentation.

Provisioning the 4-Channel Interface using the Standalone Mode of the Remote Control will provision the 4-Channel Interface with the following described functions:

The 4-Channel Interface behaves as group 7 on the Remote Control



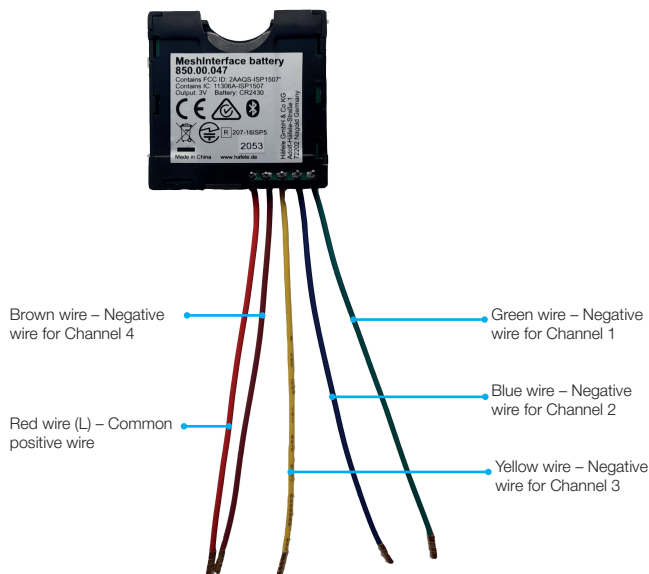
[image 6]

Button	Group or Scene	Action
Upper Left	Group 7 (All Lights) On/Off	Toggle On/Off (click) Dimm (long press)
Upper Right	Scene A (of all lights)	Trigger Scene (click) Dimm Group (long press)
Lower Left	Scene B (of all lights)	Trigger Scene (click) Dimm Group (long press)
Lower Right	Scene C (of all lights)	Trigger Scene (click) Dimm Group (long press)

4. Connect Mesh 4-Channel Interface Installation Guidelines

4.1. General Information:

- Connect Mesh 4-Channel Interface has 4 Channels.
- These 4 Channels can be used to control Luminaire/Häfele Devices connected in Connect Mesh 6 way distributor.
- Luminaire connected to Connect Mesh 6 way distributor are dimmable.
- Connect Mesh 4-Channel Interface is battery driven (CR2430).
- 1–4-way Push Switch is compatible but Normal Switch is not compatible.

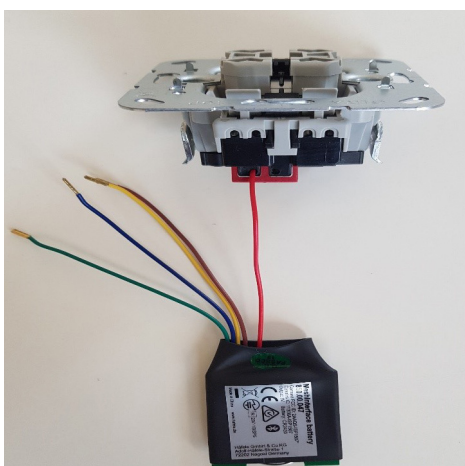


[image 7] Connect Mesh 4-Channel Interface – Hardware Version 2 (With Reset button)

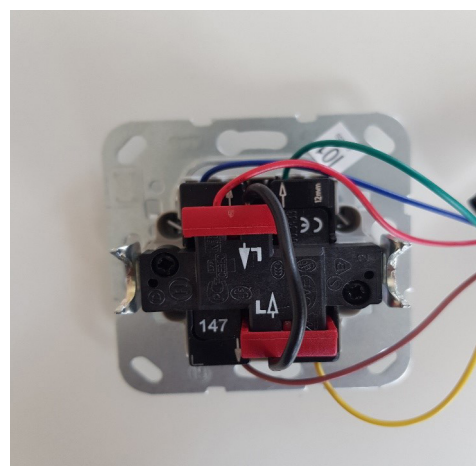
4.2. Step-by-Step Procedure:

In this document, we explicitly provide step-by-step procedure to install a Connect Mesh 4-Channel Interface with a GIRA Switch. In this case, we used GIRA 014700 4-way push switch as an example. You can also use any similar type of 4 way push switch.

1. Power Supply:
Connect the Red wire in the GIRA Switch power supply slot as illustrated in image 8.
2. Bridge Wire:
The Black wire is used as Bridge between the two sides of the GIRA switch. One side of the Black wire is connected next to Red Wire of the Interface (L) and other side is connected to another L as shown in image 9. The Purpose of this bridge wire is to flow the current in both sides of the Switch.

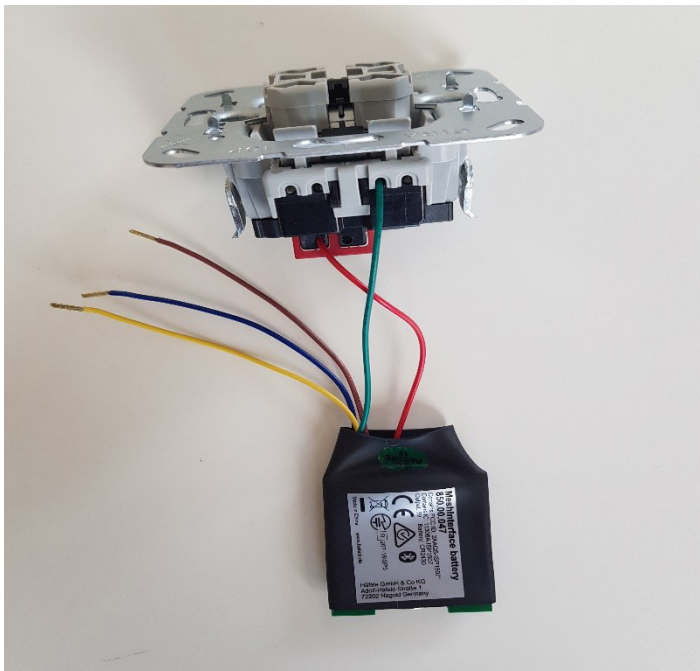


[image 8]



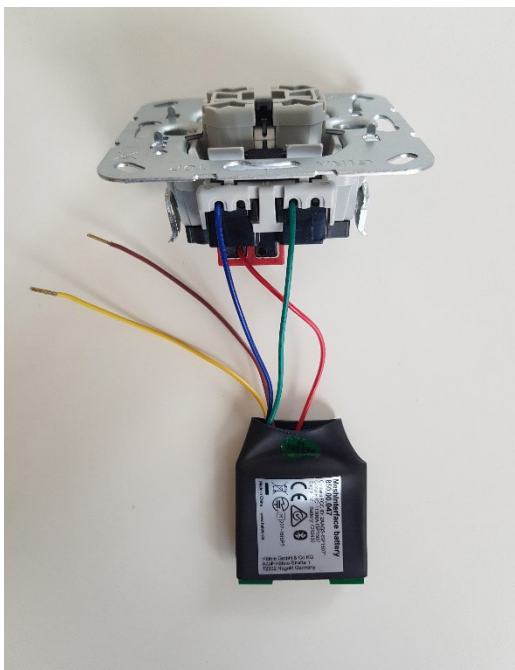
[image 9]

3. Channel 1:
Green Wire is negative terminal of Channel 1. Connect the Green wire in the 3rd slot of the GIRA Switch (Top Side) as shown in image 10.



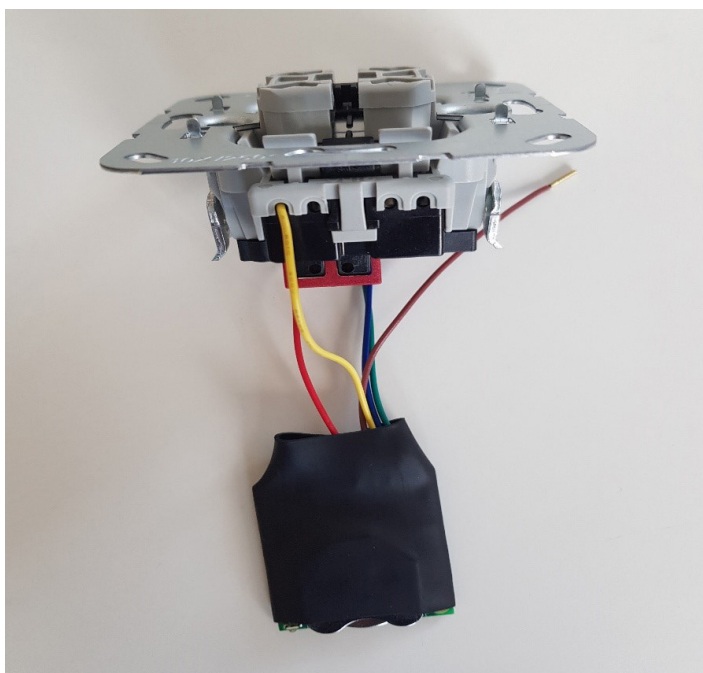
[image 10]

4. Channel 2:
Blue Wire is negative terminal of Channel 2. Connect the Blue wire in the 1st slot of the GIRA Switch (Top Side) as presented in image 11.



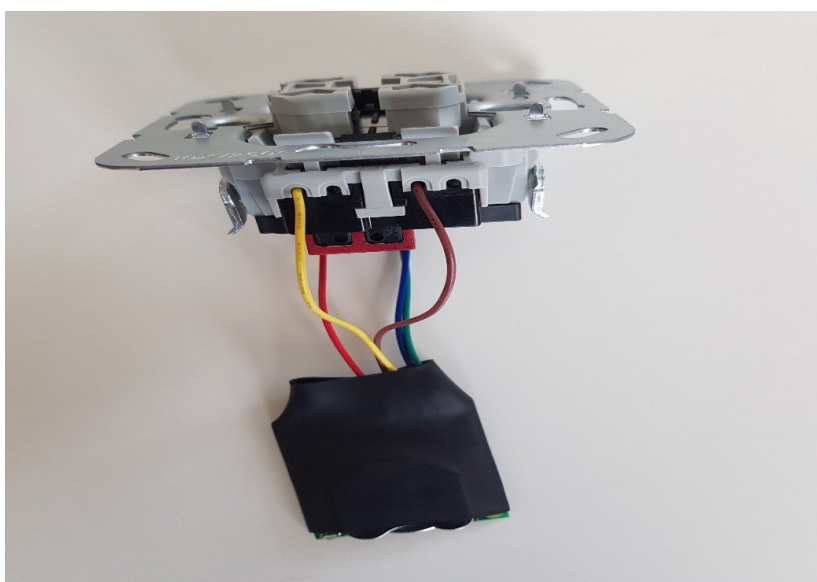
[image 11]

5. Channel 3
Yellow Wire is negative terminal of Channel 3. Connect the yellow wire in the 1st slot of the GIRA Switch (Bottom Side) as demonstrated in image 12.



[image 12]

6. Channel 4
Brown Wire is negative terminal of Channel 4. Connect the brown wire in the 3rd slot of the GIRA Switch (Bottom Side) as shown in image 13.



[image 13]

5. List of Compatible Switches

S. No.	Manufacturer	Model Number	EAN
1	GIRA	014700	4010337147008
2	JUNG	532-4U	4011377021044
3	Berker	503404	4011334255994

Apart from this list of compatible Switches, you can also use any similar type of 4-way Switch.