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# nithum

## **Rithum Switch**

Model: RS-01-XX

Specification Sheet

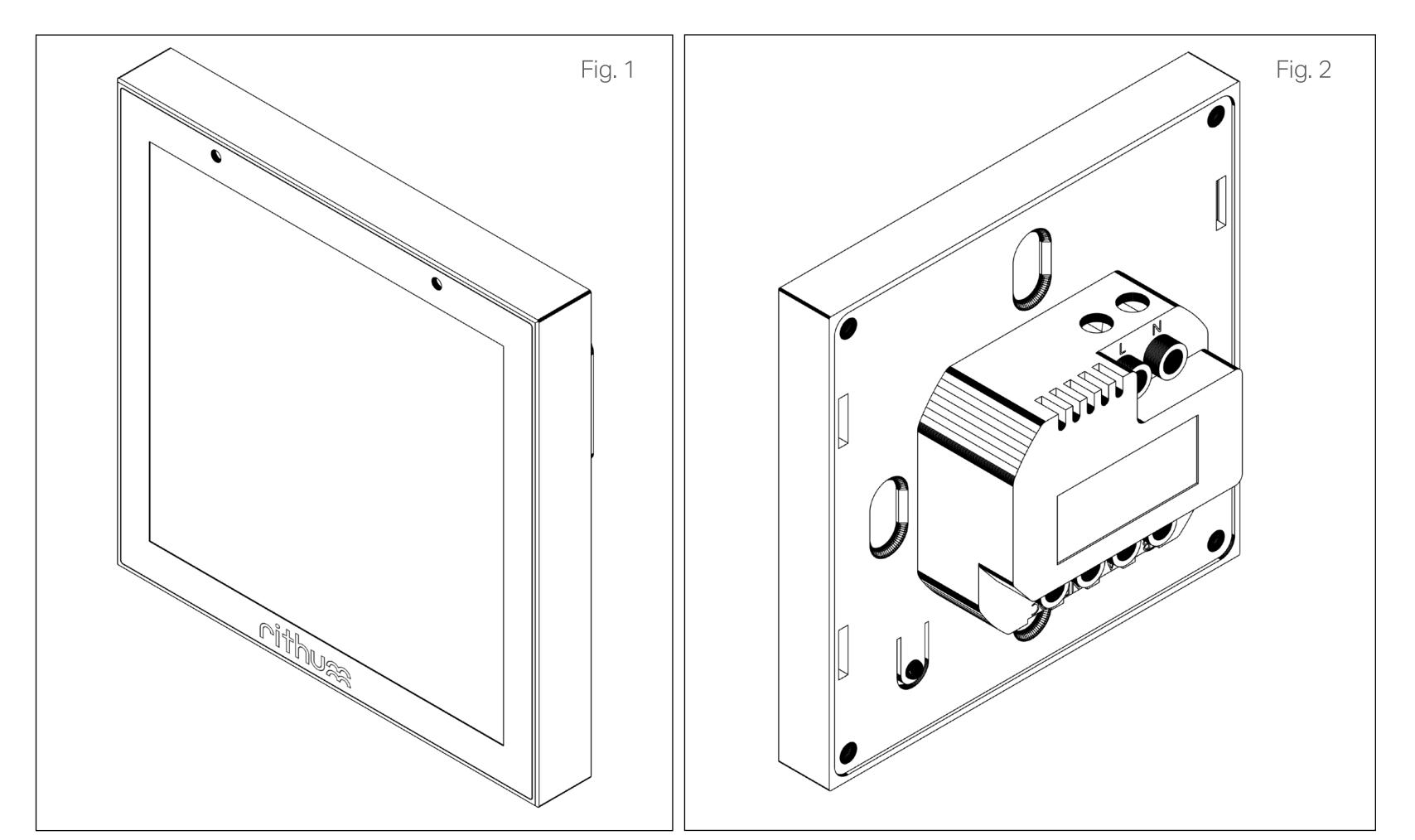
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Description:

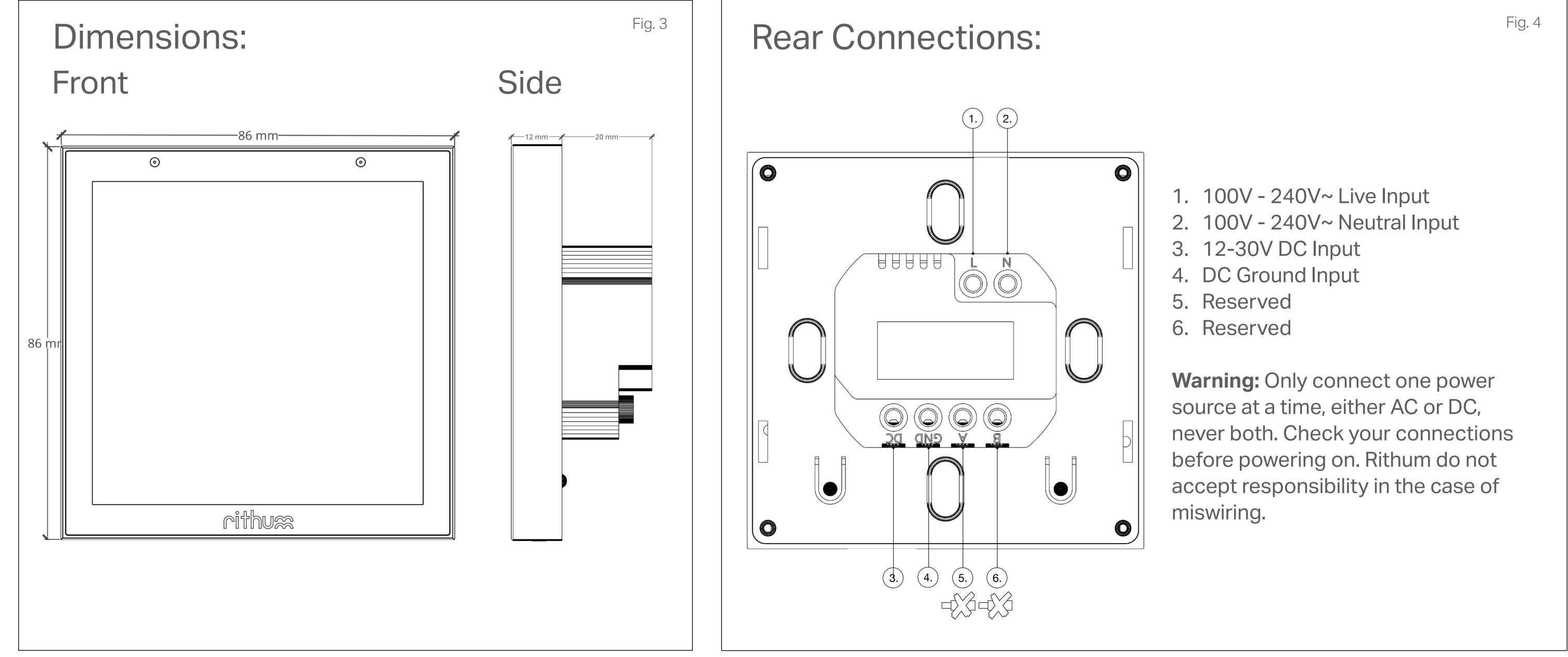
Rithum Switch is a touch screen light switch which directly replaces a UK/European light switch and provides control of third party systems.

To correctly utilise the features of Rithum Switch, you will need third party systems such as lighting, audio or climate control systems, although there are some climate features built-in.

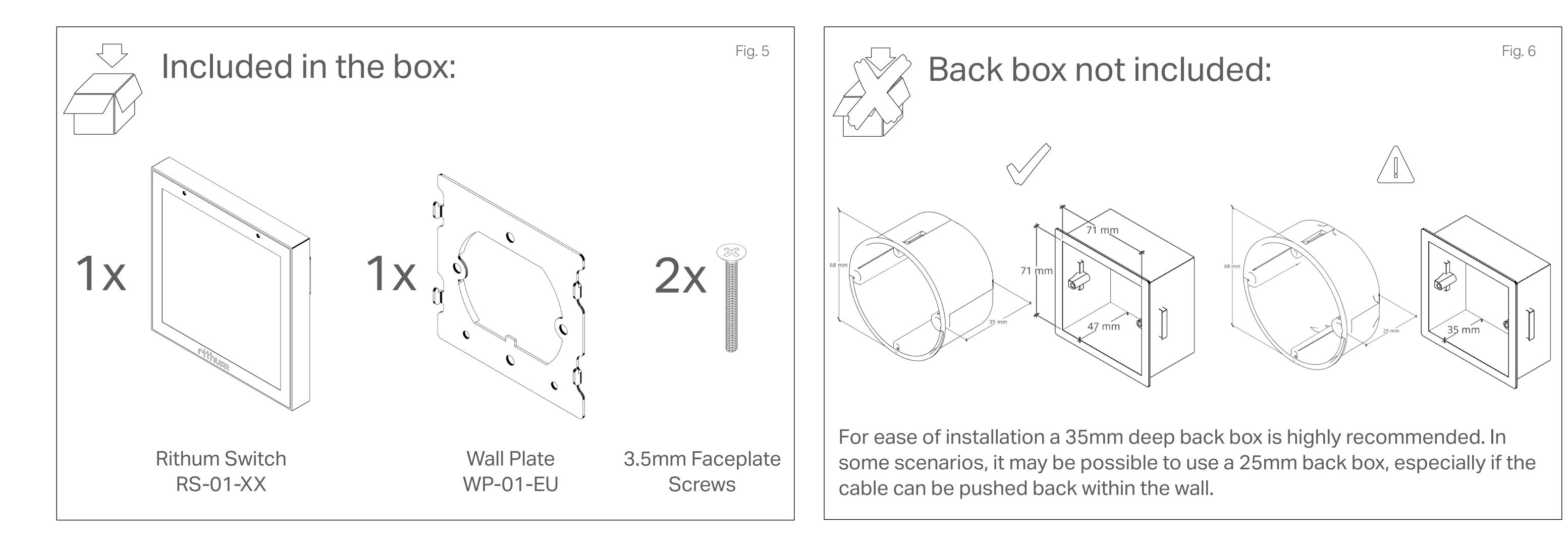
### Specification:



Input rating: 100 - 240V~AC 50/60Hz / 12-30VDC Wiring: Parallel (neutral required) Input current max: 260mA **Power consumption standby:** 0.7W Wi-Fi: 2.4GHz 802.11bgn (Wi-Fi 4) **Environment:** For indoor use only Back box: EU 71mm round or UK 71mm square Back box depth: 35mm (25mm in some scenarios)



 $(\mathbf{F})$ 



**CF** 

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Model: RS-01-XX

### Specification Sheet

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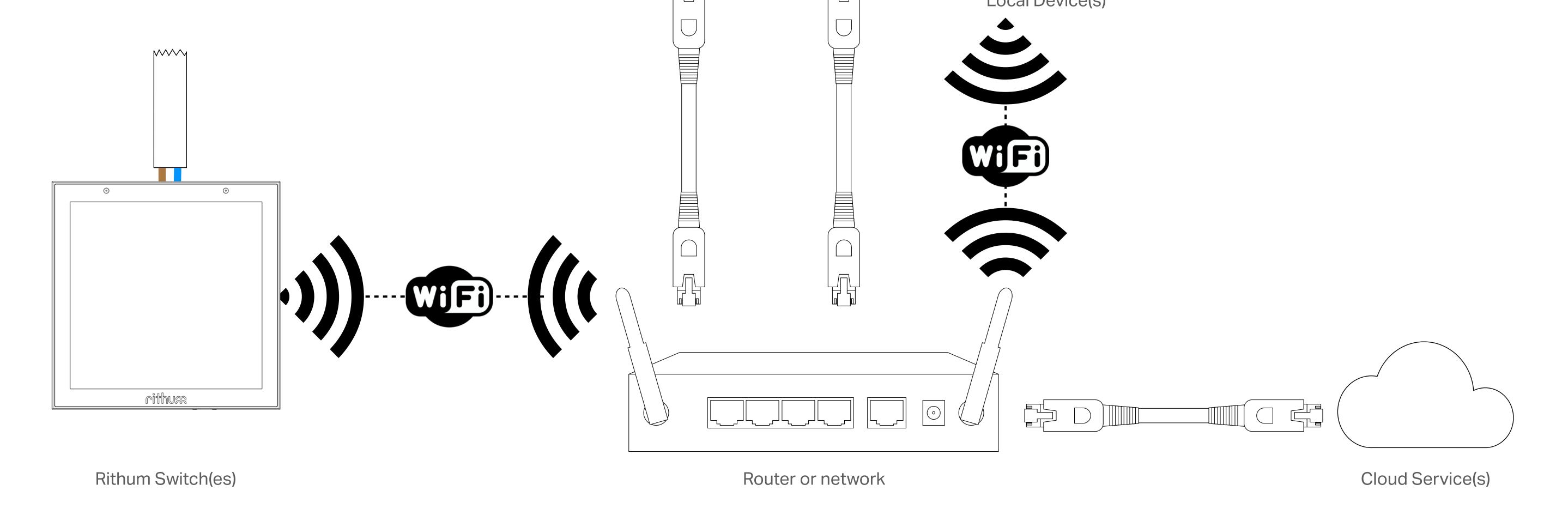
System topology: Rithum Switch integrates with third party systems over Wi-Fi. It is important that you have a reliable and strong Wi-Fi signal and upgrading your ISP supplied equipment highly recommended.

Rithum integrates with multiple lighting, audio, climate and other systems. For more about what Rithum works with, please see our website which also contains more system-specific topologies.

You may need one or more software plugins for Rithum to integrate with certain systems or provide certain features

Multiple Rithum Switches can communicate with these systems over the same network (subject to network limitations).

Example system topo	logy:	Fig. 7
	Device(s) via bridge Local Bridge(s) - e.g. Philips Hue Local Device(s) Local Device(s)	



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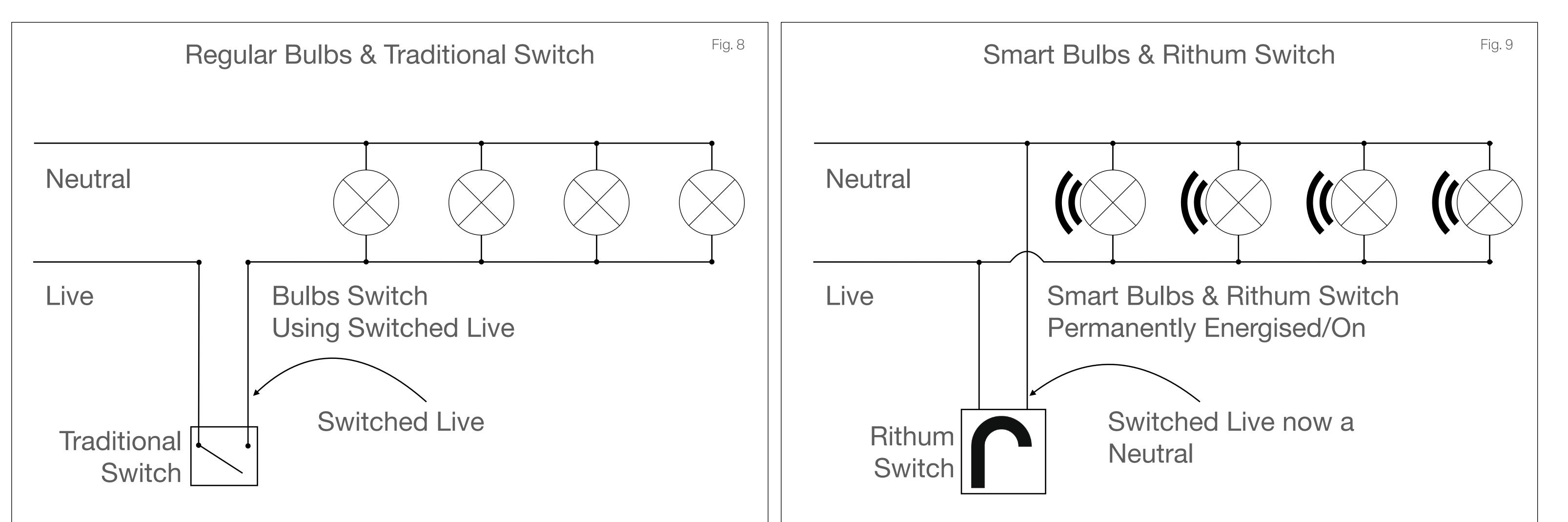
### Wiring:

Rithum Switch is mains powered (unless using 12-30V DC) and requires a neutral, meaning that it should be wired in parallel with your bulbs rather than in series with them. When utilised with smart bulbs/dimmers (as is intended), tweaking your existing setup is relatively straightforward.

The general concept is to permanently energise the smart bulbs/dimmer and use the original switch wire to send both the live and the neutral back

WARNING: Electrics are dangerous and you should seek the help of a professional electrician if you are not 100% sure what you are doing. Always ensure the 4 power is off before working and test any wires before touching them. Risk of fire. Risk of shock. Risk of death.

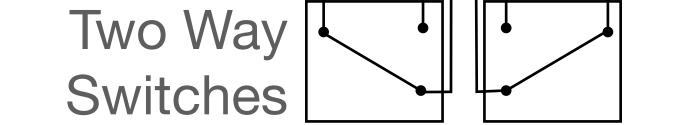
#### down to the switch.



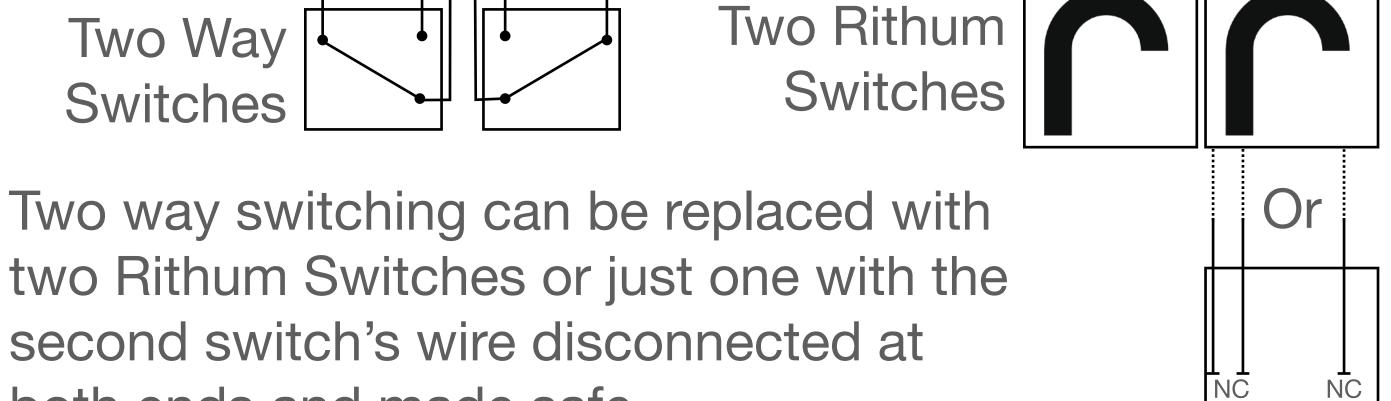
NB: Rithum Switch does not communicate directly with smart bulbs. This diagram is provided for an overview of power only. For system topology, please see the relevant section. Fig. 11 Fig. 10 Two Way Switching Smart Driver & Rithum Switch Out In Neutral Neutral Neutral Out In NC Live Live Smart Driver Input & Rithum Switch Live Permanently Energised/On Switched Live now a



NB: Rithum Switch does not communicate directly with smart drivers. This diagram is provided for an overview of power only. For system topology, please see the relevant section.



both ends and made safe.



NC = Not Connected (safely)

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# **Rithum Switch**

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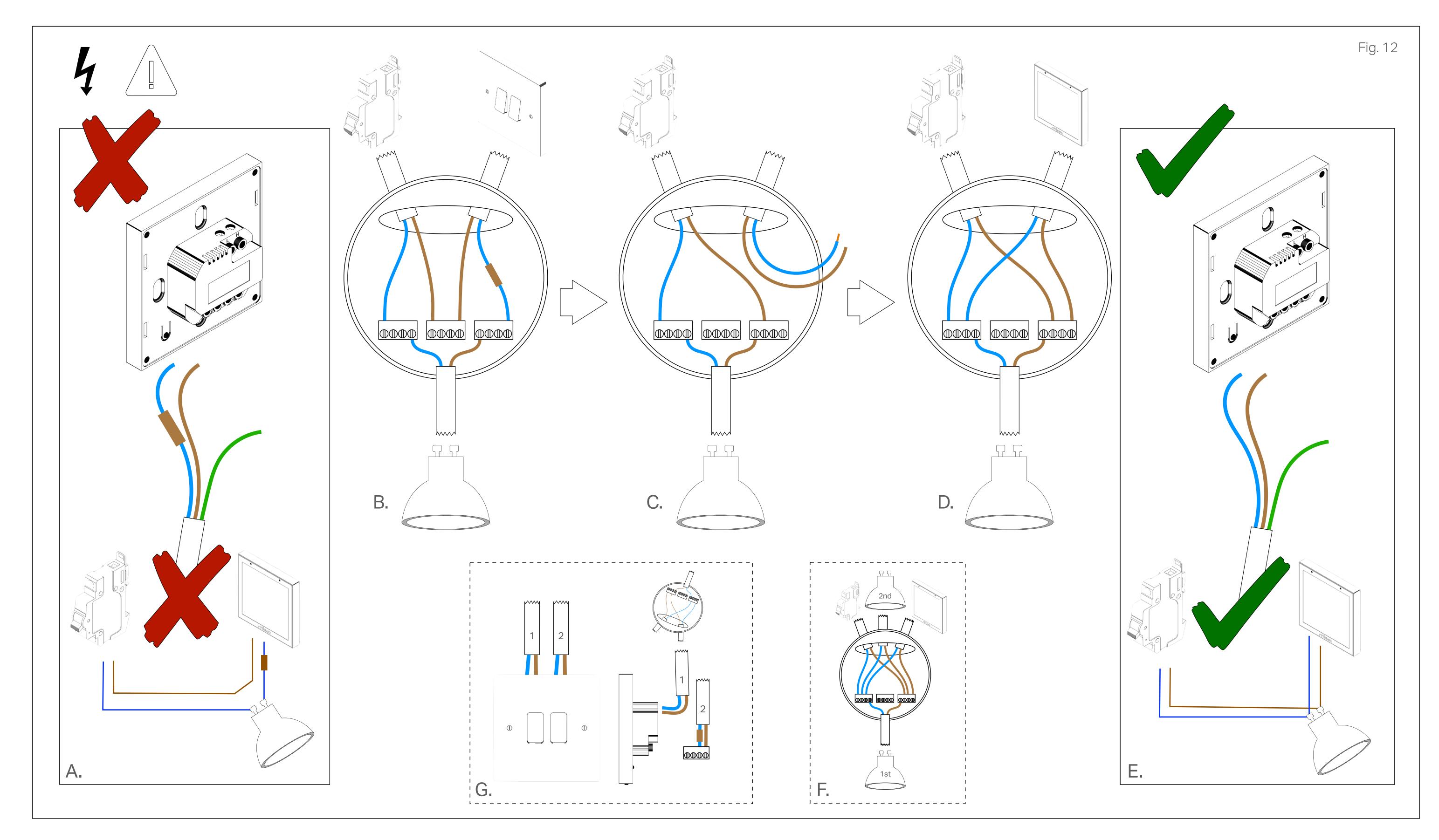
## Specification Sheet

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### Wiring:

The diagrams below are a representation of how the wires and junction box(es) in your install might actually look, however the end result is the same as in the wiring diagrams on the previous page.

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Some homes will not have a neutral at the switch location (A), they have a switched-live (usually a blue wire marked with brown tape). Since Rithum Switch requires a neutral, there is a small change that needs to be made to utilise the existing wiring. [**Note:** *If you do have a neutral at the switch location already (very likely in mainland Europe), then the same concept discussed below applies just at the switch its off wath any the light least is not already in the section already for the section already is a section already for the section already for the section already for the section already is a section already for the section already is a section already for the section already is a section already for the section already for the section already is a section al* 

This has now converted the switched-live back to a neutral (and so the brown marker tape can be removed) (E).

Note that this is only possible with smart bulbs since the bulbs can be turned on and off through the software meaning the original switch is not necessary.

If you have additional bulbs they should be connected the same as the first bulb: in parallel (F).

The digram above (B) shows the likely starting point for the wiring within a ceiling rose or downlight. To start with, the switch is in series with the bulbs, making and breaking the circuit as it is switched.

By hooking the incoming power feed directly up to the bulb(s) (C), they will be permanently energised.

Then connect the wire from the switch in parallel (D) to send both a live and neutral back down to the switch location.

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If the switch has two cables (i.e. for two circuits), then the live and switched live in the second cable can be connected (G) with a suitable connector to permanently energise that circuit too, only from the switch location rather than the rose.

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CE

Installation:

