



## Introduction

When installing a wireless RAK system dimmers are housed in RAK boxes with either 8 modular cards (RAK8) or 4 fixed type controls (RAK4).

These are typically mounted to form "stacks" of up to 16 channels with a single receiver per stack: an RxLink.

## RAK8

Utilising plug in cards the RAK8 has 8 slots each of which can be filled with one of the following control modules:

**WMT-400** - Trailing edge mains dimmable

**WMS-600** - Switching only

**WDA-600** - Digital broadcast: 0-10V, DALI, DSI

**WM-CUB** - Curtain and blind controller (dual relay)

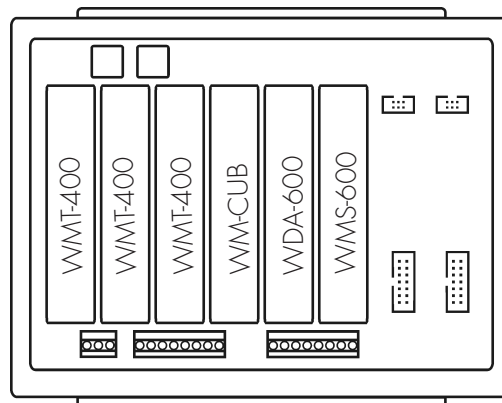
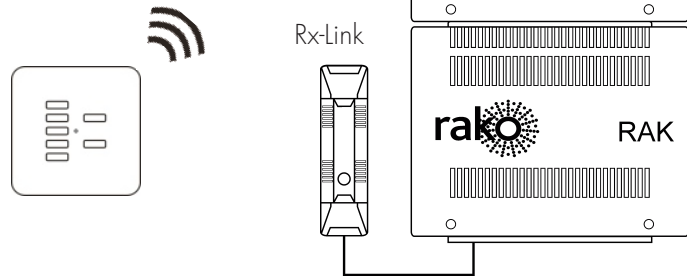
## RAK4

4 control outputs per RAK offering larger loading than RAK8 equivalents.

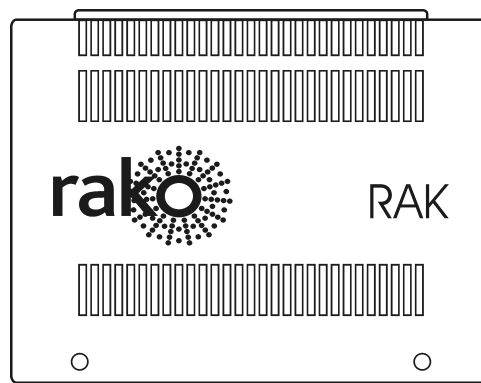
**RAK4-T** - Trailing edge mains dimmable

**RAK4-F** - Digital broadcast: 0-10V, DALI, DSI

**RAK4-R** - Curtain and blind controller (dual relay)



RAK8 with 6 modules fitted



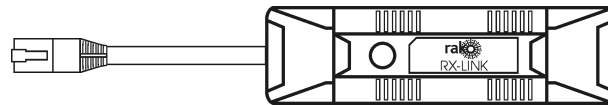
RAK4 with 4 fixed outputs

**RxLink**

The core of the wireless RAK system is the RxLink.

Each stack of RAKs is connected together by RJ45 patch cables with the RxLink also connected by a patch cable at one end.

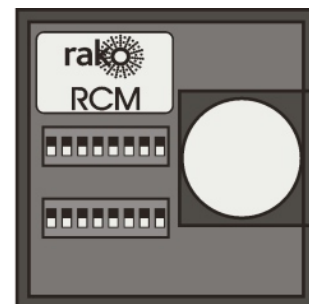
RAK8s and RAK4s do not have an in-built receiver and require a LINK device to function as part of the system.



**RCM**

RCM keypads are addressed using switches on the rear of the modules.

The keypad always communicates with a single room. Additional functionality can be activated by pressing and holding different button combinations. For example: House Master off and Channel mode.

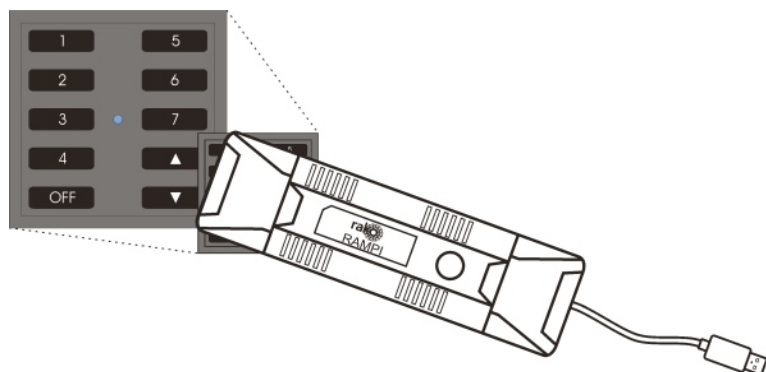


[Advanced keypad features application sheet](#)

**RNC**

The RNC keypads are fully programmable via NFC technology. The RAMPI and Rasoft Pro are required to address these keypads.

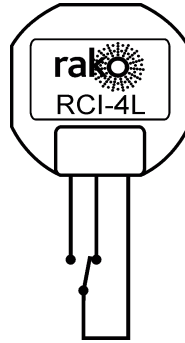
Once addressed any button can communicate with any room and channel within the Rako system. A button can also be programmed to talk to multiple rooms/circuits with a single press.



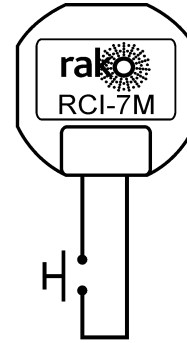
**Integrating with 3rd Party switches**

The RCI interface allows 3rd party latching and momentary switches to transmit wireless Rako commands.

They are programmed in via NFC in much the same way as the RNC keypads. Two options are available for different switch types: the RCI-7M for momentary switches and the RCI-4L for latching switches



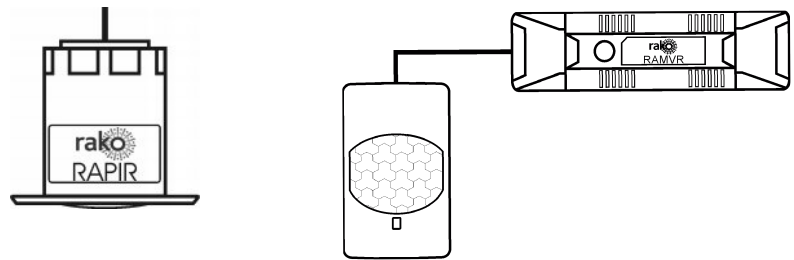
Latching



Momentary

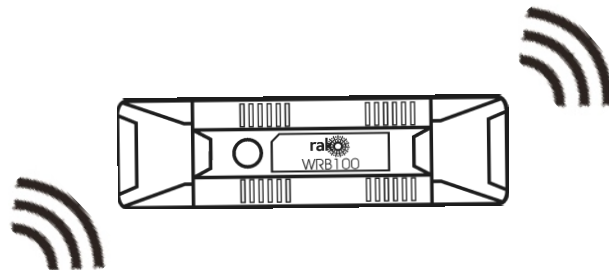
**PIRs**

Presence sensing is achieved either directly with a RAPIR or by using a RAMVR which can be integrated with 3rd party PIRS (either mains or contact closure).



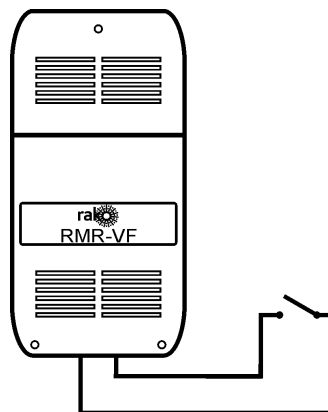
**Signal Repeater Booster**

Where range may be an issue, due to particularly long transmission distance, the WRB100 repeater unit can be used. The WRB100 is supplied with a 9-12V dc power supply and retransmits Rako wireless signals, increasing transmission range.



**Volt Free Input logic unit**

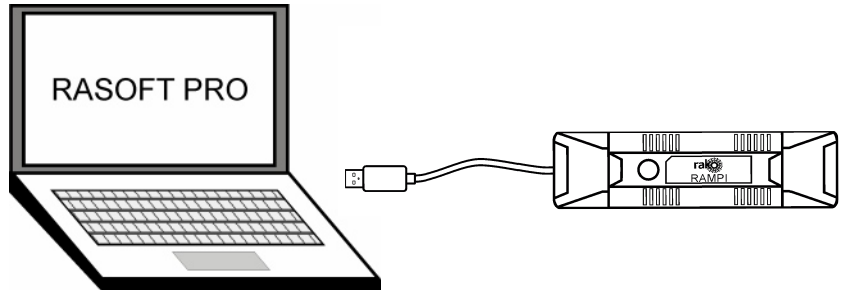
The RMR-VF allows mechanical switches and logic levels to add additional control of a Rako Wireless system. This include inputs from Alarm sensors, PIR modules, Thermo sensors and Light detectors. In fact anything that can provide an electrical contact or DC logic output.



**RAMPI**

A RAMPI plugs into a USB port and allows control and programming from Rasoft Pro. It also allows for NFC programming for products such as the RNC and RCI range.

[Wireless RAK programming guide](#)



**Bridge**

The Bridge comes in two varieties when used with a wireless system.

The RA-Bridge operates as a network interface, allowing system control from the Rako App and other IP based control systems. It also stores the Rasoft project file.

The RTC-Bridge performs all the roles of an RA-Bridge in addition to: events, holiday mode, wireless mappings and macros.

All types of Bridge can be used to program systems via the Rasoft Pro software.

See Bridge application sheet for more information on Bridge functionality and usage.

[Bridge application sheet](#)

