



Introduction

When installing a wireless RAK system dimmers are housed in RAK boxes with either 8 modular cards (RAK8).

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, DLI, DSI

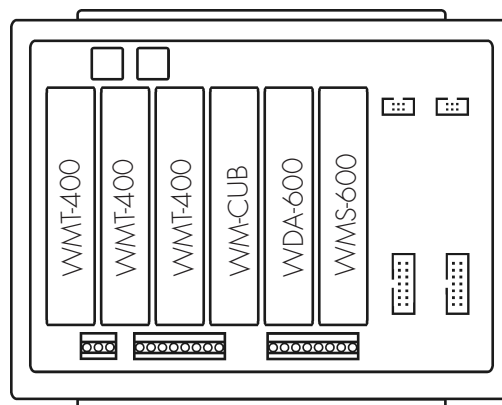
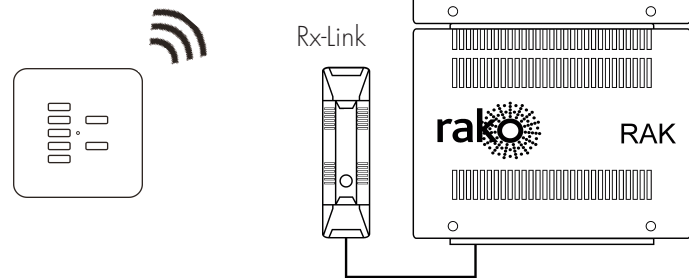
WM-CUB - Curtain and blind controller (dual relay)

RxLink

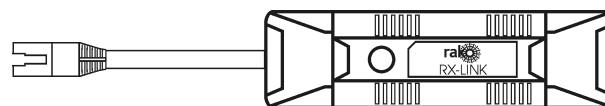
The core of the wireless RAK system is the RxLink.

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

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



RAK8 with 6 modules fitted

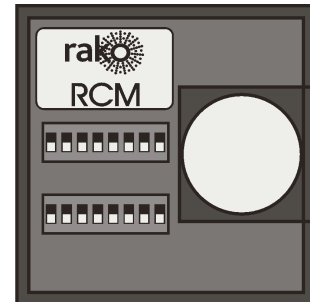


RCM

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.

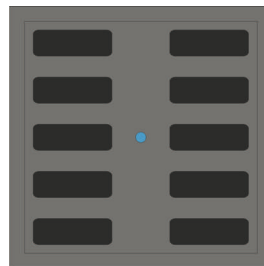
[Advanced keypad features application sheet](#)



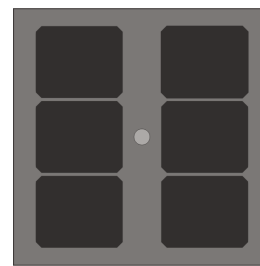
RNC / RK-EOS / RK-MOD

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

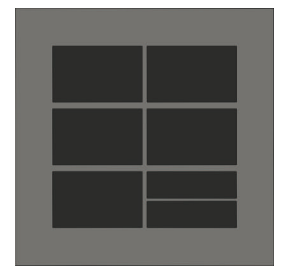
Once addressed any button can communicate with any room and channel within the Rako system. A button can also be programmed to talk to multiple rooms/circuits with a single press.



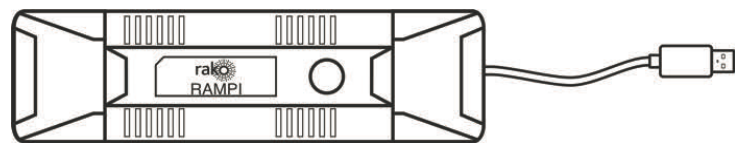
RNC



RK-EOS



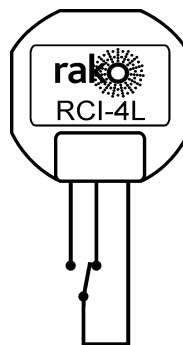
RK-MOD



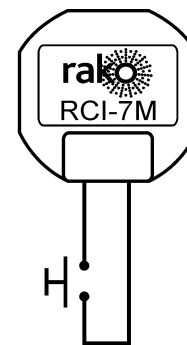
Integrating with 3rd Party switches

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.



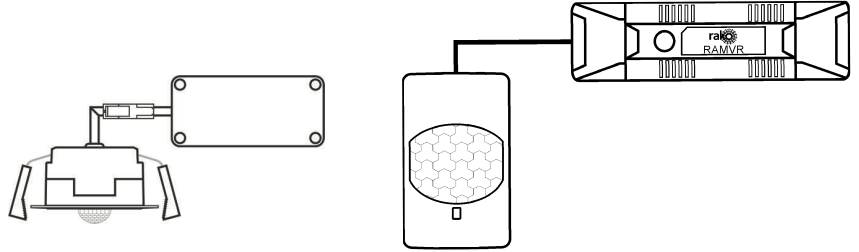
Latching



Momentary

PIRs

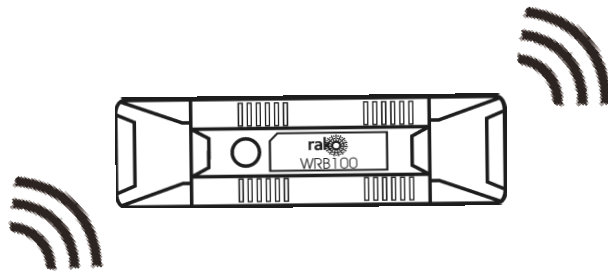
Presence sensing is achieved either with Rako's RK-PIR (via Hub) or by using a RAMVR which can be integrated with 3rd party PIRS (either mains or contact closure).



RK-PIR with battery pack

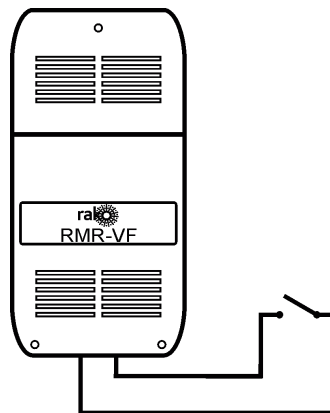
Signal Repeater Booster

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.



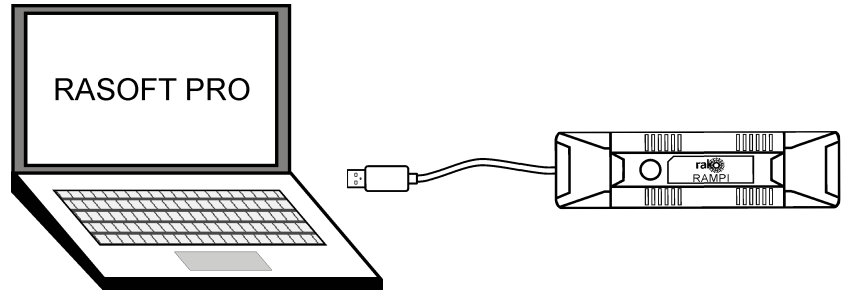
Volt Free Input logic unit

The RMR-VF allows mechanical switches and logic levels to add additional control of a Rako Wireless system. This includes 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.



HUB

For wireless systems the RK-HUB operates as a network interface allowing control from the Rako App, Amazon Alexa, Google home, Apple homekit and other ip based systems.

It stores the Rasoft project files and allows programming from Rasoft Pro using a PC or Mac

The RK-HUB also has additional functions of Timed events linked to dawn/dusk, holiday mode, wireless mappings and macros.

NFC programming via HUB's docking station.

See RK-HUB datasheet for more information.

