RAK8 Motherboard Instruction Manual

For programming information see "RAK8 wired/wireless programming guide"

Overview:

The RAK8 Motherboard forms the base for up to 8 pluggable modules which can be added in any combination according to system requirements. Compatible pluggable modules to be used with the RAK8 motherboard are:

WMT-400 - 400W Trailing edge dimmer
WML-400 - 400W Leading edge dimmer
WDA-600 - 600W digital dimmer for use with 1-10V, DSI and DALI broadcast
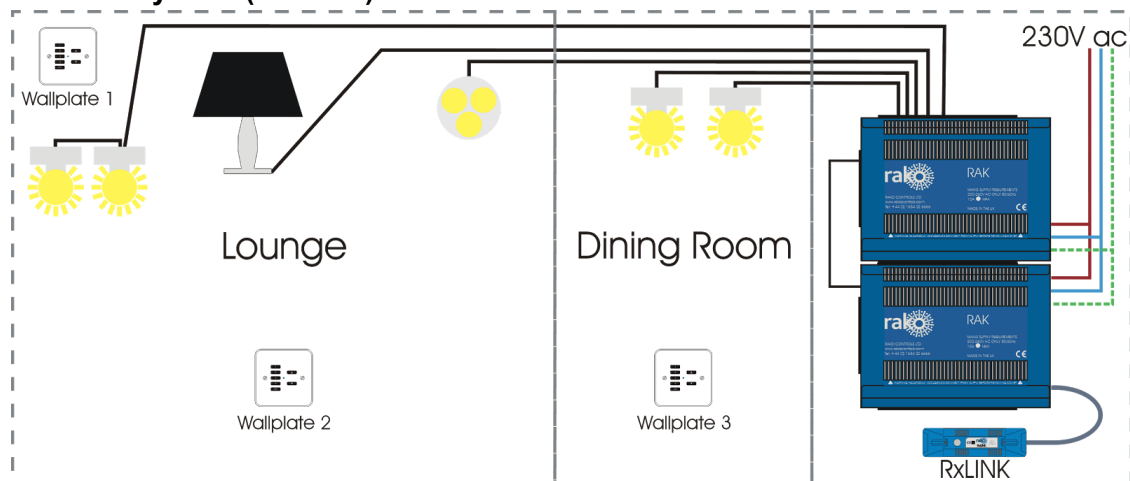**WMS-600** - 600W Switching module
WM-CUB - Twin relay curtain and blind controller

RAK8s, combined with a Link device (RX-Link or RAKLink) can either be used as a single 8 channel unit or formed into a "stack". RAK8s can be also be used in combined stacks with other Rako RAK units (RAK4-T, RAK4-F, RAK4-R) on the same Link device.

Before commencing installation of a Rako product first read this instruction manual carefully. Rako Controls Ltd accepts no responsibility for any damage or injury caused by incorrect installation of a Rako product.
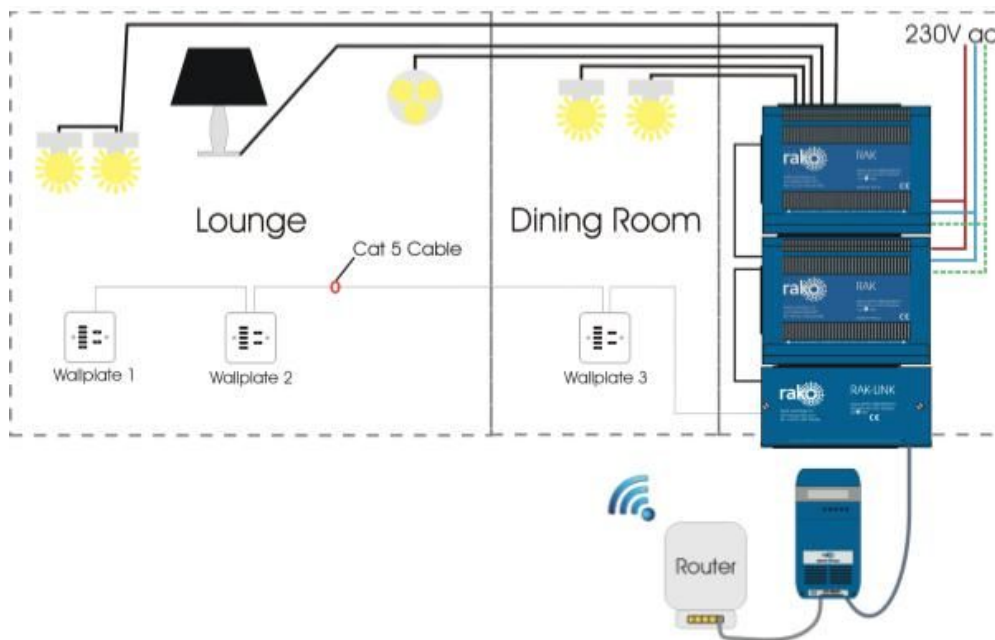
Installation should only be carried out by a qualified electrician. Always install RAK8 units in a well ventilated room, with a minimum clearance of 50mm at the sides in the correct orientation i.e. vents top and bottom. Each RAK-4 unit must be earthed.
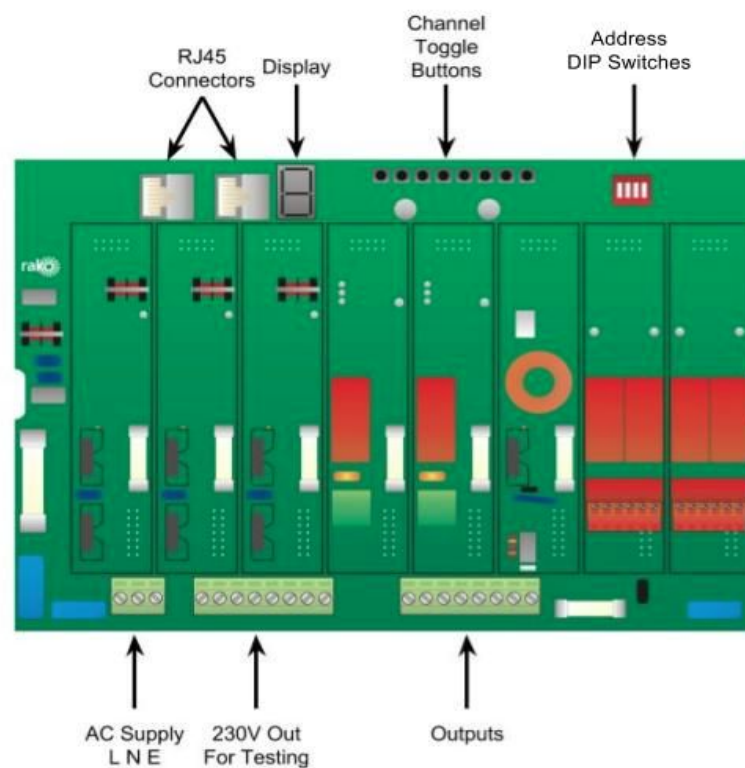
Wireless system (RX-Link):

The RX-Link is used to integrate the RAK8(s) into the wireless system and can support a total of 16 circuits. For example two RAK8s or one RAK8 and two RAK4s.
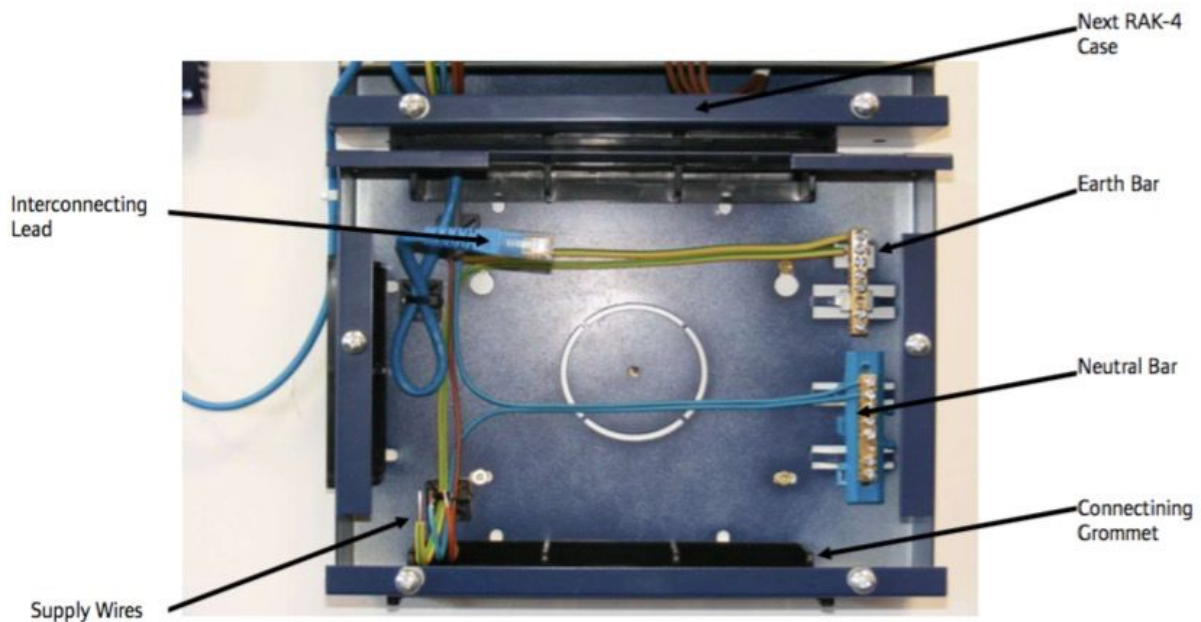
Wired system (RAKLink):

The RAKLink is used to integrate the RAK8(s) into the Rako Wired Network and can support a total of 32 circuits. For example 4 RAK8s or 3 RAK8s and 2 RAK4s.

The circuit board:

Installation:

Step 1 - Secure metal box housing to wall or secure mounting position. The RAK8 system relies on being vertically mounted to allow the ventilation system to work properly.

Step 2 - If multiple RAK8s are to be joined to form a larger 'stack' mount and join the other cases to join the original case using the connecting grommets (see picture overleaf) cutting away enough plastic to allow cable access.

Step 3 - Bring a separate 10A MCB protected supply to each RAK8 case. Leave the supply Live, Neutral and earth ready to connect to the circuit board supply.

Step 4 - Bring all lighting feeds for this RAK8 into the case and connect the Neutrals and Earths to the appropriate bus bars leaving the Lives and any control cables ready for connection to the circuit board.

Step 5 - Secure the circuit tray mounted motherboard into position using the two fixing screws supplied and connect the Supply (L,N&E).

Step 7 - Connect the Lives to the appropriate output terminals.

NB *If daughterboards are not yet to be fitted the Aux 230V outputs can be used for testing.*

Step 8 - On multiple assemblies of RAK8s link the circuit boards using the interconnecting leads supplied, plugging them into the IN/OUT RJ45 sockets. The system interface (RxLink for wireless, or RAKLink for wired networks) should then plug into one of the remaining IN/OUT sockets.

Step 9 - Plug the daughter board modules into the motherboard according to required lighting specifications.

Step 10 – Fit Lid.