Overview

Motorised Curtains and Blinds can be controlled via relay pairs contained in Rako's range of contollers. Configured to suit most motor types, whether that be 240V roller, Venetian or Roman blinds, curtain tracks or low voltage motors.

Wired or Wireless

Rako modules and RAKs can be controlled from either the Rako wireless or CAT5 wired communication.

Module Options

RACUB – The universal control module. Can be wired to suit all options but may require more wiring than other modules.

RAK4R – 4 channel equivalent of the standard RACUB but in a RAK format for centralised systems and the Rako CAT5 wired network. Auxillary 240V terminals simplify wiring for 240V motors.

RACUB-2L – Similar to the standard RACUB but with internal wiring for simpler installation with 240V tubular motors.

RACUB-24DC – Similar to the standard RACUB but with internal wiring for simpler installation with 24VDC tubular motors with 2 wire operation.

Features

All module options share the same control and programming features. By default all units respond to both Scene commands (Defaults are Scene 2=Up, Scene 4=Down, Scene 3=Stop) and Raise/Lower commands.

Accurate control of the end-limits are set within the motors themselves but the Rako modules have an adjustable Timeout feature (default one minute) which opens the relays to avoid having permanent power fed to the motors.
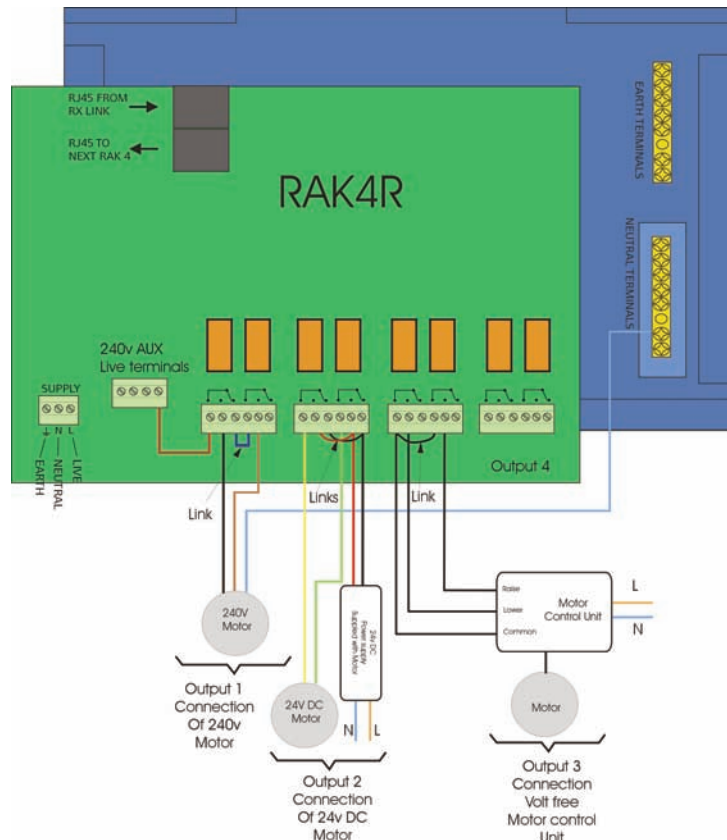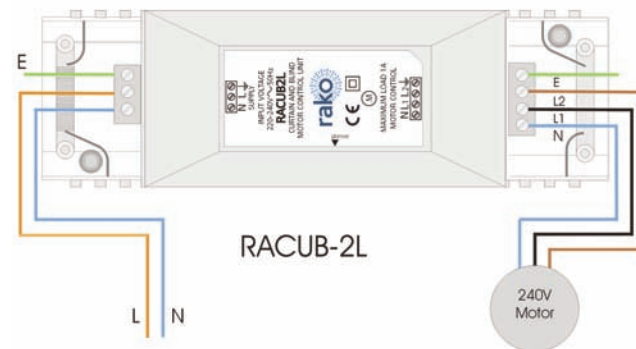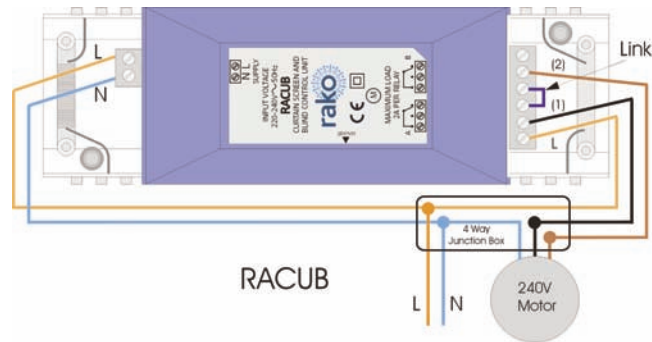
The wound coils in electric motors store a large amount of energy in magnetic fields which can cause large currents leading to arcing and relay damage. To prevent this Rako modules have a 'Stop on Changeover' function. This allows one relay to stop the motor before the second reverses the motor when trying to perform an immediate reverse of direction.

Motor Type

240V Tubular Motors

To be successfully controlled by a Rako system motors must be designed to be controlled from external relays feeding power to one winding for Up and one winding for Down. Motors that have their own proprietry control system embedded in the motor cannot be controlled from Rako curtain and blind modules*. This is most apparent by the motor having 3 wires coming from the motor (L, N + E) rather than the 4 wires (L, L, N + E) required.
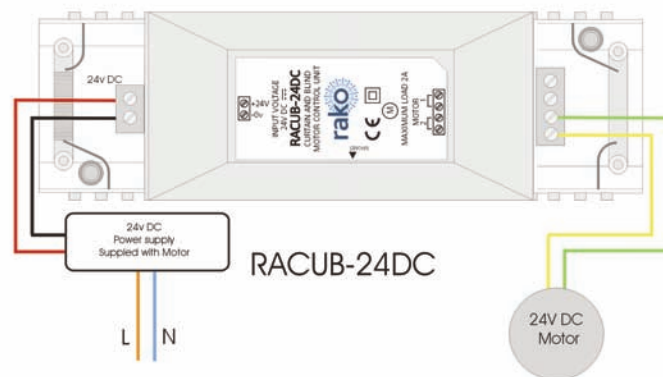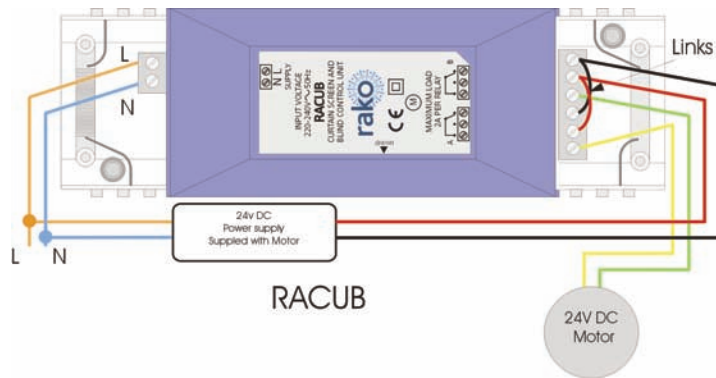
* Motors with embedded control systems may be controllable if they are available with an interface for external control. See the section 'Bridge Interfaces' for details.

RACUB

RACUB-2L

RAK4R

Motor Type

24V DC Motors – 2 Wire

DC motors that have 2 wire connections require a reversal of polarity to change direction. 24V DC power is supplied by the motor manufacturer's power supply.
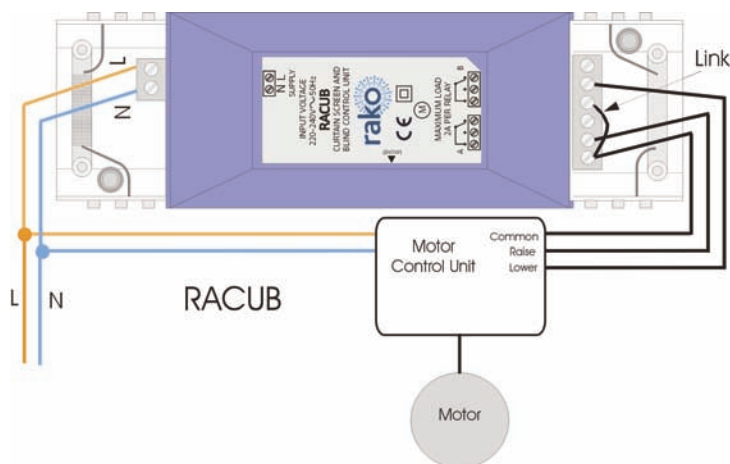

Volt Free Control.

Some motors require volt-free contact closures which operate a Motor Control Unit supplied with the motor.

Curtain Motors

Most curtain motors can be controlled by a Rako RACUB or RAK4R, the control requirements can differ depending on the make and type of motor in question. Refer to Rako's technical support department for more information.

Control

Rako curtain and blind modules can be operated by any of the controllers and interfaces available for the lighting control system, these include Infra Red, Volt Free contact closure, RS232, and IP. Controllers include Rako wallpanels, hand held remotes, and iPhone, iPad and Android interfaces.

Plate Finishes

Rako screw-fixing and screwless plate kits are available in a selection of finishes including:

Screw-fixing flat plates:

Brushed Stainless Steel
Mirrored Stainless Steel
Polished Brass
White Metal

Screwless flat plates:

Brushed Stainless Steel
Mirrored Stainless Steel
Polished Brass
Black Nickel
White Plastic

3 Button Control format.

As the standard scene configuration for lighting is not a logical control format for blinds and curtains, most Rako controllers have options for more sensible layouts for such control. Typically these controls have 3 buttons, for open/close and stop functions and controllers with displays (Smart remotes and Apps) can be configured for this style of operation. For areas where two separate channels of controls are needed 6 button options are available (e.g. where separate control for blinds and curtains are required or where separate control for different aspects is needed).
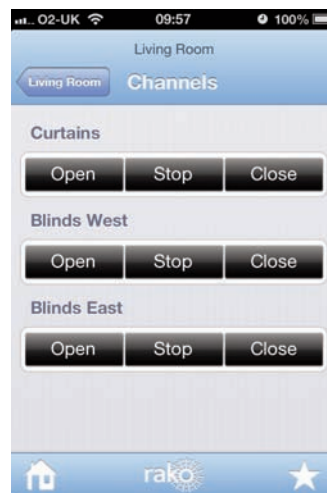
When a system is in the same room as a Rako lighting system double gang control panels are available giving scene controls for lighting on one side and curtain/blind controls on the other.
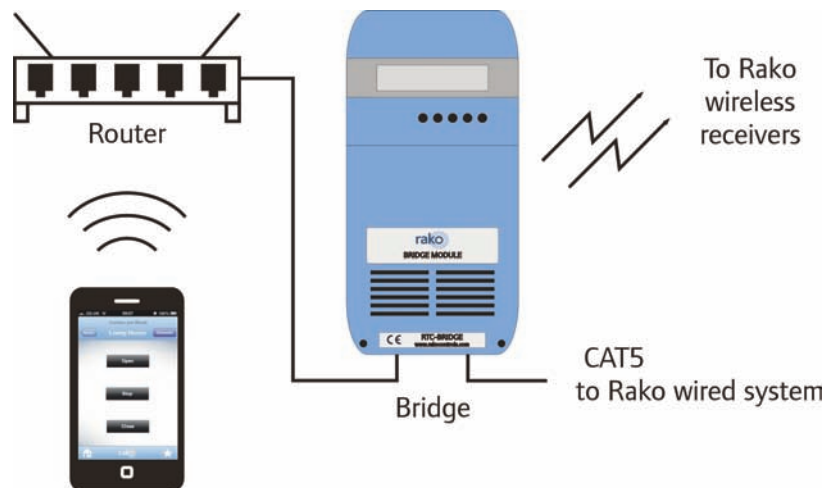
Control from smart phones

Apps for iPhone/iPad and Android phones allow configuration of pages for blinds in each room, along with channel control and naming.

Bridges

Bridge Modules are the interfaces between Rako systems and others. Bridges with a time clock module (TCM) fitted i.e. RTC or WTC Bridges, can also trigger timed events and replay normal activity in a 'Holiday Mode'. Bridges also have an ethernet link making them the interface unit for Smart Phone App interfacing.
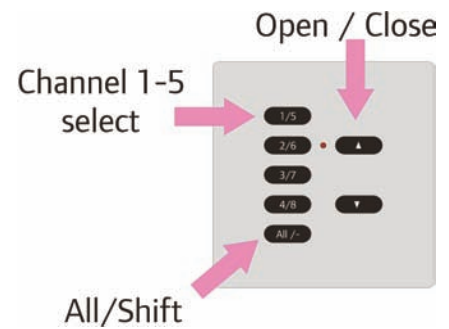
The WRA232 Bridge has an RS232 data link. As some curtain and blind motors with embedded control systems have interface units available which can accept custom RS232 commands, the WRA232 Bridge can be used to send commands to these units, allowing override control of the motors from the Rako System.
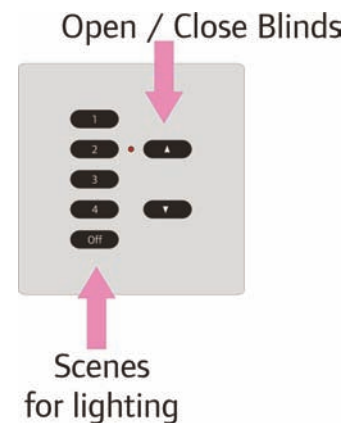
RAKO CONTROLS
RAKO BLIND AND CURTAIN CONTROLS

Multiple Channel control

Areas (rooms) that require multiple channel controls (more than two) can be contolled by 8 channel control panels or handhelds. To reduce the need for 8 sets of 3 button controls a 7 button wall panel is available with functions to select one of 8 channels (single press for channels 1-4 and SHIFT and press for channels 5-8) or All channels open and close.

Open / Close

Channel 1-5 select

All/Shift

Control from standard lighting control panels.

It is possible to split the function of a standard 7 button keypad into lighting and curtain/blind control using advanced ignore functions available from Rasoft. Using this feature the 4 scene buttons plus Off control the lighting and the raise/lower buttons control the blinds.

Open / Close Blinds

Scenes for lighting

Remote Control From Handhelds

Rako single gang wallpanel arrangements are also available in the RAH03, RAH06 and RAH07 handheld units and the RAHSmart offers whole house control of both lighting and curtains and blinds. With a menu driven display individual channels can be named and controlled independently.