

TOTAL LIGHTING CONTROLS

Welcome to Rako



Rako is leading the way in providing state of the art digital dimming technology, providing innovative solutions to meet the needs of a diverse range of applications with lighting systems that are simple to use, creative, easily installed and cost effective.

Designed and manufactured in the UK. With a wealth of experience in lighting controls, Rako offers an unparalleled range of products backed by a project planning and support service that is second to none.

Providing innovative, cost effective lighting controls for homes, offices, venues and hotels

Mood. Ambience. Function.



Applications

Rako lighting systems make the Smart Home dream a reality but can equally be applied to other applications. Office, meeting and conference facilities take on a more professional image with moods for presentations and meetings. The atmosphere in bars and restaurants can be subtly changed, enhancing the customer experience with smooth fading, reducing the impact and intrusion of cumbersome switching. Scene changes can be easily selected by staff or automatically from repeatable timed events. Hotel rooms have added sophistication, giving guests a little extra luxury whilst dining and public areas benefit from a more relaxing feel with scenes becoming more intimate as the evening progresses.

Mood lighting systems offer the user the ability to recall a scene, or mood of lighting, at the touch of a single button despite controlling multiple circuits and lamp types. Circuits are split to define zones and highlight room features and are programmed to suit the different uses of a space. Scene changes incorporate fade times giving subtle lighting transitions.

Advanced technologies allow control of all light fittings, including the dimming of LEDs, fluorescent lighting and low voltage fittings, saving energy and increasing lamp life as lamps are dimmed.

Push button systems allow two, or multi-way control and can be controlled from hand-held remotes as well as the new generation of smartphones. Digital communication means system integration is easily achievable, linking lighting to audio-visual, security and home/building controllers, including control of curtains, blinds and screens.

Advanced programming features allow 'Master Off' control from any keypad or maybe a button to create a 'Welcome Home' scene. The addition of a TCM time-clock module provides 'Holiday Mode' security, timed events and astro dawn/dusk programming. The TCM also allows sequenced events and macro commands.

Rako offers a number of installation options including wireless control for ease of installation and retro-fit applications. More complex projects may suit the wired network with centralised RAK units, or possibly combined systems giving a mix of both. The ability to offer wireless, wired or combined options means Rako can provide the best possible approach for any project and gives the safety net should cables be forgotten or extra wall-plates be needed after walls are sealed.

Tailored environments



For homes



For offices



For venues



For hotels

Wireless



Rako's wireless system provides all the benefits of a sophisticated lighting control system without the need to re-wire and can be used in both new and retro-fit installations.

The wireless capability provides the most cost effective and simple to install solution saving on cabling and re-decoration.

Wireless systems can use either individual modules or Rako's RAK system with the RxLink wireless interface.

Modules wire in-line with each lighting circuit and can be mounted either in the ceiling or in a central cupboard. Split lighting into circuits to allow independent control and provide the ability to highlight different areas and features within a room.

Wall-plates can be flush mounted into a standard back-box or can be surface mounted, requiring no cabling at all as they communicate wirelessly with the receiver modules.

Modules are available to suit all types of load from incandescent, low voltage and fluorescent to the latest generation of LEDs. Systems can be as small as one circuit and one wall-plate up to whole home installations with master house controllers and full system integration. Signal repeaters make wireless practical for the largest of projects.

Simple connection of the Rako Bridge to a wireless router provides programming access via Wi-Fi and allows control from the Rako App, giving access to both scene and individual channel control.

Awaken your senses





Wired



The Rako wired system is the option for customers who prefer a cabled network. It offers LED backlit buttons with the option for custom etching and ultimately can cope with the largest of projects.

Using CAT5 cabling, system components are wired either as a daisy chain network or star arrangement using the RAK-STAR box.

Circuits are wired to a centralised location or a number of hubs, linked together on the network and connected to either RAK8 packs, with pluggable modules or RAK4s. Both include options for trailing edge dimming, ideal for LEDs as well as 0-10V, DSI, DALI or switch options. Curtain and blind control can be incorporated with either the

WM-CUB module for the RAK8 system or the RAK4-R and colour changing is achieved with DMX or WLED modules.

User controls, including wall-plates, PIRs, time-clocks and system interfaces are added to the network and programmed from a PC or Mac connected via Wi-Fi to a Bridge unit. Adding a WTC Bridge to the system gives access to timed events, 'Holiday Mode', dawn/dusk programming and advanced macros and mapping features. End users can then program scenes for events such as breakfast, lunch and dinner from a smartphone or tablet providing total user control.

Enhance the experience





Combined



The ability to combine Rako wireless and wired systems provides a unique solution for installers and end-users alike. This amazing flexibility gives a remarkable choice in installation methods allowing the creation of a network of components that interact and work seamlessly together.

Projects started as completely wired systems have the fall-back position that the addition of wireless modules and wall-plates allows, giving the 'get out of jail free card' for when the job doesn't quite go to plan, or when system expansion is required, after cabling is complete. Some projects may just suit the combined approach such as where a new build or extension is added to an existing building and a lighting control system is required in both parts.

The Rako Bridge used to combine the wireless and wired systems also allows complete control from a smartphone or tablet and can provide remote access to the network from a PC or Mac.

The whole palette of Rako products and the ability to 'combine' allows project designers to plan the best possible solution for any project.

Set the scene





LEDs



The introduction of LEDs has been the single biggest change the lighting industry has seen since the introduction of the electric lamp and the use of LEDs has now become the norm within lighting design.

This creates opportunities and difficulties alike. As with all revolutions things can get messy before order is resumed. Unfortunately with the benefits of increased efficiency that LEDs bring also comes confusion amongst installers, end users and suppliers alike. Rako's experts can help and provide control solutions for all the currently available options on the market.

As a manufacturer the challenge for Rako Controls is to keep abreast with the changes, keep customers informed and provide solutions for the myriad of products available. Rako is continually developing new products to keep on top of this fast moving sector offering smooth flicker free dimming control. This is often limited by the quality of the LED lamp or driver and therefore Rako tests and publishes results for hundreds of lamps and drivers, giving the installer and end user a choice of suitable lamps.

For an up-to-date record of these results, go to: leds.rakocontrols.com

Control options for all LEDs

Range of wired and wireless trailing edge dimmers for mains dimmable lamps and drivers;

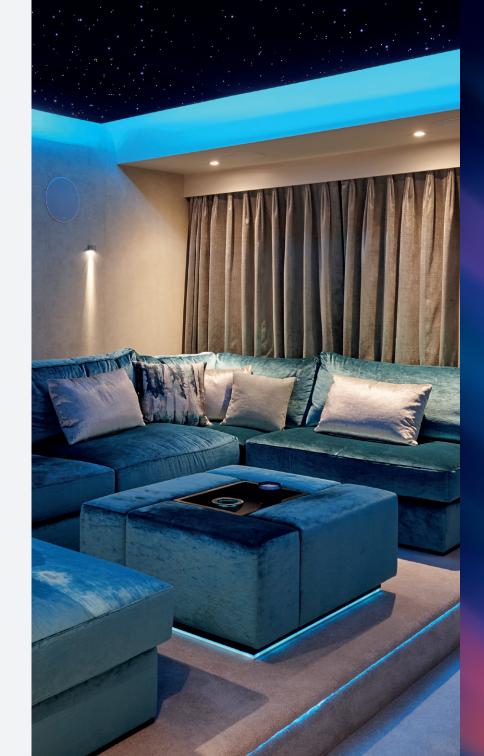
Wired and wireless 0-10v, DSI, DALI and DMX controllers

Constant Current drivers, Single and 3 channel for RGB

Constant voltage Single channel drivers

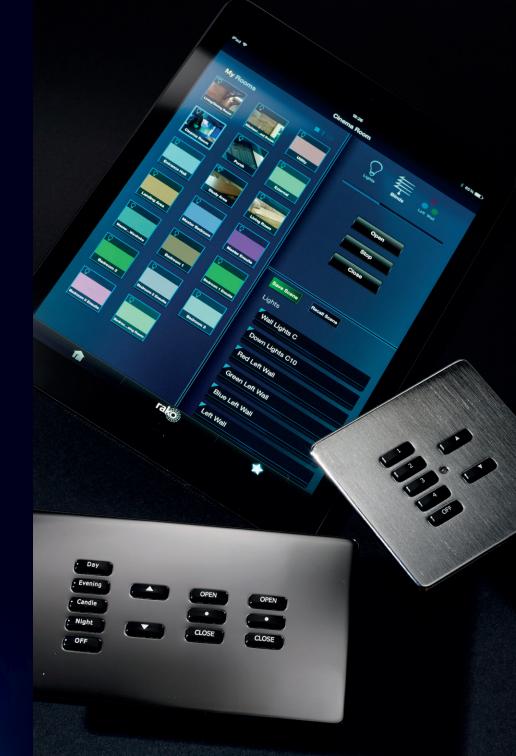
Constant voltage 4 channel for RGB plus white control





At your fingertips

Control Rako from your smartphone or tablet – connected via Rako Bridges the Rako App provides the ultimate in flexible control of the Rako lighting system from local area network or anywhere in the world via the internet. Select rooms and control individual channels with the on screen touch sliders. Save changes to a desired scene, close curtains whilst away from home, then select a welcome scene upon return.



System integration

Rako Bridges

Rako Bridges link wireless and Rako wired systems, also providing additional functionality such as smartphone control. They are the building blocks of 'Combined' Rako systems.

Adding the TCM module to either wireless or wired Bridges enables astronomic time clock events, automated macros, conditional logic and holiday mode.

Third Party systems

Rako's system interfaces allow communication with almost all home automation controllers on the market. Integration can be achieved with audio visual controllers, security, heating systems or multi-room audio using either IP, RS232 or simple volt free switch contacts.

Voice activation

The Cloud-Gateway allows control of a Rako system from one of the many voice recognition systems becoming available, such as Amazon Echo.*





^{*} Due to the speed at which this technology is evolving contact Rako for status on compatible systems.

Control Modules



RCM - Wireless

Wireless push button wall plate control module, shown here with 7 scenes, off and master raise and lower buttons. Being battery powered means that the module can be mounted anywhere without the need to run cabling. Available in several button layout options, custom button etching also available.





Hard wired push button wall plate control module, shown here with 4 scenes, off and master raise and lower buttons. Connected to the Rakom wired CAT5 (CAT6) network. Available in several button layout options, custom button etching also available.

Cover plates & mounting options

All Rako plates are designed to fit a standard UK back-box, be it single or double gang.





Flat plate screw fixing

Clip-on screwless fixing plate

Available as flat screw fixing or clip-on screwless fixing plates, both styles are available in standard or custom finishes (custom finishes may be subject to additional costs and extended lead times).



Surface mount using pattress

For when no back-box is available, or possible, Rako's wireless modules (flat plate only) can be surface mounted using the RVF pattress mounting kit. Screwless fixing plates are not suitable for surface mounting.



Double gang plates

Double gang plates can control two areas, clearly combine separate functionality (e.g. lighting and blinds) on a single plate, or can simply be used to blank an existing hole. Suitable for flush mounting only.

Switch interfaces



RCI4L and RCI7M switch interfaces

Allows the use of standard latching or momentary action rocker switches. Accessories from any switch plate manufacturer can be used to link into a Rako wireless or wired control system, ensuring that all electrical accessories match. Whilst the volt free interface simplifies the control method, the full extent of a Rako system, such as more scenes can be accessed via the Rako App.



RNC - Near Field Technology keypad

The fully programmable alternative to the RCM range provides a quick and powerful way to customise a wireless system.



Using the same technology as contactless cards, NFC (Near Field Communication) allows the rapid transfer of data between the programmer and the wall panel.

Why use an RNC?

Removing the restriction of dedicating a panel to a single room, means each button can have completely programmable functionality, controlling individual circuits or running Macro events, closely matching the functionality of the wired system.

Requires programming with Rasoft Pro and RAMPI interface.

Rako control panels come in the widest possible range of options, to suit installation method, finish, style and fixing options. Finally, for where the customer simply must have the exact switch and finish they want, even when it's not a Rako option, the RCI interfaces allow them to control the Rako system from standard light switches.

Whilst being a sophisticated control system, operational simplicity is key. To this end numerous button layouts are available to make day-to-day use as clear and easy as possible. For those who really need it spelling out, buttons can be engraved to suit customers' custom requirements.

Button layouts



RCM070

4 scenes, off, raise + lower



WCM100

7 scenes, off, raise + lower



WCM020

On + off



RCM030

3 button single control for curtain and blinds



WCM060

6 button twin control for curtain and blinds



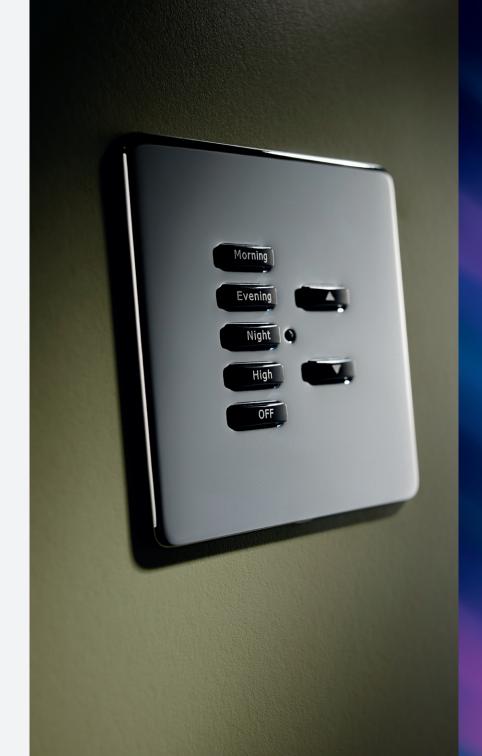
RCM101

10 button combined lighting and single control for curtain and blinds

Custom engraving

Customise each button on a keypad;

System design is achieved using Rako's 'plate designer' available at: www.rakocontrols.com/support/ plate-designer/



Not only does lighting have many different control requirements but the installation requirements of projects vary greatly too. Rako provides modules and centralised RAK solutions for all types of lighting currently available, catering especially for the confusing needs of modern LED lamp types.

Control Modules & Raks





Module dimmers

- Mains dimming up to 500w
- Leading & Trailing Edge
- LED Constant Voltage
- LED Constant Current

- Three channel LED
- 0-10, DSI, DALI
- Switch only
- Curtain and blind control



Larger dimmers and DMX

- Mains dimming up to 1200w
- Leading & Trailing Edge
- DMX Control



RAKs

■ For centralised wiring



Programming interfaces

With either direct connection to a PC/Mac or wireless connection via a router the Rako Bridge is the primary system programming tool and also allows connectivity from smartphone and tablet devices. Connection allows programming via Rasoft software package with expert or guided user levels.

The RAMPI interface is a USB connected device allowing programming of wireless systems without a Bridge and programming of Rako's NFC (Near Field Communication) devices.

Interfaces & accessories







Mood. Ambience. Function.

At Rako we realise that planning a project can be confusing, especially with the vast array of lamp types and fittings now available. With a hugely experienced support team and a network of trained dealers, there's always someone able and willing to help.

Rako Controls Ltd, Knight Road, Rochester, Kent ME2 2AH

T: 01634 226666 F: 01634 226667

W: www.rakocontrols.com E: sales@rakocontrols.com

Acknowledgements

Image on page 2 courtesy of Ciao Interiors
Image on page 6 courtesy of Brilliant Lighting and Simon Warren
Image on page 10 courtesy of Artcoustic Loudspeakers
Image on page 12 courtesy of Majik House

Rako reserve the right to change the specification and data herewith without notice