



TOTAL LIGHTING CONTROLS

# Welcome to Rako



Lighting controls offer luxury, comfort and convenience in the hospitality and commercial sectors and are an integral part of today's smart homes. With control options ranging from keypads, remotes, tablets, smartphone apps and voice command, Rako provides the user with ultimate flexibility.

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.

Mood. Ambience. Function.

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





# Applications

Mood lighting systems offer the user the ability to recall a scene, or mood of lighting, at the touch of a single button whilst controlling multiple circuits and lamp types.

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.

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, smartphones as well as voice activation. 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. With the addition of the Rako Hub, 'Holiday Mode' security, timed events and astro dawn/dusk programming can be incorporated. The Hub will also enable 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.

Wireless wall-plates can be flush mounted into a standard back-box and Rako's Classic wall-plates can be surface mounted too. Wireless wall-plates require no cabling at all, as they communicate wirelessly with the receiver modules.

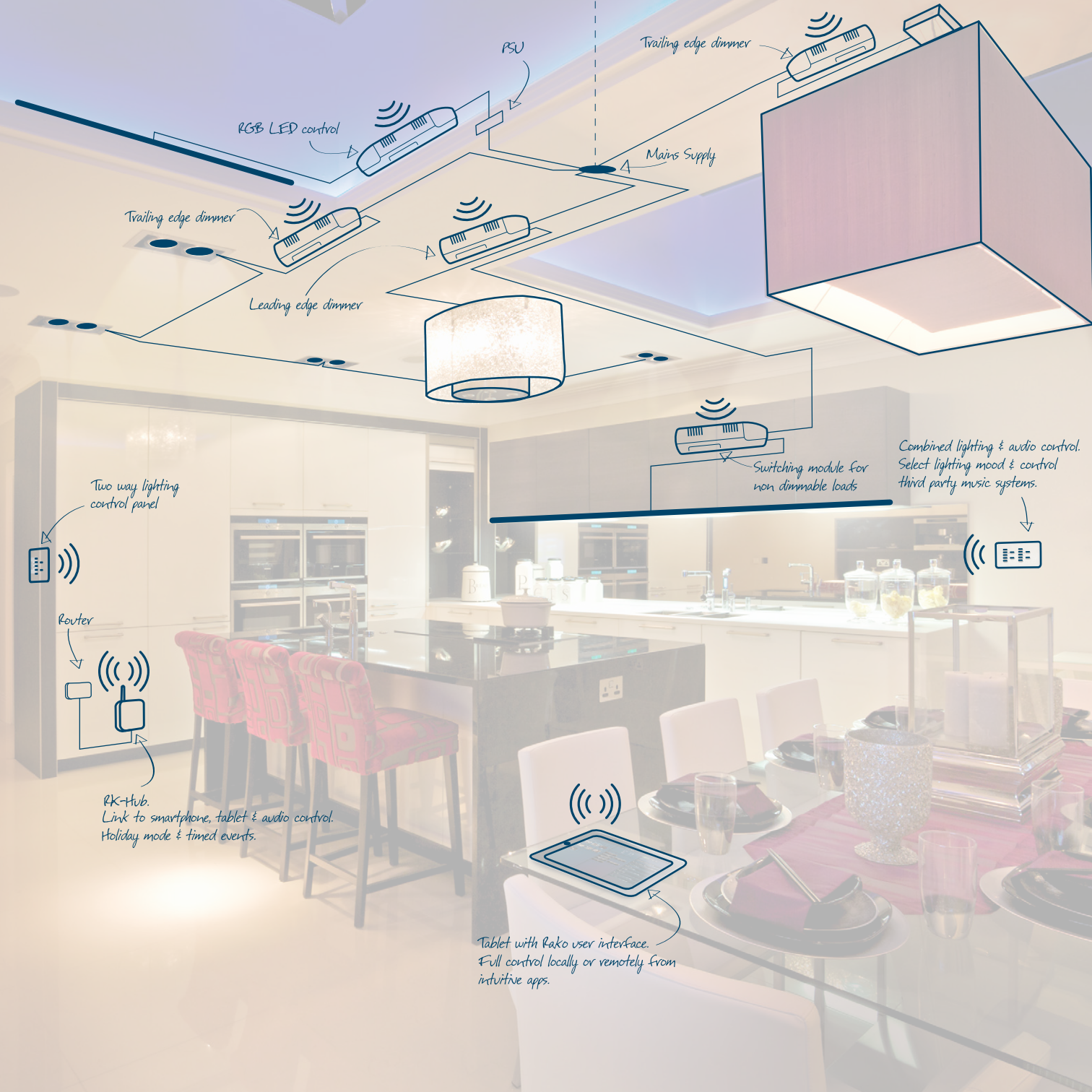
Modules are available to suit all types of load from incandescent, low voltage and fluorescent to the latest generation of LEDs. Systems can be as small as one circuit and one wall-plate up to whole home installations with master house controllers and full system integration. Signal repeaters make wireless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

Simple connection of the Rako RK-Hub 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







RGB LED control

PSU

Trailing edge dimmer

Mains Supply

Trailing edge dimmer

Leading edge dimmer

Switching module for non dimmable loads

Combined lighting & audio control.  
Select lighting mood & control  
third party music systems.

Two way lighting  
control panel

Router

RK-Hub.  
Link to smartphone, tablet & audio control.  
Holiday mode & timed events.

Tablet with Rako user interface.  
Full control locally or remotely from  
intuitive apps.



## 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 stacks, linked together on the network and connected to RAK8 packs, with pluggable modules. Options for trailing edge dimming, ideal for LEDs as well as 0-10V, DSI, DLI (Digital Lighting Interface - compatible with EN62386) or switch options. Curtain and blind control can be incorporated

with the WM-CUB module and colour changing is achieved with DMX or WLED modules.

User controls, including wall-plates, PIRs and system interfaces are added to the network and programmed from a PC or Mac connected via Wi-Fi to a Hub unit. Adding a WK-Hub 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 the Rako App, providing total user control.

Enhance  
the experience







Wire all circuits back to a central location

Curtain & blind control

Programmable scene control panel

RAKB Packs

WK-Hub  
Auto Astro time control  
(Breakfast, lunch & dinner)

RAK-Link connecting the RAKOM network

Router

CAT5 cable connection

Program mood lighting directly from a smartphone or tablet



## 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.

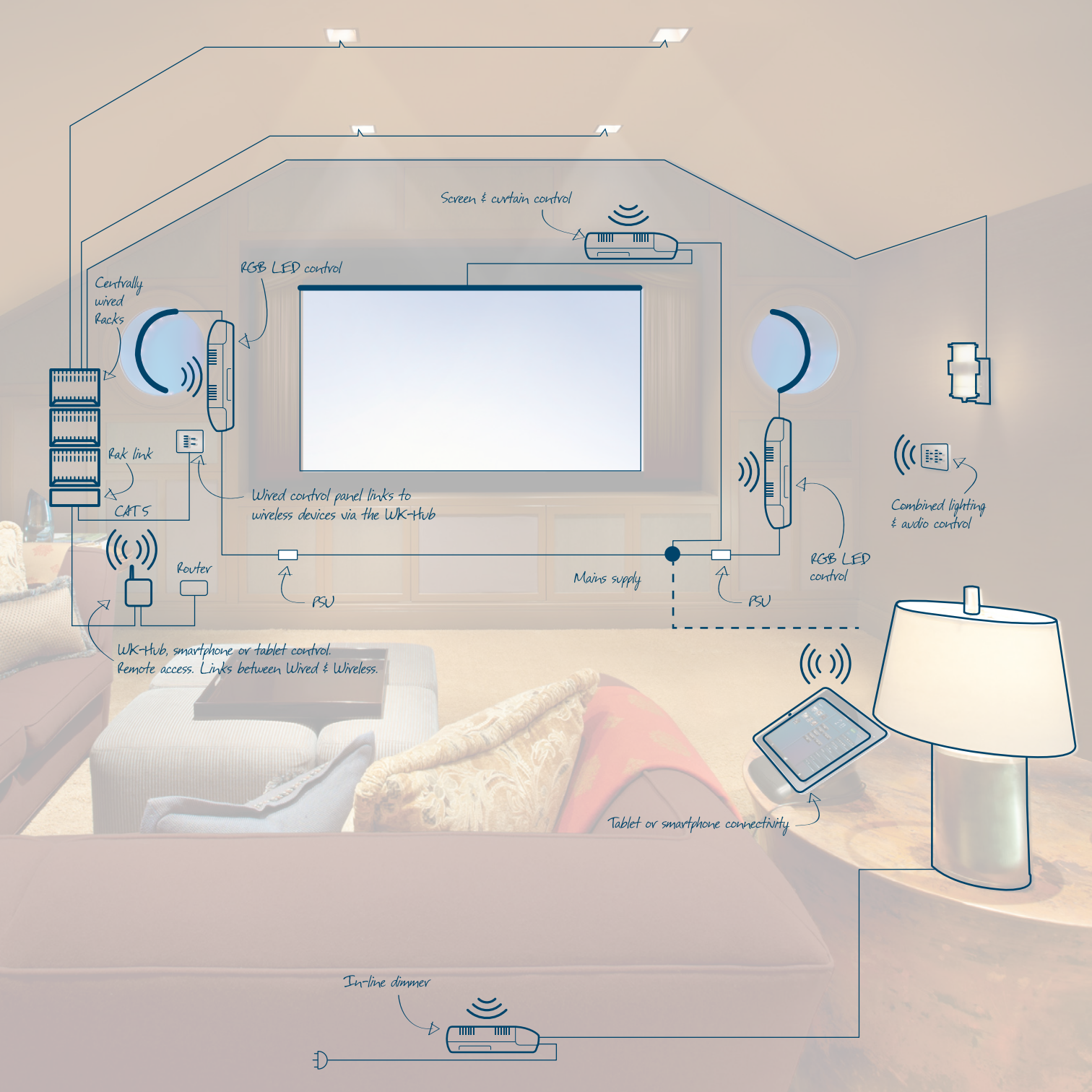
The Rako WK-Hub used to combine the wireless and wired systems also allows complete control from a smartphone or tablet and can provide remote access to the network from a PC or Mac.

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 and confidence with compatibility.

For an up-to-date record of these results, go to:  
[leds.rakocontrols.com](http://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, DLI and DMX controllers

Constant current drivers, single and 3 channel for RGB

Constant voltage single channel drivers

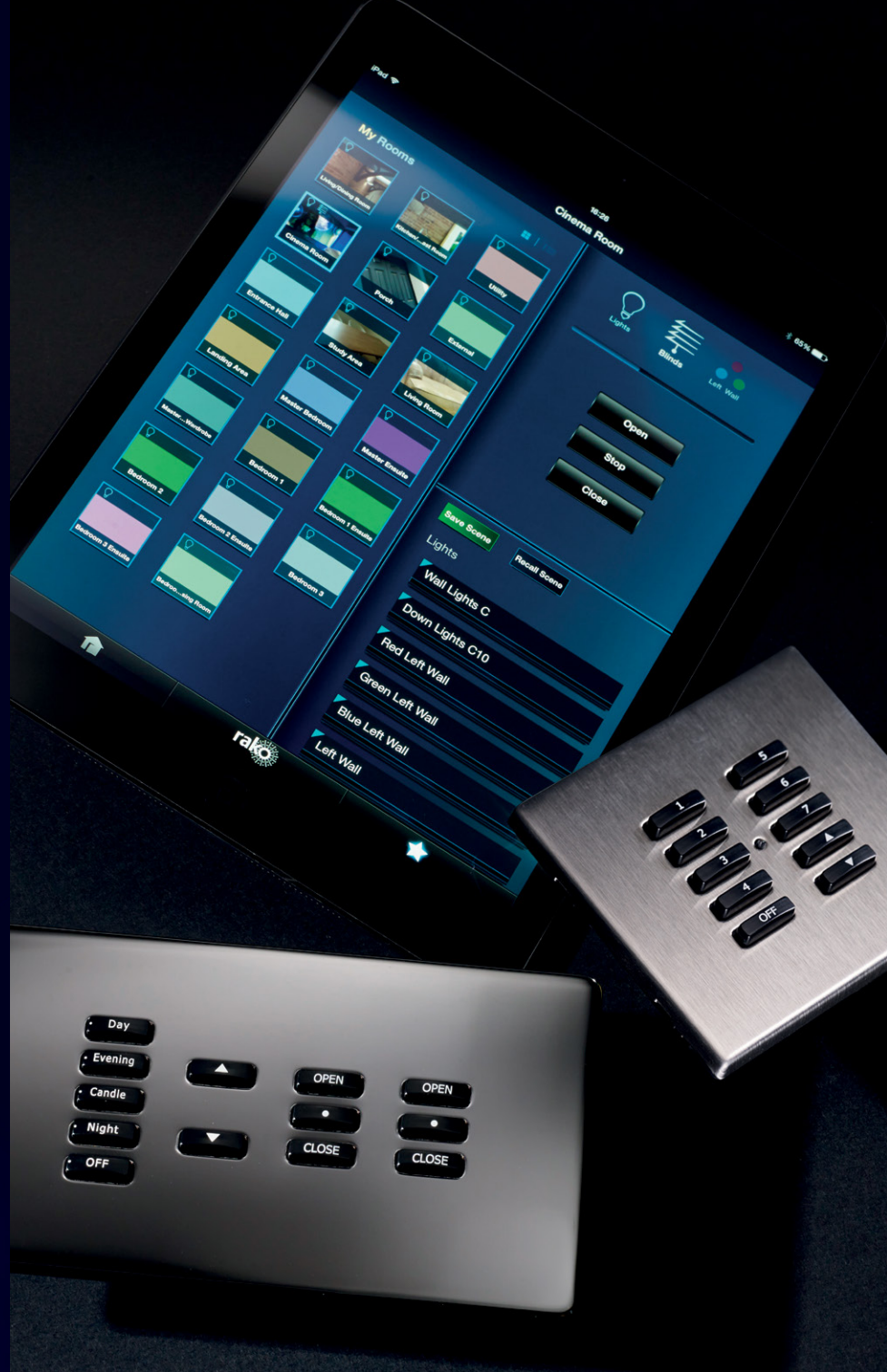
Constant voltage 4 channel for RGB plus white control





## At your fingertips

Control Rako from your smartphone or tablet – connected via a Rako Hub, 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 Hubs

The Rako Hub links wireless and Rako wired systems, providing additional functionality such as smartphone control and voice activation from one of the many voice recognition systems available, such as Amazon Echo, Google Home and Apple Homekit. The Hub also enables astronomic time clock events, automated macros, conditional logic, holiday mode and Sonos integration.

### 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.





## Control modules



### RCM and WCM Classic Control Modules

Rako's classic RCM (wireless) and WCM (wired) push button control modules are available in several button layout options with custom button etching available on request. Wireless control modules are battery powered which means they can be mounted anywhere without the need to run cabling whilst wired control modules are connected to the Rakom wired CAT5 (CAT6) network.

### 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.

## EOS wall-plates

Rako's all new EOS push button control modules are available as wired or wireless NFC. Built around an all metal screwless flush fascia design, this elegant range offers specifiers and end clients a clean uncluttered look for their projects with six configurable buttons offering scene, curtain/blind and audio control options.

The wireless EOS control module is programmable via Rako's patented NFC (Near Field Communication) technology, allowing each button to trigger a single or multiple commands. This product can only be programmed with a laptop using Rako's Rasoft Pro software and a programming interface. Both wired and wireless EOS control modules are designed to be flush mounted to UK back boxes.

## Cover plates & mounting options

All Rako plates are designed to fit a standard UK back-box.



### Flat plate      Clip-on screwless screw fixing    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).



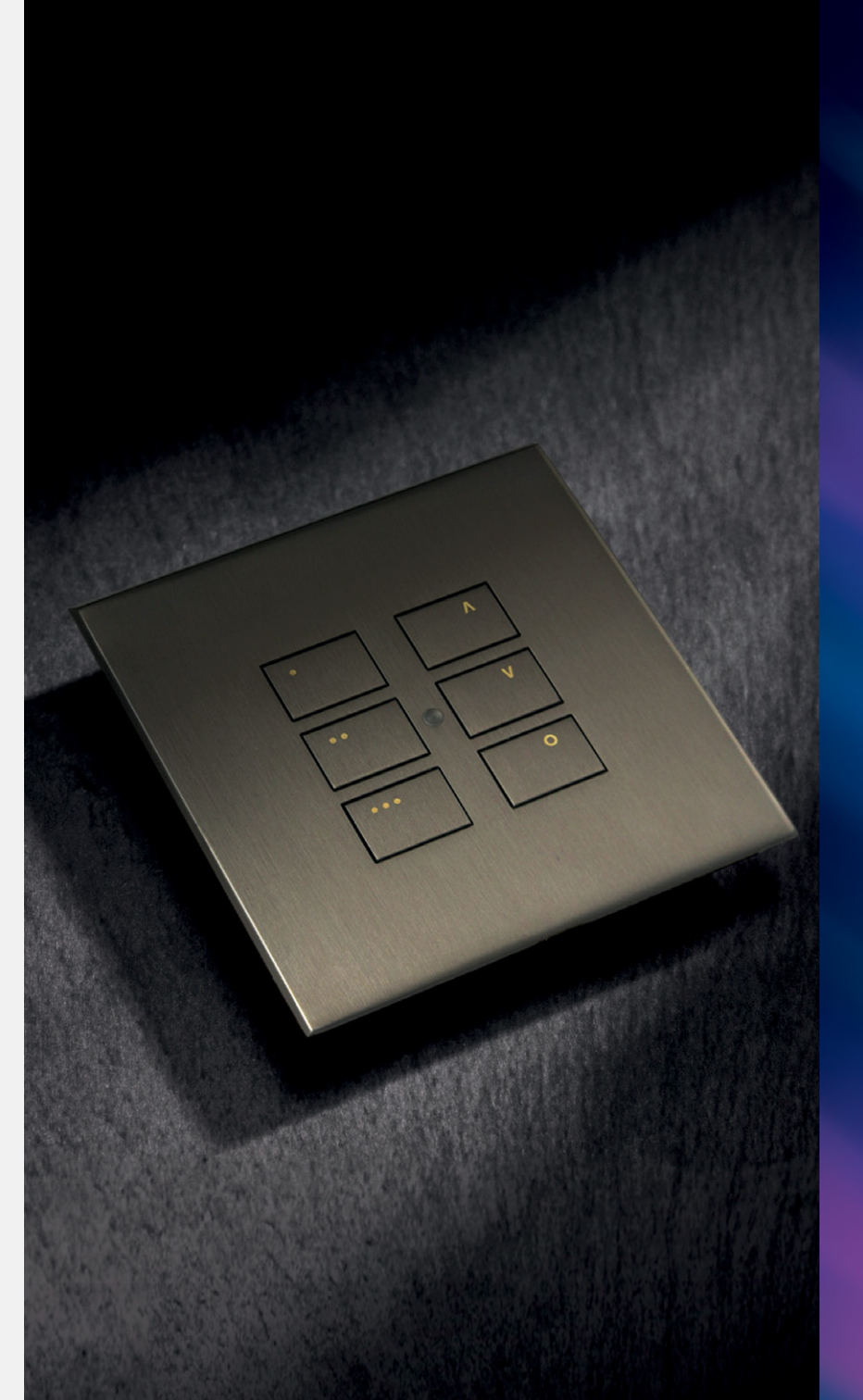
### Surface mount using pattress

For when no back box is available, or possible, Rako's classic 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.





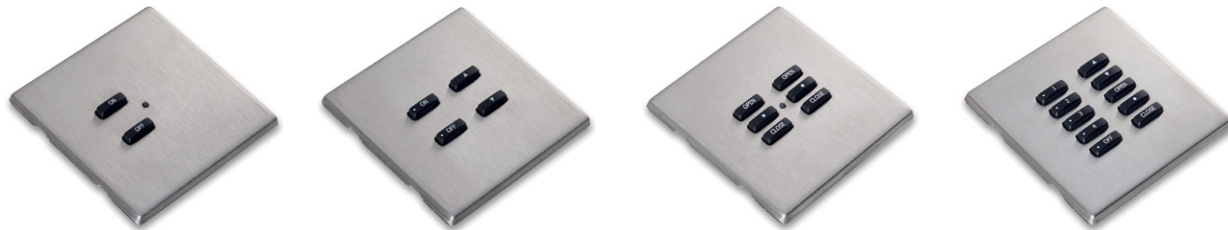
## Switch interfaces

Rako control panels come in the widest possible range of options, to suit installation method, finish, style and fixing options. When 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. This means that 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.



The RCI4L and RCI7M switch interfaces allow the use of standard latching or momentary action rocker switches. 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.

## Button layouts



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.

## 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/](http://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.

## Dimmer modules & RAKs



### Dimmer modules

- Mains dimming up to 500W
- Leading & Trailing Edge
- LED Constant Voltage
- LED Constant Current
- Three channel LED
- 0-10, DSI, DLI
- Switch only
- Curtain and blind control



### Larger dimmers and DMX

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



### RAKs

- For centralised wiring
- Mix and match plug in modules to suit load types

## Programming interfaces

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

The RAMPI interface is a USB connected device allowing programming of wireless systems without a Hub 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.

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