Rako control panels come in wired or wireless formats, with the wireless having the options of the new or classic Rako style. Wired control panels can have up to 10 buttons on a single gang plate, the wireless up to 7. Wired control panels need to be fitted to a 45mm back box, wireless panels of either style can be flush fitted to a 12mm back box or surface mounted using the pattress. Wired keypads have backlit buttons with LED tellback, wireless panels have a central comfort LED.

Screwfixing and screwless options are available for all types as well as double gang options, double gang panels are only available for flush fixing.

Wireless control has huge benefits and can make the installation of a lighting control system feasible in projects where the demands of specialist and dedicated cabling would otherwise be prohibitive. There are however, many projects where dedicated cabling is being installed and a wired solution can provide some features difficult to achieve with a wireless network, such as permanently powered tell-back LEDs, true status feedback and ultimately sheer distance of possible communication. Rako’s introduction of a wired alternative gives an installation solution for all projects and in making the wired and wireless options totally compatible the real and important benefits of the ‘hybrid’ solution can now be achieved.

Rako Classic Wireless panel.

Rako new Wired style.
NETWORK
A Rako network consists of a daisy chained data network terminated at each end with devices, be they panels or dimmer racks, connected in one continuous run. Rako’s RAK-Link provides the connection point for each RAK location, controlling up to eight RAK4 boxes and providing network power.

STAR WIRING
For home run or star wired networks Rako’s RAK-Star distribution box is available to give up to 16 individual cable runs.

BRIDGE MODULES
The bridge modules allow interfacing to other networks, Ethernet, Rakom wireless, RS232 etc. The WRE bridge also allows use of the iPhone app allowing users to control a Rako network from their iPhone.

MORE SCENES
A wired system allows more data transmission between devices allowing more scene options, to all intents the only limit to scene options on a Rako network is the physical number of buttons.

MORE FUNCTIONS
Buttons can have different press and press and hold functions, can run macros or sequences and can have programmable LED tell-back functionality.

WIRED
A wired system where an installer has the absolute ability to plan and install communication or data cabling allows a control system that has a fixed rack solution for the dimmers that can be neatly mounted in accessible and serviceable locations. The control panels can draw permanent power from the data network and have LED tell-back with back-lit buttons. There is no practical limit to the size of the network and the network can be interrogated for existing program details.
RF REMOTES
These can talk to the Bridge units and have the advantage over infra-red remotes in that they don’t require ‘pointing’ at receivers and are not affected by bright sunshine or high frequency interference from fluorescent ballasts etc.

WIRED SPINE
Using a CAT5 data cable as a spine for the system eliminates problems of transmission range for a large project whilst retaining the simplicity of a wireless network. The wired spine gives an easy to install single line data network that still eliminates the complexity of cable drops to switch positions and the time required for the terminations. RF remotes can talk to the Bridge units and have the advantage over infra-red remotes in that they don’t require ‘pointing’ at receivers and are not affected by bright sunshine or high frequency interference from fluorescent ballasts etc.

BRIDGE MODULES
RF Bridge modules provide the interface between the spine and RF control panels.

RACK OPTIONS
For areas where lighting circuits are brought back to a central location Rako’s RAK dimmers can be used connecting to the spine using a RAK-Link unit.

MODULE OPTIONS
Where lighting circuits are existing or installing individual modules is simpler or more cost effective these can link to the spine via the bridge modules sending Rakom RF messages.

First Floor
Individual Modules

Ground Floor
Central Racks
PLANNED WIRED INSTALLATION WITH WIRELESS ADD-ONS

Any planned installation encounters site problems and having planned a wired network the ability to fit wireless control panels or dimmer modules after the event overcomes the major headaches caused by missing data cables, position changes due to site conditions or additional or two way panels being required late in the project.

Wireless dimmer modules can be fitted to rooms that weren’t initially to be within the project scope. Table lamps can be incorporated into a network where dedicated dimmed SA sockets were not installed.

Wired control panels can be installed with wireless dimmers, for example, where data cabling is being installed for multi-room audio keypads but a complete electrical re-wire is not necessary.

Bridge modules provide the link between wired and wireless networks.

WIRED CONTROL PANELS WITH WIRELESS DIMMER MODULES

An arrangement of wired control panels communicating with wireless dimmer modules gives a system the advantage of permanent power to the panels LED tellback and back-lit buttons but the ease of retrofitting the lighting control modules. A system of this nature is a useful method of installing a mood lighting system when, for example, a multi-room audio system is being installed with data cabling to the switch positions but a full home re-wire is unnecessary.

COMBINED OR HYBRID SYSTEMS

A wired system with a bridge or bridges overcomes the inevitable problems of missing cables and wallpanels that need repositioning due to unforeseen site conditions or last minute client whims. A wired network with an RF bridge facility offers the installer the ultimate “get out of jail” card. A full hybrid system can be the only solution for a project where a new extension can be fully wired but the existing property needs a retrofit solution.

First Floor

Individual Modules

Bedroom 1

En-Suite

Bedroom 2

Ground Floor

20A LNE Supply
Circuit 5- Kitchen
Circuit 6- Kitchen
Circuit 7- Kitchen
Circuit 8- Lounge
Circuit 9- Lounge
Circuit 10- Lounge
Circuit 11- Kitchen
Circuit 12- Dining
10A LNE Supply
Circuit 13- Dining
Circuit 14- Dining
Circuit 15- Dining
Circuit 16- Dining

20A LNE Supply
Circuit 1- Bedroom 1
Circuit 2- Bedroom 1
Circuit 3- En-Suite
Circuit 4- Bedroom 2

20A LNE Supply
RDI250C

RDI500C

RDI-PILL

CAT’S Data Cable

BRIDGE

Iphone

RS-232

RACOM

Interface

telephone +44 (0) 1634 226666   fax +44 (0) 1634 226667   www.rakocontrols.com
RACK / MODULE OPTIONS
Dimmers can be mounted remotely locally with modules or centrally with either modules or RAK solutions.

WALLBOX DIMMERS
Pill dimmers allow mains voltage lighting to be controlled from dimmers fitted to a wall-box with no neutral.

MOUNTING OPTIONS
Wall panels can be surface mounted with no back-box using the pattress or flush mounted into a standard back-box.

Combined lighting and curtain/blind control panels available.

A complete range of system interface accessories available.

Simple programming from wall-panels or sophisticated programming from RASOFT PC software package.

WIRELESS
A wireless network allows complete freedom when locating dimmers and control panels. Dimmers can be retro-fitted into ceilings, wall-boxes and in-line with flexes for table and free-standing lamps. Systems can be retro-fitted or installed into newly wired projects where the ease of installation and simplicity of programming is a priority.
CURTAIN AND BLIND CONTROLS

Whilst primarily a lighting control system, Rako has modules and control panel options that allow curtain and blind control to be integrated with the lighting system. RACUB twin relay control modules can be configured to control most motor types with RASOFT programmable options to optimise control for Venetian and Roman blind types. Rako control panels have 3 or 6 button options giving Up/Stop/Down control of one or two motors, or banks of motors. Rako’s RAH-Smart hand held remote can access individual motors.

All systems, wired, wireless or combined can be controlled from an iPhone using an APR or WRERBridge interface module and the free iPhone app. The bridge module connects to a wireless router giving Ethernet access from the iPhone and connection to either Rako’s wireless Racom or the wired Ranet network.

CHOOSING A SYSTEM - THE BRASS TACKS

Rako’s wireless system offers an easy to install system with a maximum of 4 scenes per room. Pricing of the wireless system is generally less than a wired option, is easier to install and simpler to program. A simple wireless system can be programmed by the end user without software whereas a wired system will invariably need commissioning by a trained engineer. A wired system has more scenes with true LED tellback and the wired network will ensure communication over large projects.