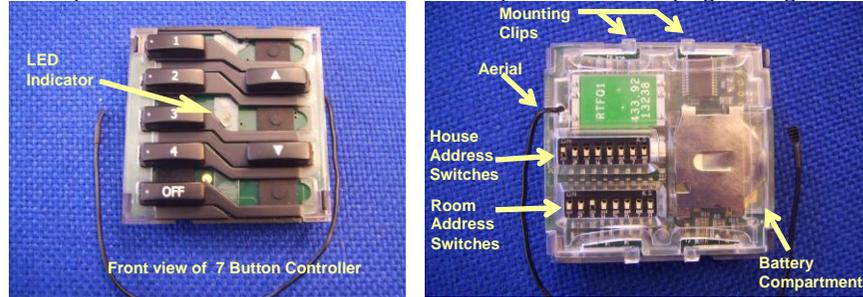# Rako RCM070 Wall-Plates: Installation, Programming and Operating Instructions.

General

RCM070 Wall-plate electronics module is a wireless 7 button wall mounted control panel providing 4 Scenes plus Off and Master Raise and Lower. The unit provides full scene programming.

Front view of 7 Button Controller

Mounting Clips
Aerial
House Address Switches
Room Address Switches
Battery Compartment
LED Indicator

The Rako RCP series of wall-plates are designed to cope with a number of different installation situations.
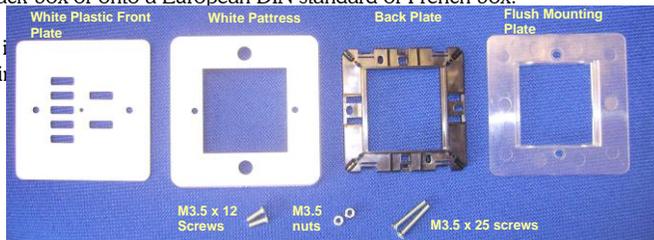These are predominantly:
Flush fixing into a UK back-box.
Surface mounting with a UK back-box
Surface mounting with no back-box or onto a European DIN standard or French box.

In order to fit the wall-plate i[...] [...]ble with a number of faceplate fi[...]

- White Plastic Front Plate
- Black Back Plate
- 2 x 25mm M3.5 screws.
- 2 x M3.5 nuts
- White pattress
- Flush Mounting Plate

White Plastic Front Plate
White Pattress
Back Plate
Flush Mounting Plate
M3.5 x 12 Screws
M3.5 nuts
M3.5 x 25 screws

Checking for correct operation

Rako control panels are supplied with a pullout tab to prevent inadvertent operation and battery deterioration during transit. Slide the tab out of the battery compartment. The Rako control panel should now be operational.
To check this press one of the buttons on the front of the Electronics Module and the indicating LED should illuminate briefly for a single flash. If the LED does not flash or it flashes repeatedly for a short burst (low battery warning) then you should contact Rako controls.

Battery replacement

The Rako RCP series of wall-plates are designed to be powered by batteries. The designed battery life is better than 3 years (based on 30 button presses daily) but the batteries will eventually need replacing. In normal use the Led on the front panel illuminates momentarily when a button is pressed to indicate that a (radio) transmission has been made. When the batteries are approaching the end of their useful life the Led will continue to blink after a button has been pressed. When this starts to happen the batteries should be replaced as soon as possible. *Always use two CR2016 batteries.* To replace the batteries remove the Wall Plate from the wall and unclip the Electronics Module from it's mounting plate, taking care not to damage the aerial (note that when flush mounted the aerial may be located in a hole outside the back-box). Carefully Slide out the battery compartment drawer. Replace with new batteries ensuring that the positive (+) terminal makes contact with the battery clip and the negative (-) terminal with the pad on the circuit board.
To ensure reliable operation always ensure that battery contacts and battery surfaces are kept clean of any grease, moisture or other contamination.

Flush Fixing a Wallplate to a Back Box

Fit Electronics Module to Mounting Plate
Set correct House and Room Address switches
Place Module onto Back Box
Tip: Aerial works best when kept straight by pushing it into wall cavity
Screw on Front Plate

Warning

Rako wall-plates are designed to operate at safety extra low voltages (6V). When fixing the wall-plates to existing back-boxes there may be mains wiring present, if this is the case then the wiring should be made safe, properly insulated and any metal back-boxes earthed. Earthing of the back box is essential if a decorative metal front plate is being used. Should there be any doubt in how to do this contact a qualified electrician.

Rako Controls Ltd accepts no responsibility for any damage or injury caused by incorrect installation of a Rako product.

Surface Mounting a Wallplate using a Pattress

Fit Electronics Module to Back Plate
Secure Aerial into Plastic Guides
Fit Nuts to Back Plate
Set House & Room DIP Switches
Fix back Plate to Wall
Clip Pattress to Back Plate
Fit Front Plate using 12mm Screws

General

Rako thanks you for having purchased a Rako product and hopes that you are pleased with your system. Should for any reason you need to contact us please contact us via our website www.rakocontrols.com or by phoning our customer help line on 01634 226666.

Rako RCM070 Wall-Plates: Installation, Programming and Operating Instructions.

Set-up and Addressing

<u>Before</u> any lighting scenes can be programmed (see the wall panel or handheld instruction manual) the receivers need to be addressed.

To avoid interference between rooms or neighbouring installations a Rako system should be set to an address other than the factory default of House 1 Room 4. The preferred addressing method is to select a logical House address number for the project, separate Room addresses for each room within the house and then sequential Channel numbers for each receiver within each room (see Fig.5) i.e. Channel 1 for the 1st receiver, Channel 2 for the 2nd etc. The House and Room addresses are set using the DIP switches on the back of a Rako controller (see Fig.4) and the Channel address is set by 'stepping' through the channel numbers with a panel in programming mode (see Step 3 overleaf) and then sending this number (along with the House and Room address) to a receiver (Step 4).
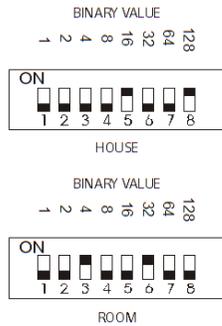
Addressing Switches
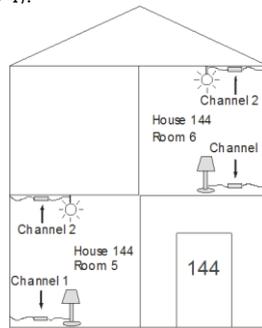
Addressing Example

Setting the address switches.

Each Rako transmitter has two, 8 way banks of switches for setting its address. The two sets of switches allow the user to choose from 256 house addresses and 256 room addresses. To set the address, unclip the rear cover whereupon the banks of switches will be now become visible. To set an address, use a small terminal screwdriver or similar device and carefully move some of the switches into the 'ON' position. Addressing uses binary encoding and the value of the switches is shown below.

Notes on addressing.

Note: Any control panels set with the same address will act as two or multi way controls.
A dimmer will not receive an address of House 0 (All switches set to off)
A dimmer will respond to, but not receive an address of Room 0 (All switches set to off). This Room 0 address is used for 'Master House' control
A dimmer cannot be set to channel 0.
To program a lighting scene see opposite

Programming Scene Levels

The following procedure assumes that all the receivers have already been addressed, see receiver instruction manual for details.

Note:

If a panel is left in programming mode without pressing a button or a receiver does not receive a command within 3 minutes of the panel going into programming mode they will time out and return to normal mode

Step 1

<u>TIP</u>
Press the scene button first

Put controller into programming mode by pressing and holding the scene button to be programmed and both raise and lower buttons together. After 5 seconds the red LED on the panel starts to flash. The panel is now in programming mode. Release the buttons
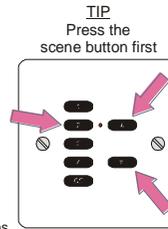
Note:
A Rako panel will <u>always</u> enter programming mode at Channel 0. It is not possible to give a receiver an address of Channel 0 but this gives a consistent starting point.

Note:
When in programming mode the buttons have functions as detailed in table 1.

Note:
As soon as the panel enters programming mode all receivers controlled by that panel will flash their loads (indicating channel 0). As each individual channel is reached by stepping up and down using buttons 1and 2 (see Step 2) that particular channel will flash its load only. If at any point it is desired to check which channel the controller is currently talking to, pressing button 3 will flash that channel's load without stepping up or down

TABLE 1

Button	Action
1	Step up one channel and ident
2	Step down one channel and ident
3	Ident
4	Store
Off	Exit programming

Step 2

Press button 1 once to step up to the first channel. Adjust the level for this channel by using the raise and lower buttons. When the first channel is set at the correct level press button 1again to step up to the second channel and adjust the level using the raise and lower buttons. Repeat this until all of the channels are set at the desired level. If at any point it is necessary to go back a channel, pressing button 2 will step down one channel at a time

Step 3

When the levels on all the channels are set to the desired levels press button 4 to save the settings
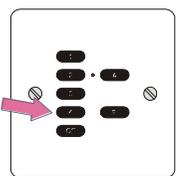
Step 4

Press Off button to exit controller from programming mode