Instruction Manual

RK-EOS-6

Six-Button Wireless Keypad

2024
Version 2.0.0

UK CA

For more information relating to the RK-EOS-6 see the Wireless Module Application Sheet, Wireless RAK Application Sheet, and Wireless Device LED Diagnostics.

For programming a Wireless system, including the device in this manual: Wireless Module Programming Guide

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1 What is the RK-EOS-6?

The RK-EOS-6 is a six-button Wireless keypad used in a Rako Wireless system.

Each button on the RK-EOS-6 can be configured via Rasoft Pro to transmit commands to multiple Rooms, providing additional flexibility for switch locations that may require multiple Rooms, such as on staircases or open-plan areas.

The RK-EOS-6 is the programmable section and the RP-EOS-60-XX is the cover plate and mounting kit which form the front buttons, therefore the RP-EOS-60-XX must be used in conjunction with the RK-EOS-6.

2 Programming the RK-EOS-6

Before the RK-EOS-6 can be installed, it needs to be configured in Rasoft Pro using either a RAMPI or a HUB.

2.1 Using a HUB

Similar to the RAMPI, the HUB has built-in NFC programming functionality, if the HUB has not yet been set up, see A1.2 HUB.

- To begin the setup process, ensure you are connected to the HUB in the communication Devices in Rasoft Pro, and that the HUB has been configured.

- Place the RK-EOS-6 on the top, middle section of the HUB.

- When the Device is correctly positioned, a green LED will show on the HUB, and a window will pop up in Rasoft Pro.

- Give the Device a suitable name so that it is identifiable in the software.

- Select the local Room for the Device. After the initial setup, the RK-EOS-6 will behave like an RCM with dip switches set to this Room.

NB
It is important to set the Room at this stage. If "Assign later" is selected, then the RK-EOS-6 will not be programmed and will be added as a virtual Device

- Select Finish on the next page to complete the setup. The HUB will need to upload to the RK-EOS-6 at this stage.

2.2 Using a RAMPI

Unlike the RCM, the RK-EOS-6 must be programmed using Rasoft Pro software, a RAMPI or a HUB is required to do this. First, ensure that the RAMPI is connected to Rasoft Pro in the communication window (see A1.1 RAMPI).

- To begin the setup process, place the RAMPI on the RK-EOS-6 and ensure no metallic cover plates are fixed to the Device.

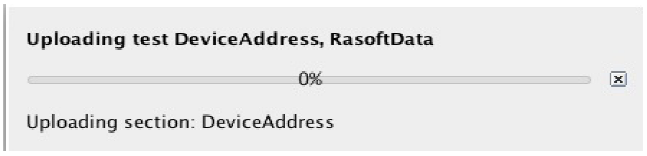
- When the RK-EOS-6 is correctly positioned, a green LED will flash in the RAMPI, and a window will pop up in Rasoft Pro.

- Give the RK-EOS-6 a suitable name so that it is identifiable in the software.

- Select the local Room for the Device. After the initial setup, the RK-EOS-6 will behave like an RCM with dip switches set to this Room.

NB
It is important to set the Room at this stage. If "Assign later" is selected, then the RK-EOS-6 will not be programmed and will be added as a virtual Device

- Select Finish on the next page to complete the setup. The RAMPI will need to upload to the RK-EOS-6 at this stage.



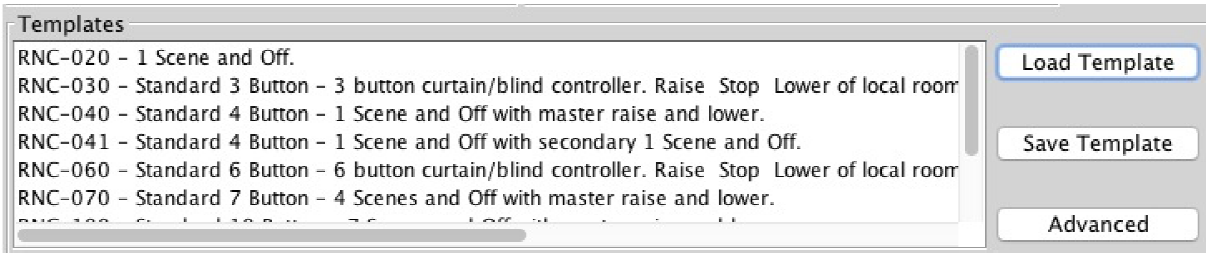
2.3 Configuring an RK-EOS-6

Once set up in Rasoft Pro, the RK-EOS-6 will use default Rooms.

The button mapping screen for the RK-EOS-6 can be accessed by selecting it in the Device list; this will open the Device Editor for the RK-EOS-6 Device.

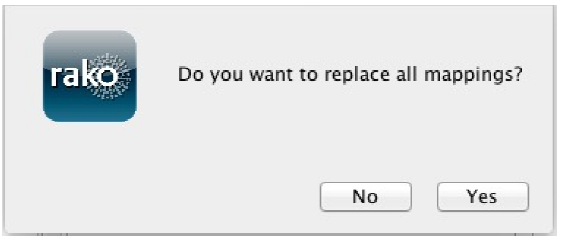
To apply a template to an RK-EOS-6:

- In the button mapping tab of the Device editor, scroll to the bottom to view the templates menu.



The templates section will vary depending on the RK-EOS-6

- Select the relevant template and click Load Template. This will open a pop-up box; select yes to overwrite the mapping with the template



- The mappings for this template will now appear in the left tile of the Device editor

- Click "save for upload" at the bottom of the page to upload these settings onto the RK-EOS-6.

- At this point, a progress bar will appear on the screen. Place the RK-EOS-6 onto the HUB to upload the new settings.

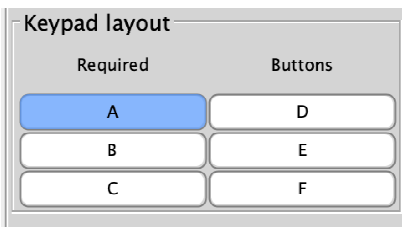
2.3.1 Button Layout

The RK-EOS-6 has inputs that represent the buttons on the Keypad. The inputs are as follows:

2.3.2 The Mapping Section

All programmed inputs for the RK-EOS-6 must first have a mapping. The purpose of a mapping is to program a button to perform a specific command. Each input has its own letter to represent its input; the RK-EOS-6 has 6 inputs.

New mappings can be created by selecting a disabled field and selecting the corresponding input letter in the next column:



Active mappings can be copied or pasted into disabled mappings; this is typically used when re-using similar functions of an existing mapping to save time, such as a toggle function.



Mapping right-click options

NB
Ensure only a single letter is used for each mapping, otherwise, the mapping will not function unless all inputs are pressed at the same time.

2.3.3 Keypad layout

The inputs for the mappings are selected in the Keypad layout section, as well as additional input options:

Function	Description
Send Stop On Release	When the button is released, a 'Stop' command will be triggered.
Trigger on press	Trigger the output command when the button is pressed.
Trigger on release	Trigger the output command when the button is released.

2.3.4 Button action

The output actions of the buttons inputs are set up in the button action section, the following options are available:

Function	Description
Room	The Room number of the output command.
Channel	The Channel number of the output command, can be All Channels or a single Channel.

Disable map	When enabled, the button input will have no output command.
Scene	If a Scene is being triggered, select a Scene between 1-16.
Fade-Up/Fade-Down	Commonly used to manually dim lighting up and down, as well as the opening/closing of blinds. NB 'Send Stop on Release' should also be checked when using this option.
Motor Stop	Used to stop 3rd party motors that are configured within the HUB.
Ident	This option is not recommended, as the command will make a load flash momentarily and provides no practical function for daily use.
Toggle	The Toggle function will alternate between two commands, either a Level command and Off, or a Scene command and Off. NB Do not map more than one Toggle to a single button on the inputs; this will result in sporadic switching due to toggles getting out of sync.
Level	Sets the lighting Level to a percentage of brightness between 0-100%.
Tunable White	Set the temperature output.
Macro	Trigger an internal Macro on the Device; this is not the same as triggering a Macro on a HUB. NB Macros can be created on the 'Macro' tab above the button configuration.

3 Installing the RK-EOS-6 with RP-EOS-60-XX

⚠WARNING

Installation should only be carried out by a competent electrician.

- RK-EOS-6 modules should be mounted in dry areas only.
- Metal backboxes will reduce the transmission distance; to mitigate this, it is recommended to drill out of the backbox and into the wall.
- The RK-EOS-6 is a battery-powered device; it must be accessible for battery replacement.
- The RP-EOS-60 is required to mount the RK-EOS-6 into a backbox, ensure that the unit has been configured before installing the unit.

Step 1		Install and prepare the back-box. NB It is advised that at least a 35mm backbox is used.
Step 2		Screw the grid provided with the RP-EOS-60 into the backbox.
Step 3		Insert the RK-EOS-6 into the grid NB It is not possible to program the RK-EOS-6 once inserted into the grid.
Step 4		Clip the face plate to the grid to complete installation.

4 Initial checks

- Press any button on the RK-EOS-6, and the blue LED in the centre will illuminate momentarily and go off.
- Ensure every button on the switch can be pressed without obstruction.
- If there is no blue light when a button is pressed, check that that ‘pull out’ tab has been removed from the battery terminal.

5 Appendix - LED Diagnostics

Battery	LED Pulses	Description
Healthy battery	One second-long pulse.	When a button is pressed on the RK-EOS, there should be a single pulse on the blue LED.
Low battery or the wrong battery.	Multiple intermittent pulses.	If the RK-EOS has a low battery, the blue LED will flash when a button is pressed, there may also be no LED if the battery is flat.