Instruction Manual

RCI-4L

Volt-Free Switch Interface

2024
Version 2.0.0

For more information relating to RCI-4L 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](#)

Contents

1 What is the RCI-4L?

The RCI-4L is a Wireless battery-powered switching interface which takes up to four latching inputs from third-party switches and is programmed to transmit Rako Wireless commands.

Designed to fit in a standard UK backbox, the RCI-4L is 48x48x9mm.

2 Inputs

The RCI-4L has up to four latched inputs, the example shows a single latching input, when the switch position is changed between 1 and 2, a Rako command can be programmed to be transmitted by the RCI-4L.
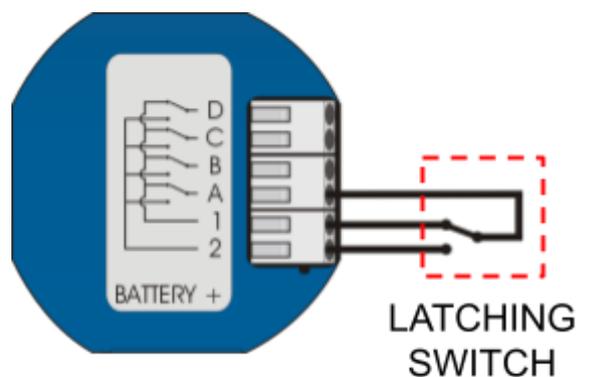
3 Installation Instructions

The RCI-4L module is designed to fit in a back-box locally to the connected switch inputs. Excessive cable lengths can pick up noise which can cause intermittent operation or spurious triggering. The recommended maximum cable length is 300mm.

NB
This product can only be programmed with RASOFT Pro software with a Rako RAMPI or HUB programming interface.

3.1 Battery

The RCI-4L requires a single CR2032 battery for power.

⚠ WARNING

Lithium batteries may explode if handled incorrectly. Always dispose of used batteries under the manufacturer's recommendations.

3.2 Enclosures

The RCI-4L is designed to fit into a UK backbox. As the unit transmits a wireless message to remote receivers the aerial must not be surrounded by metalwork which will restrict transmitting range, as may be the case with a metal backbox and cover plate. It is highly recommended to feed the aerial out of any backbox.

4 Addressing the RCI-4L (HUB)

The following steps assume a Project File has been created, if that has not yet been done, see the Wireless Module Programming Guide.

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 RCI4-L on the top, middle section of the HUB.
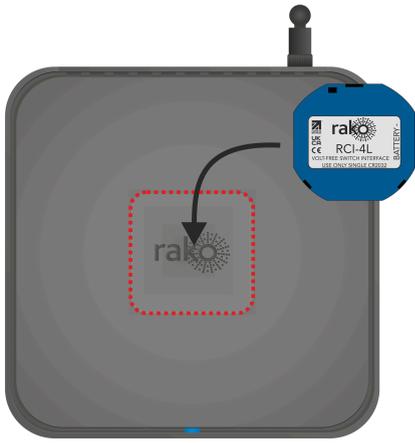
- When the RCI-4L is correctly positioned, a green LED will show on the HUB, and a window will pop up in Rasoft Pro.
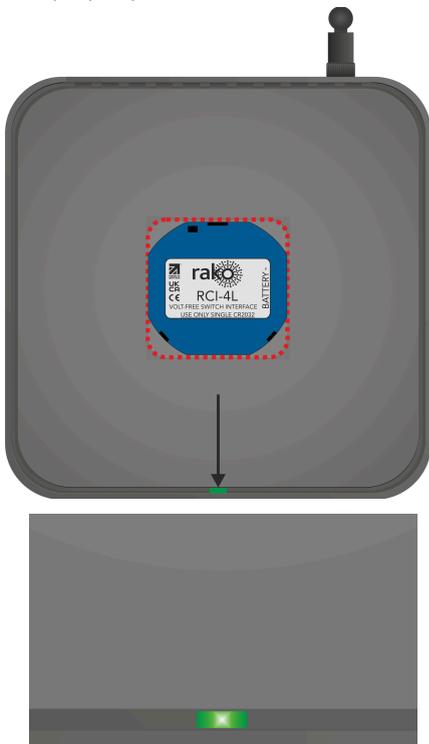
- Give the RCI-4L a suitable name so that it is identifiable in the software.

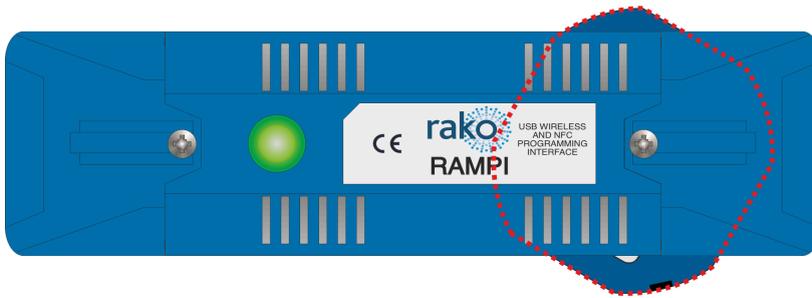- Select the local Room for the RCI-4L.

NB

It is important to set the Room at this stage. If "Assign later" is selected, then the NFC Device 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 NFC Device at this stage.

5 Addressing the RCI-4L (RAMPI)

Unlike the RCM, the RCI-4L 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 NFC Device and ensure no metallic cover plates are fixed to the Device.


- When the Device is correctly positioned, a green LED will flash in the RAMPI, 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.

NB
It is important to set the Room at this stage. If "Assign later" is selected, then the NFC Device 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 NFC Device at this stage.
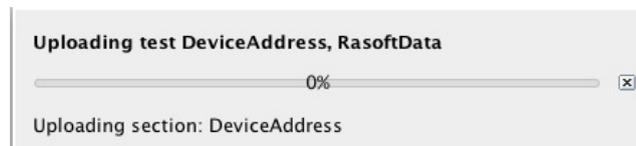
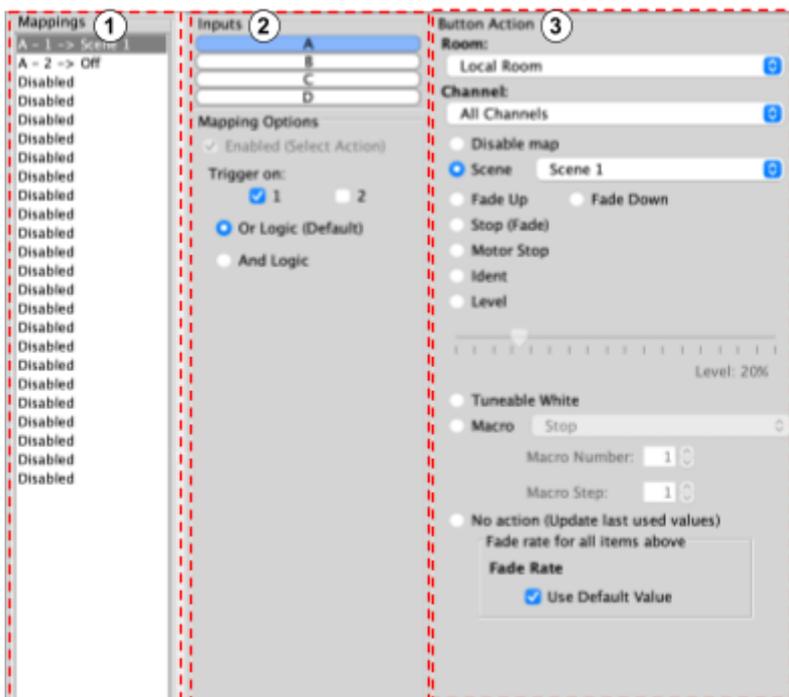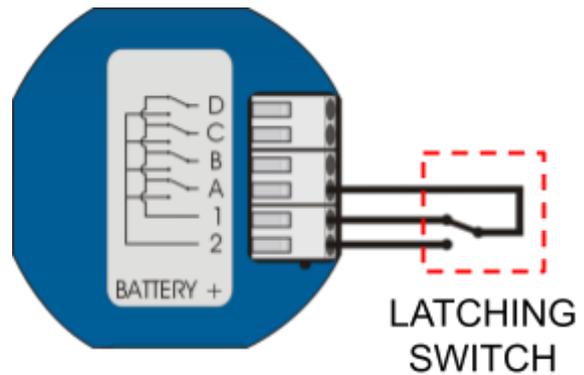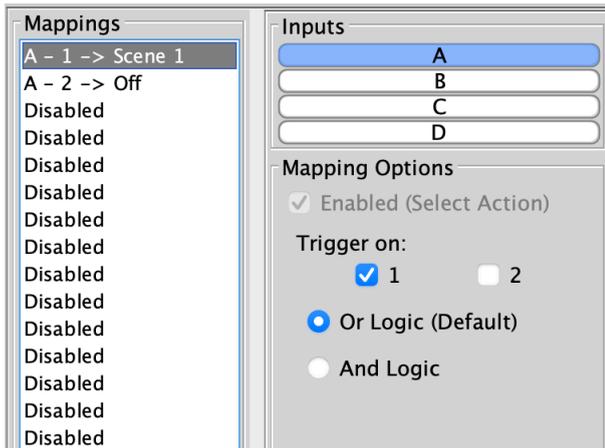- Once the upload is complete, the RCI-4L can be configured.

6 Configuring the RCI-4L

There are four latched inputs on the RCI-4L, Each input has an 'A' contact and a 'B' contact.

In the example below, input A is used to Trigger Scene 1 A-1, and A-2 is used to Trigger Scene Off.

NB
Up to 4 latching switches can be used per RCI-4L.

6.1 The Mapping section

All inputs for the Device must first have a mapping. The purpose of a mapping is to program an input to perform a specific command. Each input has its own letter to represent its input; the RCI-4L has up to 4 inputs.

New mappings can be created by selecting a disabled field and selecting the corresponding input letter in the next column.
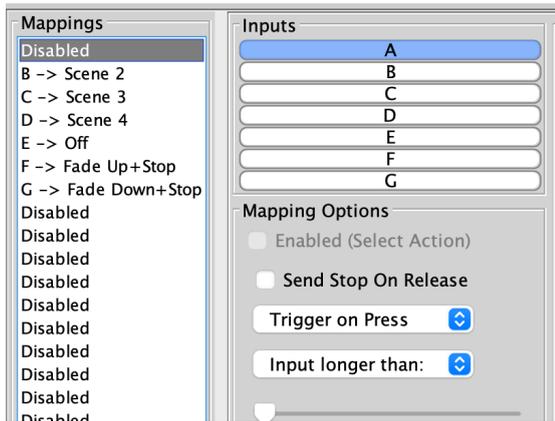
Active mappings can be copied or pasted into disabled mappings; this is typically used when re-using similar functions of an existing mapping to save time such as a toggle function.
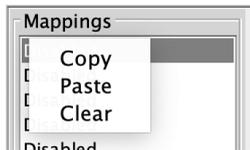
Mapping right-click options

6.2 Inputs

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 made contact is released, a 'Stop' command will be triggered.
Trigger on press	Trigger the output command when the momentary switching <u>makes</u> contact between its input and common.
Trigger on release	Trigger the output command when the momentary switch <u>breaks</u> contact between its input and common

6.3 Button actions

The output actions of the 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.

Thank you for choosing Rako Controls; we hope that you are pleased with your system. Should you require further assistance, please contact us via our website, www.rakocontrols.com, or by calling our customer support helpline on 01634 226666.