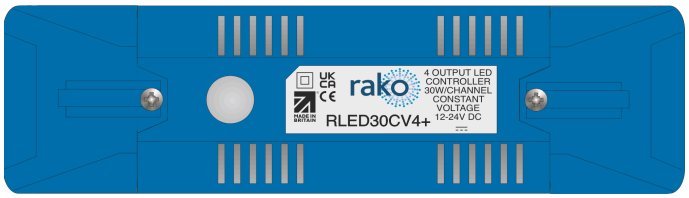
Instruction Manual

RLED30CV4+

4-Channel Constant Voltage Dimmer



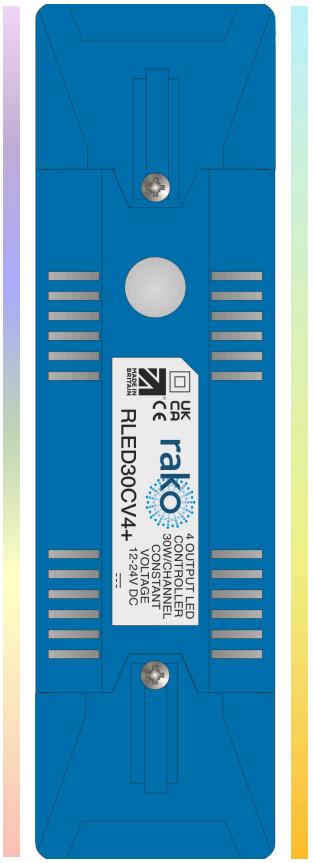
2024
Version 2.0.1

For more information relating to the RLED30CV4+, 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 RLED30CV4+?
2. Loadings
3. Installation
4. Initial Checks
5. Programming the RLED30CV4+
    - 5.1 Adding the RLED30CV4+ into Rasoft
    - 5.2 Output types
    - 5.3 Setting the device output
6. Appendix 1: LED Diagnostics



1 What is the RLED30CV4+?

The RLED30CV4+ is a constant voltage dimmer with four individually controllable outputs, typically used for constant voltage loads, such as colour-changing LED tape.

There are four modes of operation:

- 4 Rako Channels RGBW
- 1 Rako Channel RGBW*
- 1 Rako Channel RGB*
- 1 Rako Channel Colour Tunable*

*Requires latest version of Rasoft Pro

2 Loadings

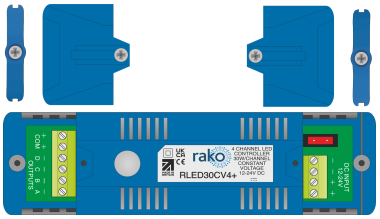
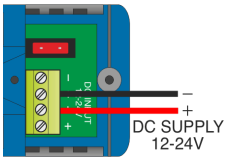
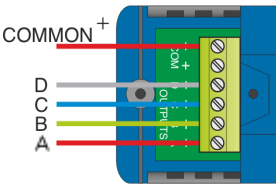
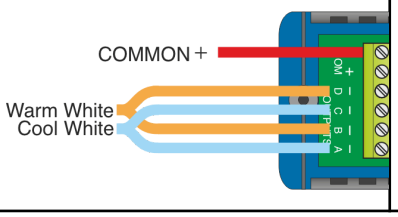
Voltage	Wattage
12VDC	30W per Channel
24VDC	60W per Channel

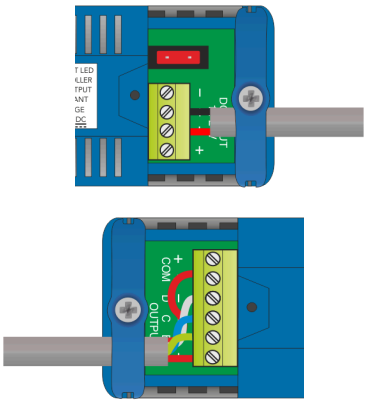
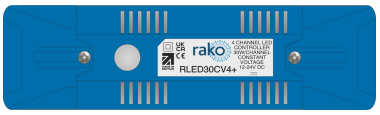
3 Installation

⚠WARNING

Installation should only be carried out by a competent electrician.
DO NOT CONNECT DIRECTLY TO THE MAINS SUPPLY.

- RLED30CV4+ modules should be mounted in areas that are adequately ventilated, dry, and outside of any enclosed metal casings that may interfere with the Wireless signal.
- Modules should be mounted vertically, with the terminals at the bottom, or horizontally.
- While the modules are designed to be maintenance-free, they should be mounted in an accessible location should investigation or re-addressing of the units be necessary.
- Ensure that the cable clamps are fitted tightly to secure the cables.
- The unit input voltage is 12V or 24V DC, and the power supply must be adequately rated for the connected load.

STEP 1		Remove the covers and cable clamps.
STEP 2		Connect the 12/24V power supply to the 'DC Input' terminals.
STEP 3	Option 1 - RGBW  Option 2 - Colour Tunable 	Connect the constant voltage load. The RLED30CV4+ has a common positive, and four independent negative connections. When connecting colour tunable LEDs, Outputs A and C are controlled together, as are B and D.

STEP 4		Secure the cables with the cable clamps provided.
STEP 5		Replace the covers.

4 Initial Checks

- When power is initially connected to the module, the load should power up to full brightness on all outputs.
- The clear button can be used as a manual on/off switch to test the circuits.
- The internal LED behind the clear button will flicker when the module receives any Rako Wireless message and is a useful diagnostic indicator. The LED feedback becomes inactive after 20 minutes to avoid a nuisance light spill but can be re-activated by pressing the clear button.

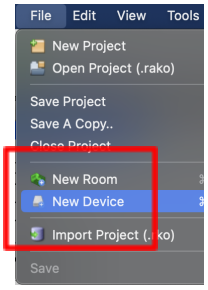
5 Programming the RLED30CV4+

Once the RLED30CV4+ has powered up and has been tested working with the setup button, the device is ready to be programmed.

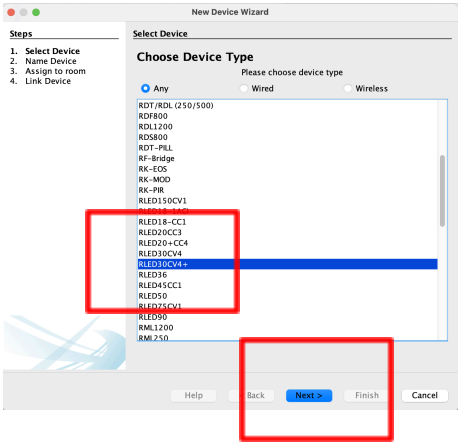
Ensure that a project file has been created, and Rasoft Pro is connected to a programming device such as a RAMPI or HUB. For more information, see the Wireless Module Setup Guide.

5.1 Adding the RLED30CV4+ into Rasoft

1. In Rasoft Pro, go to File > New Device

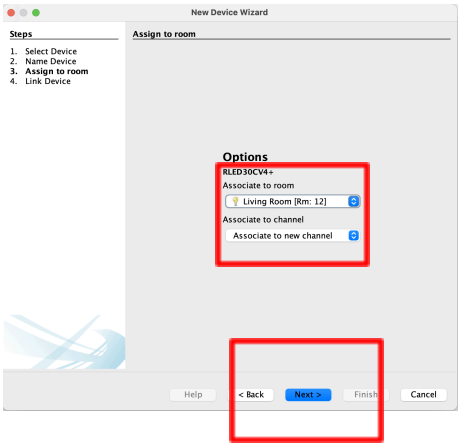


2. A device menu will pop up, select the RLED30CV4+ and select 'Next'



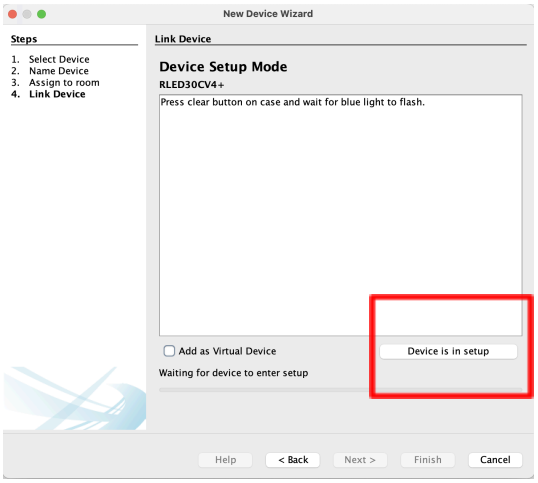
3. Assign the RLED30CV4+ to the desired Room and Channel, and select 'Next'

   NB
   For more than one Channel, select the first Channel, subsequent Channels will automatically be assigned.



4. To put the device into setup mode, press and hold the clear button on the RLED30CV4+, and the LED will begin to flash. Release the button; the LED should continue to flash.

5. Select 'Device is in setup', this will send an 'Ident' command to the device in setup mode, once this is complete, the LED on the device should no longer be flashing.

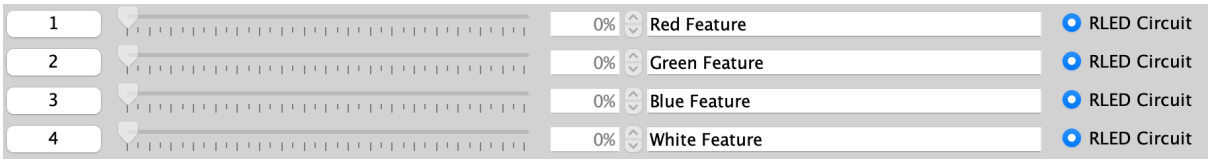


6. Select 'Finish', the device is now paired and in the project file.

5.2 Output types

The RLED30CV4+ can be configured in different ways depending on the load type, there are four options in Rasoft Pro.

1. RGBW (4 Channels) - Four controllable Rako Channels in the Room Editor and the App.



RGBW 4 Channel Mode

2. RGBW (1 Channel) - One Channel in the Room Editor and the App, the colour can be set using a separate colour wheel by selecting the RGBW symbol on the Channel slider or by using the colour wheel on the app.



RGBW 1 Channel Mode

3. RGB (1 Channel) - Similar to the RGBW single Channel output, only omitting white.



RGB 1 Channel Mode

4. Colour Tunable (1 Channel) - Used when there are two temperatures of LED load, controllable via the Colour Tunable icon to the right of the Channel name, as well as in the App.

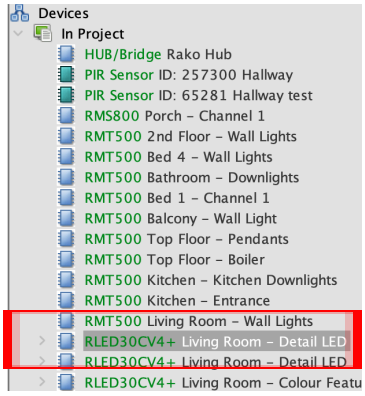
   NB
   Outputs A and C are used for Cool White, B and D are used for Warm White.



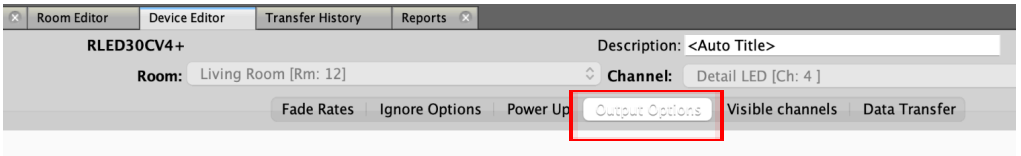
Colour Tunable 1 Channel Mode

5.3 Setting the device output

1. Select the RLED30CV4+ in the device editor



2. Select the 'Output Options' tab.



3. From the dropdown menu, select the desired output option.



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.

6 Appendix 1: LED Diagnostics

Wireless Range	LED Pulses	Description
Good Wireless reception		When the unit is receiving successfully, there will be four rapid pulses on the LED when any Wireless message is sent.
Bad Wireless reception		When the unit is out of range, there will be intermittent pulses on the LED when any Wireless message is sent. **NB** It is recommended to install a Wireless repeater (WRB-100) if you are experiencing intermittent Wireless range.

Should the module not respond to any of the above, check the supply voltage.