



Instruction Manual

RLED150CV1

1 Channel Constant Voltage Dimmer



2024
Version 2.0.0



For more information relating to the RLED150CV1 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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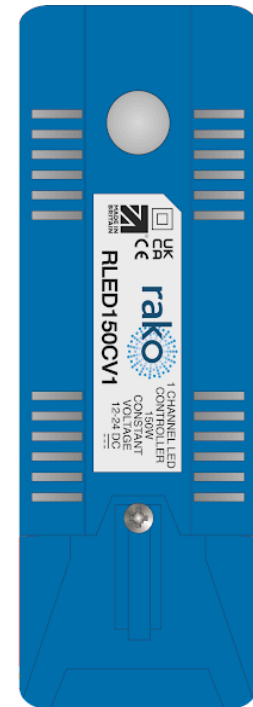
1 What is the RLED150CV1?

The RLED150CV1 is a Wireless single Channel constant voltage dimmer designed for constant voltage LED loads. With its built-in receiver, the RLED150CV1 works with a Rako Wireless system and a Rako Wired* system.

The RLED150 can be programmed from an RCM keypad, or via Rasoft Pro using a programming tool (RAMPI or HUB).

Ceiling installation or surface mount installation is available for the RLED150CV1, For surface mount installation, a bracket is provided.

**requires a WK-HUB in range of the RLED150CV1*



2 Loadings

Maximum Load at 12V DC	150W
Maximum Load at 24V DC	300W

NB

Loads should be tested before being connected to the RLED150CV1.

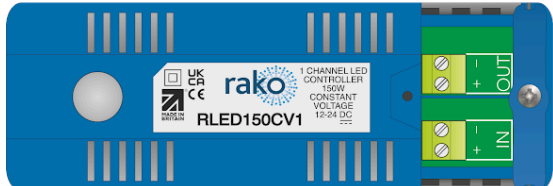



3 Installation of the RLED150CV1

⚠ WARNING

Installation should only be carried out by a competent electrician.

Do not connect directly to a 230V supply.

- RLED150CV1 modules should be mounted in areas which 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, with ventilation slots at the front.
- Do not obstruct the ventilation slots.
- While the modules are designed to be completely maintenance-free, they should be mounted in an accessible location should investigation or re-addressing be necessary.

Step 1	 A blue RLED150CV1 module with its cover removed, showing the terminal block on the right side. The terminal block has two green terminals labeled 'IN' and 'OUT' with '+' signs. The module's label includes 'UK CE', 'rako', '1 CHANNEL LED CONTROLLER', '150W', 'CONSTANT VOLTAGE', and '12-24 DC'.	Remove the cover and the cable clamp.
Step 2	 The RLED150CV1 module with the 'IN' and 'OUT' terminals connected to red and black wires. The wires are secured with a cable clamp. The module's label is visible.	Connect the DC power supply to the 'IN' terminals of the RLED150CV1 as well as the load cable to the 'OUT' terminals.
Step 3	 The RLED150CV1 module with the cover and cable clamp replaced. The wires are held firmly in place. The module's label is visible.	Replace the cable clamp, and ensure that the cables are held firmly in place.
Step 4	 The RLED150CV1 module with the cover fully installed, showing the ventilation slots. The module's label is visible.	Replace the cover.

4 Initial Checks

When the module powers up, the load should dim up to full brightness.

The clear button can be used as a manual on/off switch. The internal LED behind the clear button will flicker when the module receives any Rako Wireless message and is a useful diagnostic indicator. This function becomes inactive after 20 minutes to avoid a nuisance light spill but can be re-activated by pressing the clear button.



5 Programming the RLED150CV1

Once the RLED150CV1 has powered up and has been tested working with the setup button, the device is ready to be programmed. For instructions on how to program the RLED150CV1, see the [Wireless Module Setup Guide](#).

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.

7 Appendix 2: Wiring Example

The diagram below shows an example of how the RLED is to be connected.

Please check with the power supply manufacturer for compatibility before installing it with an RLED product.

