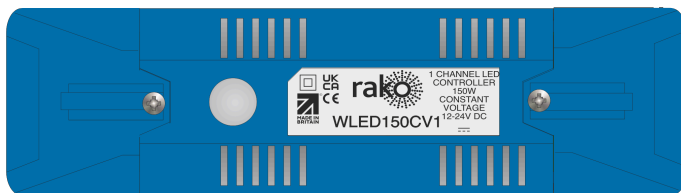




Instruction Manual

WLED150CV1

Wired Single Channel Constant Voltage Dimmer



2024
Version 2.2.0



For programming system programming information: [Wired system setup guide.](#)

For a general overview: [Wired RAK application sheet.](#)

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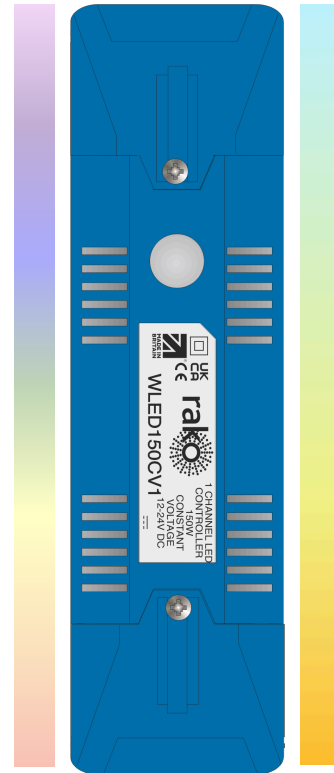
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1 What is the WLED150CV1?

The WLED150CV1 is a single Channel constant voltage dimmer used in a Rako Wired network.

The RJ11 port on the WLED150CV1 is used to connect to the Rako Wired network, if it is not connected to one of the RAK-LINKs RJ11 ports, a WK-CONNECT is required.

2 Loadings

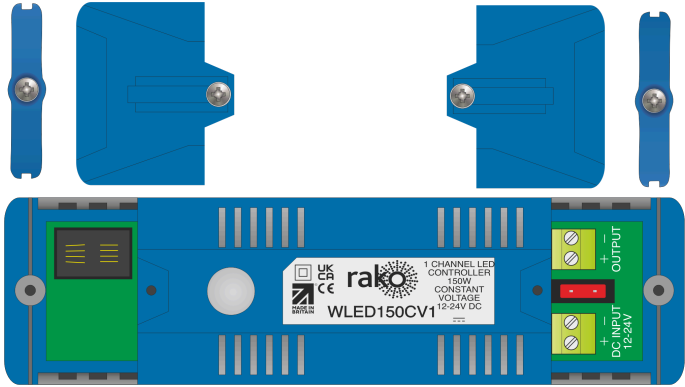
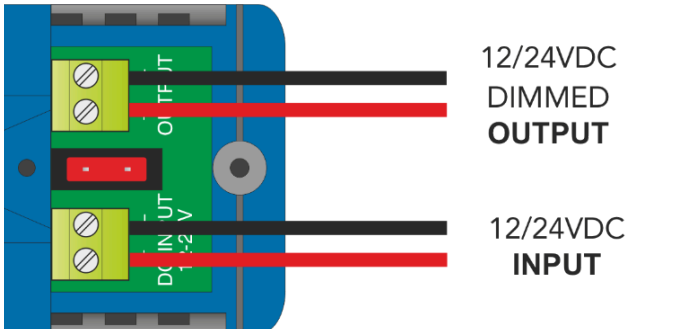
Voltage (MAX)	Wattage (MAX)
12VDC	150W
24VDC	300W

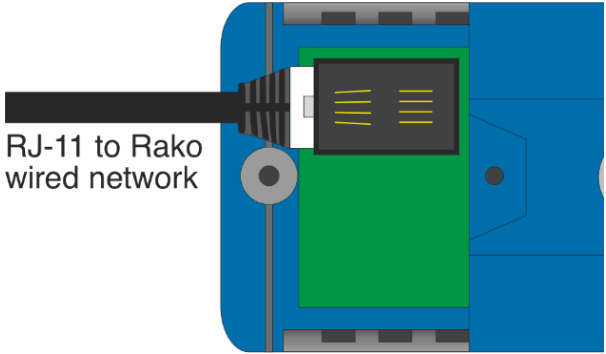
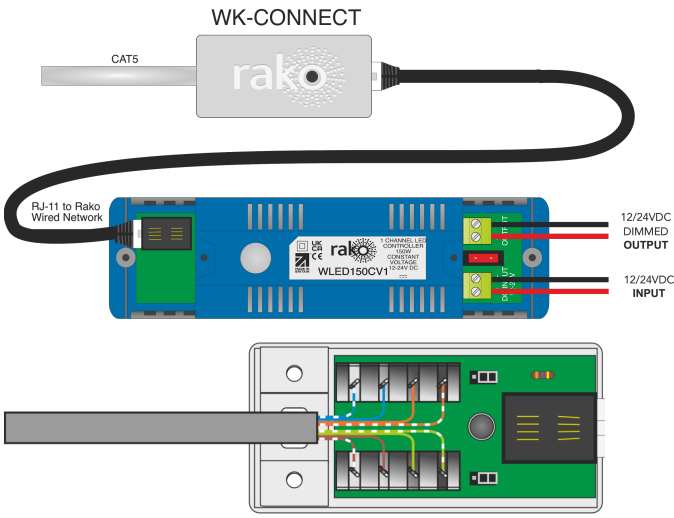
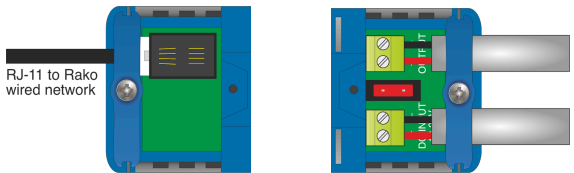
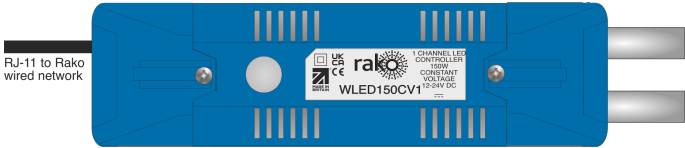
3 Installing the WLED150CV1

⚠ WARNING

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

- WLED150CV1 modules should be mounted in areas that are adequately ventilated, and dry.
- 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 DC power supply to the 'DC Input' terminals. Connect the 12/24V load to the 'Output' terminals. NB The connected power supply must be adequately rated for the load.

<p>STEP 3</p>		<p>Connect the RJ11 cable to the RJ11 port.</p> <p>If the WK-CONNECT is used, connect the opposite side of the RJ11 cable to the WK-CONNECT RJ11 port.</p> <p>The WK-CONNECT punch-down connection can accept up to two CAT5 or CAT6 cables.</p>
<p>STEP 4</p>		<p>Connect the RJ11 cable to the RJ11 port.</p> <p>If the WK-CONNECT is used, connect the opposite side of the RJ11 cable to the WK-CONNECT RJ11 port.</p> <p>The WK-CONNECT punch-down connection can accept up to two CAT5 or CAT6 cables.</p>
<p>STEP 5</p>		<p>Secure the cables with the cable clamps provided.</p>
<p>STEP 6</p>		<p>Replace the covers.</p>

4 Terminating the WK-CONNECT

The WK-CONNECT is used to connect between the WLED150CV1 and the Rako Wired network. The WK-CONNECT must be terminated correctly otherwise the WLED150CV1 will not function. The termination requirements depend on the nature of the installation and the position of the WK-CONNECT within the system.

No TERM - Both jumpers removed

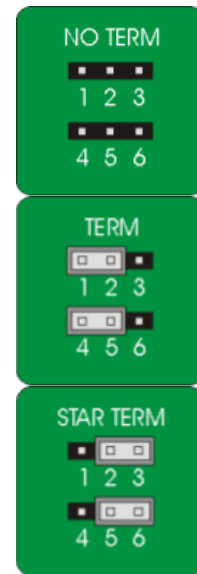
When the WK-CONNECT is not at the end of line. This is usually identifiable by two cables being punched down to the WK-CONNECT.

TERM - Jumper fitted across 1+2 & 4+5

When the WK-CONNECT is the end of line in a daisy chain configuration.

STAR TERM - Jumper fitted across 2+3 & 5+6

When the WK-CONNECT is end of line in a STAR wire configuration.



5 Adding the WLED150CV1 into Rasoft Pro

Once the WLED150CV1 has been installed and connected to the Rako Wired network, it needs to be assigned as a Device in Rasoft Pro.

The following steps assume:

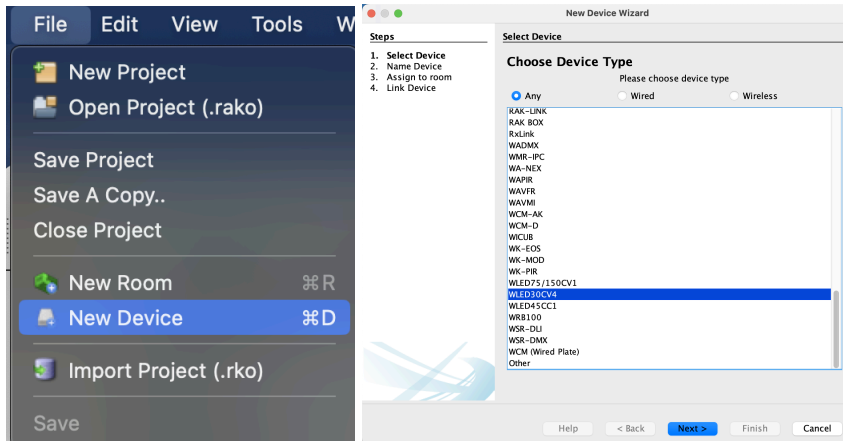
- A Project File has been created.
- Rooms have been added to the Project File.
- Channels have been added to the Project File.
- The HUB has been configured.

If any of the above steps have not been completed, see [Wired System Setup Guide](#).

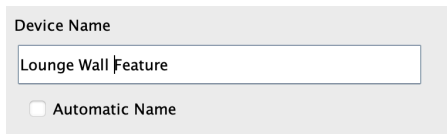
- Connect to the HUB in the communications window by double-clicking it, there will be a green tick to confirm the connection has been successful.



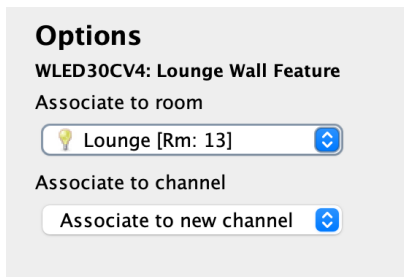
- Select "File" - "New device" to bring up the "New device Wizard" and choose "WLED150CV1" from the list.



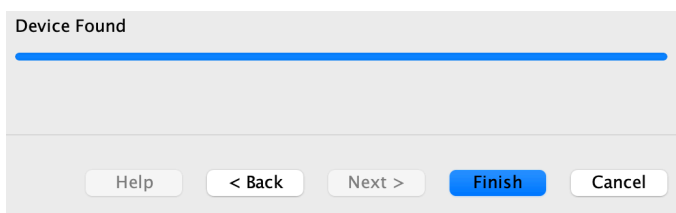
- Choose a Device name, if multiple devices are being programmed it is advised to add a unique description. To assign an automatic name and leave the text field blank, tick the box 'Automatic Name'.



- Assign the WLED150CV1 a Room, and leave 'Associate to new Channel' blank.



- Press and hold the clear button on the WLED150CV1 for 3-4 seconds until it starts to flash, 'Device Found' will appear in the software window.



- Select 'Finish'.

NB

The Rako Wired network must be connected and powered to the WLED150CV1 for pairing to be successful.

The WLED150CV1 has now been added as a Device, the Channel for the Device can be found by selecting the Room it was programmed to.

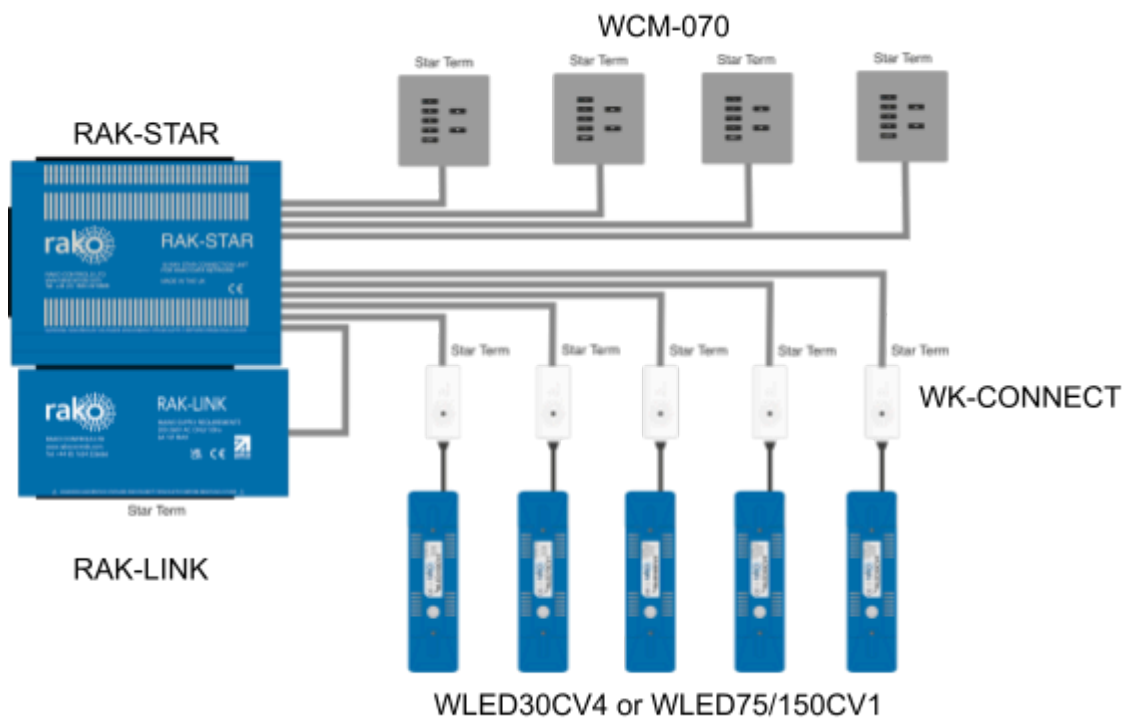
Thank you for choosing Rako Controls; we hope that you are pleased with your system. Should you require further assistance, please contact us via our website, www.rakocontrols.com, or by calling our customer support helpline on 01634 226666.



Appendix 1 - Wiring Examples

A1.1 STAR Wiring

Star Wired systems are connected back to the RAK-STAR unit with individual runs of CAT5 or CAT6 cable, there can be multiple Devices on a single run, although the end of line must be set to 'STAR' at the end of line.



A1.2 Radial Wiring

Radial wiring connects two or more Devices together in a single continuous run, each end of line must have a 'Term' set on the termination jumpers.

