WLED150CV1 User Manual

For programming information: Wired system Programming Guide

For further installation information: Wired RAK Application Sheet
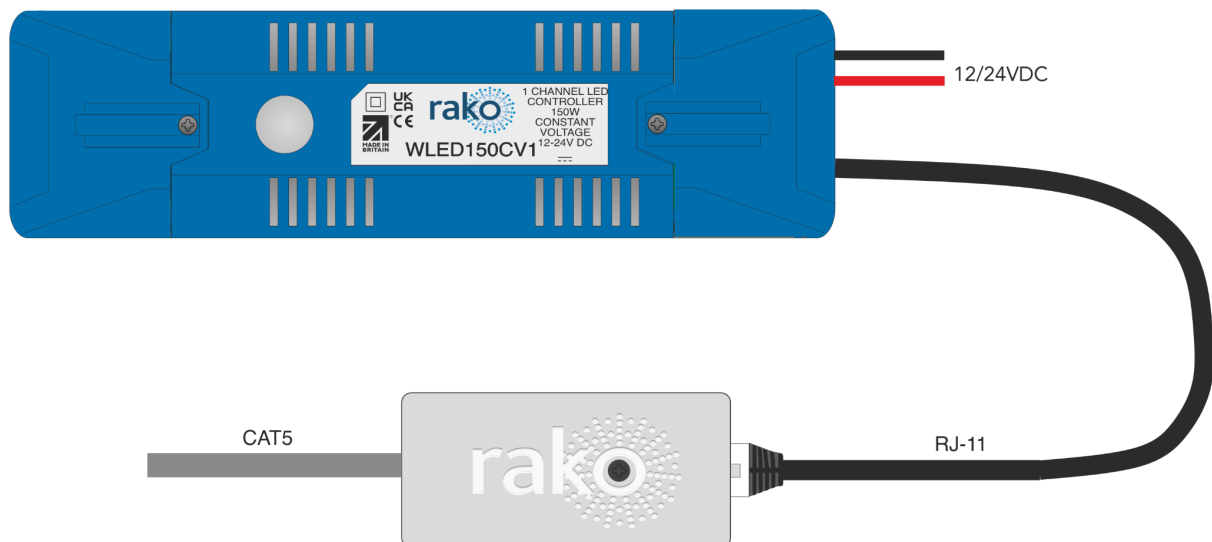
What is the WLED150CV1?

Rako WLED150CV1 modules are single channel dimmer units designed for use with constant voltage LED devices (usually flexible single colour tape lighting).
 They are designed to accept a 12V or 24V DC supply from a power supply (normally the power supply that would power the LED device if it were not to be dimmed) and give a PWM (Pulse Width Modulation) output for smooth flicker free dimming.
They communicate over the Rako Wired Network connected via a WK-CONNECT and can be used in both a daisy-chain and star wiring configuration.
All WLED products require a WK-CONNECT to connect to the Rako wired network.

Installing the WLED150CV1

- Step 1: Remove end caps and cable clamps from both ends of the WLED150CV1.

- Step 2: Wire the LED tape into the output end of the WLED150CV1

- Step 3: Connect the 12-24V power supply and the RJ11 into the input end of the WLED150CV1

- Step 4: Connect the opposite end of the RJ11 cable into the WK-CONNECT

- Step 5: Punch down the CAT5 cable onto the WK-CONNECT, ensure the termination is set according to the wiring layout.

- Step 5: Check that the WLED150CV1 is getting power by pressing the clear set up button. You should see the LED tape turn on and off and a blue light flash when the button is pressed.
  Ensure that the WLED150CV1 is connected to the Rako wired network otherwise the WLED will not function.

- Step 6: Screw down the cable clamps and end caps to both ends of the WLED150CV1

NB
The default address for both modules and transmitters is House 1 Room 4.

Maximum loadings per channel

The maximum load for the WLED150CV1 changed depending on the power supply going into input end.
With a 12V PSU will mean you can have up to 150W per channel.
With a 24V PSU will mean you can have up to 300W per channel.

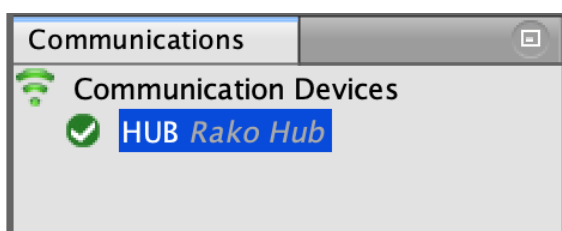## Adding the WLED150CV1 into the software

For the WLED150CV1 to operate correctly with a RAKO system some initial setup must be performed. This is done using a PC running RASOFT Pro and communicating with a RAKO HUB or Bridge connected to the same wired system as the WLED150CV1.

Open the Project File for the installed Rako system and make sure that Rasoft is connected to a communication device.
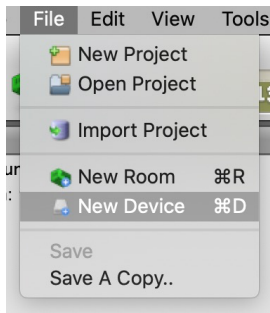
NB
The communication window at the bottom right should indicate whether a Bridge is connected or not. For instructions on how to connect to a HUB or Bridge see Rasoft Pro programming guides.

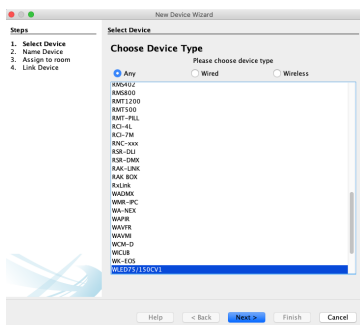*For more information more information on how to connect to the Hub see: WK-HUB*

Step 1:

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

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Step 2:

Choose a suitable device name (if you have multiple WLED150CV1 make sure it is identifiable from this description). Leave "Device ID" blank with the "Automatic ID" box checked.
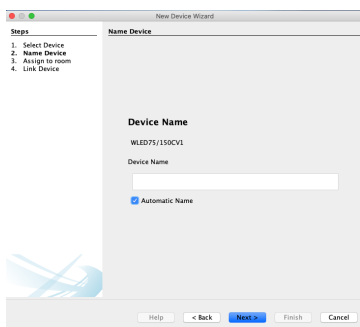

Step 3:

Associate the WLED150CV1 to a room from the drop down menu. The room selected here will set the "Local Room" for this device, leave "Associate to channel" blank.
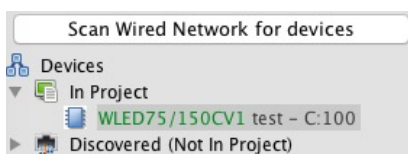
Step 4:

Once this screen appears press and hold the blue button on the WLED150CV1. After a few seconds it will enter Setup Mode and the status LED will start to blink. Release the button and "Waiting for device to enter setup" should change to "Device Found".

Step 5:

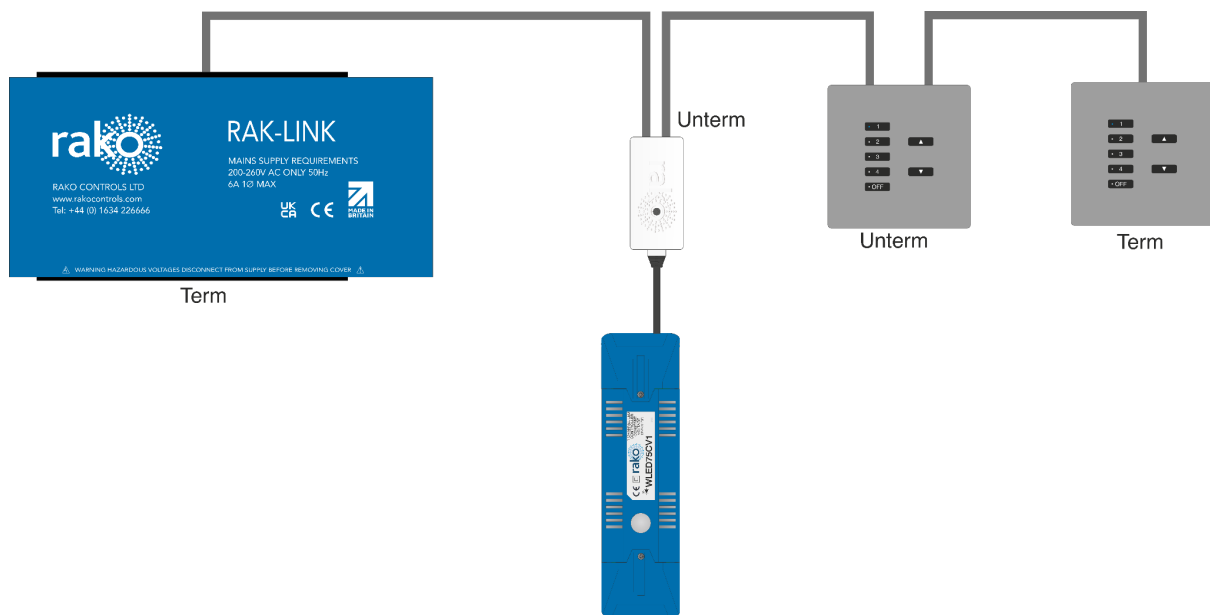Click the "Finish" button to complete setup

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NB

When the device list is in the device list and there is an orange icon it means its been added as a virtual device if its in blue it has been added as a device
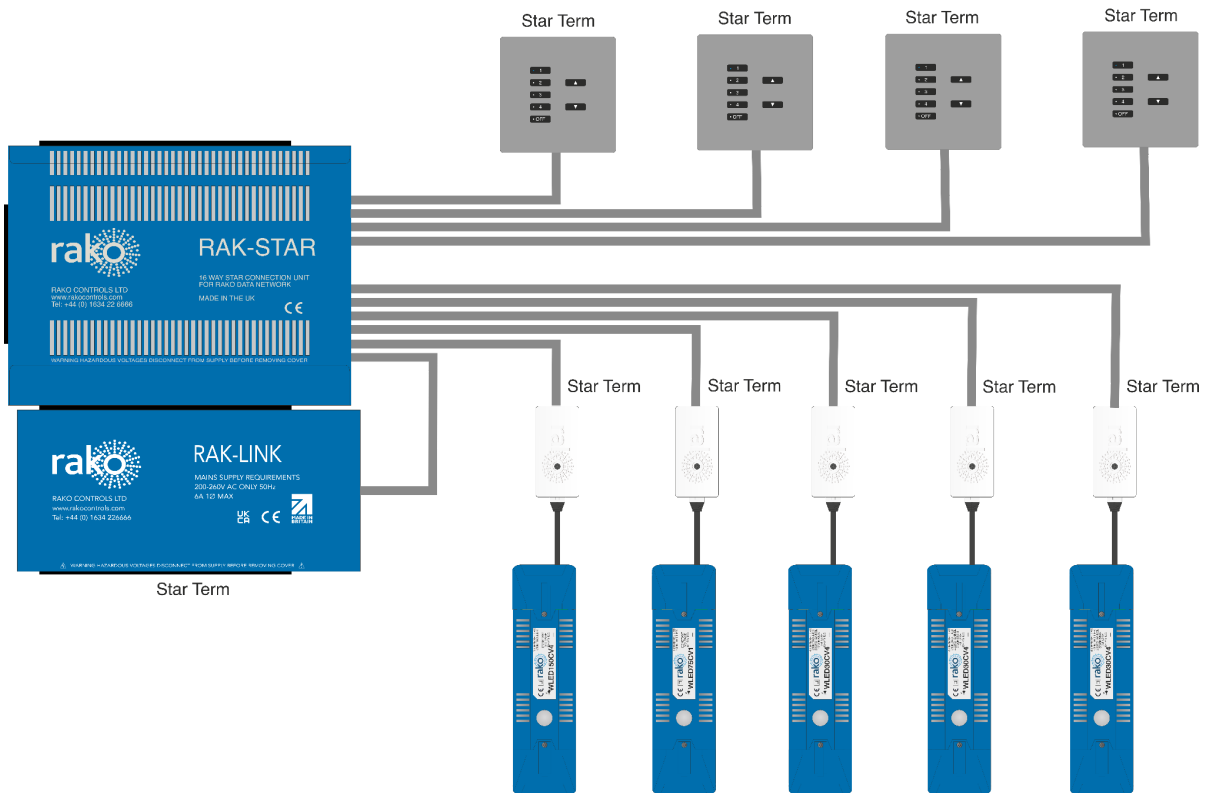
System wiring - Radial

A single run of keypads runs from the RAK-LINK and to an end point. It is still usually advisable to run a return leg back to
the RAK-LINK as a spare.

System wiring - Star

"STAR" configuration - Cables are all run back to a central point: a RAK-STAR usually located with the RAK-LINK. Each cable can be from a single keypad or a leg of keypads.

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RAK-STAR

16 WAY STAR CONNECTION UNIT
FOR RAKO DATA NETWORK

MADE IN THE UK

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www.rakocontrols.com
Tel: +44 (0) 1634 22 6666

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WARNING HAZARDOUS VOLTAGES DISCONNECT FROM SUPPLY BEFORE REMOVING COVER

RAK-LINK

MAINS SUPPLY REQUIREMENTS
200-260V AC ONLY 50Hz
6A 12I MAX

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⚠ WARNING – HAZARDOUS VOLTAGES DISCONNECT FROM SUPPLY BEFORE REMOVING COVER ⚠

Star Term

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