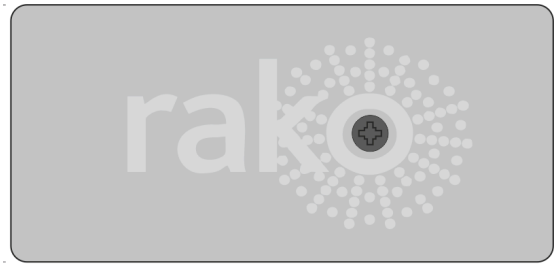
Instruction Manual

WK-CONNECT

In-ceiling wired connection unit



2024

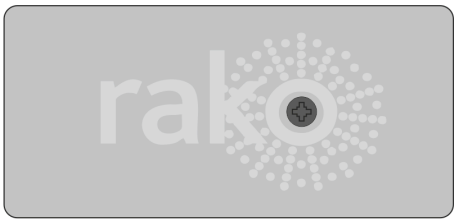
Version 2.1.2

For programming information: Wired System Programming Guide

For further installation information: The Wired RAK Application Sheet

The WK-CONNECT is required for the following products:
WK-PIR, WLED30CV4, WLED75CV1, WLED150CV1

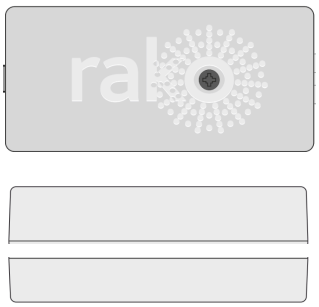
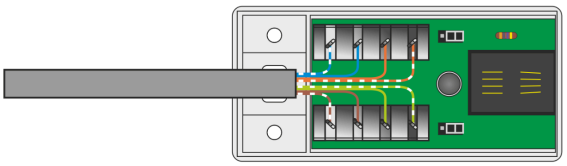
Contents

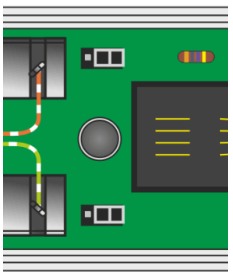
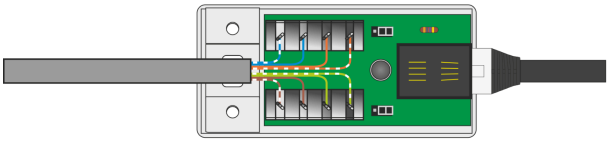


What is the WK-CONNECT?

The WK-CONNECT is used to connect certain products to the Rako Wired network via a punchdown and RJ11. It also provides termination jumpers, which must be set appropriately for the system to work correctly.

Installation of the WK-CONNECT

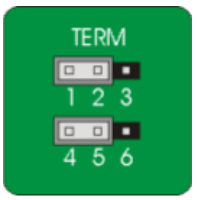
Step 1		Prepare the WK-CONNECT for connection by unscrewing and removing the lid.
Step 2		Punch down the CAT cable(s), matching cable colours to match the circuit board. There can be up to two sets of cables to punch down.

Step 3	 *STAR terminated example*	Terminate the WK-CONNECT as required. TIP: *Take care when preparing and installing so as not to disturb the punch-down connections. Loops are provided on the back section to cable tie the cable(s) if desired.*
Step 4		Connect the RJ-11 cable to the WK-CONNECT which will be going to the Rako wired device. This could be any RAKO wired device with an RJ-11 port.
Step 5		Replace the cover of the WK-CONNECT and screw on the lid.

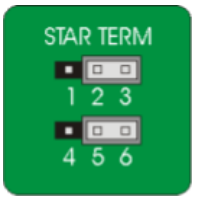
Terminating the WK-CONNECT

The WK-CONNECT must be terminated correctly otherwise the wired system 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.

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.

Troubleshooting the Wired Network

Sometimes cabling problems or incorrectly punched down cables mean a degree of fault finding needs to be done on the wired network.

For more information on fault finding on a wired network, see the links below.

RAK-LINK diagnostics - For fault finding “Daisy Chain” and “STAR” configuration.

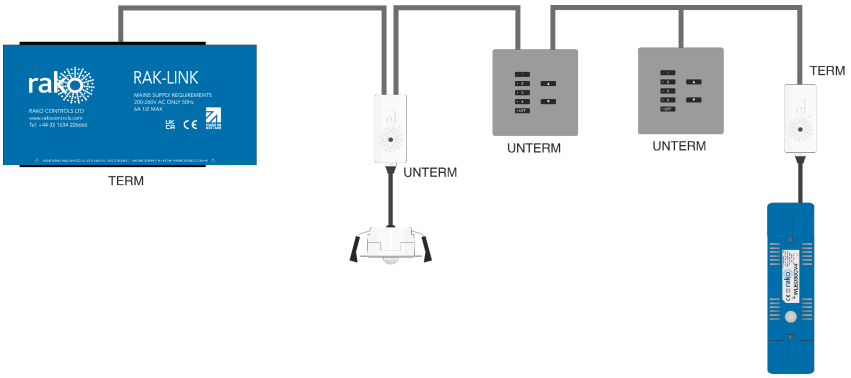
RAK-STAR diagnostics - For fault finding “STAR” configuration.

Appendix 1 - Wiring Examples

The wired system can be configured in one of two ways:

Radial Wired

A single leg of wired devices runs from the RAK-LINK to an endpoint. It is recommended to wire a return leg back to the RAK-LINK as a spare, each end of line must be set to TERM, intermediate devices must be set to UNTERM.



STAR Wired

Cables run back to one or more central points, there can be one wired device on a single cable run or multiple, and the end of each line must have a STAR termination, if there are intermediate devices they must be set to UNTERM.