WP-CONC Instruction Manual

For programming information: Wired system Programming Guide

For general overview: Wired RAK Application Sheet

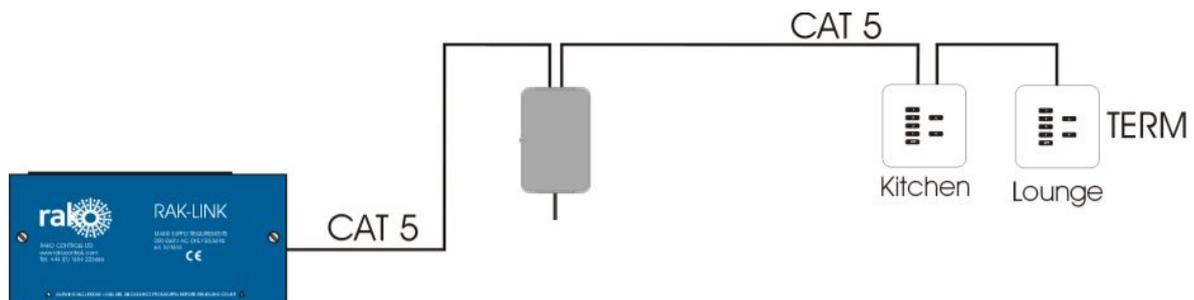**The WP-CONC is required for the following products:**
WAPIR, WLED30CV4, WLED75CV1, WLED150CV1
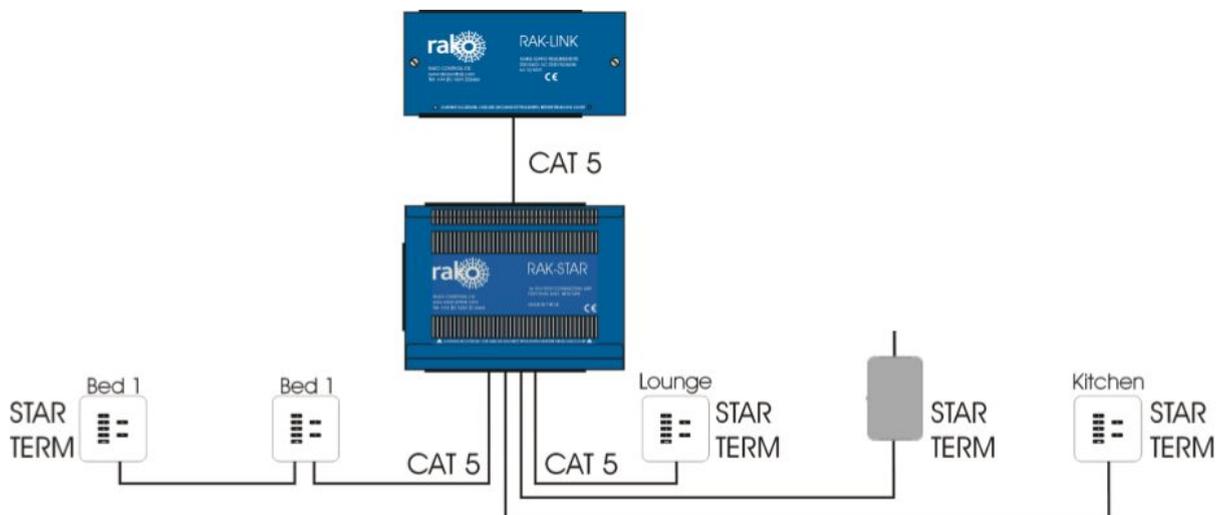
What is the WP-CONC?

The WP-CONC is used to connect certain products to the Rako Wired network. It allows cables to be connected to the wired network via a punchdown. It also provides termination jumpers which must be set appropriately for the system to work correctly.

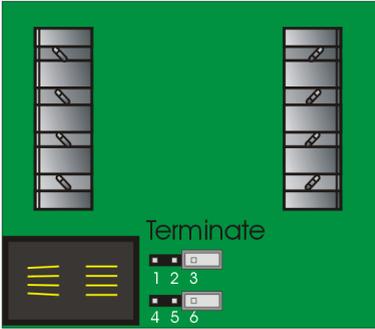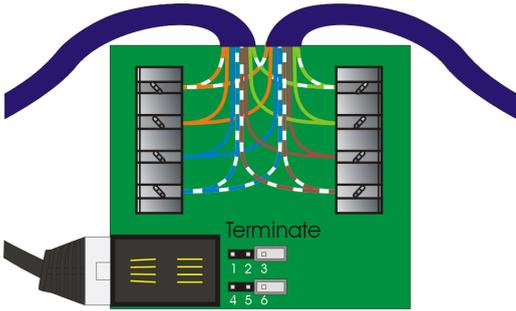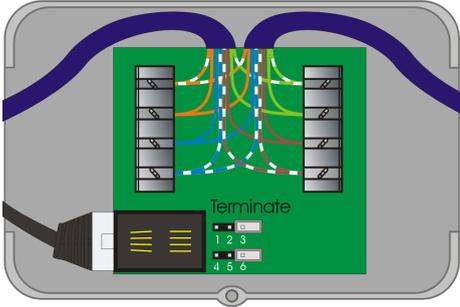The wired system is most commonly configured in one of two ways:

"Daisy Chain" configuration - A single leg of wired devices runs from the RAK-LINK to an end point. It is still usually advisable to run a return leg back to the RAK-LINK as a spare.

"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.

Installation of the WCM with screwless finish plates (WLF/WLM):

Step 1	Terminate	Prepare the WP-CONC for connection by removing it from the case. Prepare the junction box by cutting slots in each side for cable entry/exit.
Step 2	Terminate	Punch down cable(s) matching cable colours to colours written on the circuit board. There may be either one or two sets of cables to punch down.
Step 3	Terminate	Terminate the WCM as required. See "Terminating the WCM" on page 3 of this manual. **TIP:** *Take care when preparing and installing not to disturb the punchdown connections. Loops are provided on the back section to cable tie the cable(s) if desired.*
Step 4		Slot the circuit board into the junction box. FIx cable clamps, close lid and screw close to complete installation.

Terminating the WCM

It is important to terminate WCMs correctly otherwise the wired system will not function. The termination that is required depends on the nature of the installation and the position of the RAK-LINK within the system.

No Term - Both Jumpers removed
Used when the WCM is not at the end of line. This is usually identifiable by two cables being punched down to the WCM.

Term - Jumper fitted across 1+2 & 4+5
Used when the WCM is end of line in a daisy chain configuration. For example the WCM marked "TERM" shown in "Typical Wired Installation layout" on page one.

Star Term - Jumper fitted across 2+3 & 5+6
Used when the WCM is end of line in a STAR wire configuration. For the example the WCMs marked "STAR TERM" on page one.
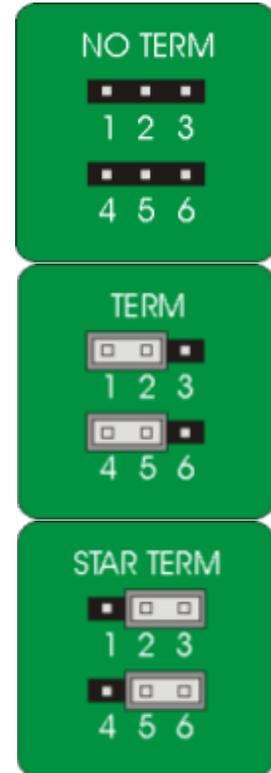
Troubleshooting the Wired Network

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

WCM Diagnostic Feedback - For fault finding "Daisy Chain" and "Star" configuration.

RAK-LINK diagnostics - For fault finding "Daisy Chain" and "Star" configuration.

RAK-STAR diagnostics - For fault finding "Star" configuration.