Instruction Manual

WCM

Wired push button control module



2026
Version 2.1.2

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1 What is the WCM?



The WCM is a wall controller for use within a Rako Wired system. It is designed to fit in a standard UK backbox for wall mounting.

Depending on the WCM requirements, many button configurations are possible, ranging from Lighting, Blind and Audio control.

Through Rasoft Pro, commands can be assigned to the buttons to perform actions, such as switching a Scene for a Room or closing Blinds.

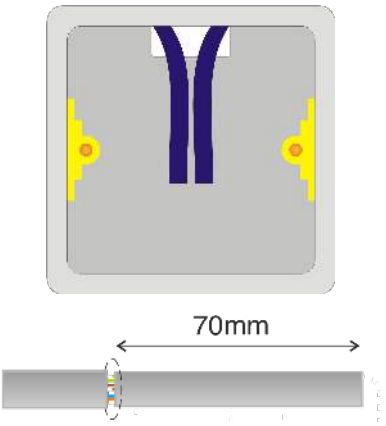
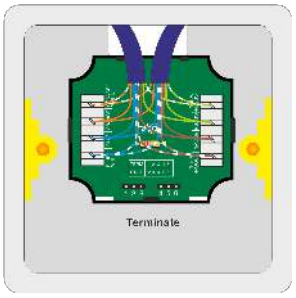
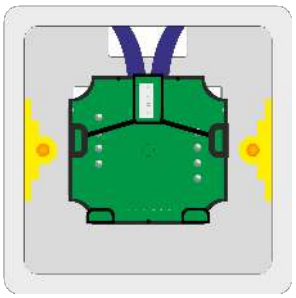
Commands include:

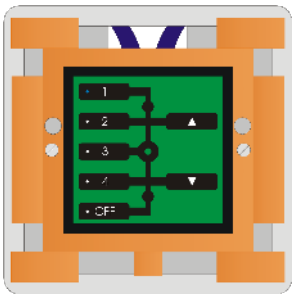
- Scenes 1 to 16
- Toggles for individual Channels or Rooms
- Fade Up/Fade Down for individual Channels or Rooms
- Levels (0-100%)
- Multiple commands on a single input
- Press and hold
- Press and release
- Whole House commands

2 Installation

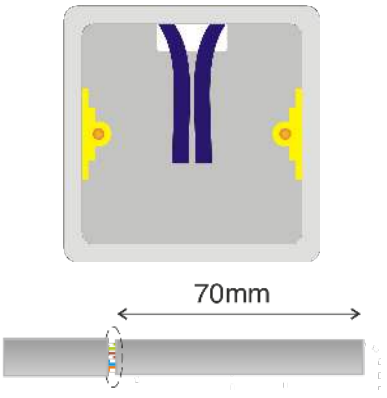
The WCM assembly comes in two parts. The installation guide refers to the 'Back' as the part which has the cable connections, and the 'Front', which has the buttons and a four-pin connector. The front section contains all of the programming.

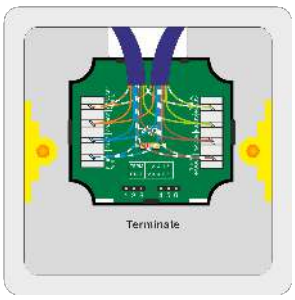
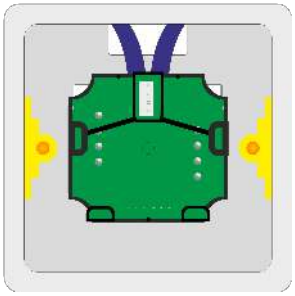
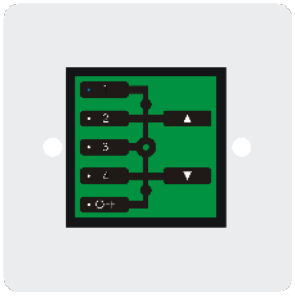
2.1 Installation of the WCM (Screwless)

WLH/WLM/WLF Coverplate		
1	 *Remove 70mm of insulation*	Bring the cable(s) into the backbox, and strip 70mm of the outer insulation, exposing the data cable. <u>NB</u> Leave plenty of slack if possible to allow for re-punching down later if required.
2		Using a punch-down tool, connect the cable cores to the labelled inputs on the WCM 'Back' section. Ensure that the cable cores are not loose in the connector, as this will result in intermittent faults.
3		Set the appropriate jumper termination on the 'back' section of the WCM. The termination arrangement will depend on the WCM's position in the Wired network; see section 3 for more information. <u>NB</u> Take care when preparing and installing to avoid disturbing the punch-down connections. Loops are provided on the back section to tie the cable(s) if desired.

WLH/WLM/WLF Coverplate		
4	 *(Grid appearance may vary)*	Clip the front section of the WCM into the grid, then connect it to the back section. Screw the grid for the screwless cover plate into the backbox. <u>NB</u> If the Wired network is powered, then the backlit LEDs on the keypad will illuminate.
5		Clip the cover plate into the grid to complete the installation.

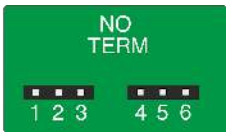
2.2 Installation of the WCM (Screwed)

WVF coverplate		
1		Bring the cable(s) into the backbox, and strip 70mm of the outer insulation, exposing the data cable. <u>NB</u> Leave plenty of slack to allow for re-punching down later if required.

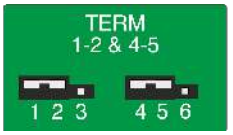
WVF coverplate		
2		Punch down cable(s) matching cable colours to colours printed on the circuit board. There may be either one or two sets of cables to punch down. Terminate the WCM as required. See "Terminating the WCM" in section 3 of this manual.
3		The back section of the WCM is now installed and is ready for the front section and cover plate. <u>NB</u> Take care when preparing and installing to avoid disturbing the punch-down connections. Loops are provided on the back section to tie the cable(s) if desired.
4		Clip the transparent surrounding mounting plate and the WCM front board together. Fit the WCM front board and attach the surround to the WCM backboard. <u>NB</u> If the Wired network is powered, then the backlit LEDs on the keypad should illuminate once the two halves are connected.
5		Screw the cover plate into the backbox through the screw holes in the transparent surround. Installation of the WCM is now complete.

3 Terminating the WCM

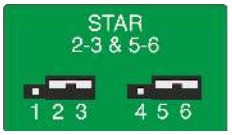
It is essential to terminate WCMs correctly; otherwise, the Wired system will not function correctly. The termination that is required depends on the nature of the installation and the position of the WCM within the system.



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.



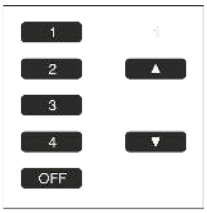
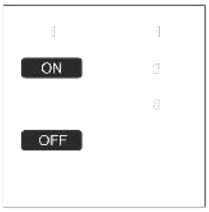
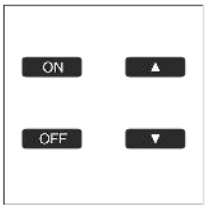
Term - Jumper fitted across 1+2 & 4+5
Used when the WCM is end of line in a daisy chain configuration.

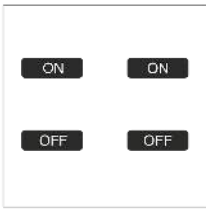
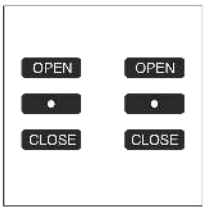
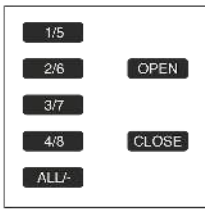
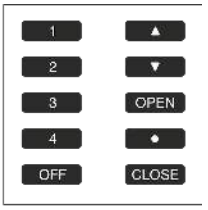


Star Term - Jumper fitted across 2+3 & 5+6
Used when the WCM is the end of line in a STAR wire configuration.

4 Button configurations

The WCM is capable of having up to ten buttons to control Lighting and Blinds. Custom button layouts can be created on the Plate Designer; the standard button layouts are below:

Layout	Description	Layout	Description
 WCM-070	Scenes 1-4, Off and Raise/Lower.	 WCM-100	Scenes 1-7 and Off.
 WCM-020	Scene 1 and Off.	 WCM-040	Scene 1, Off and Raise/Lower.

 WCM-041	Dual Room Control, Scene 1 and Off.	 WCM-030	Open, Stop and Close.
 WCM-060	Dual Blind control, Open, Stop and Close.	 WCM-071	Multi-Blind selector. Controls up to 8 individual Blinds or as a group.
 WCM-103	Dual Room Control, Scenes 1-4 and Off.	 WCM-101	Scenes 1-4, Off and Raise/Lower for lighting. Open, Stop and Close for Blind control.

5 Programming the WCM

Before the WCM can operate Lighting or Blinds, it needs to be programmed into a Wired system using Rasoft Pro and a WK-HUB.

For instructions on how to do this, please refer to the Wired programming guide:
Wired system setup guide.

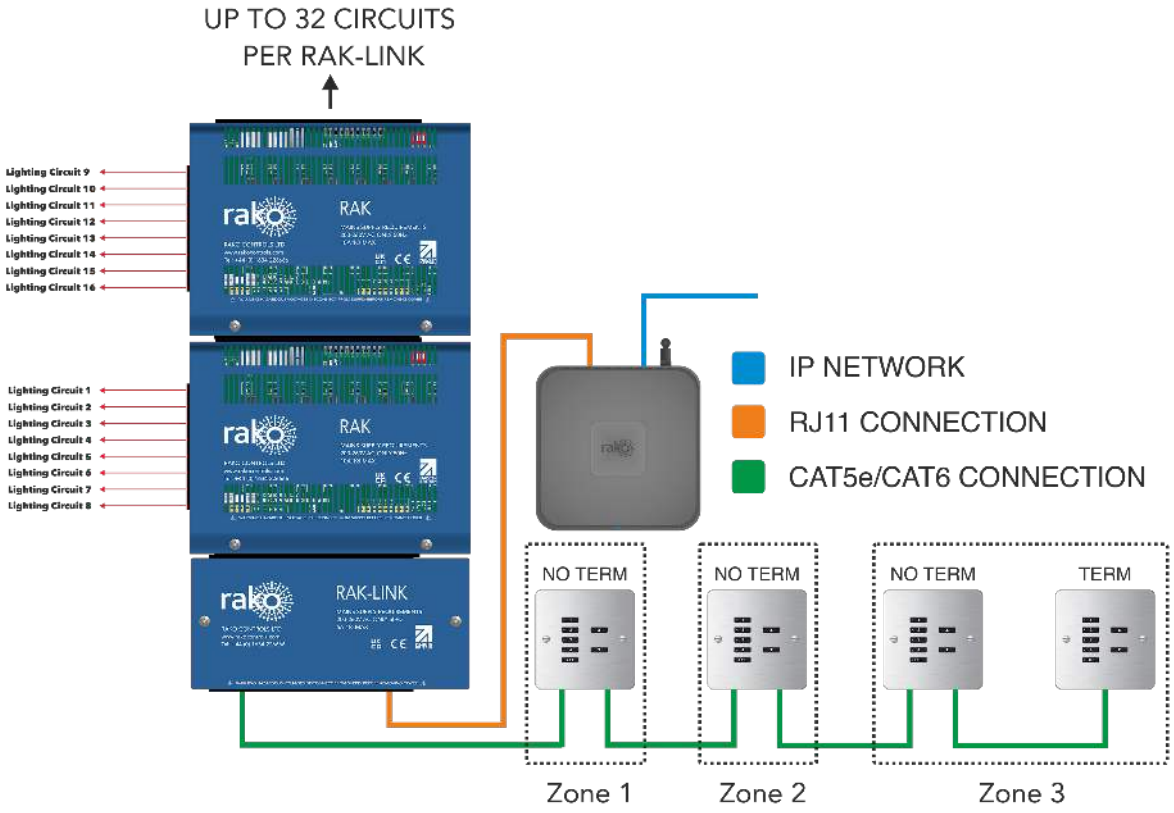
Thank you for choosing Rako Controls; we hope that you are pleased with your system. Should you require further assistance, please contact us via our website, www.rakocontrols.com call our customer support helpline on 01634 226666. The office address is Rako Controls Ltd, Knight Road Rochester, ME2 2AH.

Appendix 1: Troubleshooting the Wired Network

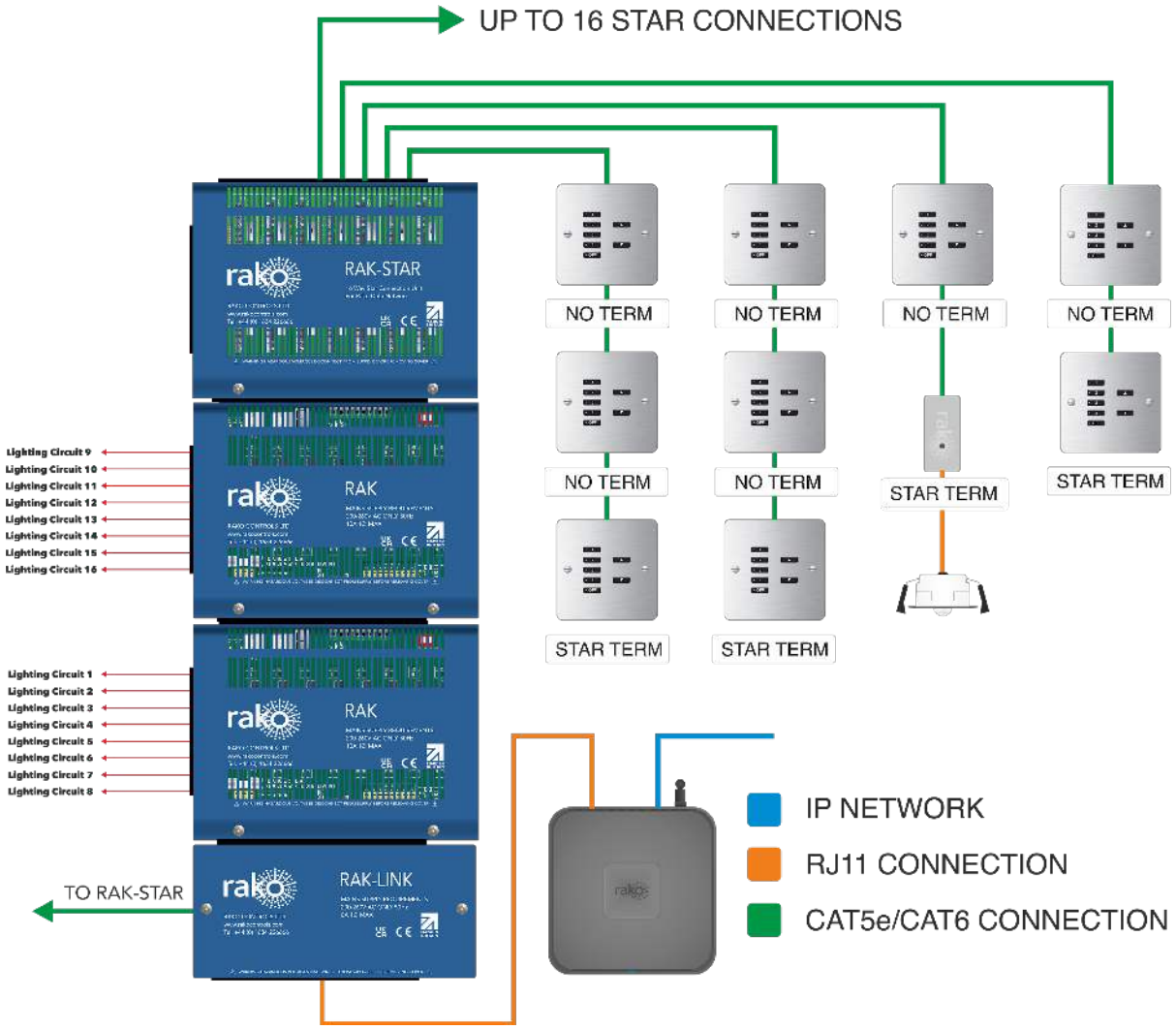
If any issues are detected on the device's power-up, the onboard LEDs provide fault codes. For more information and further diagnostic information, refer to Wired System Diagnostics.

Appendix 2: System Wiring Examples

RAK System - Radial

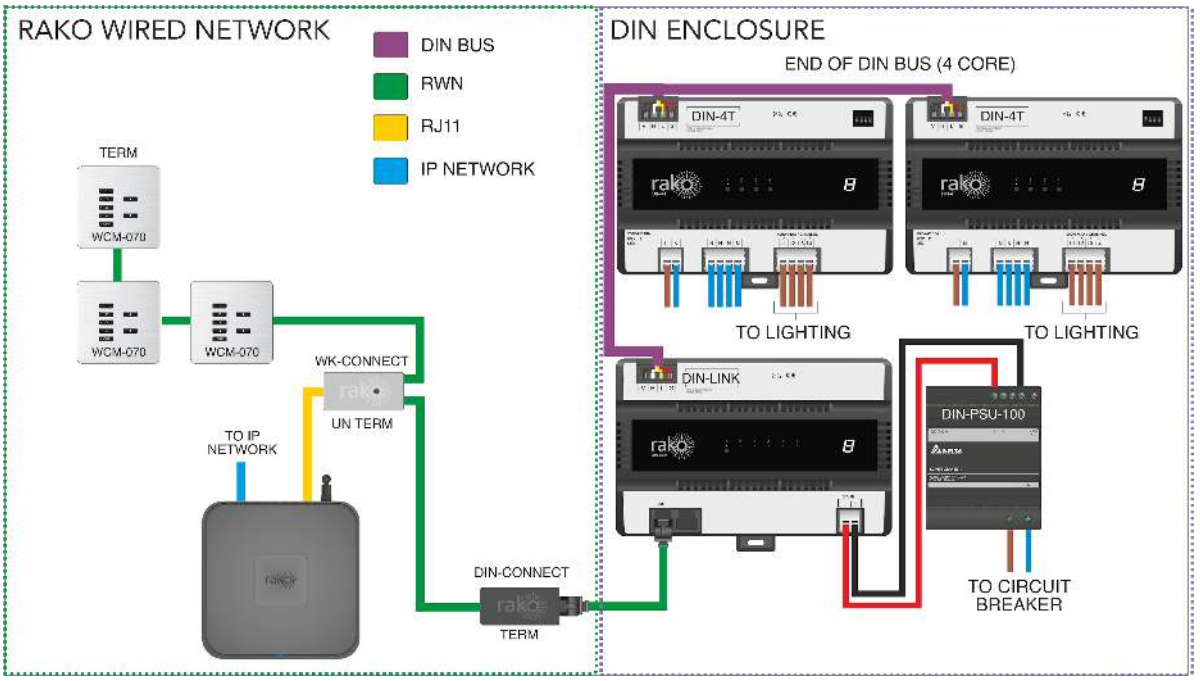


RAK System - STAR

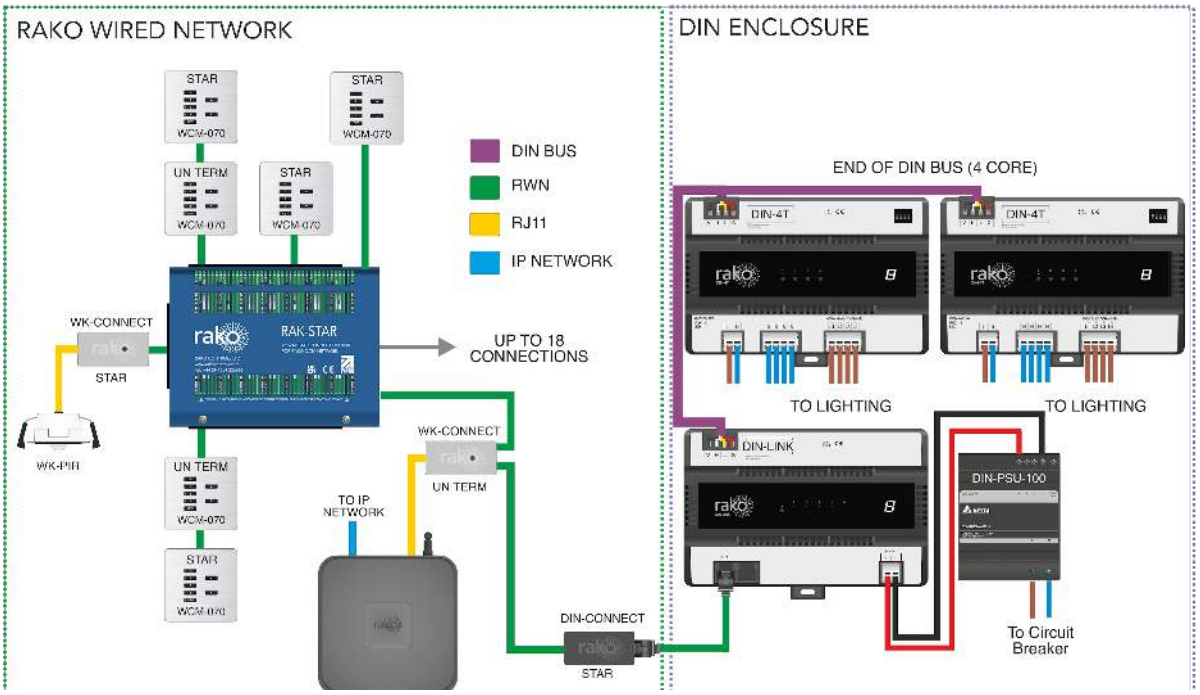


More than one Device can be connected to a leg on a STAR system. Devices in the middle of a loop in/loop out should be set to TERM, and the end of lines should be set to STAR.

DIN System - Radial



DIN System - STAR



More than one Device can be connected to a leg on a STAR system. Devices in the middle of a loop in/loop out should be set to TERM, and the end of lines should be set to STAR.