

# RAK-LINK Instruction Manual

For programming information: [“Wired programming guide”](#)



For further installation information: [“Wired Application Sheet”](#)

## What is the RAK-LINK?

The RAK-LINK is a required element of any wired system.

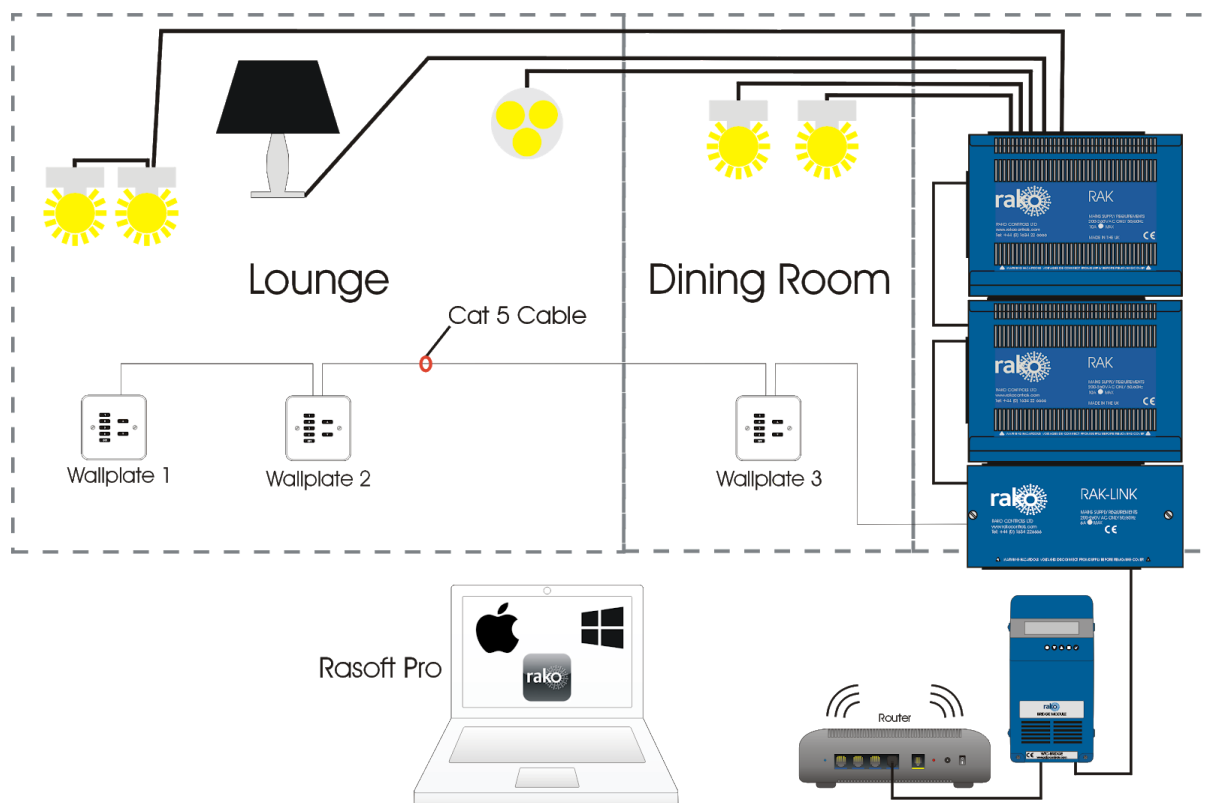
The RAK-LINK powers the wired network and also provides a link between the keypads and RAK dimmers.

Up to 32 RAK circuits can be used per RAK-LINK. These 32 circuits can be designated in any combination of RAK8s and RAK4s.

The RAK-LINK supports up to approximately 40 wired devices communication devices in a typical installation of 1000m of data cable. “Wired communication devices” refers to WCMs (keypads), WAPIR (motion sensor) etc.

[For a more exact calculation of power requirements please refer to “RAK-LINK diagnostics” application sheet.](#)

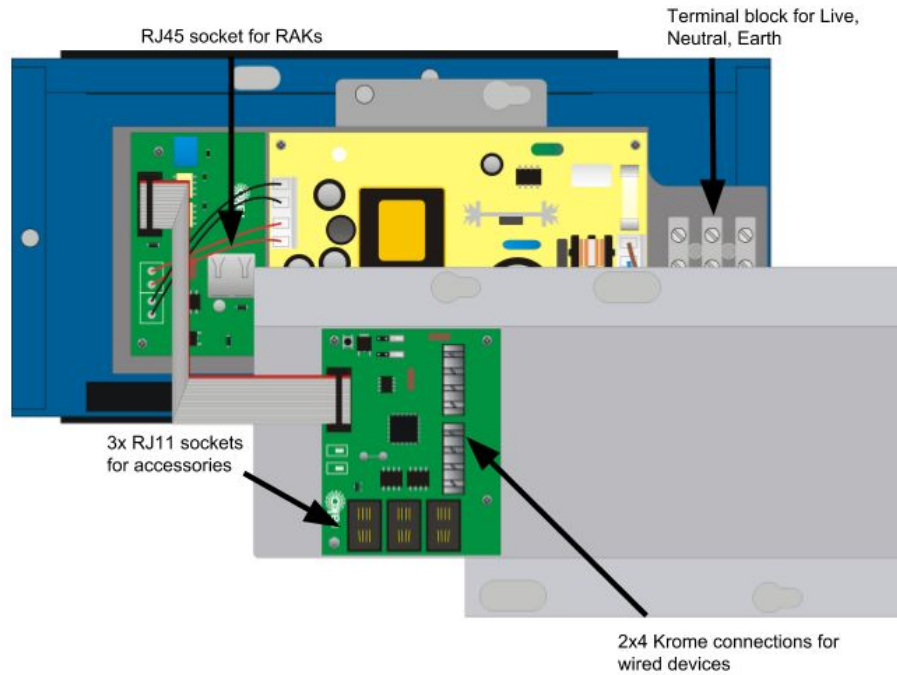
## Typical Wired Installation layout:





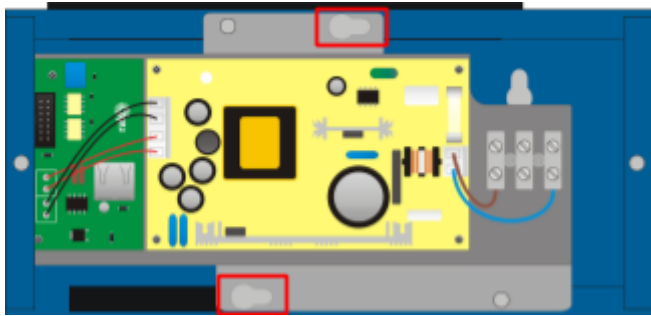
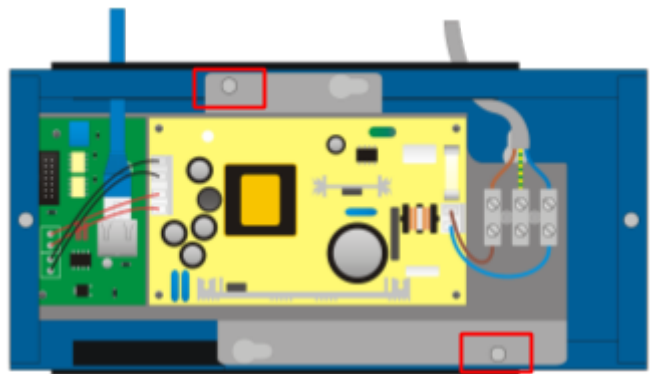
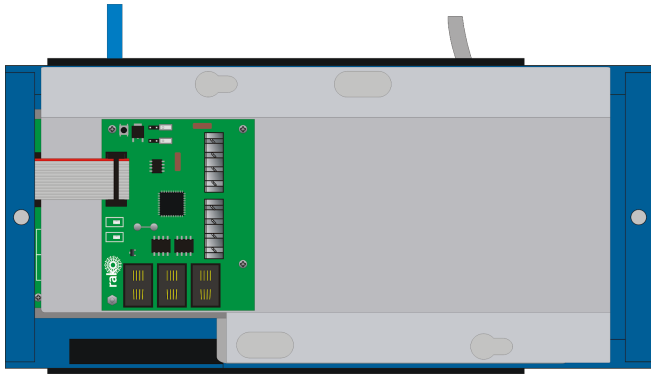
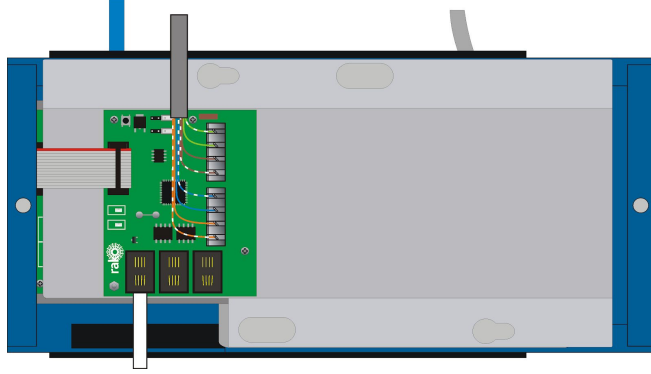
## Installation of the RAK-LINK

The connections to the RAK-LINK, as shown below are:

- 1) Mains AC connection to power supply
- 2) RJ45 patch lead to RAK stacks
- 3) Krome connector punchdowns and RJ11 sockets to wired network
- 4) Optional 3 x RJ11 sockets for wired accessories



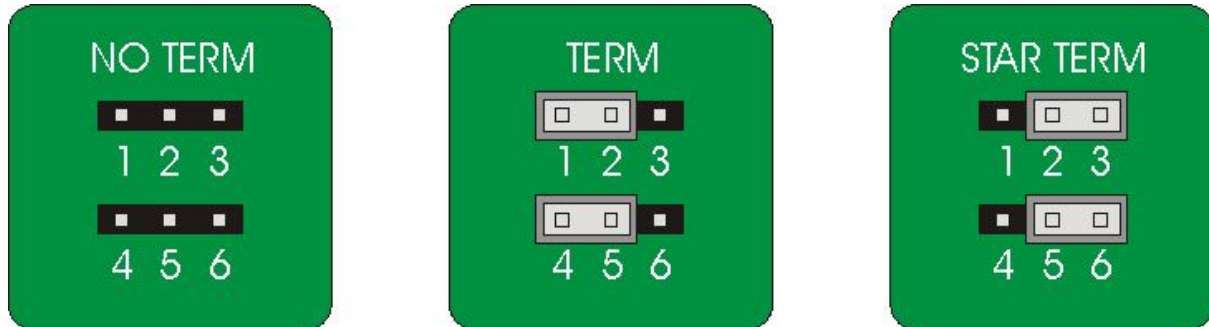
<p><b>Step 1</b></p>		<p>Remove lid.</p> <p>Remove plastic knockouts to allow cables to pass in and out of RAK-LINK.</p>
<p><b>Step 2</b></p>		<p>Slot the RAK-LINK housing into the RAK metal work</p> <p>Screw RAK-LINK to wall and prepare mains supply cable.</p>

<p><b>Step 3</b></p>		<p>Remove the top tray by disconnecting the ribbon cable and screws</p> <p>Fix the lower tray into the wall mounted metal housing using the screws indicated in the diagram.</p>
<p><b>Step 4</b></p>		<p>Wire the mains supply into the terminal block.</p> <p>Insert the RJ45 cable that links the RAK-LINK to a stack of RAKs.</p> <p>Prepare two remaining screws to be slotted into top tray</p>
<p><b>Step 5</b></p>		<p>Reattach the ribbon cable between the top and bottom board</p> <p>Slot the top tray into the bottom tray and screw down</p>
<p><b>Step 6</b></p>		<p>Punchdown the CAT5 to wired network to complete installation.</p> <p>If required plug devices (for example Bridges) into the RJ11 ports</p>

## Terminating the RAK-LINK

The final step in the installation process is to terminate the RAK-LINK. The termination that is required depends on the nature of the installation and the position of the RAK-LINK within the system.

### Termination Jumper settings:



#### **No Term - Both Jumpers removed**

Used when the RAK-LINK is not at the end of line. This is usually identifiable by two cables being punched down to the RAK-LINK.

#### **Term - Jumper fitted across 1+2 & 4+5**

Used when the RAK-LINK is end of line in a daisy chain configuration (such as the RAK-LINK shown in "Typical Wired Installation layout" on page one).

#### **Star Term - Jumper fitted across 2+3 & 5+6**

Used when the RAK-LINK is end of line in a STAR wire configuration.

[See Wired application sheet for more information on the different types of wired installation.](#)

## Programming the RAK-LINK

The RAK-LINK is programmed using the Rasoft pro programming software. A WA/WTC-Bridge is required for any programming of a wired system.

[For more information on how to programme a RAK-LINK please refer to "Wired System Setup Guide"](#)

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Rako thanks you for having purchased a Rako product and hopes that you are pleased with your system. Should for any reason you need to contact us please contact us via our website [www.rakocontrols.com](http://www.rakocontrols.com) or by phoning our customer help line on 01634 226666.

