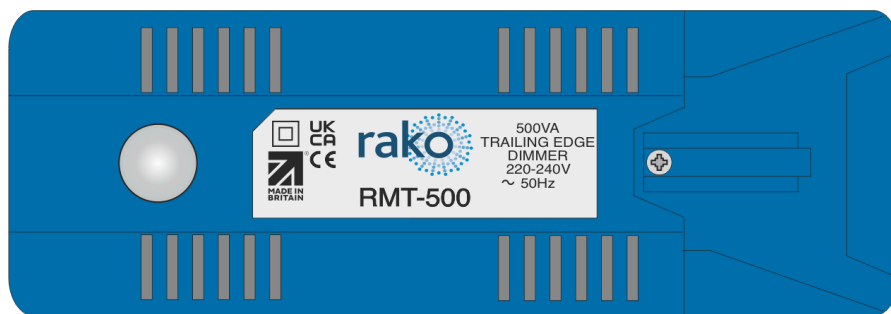




# Instruction Manual

# RMT-500

500W Trailing Edge Wireless Dimmer



2024

Version 2.0.1



# RMT-500 Instruction Manual

For more information relating to the RMT-500 see the [Wireless Module Application Sheet](#), [Wireless RAK Application Sheet](#), and [Wireless Device LED Diagnostics](#).

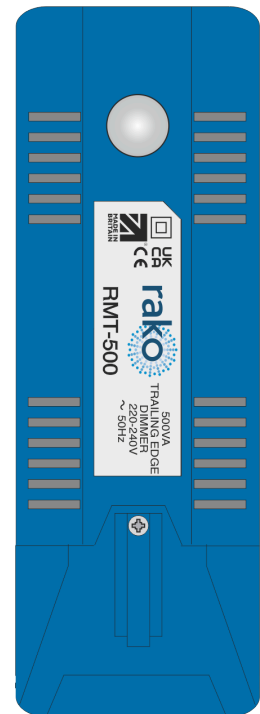
For programming a wireless system, including the device in this manual: [Wireless Module Programming Guide](#)

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## What is the RMT500?

- The RMT-500 is a wireless trailing edge dimming module designed for mains dimmable LEDs as well as tungsten and incandescent lamps.
- The RMT-500 dimmer modules are not suitable for inductive loads such as wire-wound transformers or electric motors.
- The RMT-500 can be controlled by any Rako device that transmits wireless messages.



## Loadings

Minimum	1W
Maximum	500W
Low-voltage transformer loads	450W (de-rate by 10%)
Mains voltage LEDs	250W (de-rate by 50%)

## NB

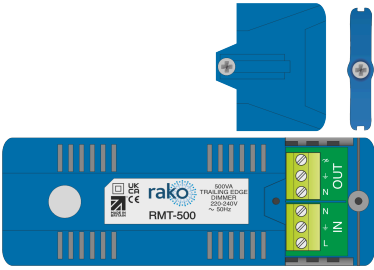
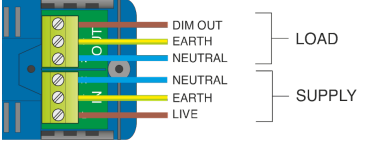
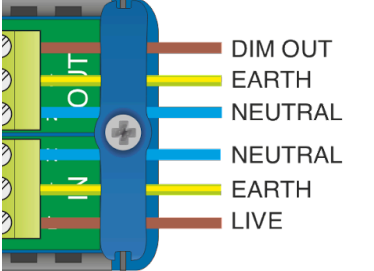
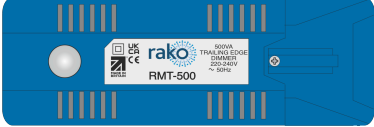
Derating is a precaution to account for varying characteristics in the lighting loads; this can include inrush currents and higher ambient temperatures, as well as recommendations from 3rd party lighting manufacturers.

## Installation

### **⚠ WARNING**

Installation should only be carried out by a competent electrician.

- RMT500 modules should be mounted in areas that are adequately ventilated, dry, and outside of any enclosed metal casings that may interfere with the wireless signal.
- Modules should be mounted vertically, with the terminals at the bottom, or horizontally.
- While the modules are designed to be maintenance-free, they should be mounted in an accessible location should investigation or re-addressing of the units be necessary.
- Ensure that the cable clamp is fitted tightly to secure the cables.

STEP 1:	 The diagram shows the RMT-500 module with its blue cover and cable clamp removed. The cover is shown above the module, and the clamp is shown to the right. The module's terminals are visible at the bottom.	Remove the cover and cable clamp
STEP 2:	 The diagram shows the wiring connections for the RMT-500 module. The terminals are labeled: DIM OUT (brown), EARTH (green/yellow), NEUTRAL (blue), IN (green), EARTH (green/yellow), and LIVE (brown). The connections are grouped into LOAD and SUPPLY.	Insert the supply IN conductors as well as the load OUT conductors.
STEP 3:	 The diagram shows the RMT-500 module with the cable clamp replaced. The clamp is shown in the center, securing the cables. The connections are labeled: DIM OUT (brown), EARTH (green/yellow), NEUTRAL (blue), IN (green), EARTH (green/yellow), and LIVE (brown).	Replace the cable clamp, ensuring the cables fit securely underneath
STEP 4:	 The diagram shows the RMT-500 module with the cover replaced. The cover is shown in the center, covering the module. The connections are labeled: DIM OUT (brown), EARTH (green/yellow), NEUTRAL (blue), IN (green), EARTH (green/yellow), and LIVE (brown).	Replace the cover



## Initial checks

- When power is initially connected to the module, the load should power up to full brightness.
- The clear button can be used as a manual on/off switch to test the circuit.
- The internal LED behind the clear button will flicker when the module receives any Rako wireless message and is a useful diagnostic indicator. The LED feedback becomes inactive after 20 minutes to avoid a nuisance light spill but can be re-activated by pressing the clear button.

## Programming the RMT-500

Once the RMT-500 has powered up and has been tested working with the setup button, the device is ready to be programmed. For instructions on how to program the RMT-500, see the [Wireless Module Setup Guide](#).

## Appendix 1: LED Diagnostics

Wireless Range	LED Pulses	Description
Good wireless reception		When the unit is receiving successfully, there will be four rapid pulses on the LED when any wireless message is sent.
Bad wireless reception		When the unit is out of range, there will be intermittent pulses on the LED when any wireless message is sent.  <b>NB</b> It is recommended to install a wireless repeater (WRB-100) if you are experiencing intermittent wireless range.

*Should the module not respond to any of the above, check the supply voltage.*

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](http://www.rakocontrols.com), or by calling our customer support helpline on 01634 226666.

