



Instruction Manual

RML-500

500W Leading Edge Wireless Dimmer



2024

Version 2.0.1



RML-500 Instruction Manual

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

For programming a wireless system: [Wireless Module Programming Guide](#)

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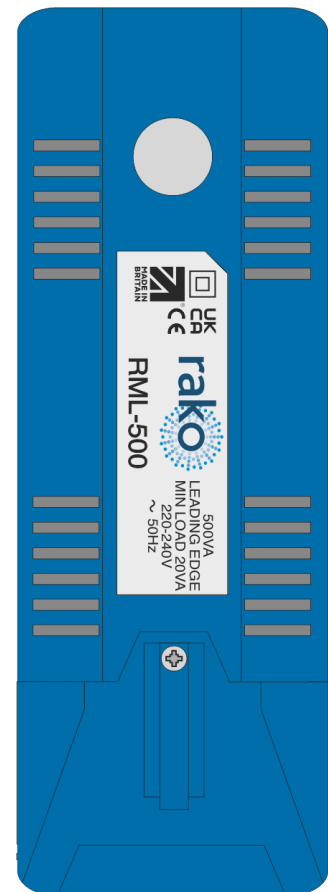
What is the RML-500?

The RML-500 is a wireless, leading-edge dimmer module suitable for use with mains voltage tungsten lighting and low voltage tungsten with leading-edge dimmable transformers.

- RML-500 modules are not generally recommended for use with LEDs.
- RML-500 modules can be controlled by any Rako device that transmits wireless messages.

Loadings

Minimum	20W
Maximum	500W
Low-voltage transformer loads	450W (de-rate by 10%)
Mains voltage LEDs	Not Recommended



NB

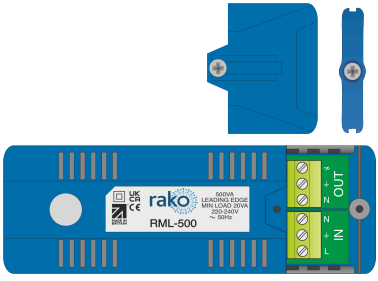
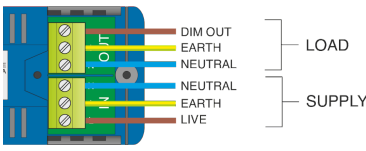
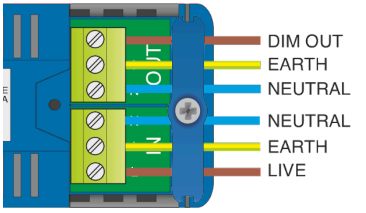

Derating is a precaution to account for varying characteristics in the lighting loads; this can include inrush currents and higher ambient temperatures, as well as recommendations from 3rd party lighting manufacturers.

Installation

⚠ WARNING

Installation should only be carried out by a competent electrician.

- RML500 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:		Remove the cover and cable clamp
STEP 2:		Insert the supply IN conductors as well as the load OUT conductors.
STEP 3:		Replace the cable clamp, ensuring the cables fit securely underneath
STEP 4:		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 RML-500

Once the RML-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 RML-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. NB 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, or by calling our customer support helpline on 01634 226666.

