# Instruction Manual

# RML-500

## 500W Leading Edge Wireless Dimmer

2025
Version 2.0.2

UK CA

# Contents

1.0 What is the RML-500?..... 3
2.0 Loadings..... 3
3.0 Installation..... 4
4.0 Initial checks..... 5
5.0 Programming the RML-500..... 5
6.0 Appendix 1: LED Diagnostics..... 6

# 1.0 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.

# 2.0 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.

# 3.0 Installation

**⚠WARNING**

Installation should only be carried out by a competent electrician.

- RML-500 modules should be mounted in adequately dry and ventilated areas 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.

| | | |
|---|---|---|
| 1 | | Remove the cover and cable clamp |
| 2 | | Insert the supply IN cables as well as the load OUT cables. |
| 3 | | Replace the cable clamp, ensuring the cables fit securely underneath |
| 4 | | Replace the cover |

# 4.0 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 reactivated by pressing the clear button. For more information on LED diagnostics, see 6.0 Appendix 1: LED Diagnostics.

# 5.0 Programming the RML-500

Once the RML-500 has powered up and has been tested with the setup button, the device is ready to be programmed.

Programming using a RAMPI or HUB
Wireless System Setup Guide

Programming using an RCM Keypad
Programming With An RCM Guide.

For further general information relating to the RML-500, see the Wireless Module Application Sheet.

# 6.0 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.<br><br>NB<br>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.*

For additional diagnostic information, see the Wireless Device LED Diagnostics.