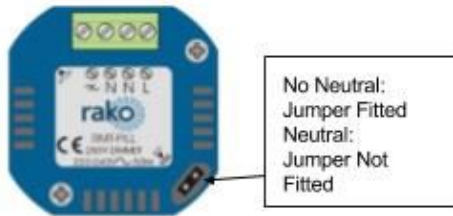


## Rako RMT-PILL Dimmer Modules – Installation, Programming and Operating Instructions

The Rako RMT-PILL dimmer is a digital dimmer suitable for use with loads up to 250W max. It is not suitable for inductive loads (wire wound transformers) and is designed to be mounted in a backbox.



### General Installation

Before commencing installation of a Rako dimmer module first read this instruction manual carefully. Rako Controls Ltd accepts no responsibility for any damage or injury caused by incorrect installation of a Rako product. Installation should only be carried out by a competent electrician. Never attempt to connect a Rako dimmer without first isolating the circuit at the fuse/MCB board.

Connect the RMT-Pill according to the appropriate wiring diagram overleaf. The circuit supplying a Rako dimmer should always be protected by either a 5A fuse or 6A MCB. Rako RMT-PILL dimmers are designed to be mounted in a wall mounted electrical back-box or conduit box. If a metal back box is used then the aerial should be mounted outside of the box, albeit into the fabric of the wall itself.

The RMT-Pill must be mounted into a back box. The cabling both supplying the dimmer and to the load should be a minimum of 0.5mm<sup>2</sup>.

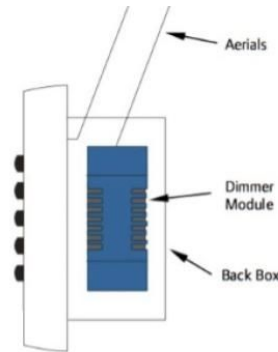
### Loadings

**With neutral** Min – 1W Max – 250W

Any trailing edge dimmable fittings (LEDs etc.)

**Without neutral** Min - 60W Max - 250W

Mains voltage tungsten/halogen **ONLY**.



### Installation with or without a neutral

It is very important to set the jumper provided appropriately depending on if the RMT-Pill is installed with or without a neutral. Failure to do so will result in poor dimming performance. When wired with a neutral the jumper should not be fitted. When wired without a neutral the jumper should be fitted

Without a neutral the RMT-Pill can only be used with mains voltage tungsten and tungsten halogen fittings and not mains voltage LEDs. It is not suitable for low voltage or any other transformer fed lighting types.

Only use the dimmer with either both neutrals connected or neither. Wiring a single neutral risks damaging the dimmer.

### Initial Checks

When power is initially connected to the module the unit should switch the load ON. The factory set address for both modules and transmitters is House 1 Room 4 (See Fig 1 for further information). A Rako wireless wallplate set as address House 1 Room 4 will control and dim the module.

### Set-Up and Addressing

The RMT-Pill modules can be programmed manually or by using RASOFT Pro programming software. For software programming refer to the appropriate programming guide which can be downloaded from: [www.rakocontrols.com](http://www.rakocontrols.com).

### Manual Addressing from Wallplate or Handheld

Before any lighting scenes can be programmed (see the wall-panel or hand-held manual) the RMT-Pill module needs to be addressed (see overleaf).

The procedure for doing this is described overleaf. House 1 should **never** be chosen as this is the default house address.

Choose a Room address for each separate room or area to be controlled independently and set this on the appropriate transmitters using the Room address switches. **Note:** Any control panels set with the same address will act as two or multi-way controls for the same Room. For rooms with multiple modules each module needs to be also assigned a separate Channel number from 1-15 within each Room.

### Notes on address switches

The address numbers are set using the switches on the back of a Rako transmitter. Binary coding is used and a diagrammatic explanation is given in Fig 1. It is not however necessary to understand binary just set the House switches to a different setting than the factory default and use a different combination of Room switch settings for each room or area to be controlled separately.

### Notes on Addressing

A dimmer cannot be set to an address of House 0 (All switches set to off. A dimmer will respond to, but not receive an address of Room 0 (All switches set to off). This Room 0 address is used for 'Master House' control. A dimmer cannot be set to channel 0.

### Using the Aux Input

It is possible to connect a switch directly via the header connector to provide basic fade up/down control of the RMT-Pill. Rasoft Pro must be used to enable this feature. The switch must be retractive and is connected to the RMT-Pill via a 2.54mm pin connector. This is the same connector as used for indicating if the module is in neutral or no neutral mode.

### Power-Up Mode

With the factory address setting of House 1 the RMT-Pill will turn ON when power is applied. When the House address is changed the Power-Up mode becomes 'OFF' which is generally preferable once installation is complete.

### Multiple Control Panels

If the dimmer module is to be controlled by two wall/hand-held transmitters it is only necessary to address the module to one of these transmitters. Set the other transmitters to the same House and Room address and they will transmit exactly the same message as the first transmitter and the module will respond accordingly.

### LED/button functions

The internal LED will flicker when the module receives ANY Rako wireless message and is a useful diagnostic indicator.

If an RMT-Pill module has already been addressed to a wall-panel the internal LED will start to pulse as soon as that transmitter (or any other transmitter with the same address) is put into programming mode. The module can still be re-addressed in the normal way.

### Care and Maintenance

A Rako dimmer module contains no user serviceable parts. 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 helpline on 01634 226666.

## Initial Addressing of a Rako Receiver Module

In the following procedure both the controllers (wallpanels and hand held remotes) and the receivers have an automatic time out after approximately 3 minutes when in programming or set-up mode. This feature avoids the possibility of either being left permanently in programming or set-up mode. This may cause confusion if either the controller or receiver times out before the procedure is complete. It is worth becoming familiar with the procedures before starting the addressing procedure. If at any time it is necessary to start again the controllers can be returned to normal mode by pressing the 'Off' button and the receivers by resetting the electrical supply.

