

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 such as wire wound transformers.



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.

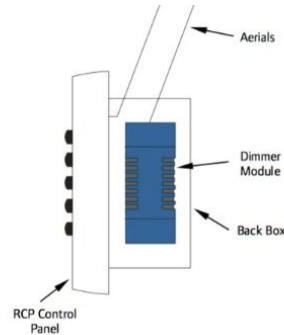
Connect the RMT-Pill according to the appropriate wiring diagram overleaf. The circuit supplying a Rako dimmer should always be protected by either a 5A fuse or 6A MCB. Rako RMT-PILL dimmers are designed to be mounted in a wall mounted electrical back-box or conduit box. If a metal back box is used then the aerial should be mounted outside of the box, albeit into the fabric of the wall itself (see Fig 2).

If the dimmer module is not being mounted in a back-box then it should be somewhere accessible should any re-addressing or replacement ever be necessary. The cabling both supplying the dimmer and to the load should be a minimum of 0.5mm.

Loadings

With neutral Min – 1W Max – 250W

Without neutral Min - 60W Max - 250W



Installation without a neutral

The RMT-PILL can also be used without a neutral wired connection. When wired like this it 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 and poor dimming performance.

Initial Checks

When power is initially connected to the module the unit should switch the load ON. The load can then be manually switched using the small button on the side of the module.

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.

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).

To avoid interference between neighbouring installations choose a House address other than the factory default of House 1 and set this on the transmitters using the dip switches.. Keep the House address the same throughout the project (for master functions).

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.

The module now needs to be sent its new House and Room address from the appropriate keypad. For rooms with multiple modules each module needs to be also assigned a separate Channel number from 1-15 within each Room.

The House and Room addresses are set using the switches on the back of a Rako transmitter (see Fig 1) and the Channel addresses are selected by putting a transmitter in programming mode and 'stepping' through the channel numbers (see Step 3 overleaf). This number is then 'sent' (along with the House and Room address) to a receiver (Step 5).

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. To program a lighting scene see Wall panel or Hand held manual.

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 setup button can be used as a manual On/Off switch. The internal LED will flicker when the module receives ANY Rako wireless message and is a useful diagnostic indicator. This function becomes inactive after 20 minutes to avoid nuisance light spill but can be re-activated by pressing the ad

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 or by phoning our customer help line 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.

