Rako RAMVR Installation, Programming and Operating Instructions

General

Rako RAMVR is an interface module allowing third party presence sensors to be integrated into a Rako wireless system. PIRs can either give mains or volt-free switching inputs.

Before commencing installation of a Rako module please read this instruction manual carefully. Rako Controls Ltd accepts no responsibility for 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 module or remove the terminal cover without first isolating the circuit at the fuse/MCB board.

Mounting

Rako 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. Wherever possible the mounting bracket should be used.

Whilst Rako modules are designed to be completely maintenance free the units should be mounted in an accessible location should there be a fault or re-addressing of the unit be necessary.

Connections

Connect the RAMVR according to the wiring diagram opposite, using either the volt-free or mains input connections as appropriate.

Do not use loop In/Out connections within the module. A junction box should be used if required.

Ensure the cable clamp bar securely clamps the cables and that the terminal cover is fitted before switching the supply on.

Set-Up and Addressing

RAMVR modules can be programmed manually, from a keypad or by using RASOFT Pro programming software. For software programming refer to the appropriate programming guide supplied as a PDF with the programming interface (RA or RTC-Bridge etc.) or download from our website:

www.rakocontrols.com.

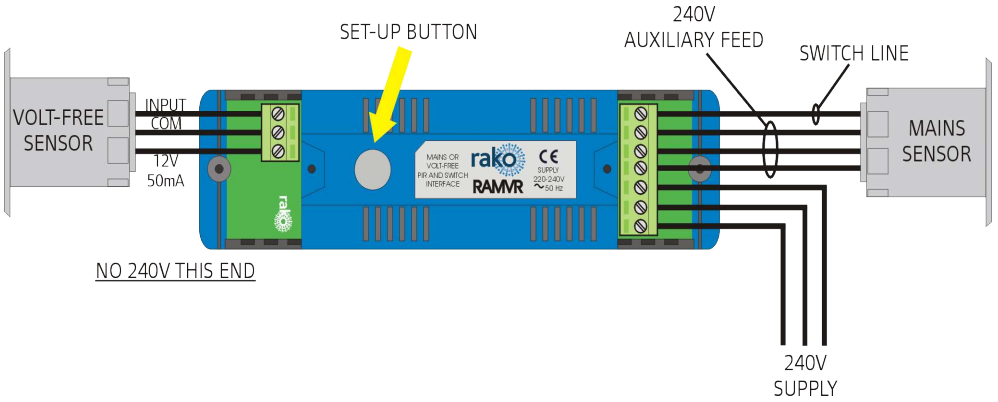
Address the module to a channel in the same Room as the lighting to be controlled. It is preferrable, although not essential, to choose a channel that is not being used for the lighting e.g. channel 15.

NOTE: Sensors may have their own internal timers to hold lights on for a period of time after.

As this time can also be set in the RAMVR it is advisable to set the sensors timer to zero to avoid confusion.

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.



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PIRs or Passive Infra-Red sensors are commonly used to turn lights on and off automatically. When this style of control is integrated with manual keypads the control requirements become far more involved. The following is intended to explain the options available within the RAMVR and their functions. All functions are accessed when programming via Rasoft Pro.

User Level

This guide covers the functions available while programming in either Beginner or Intermediate level. Due to the potential complexity of sensor programming the user should consider carefully before attempting to use expert mode.

The PIR setup tab accesses all of the configuration screens required to program the RAMVR.

Uploading Information

When uploading information to an RAMVR it is important that the unit is not performing any functions at the same time. This means it is always advisable to upload information to the module when the operator is out of detection range of the sensor.

Movement Action Tab

This list of checkboxes determines the command sent by the RAMVR when the sensor detects motion, or lack of motion (depending on Contact Type selected, see below).

The normal mode of operation of a Rako RAMVR is as a motion detector, i.e. the module will do something (usually turning lights on) if movement is detected.

Ticking 'Use as absence detector' turns the unit into an absence detector, i.e. it triggers a command when the sensor ceases to detect movement. This is uncommon and if required would normally be selected if the sensor is ONLY to be used to turn lights Off. This should not be confused with the requirement for the sensor to turn lights off AFTER it has switched them on, which is governed by the Auto Off function.

Set Scene Only If Lights Are Off – This function is almost certainly a requirement if the unit is in a room that also has a Rako keypad. Without this ticked selecting a dimmed scene would always involve movement, which in turn would trigger the sensor and therefore set the lights to full.

30 Second Exit delay – This function allows a user to manually switch lighting off from a Rako keypad. Without this feature the movement of pressing the off button on a keypad would reset and then trigger the sensor bringing the lights back on. It should be noted that this function can cause confusion when testing a RAMVR by turning lights off and re-entering a room to check it turns them on again, adequate time should be left for the 30 seconds to expire.

Room – An RAMVR relies on knowing the current state of the room lighting (i.e. On or Off) in order to function properly. It is therefore only under special circumstances that an RAMVR should trigger commands in Rooms other than the Local Room.

Reset to Defaults - Resets the default settings of the module but DOES NOT reset any addressing information, e.g. House, Room or Channel addresses.

Auto Off Trigger Tab

It is common, but not necessary, that the RAMVR should turn lights off when the sensor has ceased to detect movement. It is also normal to have a delay, to ensure that temporary inactivity by occupants does not result in lights being turned off.

The Auto Off function is also controlled by three other tick boxes:

Auto turn lights off after - Determines whether the function is active or not, if set the time is set using the HH/MM/SS boxes below.

Disable Auto Off if they've been turned on by a keypad–Enabled by default. Selection of a scene from a Rako keypad will disable the Auto Off function. An example of use of this function is a room, such as a bathroom, where someone may be stationary for long periods of time. If a button, other than off, is pressed on a keypad the RAMVR will not turn lights off automatically. An off command from a keypad will reset the auto off. Having this function ticked does mean that when a button on a keypad has been pressed, the off function of the RAMVR will appear not to work, until reset by pressing off on a keypad.

General

The above gives an overview of the features available when programming an RAMVR. It is usual to have a sensor or sensors controlling a single Rako Room and interacting with a keypad addressed within that same Room. Sometimes, for various reasons, users program sensors into Rooms where Group features are enabled or use a Rako Bridge to map commands either from or to an RAMVR. In all of these circumstances the level of programming complexity increases significantly and should be attempted with extreme caution. In these situations it is worth discussing your requirements with Rako's technical department before attempting programming.

Testing RAMVRs

When testing an RAMVR it is often worth programming short time out delays whilst checking the basic operation. Avoid extremely short time out delays, 20-30 seconds would be recommended.