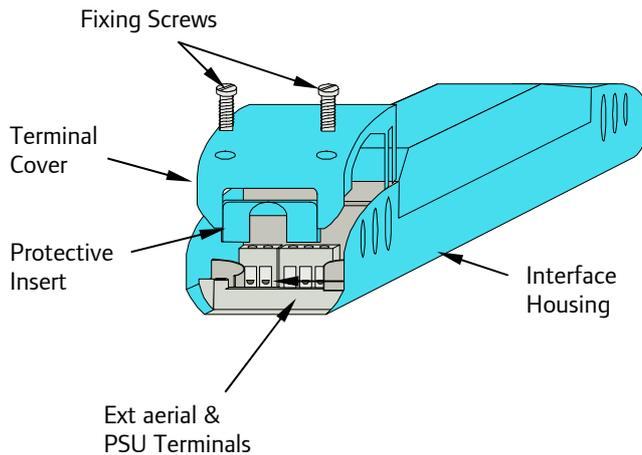


# RAVIR Infra Red to Rakom RF Interface – Installation and Operating Instructions.

## General

The Rako RAVIR is an Infra-red to RF interface designed to convert standard RC5 infra red signals to Rakom RF. The unit allows use of generally available IR transmitter devices to select lighting scenes on a Rako system. The RAVIR is fitted with an internal receiver but can also be used with an external IR receiver head allowing the unit to be positioned in a discrete location. The RAVIR requires the use of an external power supply. Modules are supplied fitted with two external aerials.



**Fig 1.**  
**Front View of Components**

## Installation

**Before commencing installation of the Rako RAVIR interface 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.**

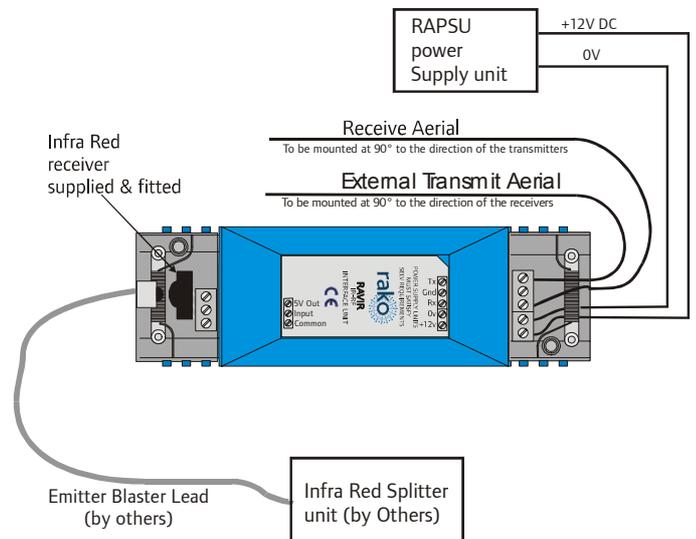
The RAVIR comes supplied and fitted with an IR receiver head. The receiver can either be used to receive IR commands directly or by clamping an IR emitter head, from an external receiver unit, into the RAVIR terminal cover as shown in Fig. 2.

The RAVIR requires the use of the RAPSU external power supply or other 12V d.c. power supplies conforming to SELV requirements. Connect the power supply as shown in Fig. 2.

The RAVIR is supplied with both receive and transmit aerials fitted externally as shown in fig 2.

The RAVIR converts standard RC5 received Infra-red signals to Rakom RF, selecting lighting scenes or controlling the master fade commands. **The default setting is VCR1 with numeric keypads 1-4 respectively selecting scenes 1-4 and keypad 0 selects off. Channel + and Channel - keys command the master raise and lower functions of the lighting receivers.** Changing the RC5 codes that the unit responds to requires the use of the RASOFT software package.

Before use, the RAVIR needs to be addressed to the same House and Room address as the receiver units that it is to control. This can be achieved either by using the RASOFT software or by using a Rako control panel or RAH07 hand held controller.



**Fig 2.**  
**Connection Detail**

## Setting the RAVIR room and house addresses.

The procedure for setting the receiver address is as follows. Refer to individual sections for details on each procedure.

- Put wall-plate into programming mode.
- Put receiver into set-up mode using the magnet provided.
- By press button one once to scroll to a valid channel number, i.e. anything other than 0.
- Press the ident button.
- Exit programming mode on wall-plate.

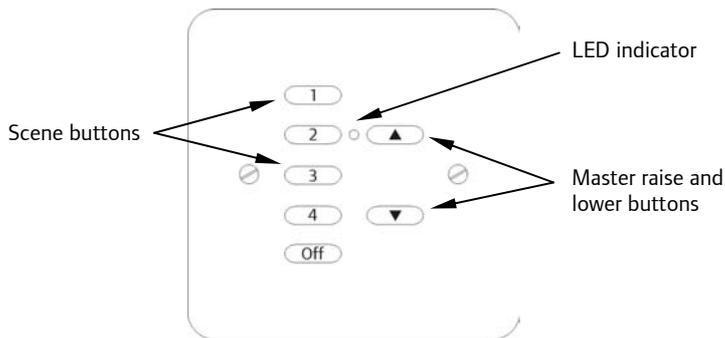
(The above Ident function is also available from the RASOFT software package, allowing the unit to be addressed without using a wall panel. Simply select the relevant house and room address on the main screen, ensure the channel is not set to 'ALL' and then hit the Ident button. The receiver must be in set-up mode.)

## Putting Wall-plate into programming mode.

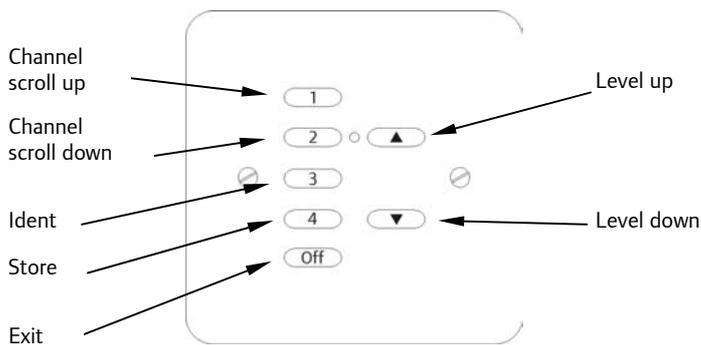
Press and hold a scene button (one of the four numbered buttons on the left hand side of the plate) and at the same time press and hold both the raise and lower buttons (the right hand buttons). After 3 seconds the LED will start to flash, the plate is now in programming mode. To exit programming mode press the Exit button (see Fig. 4).

### **Note:**

If the Exit button is not pressed or any other buttons pressed the panel will exit from programming mode automatically after 3 minutes.



**Fig 3.**  
**Wall-plate buttons in normal mode**



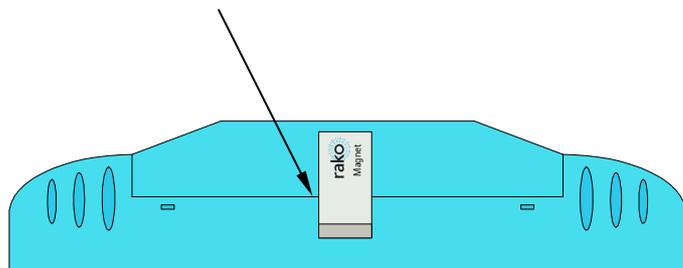
**Fig 4.**  
**Wall-plate buttons in programming mode**

**Putting receiver into set-up mode.**

The RAVIR is put into set-up mode using the magnet method as follows:

Firstly ensure that the receiver has been connected correctly  
Then using the small magnet provided with each receiver, press the magnet against the receiver casing just over halfway down (see Fig.5). The approximate position for this is indicated by the 'magnet point' legend on the top label. When the magnet is in the correct position an internal LED will illuminate. The LED will stay on with a steady illumination all the time that the magnet is in the correct position. Hold the magnet in this position for 3 seconds until the LED starts to flash. The receiver is now in set up mode.

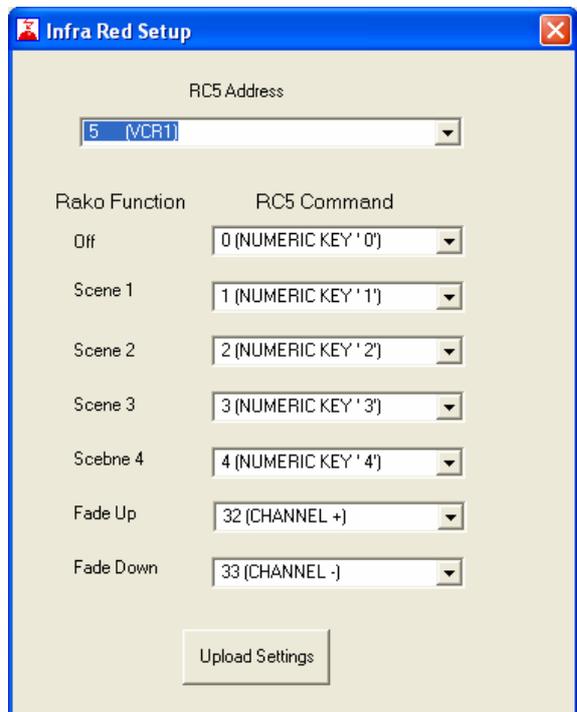
Approximate position for Rako programming magnet.



**Fig 5**

**Configuring the RAVIR to suit your IR transmitter**

Within the RASOFT software select the **Controls** menu and **Infra Red Setup**. This will open the screen as shown in Fig 6. Select, from the pull down menu, the RC5 address to be used then select the IR command key required for each of the Rako scene selections and master fade commands. To transmit the selected settings to the RAVIR unit click the 'Upload Settings' button.



**Fig 6**

Note: It is possible to access up to 4 rooms from one RAVIR when using the module in multi-room mode. This function is only accessible using the RASOFT software and is supported by the package's Help files. For further advice on this function call Rako Controls on the customer help line below.

Rako thanks you for having purchased a Rako product and hopes that you are pleased with your system. 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 help line on 0870-043-3905