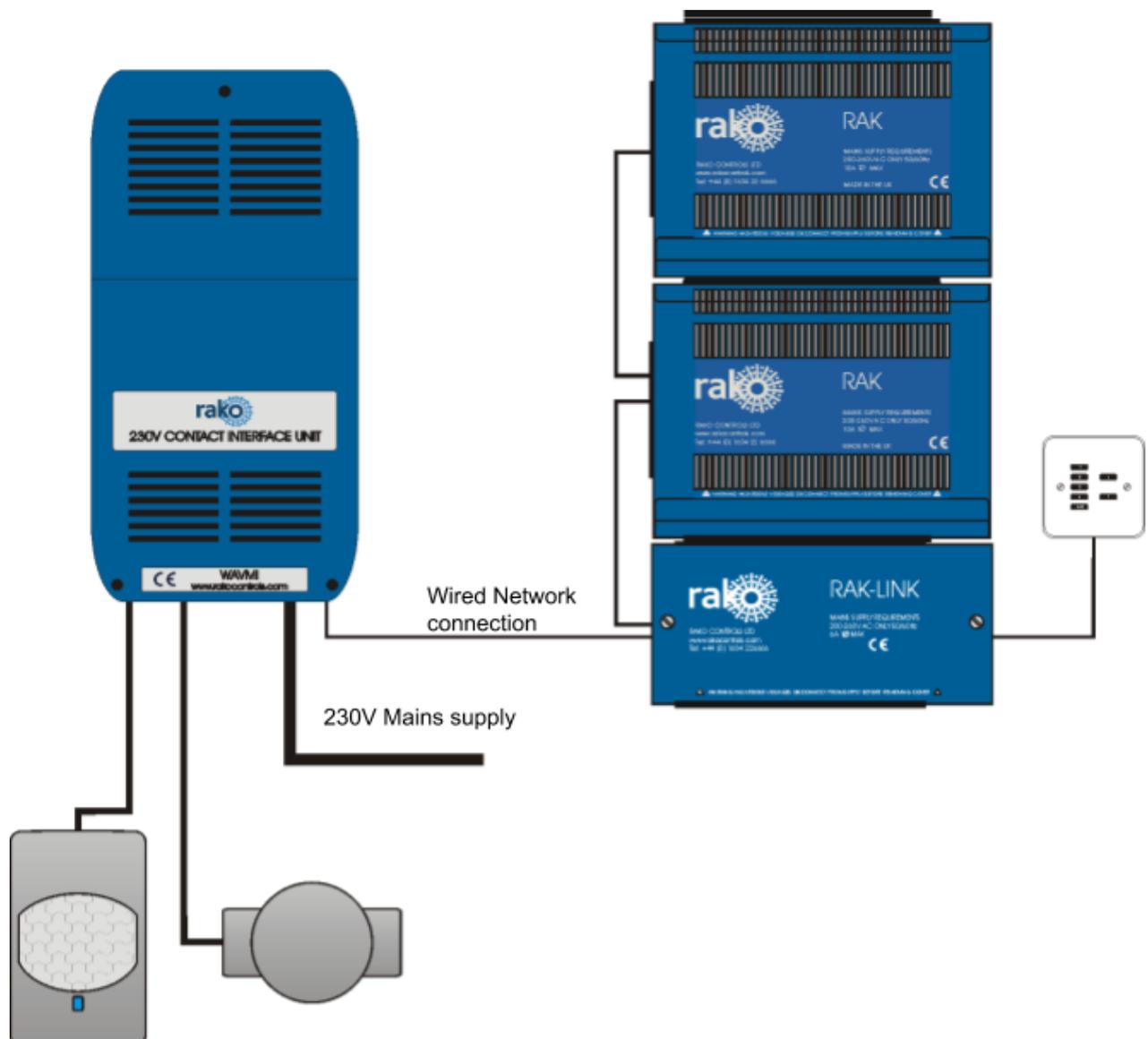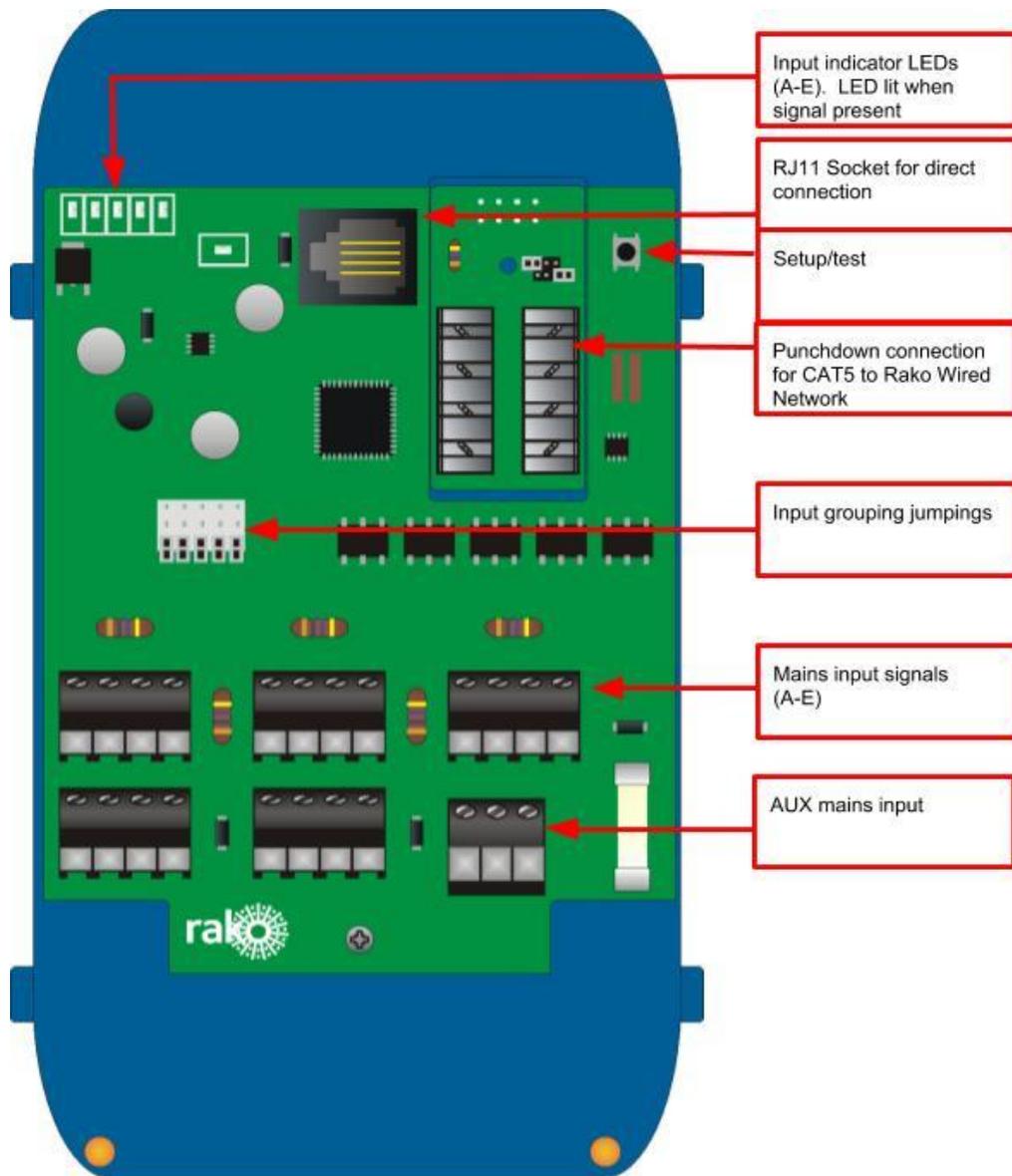# WAVMI Instruction Manual

What is the WAVMI?

WAVMI allows mains trigger signals to add additional control of a Rako Wired system.

This includes inputs from Alarm sensors, PIR modules, Thermo sensors, Light detectors.

Installing the WAVMI

The WAVMI takes its power from the RAKO wired network. No other power supply is required. Connect WAVMI by CAT5, or RJ11 to the wired system and power up.

NB

Two LEDs will light on the WAVMI circuit board. The "Power" LED in the top left of the board indicates that correct volts are being received from the power adaptor. The LED "D25" near the terminal blocks shows that the WAVMI on-board supplies are active (power to the terminal blocks).

Adding the WAVMI as a device

For the WAVMI to operate correctly with a RAKO system some initial setup must be performed. This is done using a PC running RASOFT Pro (WAVMI is not supported by RASOFT classic) and communicating with a RAKO Bridge connected to the same wired system as the WAVMI .

Open the Project File for the installed Rako system and make sure that Rasoft is connected to a communication device.
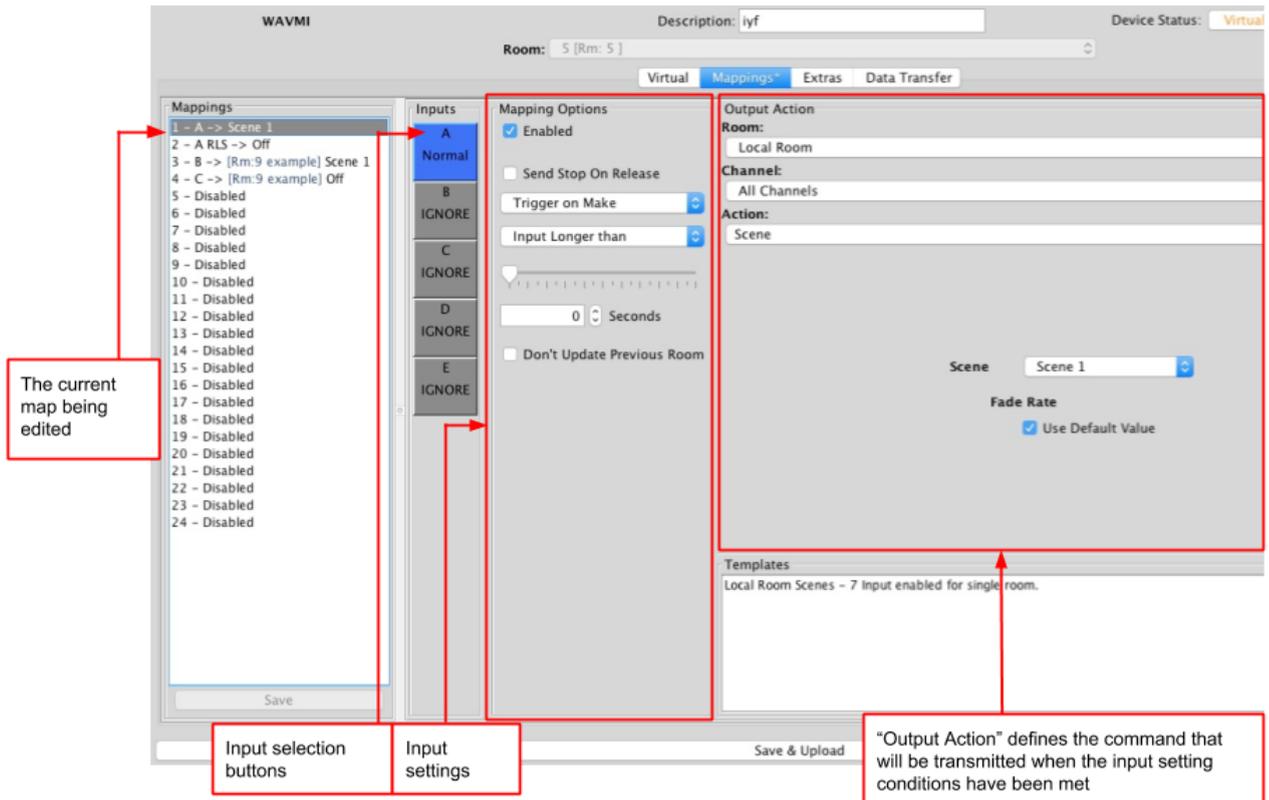
NB
The communication window at the bottom right should indicate whether a Bridge is connected or not. For instructions on how to connect to a Bridge see Rasoft Pro programming guides.

- Select "File" - "New device" to bring up the "New device Wizard" and choose "WAVMI" from the list.

- Choose a suitable device name (if you have multiple WAVMIs make sure it is identifiable from this description). Leave "Device ID" blank with the "Automatic ID" box checked.

- Associate the WAVMI to a room from the drop down menu. The room selected here will set the "Local Room" for this device, leave "Associate to channel" blank.

- Once this screen appears press and hold the blue button on the WAVMI. After a few seconds it will enter Setup Mode and the status LED will start to blink. Release the button and "Waiting for device to enter setup" should change to "Device Found".

- Click the "Finish" button to complete setup.

Programming the WAVMI functions

A WAVMI has a maximum of 24 maps that can be set. Each is programmable by selecting it in the mappings list and then editing the three sections: "Inputs", "Mapping Options" and "Output Action".

The current map being edited

Input selection buttons

Input settings

"Output Action" defines the command that will be transmitted when the input setting conditions have been met

Inputs

The ten inputs of the WAVMI "A-E" are represented by these buttons and correspond directly to the lettered terminal blocks on the circuit board. Each can be set to, "Normal", "Ignore" or "Invert" by clicking on the tile.

Normal – Used to select this input as the trigger for the map.

Ignore – The state of an input set to "Ignore" for a particular map will not affect whether the output action occurs or not.

Invert – Use only when combined inputs are required.

Take the example map shown in Figure 4. This map has a very standard configuration, as a single input is causing a single command to be outputted. The input is "A" so this is set to normal and all other inputs are set to ignore.

Mapping options
The mapping options are used to define additional parameters that must be met for the "Output action" to occur.

Trigger on Make/Break:
Sets the type of signal the WAVMI will respond to. Typically normally open devices will be set up as "Trigger on make" normally closed as "Trigger on Break". A map set up as trigger on Break will have "RLS" after the letter in the mapping list (see map 2 in figure 4).

Input longer/shorter than:
Allows the WAVMI to differentiate between inputs applied for different lengths of time. Use the slider below the drop down menu to set the time condition that the longer/shorter than will apply to.

Don't update previous room:
If this box is ticked this map will not update the "last used" flag for both room and channel. When a "last used" is sent from this device the most recent room and channel sent which doesn't have "don't update previous room" selected will be sent.

Any input Trigger (OR Logic):
Use only when combined inputs are required: see Application sheet (LINK) "Combing Volt free inputs" for further information.

Output action

This tile is used to set the command sent from the input defined in the other two sections. Before being altered the room will be the local room for that keypad. All the rooms in the project will be in the drop down menu as will an option for "previous room".
The next drop down menu can be used to change the channel affected by this command. Usually "all channels" is selected so that the entire room will be affected by this map. All the channels added in the room editor will appear in this drop down menu as will "last used" and "custom".

NB *Previous room/channel will set the room number to that which was last sent by this device. It will not track commands sent by any other device.*

The last used function sets the channel to the most recent previous command sent from that device. This is commonly used when a WCM is set up to toggle individual channels. In this case "last used" is used for the fade buttons so that the user can adjust the brightness of the channel they have just turned on.
The action sections sets which command will be sent to the room and channel that have been set.