Wireless Interconnected Module

DHI-HY-MRF50-R8

UK & ROI User's Manual

V1.0.0

WisuAlarm Technology UK & Ireland

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1. Important Safeguards and Warnings

This manual will help you to use the device properly. Read the manual carefully before using the device, and keep it well for future reference.

Operation Requirements

⚠️ **CAUTION**

● Make sure that the power supply of the device works properly before use.
● Use the device according to the operating environment.
● Only use the device within the rated power range.
● Transport, use and store the device under allowed humidity and temperature conditions.
● Prevent liquids from splashing or dripping on the device. Make sure that there are no objects filled with liquid on top of the device to avoid liquids flowing into it.

Installation Requirements

⚠️ **WARNING**

Failure to properly install and operate this device will prevent proper operation of the device and will prevent its response to fire hazards.

⚠️ **CAUTION**

● Observe all safety procedures and wear required protective equipment provided for your use while working at heights.
● Do not expose the device to direct sunlight or heat sources.
● Keep the original packing material well because you might need it to pack the device and send it back for repair.
● Make sure the application scenario conforms to installation requirements. Contact your local retailer or customer service center if there is any problem.
● All installation and operations shall conform to your local electrical safety requirements, fire protection regulations, and other relevant regulations.

2. Introduction

Wireless Interconnected Module is an optional add-on wireless interconnected module for the Wisualarm mains-powered alarm units which require wireless connection. This small size module is a simple and cost-effective way to enable the Alarm to communicate wirelessly with other WisuLink devices. Up to 24 WisuLink RF devices can be interconnected.

3. Technical Information

Specification	Introduction
Power Supply	Powered from Alarm Head
RF Range	A minimum of 100 metres in free space
RF Visual Indicator	● Flashing Red: RF transmission ● Flashing Blue: Successfully interconnected
RF Frequency	868 MHz or 925 MHz
Interconnect	Up to 24 WisuLink RF devices
Operating Temperature	-10°C to +55°C (+14°F to +131°F)
Operating Humidity	≤95% RH (non condensing)
Color	White
Casing	PC+ABS
Dimensions	53.5 mm × 38.2 mm × 11.7 mm (2.11" × 1.50" × 0.46")
Weight	11.9 g (0.03 lb)
Certification	CE, UKCA, RCM

4. Device Installation

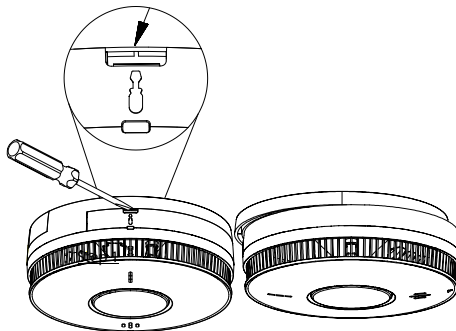### 4.1 Installation

Follow below steps to install the device properly.
Step 1 Disconnect the AC mains supply from the circuit that will be used.
Step 2 Using a screwdriver, insert into the removal slot on the side of the Alarm. Slide the alarm head away from the screwdriver to detach it from the mounting plate.

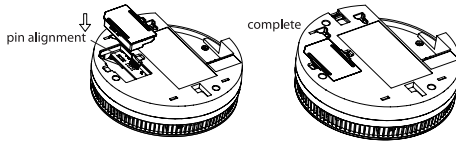⚠️ Make sure that you hold the alarm head consistently in case of dropping to the ground.

Figure 4 -1 Installation (1)

Step 3 Plug module into the bottom of alarm head.
Hold the module, align the connection pins properly and insert them perpendicularly to the base.
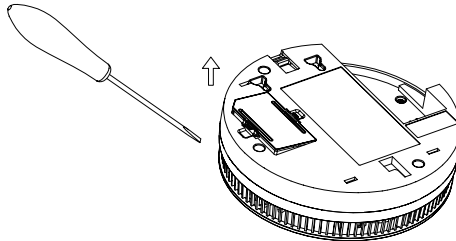
Figure 4 -2 Installation (2)

pin alignment   complete

Step 4 Connect mains supply.

4.2 Removal

If you want to remove or replace a module already fitted to an alarm, please insert a slotted screwdriver to lift by a few millimeters to release the connection pins.

Figure 4-2 Removal

5. Interconnection

5.1 How to interconnect mains Alarms with RF interlink only

Prior to permanently installing mounting plates, install the wireless interconnect module into all mains devices in network. Refit heads to mounting plates.

Step 1 Press the **Test/Silence** button on device one continuously 4 times (the Interval between each press is less than 1 second). The device emits 1 short quick beep and **red** LED indicator starts to flash continuously.

Step 2 Press the **Test/Silence** button twice on device 2 to create interconnected network with device 1. Device 2 emits 1 short beep, with quick **red** LED flash and **blue** LED indicator starts to flash continuous.
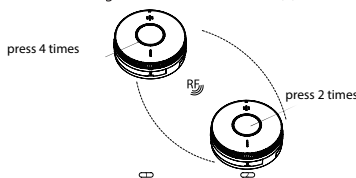
Step 3 Continue to add further new devices as per step 1

Step 4 When complete Press the **Test/Silence** button once on device 1.

Step 5 Press and hold test **Test/Silence** button and ensure all installed network alarms are interconnected.

📖 Up to 24 RF alarms can be interconnected this way.

Figure 5 -1 Interconnection (1)

press 4 times   press 2 times

5.2 How to interconnect the Alarms into existing mains wireless network

Step 1 To interconnect alarms into an existing mains RF interconnect network, press the **Test/Silence** button 4 times on an existing installed network device (to enter interconnecting transmission mode). The device emits 1 short beep, with quick **red** LED flash and then **blue** LED indicator starts to flash continuously.
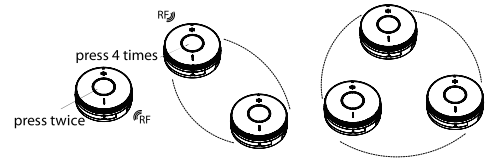
Step 2 Ensure a wireless interconnected module is installed on the device to be added to existing network and fit head to baseplate.

Step 3 Press the **Test/Silence** button twice on the new device to join the existing interconnected network. The device emits 1 short beep and **red** LED indicator starts to flash continuously.

Step 4 When complete Press the **Test/Silence** button once on the intiating existing installed network device (to exit interconnecting transmission mode).

Step 5 Press and hold test Test/Silence button and ensure all installed network alarms are interconnected.

Figure 5 -2 Interconnection (2)

press 4 times
press twice

5.3 How to build a hybrid network (mixed hardwire interconnect and wireless interconnect)

Ensure a wireless interconnected module is installed on only one device in mains hardwired interconnect network.
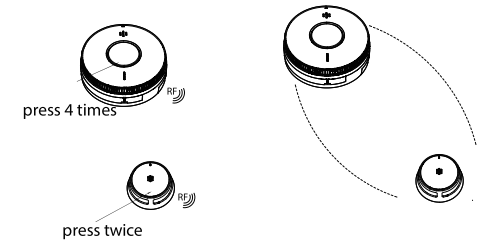
Step 1 Press the **Test/Silence** button 4 times on device with fitted RF module (to enter interconnecting transmission mode). The device emits 1 short beep, with quick **red** LED flash and then **blue** LED indicator starts to flash continuously.

Step 2 Press the **Test/Silence** button twice on the new F1 connected capable device to join the existing interconnected network. The device emits 1 short beep, with quick **red** LED flash and then the **green** LED indicator starts to flash continuously.

Step 3 When complete Press the **Test/Silence** button once on the initiating existing installed network device (to exit interconnecting transmission mode).

Step 4 Press and hold test **Test/Silence** button and ensure all installed network alarms are interconnected

Figure 5 -3 Interconnection (3)

press 4 times
press twice

5.4 How to disconnect/reset the alarms

If alarms are installed via mobile app then delete via the app.

Step 1 Continuously press the **Test/Silence** button 4 times on the device that needs to unpair with other alarms, the device emits 1 short beep and **red** LED indicator starts to flash continuously.

Step 2 On same device, Press and hold the **Test/Silence** button, the device emits 1 short quick beep and **red** LED indicator continues to flash. Release the button when the light stops flashing and emits 1 short quick beep.

📖 Please disconnect all wirless interconnected alarms if required for use in another interconnected network.

6. Indicator Summary Tables & Troubleshooting

State	Green LED (Power)	Yellow LED (Fault)	Red LED (Alarm)	Blue LED (Communication)	Buzzer
Normal RF transmission between devices	–	–	Flash	–	Beep once
Successfully interconnected	–	–	–	Flash	Beep once

7. Interconnection Test

When to test the system

A test must be carried out to verify the proper functioning of the WisuLink system under the following circumstances:
● Completion of the system installation.
● Regularly (preferably once a month).
● The house is vacant for an extended period.
● After repairing or replacing any of the system components or household electrical appliances.
● House is renovated.

How to test the interconnection

● Press and hold **Test/Silence** button on any interconnected alarm until other interconnected smoke alarms in the network start to beep.
The initiating device will beep continuously with the red LED indicator flashing. After receiving a signal, other interconnected devices in the network start beeping with the indicator lights flashing red and yellow alternately.
● Release **Test/Silence** button on initiating interconnected device, the initiating device stops flashing and beeping, and other interconnected devices stop testing soon.

8.   Identifying the Fire Source

In a hybrid system consisting of Smoke/Heat/CO Alarms, it is significant to identify the sources of alarm and take corresponding actions.

⚠️ **WARNING**

Never ignore any alarm. Failure to respond may lead to serious injury or death.

- If the alarm is due to smoke or heat: evaluate the premises and see Smoke/Heat Alarm User's Manual for further guidance.
- If the alarm is due to CO: alert all occupants about the danger and evacuate the premises immediately. Further instructions can be found in the Carbon Monoxide Alarm User's Manual.

9.   Frequently Asked Questions

Problem	Analysis	Solutions
After pressing **Test/Silence** button on the device, the blue communication indicator does not flash	The module is installed unproperly	Remove the module, and install it again.
	The LED bulb is broken	Contact the supplier for advice.
Poor RF signal	Some features of a home, such as the number of walls, number/size of rooms, furniture and types of building materials used may weaken the signal strength	Interference from structural conditions can be overcome by adding additional alarms to route the wireless signal around obstructions.
		Shorten the communication path or remove obstacles which block the signal.
		Move the alarms away from metal surfaces or wiring.

10.   Discard

Waste electrical products should not be disposed of your other household waste. Please dispose in an environmentally friendly manner, and strictly follow the local regulations regarding the disposal or recycling of the electrical device.

⚠️ **WARNING**

Do not burn or throw into fire.

11.   Warranty

WisuAlarm warrants this Alarm for five years from date of purchase (proof required) against any malfunction attributed to materials or workmanship under normal use.
The warranty applies only when the product is installed, used and maintained according to the instructions. It does not cover damage caused by misuse, improper handling, use of force, degraded batteries due to external factors outside of reasonable use and/or WisuAlarm's control, dust, fluids or other environmental factors.
If you have a warranty claim, please contact the relevant partner for instructions.

12.   Documents

The full text of the EU declarions of conformity and EU declarations of performance is available at the following internet address:
https://www.wisualarm.com/uk/Download

For more information, please visit: https://www.wisualarm.com/uk/home