# M200F-RF
## RADIO SYSTEM REPEATER
## INSTALLATION INSTRUCTIONS

ENGLISH

I 56- 3893- 003

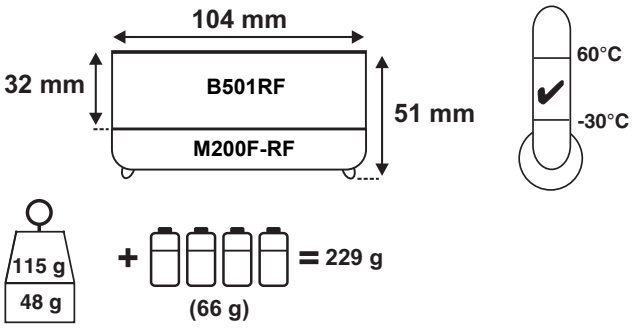



*Figure 1: B501RF Mounting*

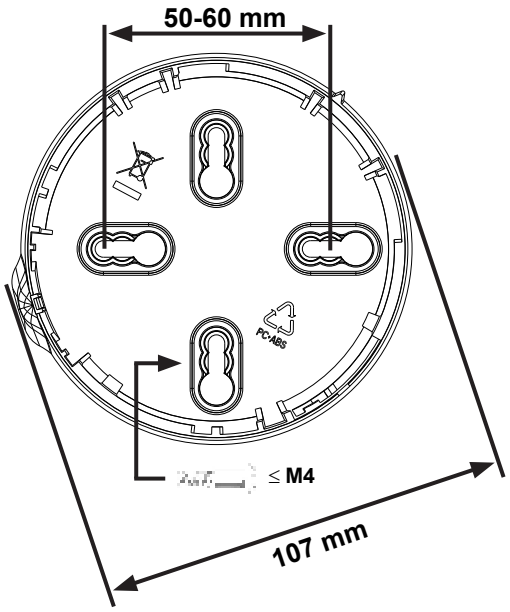



*Figure 2: Attaching the Repeater to the Base*

LINE UP REPEATER LED WITH BULGE AND TWIST CLOCKWISE (ONLY ONE LED WILL OPERATE AS KEY)

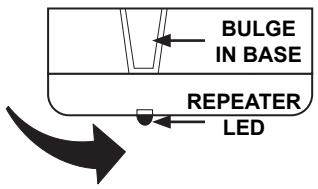



*Figure 3a: Activation of Tamper Resist Feature*

PLASTIC LEVER

BREAK TAB AT DOTTED LINE BY TWISTING TOWARDS CENTRE OF BASE

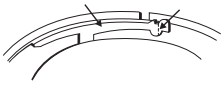
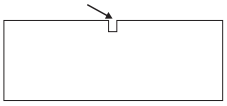


*Figure 3b: Removing Repeater From Base if Tamper Resist is Activated*

USE A SMALL-BLADED SCREWDRIVER TO PUSH PLASTIC IN THE DIRECTION OF THE ARROW



## DESCRIPTION

The M200F-RF radio repeater is a battery operated RF device designed for use with the M200G-RF radio gateway, running on an addressable fire system (using a compatible proprietary communication protocol).

The repeater contains a wireless transceiver and plugs into the B501RF wireless sensor base. It is used to extend the RF range of the radio fire detection system.

This device conforms to EN54-25 and EN54-18. It complies with the requirements of 2014/53/EU for conformance with the RED directive.

## SPECIFICATIONS

| | |
|---|---|
| Supply Voltage: | 3.3 V Direct Current max. |
| Standby Current: | 120 µA@ 3V (typical in normal operating mode) |
| Red LED Current Max: | 4mA |
| Re-Sync Time: | 35s (max time to normal RF communication from device power on) |
| Batteries: | 4 X Duracell Ultra123 or Panasonic Industrial 123 |
| Battery Life: | 4 years @ 25ºC |
| Radio Frequency: | 865-870 MHz; |
| RF Output Power: | 14dBm (max) |
| Range: | 500m (typ. in free air) |
| Relative Humidity: | 10% to 93% (non-condensing) |

## INSTALLATION

*This equipment and any associated work must be installed in accordance with all relevant codes and regulations.*

Figure 1 details the mounting of the B501RF base.

**Spacing between radio system devices must be a minimum of 1m**

Figure 2 details attaching the repeater to the base

**Anti-Tamper Features**

The base includes a feature that, when activated, prevents removal of the repeater from the base without the use of a tool. See Figures 3a and 3b for details on this.

**Head Removal Warning -** An alert message is signalled to the CIE via the Gateway when a repeater is removed from its base.

Figure 4 details the battery installation and the location of the rotary address switches.

**Important**

***Batteries should only be installed at the time of commissioning***

**Warning**

***Using these battery products for long periods at temperatures below -20°C can reduce the battery life considerably (by up to 30% or more)***

***Observe the battery manufacturer's precautions for use and requirements for disposal***

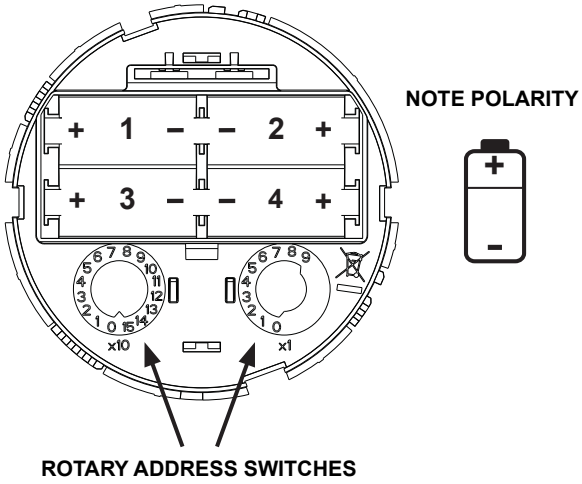
***Only use the batteries recommended in this manual and do not mix batteries from different manufacturers***

## SETTING THE ADDRESS

Set the loop address by turning the two rotary decade switches on the underside of the repeater (see figure 4), using a screwdriver to rotate the wheels to the desired address. The repeater will take one module address on the loop. Select a number between 01 and 159 (Note: The number of addresses available will be dependent on panel capability, check the panel documentation for information on this).

Insert the repeater into the base and rotate it clockwise until it locks into place.

***Figure 4: Battery Installation and Rotary Address Switches***



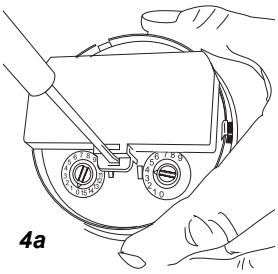

## PROGRAMMING

To load network parameters into the RF repeater, it is necessary to link the RF gateway and the RF repeater in a configuration operation. At commissioning time, with the RF network devices powered on, the RF gateway will connect and programme them with network information as necessary. The radio repeater then synchronises with its other associated devices as the RF mesh network is created by the gateway. (For further information, see the ***Radio Programming and Commissioning Manual*** - ref. D200-306-00.)

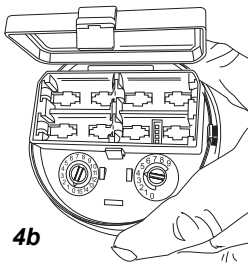
**NOTE: Do not run more than one interface at a time to commission devices in an area.**

## LED INDICATORS AND FAULT DESCRIPTION

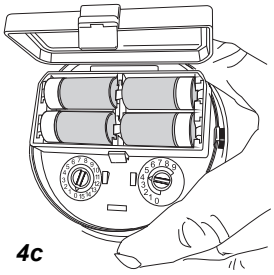
The radio gateway has two LED indicators that show the status of the device (see table below).



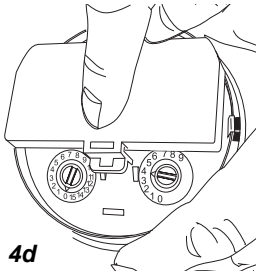
***4a***



***4b***



***4c***



***4d***

**Repeater Status LEDs**

| Repeater Status | LED State | Meaning |
|---|---|---|
| Power-on initialisation (no fault) | Long Green pulse | Device is un-commissioned (factory default) |
| | 3 Green blinks | Device is commissioned |
| Fault | Blink Amber every 1s. | Device has an internal trouble |
| Un-commissioned | Red/Green double-blink every 14s (or just Green when communicating). | Device is powered and is waiting to be programmed. |
| Sync | Green/Amber double-blink every 14s (or just Green when communicating). | Device is powered, programmed and trying to find/join the RF network. |
| Normal | Controlled by panel; can be set to Red ON, periodic blink Green or OFF. | RF communications is established; device is working properly. |
| Idle (low power mode) | Amber/Green double-blink every 14s | Commissioned RF network is in standby; used when the gateway is powered off. |

CE 0333 16

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**DOP-IRF006**

EN54-25: 2008 / AC: 2010 / AC: 2012
Components Using Radio Links

EN54-18: 2005 / AC: 2007 Input/Output Devices
for use in fire detection and fire alarm systems for buildings

**EU Declaration of Conformity**

Hereby, Life Safety Distribution GmbH declares that the radio equipment type M200F-RF is in compliance with directive 2014/53/EU

The full text of the EU DoC can be requested from:
HSFREDDoC@honeywell.com

Patents Pending