




# '008' SERIES RADIO RECEIVER DECODERS

- FM Remote Receiver Decoder
- High Security  Protocol
- 'Easy Learn' Tx Encoder Feature
- Momentary or Latching Relay Outputs
- Led Indication of Data Reception
- Enclosure Rated IP65
- Rx Decoder Can Learn up to 50 Tx Encoders
- 433 / 868 / 915 MHz Available
- 12 / 24V Power Supply
- Relay Rated 5A<sub>pk</sub> at 230Vac
- Requires No Radio Licence



## Description

The 008 range of Decoders are available as FM433, FM434.075 Narrow Band, 868 or 915MHz. When used with a matching Keeloq Transmitter encoder such as the '102 series, a complete Remote control system is generated.

Each Rx decoder incorporates an 'easy learn' feature enabling it to learn the Transmitter encoder signature code as it is transmitted. Each 008 decoder is able to learn up to 50 individual Transmitter encoders (memorised even if the power is removed).

Supplied in a tough ABS enclosure rated IP65, The 008 decoder requires connections to the power and output relays only (via screw terminals)

The relay outputs are each rated 1A @ 50Vdc and may be set to either momentary or latching by two links on the circuit board.

## Part Numbering

| Part Number  | Relay Outputs | Freq (MHz) | Optimum Range (m) | Description   | Compatible RFSL Encoders                                |
|--------------|---------------|------------|-------------------|---------------|---|
| 008-433QR1   | 4             | 433.92     | 200               | QM wideband   | 102C-433Q series<br>FM-103C-433 series<br>FM-107 Series |
| 008-433FR4   | 4             | 433.92     | 200               | FM wideband   | 102C-433F series  |
| 008C4-075FR1 | 4             | 434.75     | 400               | FM Narrowband | 102C-075F series<br>FM-103C-433,<br>FM-107 Series       |
| 008C4-915FR1 | 4             | 914.50     | 100               | FM Narrowband | 102C-915F series  |

\*\* Range stated is optimum, direct line of sight. In worst conditions this can be reduced by over 50%



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## Relay Operation Table

Each of the switches on the encoder maps directly to the relay outputs. (sw1 to rly1, sw2 to rly2 etc)

Relay 1 is rated 5A (peak) 2.5A continuous at 230Vac

Relay 2-4 are rated 2A at 12Vdc

| Link 1 (Lk1) | Link2 (Lk2) | Relay 1   | Relay 2   | Relay 3   | Relay 4   |
|--------------|-------------|-----------|-----------|-----------|-----------|
| Open         | Open        | Momentary | Momentary | Momentary | Momentary |
| Open         | Connected   | Momentary | Momentary | Latch     | Latch     |
| Connected    | Open        | Momentary | Latch     | Latch     | Latch     |
| Connected    | Connected   | Latch     | Latch     | Latch     | Latch     |

**Note :** In momentary mode the relay will operate for as long as the transmitter switch is held on.

## Learning a new Transmitter Encoder

1. Press the programming switch on the Rx decoder once (SW1)
2. The learn LED will illuminate
3. Press one of the switches on the Tx encoder once, learn LED on the Rx decoder will extinguish
4. Press one of the switches on the Tx encoder again, learn LED will flash
5. When the learn LED has stopped flashing this Tx encoder will now operate the system

## Erasing Transmitter Encoders form Memory

1. To completely erase all Tx encoders, press SW1 on the Rx decoder for 10 seconds.
2. The learn LED will turn off after the 10 seconds to indicate the Tx encoder(s) have been erased

## Technical Specifications

**Dimensions:** Length : 110mm (not including antenna), Width : 85mm, Height : 35mm

Storage Temperature: -10 to +70° Celsius. Operating Temperature: 0 to +55° Celsius.

| ELECTRICAL CHARACTERISTICS                            | MIN | TYPICAL   | MAX | DIMENSION |
|---|-----|-----------|-----|-----------|
| Supply Voltage for +12 v                              | 9   | 12.0      | 16  | V         |
| Supply Voltage for +24 v                              | 20  | 24.0      | 28  | V         |
| Supply Current :<br>Quiescent<br>all relays operating |     | 19<br>260 |     | mA        |
| Time delay from Tx on Switch to Rx Relay operation    |     |           | 100 | mS        |
| Time delay from Tx sw relax to Rx Relay release       |     |           | 300 | MS        |

Should you require further assistance, please call;

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