‘008’ SERIES RADIO RECEIVER DECODERS

- FM Remote Receiver Decoder
- High Security KEELOQ CODE HOPPING 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
- 315 / 433 / 868 / 915 MHz Available
- 12 / 24V Power Supply
- Relay Rated 12A_{pk} at 230Vac
- Requires No Radio Licence

Description

The 008 range of general purpose radio receiver decoders. When used with a matching Keeloq Transmitter encoder, 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
008-315FR1	4	315	150	FM wideband	102C-315F series
008-433FR4	4	433.92	200	FM wideband	102C-433F series
008-433QR1	4	433.92	200	QM wideband	102C-433Q series FM-103C-433 series FM-107 Series
008C4-075FR1	4	434.75	400	FM Narrowband	102C-075F series FM-103C-433, 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%

Relay Operation Table

Each of the switches on the encoder maps directly to the relay outputs. (sw1 ot rly1, sw2 to rly2 etc)
Relay 1 is rated 12A (peak) 5A continuous at 110 / 230Vac.
Relay 2-4 are rated 2A(peak) 1A continuous at 30Vdc/120Vac,

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 from 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

Case Dimensions: Length : 110mm (not including antenna), Width : 85mm, Height : 35mm
PCB Board Dimensions: Length: 90.5mm, Width: 74.5mm, Height: 22mm
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 : Quiescent all relays* operating		 19 260		 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

***The relay contacts in this unit are for functional use only and must not be used for isolation purposes**

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R F Solutions Ltd is a member of the Low Power Radio Association.