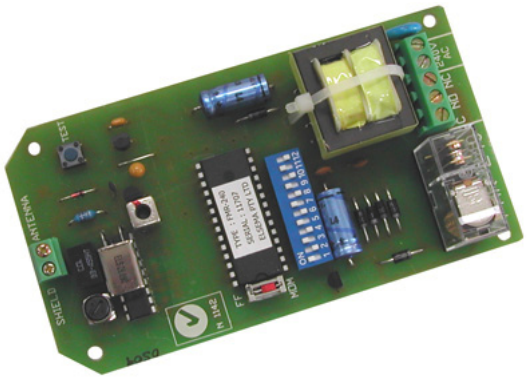
FMR-240

240V AC Receiver with 240V AC/DC 10A Relay Output



Features

- Crystal Controlled
- Comprising of Receiving, Decoding & Relay-output Sections
- LARGE SCALE INTEGRATED CIRCUIT (LSI) is employed in the decoder section

Applications

- Remote control of garage doors, gates, lights, alarms

Description

The FMR-240 is a crystal controlled single channel receiver, comprising of receiving, decoding and relay-output sections. A specially designed LARGE SCALE INTEGRATED CIRCUIT (LSI) is employed in the decoder section, which ensures operation at low supply voltage, highest reliability, associated with very low power drain. The receiver works on a digitally encoded 27 MHz frequency modulated (FM) signal. It may be used in applications such as the remote control of garage doors, gates, lights, alarms or in any other new or existing installations where the use of conventional wiring is difficult or impossible to accomplish.

If the code of the input signal (from a transmitter) matches the setting of the coding switch on the receiver (up to 4096 combinations), an output is obtained i.e. the relay operates. This relay provides a clean set of contacts for switching current up to 10 Amps on 240 Volts.
Connection to the receiver is via a five-way screw-type terminal block, with a separate two-way screw-type terminal block for the antenna.

Elsema's ANT27MHz series antennas will give a reliable control range of up to 200 metres, when used with Elsema's FMT-301, FMT-302 and FMT-304 transmitters.

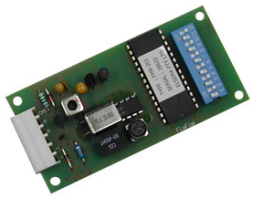
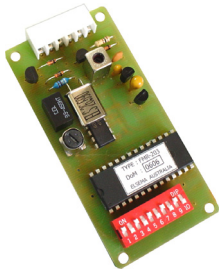
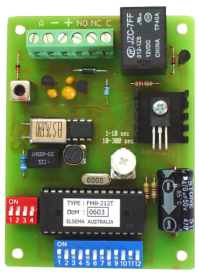
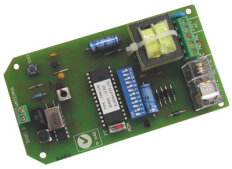
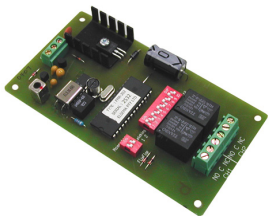
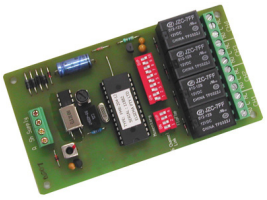
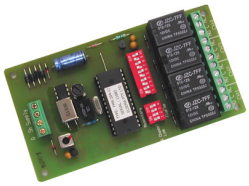
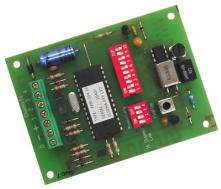
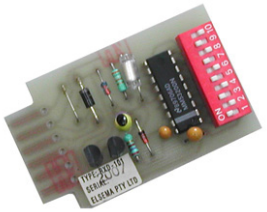
A push Button (designated as "TEST") is provided for relay output testing.

In the momentary mode (MOM) the relay is only activated while the correct signal is received. When changing the slide switch from "MOM" to "FF" (flip/flop mode) the output relay is toggled with every correct incoming signal. This enables the direct use for switching on/off lights etc. In flip/flop mode, the relay always energises at the initial "power-up".

If a "latching-on" output is required, for example receiver is used together with a "Panic Button", a wire link is to be fitted (See picture below). In such a case the relay can only be reset again by momentarily interrupting the supply. Another feature available is a "delayed-off" output. To facilitate it, a small time unit DU-3 is to be fitted into the four unused holes. When ordering receivers with this function, please specify length, which may be between 1 second to 60 minutes. In this mode the relay energises when a correct code is received or the "TEST" is pushed, and de-energises after the time unit.

Care must be taken, not to bring a receiver near strong magnetic fields, such as DC-Motors, speakers, magnets for reed switches, transformers etc. as it would magnetise the coils and may cause severe de-tuning.

Products in the Range

				
FMR-201 Single Channel Receiver with Open Collector Output	**FMR-203** 2-Channel PCB Strip Receiver	**FMR-212** Single Channel Receiver with Relay Output	**FMR-212T** Single Channel Receiver with Timer Controlled Relay Output	**FMR-240** Single Channel 240V Receiver with Relay Output
				
FMR-24002 2-Channel 240VAC Receiver with 2 Relay Outputs	**FMR-202** 2-Channel Receiver with 2 Relay Outputs	**FMR204-12** 4-Channel 12V Receiver with 4 Relay Outputs	**FMR204-24** 4-Channel 24V Receiver with 4 Relay Outputs	**FMR-204/16** 4/16 Channel Receiver with Open Collector Outputs
				
FMR-232R Computer Receiver with 2 Relay Outputs & Database Software	**FMR-100** Receiver for Multi-Channel System	**RXD-101** Decoder for Multi-Channel System		

Technical Data

Supply Voltage	240 Volts AC Mains
Current Consumption	14mA
Receiving Frequency	27.145MHz (Other frequencies available: 27.045, 27.195 & 27.455MHz. NB. 27.455MHz is available for Europe Only)
Type of Crystal Used	26.690MHz, 3rd overtone, 20pF, 30ppm at 0-50°C
IF Freq	455kHz
Selectivity	At least -40dB at ±10kHz
Sensitivity	Better than 1uV (for relay to switch on)
Type of demodulation	Narrow-bandwidth Frequency Modulation (FM)
Band Width	±2.5kHz
Decoding System	Onboard 12-way coding switch (4096 digital channels)
Output	Change over relay output Rated at 10A 240V AC & 10A 30VDC Approved for 240V AC
Relay Contacts	Common (C) Normally Close (NC) and Normally Open (NO)
Connections	Supply & Relay Contacts: 5-way screw type terminal block (Rated 240VAC) Antenna: 2-way screw type terminal block
Antenna	Elsema's ANT27MHz series antennas or piece of approximately 300 mm long wire for short range applications.
Dimensions	130 x 70 x 37mm
Weight	128g
Compatible Transmitters	All Elsema type FMT-... 27MHz series and KEY-3.. series

Manufactured by

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