

## FMR-240 240-VOLT AC RECEIVER WITH 240VAC/DC 10A RELAY OUTPUT

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 any other new or existing installations where the use of conventional wiring is difficult or impossible to accomplish.

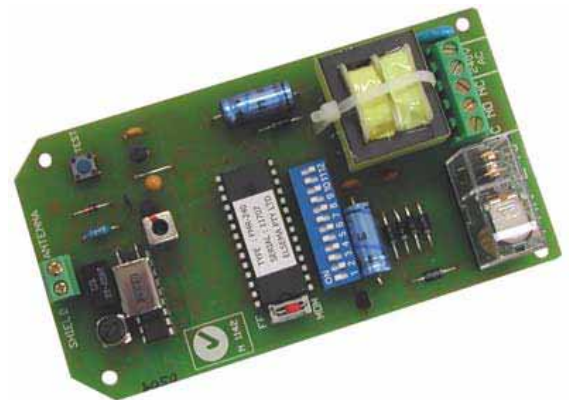
If the code of the input signal (from a transmitter) matches the setting of the coding switch on the receiver (up to 4096 combinations), an output is obtained i.e. the relay operates. This relay provides a clean set of contacts for switching current up to 10 Amps on 240 Volts.

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.

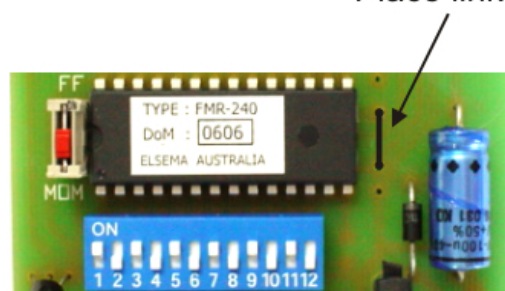
A push Button (designated as "TEST") is provided for relay output testing.

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.



Place link here



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 of 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.

## TECHNICAL DATA

SUPPLY VOLTAGE :	240 Volts AC Mains
CURRENT CONSUMPTION :	14mA, on 240V AC.
RECEIVING FREQUENCY :	27.145 MHz (Other frequencies available on 27.045, 27.195 and 27.455 MHz. The 27.455 frequency is not available for Australia).
TYPE OF CRYSTAL USED :	26.690 MHz, 3rd overtone, 20 pf, 30ppm at 0 to 50°C.
IF FREQUENCY :	455 kHz
SELECTIVITY :	At least -40 dB at + - 10 KHz.
SENSITIVITY :	Better than 1 $\mu$ V (For relay to switch on).
TYPE OF DEMODULATION :	Narrow-band-width Frequency Modulation (FM).
BAND WIDTH :	+ - 2.5 KHz
DECODING SYSTEM :	On board 12-way coding switch (4096 Digital Channels).
OUTPUT :	Change over relay output Rated at 10Amps 240V AC and 10Amps 30VDC Approved for 240V AC mains.
RELAY CONTACTS :	Common (C) Normally Close (NC) and Normally Open (NO)
<u>CONNECTIONS :</u>	
SUPPLY AND RELAY CONTACTS :	5-way screw type terminal block (Rated 240VAC)
ANTENNA :	2-way screw type terminal block.
ANTENNA :	50 ohms, 27 MHz CB-Antenna or piece of approximately 1 metre of wire.
DIMENSIONS :	130 X 70 X 37 mm
WEIGHT :	128 grams
USEABLE TRANSMITTERS :	All Elsema type FMT-... series.