

FMT-201

27MHz REMOTE CONTROL DIGITAL TRANSMITTER

The hand held transmitter, FMT-201 is part of a single channel remote control system. A few of its applications could be as:

- a calling device for the elderly or handicapped.
- a personal security alarm activator for home safety or cash carrying businesses e.g. banks, shops service stations, etc.
- a remote control switching device for garage doors, lights, gates, and automatic telephone dialer.

The transmitter is housed in an attractive, high impact resistant grey ABS plastic case.

Pressing the designated switch on the front positively activates the transmitter. Activation is confirmed by the sound of its built-in buzzer.



The battery service life approximates its shelf life. 9-Volt Carbon or Alkaline type batteries may be used. Depending on the battery type, shelf life ranges between 1 and 2 years. While the FMT-201 is not transmitting it uses no power. It will operate on as low a 4 Volts DC, however, in such cases the power and range will be reduced.

The highest possible standard of performance is achieved by employing a crystal-controlled, frequency modulated radio signal operating in the 27MHz band. This is enhanced by a specially dedicated custom-built integrated circuit. The latest "state of the art" surface-mount technology (SMD) provides maximum reliability.

A 12-way code switch (part of the digital encoding system) is used in place of the usual 8 or 10 way systems of other manufactures. This enables the user to select any one of the 4096 available codes and thus ensure highest security against false operations. The code can be readily changed at any time.

The operating distance (in conjunction with our FMR series receivers) will average between 100 and 180 metres. The operating distance may depend upon the structure of the building in which it's used. When operating near its range limit, some improvements may be obtained by pointing the transmitter towards the receiver. This is due to its slightly directional properties.

The housing of the controller has been designed to accept Elsema's leather pockets.

The transmitter is also available without its front membrane label. This enables the fitting of customer's own designed label.

TECHNICAL DATA ON FMT-201

POWER SOURCE :	9-Volt Battery Carbon : approximately 1-year shelf life. Alkaline: approximately 2-year shelf life.
SUPPLY VOLTAGE :	6 to 16 VDC (For constant RF-Output).
CURRENT CONSUMPTION :	Maximum 40mA at 8VDC supply (Only when transmitting).
OPERATING FREQUENCY:	27.145MHz (Other frequencies available on 27.045, 27.195 and 27.455 MHz).
CARRIER FREQUENCY TOLERANCE :	Crystal controlled 30 parts per million (0 to 50° C).
RADIATED R.F. POWER OUTPUT:	76.5 dB μ V/m at 3 metres.
ANTENNA :	Built in 50mm long ferrite rod.
TYPE OF EMISSION:	Narrow-band-width Frequency Modulation (FM).
FREQUENCY DEVIATION LIMITING :	1200 - 1600 Hz non-return to zero.
MODULATION FREQUENCY:	1 kHz (0.96 ms/bit) (15% tolerance).
SPURIOUS TRANSMISSION :	At least -40dB/carrier
NECESSARY BAND WIDTH :	+ - 2.5 kHz
DIGITAL CODING SYSTEM :	On board 12-way coding switch (4096 channels).
DIMENSION :	95 X 55 X 20 mm
WEIGHT :	72g excluding battery
USEABLE OPERATING RANGE :	up to 180 metres depending on building structure.

Due to its popularity, ELSEMA PTY. LTD stocks the Carbon Battery 6F22. The indicated shelf life is only approximated and can vary greatly depending on the freshness and type of brand used.

FMT-201 BLOCK DIAGRAM

