

FMT-401, FMT-402, FMT-404

High Powered, Handheld 27MHz Remote Control Digital Transmitter with LED

Features

- LED status indicator & low battery alert
- Works in the 27MHz band
- Maximum reliability provided by Surface-Mount technology
- High security by 12-way code switch enabling 4096 available coding
- Long operating distance
- Durable plastic cases
- Other versions also available



Application

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

Description

The LED indicator on the FMT-401 indicates the low battery (<6.5V) status alert by flashing at 1Hz. To activate the transmitter, simply press the button at the front. LED will be “on” when the transmitter is activated.

Working in the **27MHz band**, the FMT-401 achieves the highest possible standard of performance by employing a crystal-controlled, frequency modulated radio signal. The microcontroller with the latest **surface-mount technology** provides maximum reliability.

High security against false operations is achieved by 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 codes available. The code can be easily changed at any time.

Operating Distance

Range (m)	Receiver Antenna	Receiver Type
120	250mm wire	FMR-... series
450	1000mm wire	FMR-... series
>550	ANT27M & ANT27L	FMR-... series

(Range tests were done in an open area test site with line-of-sight operation and no interference. The receiver antenna wire was fixed vertically, away from any metal objects.)

Compatibility

All Elsema type FMR-... series

Other Products in the Range



FMT-402
2-channel



FMT-404
4-channel



FMT-401NL, FMT-402NL, FMT-404NL
No label – see page 4 for instructions

Accessories (available separately)



Stylish Leather Pouch (LP)



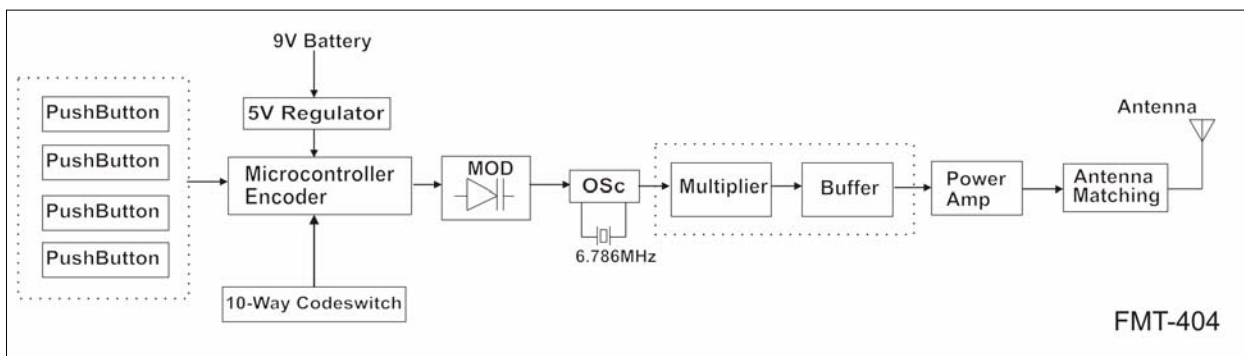
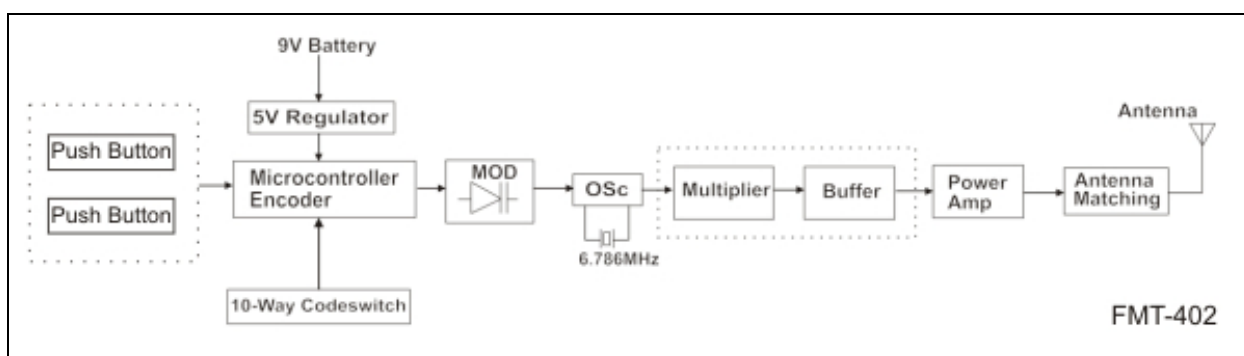
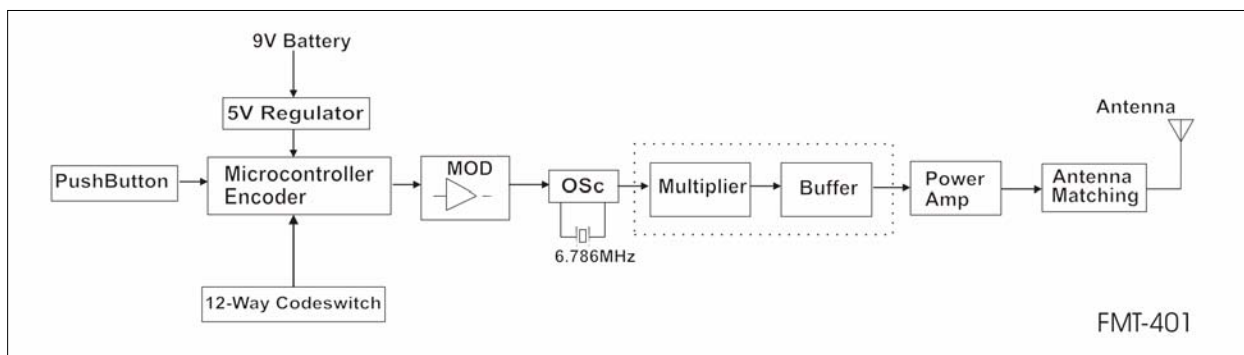
9V Alkaline Battery (6LR61)

Pictures are for illustration purpose only; final product may differ

Technical Data

Power Source	9V Alkaline Battery
Battery Life	1 year shelf life
Supply Voltage	8-10 VDC (for constant RF-output)
Current Consumption	115mA (typical) at 8VDC supply during transmission
Operating Frequency	27.145MHz (Other freq. available: 27.045, 27.195 & 27.455MHz. NB. 27.455 freq. is not available for Australia)
Carrier Freq. Tolerance	Crystal controlled 30 parts per million (0-50°C)
Radiated Field Strength	73dBµV/m at 3m (±3dB) or 6µW
Antenna	Built-in 50mm proprietary DILEC rod
Type of Emission	Narrow-bandwidth Frequency Modulation (5K00F1D)
Bits per second	926bps
Necessary Bandwidth	±5.0kHz
Digital Coding System	Onboard 12-way coding switch (4096 codes) (FMT-404: 10-way)
Dimension	96 x 55 x 20 mm
Weight	70g (excluding battery)
Useable Operating Range	450m (varies upon receiver antenna & location)
Compatible Receivers	All Elsema type FMR series

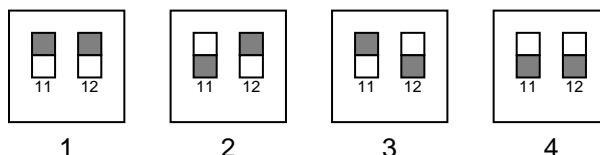
Block Diagram



Using 4 Different Receivers with FMT-404

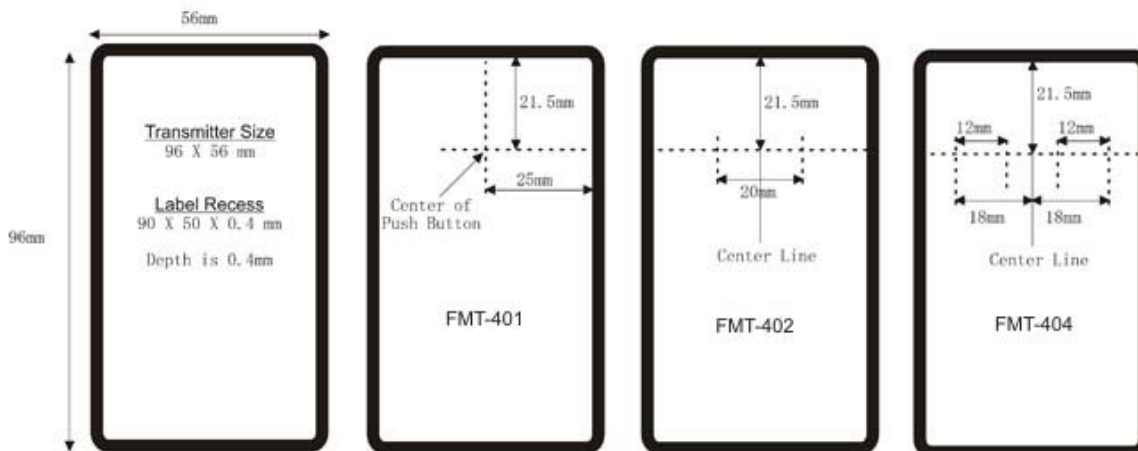
FMT-404 can be used with a 4 channel receiver, or 4 different single channel receiver eg. FMR-212. This can be setup as follows:

1. Make sure the 10 DIP switches of the transmitter board matches the first 10 DIP switches of the receiver.
2. The channel coding figure can be found at the back of the battery cover. The configuration of the button can be illustrated as below:



(Grey illustrates the position of the DIP switches)

Labels



Please note:

- Label size should be 0.5mm less than the above recess ie. 89.50 x 49.50 mm
- Rounding in the corners is 4.3mm (11/64") diameter
- On the 4-channel transmitter, channel 1 is at the extreme left followed by channel-2, etc.
- Recommended label material: *Polyester Autotex F200*

Customized labels can be made here:

Entech Integrated Manufacturing

Phone: (61) 8 8373 6116

Fax: (61) 8 8373 6018

G&M Screen Printing

Phone: (61) 2 9676 4560

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