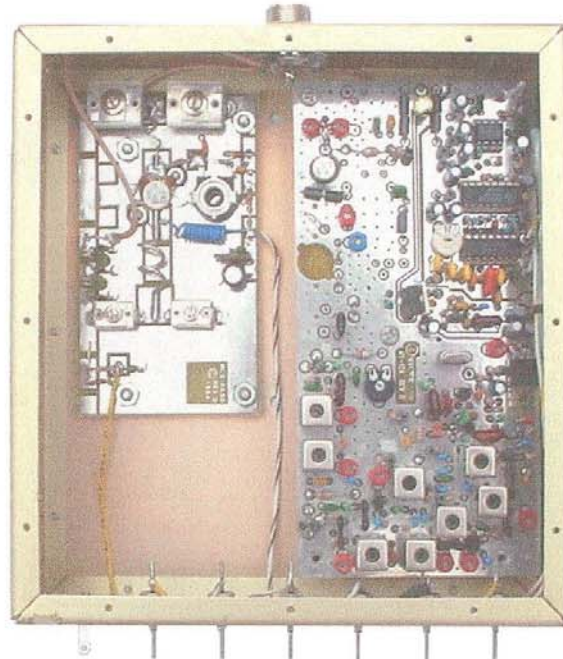


MT4 Features

- Low Noise MOS FET
- True FM
- 100% Duty Cycle
- FCC Type Approved (Commercial Version)
- Shielded Oscillator/Multiplier Stages
- Double Tuned Circuits
- Provisions for Internal CTCSS Encoder



MT4 Transmitter

The MT4 Designed with Quality in Mind

We designed the MT4 with two major objectives: *reliability and purity of signal.*

Unlike most transmitters, the MT4 uses a MOS FET for the final transistor. The MOS FET has much lower noise floor (typically 3 times lower) and is not subject to thermal runaway as bipolar transistors are. The MOS FET used in the MT4 is capable of withstanding a VSWR of up to 6:1 for short periods. The MT4 is supplied with a multiple section low pass filter to suppress harmonics. At 30-watts output, all spurious emissions are at least 90 db down and the second harmonic is at least 70 db down from the carrier.

Modulation in the MT4 is true FM. A variable gain cell amplifier is used for low distortion audio without clipping (less than 2%). Compression begins at 4.8 KHz and hard limiting will occur at a level of 5 KHz (factory set values). In hard limiting, the modulation is held constant for input levels changes greater than 30 db. Various audio and deviation configurations are available.

All stages are decoupled using ferrite beads and capacitors to enhance stability and prevent noise pick-up. The circuit board has copper ground planes on the top and bottom with multiple feed through points for excellent R.F. grounding.

An R.F. tight enclosure is provided with feed through capacitors for both audio and power supply lines. The R.F. output connector is Type N or UHF.

All units are factory tested and aligned to your specific frequency and burned in for 24 hours prior to shipping. A one-year warranty is our statement of commitment to quality.



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