

Product Description

800 MHz MT-4E Receiver



Description:

The 800 MHz MT-4E receiver (shown to the right) is a high performance FM receiver capable of P25 digital or analog operation in 12.5 KHz (narrowband) or 25 KHz (wideband) channels. The MT-4E receiver is available two versions supporting the frequency bands: 799-824 & 851-869 MHz

Daniels MT-4E receivers can be used in either repeater or base station configurations. When used in base station applications they will receive clear or secure (encrypted) P25 and analog voice radio communications. When used in repeater applications they will repeat clear or secure (encrypted) P25 and analog voice radio communications. (Secure mode operation is optional.) P25 operation is supported via a purchasable P25 firmware option.



A modular design allows each of the receiver's internal modules to be individually assembled and tested. This facilitates construction, tuning and maintenance as well as troubleshooting procedures. The receiver can be programmed with up to 2 banks of 16 channels each. P25 receiver options such as Frequency, CTCSS, NAC and analog / digital operation are software programmed with the Daniels Radio Service Software package.

Specifications:

Frequency Band	806-824, 851-869 MHz
Channel Spacing	12.5 and 25 KHz
Channel Selection	6.25 kHz increments
Number of RF Channels	32
Receiver Switching Range	Unlimited
Reference Sensitivity (12 dB SINAD)	≤ -116 dBm (0.35 μV)
Reference Sensitivity (5% BER)	≤ -116 dBm
Adjacent Channel Rejection (Selectivity)	≥ 45 dB Analog Narrowband TIA 603-C ≥ 75 dB Analog Wideband TIA 603-C ≥ 60 dB P25 Digital TIA 102.CAAA-B
Spurious Response Rejection	≥ 75 dB Analog TIA 603-C ≥ 90 dB P25 TIA 102.CAAA-B
Intermodulation Rejection	≥ 75 dB Analog TIA 603-C ≥ 80 dB P25 Digital TIA 102.CAAA-B
Hum & Noise Ratio	≥ 31 dB Analog Narrowband TIA 603-C ≥ 37 dB Analog Wideband TIA 603-C
L.O. Frequency Stability	+/- 0.1 ppm (-30°C to +60°C)
Modulation Type (Analog)	F3E (FM) or F3E (FM)
Modulation Type (Digital)	F1E (FM), F1D (FM), F1D
Audio Distortion (-30°C to +60°C)	≤ 5 %
Squelch Threshold	-123 to -105 dBm
Audio Output (600 Ω balanced)	+3.0 dBm de-emphasized or flat max.
Input Impedance	50 Ω (Type N Connector)
Operating Temperature	-30°C to +60°C
Operating Current (Unencrypted)	<150 mA maximum
Operating Current (Encrypted)	<180 mA maximum

For further information please contact Daniels Electronics at the address shown below.