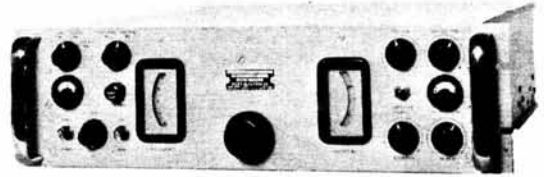


DUAL RANGE UHF RECEIVER

NEMS-CLARKE 2801

The 2801 is an extended coverage surveillance receiver which tunes the spectrum between 250 and 1,000mc in two bands. Its AM, FM capability and bandwidth of 200kc and 1mc permit its use for a wide variety of UHF data acquisition and monitoring applications. An added feature is the carrier operated relay, which may be used to actuate auxilliary recording devices at predetermined signal levels.



SPECIFICATIONS

Type Reception — AM, FM, CW
BAND "A"

Tuning Range — 250-500mc

Input Impedance — 50 ohms unbalanced, approximate

Noise Figure — 10db maximum

IF Rejection — 65db minimum

Image Rejection — 40db minimum

Oscillator Radiation at Antenna Terminal — 150 μ v maximum

First Local Oscillator — Tunable

Second Local Oscillator — Fixed tuned LC

Bandwidths — 1mc

S/N — FM — 12 μ v produces at least 10db s/n with 100kc deviation and 1kc modulation

Bandwidths — 200kc AM

S/N — AM — 8 μ v produces at least 10db s/n with 50% AM modulation

Video Response — 50cps to 500kc

FM

Output Stability — Varies less than 2db above 1 μ v input

Harmonic Distortion 200kc IF — 1.0% maximum at 500 μ v, 100kc deviation and 1kc modulation

Audio Output — 600 Ω or 150 Ω at approximately 0.16 watt

Audio Output Response — 300cps to 25kc

Carrier Operated Relay Output — 2 form C relay contacts for remote switching (contact ratings 26 watts)

Carrier Operated Relay Operation Level — Adjustable from 1 μ v with instantaneous pick up, and variable drop out delay from 3 to 10 seconds. Delay disabling switch provided for setting up.

Spectrum Display Unit — Provision for connecting a 21.4mc Nems-Clarke SDU

Meters — Signal strength meter; tuning meter

Tuning Range — 250-1000mc in two bands
BAND "B"

Tuning Range — 490-1000mc

Input Impedance — 50 ohms unbalanced, approximate

Noise Figure — 12db maximum

IF Rejection — 65db minimum

Image Rejection — 50db minimum

Oscillator Radiation at Antenna Terminal — 300 μ v maximum

Beat Frequency Oscillator — Tunable from front panel

Intermediate Frequency — 21.4mc

Bandwidths — 200kc FM

S/N — FM — 8 μ v produces at least 22db s/n with 100kc deviation and 1kc modulation

AM

Output Stability — Varies less than 7db for 40db variation of input

Harmonic Distortion 200kc IF — 3.0% maximum at 100 μ v input, 50% and 1kc modulation

Squelch — Adjustable from 1 μ v input, giving 35db minimum muting

RF Connectors — Type N

Audio and Carrier Operated Relay Connectors — DS00-12S Deutsch

Power Input — 115/230v AC, 50-60 cps

Power Consumption — 100 watts, approximate

Size — 17 \times 5 $\frac{1}{4}$ \times 17 inches (chassis width suitable for 19 inches rack mounting)

Weight — 34 pounds, approximate

Finish — Gray enamel, MIL-E-105090; Color #26329 Federal Standard 595

Price: \$3,000.00