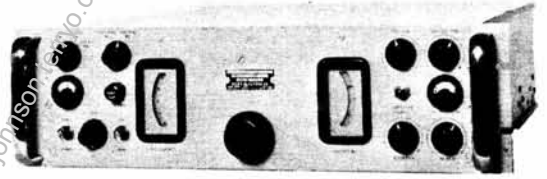


# DUAL RANGE UHF RECEIVER

## 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 $\mu$ v maximum

*First Local Oscillator* — Tunable

*Second Local Oscillator* — Fixed tuned LC

*Bandwidths* — 1mc

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

*Bandwidths* — 200kc AM

*S/N* — AM — 8 $\mu$ 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 $\mu$ v input

*Harmonic Distortion 200kc IF* — 1.0% maximum at 500 $\mu$ v, 100kc deviation and 1kc modulation

*Audio Output* — 600 $\Omega$  or 150 $\Omega$  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 $\mu$ 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 $\mu$ v maximum

*Beat Frequency Oscillator* — Tunable from front panel

*Intermediate Frequency* — 21.4mc

*Bandwidths* — 200kc FM

*S/N* — FM — 8 $\mu$ 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 $\mu$ v input, 50% and 1kc modulation

*Squelch* — Adjustable from 1 $\mu$ 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**