



Technical Data

TYPE DRO-50 COUNTER



The Type DRO-50 Counter has been designed as a companion unit for the Hammarlund SP-600-() receiver which tunes from 0.54 to 54 mc. The counter provides a direct digital display of the frequency to which the receiver is tuned by counting the local oscillator frequency and automatically subtracting the intermediate frequency in use.

The 6-digit Nixie display continuously presents the receiver frequency with no visible flicker. The information is updated every 20 milliseconds, but only the final count is displayed. These features allow the counter to display the receiver frequency without interruption as the receiver is tuned or switched to a different band.

The receiver-counter combination provides a means for very accurate readout (± 100 cps) of receiver tuning. This accurate readout allows precise logging of the frequency of an unknown signal. It also allows the receiver to be reliably pretuned when a transmission is expected on a specific frequency. In addition, the receiver can be tuned above or below a given frequency and then reset to within 100 cps of the original frequency. The readout is large, bright, and clear which tends to eliminate human error in reading the frequency dial on the receiver. Also, any drift of the receiver local oscillator will be immediately displayed.

The counter is extremely simple to operate; the only front-panel items are the off-on switch, a crystal oven lamp, and the display tubes. The DRO-50 has been designed using solid-state devices exclusively, except for the neon display tubes. The power consumption is therefore very low, averaging less than 23 watts.

A parts kit and modification instructions are included with the DRO-50 to modify the SP-600-() for use with the counter.

Counters of this design are also available to operate with other HF and VHF receivers having IF's such as 455 kc, 500 kc, 3.9 mc, and 21.4 mc.

We invite inquiries concerning the use of these counters with VHF and HF receivers.

COMMUNICATION ELECTRONICS INCORPORATED

6006 Executive Boulevard, Rockville, Maryland 20852 • Phone (301) 933-2800

SPECIFICATIONS

Input Frequency Range	0.995 mc to 57.995 mc, for use with SP-600-() Receiver. Additional input frequency ranges available
Input Impedance	95 ohms, nominal, type BNC connector
Display	Six-digit decimal readout to the nearest 100 cycles
Accuracy	± 100 cps (one count)
Stability	5 parts in 10^7 per week
Sampling	Display updated 50 times per second
Front-Panel Control	Power on-off switch
Warm-up Time	Less than 20 minutes from 0°C
Operating Temperature Range	0° to 60°C
Power Requirements	115/230 vac, 50-400 cps
Peak Power Consumption	Less than 35 watts (oven on)
Average Power Consumption	Less than 23 watts
Size	19-inches wide, 3.5-inches high, and 16.5-inches deep

PRICE: \$2,500.00

FOB Rockville, Maryland. Taxes extra where applicable. Price and specifications subject to change without notice.

6/1/65