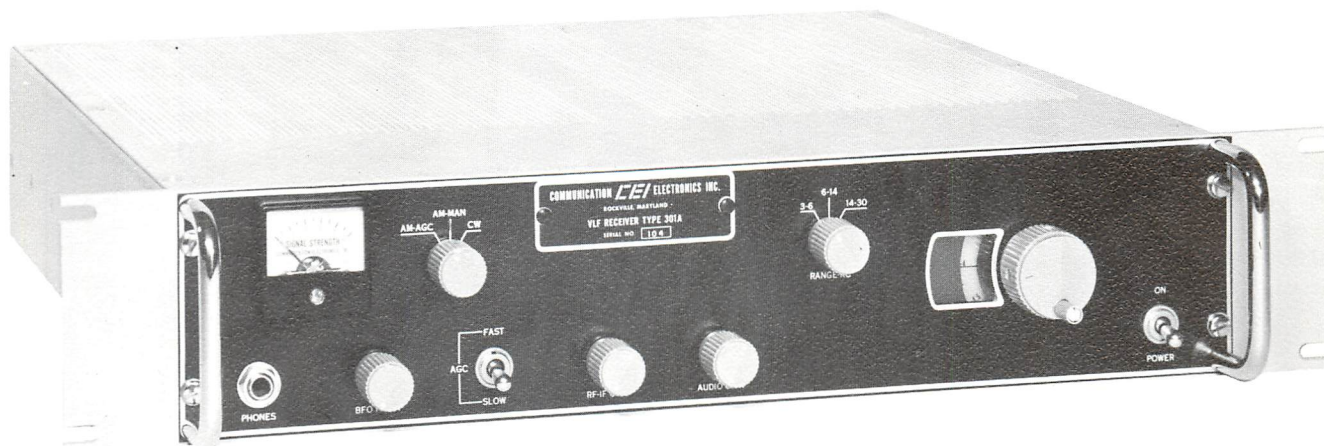




# Technical Data

## TYPES 301A AND 301A-1 RECEIVERS



### TYPE 301A RECEIVER

The CEI types 301A and 301A-1 Receivers are designed for AM and CW reception in the very low frequency range of 3 kc to 30 kc. These frequencies are tuned in three bands: 3-6 kc, 6-14 kc, and 14-30 kc. There are three modes of reception: AM-AGC, AM-MAN and CW. When the receivers are in the AM-AGC mode, the AGC response can be set for either FAST or SLOW by means of a front-panel switch. An internal BFO is activated when the CW mode is selected. The audio output from the receivers is available at a rear-apron terminal strip and at a front-panel PHONES jack. Since direct coupling is employed after the detector, a recorder can be connected to the audio output to record the dc variations in the detector output. An IF output is also provided on the rear apron.

Both receiver types feature an all solid-state design. This provides a unit with high reliability and low power requirements. The units are compact and lightweight requiring only 3.5 inches of vertical rack space and weighing less than 14 pounds. The type 301A is designed to operate from a 115 volt, 50-400 cps primary power source. The type 301A-1 can additionally operate from self-contained, rechargeable batteries.

### SPECIFICATIONS

Types of Reception . . . . .	AM and CW
Frequency Coverage . . . . .	3-30 kc in three bands:
	Band I: 3-6 kc
	Band II: 6-14 kc
	Band III: 14-30 kc
Input Impedance . . . . .	75Ω, unbalanced
Intermediate Frequency . . . . .	45 kc
IF Bandwidth . . . . .	200 cps
Sensitivity . . . . .	Approximately 0.1 μv input produces 15 db (s plus n)/n

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Image Rejection . . . . .	Better than 70 db
Audio Output . . . . .	Approximately 1 volt rms into a 2K-ohm load (for 50% modulation)
IF Output . . . . .	Approximately 100 mv into a 50 $\Omega$ load
Audio Response . . . . .	10 cps to 100 cps in AGC/Fast position 1 cps to 100 cps in AGC/Slow position 0 cps to 100 cps in AGC/Off position
Dial Accuracy . . . . .	$\pm 1\%$
Power Input . . . . .	115 vac, 50-400 cps
Power Consumption . . . . .	4 watts, approximately
Weight . . . . .	13.5 lbs, approximately
Over-all Dimensions . . . . .	19 inches wide x 3.5 inches high x 16.75 inches deep

PRICE: 301A - \$1,000.00  
301A-1 - \$1,200.00

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

4/2/65