

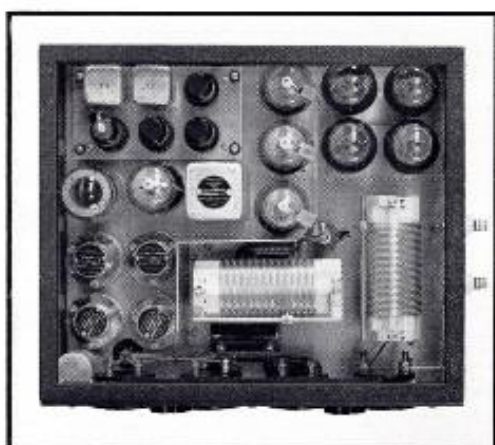
COLLINS 18H MEDIUM HIGH FREQUENCY RELAY BROADCAST TRANSMITTER



The 18H Transmitter has a power output of 50 watts and is capable of high fidelity transmission. It is designed to be extremely compact and very portable. Four crystal controlled frequencies in the medium high frequency range may be selected by means of panel controls, and the output circuit is arranged so that almost any type of temporary antenna may be used. A dynamotor operated from a 12 volt storage battery is furnished as standard equipment. Mounted in the transmitter as a sub-assembly is a high-gain, high-fidelity speech amplifier which permits any standard type of self-generating broadcast microphone to be used with-

out an auxiliary remote amplifier. Instruments are provided to facilitate adjustment and operation of the transmitter within broadcast standards. The instruments are (1) rectifier-type modulation percentage indicator, (2) milliammeter indicating plate current of r-f stages, (3) milliammeter indicating final amplifier grid current and (4) antenna ammeter. The mechanical construction of the transmitter is sufficiently rugged to withstand the hard service incident to transporting and setting up the equipment for special-events broadcasts and all components are arranged so that they are readily accessible for inspection and maintenance.

COLLINS 18H RELAY BROADCAST TRANSMITTER



SPECIFICATIONS

POWER OUTPUT: 50 watts.
FREQUENCY RANGE: 1500 kc. to 3000 kc.
FREQUENCY CHANGE METHOD: Any of four crystals are selected by means of a panel switch and continuous tuning is provided for all subsequent circuits.
R-F TUBES: 1—C-100E, 4—807.
A-F TUBES: 1—6J7, 3—6C5, 4—6L6G.
FREQUENCY CONTROL: Direct crystal control with 292, 294 or 1C Mounted Quartz Plates.

MODULATION SYSTEM: High level plate modulation of power amplifier.

A-F RESPONSE: Uniform within ± 2 db. from 50 to 8500 c.p.s.

A-F AMPLITUDE DISTORTION: Less than 5% r.m.s. total harmonics at any modulation level.

RESIDUAL NOISE LEVEL: More than 55 db. below 100% modulation.

A-F INPUT LEVEL: -75 db. at 50, 250 or 100,000 ohms. (6 mw. reference level.)

R-F OUTPUT IMPEDANCE: 13 to 600 ohms, ± 300 ohms max. Single terminal.

CABINET DIMENSIONS: 14" long x 12" deep x 12" high.

NET WEIGHT: Transmitter Unit 39 lbs.; Dynamotor Unit 38 lbs.

POWER SOURCE: Dynamotor input 11.5 volts, 45 amperes. Transmitter input 450 volts, 575 ma. 12 volts, 5.3 amperes.

Type 409H power supply can be furnished in place of dynamotor for a-c operation.

CODE WORD: ZUEMT.

APRIL, 1938

COLLINS RADIO COMPANY

Cedar Rapids, Iowa—New York, N. Y., 11 West 42nd St.

1938
11-12-38