



# RADIO

## SUPPLIES AND EQUIPMENT

Catalogue No. 22—1922-1923



Robertson-Cataract  
Electric Company  
Niagara, Elmwood & Mohawk  
Buffalo, New York

**G. E. 20-Watt V.T. Transmitter, Model ET-3619**

This radio telephone and telegraph transmitting outfit has been designed for use in conjunction with the Kenotron Rectifier unit described below. This transmitter, however, may be used with direct current where a motor generator set is available.

With the exception of the power supply everything necessary for a 20-watt transmitter is mounted on a sturdy panel and base made of heavy dielecto artistically engraved, as may be seen from the accompanying photograph. The 20 watt rate on this equipment is based on the same consideration as commercial wireless telephone transmitters, that is, four Model UV-202 5-watt Radiotrons are used as oscillators.

**Designed for Radiotron Vacuum Tubes**

The transmitter is built for operation on telephone, continuous wave (C.W.) telegraphy or interrupted

wave, 50 or 60 cycles A. C. supply. It utilizes four Model UV-216 Kenotron Rectifier Tubes. The unit contains suitable filter condensers and reactor, so that the rectified A. C. is smoothed out for satisfactory telephone transmission.

This unit also contains a combined plate and filament transformer for supplying power at the proper voltage for heating all the vacuum tube filaments and furnishing the necessary plate potential for the transmitter.

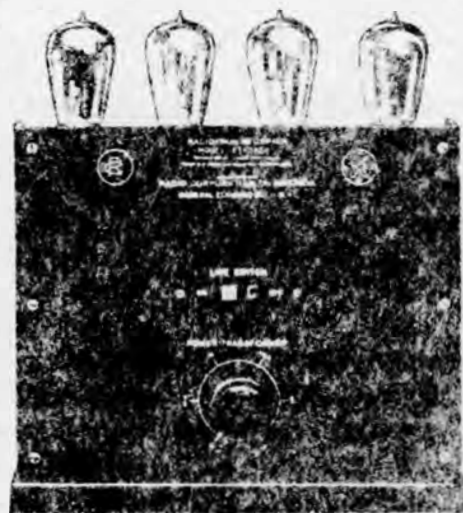
Substantial terminals are provided for connecting the above units in circuit. All these terminals are numbered to agree with the connections indicated in the diagrams which accompany the book of instructions supplied.

Terminals are also provided so that the units not supplied with this transmitter may also be connected in circuit, such as—

- (a) Magnetically controlled Send-Receive Switch;
- (b) Control button for the above switch; (c) Magnetically controlled "Break in" Key; (d) Chopper for obtaining I. C. W. transmission.



G. E. Transmitting Unit



G. E. Rectifier Unit

continuous wave (I. C. W.) telegraphy. The method of signalling is controlled by a rotary switch having three positions.

This transmitter requires the following supply for operation at full output: 160 amperes at 550 volts D. C. for the plate supply, and 10 amperes at 8 volts A. C. for the filament supply.

Model ET-3619 transmitter is entirely self-contained with the exception of the following units, which may be connected externally.

- (a) Send-receive Switch; (b) Telegraph Key; (c) Microphone Transmitter and Desk stand; (d) Motor Battery. (Not supplied as part of this transmitter)
- (e) Microphone Battery.

**Kenotron Rectifier Unit Model ET-3620**

This equipment has been designed to operate in connection with the above 20-watt transmitter, or as a separate unit for other transmitting circuits. It is designed to give full wave rectification from a 110-

Watt, 50 or 60 cycles A. C. supply. It utilizes four Model UV-216 Kenotron Rectifier Tubes. The unit contains suitable filter condensers and reactor, so that the rectified A. C. is smoothed out for satisfactory telephone transmission.

G. E. 20-Watt Telephone and Telegraph Transmitter, Model ET-3619 including Transmitting Panel, 4 Radiotrons UV-202, Telegraph Key UQ-509, Send-Receive Switch, W. E. Desk Stand with Microphone 284-W and 4 dry cell microphone battery..... **\$235.00**

G. E. Kenotron Rectifier Unit, Model ET-3620, including 4 Kenotrons UV-216..... **150.00**

Complete Transmitter and Rectifier as above..... **385.00**

Dimensions of each unit: Height, 14 in.; width, 12½ in.; Depth, 11½ in.

ity. Specially prepared carbon electrodes are used, with surfaces as hard and bright as a mirror. The



No. 156

carbon granules that we use are made from the finest grade of special transmitter carbon. The size, density

and hardness of these granules were determined only after exhaustive laboratory tests. Frosted aluminum diaphragms are used, each one subjected to micrometer measurements before passing our rigid inspection. The various parts that constitute the housing are heavily constructed in order that the complete assembly will be rigid and not respond to vibrations which would have a tendency to distort or neutralize the vibration of the diaphragm and carbon granules.

Our construction results in highest efficiency, excellent quality of articulation, and clear, distinct tones.

Frost-Radio Microphones are made in four standard types—

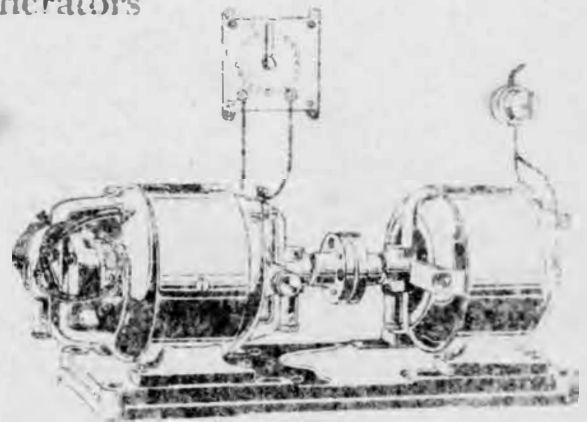
- No. 155—Frost-Radio Hand Microphone ..... \$5.00
- No. 156—Frost-Radio Desk Microphone ..... 5.75
- No. 157—Frost-Radio Pony Arm Microphone ..... 4.50
- No. 158—Frost-Radio Knuckle Arm Microphone 4.50

### Motor Generators

Where it is desired to employ motor generator to obtain the required plate excitation in Radiotron transmission, the Radio Corporation of America offers two Westinghouse units having the ratings of 100 and 250 watts respectively.

Motor Generator, Model ME, 100 watts, 500 volts, D. C., 110 volts, 60 cycle, single phase  
Motor, complete ..... \$35.00

Motor Generator, Model MH, 250 watts, 1000 volts D. C., 110 volts, 60 cycle, single phase  
Motor, complete ..... \$170.00

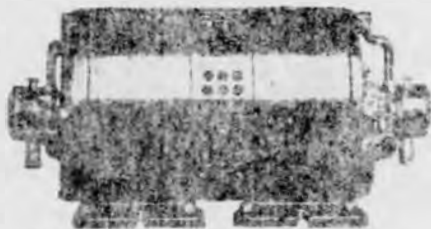


### Robbins & Myers Motors and Generators

The R. & M. line of equipment for service with wireless telephone outfits includes 500-volt and 1000-volt generator and motor generator sets of 100, 200 and 500 watts capacity, for use with vacuum tubes and

25, 50 and 60 cycle, single phase, alternator current circuits and on 32, 115 and 230-volt, direct current circuits.

Construction: The motor-generator is made of cast iron construction. The generator outfit is the two-



Motor Generator Union-Ring Type



50-1000 Volt Generator—Double Commutator Type

for other special services, also synchronous motors of 1/8 and 1/6 horse-power ratings for operating the synchronous type of rotary spark gap.

Motor-Generator Sets: R. & M. motor-generator sets are furnished for operation on 110 or 230 volt,

brush, union ring type, while the 1000-volt outfits are the non-brushing, sub-base type.

Ventilated enclosure towers are provided on the commutator end of all 1750 c. p. m. direct current machines.

