



## THE MOORHEAD TRANSMITTING TUBE



Retail Price  
\$7.50

A Moorhead  
Product

LICENSED TO BE USED ONLY ON TRANSMITTING APPARATUS  
MANUFACTURED BY DE FOREST RADIO TEL. & TEL. CO.

This tube has been developed as an undamped wave transmitter for the amateur. It is exhausted to the highest possible vacuum in order to operate at the high B battery potential necessary for transmitting purposes. From 150 to 600 volts may be used on the plate of the tube, and can be obtained from flashlight batteries or by vacuum tube rectified alternating current from a 110 volt, 60 cycle supply. The grid in this tube is made of molybdenum in accordance with British Government specifications. The Moorhead Transmitting Tube fills a long felt want in bringing the radio telephone and undamped wave transmitter to the amateur at a low price.

**LICENSED UNDER THE DE FOREST  
AUDION AND FLEMING PATENTS**



# THE MOORHEAD PERFECT VACUUM TUBE COMBINATION

As advertised in all radio periodicals

**THE MOORHEAD  
ELECTRON RELAY**

**THE MOORHEAD VT  
AMPLIFIER-OSCILLATOR**

PACIFIC RADIO SUPPLIES CO.

*Sole Distributors for*

**MOORHEAD LABORATORIES  
INC.**

638 MISSION ST. SAN FRANCISCO

*Reference—The American National Bank, S. F.*

Eastern Agents ATLANTIC RADIO SUPPLIES CO.

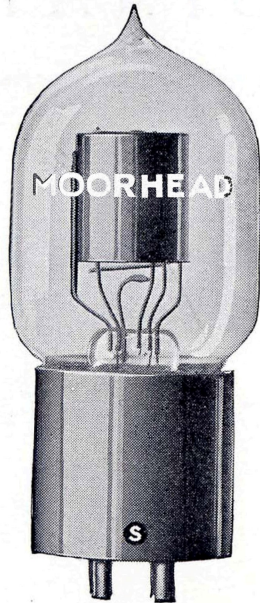
8 Kirk Place, Newark, New Jersey

Telephone Market 1575



It is well known to the Radio Art that no one tube can be both an amplifier and an efficient detector of spark signals. This is because the detector tube must be operated at a higher stage of ionization and consequently must not be exhausted to as great a vacuum. Only a *combination* of tubes can give complete efficiency and provide all necessary operating characteristics without the sacrifice or subordination of desirable features. In the new *Moorhead Electron Relay* and *Moorhead VT Amplifier-Oscillator* the Moorhead Laboratories offer amateurs and experimenters the one such perfect combination on the market to-day. Both types of tubes are rugged in construction and unqualifiedly guaranteed.

### THE MOORHEAD ELECTRON RELAY

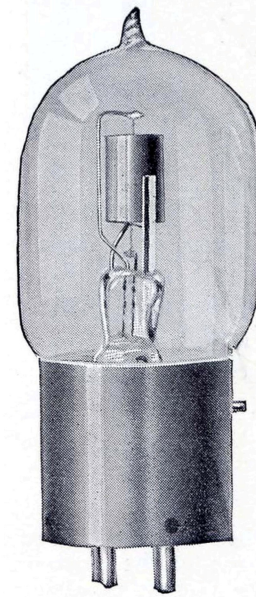


Retail Price  
Six Dollars

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Originated by the Moorhead Laboratories in 1915, the Moorhead Electron Relay was the first tubular vacuum valve ever manufactured. For the sake of convenience in operating, it is now supplied with the standard four-prong base, but retains the copper grid and aluminum plate of the old type relay. The Electron Relay has the familiar hissing point and low B battery potential requirement characteristic of the efficient detector tube.

### THE MOORHEAD VT AMPLIFIER-OSCILLATOR



Retail Price  
Seven Dollars

This is the Navy SE 1444 tube, designed for amplification and undamped wave reception by the regenerative method. It is highly exhausted to insure efficient performance as a generator and amplifier. It may be used singly for receiving continuous waves or in cascade as a two or more step amplifier. Recent Navy tests show that this tube has a higher amplification constant than any other tube known to the radio art.

**A combination of two or more VT Tubes as Amplifiers with an Electron Relay as the Initial Detector or Oscillator is the Ideal receiving combination for long distance amateur or long wave reception**