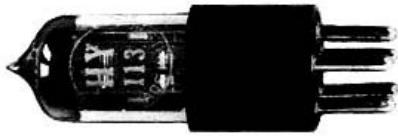




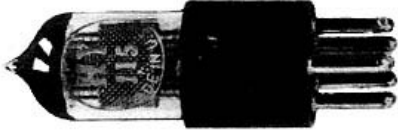
**BANTAM JR. SERIES**

Type HY113



(actual size)

Type HY115



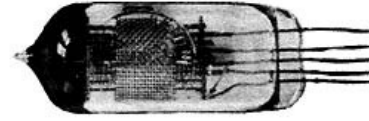
(actual size)

Type HY125



(actual size)

Available in three types offering many interesting applications such as: Microphone Preamplifiers, Wearable Hearing Aids, Miniature Compact Receivers, Remote Control Apparatus, Meteorological Instruments and Sensitive Measuring Devices.

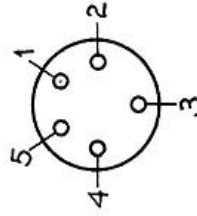


12345

**BASING CONNECTIONS**

As pictured at the left without base but equipped with  $1\frac{1}{2}$ " octal wafer base and connection leads and testing. Type number facing forward.

- 1 - Plate 3 - Filament+
- 2 - Grid 4 - Filament-
- 5 - Screen

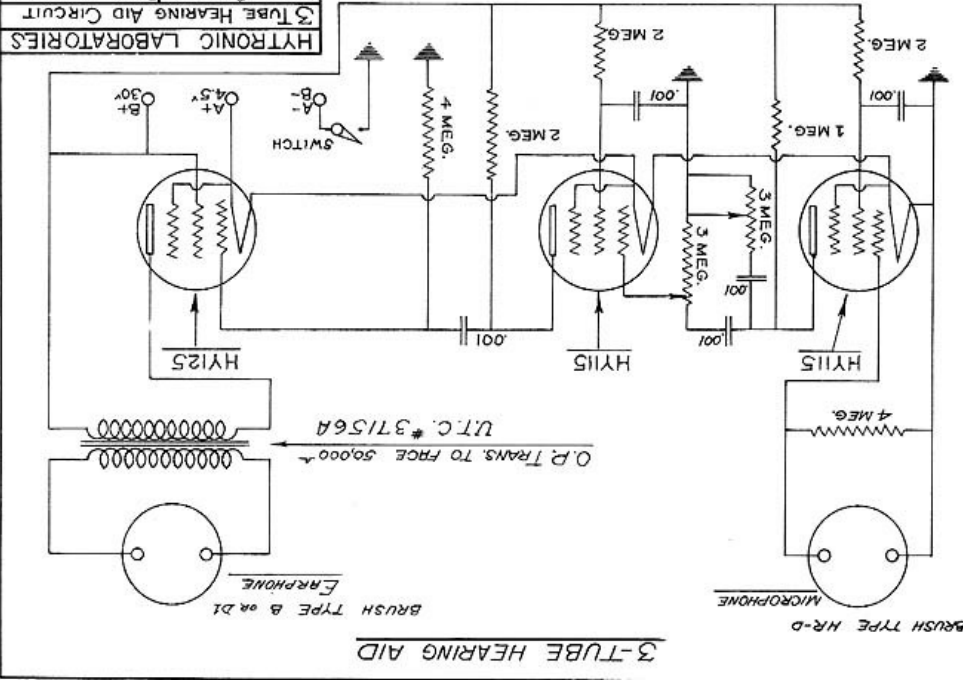


**BOTTOM VIEW**

- 1 - Filament+
- 2 - Plate
- 3 - Control Grid
- 4 - Screen Grid
- 5 - Filament-

Bantam Jr. Base pictured at right for use with Bantam Jr. midget socket.

HYTRONIC LABORATORIES  
3-TUBE HEARING AID CIRCUIT  
Drawing #HA1005 Date: -11-19-38  
Drawn by: A. M. FALCONE  
Designed by: F. F. SYLVESTER



DIVISION OF

HYTRON CORPORATION - SALEM, MASS., U.S.A.



Product of HYTRONIC LABORATORIES Salem, Mass.

TYPE HY113 TRIODE

Radio Frequency Oscillator, Amplifier, Detector or Audio Frequency Power Output Amplifier.

Filament Voltage	1.4 Volts
Filament Current	.070 Amp.
Plate Voltage	45. Volts
Grid Voltage	-4.5 Volts
Average Plate Current	0.4 ma.
Transconductance	250 umhos
Amplification Factor	6.5
Plate Resistance	25,000 ohms
Load Impedance	40,000 ohms
Power Output	6.5 milliwatts

TYPE HY115 PENTODE

High Gain, High Impedance, Inter-stage, Audio Frequency Amplifier.\*

Filament Voltage	1.4 Volts
Filament Current	.070 Amp.
Plate Voltage	45. Volts
Screen Voltage	22.5 Volts #
Grid Voltage	-1.5 Volts
Average Plate Current	0.03 ma.
Average Screen Current	0.08 ma.
Average Amplification Factor	300
Transconductance	58 umhos
Plate Resistance	5.2 megohms

TYPE HY125 PENTODE

Audio Frequency, Power Output, Amplifier.

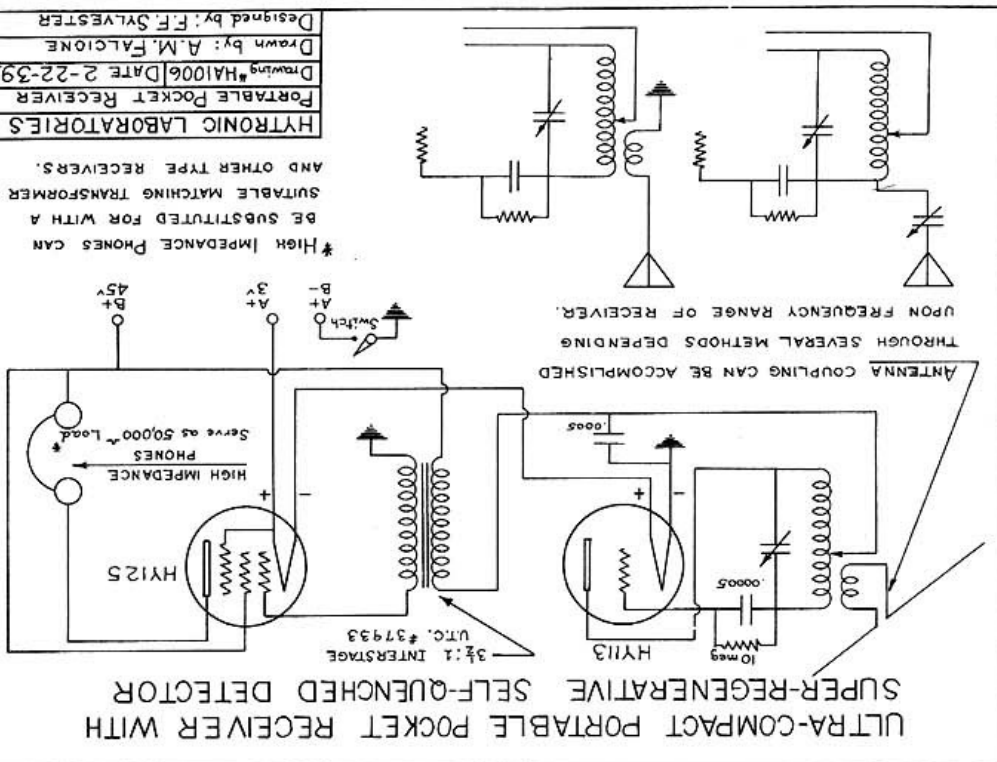
Filament Voltage	1.4 Volts
Filament Current	.070 Amp.
Plate Voltage	45. Volts
Screen Voltage	45. Volts
Grid Voltage	-3.0 Volts
Average Plate Current	.9 ma.
Average Screen Current	.2 ma.
Average Amplification Factor	255
Transconductance	310 umhos
Plate Resistance	825,000 ohms
Load Impedance	50,000 ohms
Power Output	11.5 milliwatts
Total Harmonic Distortion	5.5 per cent

\* May be operated either as a resistance-capacity coupled or transformer coupled Audio Voltage Amplifier.

# Tap on Battery supply or through suitable dropping resistor and by-pass condenser.

Maximum Overall Length	Diameter
With Base 2.19"	.700"
Without Base 1.65"	.590"

Average Weight of Tube	
With Base 9.54 grams	
Without Base 7.0 grams	



ULTRA-COMPACT PORTABLE SELF-QUENCHED DETECTOR

\* High Impedance Phones can be substituted for with a suitable matching transformer. AND OTHER TYPE RECEIVERS.

ANTENNA COUPLING CAN BE ACCOMPLISHED THROUGH SEVERAL METHODS DEPENDING UPON FREQUENCY RANGE OF RECEIVER.

3.5:1 INTERSTAGE  
UTC #31933

HIGH IMPEDANCE PHONES  
SERVES AS 50,000 OHM LOAD

HY125

HY113

10mfd .0005

3:1 INTERSTAGE

3.5:1 INTERSTAGE

UTC #31933

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UTC #31933

AVERAGE PLATE CHARACTERISTICS  
WITH  $E_c$  AS VARIABLE  
Type HY113

