

OPERATING AND SERVICE INSTRUCTIONS

PILOT RADIO CORPORATION

MODEL AA-902 AMPLIFIER

AC Operation Only

Pilot Radio's 40 years of engineering skill and renown as the "standard of excellence" bring you the finest in Sound Reproduction Equipment. This booklet has been prepared especially for you. Read it carefully. The few minutes spent reading it and following the installation instructions will bring you an ample reward - - - the finest Sound Reproduction.

SAVE THIS BOOKLET

IT WILL BE HELPFUL TO YOU - - - AND  
INDISPENSABLE TO YOUR SERVICEMAN.

PILOT

Radio Corporation

Long Island City 1, New York, U.S.A.

PILOTONE AMPLIFIER  
MODEL AA-902

ELECTRICAL SPECIFICATIONS

POWER OUTPUT:	10 watts maximum
FREQUENCY RESPONSE:	plus/minus 1 db 15 cps to 40kc at 10 watts
TOTAL HARMONIC DISTORTION:	less than 1% 30 cps to 15kc at 10 watts less than 0.1% 30 cps to 15kc at 1 watt
INTERMODULATION DISTORTION:	less than 2% at 10 watts (50 cps and 7000 cps: 4/1)
SENSITIVITY:	1 volt for 10 watts output
INPUT IMPEDANCE:	470,000 ohms
HUM AND NOISE LEVEL:	90 db below 10 watts
NEGATIVE FEEDBACK:	15 db
PHASE SHIFT:	plus/minus 15 degrees 20 to 20,000 cps
SPEAKER OUTPUTS:	4, 8, and 16 ohms
OUTPUT INTERNAL IMPEDANCE:	1 ohm at 8 ohm tap
POWER CONSUMPTION:	65 watts
TUBE COMPLEMENT:	1 - 6C4 voltage amplifier 1 - 12AU7 voltage amplifier and phase inverter 2 - 6V6GT power amplifier 1 - 5Y3GT rectifier
OVERALL DIMENSIONS:	14 1/8 x 4 5/8 x 5 1/4" high
SHIPPING WEIGHT:	13 pounds

INSTALLATION

Packed with the AA-902 Amplifier Chassis is a shielded audio input cable and an envelope containing four woodscrews and cup washers.

Four non-marring rubber feet on the bottom plate permit placing the amplifier on highly finished surfaces without damage. Since there are no operating controls the AA-902 AMPLIFIER may be mounted in a concealed location, if adequate ventilation is provided.

If desired, the chassis may be fastened to a wall or shelf by removing the four rubber feet from the bottom plate. Woodscrews can then be passed through the corner holes in the chassis and bottomplate. Shockmounting is not necessary.

To prevent the possibility of breakdown due to 5Y3 rectifier filament sag, the amplifier should not be mounted with its long side horizontal on a vertical wall. If it is absolutely necessary to so mount the amplifier, a 5V4-G tube should be plugged into the rectifier socket.

OUTPUT CONNECTIONS

Terminals for 4, 8 and 16 ohm speaker voice coils are provided on the AA-902 AMPLIFIER. Matching is non-critical because of the low internal output impedance due to negative feedback.

The loudspeaker may be located as far as 50 feet from the amplifier if the connecting wires are #18 or larger. One terminal of the speaker should always be connected to the "0" output terminal, and the other speaker terminal should then be connected to the appropriate amplifier output terminal.

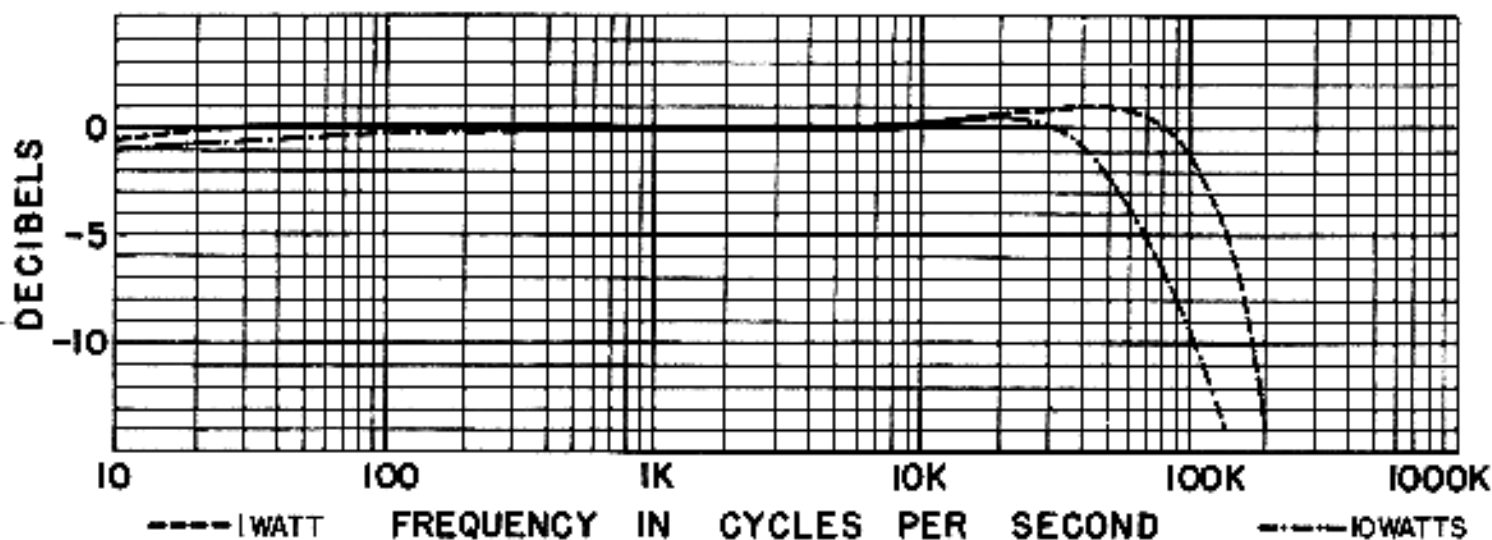
#### INPUT CONNECTIONS

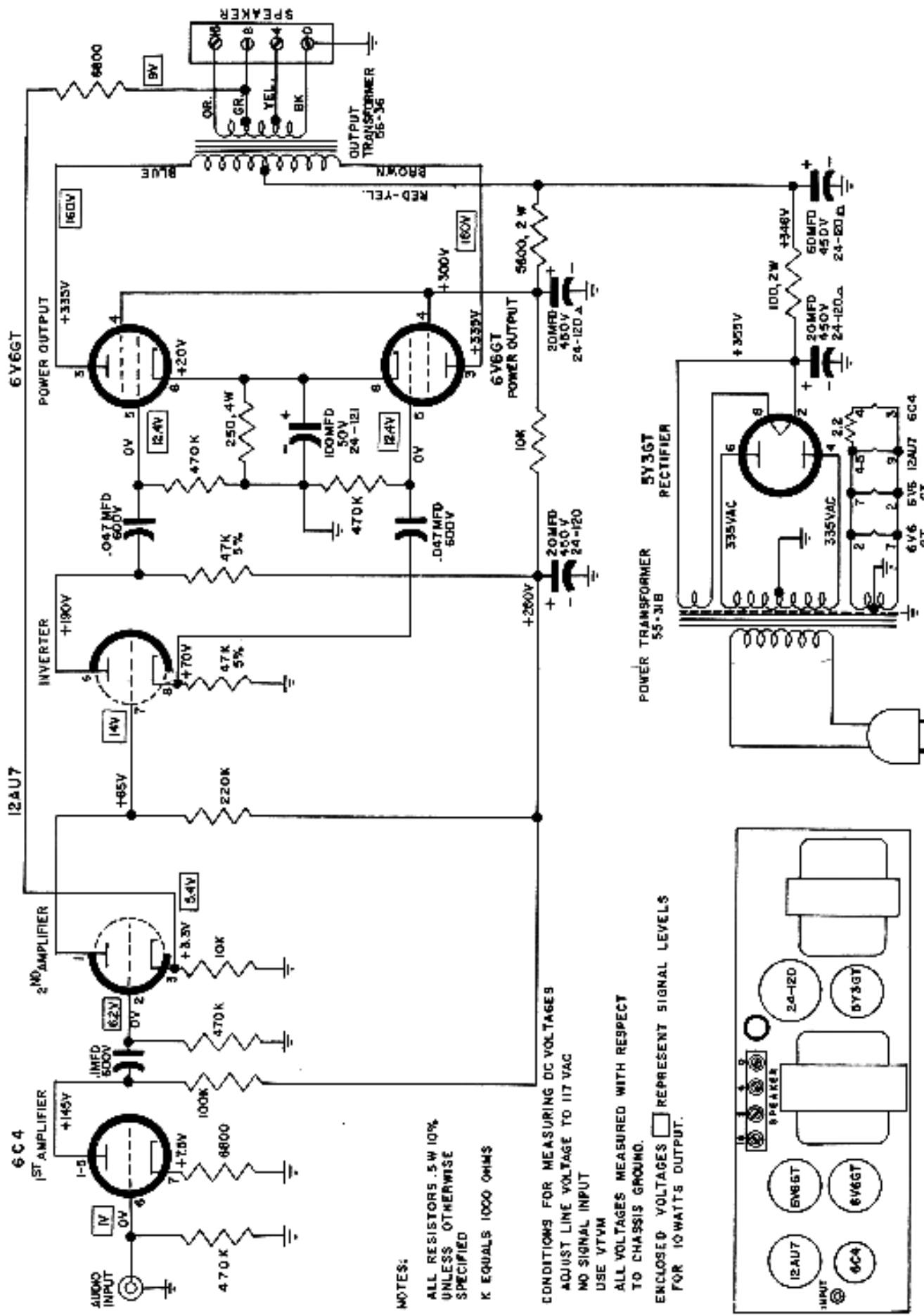
Connect the AUDIO INPUT jack on the AA-902 to the signal source by means of the 6 foot shielded cable supplied. The longest length of cable that may be used depends on the signal source. Its instruction leaflet usually will state the length of the longest cable and may be used without degrading the frequency response.

#### POWER CONNECTIONS

Since the power supply to the AA-902 will be normally controlled from some unit of associated equipment, no ON-OFF switch is supplied with the amplifier itself.

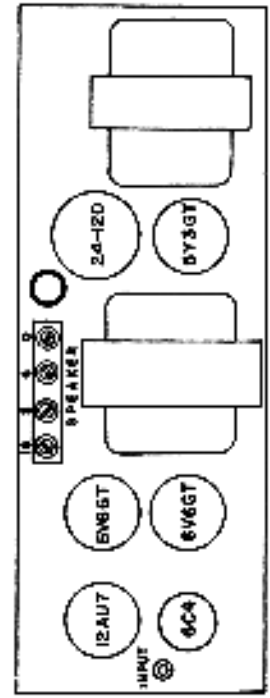
When used with Pilotuner AF-821-A the AA-902 line cord should be plugged into one of the two convenience receptacles on the rear of the tuner chassis. The Tuner ON-OFF SWITCH will then control both units.





NOTES:  
 ALL RESISTORS .5W 10%  
 UNLESS OTHERWISE  
 SPECIFIED  
 K EQUALS 1000 OHMS

CONDITIONS FOR MEASURING DC VOLTAGES  
 ADJUST LINE VOLTAGE TO 117 VAC  
 NO SIGNAL INPUT  
 USE VTVM  
 ALL VOLTAGES MEASURED WITH RESPECT  
 TO CHASSIS GROUND.  
 ENCLOSED VOLTAGES  $\square$  REPRESENT SIGNAL LEVELS  
 FOR 10 WATTS OUTPUT.



CHASSIS TOP VIEW

105-120V  
 60 CYCLE  
 65 WATTS

PILOT RADIO CORPORATION  
 LONG BEACH, CALIF. U. S. A.  
 SCHEMATIC DESIGN MODEL AA-902  
 AUDIO AMPLIFIER  
 Date of Issue: 12-15-57  
 Checked by: J. L. ...  
 Approved by: ...

CLASSIFICATION: AA 902  
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