

**AMBASSADOR****Model PA145**

**General Description :** Eight-valve (including rectifier) amplifier incorporating medium-wave superheterodyne receiver. Audio output 20 watts. Released April 1945.

**Power Supply :** A.C. mains, 200–250 volts.

**Intermediate Frequency :** 465 kc/s.

**Valves :** (V1) TH4I; (V2) VP4I; (V3) HL4I/DD (triode section as microphone pre-amplifier); (V4 and V5) Pen 44s (push-pull output); (V6) SP4I; (V7) AC/HL (phase reverser); (V8) UU5.

**Alignment Procedure :**

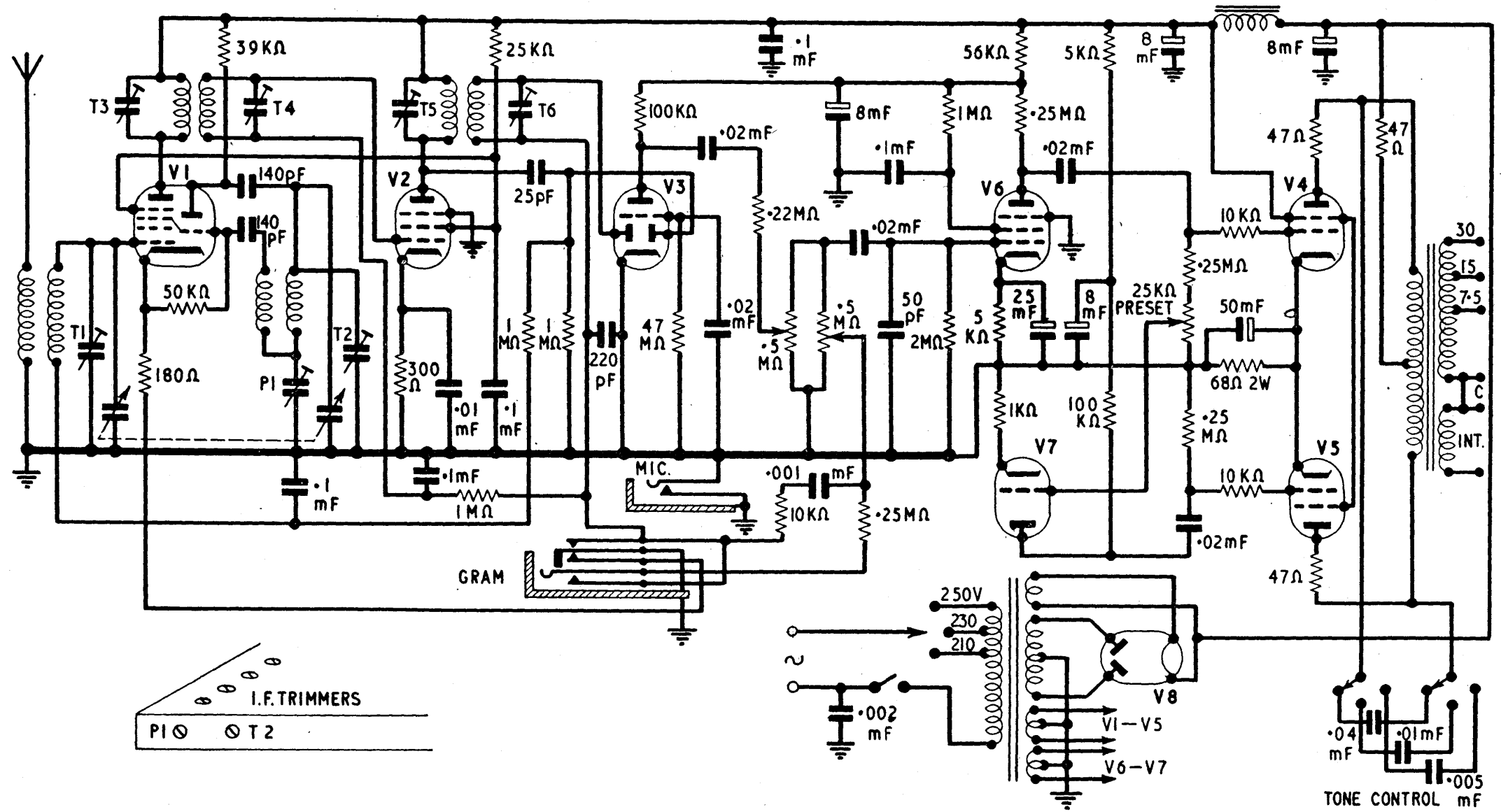
<i>Inject Signal via</i>	<i>Frequency</i>	<i>Set Receiver to</i>	<i>Adjust in Order Stated</i>
V1 grid	465 kc/s.	—	T6, T5, T4, T3
Aerial socket	600 kc/s.	500 m.	P1
„ „	1500 kc/s.	200 m.	T2, T1

**General Notes :** This amplifier consists of a 20-watt amplifier for radio, gram and microphone, with a separate pre-amplifier for microphone work and a superhet receiver for medium waves only.

Pen 44s are employed in the output stage, and a three-position tone control is provided for varying degrees of top cut. The output impedances available are 7.5, 15 and 30 ohms. A pentode A.F. amplifier and a triode phase reverser feed the output stage, the voltage fed to the phase reverser being adjustable by a pre-set 25k resistor. This should be adjusted for a balanced drive to the output stages.

A common fault is that the screen resistor of the SP4I may go O/C, causing a great reduction in available volume. Faders are provided for mic/gram, and mic/radio, and it will be noted that the gramophone jack mutes the radio section when it is inserted. If it is desired to use a low-impedance microphone, it will be necessary to connect a step-up transformer in circuit.

The receiver section employs a standard superhet circuit, but it must be noted that sensitivity is low, as the I.F.s are fairly low Q. The frequency changer cathode is open-circuited on gram: if trouble is experienced with this section, the gram socket should be checked. Alignment is done by trimmers and a variable oscillator padder.



CIRCUIT AND TRIMMER LAY-OUT DIAGRAMS—AMBASSADOR AMPLIFIER MODEL PA145