

PHILIPS

“ PERSONIC ”

Model LIG75T

General Description: Seven-transistor, pocket portable receiver. All components, together with batteries and loudspeaker, are mounted on a paxolin plate (conventionally wired), and sockets for the connection of high-impedance headphones are included.

Power Supply: 6 volts (four 1.5 volt cells, Type D14, U12, V0030 or V0028). No signal consumption 6-9 mA.

Waveband: M.W. 185-580 m. only.

Transistors: (Tr1) OC44; (Tr2) OC45; (Tr3) OC45; (Tr4) OC71 (Tr5) OC71; (Tr6, Tr7) Matched pair OC72; (X1) OA95.

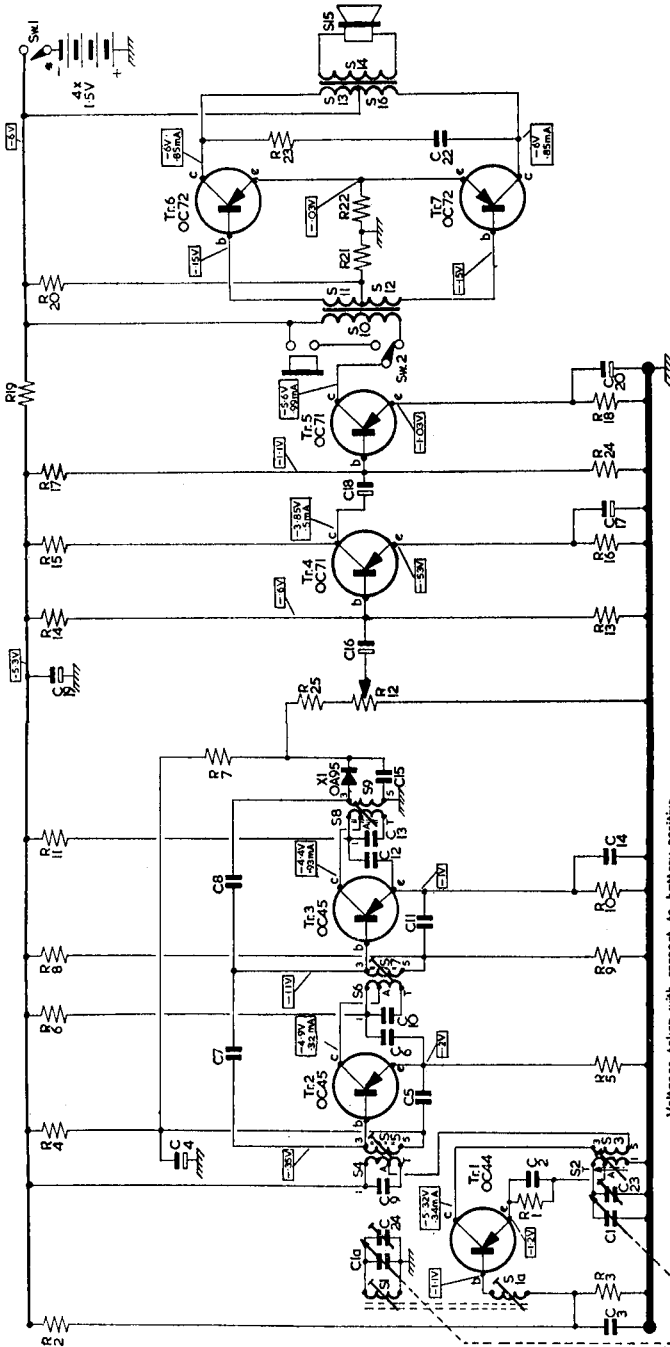
Alignment Procedure: Disconnect loudspeaker and connect output meter in parallel with a 5-ohm load resistor across leads. Output level of 50 mW. Trimming tool can be made by cutting slot in end of insulated No. 10 knitting needle.

I.F.: With gang fully open, inject a 470-kc/s. signal to base of Tr1 via a 0.047- μ F. capacitor and adjust S8, S6 and S4.

R.F.: Inject signals by winding two or three turns of wire round the “Ferroceptor” rod aerial and connecting the generator lead to one end of the wire. Turn gang to maximum. Inject a 512-kc/s. signal and adjust S2. Turn gang to minimum, inject a 1630-kc/s. signal and adjust C23. Repeat sequence until calibration is correct. Inject a 600-kc/s. signal, tune to signal and adjust S1/S1a. Inject a 1500-kc/s. signal, tune to signal and adjust C24. Repeat as necessary.

Removing Case: Remove rear panel (coin-slotted screws). Remove knurled screw in centre of scale, tuning knob, spring washer, felt washer and scale. Remove three countersunk fixing screws under scale and slide receiver out of case.

Servicing Notes: The usual precautions should be taken to prevent the application of excessive heat or voltages to the transistors.



Voltages taken with respect to battery positive using a 20,000ΩV voltmeter.

CIRCUIT DIAGRAM—PHILIPS "PERSONIC" MODEL LiG75T

- Capacitors.**
- C2 3,300 pF.
 - C3 47,000 pF. (10%)
 - C4 25 (6 v).
 - C5 47,000 pF. (10%)
 - C6 47,000 pF. (10%)
 - C7 54 pF. (4%)
 - C8 18 pF.
 - C9 91 pF.
 - C10 91 pF.
 - C11 47,000 pF. (10%)
 - C12 47,000 pF. (10%)
 - C13 91 pF.
 - C14 47,000 pF. (10%)
 - C15 4,700 pF.
 - C16 8 (6 v).
 - C17 8 (6 v).
 - C18 80 (6 v).
 - C19 8 (6 v).
 - C20 8 (6 v).
 - C22 47,000 pF. (10%)

- Resistors.**
- R1 33k (5%)
 - R2 12k (5%)
 - R3 33k (5%)
 - R4 33k (5%)
 - R5 590 (5%)
 - R6 15k
 - R7 15k (5%)
 - R8 47k (5%)
 - R9 47k (5%)
 - R10 1k (5%)
 - R11 1k (log.)
 - R12 33k
 - R13 33k
 - R14 47k
 - R15 1k (5%)
 - R16 12k
 - R17 12k
 - R18 20k
 - R19 24k
 - R20 10k
 - R21 10k
 - R22 10k
 - R23 270
 - R24 33k
 - R25 680

- R28 1k (5%)
- R29 220
- R30 30k (5%)
- R31 100 (5%)
- R32 10 (5%)
- R33 270
- R34 33k
- R35 680