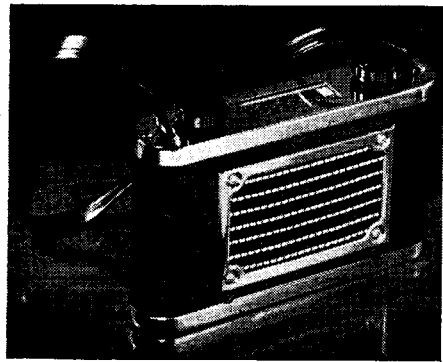


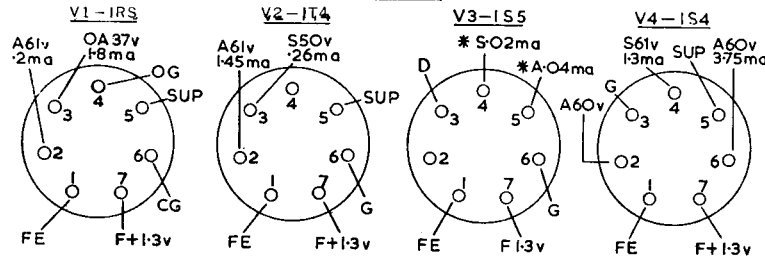
# ROMAC "PERSONAL"



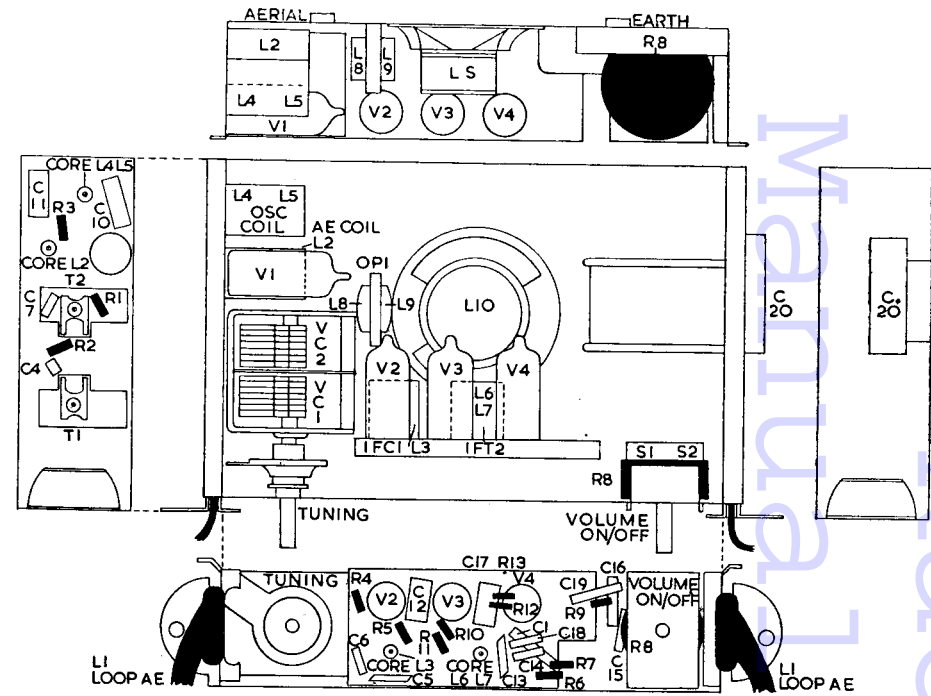
"Personal" receiver model 126 is a battery portable 9½ in. long, 6 in. deep and 2½ in. wide, with a shoulder-strap handle incorporating an aerial. Circuit is a four-valve superhet working from all-dry batteries and using miniature valves. Weight 4½ lb. Makers, Romac Radio Corporation, Ltd., The Hyde, Hendon, London, NW9.

## RESISTORS

R	Ohms	Watts	R	Ohms	Watts
1	100 k	½ W	8	1 m potentiometer	
2	220	½ W		(with D.P. switch)	
3	10 k	½ W	9	10 m	½ W
4	1 m	½ W	10	470 k	½ W
5	10 k	½ W	11	3.3 m	½ W
6	1 m	½ W	12	1 m	½ W
7	100 k	½ W	13	680	½ W



\* NOTE: DUE TO HIGH ANODE AND SCREEN RESISTORS VOLT READINGS IMPRACTICAL  
 ALL READINGS TAKEN ON MODEL 7 AVOMETER



## ROMAC — Continued

Circuit diagram, chassis diagrams and component tables are grouped together for quick reference on the preceding page.

**CIRCUIT.** A heptode frequency-changer with loop aerial grid circuit is followed by an IF amplifier, a combined diode and AF valve and a pentode output stage. Valves are 1.4V types, operated from a combined 67.5 and 1.5V battery.

**Aerial.** The loop aerial, L1, which is formed by five turns of plastic-covered wire, is used as a shoulder sling to carry the receiver. L1 is connected in series with L2, an iron-dust cored loading inductance. L1 and L2 are tuned by VC1 trimmed by T1.

V1 is a pentagrid frequency-changer and the signal developed across the aerial tuned circuit is fed to G3.

**Oscillator.** L4 is the oscillator grid coil tuned by VC2 and damped at the HF end by R2 in series with T2.

T2 is the oscillator trimmer and C10 the padding capacitor. The oscillator grid G1, is given leak-condenser bias by C7, R1. A neutralising condenser C4 is connected between the two gang sections.

L5, the oscillator anode coil, is series fed and taken to G2 and G4 of V1. Oscillator HT is derived from R3 decoupled by C11. L4 and L5 are coils of the permeability-tuned iron-dust core type.

L3, C5 tune the anode of V1 to the intermediate frequency, trimming being by adjustable iron-dust core. The signal is capacity fed by C6 to R4 in the grid of V2, the IF amplifier.

AVC is fed to grids of V1 and V2 via R6 decoupled by C1. Screen voltage for V2 is obtained from R5 decoupled by C12. L6, the primary of a permeability-tuned IF transformer, is in the anode of V2.

**Signal rectifier.** L7, C13 form the tuned secondary of IFT2 and feed the signal to the single diode of V3. R8 is volume control and diode load. R7, C14, C15 form a conventional IF filter. AVC is taken from top of R7 and is fed via R6 to grids of V1 and V2.

**AF amplifier.** C16 transfers the audio signal to grid of pentode section of V3. R9 is its grid resistor. C16 and R9 provide self-bias for V3.

Screen voltage is derived from R11 decoupled by C17. R10 is the anode load of V3.

**Output stage.** C18 feeds the amplified signal to grid of V4, a pentode output valve. R12 is its grid resistor. Automatic bias for V4 is developed across R13, which is in the HT negative return from chassis. Tone compensation is provided by

C19 connected between anode of V4 and chassis. L9, the secondary of the output transformer OP1, feeds L10, a low impedance speech coil, earthed on one side.

**High tension,** decoupled by C20, is supplied by a 67.5V battery of particularly small dimensions.

**Filaments** are supplied from a 1.5V cell of standard type. S1 and S2 operated by volume control spindle form a double pole on/off switch.

**Removal of chassis.** Remove base plate and batteries and two control knobs on top of case. Unscrew two bolts holding top of case and ease off top and slide it a few inches up carrying handle. Remove loudspeaker escutcheon (held in place by four bolts). Outer section of case may now be taken off chassis.

Remove eight brass screws on side of case opposite to loudspeaker. This screen can be removed completely if LT leads are unsoldered.

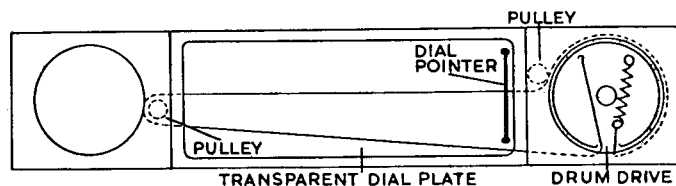
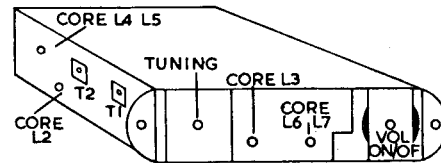
To expose underside of valve holders and sub-chassis wiring, remove two brass screws at each end of dial plate assembly and also two bolts fixing drive wheel to flange on tuning spindle. Lift off wheel and dial plate.

### TRIMMING INSTRUCTIONS

Apply signal as stated below	Tune Receiver to	Trim in Order stated for Max. Output
1) 465 kc/s to grid of V1 via .01 capacitor ..	200 metres	Cores of L6, L7, and L3
2) 1,450 kc/s to loop aerial via link coupling of 2 or 3 turns of wire wrapped round plastic covering of loop aerial	207 metres*	T2 and T1
3) 550 kc/s as above ..	545 metres*	Cores of L4, L5, and L2

Repeat (2) and (3) until dial is aligned correctly.

\* 207 and 545 metres are marked on dial by means of circular dots on the second line of station markings from the top.

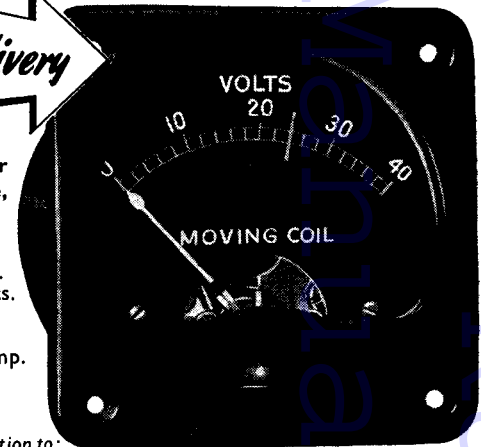


How the pointer drive cord is arranged on drum drive and pulleys

# PIFCO

Immediate delivery

METERS at PRICES BELOW PRESENT DAY COST



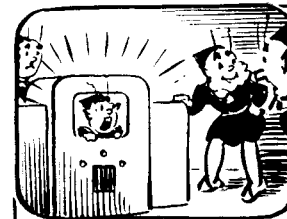
Panel-mounting moving-coil meter illustrated is in Black Bakelite case, 2 1/4" x 1 1/2". 0-40 volts.

Also available are :

- Voltmeter 2 1/4" x 1 1/2" 0-20 Volts.
- Voltmeter 2 1/8" x 1 1/2" 0-600 Volts.
- Milliammeter 3" x 1 1/4" 0-50 M.A.
- Milliammeter 1 1/2" x 1 3/8" 0-75 M.A.
- Ammeter 2 1/4" x 1 1/8" 50-0-50 Amp.
- Oil Pressure Gauge 2 1/4" x 2 1/2" 0-160 lbs.

Illustrated folder and trade prices on application to:

PIFCO LTD. · PIFCO HOUSE · WATLING ST. · MANCHESTER, 4



"Look who's there! Televising tonight! Why it's Ol demonstrating FLUXITE." From within came a cry "Televising? My eye! I've soldered myself in here tight!"

For all SOLDERING work you need FLUXITE—the paste flux—with which even dirty metals are soldered and "tinned." For the jointing of lead—without solder and the "running" of white metal bearings—without "tinning" the bearing. It is suitable for ALL METALS—excepting Aluminium—and can be used with safety on Electrical and other sensitive apparatus. With FLUXITE, joints can be "wiped" successfully that are impossible by any other method. OF ALL IRONMONGERS, in tins—10d., 1/6 & 3/- Used for over 40 years in Government works and by leading Engineers and Manufacturers. "The FLUXITE GUN" puts Fluxite where you want it by a simple pressure. Price 1/6 or filled 2/6.

## FLUXITE

SIMPLIFIES ALL SOLDERING

Write for Leaflets on Case-Hardening Steel and Tempering Tools with FLUXITE, also on "wiped" joints. Price 1d. each. FLUXITE LTD., (Dept. T.E.), Bermondsey St., London, S.E.1.

FOR ALL TIME  
STURDY  
REWINDS  
SATISFACTION

Send your rewinds to Sturdy. All makes Radio Mains Transformers, Field Coils, etc. First-class work with quick delivery and fully guaranteed.

STURDY ELECTRIC CO., LTD.  
DIPTON Tel.: DIPTON 221 NEWCASTLE-ON-TYNE