

BUSH SERVICE INFORMATION

MODEL VTR330 RADIO RECEIVER

SPECIFICATION

GENERAL

Model VTR330 is a battery-operated portable radio receiver designed for reception of the long, medium and VHF wavebands. The receiver incorporates 10 transistors and 4 crystal diodes and is fitted with an internal ferrite rod aerial and a car type aerial socket for the AM wavebands. A telescopic rod aerial is provided for the VHF waveband and a socket is fitted for using an earpiece or external loudspeaker.

CABINET

Presentation

Two piece moulded plastic cabinet covered with grained black plastic material. The tuning scale, black with white/green lettering, is enclosed by a clear plastic convex scale cover with a chrome escutcheon. The volume, tone and tuning controls are edge operated and project through the scale escutcheon. Three rectangular push button switches are mounted adjacent to the tuning control and select the three wavebands. A rigid carrying handle, finished in bright anodised aluminium, is fitted and is pivoted on the cabinet sides. The VHF aerial is mounted at the rear of the cabinet and when not in use is secured in a horizontal position by means of a plastic clip.

Dimensions

Height : 165 mm (6.5 in.)
Width : 255mm (10 in.)
Depth : 87mm (3.42 in.)
Weight: 1.01 kg (2.25 lb.)

CONTROL L to R

Volume and On/Off switch; Tone; 3 push buttons for LW, MW, and VHF; Tuning.

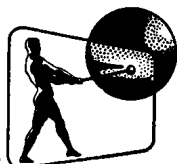
WAVEBANDS

LW Band —1070 to 1900 (2800 to 158 kHz)
MW Band—187 to 570 metres (1605 to 525 kHz)
VHF Band—87.5 to 100 MHz

BATTERY

9 volt Ever-Ready PP9 or equivalent.

THE SERVICE DEPARTMENT



RANK RADIO INTERNATIONAL

DRAYTON ROAD · BOREHAM WOOD · HERTFORDSHIRE · ENGLAND

Telephone: 01-953 6151 · Telex: 262741 · Cables: Rankboom Boreham Wood

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BATTERY CONSUMPTION

20-24mA quiescent.

INTERMEDIATE FREQUENCIES

AM—470 kHz \pm 3 kHz.
FM—10.7 MHz \pm 0.1 MHz.

AUDIO OUTPUT

1 watt at 1000 Hz for 10% T.H.D. sinewave rating.

LOUDSPEAKER

152 x 102mm (6 x 4 in.) elliptical. Flux 800MT (8000 lines per sq. cm.). Impedance 8 ohms.

TRANSISTORS AND DIODES

VT1	BF195	R.F. amplifier (FM)
VT2	BF197	Mixer oscillator (AM)
VT3	BF195	Mixer oscillator (FM)
VT4	BF197	I.F. amplifier (AM/FM)
VT5	BF197	I.F. amplifier (FM)
VT6	BF197	I.F. amplifier (AM/FM)
VT7	AC127	Audio amplifier
VT8	AC128	Driver stage
VT9	AC128	Complementary pair, output stage
VT10	AC127	
D1	BA154	Limiter (FM)
D2	AA119	Detector (AM)
D3	AA119	Detector (FM)
D4	AA119	

AUTOMATIC GAIN CONTROL

One controlled stage on all bands.

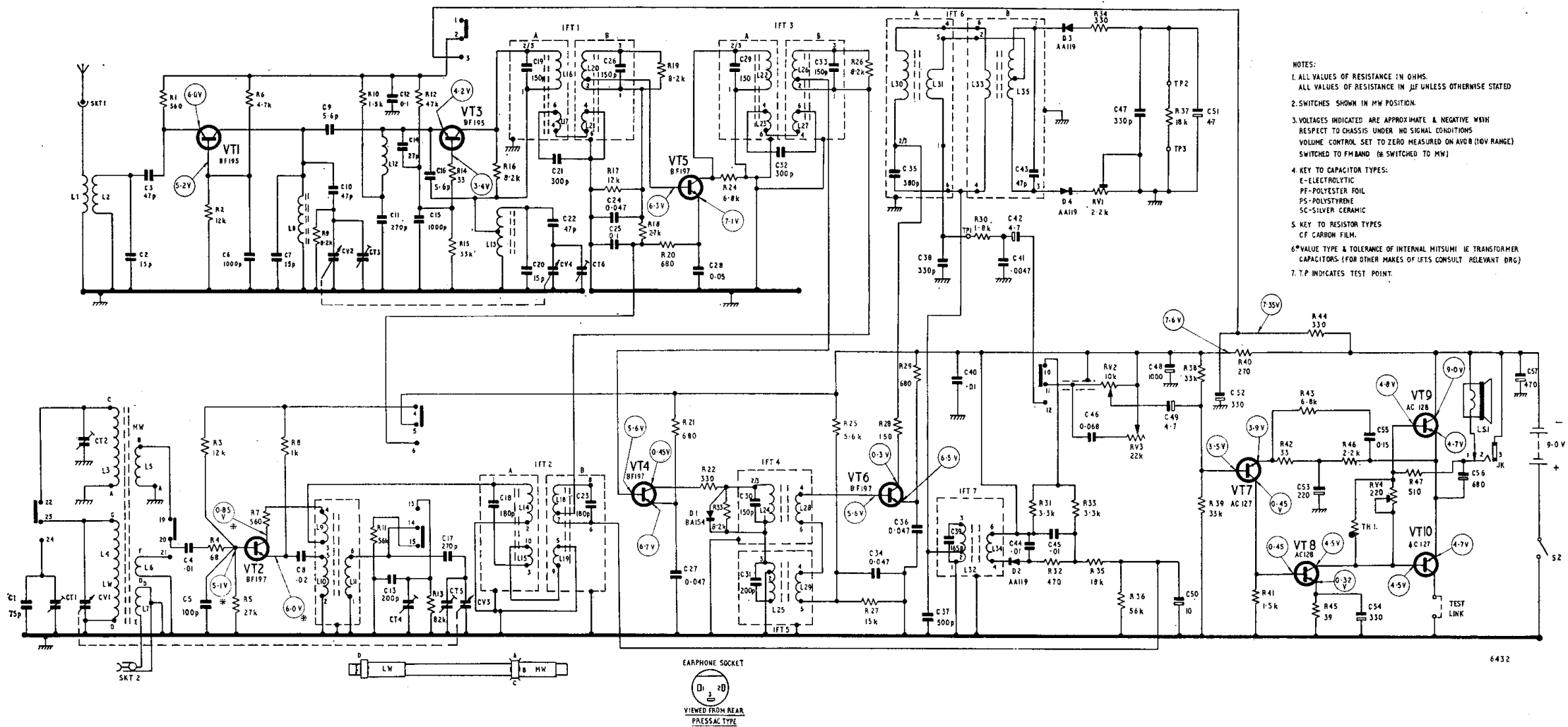
EARPIECE SOCKET

The output from the earpiece socket may be used to feed the following items:—

Earpiece, impedance between 500 and 1000 ohms.

External speaker, impedance not less than 8 ohms.

Tape Recorder, via correctly terminated lead of approximately 8 ohms.



- NOTES:
1. ALL VALUES OF RESISTANCE IN OHMS.
ALL VALUES OF RESISTANCE IN μ F UNLESS OTHERWISE STATED
 2. SWITCHES SHOWN IN MW POSITION.
 3. VOLTAGES INDICATED ARE APPROXIMATE & NEGATIVE WITH RESPECT TO CHASSIS UNDER NO SIGNAL CONDITIONS
VOLUME CONTROL SET TO ZERO MEASURED ON AV0B (10V RANGE) SWITCHED TO FMBAND (IN SWITCHED TO MW)
 4. KEY TO CAPACITOR TYPES:
E-ELECTROLYTIC
PF-POLYESTER FOIL
PS-POLYSTYRENE
SC-SILVER CERAMIC
 5. KEY TO RESISTOR TYPES
CF CARBON FILM.
 6. *VALUE TYPE & TOLERANCE OF INTERNAL MITSUBISHI IFT TRANSFORMER CAPACITORS. (FOR OTHER MAKES OF IFTS CONSULT RELEVANT DRG)
 7. T.P. INDICATES TEST POINT.

VTR330 Circuit diagram