



Type 53/1 Country of origin: England

DATA SUMMARY

Organisation: SOE
Design/Manufacturer: Unknown
Year of Introduction: 1945.
Purpose: Miniature receiver for resistance groups.
Circuit features: RF stage, regenerative detector, AF.
Frequency coverage: 3-12MHz in two ranges: 3-6MHz and 6-12MHz. (Dial calibrated in MHz).
AF Output: High impedance hearing-aid type crystal earphones; 300mV over 80kΩ.
Performance: Sensitivity 5uV.
Valves: 9001 (3x); rectifier 3A5.
Power Supply: AC mains 100-140V and 200-240V.
Consumption: HT 100V at 4mA; LT 6.3V at 0.45A.
Size (cm) and Weight (kg):

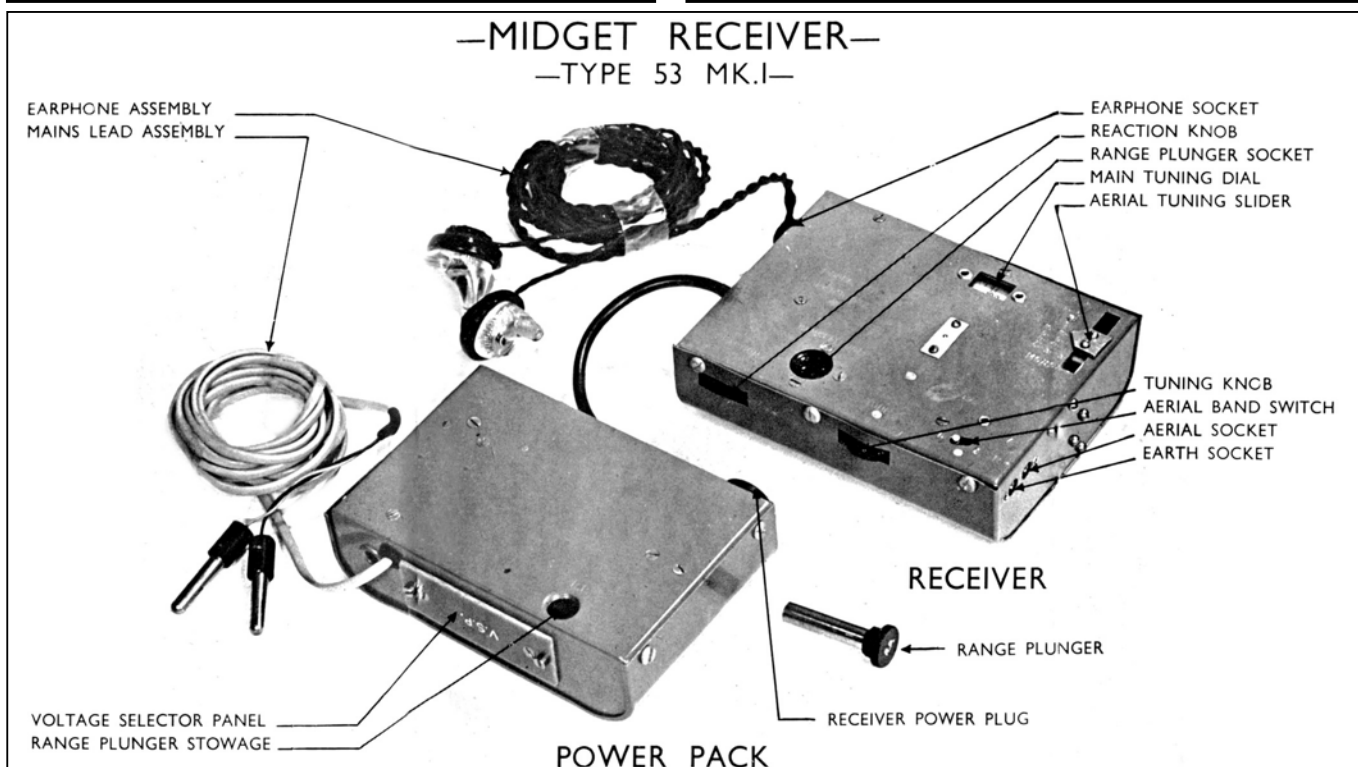
	Height	length	width	weight
Type 53/1 receiver	4	9	12	0.4
Mains power unit	4	8	12	0.6

This supplement chapter is a follow up and should be read in conjunction with the Type 53/1 section in the 'Great Britain' chapter of WftW Volume 4.

Remarks

Type 53/1, also known as Type 53 Mk.I and 'Midget Receiver', was a miniature radio receiver developed for SOE in late WW2. It comprised a separate receiver and AC mains power supply unit, believed to be produced as an easy to conceal alternative to the MCR 1 receiver which was normally powered by difficult to obtain replacement batteries. The Type 53/1 resembled the battery powered Type 31/1 ('Sweetheart' see Chapter 250) which was intended for general (cont. next page)

Accessories: Pair of miniature crystal earphones, 6m aerial and 2m earth wire, lamp socket adapter for bayonet cap or Continental Edison screw socket, two brass pins for conversion of mains plug to English or continental type wall sockets (all contained in a linen bag), and a folded user instruction booklet.



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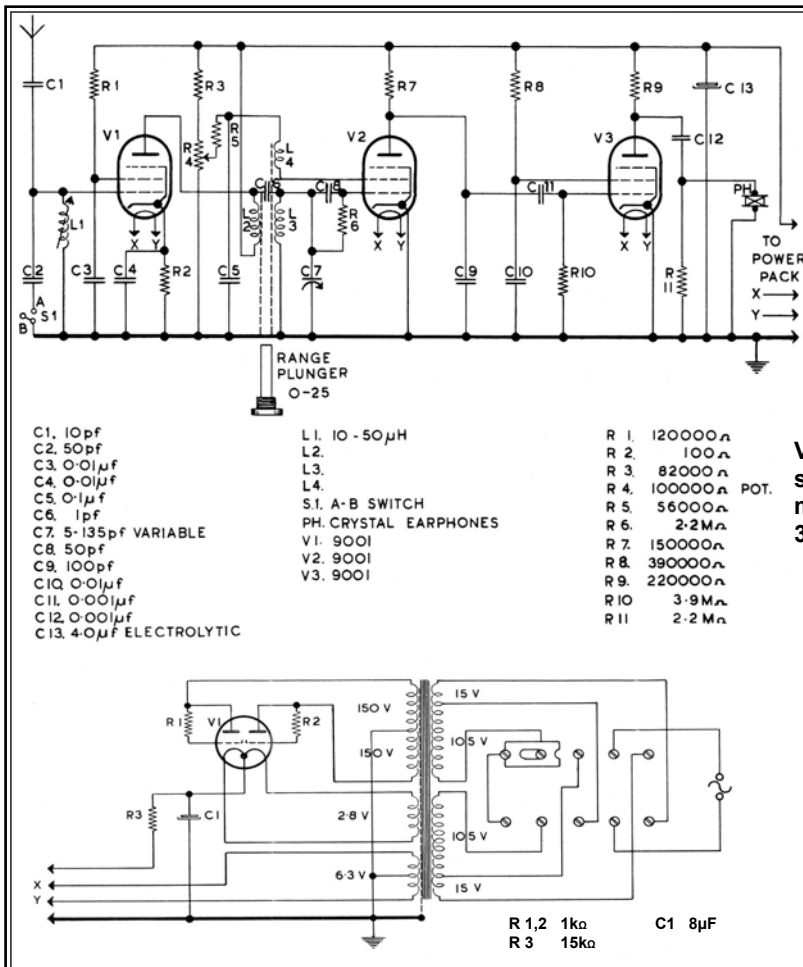
Inside view of Receiver Type 53/1 showing the very compact build with its three 9001 valves, tuning condenser C7 and tuning coil L2/3/4. Note the production date stamp March 1945 on the electrolytic condenser C13.



(Cont. from page 1) purpose broadcast reception, whereas the Type 53/1 was principally intended to be used by resistance groups. With its RF stage it was more sensitive and not liable to RF radiation when listening to CW signals. The piezo-crystal earphone assembly was identical to that used with the 'Sweet-heart'. It was connected to a similar type of sliding socket. (See inset above).

References:

- WftW Volume 4, *Clandestine Radio*, L. Meulstee, 2004, Wimborne Publishing Ltd., ISBN 0952063 36 0.
- Receiver Type 53/1, Instruction booklet, n.d.



Circuit diagram and list of components of Type 53/1 with associated mains power unit (left).



View of voltage selector panel with range plunger stowage (above); with cover opened showing the miniature mains transformer and rectifier valve 3A5 (below).

