



### DESCRIPTION:

Model 41-51 is a 7-transistor, 3-diode, portable receiver for Broadcast Band reception from 525 to 1800 KHz.

The circuitry is designed for separate assembly construction; 3 Germanium transistors with associated components forming an R.F.-I.F.-2nd Detector assembly, while 2 Silicon and 2 Germanium transistors with associated components form an Audio assembly.

The cabinet consists of a plated cast-metal front, a hinged back and sides of imitation-leather plastic, the sides being stitched and glued to an A.B.S. framework. A carrying handle is fitted to the top.

# AERIAL:

An in-built ferrite rod, size  $8'' \times \frac{3}{6}''$ . (Note: If ordering a replacement, it is advisable to order the aerial loop stick assembly complete, Part No. 14-7962.)



Model 41-51

## BATTERY:

Four 1.5V "C" size cells, Eveready 1035 or equivalent; Manganese Alkaline cells may be used for longer life. For battery access, raise the hinged back after unclipping the stud fasteners.

### DIMENSIONS:

Length, 91/4"; Height, excluding handle, 55/8"; Depth, excluding knobs, 21/5"; Weight, 3 lb. 12 oz.

## CIRCUIT DATA AND PARTS LIST:

RESISTOR CIRCUIT CODE by numbers, value in ohms or kilohms, half watt, 10% tolerance except R29 & R32, 5%; R22 PART No. 32-7960; R31 & R34, TYPE DUCON A/T thermistor. CAPACITOR CIRCUIT CODE by lower case letters. Electro's in #F; remainder in pF below or #F above 1000pF/.001#F. CAPACITORS Ca,m,o; 25V + 80 — 20% DUCON REDCAP STYLE "A"; Ce, ditto except ± 20%; Cd,h,i,l,n; 25V + 80 — 20% DUCON REDCAP STYLE "B". Cu, ditto except, style "E". Cb, 5 — 55pF DUCON TYPE CWA. Cg, 3 — 30pF DUCON TYPE CW. Cc, MSP TYPE K2X. Cf, Styroseal 50V 5%. Ct, Polyester 16W ± 10%. ELECTRO'S: Cj-12.5V + 50 — 10%, Cw, 2.5V. Cv, xy, 6.4V.

LOOP STICK ASS'Y PART No. 14-7962. OSC COIL, 14-7963. IFT1, CZ651-004, IFT2, CZ651-003, IFT3, CZ651-005.

CABINET CASE, PART No. 90-7966. CABINET FRONT, PART No. 36-7930. HANDLE, part of PART No. 90-7966. DIAL SCALE, FRONT 69-7955; REAR, 16-7933. DIAL DRUM, 20-7945, POINTER 16-7934. CONTROL KNOB, PART No. 20-7948.

INSERT FOR TUNING KNOB, 16-7939. INSERT FOR VOLUME KNOB, 16-7940. BATTERY CARTRIDGE PART No. 20-7949.

SERVICE ACCESS. AUDIO BOARD REMOVE BATT. CARTRIDGE, REMOVE 2 <u>MACHINE</u> SCREWS SECURING THE MOUNTING BRACKET TO HEX PILLARS FASTENED TO SPEAKER FRAME. R/F BOARD. Remove 2 self-evident self-tapping screws from printed panel. On replacement, dress lead to Ct clear of gang.

DIAL CORD ACCESS. Remove knobs; release main assembly by removing 4 ST screws—2 along bottom edge of battery compartment, 1 near tuning spindle, 1 near top centre of cabinet—unsolder + ve battery lead, manoeuvre assembly out from under loop stick to the extent of the lead lengths.

SPEAKER ACCESS. Remove, main assembly and Audio Board, —ve batt lead and spkr connections.

TUNING RANGE, 525-1800 KHz. I.F. 455KHz. Tracking Points, 600, 1700KHz. Conventional Alignment. Connect Generator between base, via a. 22µF, & emtr of TR1 for I.F's. Peak in reverse sequence; 3,2,1. Radiate signal into aerial, re-check IFT1 with gang closed. Adjust oscillator coil at 525 KHz. Fully open gang, adjust osc trimmer at 1800 KHz. Set dial scale to 600 KHz, peak aerial coil. Set scale to 1700 KHz, peak aerial trimmer. Check alignment at low level inputs.