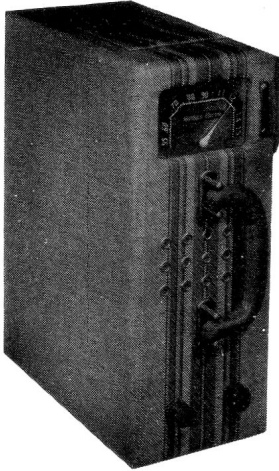


Model EP-551 Portable

Battery & A-C Universal Superheterodyne Radio Receiver



Specifications

Frequency Range:

.54 to 1.5 megacycles
(Standard Broadcast)

I.F.:

470 kilocycles

Tubes:

Type	Position
1A7G	Converter
1N5G	I-F Amplifier
1H5G	2nd Detector, A.V.C. and 1st Audio Amplifier
1T5GT	Output
35Z5GT	Rectifier

Batteries Required:

Filament 1.5 volts
Plate Supply 90 volts
(See Instruction Folder accompanying
receiver for battery recommendations)

Battery Consumption:

"A" 200 mls
"B" 9 to 10 mls

Line Power Supply:

110-125 volts, 25-60 cycle
110-125 volts D.C.
Consumption: 28 watts

Power Output:

125 milliwatts

A.V.C.:

Applied to 1A7G Converter Tube

Audio System:

First A-F section of 1H5G resistance-capacitance coupled to 1T5GT output.

Controls:

Knob towards front of cabinet is power switch and volume control. Knob towards rear is tuning control.

Antenna:

Built-in loop with provision made for use of external antenna.

Loudspeaker:

5" P.M.

Dial:

Metaloid gold finished plate with white pointer.

Cabinet:

Wood, covered with striped woven tweed.
Red leather handle.

Dimensions:

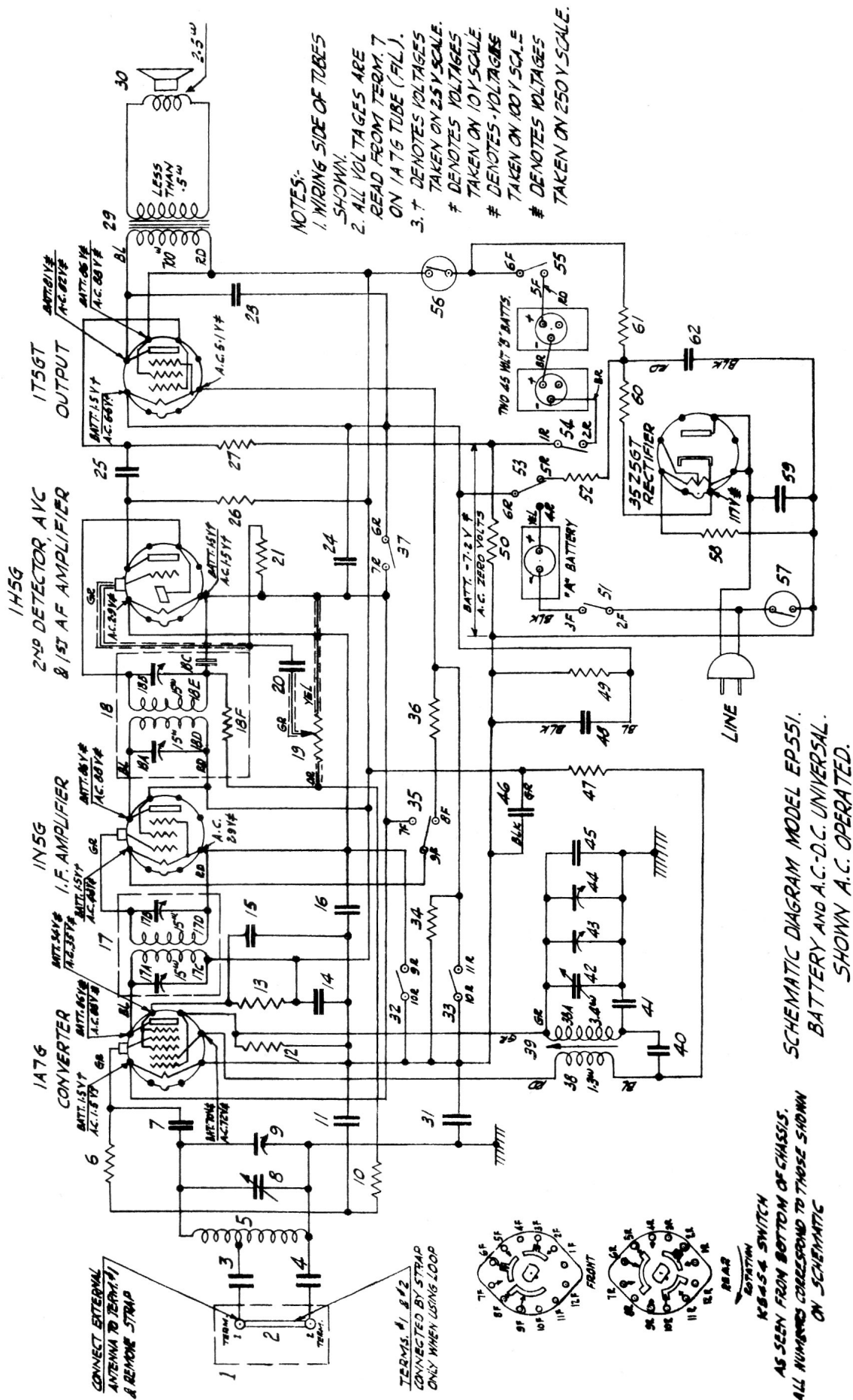
Chassis: 11-1/8" long, 3-5/8" wide and
3-1/4" high.

Cabinet: 12-7/8" long, 5-1/8" wide and
9-7/16" high plus 2-3/4" for handle.

Special Notes:

- (1) Loop removable to enable batteries being fitted underneath chassis.
- (2) Where battery use is intended, the line plug is inserted in slots located underneath the flap at left-hand end. This operates a switch preventing use of line plug while receiver is being battery-operated.

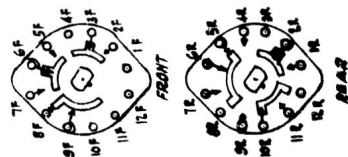
MODEL EP-551 RADIO RECEIVER



- NOTES:-
1. WIRING SIDE OF TUBES SHOWN.
 2. ALL VOLTAGES ARE READ FROM TERM. 7 ON 1A76 TUBE (FIL.).
 3. * DENOTES VOLTAGES TAKEN ON 25V SCALE.
 - # DENOTES VOLTAGES TAKEN ON 10V SCALE.
 - ^ DENOTES VOLTAGES TAKEN ON 100V SCALE.
 - ^ DENOTES VOLTAGES TAKEN ON 250V SCALE.

SCHEMATIC DIAGRAM MODEL EP551. BATTERY AND A.C.-D.C. UNIVERSAL. SHOWN A.C. OPERATED.

AS SEEN FROM BOTTOM OF CHASSIS. ALL NUMBERS CORRESPOND TO THOSE SHOWN ON SCHEMATIC



MODEL EP-551 RADIO RECEIVER

REPLACEMENT PARTS LIST

Item	Description	Part No.	Item	Description	Part No.
1	Antenna & Ground Term. Strip	K-3749-3	39	B.C.Oscillator Coil Core Pt. of	K-5474
2	Metal Strap	K-3291-1	40	Capacitor: .002 mf. 400 volt	K-2228-2
3	Capacitor: .003 mf. 600 V. (on loop)	K-5660-3	41	Capacitor, mica: 500 mmf.	K-1611-7
4	Capacitor; mica, 100 mmf.	K-1611-2	42	Tuning gang;osc.420 mmf. Pt. of	K-5615
5	Loop Assembly	K-5472-5	43	Trimmer(on gang)1.5-20 mmf.	Part of K-5615
6	Resistor: 1 meg, 1/2 watt	K-2226-2	44	Trimmer(" ")1.5-20 mmf.	Part of K-5615
7	Capacitor, mica: 1000 mmf.	K-1611-23	45	Capacitor, mica: 25 mmf.	K-1611-9
8	Tuning gang:Ant.420 mmf.Part of	K-5615	46	Capacitor: 40 mf. 150 V.Part of	K-5634
9	Trimmer(on gang)1.5-20 mmf.	Part of K-5615	47	Resistor: 10,000 ohms 1/2 W.	K-2226-10
10	Resistor: 2 meg. 1/2 watt	K-2226-1	48	Capacitor: 200 mf.10 V. Part of	K-5634
11	Capacitor: .05 mf. 200 volt	K-2227-8	49	Resistor: 1000 ohm, 1/2 watt	K-2226-16
12	Resistor: 200,000 ohm 1/2 watt	K-2226-67	50	Resistor: 800 ohms, 1/2 watt	K-2226-76
13	Resistor: 75,000 ohm 1/2 watt	K-2226-27	51	Part of Change-Over Switch	K-5654
14	Capacitor: .25 mf. 200 volt	K-2227-10	52	Resistor: 2000 ohms, Part of	K-5658
15	Capacitor: .1 mf. 200 volt	K-2227-9	53	Part of Change-Over Switch	K-5654
16	Capacitor: .1 mf. 200 volt	K-2227-9	54	Part of Change-Over Switch	K-5654
17	1st I-F trans.assy. complete	K-4738-1	55	Part of Change-Over Switch	K-5654
17A-17B	1st I-F trimmers	K-2134-1	56	Battery On-Off Switch Part of	K-4754-3
17C-17D	1st I-F Coils only	K-4739	57	AC-DC On-Off Switch Part of	K-4754-3
18	2nd I-F trans.assy. complete	K-4545-1	58	Resistor: 550 ohms Part of	K-5658
18A,B&C	2nd I-F trimmers	K-2932-1	59	Capacitor: .03 mf. 400 volt	K-2228-18
18D-18E	2nd I-F coils only	K-4585	60	Resistor: 35 ohms, 1/2 watt	K-2252-28
18F	Resistor, 50,000, 1/2 watt (Part of K-4545-1 Assembly)	K-2226-6	61	Resistor: 2500 ohm, 1/2 watt	K-2226-13
19	Volume Control (with Sw.).5 meg.	K-4754-3	62	Capacitor: 40 mf. 150 V.Part of	K-5634
20	Capacitor: .02 mf. 200 volt	K-2227-7	MISCELLANEOUS		
21	Resistor: 10 meg. 1/2 watt	K-2226-74	Sockets (Octal Base, small size)		
24	Capacitor: .05 mf. 200 volt	K-2227-8	Dial Scale		
25	Capacitor: .02 mf. 200 volt	K-2227-7	Dial Indicator		
26	Resistor: 1 meg. 1/2 watt	K-2226-2	Dial Cord 24" long (order by feet)		
27	Resistor: 2 meg. 1/2 watt	K-2226-1	Dial Cover (celluloid)		
28	Capacitor: .005 mf. 400 volt	K-2228-5	Spring (dial cord)		
29	Output Transformer Assembly	K-5635	Spring (dial pulley)		
30	Loudspeaker Assembly	K-5500	Indicator Shaft		
31	Capacitor: .25 mf. 200 volt	K-2227-10	Knob (tuning)		
32	Part of Change-Over Switch	K-5654	Knob (volume)		
33	Part of Change-Over Switch	K-5654	Standoff (antenna)		
34	Resistor: 1,000 ohms 1/2 watt	K-2226-16	Standoff		
35	Part of Change-Over Switch	K-5654	Loop Antenna Assembly		
36	Resistor: 15 ohms, 1/2 watt	K-2252-35	Loop Antenna		
37	Part of Change-Over Switch	K-5654	"A" Battery Plug		
38	B.C. Oscillator Coil Primary }	K-5474	"B" Battery Plug		
38A	B.C. Oscillator Coil Secondary }				

REALIGNING DETAILS

Before removing the chassis from cabinet, close the gang capacitor and set the pointer to end of scale. This may be done by removing the spring at the dial end of the cord, from the lug on the pulley and rotating the pointer to the proper position and then pushing the spring over the lug. Rotate the gang until the pointer is at 600 kilocycles and put a mark on the gang frame and pulley. Repeat this at 1000 kilocycles and 1400 kilocycles. These marks will permit proper gang settings when the chassis is removed from the cabinet.

Note: All alignment should be done with the receiver on battery operation.

I.F. Alignment:

Connect the generator to the 1A7G grid through .1 mf. capacitor. The low side of the generator should be connected to No. 7 pin on the 1A7G tube. Align items 17A, 17B, 18A and 18B for maximum output with generator at 470 kilocycles.

R.F. Alignment:

Connect high signal generator lead through 100-mm. capacitor to terminal No. 1 (with strap removed) on rear cover of receiver. Set gang to 1400 kilocycles mark and generator to 1400 kilocycles. Adjust oscillator trimmer item 43 (trimmer on lower section of gang). **Note:** If there is insufficient adjustment, adjust oscillator trimmer item 44, also, (trimmer on other side of gang, lower section). Adjust antenna trimmer, item 9 (trimmer on upper section of gang) for maximum output. Set generator to 600 kilocycles and tune in signal. Adjust iron core for maximum output, rocking the gang while doing so. Recheck at 1400 kilocycles.