
THE FISK RADIOLA

Models 99 and 604

**FIVE VALVE, TWO BAND, UNIVERSAL A.C.-D.C. OPERATED
SUPERHETERODYNES**

Technical Information & Service Data

ELECTRICAL SPECIFICATIONS.

TUNING RANGES

"Short Wave"—13.6-43 M.
"Standard Medium Wave"—1600-550 K.C.

R.F. ALIGNMENT SETTINGS.

"Standard Medium Wave"—600 K.C. (Osc.), 1500 K.C. (Osc. & Aer.)
"Short Wave"—15 M. (Osc. & Aer.)

INTERMEDIATE FREQUENCY455 K.C.
POWER SUPPLY RATING200-260 volts A.C. or D.C.
POWER CONSUMPTION 90 Watts

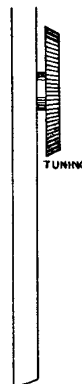
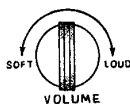
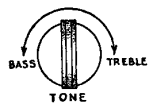
VALVE COMPLEMENT.

6J8G Converter.
6U7G I.F. Amplifier.

6B6G Detector, A.V.C. and A.F. Amplifier.
25L6G Output.

25Z6G Rectifier

CONTROLS.



LOUDSPEAKER.

	MODEL 604.		MODEL 99.
Type AS14.	12 inch.	Type AW12. Type AW15.	7 inch.
Transformer	TU16	Transformer	XA5
Field Coil Resistance	2500 ohms	Field Coil Resistance	2500 ohms
Voice Coil Impedance	2.2 ohms at 400 cycles	Voice Coil Impedance	3 ohms at 400 cycles

UNDISTORTED POWER OUTPUT2.2 Watts.

DIAL LAMPS3.2V., .35 Amp.

ALIGNMENT PROCEDURE.

Alignment should be necessary only when adjustments have been altered from the factory setting or when repairs have been made to the tuned circuits. Climatic conditions should not seriously affect the Receiver.

It is important to apply a definite procedure, as given in this booklet, and to use adequate and reliable test equipment. Instruments ideally suited to the requirements are either the A.W.A. Junior Signal Generator, Type 2R3911, or the A.W.A. Modulated Oscillators, Types J6726 and C1070. If either of the latter instruments is used, see that a 250,000 ohms resistor is connected between the output terminals of the instrument, and for Short Wave alignment, a 400 ohms non-inductive resistor in series with the "hot" output lead of the instrument.

Perform alignment in the proper order as shown in the chart, starting from No. 1, and following all operations across, then No. 2, etc. Adjustment locations are shown in the layout diagrams.

Keep the Volume Control set in the maximum clockwise position, and regulate the output of the test instrument so that a minimum signal is introduced to the Receiver to give a standard indication on the output meter. This will avoid A.V.C. action and overloading.

When the Receiver has been satisfactorily aligned, seal the adjusting screws with a small quantity of celluloid cement to eliminate the possibility of their shifting.

ALIGNMENT TABLE

Alignment Order	Test Inst. Connection to Receiver	Test Inst. Setting	Receiver Calibration Scale Setting	Circuit to Adjust	Adjust for Max. Peak Output
1.	*6J8G Grid Cap	455 K.C.	0°	2nd I.F. Trans.	L14
2.	*6J8G Grid Cap	455 K.C.	0°	2nd I.F. Trans.	L13
3.	*6J8G Grid Cap	455 K.C.	0°	1st I.F. Trans.	L12
4.	*6J8G Grid Cap	455 K.C.	0°	1st I.F. Trans.	L11
Repeat adjustments 1, 2, 3 and 4.					
5.	Aerial	600 K.C.	†	Oscillator	Core L7
6.	Aerial	1500 K.C.	155.2°	Oscillator	C7
7.	Aerial	1500 K.C.	155.2°	Aerial	C4
Repeat adjustments 5, 6 and 7.					
8.	Aerial	15 M.	156°	Oscillator	C8**
9.	Aerial	15 M.	156°	Aerial	C5***†

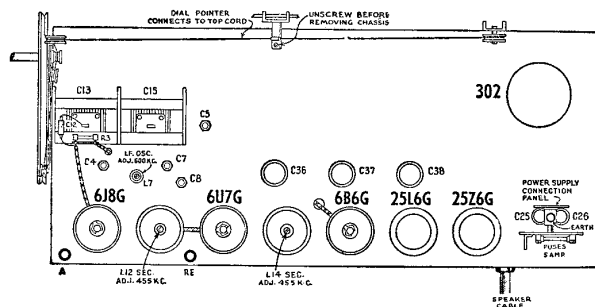
*With grid clip connected. A .001 mfd condenser should be connected in series with the active output lead of the test instrument.

†Rock the Tuning Control back and forth through the signal.

**Use minimum capacity peak if two peaks can be obtained.

***Use maximum capacity peak if two peaks can be obtained.

‡Tune for image signal by tuning the Receiver to approx. 16 M. It should be necessary to increase the output of the Test Instrument to receive the signal.



SOCKET VOLTAGES.

VALVE		Cathode Screen Grid		Plate to Negative	Plate Current M.A.	Heater Volts
		to Negative Volts	to Negative Volts			
6J8G Converter	M.W.	2.5	80	220	0.9	6.3
	S.W.	2.5	80	220	1.3	6.3
	Osc.	—	—	140	4.5	—
6U7G I.F. Amp.	M.W.	—	—	140	4.5	—
	S.W.	—	—	140	4.5	—
6B6G Detector	.....	3.0	80	220	4.0	6.3
25L6G Output	.....	0	—	140*	0.4	6.3
25Z6G Rectifier	.....	7.0	105	90	41	25.0
	.....	235	—	240	—	25.0

Voltage across loudspeaker field—130.

*Cannot be measured with ordinary voltmeter.

Measured at 240 Volts A.C. supply.

No signal input. Volume at maximum.

