

**MEASUREMENT SPECIFICATION:**

I.F. Sensitivity—V2 grid 250 Microvolts.

I.F. Sensitivity—V3 grid 6 Millivolts.

Broadcast Sensitivity. 6 Microvolts average.

Short Wave Sensitivity. 10 Microvolts average.

When measuring I.F. sensitivity a .1 MF condenser should be used between the "HOT" signal generator lead and grid of V2. Do not disconnect any wiring.

These figures are related to an audio frequency output of 22.5 volts measured between plate of V6 and plate of V7, through a series condenser of .1 MFD capacity.

**ALIGNMENT FREQUENCIES:**

Broadcast: 600 Kc/s and 1400 Kc/s.

Short Wave: 5 Mc/s and 15 Mc/s.

**CHECK POINTS:**

Broadcast: 1000 Kc/s.

Short Wave. 9 Mc/s.

**SERVICING DIRECTIONS:**

To remove the receiver from the cabinet, switch off and disconnect the power supply, then proceed as instructed below:—

- a. Unscrew the top backboard holding screws and while guiding the aerial, earth and power leads through their holes, take the backboard away from the cabinet and lean against the unwanted rear half of the cabinet.
- b. 1. Disconnect the speaker plug.
2. Disconnect the pickup plug.
3. Disconnect the receiver power flex and power flex leading to the mains switch from the terminals, then undo the clamp holding the power flex on the chassis mounting board.  
power flex on the chassis mounting board.
4. Unmount the centre strip illuminating lamp.
5. Disconnect the earth lead on right hand side of chassis.
6. Disconnect the record changer illuminating lamp leads from terminals on the rear of the chassis.
7. Unscrew the four knobs and place them aside.
8. Unscrew the four holding screws in the chassis mounting board.  
Then carefully withdraw the chassis from the cabinet.

To replace, repeat the above instructions in the reverse order.

**REPLACEMENT OF PICKUP STYLUS:**

When the pickup stylus is replaced it must be checked and adjusted if necessary for record clearance as instructed below:—

- a. With a single 12" microgroove record on the turntable and pickup set to play microgroove records, check that the clearance between the front sapphire and record is just sufficient to allow a doubled cigarette paper to pass between without catching. If it is necessary to adjust the stylus, do so by first removing, then bending the stylus arm with a suitable instrument.
- b. With a full stack of 8 standard 10" records and the pickup set to play standard records, check that there is the same clearance as mentioned in (a) between the rear sapphire and record.
- c. If the clearance is insufficient repeat (a) and then check the clearance as instructed in (b).



# RADIO SERVICE BULLETIN

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 Subject: Model A8231

## SPECIFICATION OF S.T.C. MODEL A8231 RADIO PHONOGRAPH

### DESCRIPTION:

De luxe 8 valve, dual wave, console radiogram, incorporating:—  
 Electronic tuning indicator.  
 Slotted baffle and enclosed sound chamber.  
 High fidelity reproduction of local stations.  
 Tone Accentor.  
 Push-Pull power output tetrodes with inverse feedback.  
 Three speed record changer.

### TUNING RANGE:

Broadcast: 530-1620 Kc/s.  
 Short Wave: 4.8-16.2 Mc/s.

### INTERMEDIATE FREQUENCY:

455 Kc/s.

### VALVE COMPLEMENT:

- V1. Radio Frequency Amplifier. 6BA6.
- V2. Frequency Converter. 6BA7.
- V3. I.F. Amplifier. 6BA6.
- V4. Detector, A.V.C. and Audio Amplifier. 6BD7.
- V5. Amplifier and Phase Inverter. 12AU7.
- V6, V7. Push-Pull power amplifier. 6BW6.
- V8. H.T. Rectifier. 5Z4G.  
 Electronic tuning indicator. EM85.

### POWER SUPPLY:

200-260 volts, 40-60 cycles.  
 360 Milliamps with 240 volts at 50 cycles input.  
 455 Milliamps with 240 volts at 50 cycles input on phono.

### LOUD SPEAKER:

12 inch permagnetic with Push-Pull 10,000 ohm transformer.

### CIRCUIT VOLTAGES:

	Plate	Screen	Target	Cathode	Heater
V1	224	64	—	1.26	6.15
V2	224	87	—	6.15	6.15
V3	224	86	—	5.0*	6.15
V4	100	—	—	1.1	6.15
V5	128/96	—	—	66/2.8	6.15
V6	257	265	—	15	6.15
V7	254	265	—	15	6.15
V8	270/270	—	—	312	5.0
Tuning Indicator	20	—	224	—	6.15

These voltages may vary within 5% of their stated values and must be measured to receiver earth with a voltmeter having a resistance of at least 1000 ohms per volt. Volume control must be turned to maximum.

NOTE: \*This voltage may vary considerably in different Receivers.

## MODEL 8231 RADIO-PHONOGRAPH

