

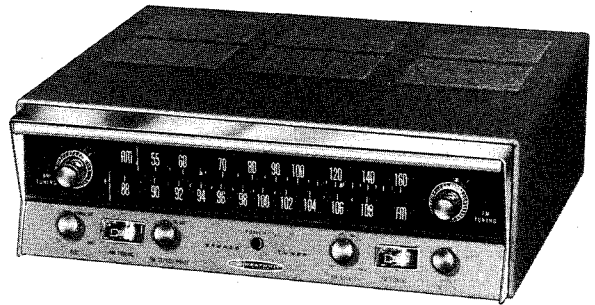
specifications

FOR THE



STEREO TUNER

MODEL AJ-41



SPECIFICATIONS

FM SECTION

| | |
|---|--|
| Tuning Range | 88 to 108 megacycles. |
| Intermediate Frequency (IF) | 10.7 megacycles. |
| Antenna | 300 Ω balanced. |
| Output Impedance (Cathode Follower) | Variable to 4000 Ω . |
| Output Voltage | Nominal .5 volt with 3 μ v, 30% modulation in. |
| Quieting Sensitivity. | 2 μ v for 20 db of quieting. 3 μ v for 30 db of quieting. 20 μ v for full quieting, 40 db. |
| Audio Frequency Response. | \pm 2 db from 20 to 20,000 cps. |
| Maximum Deviation Sensitivity | 5 μ v, 400 cps, 100% modulation in. (Minimum signal with 100% modulation that will pass through the tuner without exceeding rated distortion). |
| Deviation Sensitivity | 20 kc (1100 μ v in). (Minimum deviation required to produce rated output). |
| Harmonic Distortion | Less than 1% (1100 μ v, 400 cps, 100% modulation). |
| Intermodulation Distortion. | Less than 1%. |
| Image Ratio. | 40 db. |
| Capture Ratio. | 12 db. |
| AFC Correction Factor | 12 db. |
| Amplitude Modulation Suppression. | 25 db. |
| Hum and Noise | 40 db below 30% modulation (20 μ v in). |

FM STEREO CONVERTER SECTION

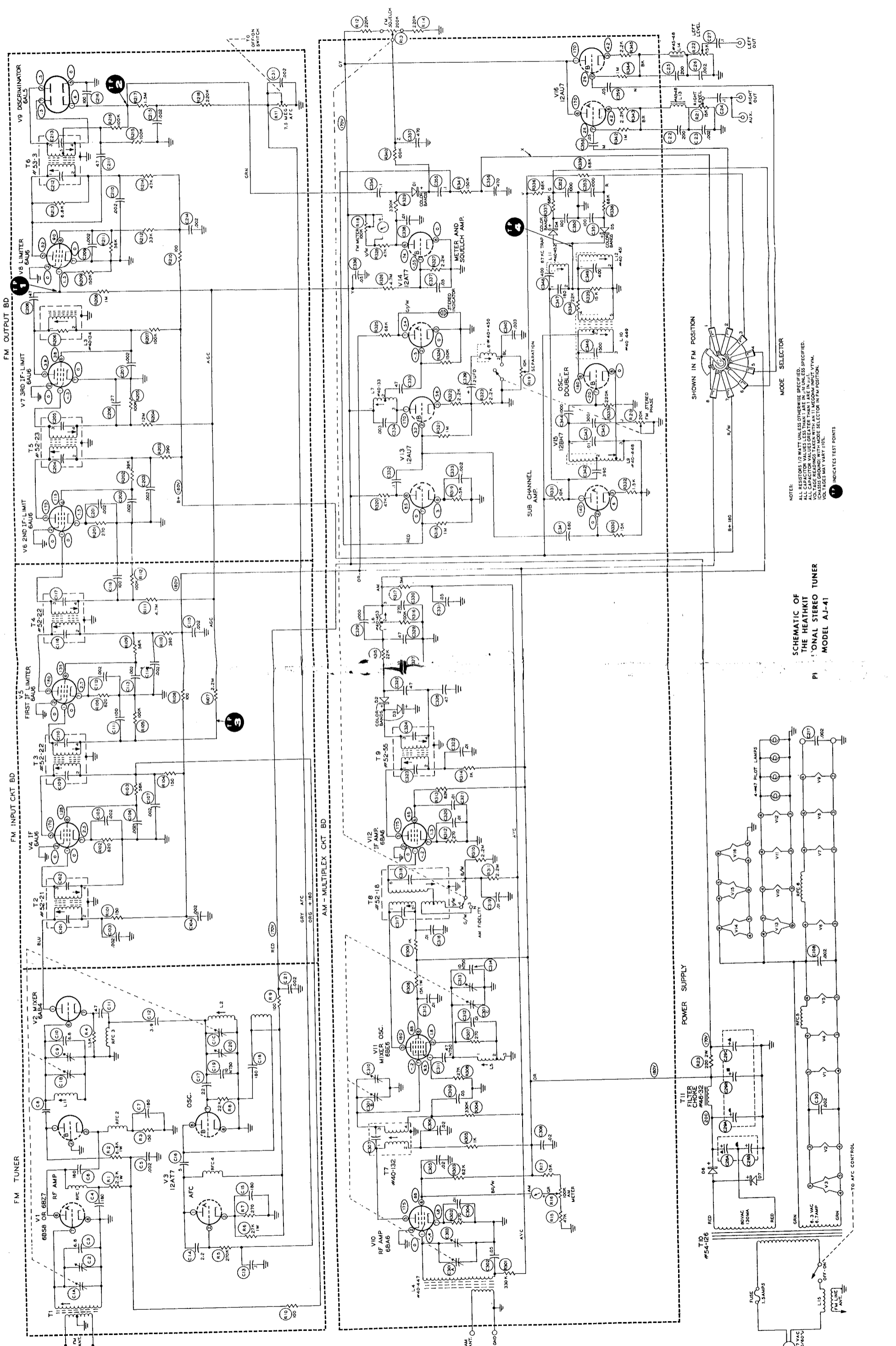
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|---|---|
| Audio Frequency Response. | \pm 2 db from 50 to 15,000 cps. |
| Subcarrier Bandpass. | \pm 3 db from 23,000 to 53, 000 cps. |
| Channel Separation. | 30 db at 1 kc. 25 db at 10 kc. |
| Hum and Noise | -55 db relative to 1 volt rms output. |
| Output Impedance (Cathode Follower) | Variable to 4000 Ω , each channel. |
| Outputs | LEFT CHANNEL-RIGHT CHANNEL. |

AM SECTION

| | |
|---|---|
| Tuning Range | 535 to 1620 kc. |
| Sensitivity, Normal Position. (At antenna terminals through standard IRE dummy antenna. Reference output: .1 volt rms.) | 1400 kc 3 μ v. 1000 kc 4 μ v. 600 kc 8 μ v. |
| Sensitivity Change, Normal to Maximum | -5 db. |
| Intermediate Frequency (IF) | 455 kc. |
| Antenna | Built-in rod, with provisions for external straight wire. |
| Output Impedance (Cathode Follower) | Variable to 4000 Ω . |
| Output Voltage | Nominal .3 volt. |
| IF Band Width | Normal: 14 kc (6 db down). Maximum: 20 kc (6 db down). |
| Image Ratio. | 1400 kc, 50 db. 600 kc, 75 db. |
| Harmonic Distortion | Less than 1%. |
| Hum and Noise | 35 db below 30% modulation(1000 kc with 100 μ v in). |
| IF Rejection Ratio | 1400 kc, 42 db. 600 kc, 38 db. |
| 10 KC Rejection | 40 db. |

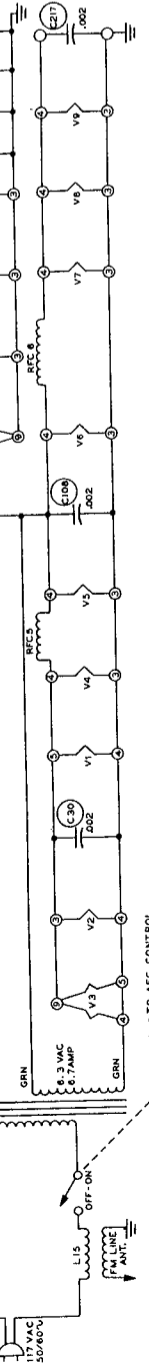
GENERAL

| | |
|-------------------------------|--|
| Tube Complement | 5 - 6AU6 2 - 6BA6 1 - 6BS8 or 6BZ7 1 - 6AB4 2 - 12AT7 1 - 6AL5 1 - 6BE6 2 - 12AU7 1 - 12BH7 |
| Front Panel Controls. | POWER switch, AFC control. FM STEREO PHASE. AM FIDELITY switch, FM SQUELCH control. MODE SELECTOR. AM TUNING. FM TUNING. Individual AM and FM TUNING METERS. |
| Power Supply | Transformer-operated, silicon rectifiers. |
| Power Requirements. | 117 V, 50/60 cps, 100 watts. |
| Dimensions- | |
| Overall. | 5-1/4" high x 15-1/2" wide x 14-1/4" deep. |
| Panel Mounting | Cutout 4-1/4" x 14-1/2"; depth 12-7/8". |
| Net Weight | 18-1/2 lbs. |
| Shipping Weight. | 22 lbs. |



NOTES:
 ALL RESISTORS 1/2 WATT UNLESS OTHERWISE SPECIFIED.
 ALL CAPACITORS 50 VOLT UNLESS OTHERWISE SPECIFIED.
 ALL CAPACITOR VALUES GREATER THAN 1 μF ARE IN μF UNLESS SPECIFIED.
 ALL CAPACITOR VALUES LESS THAN 1 μF ARE IN P.P.M. UNLESS SPECIFIED.
 ALL CAPACITORS ARE TO BE CHASSIS GROUND UNLESS OTHERWISE SPECIFIED.
 VOLTAGES MAY VARY 5%.

SCHEMATIC OF
 THE HEATHKIT
 DUAL STEREO TUNER
 MODEL AJ-41



TO AFC CONTROL