

SPECIFICATIONS

Semiconductors

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Amplifier Section

Continuous Power Output of 65 watts* per channel, min., at 8 ohms from 20 Hertz to 20,000 Hertz with no more than 0.02 % total harmonic distortion or 65 watts per channel at 4 ohms from 20 Hertz to 20,000 Hertz with no more than 0.03 % total harmonic distortion.

Continuous Power Output at 1kHz (both channels driven)
T.H.D. 0.02%, 8 ohms 70 watts per channel

Total Harmonic Distortion (20 Hertz to 20,000Hertz, 8 ohms, from AUX)
continuous rated power output . . No more than 0.02%
32.5 watts per channel power output

..... No more than 0.02%
1 watt per channel power output . No more than 0.02%

Intermodulation Distortion (50 Hertz: 7,000 Hertz = 4:1, 8 ohms, from AUX)

continuous rated power output . . No more than 0.02%
32.5 watts per channel power output

..... No more than 0.02%
1 watt per channel power output . No more than 0.02%

Damping Factor

(20 Hertz to 20,000 Hertz, 8 ohms) 35

Input (Sensitivity/Impedance)

PHONO	2.5mV/50kilohms
TUNER	150mV/50kilohms
AUX	150mV/50kilohms
TAPE PLAY 1, 2	150mV/50kilohms
TAPE PLAY 2 (DIN connector) . . .	150mV/50kilohms

Phono Overload Level (T.H.D. 0.01%, 1kHz)

PHONO	200mV
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Output (Level/Impedance)

TAPE REC 1	150mV/1kilohm
TAPE REC 2	150mV/1kilohm
TAPE REC 2 (DIN connector)	30mV/80kilohms
Speaker	A, B, A+B (4 — 16ohms)

Frequency Response

PHONO (RIAA Equalization)	
.....	20Hz to 20,000Hz ± 0.2 dB
TUNER, AUX, TAPE PLAY	
.....	10Hz to 50,000Hz ± 1 dB

Tone Control

BASS	+7.5dB, —7.5dB (100Hz)
TREBLE	+7.5dB, —7.5dB (10,000Hz)

Subsonic Filter 15Hz (—6dB/oct)

Loudness Contour (Volume control set at —40dB

position) +6dB (100Hz), +3dB (10,000Hz)

Hum and Noise (IHF, short-circuited, A network)

PHONO 86dB

TUNER, AUX, TAPE PLAY 100dB

Hum and Noise (DIN continuous power/50mW)

PHONO 70dB/60dB

TUNER, AUX, TAPE PLAY 86dB/61dB

Muting —20dB

Miscellaneous

Power Requirements

HA model 220V, 50/60Hz

HR model 240V, 50/60Hz

S, S/G models 110V/120V/220V/240V, 50/60Hz

Power Consumption

HA, HR models 600W

S, S/G models 190W

Dimensions 420(W) x 150(H) x 337(D) mm

16-9/16(W) x 5-7/8(H) x 13-1/4(D) in

Weight (without package) 9.7kg (21 lb. 6 oz)

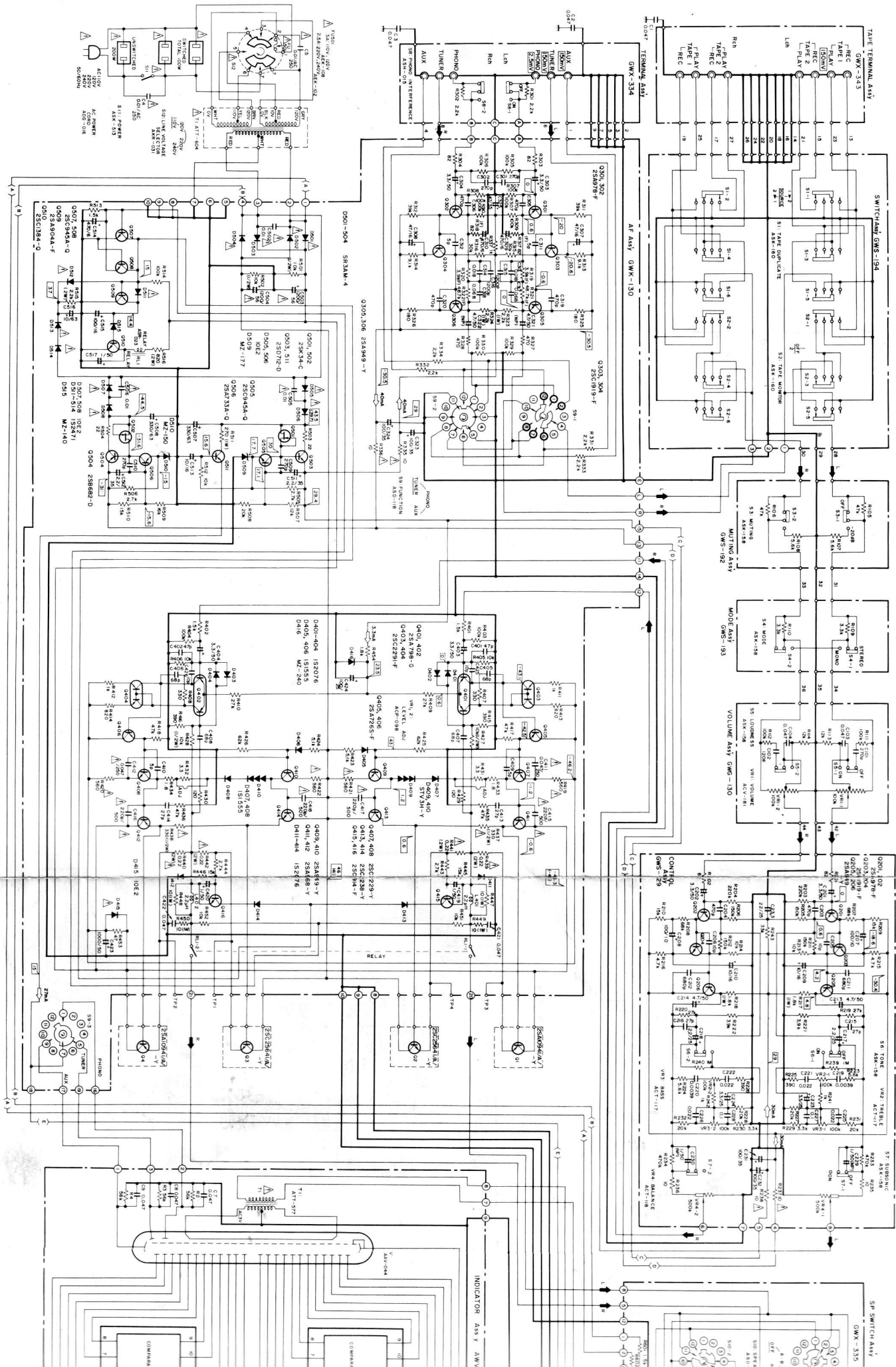
Furnished Parts

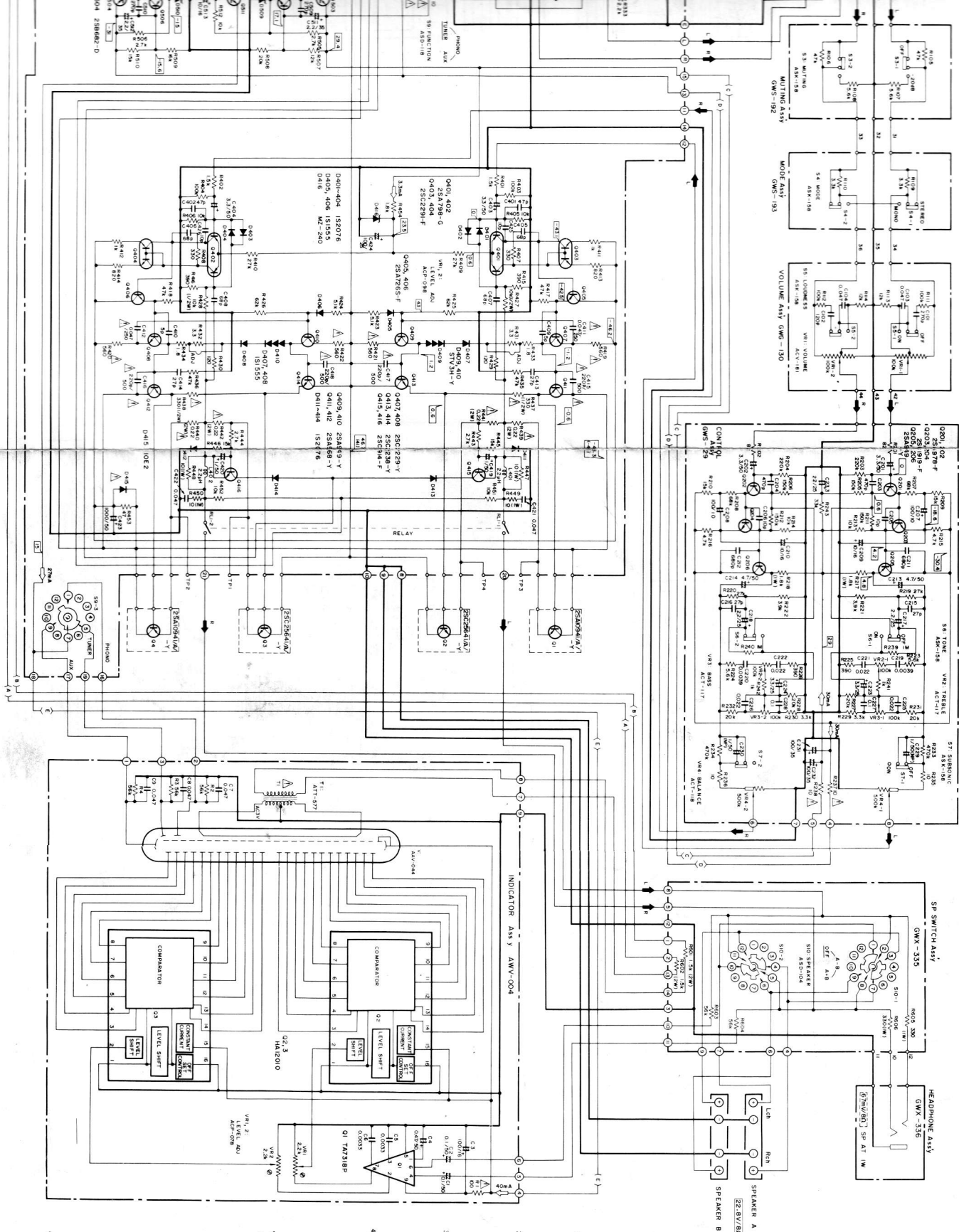
• Operating instructions	1
Fuse 2.5A (S, S/G models only)	1
Fuse 5A (S, S/G models only)	1

NOTE:

Specifications and the design subject to possible modifications without notice due to improvements.

* *Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifiers.*





1. RESISTORS:
Indicated in Ω, kΩ, MΩ, 5% tolerance unless otherwise noted.
kΩ, MΩ, (P), (I), (Z), (K), (10) tolerance
Indicated in capacity (P)/voltage (V) unless otherwise noted.
Indication without voltage is 50V except electrolytic capacitor.
2. CAPACITORS:
Indicated in pF, nF, μF, 5% tolerance unless otherwise noted.
Indication without voltage is 50V except electrolytic capacitor.
3. VOLTAGE, CURRENT:
V: Signal voltage at 65W + 65W B output (1kHz)
V: DC voltage (V) at no input signal
Value in () is DC voltage at rated power.
mA: DC current at no input signal
4. OTHERS:
→ : Signal route
⊙ : Adjusting point
The ⊙ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation. This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

SWITCHES

S1 TUNE DIAL: 1-2 SOURCE-2-1

S2 TUNE MONITOR: 1-2 OFF-2

S3 TUNING: OFF - 20dB

S4 MODE: STEREO-MONO

S5 LOUDNESS: OFF-ON

S6 TONE: OFF-ON

S7 SUBSONIC: OFF-ON

S8 PHONO INTERFERENCE: OFF-ON

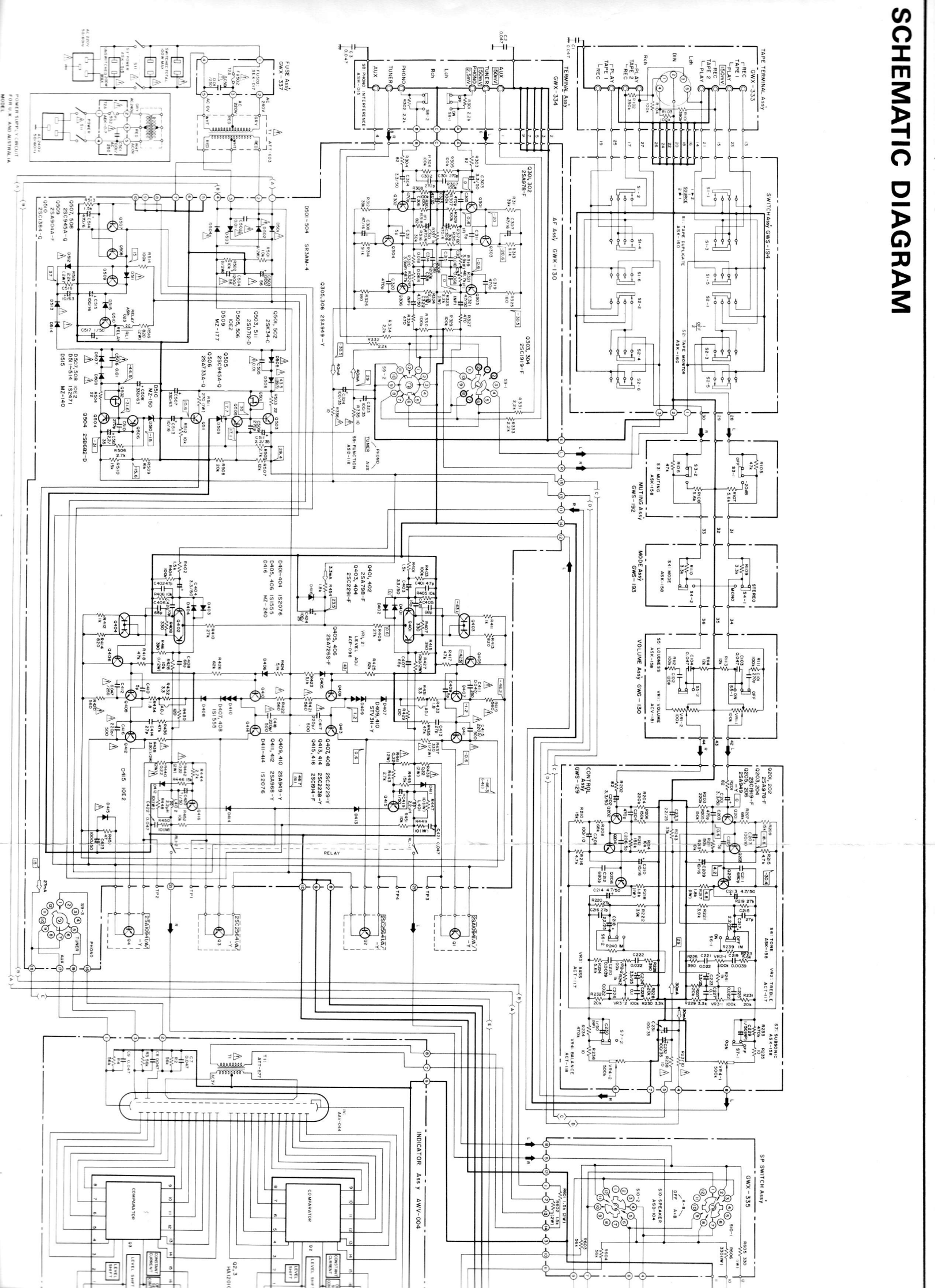
S9 PHONO: PHONO-AUX

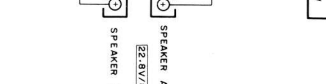
S10 SPEAKERS: OFF-ON

S11 POWER: OFF-ON

S12 LINE VOLTAGE SELECTION: 110V-120V-220V-240V

The underlined indicates the switch position.

[illegible]



1. RESISTORS:
Indicated in R_n / $14W$, .5% tolerance unless otherwise noted
K:K, M:M, (F):1k, (G):2k, (R):10k tolerance
Indicated in capacity/(V) voltage(V) unless otherwise noted
Indication without voltage is 50V except electrolytic capacitor.
3. VOLTAGE, CURRENT
: Signal voltage at 65k + 65k 80 output (1W)
: DC voltage(V) at no input signal
Value in () is DC voltage at rated power.
- : DC current at no input signal
4. OTHERS:
→ : Signal route
⊗ : Adjusting point
The  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.
- SWITCHES
- | | |
|-----------------------|-----------------|
| S1 TAP/DUP.LICATE | 1-2-5-OURCE-2-1 |
| S2 TAP/ MONITOR | 1-OUT-2 ✓ |
| S3 WIRING | OFF- -10dB |
| S4 WIDE | STEREO- MONO |
| S5 LOUDNESS | OFF-ON |
| S6 TONE | OFF-ON |
| S7 SUBSONIC | OFF-ON |
| S8 HIGN INTREFFERENCE | OFF-ON |
| S9 FUNCTION | TUNING-HOLD-ANX |
| S10 SPEAKERS | OFF-A-1-A-4-8 |
| S11 POWER | OFF-ON |
- the underlined indicates the switch position.