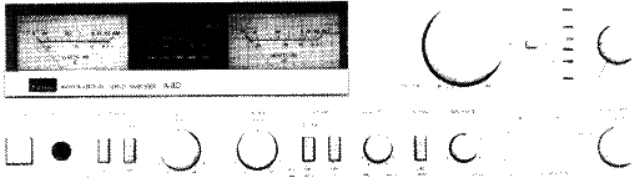


# SERVICE MANUAL

INTEGRATED STEREO AMPLIFIER

## SANSUI A-60 (Silver & Black Model)

## A-80 (Silver & Black Model)



**Sansui**

SANSUI ELECTRIC CO., LTD.

### SPECIFICATIONS

#### ●A-60

##### Power output

Min. RMS, both channels driven, from 20 to 20,000 Hz,  
with no more than 0.05 % total harmonic distortion  
45 watts per channel into 8 ohms

Load impedance . . . . . 8 ohms

##### Total harmonic distortion

less than 0.05 % at or below rated  
min. RMS power output

##### Frequency response (at 1 watt)

5 to 70,000 Hz +0.5 dB, -2 dB

##### RIAA curve deviation (PHONO, 30 Hz to 15 kHz)

+0.8 dB, -0.8 dB

##### Input sensitivity and impedance (1 kHz, for rated power output)

PHONO . . . . . 2.5 mV/47 kilohms

(Max. input capability; 160 mV at 1 kHz, less than  
0.1 % total harmonic distortion)

AUX, TUNER, TAPE PLAY

150 mV/47 kilohms

##### Output level and impedance (1,000 Hz)

TAPE REC . . . . . 150 mV/47 kilohms

##### Hum and noise (short circuit, A-network)

PHONO . . . . . 75 dB

AUX, TUNER, TAPE PLAY

95 dB

##### Power requirements

Power voltage . . . . . 110 ~ 120, 220 ~ 240 V  
(50/60 Hz)

For U.S.A. & Canada

120 V (60 Hz)

##### Power consumption

180 watts Rated

250 watts Maximum

UL, CSA Model . . . . . 165 watts 180 VA Rated

##### Dimensions

430 mm (16-15/16") W

147 mm (5-13/16") H

251 mm (9-15/16") D

##### Weight

6.3 kg (13.9 lbs.) net

7.2 kg (15.9 lbs.) packed

#### ●A-80

##### Power output

Min. RMS, both channels driven, from 20 to 20,000 Hz,  
with no more than 0.05 % total harmonic distortion  
65 watts per channel into 8 ohms

Load impedance . . . . . 8 ohms

##### Total harmonic distortion

less than 0.05 % at or below rated  
min. RMS power output

##### Frequency response (at 1 watt)

5 to 70,000 Hz +0.5 dB, -2 dB

##### RIAA curve deviation (PHONO, 30 Hz to 15 kHz)

+0.6 dB, -0.6 dB

##### Input sensitivity and impedance (1 kHz, for rated power output)

PHONO-MM . . . . . 2.5 mV/47 kilohms

(Max. input capability; 180 mV at 1 kHz, less than  
0.1 % total harmonic distortion)

PHONO-MC . . . . . 0.1 mV/10 ohms

AUX, TUNER, TAPE PLAY

150 mV/47 kilohms

##### Output level and impedance (1,000 Hz)

TAPE REC . . . . . 150 mV/47 kilohms

##### Hum and noise (short-circuit, A-network)

PHONO-MM . . . . . 80 dB

PHONO-MC . . . . . 60 dB

AUX, TUNER, TAPE PLAY

95 dB

##### Power requirements

Power voltage . . . . . 110 ~ 120, 220 ~ 240 V  
(50/60 Hz)

For U.S.A. & Canada

120 V (60 Hz)

##### Power consumption

255 watts Rated

350 watts Maximum

UL, CSA Model . . . . . 230 watts 275 VA Rated

##### Dimensions

430 mm (16-15/16") W

147 mm (5-13/16") H

251 mm (9-15/16") D

##### Weight

7.1 kg (15.7 lbs.) net

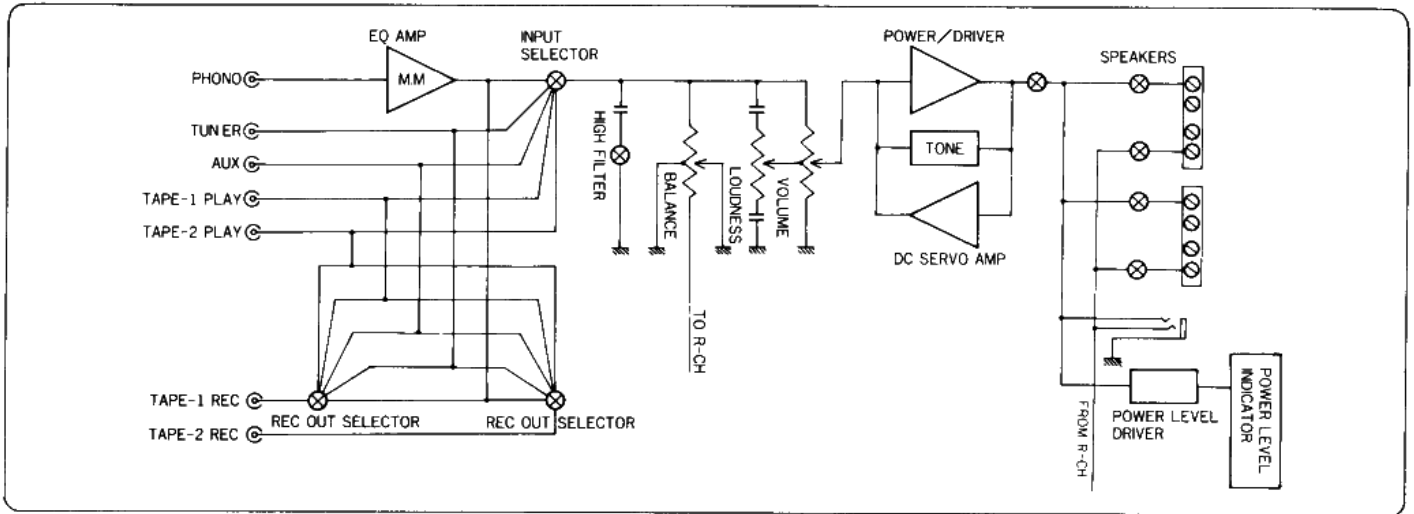
8.0 kg (17.6 lbs.) packed

\*Design and specifications subject to changes without notice  
for improvements.

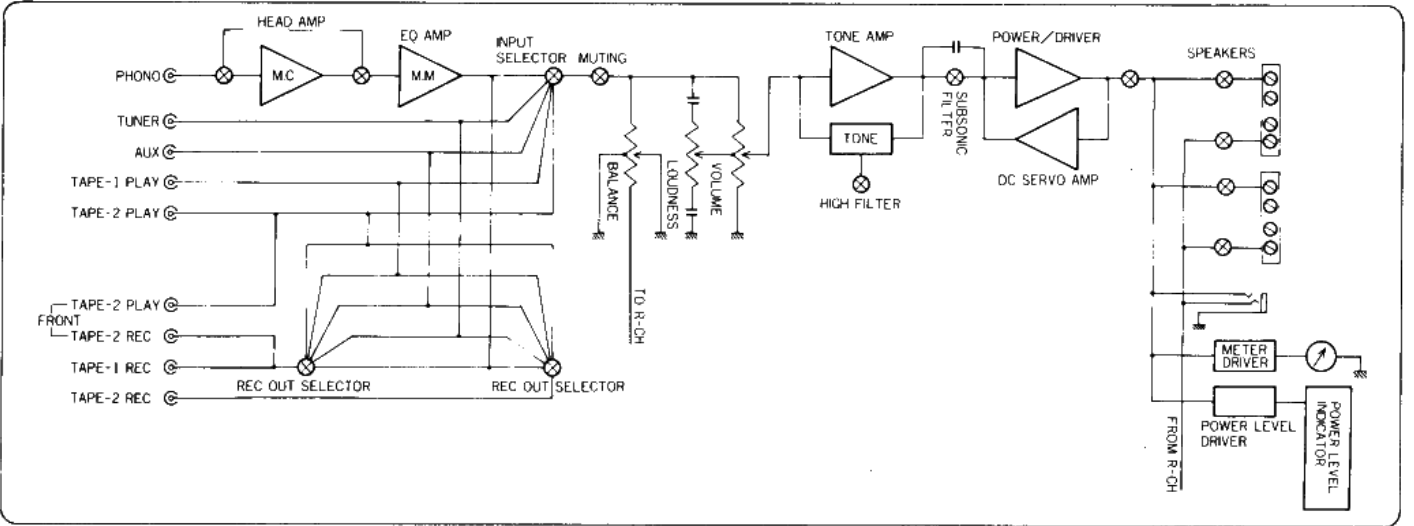
\*In order to simplify the explanation illustrations may some-  
times differ from the originals.

# 1. BLOCK DIAGRAM

## 1-1. A-60



## 1-2. A-80



# 2. ADJUSTMENTS

- Notes: 1. Room Temperature . . . . . 18°C ~ 28°C (65°F ~ 83°F)  
 2. For this adjustment, run the unit for more than 5 minutes after the power is switched ON with its level volumes minimum.  
 3. Before adjusting or confirming the bias current, avoid such a measurement that the power transistors are heated.

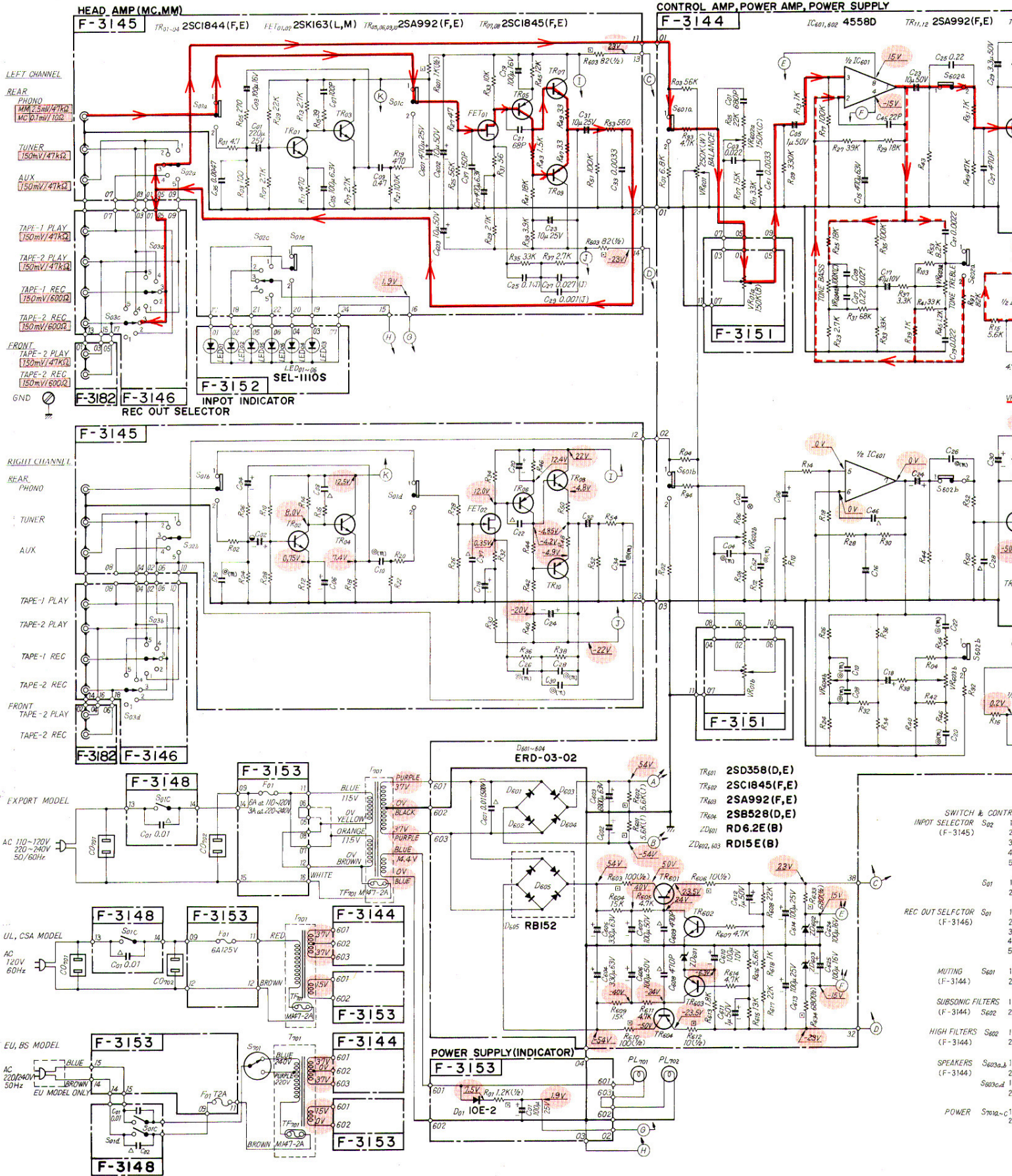
### 2-1. A-60 Bias Current Adjustment (See Top View on page 6)

STEP	SUBJECT	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARK
1.	Bias Current (L-CH) Adj.	Voltage across R71	VR01 on F-3159	DC 1.5 mV	Before turning ON power switch, turn VR01, VR02 fully counterclockwise.
2.	Bias Current (R-CH) Adj.	Voltage across R72	VR02 on F-3159	DC 1.5 mV	In this adjustment, the bias current is converted into the voltage.

### 2-2. A-80 Bias Current Adjustment (See Top View on page 7)

STEP	SUBJECT	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARK
1.	Bias Current (L-CH) Adj.	Voltage across R87	VR01 on F-3144	DC 1.5 mV	Before turning ON power switch, turn VR01, VR02 fully counterclockwise.
2.	Bias Current (R-CH) Adj.	Voltage across R88	VR02 on F-3144	DC 1.5 mV	In this adjustment, the bias current is converted into the voltage.

5-2. A-80

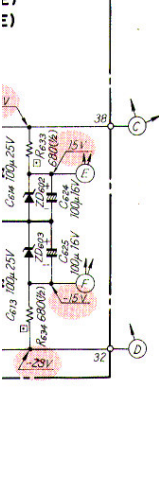
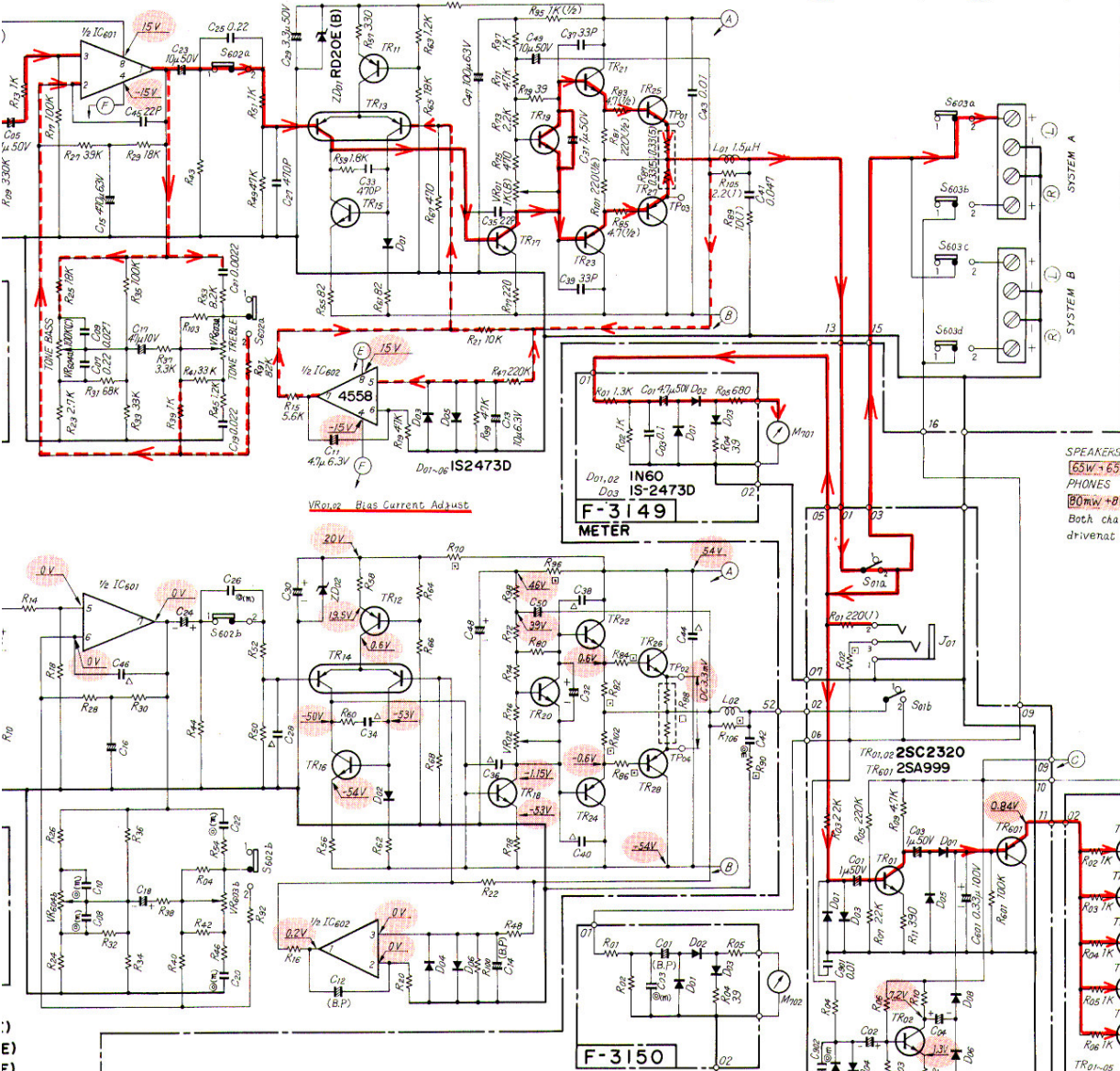




\* Design and specifications subject to change without notice for improvement.  
 \* La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.  
 \* Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.

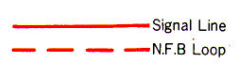
MP, POWER SUPPLY

IC<sub>601,602</sub> 4558D TR<sub>1,12</sub> 2SA992(F,E) TR<sub>15,16,19,20</sub> 2SC1845(F,E) TR<sub>13,14</sub> 2SA798(F,G) TR<sub>17,18</sub> 2SC1904(B,V) TR<sub>21,22</sub> 2SD358(D,E) TR<sub>23,24</sub> 2SB528(D,E) TR<sub>25,26</sub> 2SC2579(O,Y) TR<sub>21,28</sub> 2SA1104(O,Y)



- SWITCH & CONTROLS**
- INPUT SELECTOR (F-3145) S<sub>02</sub>
- AUX
  - TUNER
  - PHONO
  - TAPE 1
  - TAPE 2
- MUTING (F-3144) S<sub>01</sub>
- MM
  - MC
- REC OUT SELECTOR (F-3146) S<sub>01</sub>
- TAPE 2 > 1
  - TAPE 1 > 2
  - PHONO
  - TUNER
  - AUX
- MUTING (F-3144) S<sub>02</sub>
- OFF
  - 20dB
- SUBSONIC FILTERS (F-3144) S<sub>02</sub>
- OFF
  - 16Hz
- HIGH FILTERS (F-3144) S<sub>02</sub>
- OFF
  - ON
- SPEAKERS (F-3144) S<sub>03a,b</sub>
- OFF
  - A
- S<sub>03c,d</sub>
- OFF
  - B
- POWER (F-3144) S<sub>01a-c</sub>
- OFF
  - ON

- SYMBOL**
- △ Ceramic
  - Low-Leak Electrolytic
  - (B.P) Bi-Polar Electrolytic
  - ⊕ Polystyrene
  - ⊙ Mylar
  - Cement Resistor
  - ▣ Non-Inflammable Resistor
- RESISTORS**
- Are in ohms, 1/4 Watts, ±5% Tolerance Unless Otherwise Noted. K:KΩ, M:MΩ
- CAPACITORS**
- Are in μF, Unless Otherwise Noted. P: pF
- TOLERANCE**
- J: ±5%, G: ±7%, F: ±1%
- Each DC Voltage shows the nominal value in volts at no input signal
- BASS** VR<sub>604 a,b</sub> F-3144
- TREBLE** VR<sub>603 a,b</sub> F-3144
- LOUDNESS** VR<sub>602 a,b</sub> F-3144
- BALANCE** VR<sub>601</sub> F-3144
- VOLUME** VR<sub>01 a,b</sub> F-3151



**SPEAKERS**  
 65W + 65W / 8 Ω  
**PHONES**  
 80mW + 80mW / 8 Ω  
 Both channel driven at 1000Hz.

- 2SA992
- 2SA999
- 2SC1844
- 2SC1845
- 2SC2320
- 2SK163
- 2SC1904
- NJM4558D
- 2SA1104
- 2SC2579
- 2SB528
- 2SD358
- 2SA798
- IS2473D
- ERD03 02H
- IN 60
- RD6 2E-B
- RD15E-B
- RD20E-B
- RB-152
- 10E2

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