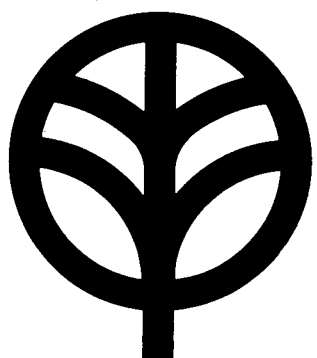


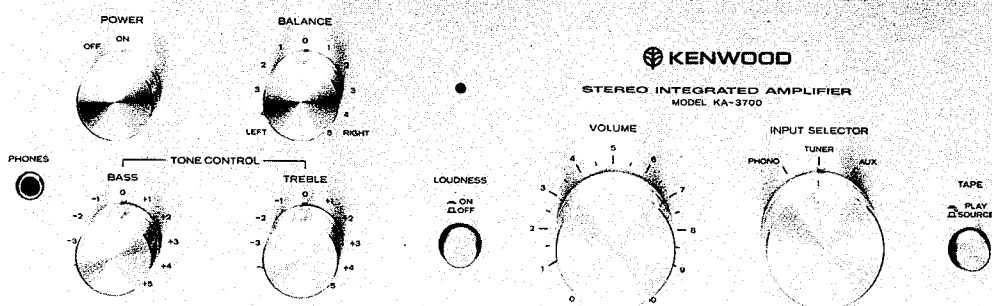
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**KENWOOD**  
HI/FI STEREO COMPONENTS

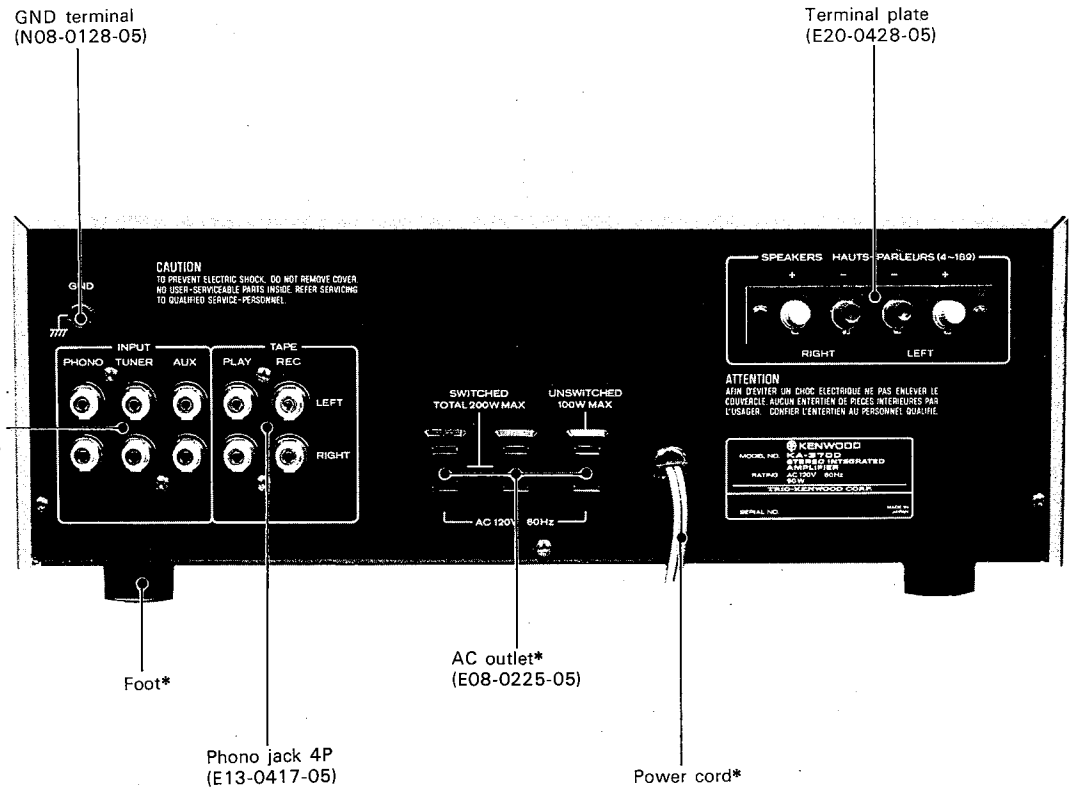
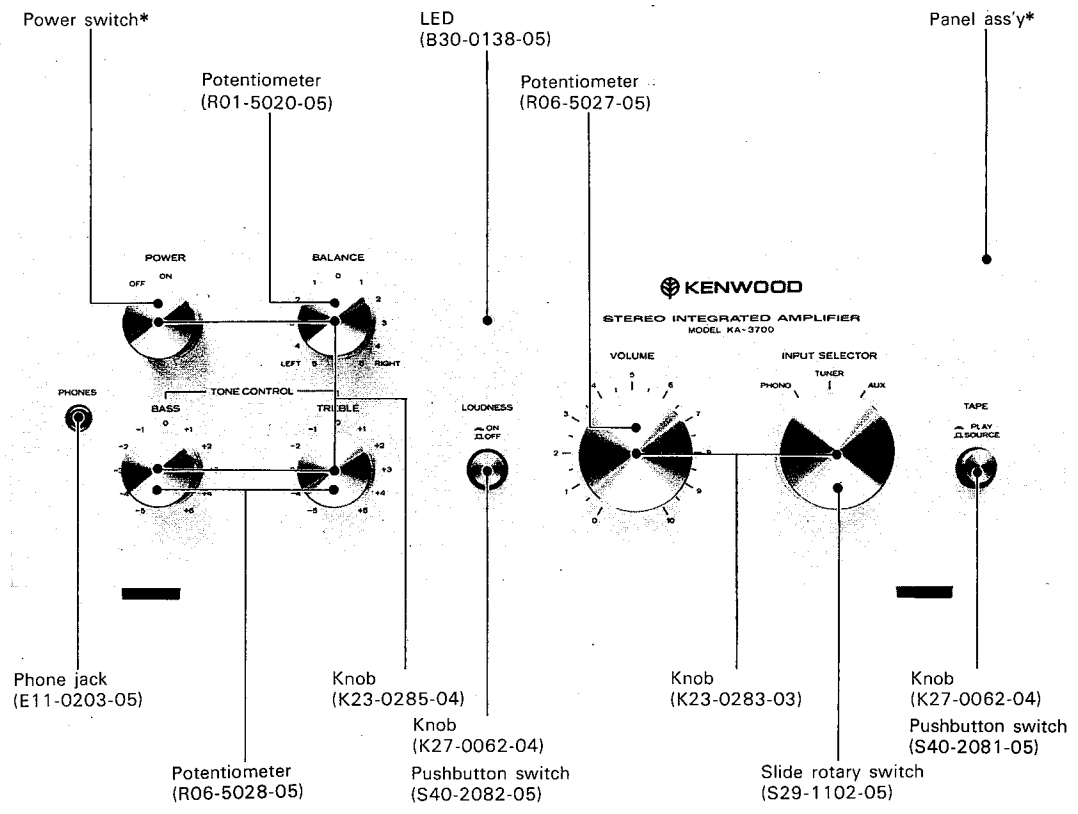
# SERVICE MANUAL

## KA-3700



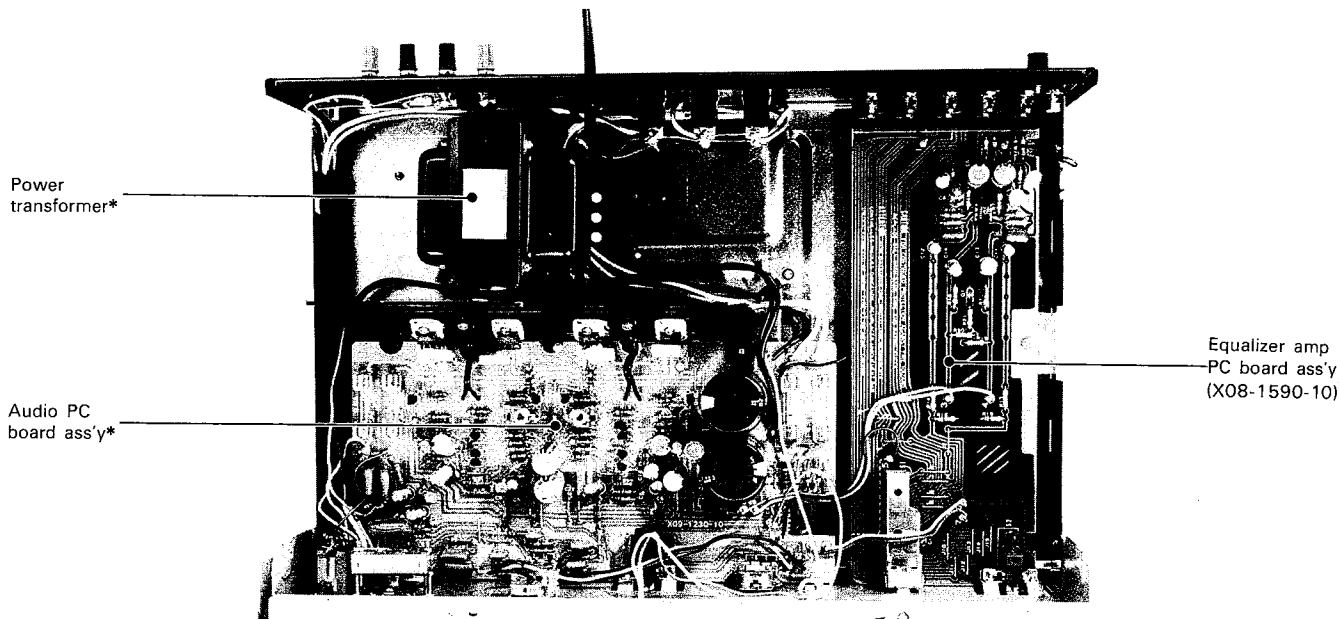
**STEREO INTEGRATED ANPLIFIER**

## EXTERNAL VIEW



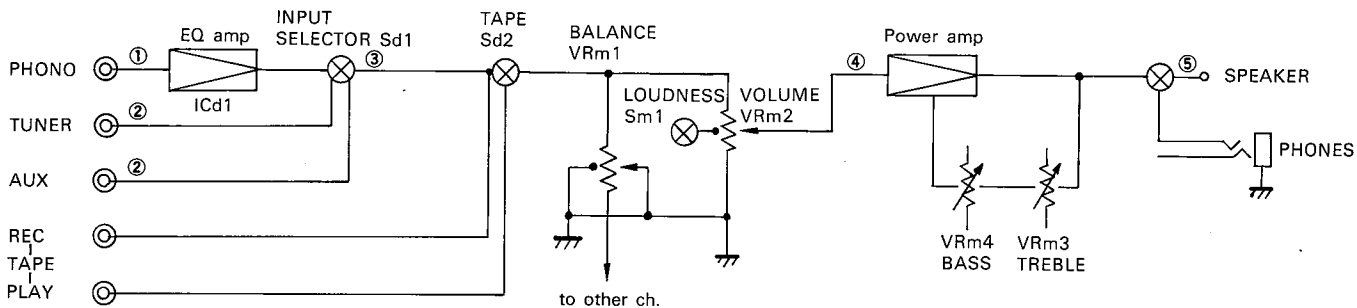
\* Refer to Destinations' Parts List.

## INTERNAL VIEW/BLOCK DIAGRAM/LEVEL DIAGRAM

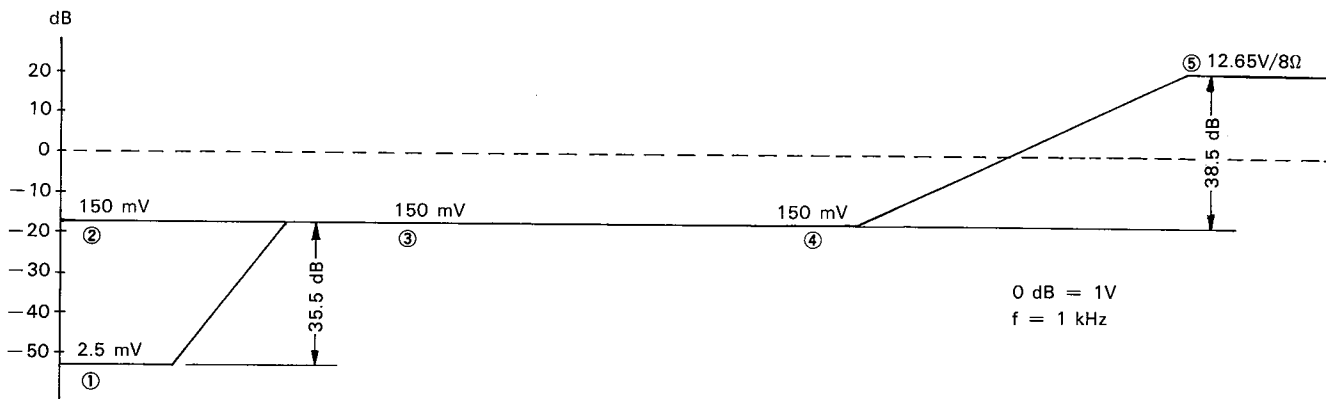


\* Refer to Destinations' Parts List.

### BLOCK DIAGRAM



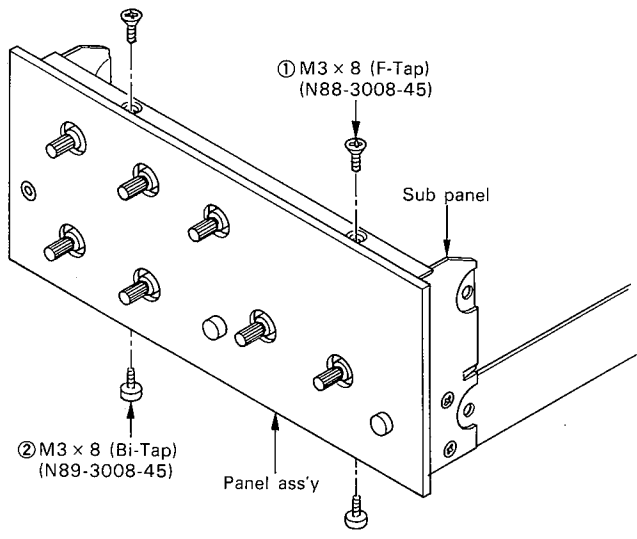
### LEVEL DIAGRAM



## DISASSEMBLY FOR REPAIR

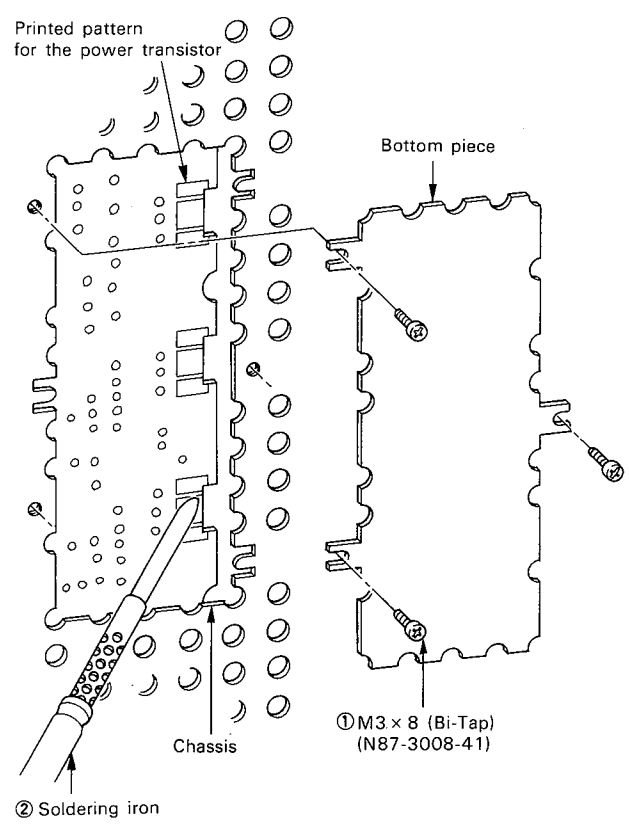
**Note:** Dissassemble in numerical order.

### PANEL ASS'Y

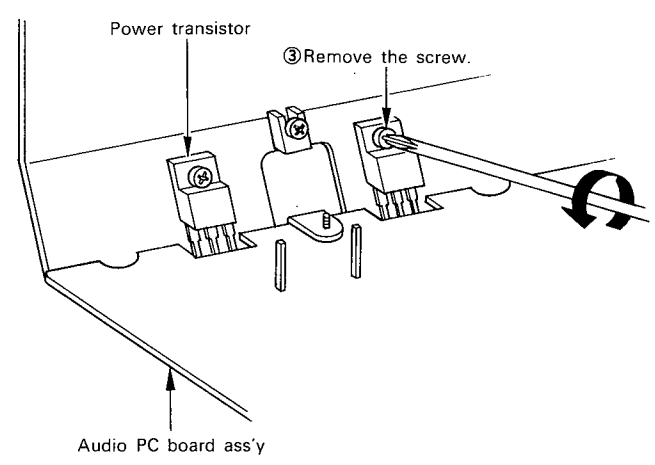


### POWER TRANSISTOR

a)



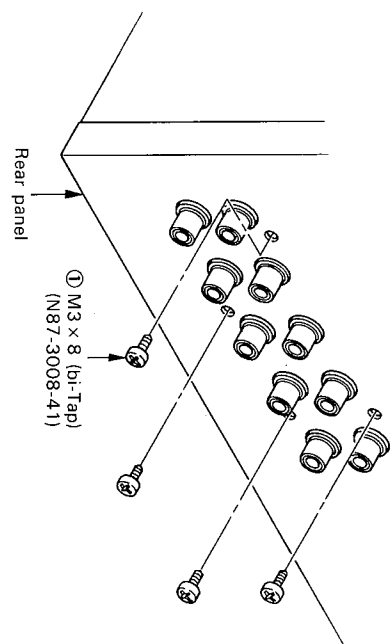
b)



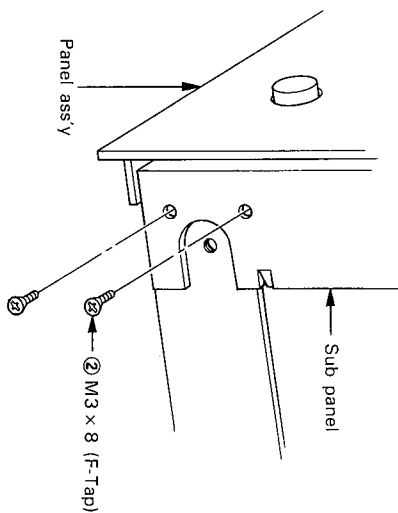
DISASSEMBLY FOR REPAIR

EQUALIZER AMP PC BOARD ASS'Y

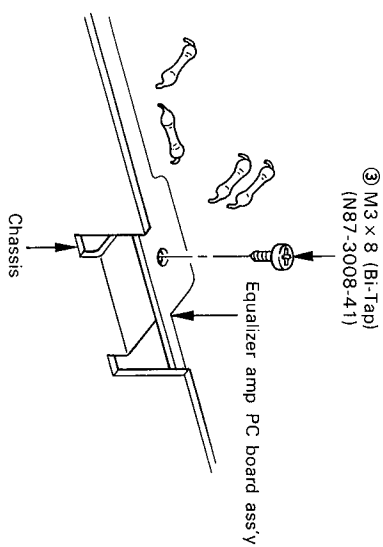
a)



b)



c)



☆ : new parts

Ref. No.	U.S.A. (K)	Canada (P)	Australia (X)	Europe (W)	Scandinavia (L)	England (T)	South Africa (S)	Other Area (M)	Description
C3	C90-0145-05	C91-0025-05	C91-0023-05	CK45E3D103-PMU	CK45E3D103-PMU	CK45E3D103-PMU	C91-0023-05	C91-0023-05	Capacitor 0.01μF
C4	—	—	—	CK45E3D103-PMU	CK45E3D103-PMU	CK45E3D103-PMU	—	—	Capacitor 0.01μF
—	A20-1193-03	A20-1193-03	A20-1193-03	A20-1193-03	A20-1193-03	A20-1195-13	A20-1193-03	A20-1193-03	Panel ass'y ☆
—	B46-0061-10	B46-0055-20	—	—	—	B46-0060-00	—	—	Warranty card
—	B50-1659-00	B50-1660-00	B50-1659-00	B50-1717-00	B50-1717-00	B50-1693-00	B50-1659-00	B50-1659-00	Instruction manual ☆
—	—	—	D32-0075-04	D32-0075-04	D32-0075-04	—	D32-0075-04	D32-0075-04	Switch stopper
—	E08-0225-05	E80-0225-05	E08-0225-05	—	—	—	E08-0225-05	E08-0225-05	AC outlet × 3
—	E30-0181-05	E30-0181-05	E30-0185-05	E30-0459-05	E30-0292-05	E30-0602-05	E30-0602-05	E30-0515-05	Power cord
—	H01-1744-04	H01-1745-04	H01-1747-04	H01-1744-04	H01-1747-04	H01-1746-04	H01-1744-04	H01-1744-04	Carton case ☆
—	—	—	H12-0056-04	—	H12-0056-04	—	—	—	Buffer fixture
—	H20-0441-04	H20-0441-04	H20-0441-04	H20-0441-04	H20-0441-04	H20-0441-04	H20-0441-04	H20-0417-04	Polyethylene cover
—	—	—	—	—	—	—	—	H40-0004-04	Anti-rust paper
—	J02-0073-04	J02-0049-14	J02-0049-14	J02-0049-14	J02-0049-14	J02-0049-14	J02-0049-14	J02-0049-14	Foot × 4
—	J41-0034-05	J41-0034-05	J41-0024-15	J41-0033-05	J41-0033-05	J41-0024-15	J41-0024-15	J41-0033-05	Power cord bushing
—	—	—	—	—	J61-0038-05	—	—	—	Cord band
—	L01-1401-05	L01-1408-05	L01-1405-05	L01-1406-05	L01-1402-05	L01-1407-05	L01-1405-05	L01-1405-05	Power transformer ☆
S1	S29-1103-05	S29-1103-05	S29-1105-05	S29-1104-05	S29-1104-05	S29-1104-05	S29-1105-05	S29-1105-05	Power switch ☆
—	—	—	S31-2001-05	S31-2001-05	S31-2001-05	—	S31-2001-05	S31-2001-05	Slide switch
—	X09-1230-10	X09-1230-10	X09-1230-21	X09-1230-51	X09-1230-51	X09-1230-51	X09-1230-21	X09-1230-21	Audio PC board ass'y ☆

DESTINATIONS' PARTS LIST

PARTS LIST

☆ : new parts

Ref. No.	Parts No.	Description	Re- marks
<b>CAPACITOR</b>			
C1.2	CO93M1H104M	Mylar 0.1μF ±20%	
<b>RESISTOR</b>			
R1.2	RC05GF2H271K	Carbon 270Ω ±10% 1/2W	
R3.4	RS14AB3A100J	Metal film 10Ω ±5% 1W	
<b>MISCELLANEOUS</b>			
—	A01-0325-03	Case	
—	B07-0220-04	Ring	
D1	B30-0138-05	LED	☆
—	B42-0009-04	Passed sticker	
—	E11-0203-05	Phone jack	
—	E20-0428-05	Terminal plate	
—	H10-1497-02	Polystyrene foamed fixture (L)	
—	H10-1498-02	Polystyrene foamed fixture (R)	
—	H25-0078-04	Instruction bag	
—	J19-0306-05	Lead holder	
—	J19-0509-04	LED holder	
—	K23-0283-03	Knob (VOLUME SELECTOR) × 2	☆
—	K23-0285-04	Knob (TONE, BALANCE, POWER) × 4	☆
—	K27-0062-04	Knob (TAPE, LOUDNESS) × 2	
—	N08-0125-05	Dress screw × 6	
—	N08-0128-35	GND screw	
—	X08-1590-10	Equalizer amp, PC board ass'y	☆

EQUALIZER AMP (X08-1590-10)

Ref. No.	Parts No.	Description	Re- marks
<b>CAPACITOR</b>			
Cd1.2	CE04AW1H3R3M	Electrolytic 3.3μF 50WV	
Cd3.4	CE04W1A101K	Ceramic 100pF ±10%	
Cd5.6	CE04W1A221	Electrolytic 220μF 10WV	
Cd7.8	CO09FS1H752J	Polystyrene 0.0075μF ±5%	
Cd9.10	CO09M1H2731	Mylar 0.027μF ±5%	
Cd11.12	CE04BW1H010M	Non-pole electrolytic	
Cd13	CE04W1E330	Electrolytic 33μF 50WV	
Cd14	CE04W1E100	Electrolytic 10μF 25WV	
Cd15	CK45B1H561K	Ceramic 560pF ±10%	
<b>SEMICONDUCTOR</b>			
Qd1	V01-0084-05	Transistor 2SA733(O), (R)	
ICd1	V30-0217-05	IC NJM4558DA	
<b>SWITCH</b>			
Sd1	S29-1102-05	Slide rotary switch (INPUT SELECTOR)	☆
Sd2	S40-2081-05	Pushbutton switch (TAPE)	☆
<b>MISCELLANEOUS</b>			
—	E13-0417-05	Phono jack (4P)	
—	E13-0611-05	Phono jack (6P)	☆

AUDIO (X09-1230- )

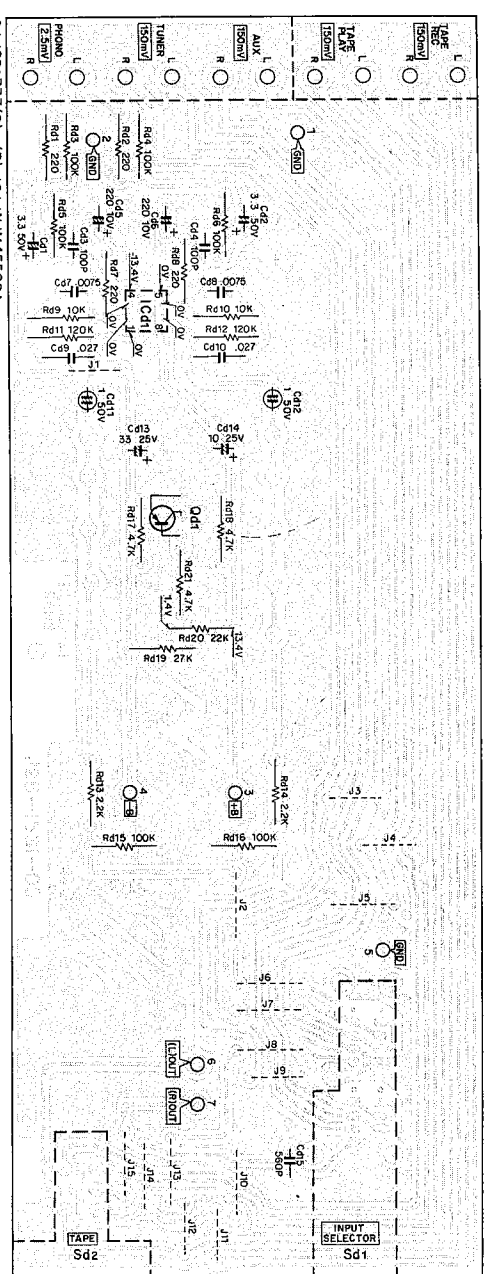
Ref. No.	Parts No.	Description	Re- marks
<b>CAPACITOR</b>			
Cm1.2	CO93M1H393K	Mylar 0.039μF ±10%	
Cm3.4	CE04W1C220	Electrolytic 22μF 16WV	
Cm5.6	CE04W1H010M	Electrolytic 1μF 50WV	
Cm7.8	CC45SL1H220K	Ceramic 22pF ±10%	
Cm9.10	CE04W1E100	Electrolytic 10μF 25WV	
Cm11.12	CC45SL1H150K	Ceramic 15pF ±10%	

Ref. No.	Parts No.	Description	Re- marks
Cm13.14	CE04W1A101	Electrolytic 100μF 10WV	
Cm15.16	CC45SL1H100K	Ceramic 10pF ±10%	
Cm17.18	CE04W1V470	Electrolytic 47μF 35WV	
Cm19.20	CC45SL1H470K	Ceramic 47pF ±10%	
Cm21.22	CE04W1V221	Electrolytic 220μF 35WV	
Cm23.26	CE04W1E100	Electrolytic 10μF 25WV	
Cm27.28	CO93M1H183K	Mylar 0.018μF ±10%	
Cm29.30	CO93M1H823K	Mylar 0.082μF ±10%	
Cm31.32	CO93M1H472K	Mylar 0.047μF ±10%	
Cm33.34	CO93M1H222K	Mylar 0.022μF ±10%	
Cm35.36	CO93M1H104M	Mylar 0.1μF ±20%	
Cm37.38	C90-0364-05	Electrolytic 6800μF 35WV	
Cm39.40	CK45E2H103P	Ceramic 0.01μF ±100% -0%	
Cm41	CE04W1V101	Electrolytic 100μF 35WV	
Cm42	CK45B1H561K	Ceramic 560pF ±10%	
Cm43	CE04W1V101	Electrolytic 100μF 35WV	

Ref. No.	Parts No.	Description	Re- marks
Rm25.26	RD14GY2E101J	Flame proof carbon 100Ω ±5% 1/4W	
Rm27.28	RD14GY2E221J	Flame proof carbon 220Ω ±5% 1/4W	
Rm35.36	RD14GY2E470J	Flame proof carbon 47Ω ±5% 1/4W	
Rm37.38	RD14GY2E331J	Flame proof carbon 330Ω ±5% 1/4W	
Rm39.40	RD14GY2E101J	Flame proof carbon 100Ω ±5% 1/4W	
Rm41.42	RD14GY2E220J	Flame proof carbon 22Ω ±5% 1/4W	
Rm43.46	R92-0110-05	Cement 0.47Ω ±5% 1W	
Rm45.58	RS14GB3A100J	Metal film 10Ω ±5% 1/4W	
Rm59.60	RD14GY2E222J	Flame proof carbon 2.2kΩ ±5% 1/2W	
Rm62	RC05GF2H152K	Carbon 1.5kΩ ±5%	

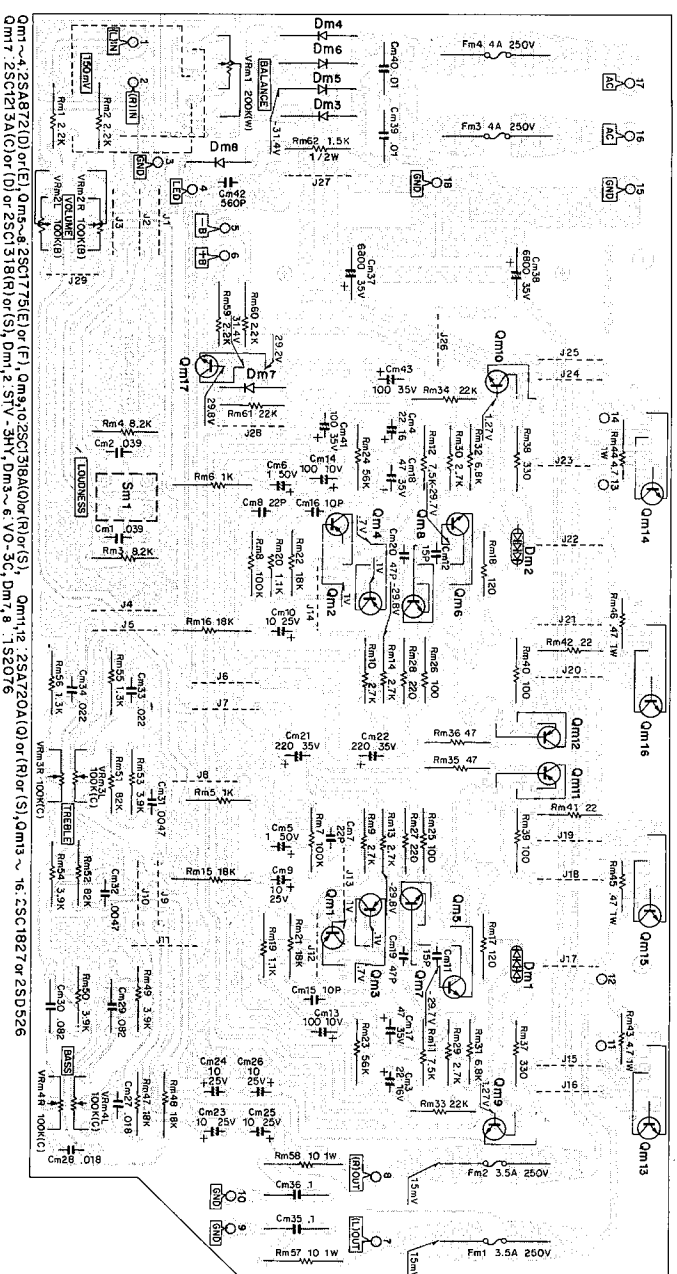
Ref. No.	Parts No.	Description	Re- marks
Om1~4	V01-0191-05	Transistor 2SA872 (D), (E)	
Om5~8	V03-0500-05	Transistor 2SC1775 (E), (F)	
Om9.10	V03-1318-10	Transistor 2SC1318A (Q), (R), (S)	☆
Om11.12	V01-0720-10	Transistor 2SA720A (Q), (R), (S)	☆
Om13~	V03-1827-00	Transistor 2SC1827	☆
Om16	V03-0131-05	or 2SD526	
Om17	V03-0215-05	Transistor 2SC1213A (C), (D)	
Om18	V03-0371-05	or 2SC1318 (R), (S)	
Dm1.2	V21-0013-05	Varistor STV-3HY	
Dm3~6	V11-0290-05	Diode VO-3C	
	(X09-1230-10, -21, -51)	ERCO4-02A	☆
Dm7.8	V11-7100-30	Diode (X09-1231-01)	
	V11-0271-05	Diode 1S2076	
<b>POTENTIOMETER</b>			
Vrm1	R01-5020-05	BALANCE 200kΩ (W)	☆
Vrm2	R06-5027-05	VOLUME 100kΩ (B)	☆
Vrm3.4	R06-5028-05	TONE 100kΩ (C)	☆
<b>SWITCH</b>			
Sm1	S40-2082-05	Pushbutton switch LOUDNESS	☆
<b>MISCELLANEOUS</b>			
Fm1.2	F05-3523-05	Fuse 3.5A 250V (X09-1230-21)	
	F05-3524-05	Fuse 3.5A 250V (X09-1230-10, X09-1231-01)	
	F05-3525-05	Fuse 3.5A 250V (X09-1230-51)	
	F05-4021-05	Fuse 4A 250V (X09-1230-01)	
	F05-4022-05	Fuse 4A 250V (X09-1230-21)	
	F05-4024-05	Fuse 4A 250V (X09-1230-51)	
	J13-0041-05	Fuse clip × 8 (X09-1230-10, -21, X09-1231-01)	
	J13-0054-05	Fuse clip × 8 (X09-1230-51)	☆

EQUALIZER AMP (X08-1590-10)

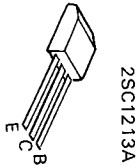


PC BOARD

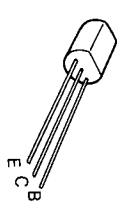
AUDIO (X09-1230-10)



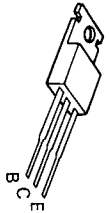
SCHEMATIC DIAGRAM



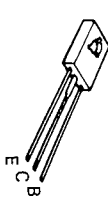
- 2SA640
- 2SA720A
- 2SA733
- 2SA872
- 2SA872A



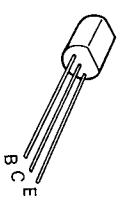
- 2SD525
- 2SD526
- 2SC1827



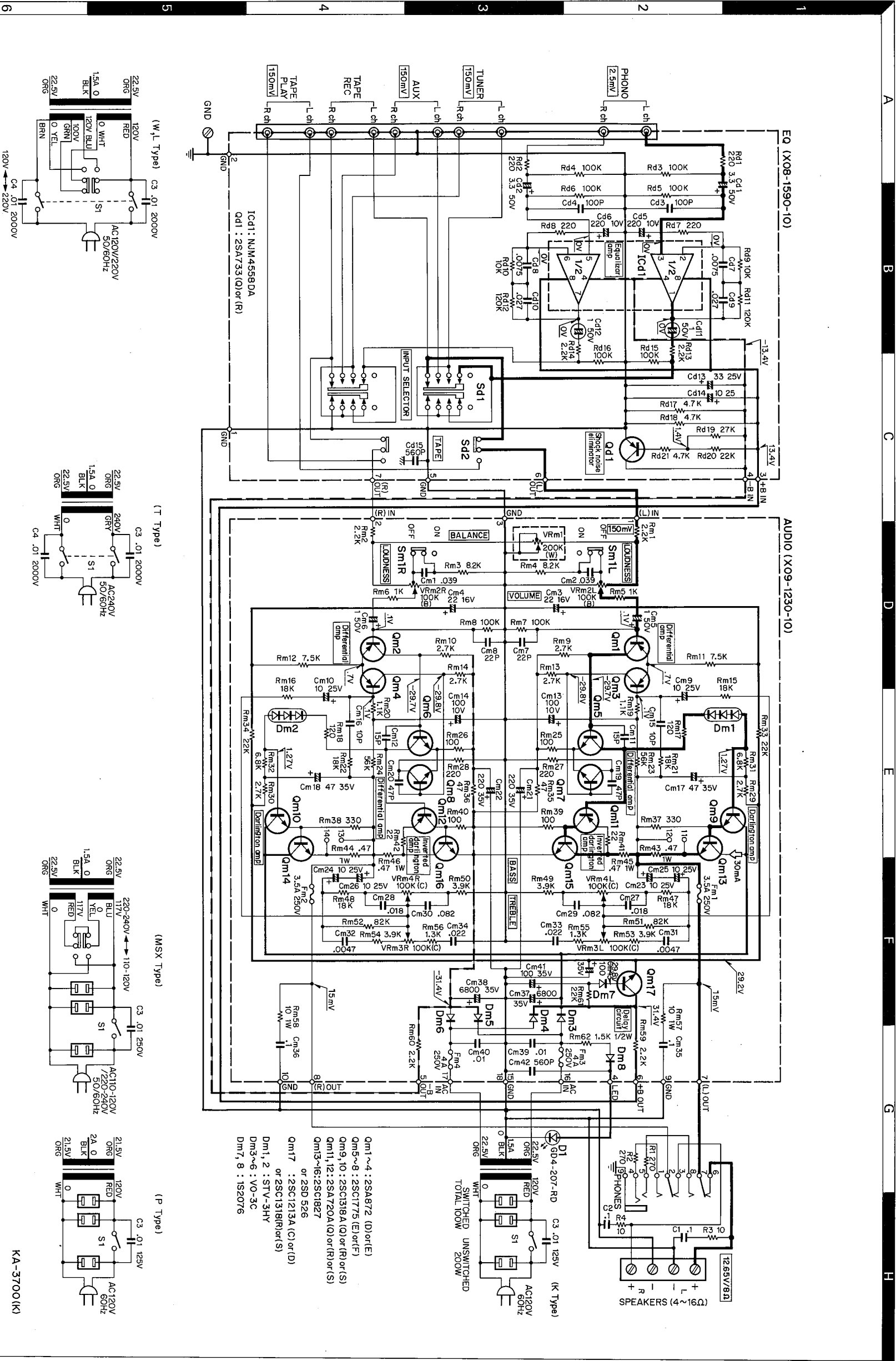
- 2SC1212A



- 2SA850
- 2SC1735



Semiconductor	Substitution
2SA720A	2SA640
2SA872	2SA733
2SC1213A	2SC1212A
2SC1318	2SC1318A
2SC1318A	2SC1212A
2SC1775	2SC1775A
2SC1827	2SD525
2SD526	2SD525



DC voltages to the chassis are reference values obtained from measurements with a 20 kΩ/V circuit tester under no signal condition.

**SPECIFICATIONS**

**Power Output (K·M·S·X)**  
**20 watts\* per channel, minimum RMS at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.08% total harmonic distortion.**

**Power Output (W·L·T)**  
**25 watts per channel, minimum RMS at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.1% total harmonic distortion.**

**Both Channel Driven (K·M·S·X)** ..... 22+22 watts 4 ohms at 1,000 Hz  
**(W·L·T)** ..... 25+25 watts 4 ohms at 1,000 Hz

**Dynamic Power Output** ..... 100 watts 4 ohms

**Total Harmonic Distortion (K·M·S·X)** ..... 0.08% at rated power into 8 ohms

**Total Harmonic Distortion (W·L·T)** ..... 0.1% at rated power into 8 ohms

**Tatal Harmonic Distortion** ..... 0.04% at 1/2 rated power into 8 ohms

**Intermodulation Distortion** ..... 0.04% at rated power into 8 ohms  
 (60 Hz : 7 KHz = 4 : 1)

**Power Bandwidth** ..... 10 Hz at 50 KHz

**Damping Factor** ..... 30 at 8 ohms

**Speaker Impedance** ..... Accept 4 ohms to 16 ohms

**Input Sensitivity/Impedance**

Phono ..... 2.5 mV/50k ohms

Tuner ..... 150 mV/10k ohms

AUX ..... 150 mV/50k ohms

Tape ..... 150 mV/50k ohms

**Signal to Noise Ratio (IHF: A)**

Phono ..... 72 dB for 2.5 mV input  
 78 dB for 5.0 mV input

Tuner ..... 84 dB for 10 mV input

AUX ..... 100 dB for 150 mV input

Tape ..... 100 dB for 150 mV input

Maximum Input Level for

Phono ..... 150 mV (rms.), T.H.D. 0.08% at 1,000 Hz

Output Level/Impedance

Tape REC (Pin) ..... 140 mV/450 ohms

**Frequency Response**

Phono ..... RIAA standard curve +0.4 dB, -0.4 dB

AUX and Tape ..... 20 Hz to 20 KHz +1 dB, -1 dB

**Tone Control**

Bass ..... ±7.5 dB at 100 Hz

Treble ..... ±7.5 dB at 10 KHz

Loudness Control ..... 9 dB at 100 Hz

(at -30 dB Volume Level)

**Power Consumption** ..... 185 watts at full power

A.C. Outlet ..... Switched 2, Unswitched 1

Dimension ..... W 14-31/32" (380 mm)

H 5-1/2" (140 mm)

D 11-7/16" (291 mm)

Weight (Net) ..... 12.7 lbs (5.7 kg)

(Gross) ..... 15.2 lbs (6.8 kg)

\* Measured pursuant to Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier in U.S.A.

**Note:**

Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

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**TRIO-KENWOOD CORPORATION**

■ 3-6-17 AOBADAI, MEGURO-KU, TOKYO, JAPAN.