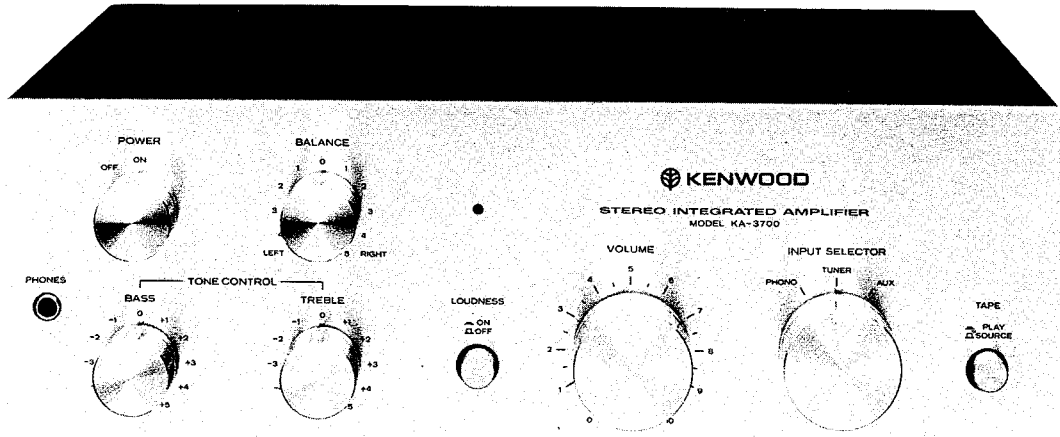
KENWOOD

HI/FI STEREO COMPONENTS

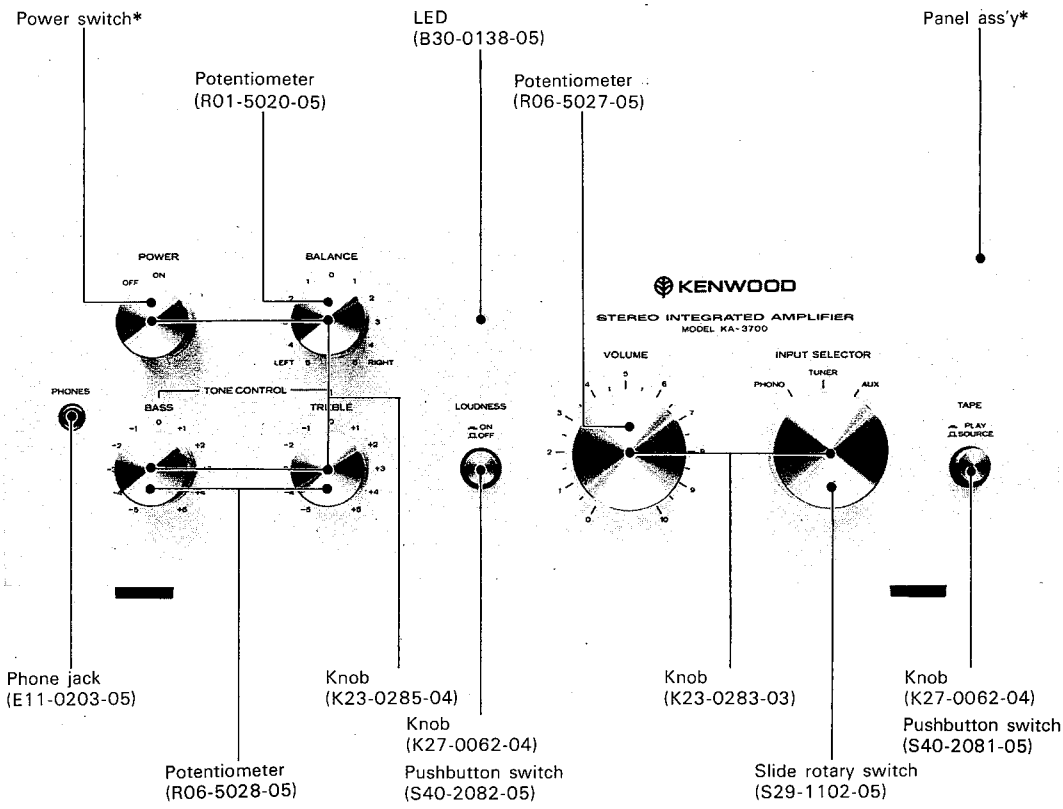
SERVICE MANUAL

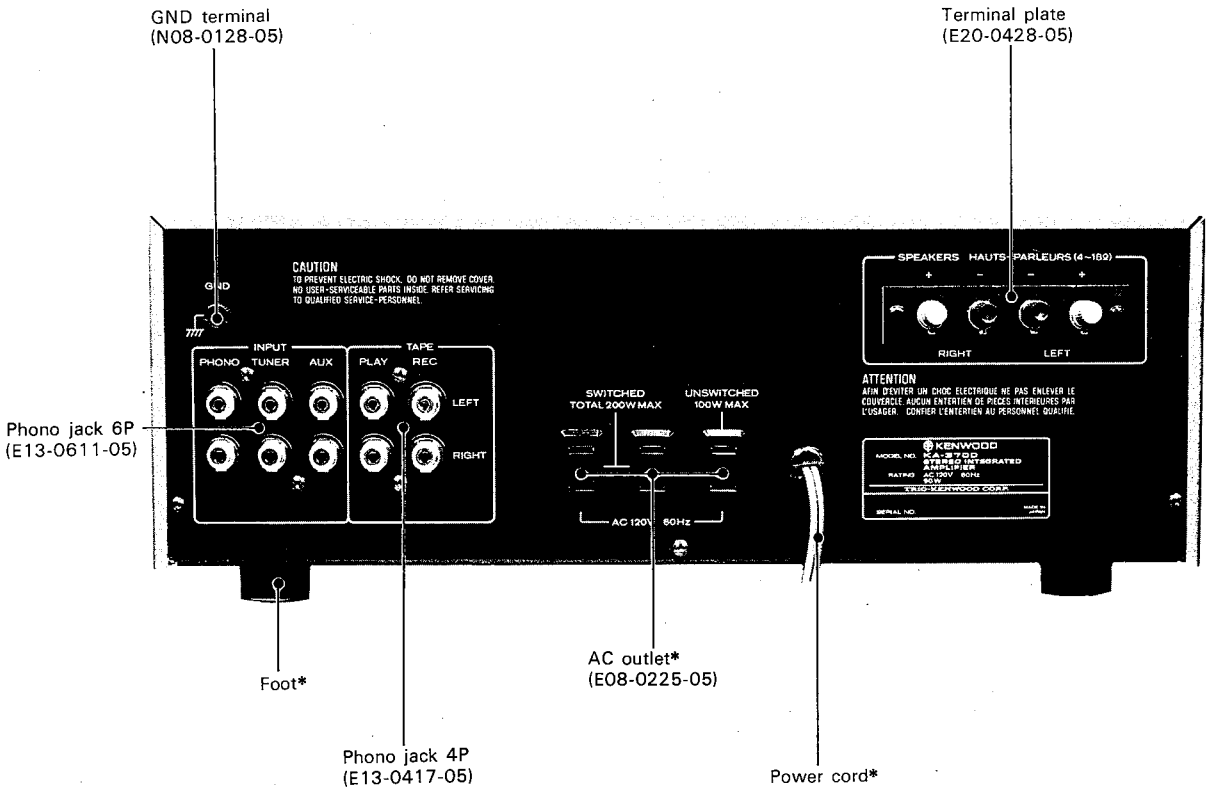
KA-3700



STEREO INTEGRATED ANPLIFIER

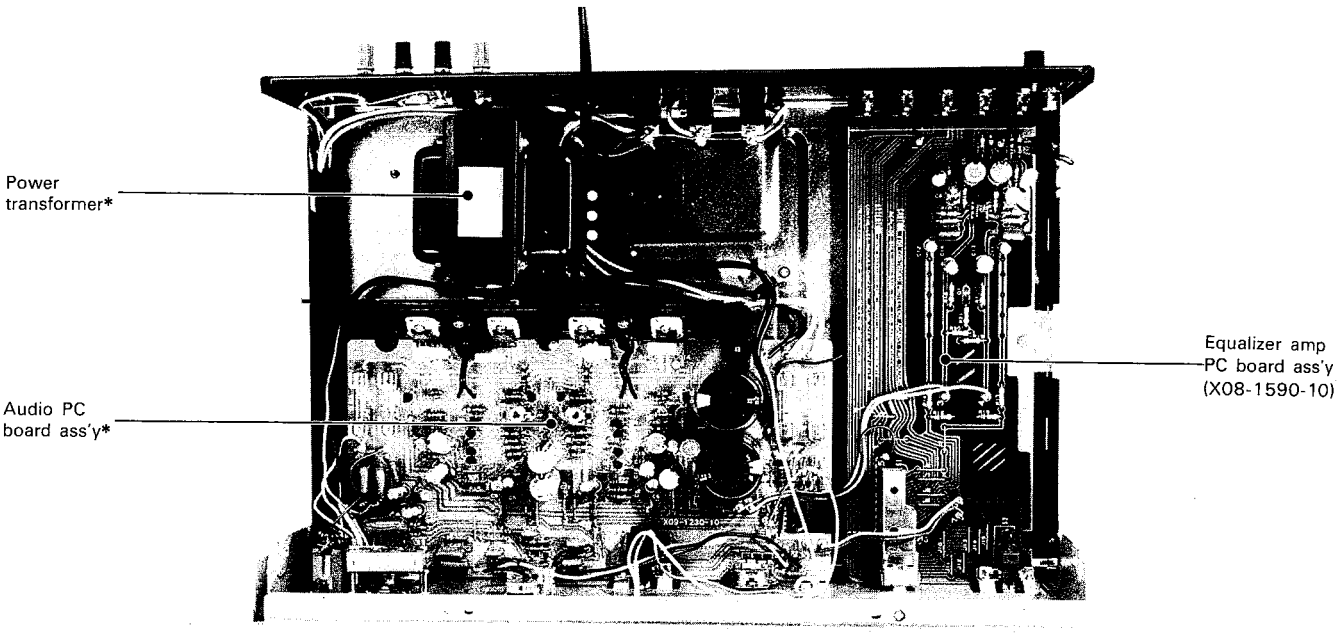
EXTERNAL VIEW





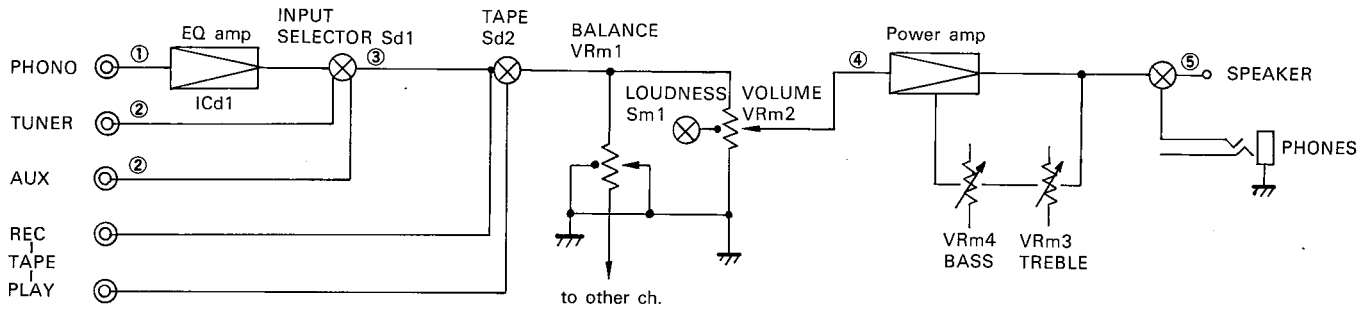
* Refer to Destinations' Parts List.

INTERNAL VIEW/BLOCK DIAGRAM/LEVEL DIAGRAM

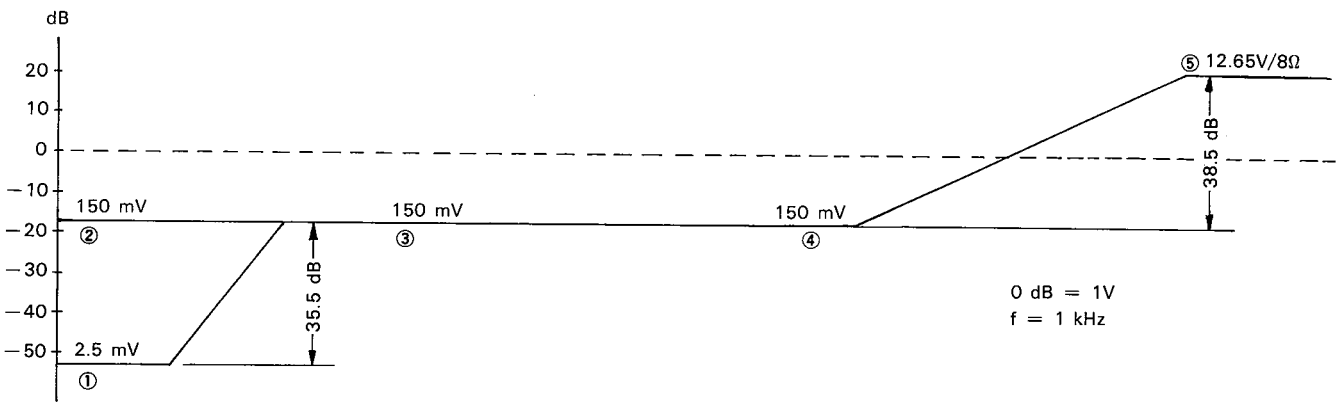


* Refer to Destinations' Parts List.

BLOCK DIAGRAM



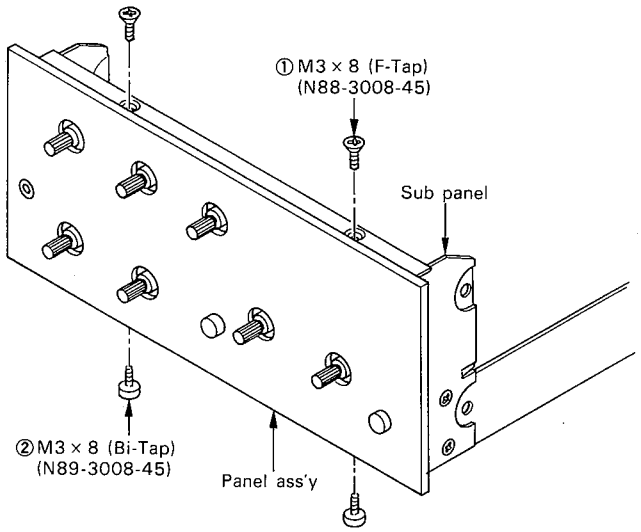
LEVEL DIAGRAM



DISASSEMBLY FOR REPAIR

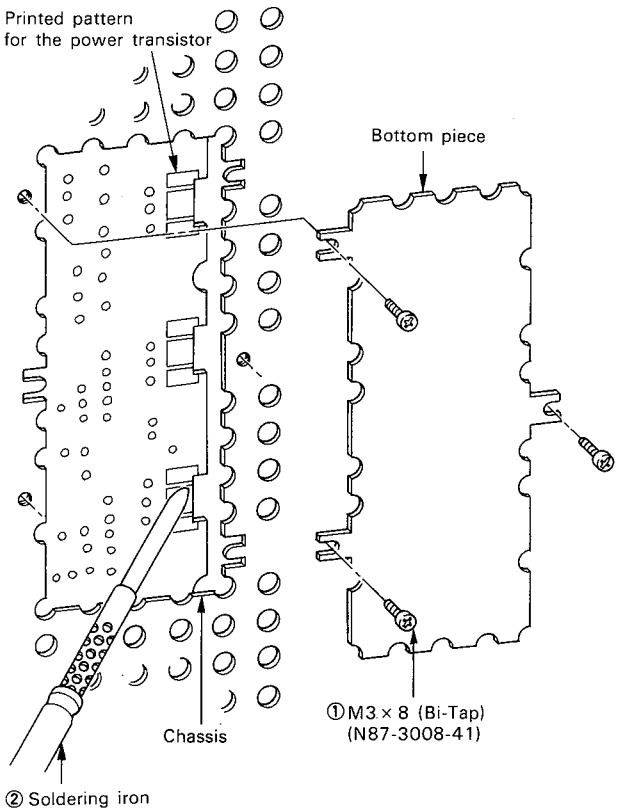
Note: Dissasemble in numerical order.

PANEL ASS'Y

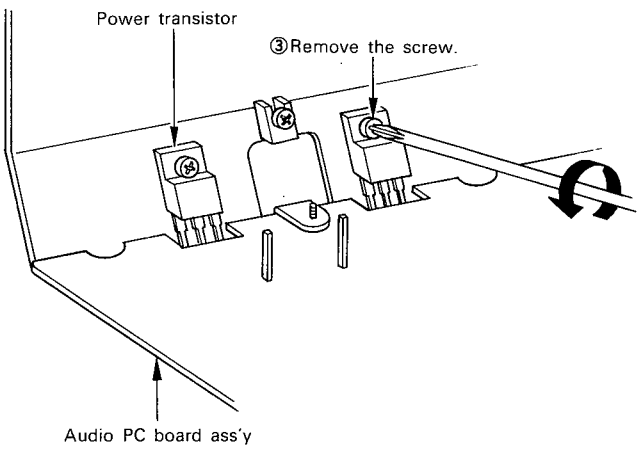


POWER TRANSISTOR

a)

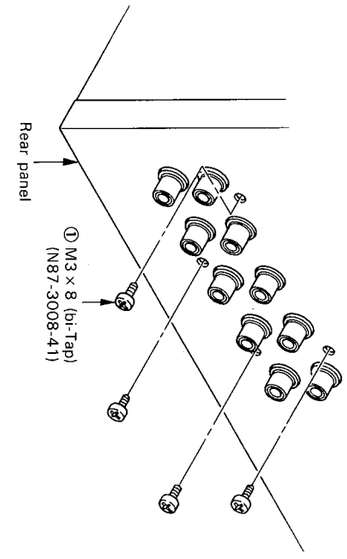


b)

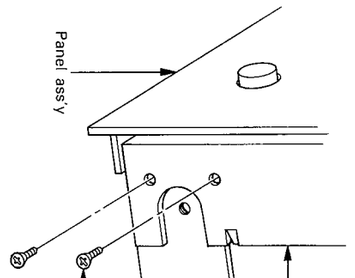


EQUALIZER AMP PC BOARD ASS'Y

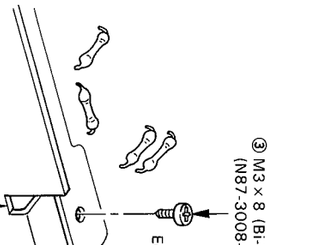
a)



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 ☆

PARTS LIST

☆ : new parts

Ref. No.	Parts No.	Description	Re-marks
		CAPACITOR	
C1,2	CQ93M1H104M	Mylar 0.1μF ±20%	
		RESISTOR	
R1,2	RC05GF2H271K	Carbon 270Ω ±10% 1/2W	
R3,4	RS14AB3A100J	Metal film 10Ω ±5% 1W	
		MISCELLANEOUS	
—	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)

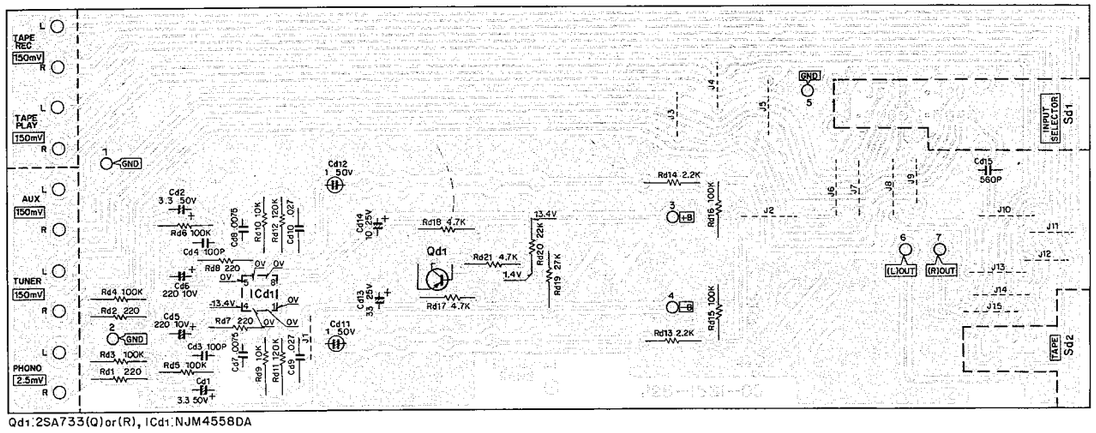
Ref. No.	Parts No.	Description	Re-marks
		CAPACITOR	
Cd1,2	CE04AW1H3R3M	Electrolytic 3.3μF 50WV	
Cd3,4	CC45SL1H101K	Ceramic 100pF ±10%	
Cd5,6	CE04W1A221	Electrolytic 220μF 10WV	
Cd7,8	CQ09FS1H752J	Polystyrene 0.0075μF ±5%	
Cd9,10	CQ93M1H273J	Mylar 0.027μF ±5%	
Cd11,12	CE04BW1H010M	Non-pole electrolytic 1μF 50WV	
Cd13	CE04W1E330	Electrolytic 33μF 25WV	
Cd14	CE04W1E100	Electrolytic 10μF 25WV	
Cd15	CK45B1H561K	Ceramic 560pF ±10%	
		SEMICONDUCTOR	
Qd1	V01-0084-05	Transistor 2SA733(Q), (R)	
ICd1	V30-0217-05	IC NJM4558DA	
		SWITCH	
Sd1	S29-1102-05	Slide rotary switch (INPUT SELECTOR)	☆
Sd2	S40-2081-05	Pushbutton switch (TAPE)	☆
		MISCELLANEOUS	
—	E13-0417-05	Phono jack (4P)	☆
—	E13-0611-05	Phono jack (6P)	

AUDIO (X09-1230-)

Ref. No.	Parts No.	Description	Re-marks
		CAPACITOR	
Cm1,2	CQ93M1H393K	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%	
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	CQ93M1H183K	Mylar 0.018μF ±10%	
Cm29,30	CQ93M1H823K	Mylar 0.082μF ±10%	
Cm31,32	CQ93M1H472K	Mylar 0.0047μF ±10%	
Cm33,34	CQ93M1H223K	Mylar 0.022μF ±10%	
Cm35,36	CQ93M1H104M	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	
		RESISTOR	
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	
Rm57,58	RS14GB3A100J	Metal film 10Ω ±5% 1/4W	
Rm59,60	RD14GY2E222J	Flame proof carbon 2.2kΩ ±5% 1/4W	
Rm62	RC05GF2H152K	Carbon 1.5kΩ ±5% 1/2W	
		SEMICONDUCTOR	
Qm1～4	V01-0191-05	Transistor 2SA872 (D), (E)	
Qm5～8	V03-0500-05	Transistor 2SC1775 (E), (F)	
Qm9,10	V03-1318-10	Transistor 2SC1318A (Q), (R), (S)	☆
Qm11,12	V01-0720-10	Transistor 2SA720A (Q), (R), (S)	☆
Qm13 ～ 16	V03-1827-00	Transistor 2SC1827	☆
	V03-0131-05	or 2SD526	
Qm17	V03-0215-05	Transistor 2SC1213A (C), (D)	
	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)	
	V11-7100-30	Diode ERC04-02A (X09-1231-01)	☆
Dm7,8	V11-0271-05	Diode 1S2076	
		POTENTIOMETER	
VRm1	R01-5020-05	BALANCE 200kΩ (W)	☆
VRm2	R06-5027-05	VOLUME 100kΩ (B)	☆
VRm3,4	R06-5028-05	TONE 100kΩ (C)	☆
		SWITCH	
Sm1	S40-2082-05	Pushbutton switch LOUDNESS	☆
		MISCELLANEOUS	
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)	
Fm3,4	F05-4021-05	Fuse 4A 250V (X09-1230-10, X09-1231-01)	
	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)	☆

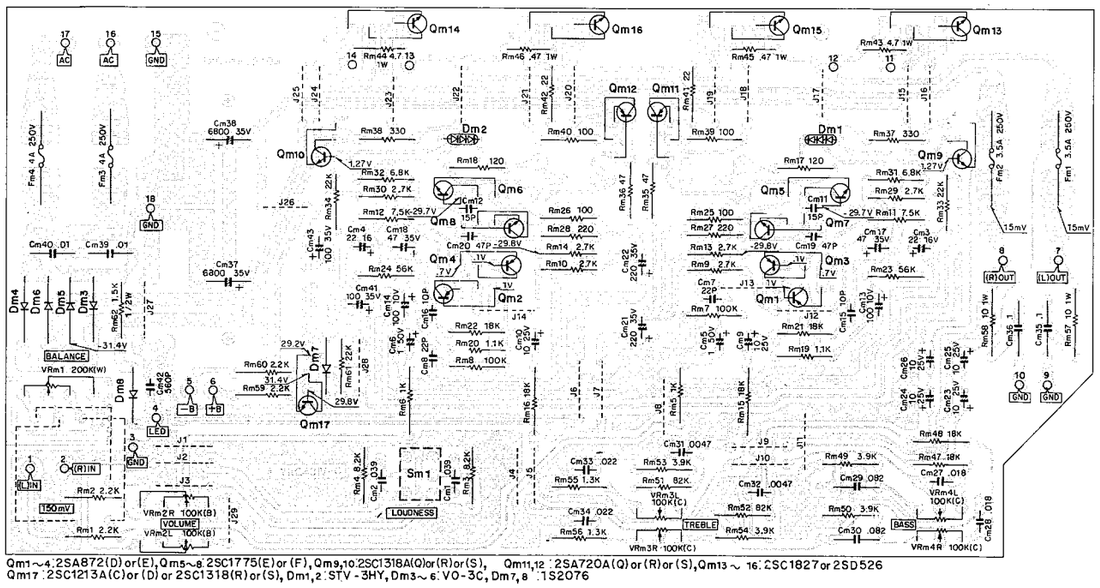
PC BOARD

EQUALIZER AMP (X08-1590-10)



Qd1:2SA733(Q)or(R), ICd1:NJM4558DA

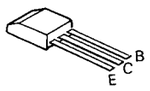
AUDIO (X09-1230-10)



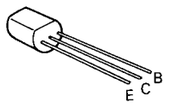
Qm1～4:2SA872(D)or(E), Qm5～8:2SC1775(E)or(F), Qm9,10:2SC1318A(Q)or(R)or(S), Qm11,12:2SA720A(Q)or(R)or(S), Qm13～16:2SC1827or2SD526
Qm17:2SC1213A(C)or(D)or2SC1318(R)or(S), Dm1,2:STV-3HY, Dm3～6:VO-3C, Dm7,8:1S2076

SCHEMATIC DIAGRAM

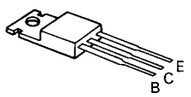
2SC1213A



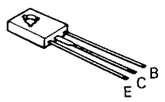
2SA640 2SC1318
2SA720A 2SC1318A
2SA733 2SC1775
2SA872 2SC1775A
2SA872A



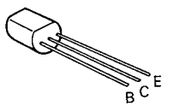
2SD525
2SD526
2SC1827



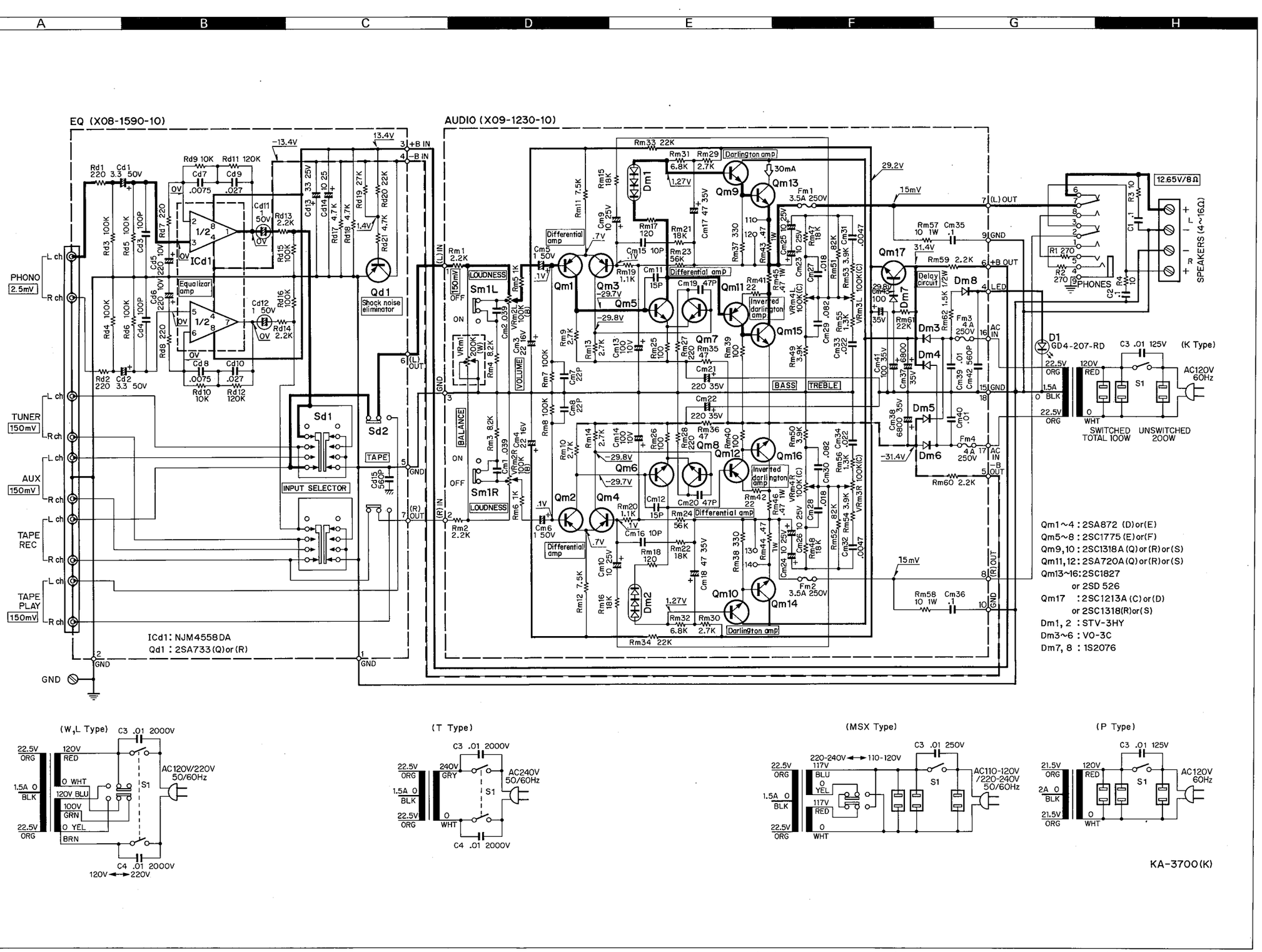
2SC1212A



2SA850
2SC1735



Semiconductor	Substitution
2SA720A	2S850
2SA733	2SA640
2SA872	2SA872A
2SC1213A	2SC1212A
2SC1318	2SC1318A 2SC1212A
2SC1318A	2SC1735
2SC1775	2SC1775A
2SC1827	2SD525
2SD526	2SD525



KA-3700(K)

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
Both Channel Driven	**(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 (60 Hz : 7 kHz = 4 : 1)	0.04% at rated power into 8 ohms
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
	84 dB for 10 mV input
Tuner	100 dB for 150 mV input
AUX	100 dB for 150 mV input
Tape	100 dB for 150 mV input
Maximum Input Lever 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 (at −30 dB Volume Level)	9 dB at 100 Hz
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 Commision'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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