



3538

KENWOOD
HI/FI STEREO COMPONENTS

SERVICE MANUAL

KA-8300
(KA-9800)



STEREO INTEGRATED AMPLIFIER

CONTENTS

EXTERNAL VIEW	3
INTERNAL VIEW	3
DISASSEMBLY	4
BLOCK DIAGRAM	5
PACKING	5
CIRCUIT DESCRIPTIONS	6
ADJUSTMENTS	6
TROUBLESHOOTING	6
DESTINATIONS' PARTS LIST	7
PARTS LIST	
TOTAL	8
POWER SUPPLY (X00-1650-11, -21, -61)	8
POWER AMP (X07-1420-10)	9
PREAMP (X08-1440-10)	9
PRESENCE (X11-1330-10)	10
METER (X13-2170-01)	10
SWITCH (X13-2220-10)	10
PC BOARD	11
SEMICONDUCTOR SUBSTITUTIONS	11
SCHEMATIC DIAGRAM	12
SPECIFICATIONS	13

Note 1 :

The products are subject to modification in components and circuits in different countries and regions. This is because each products must be used under the best condition.

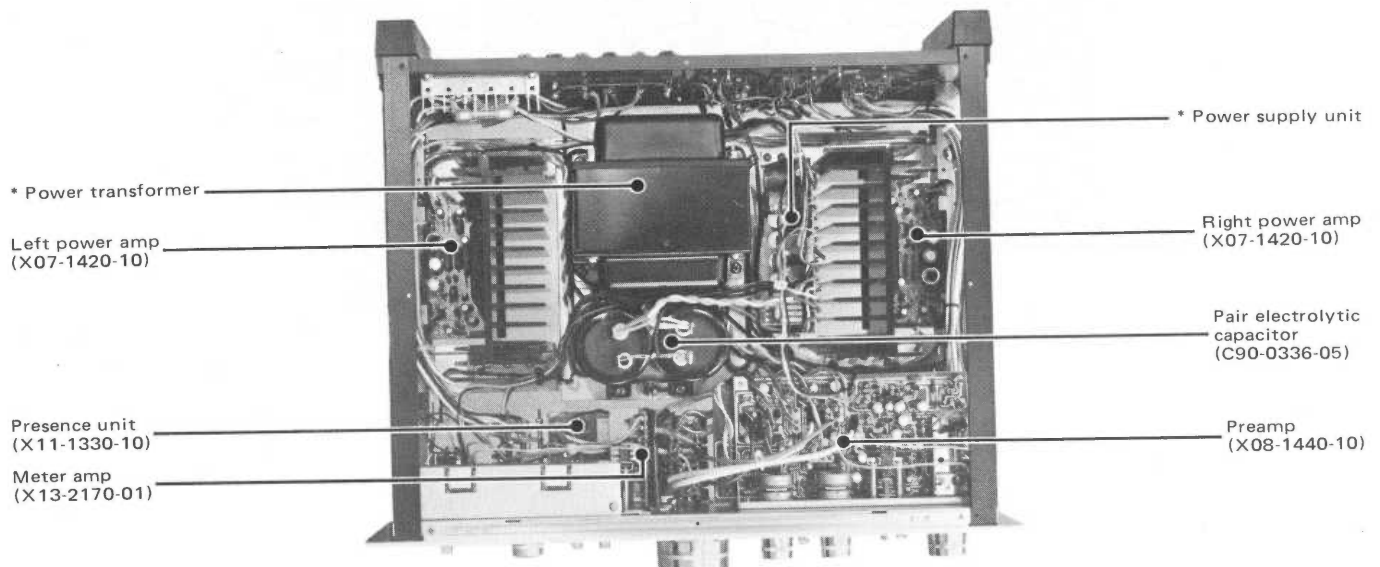
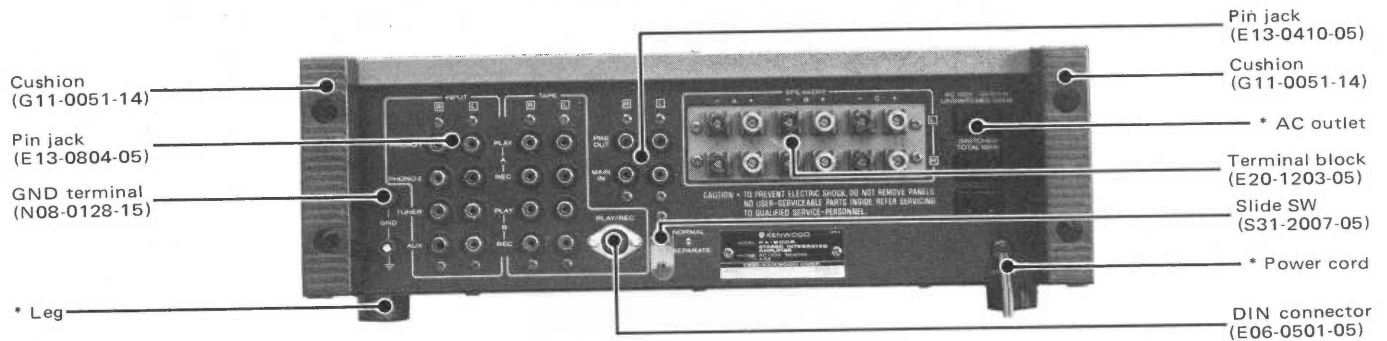
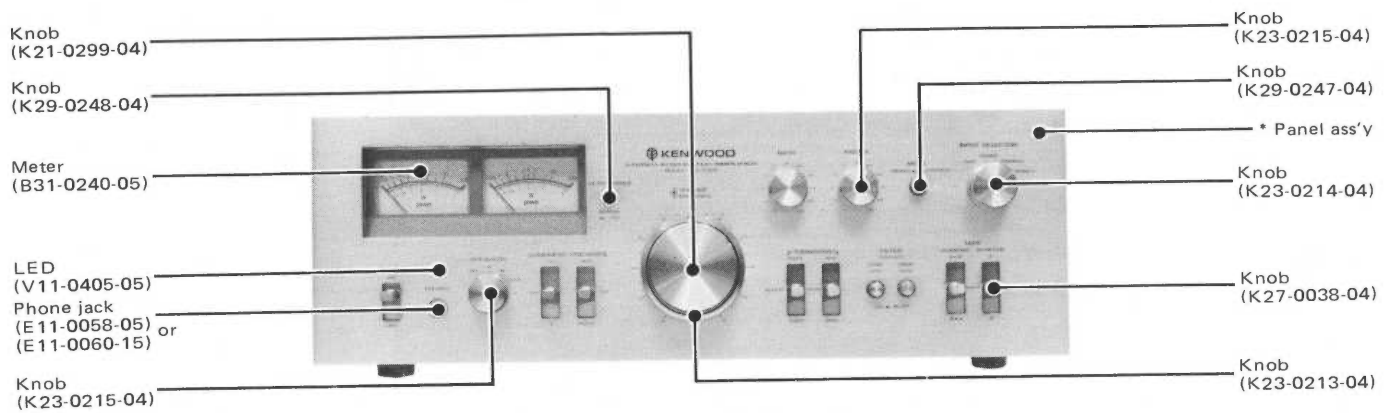
This manual provides information of modification based on the standard in the U.S., for the convenience of ordering associated components and parts.

U.S.A.	K
Canada	P
PX	U
Australia	X
Europe	W
England	T
Scandinavia	L
South Africa	S
Other area	M

Note 2 :

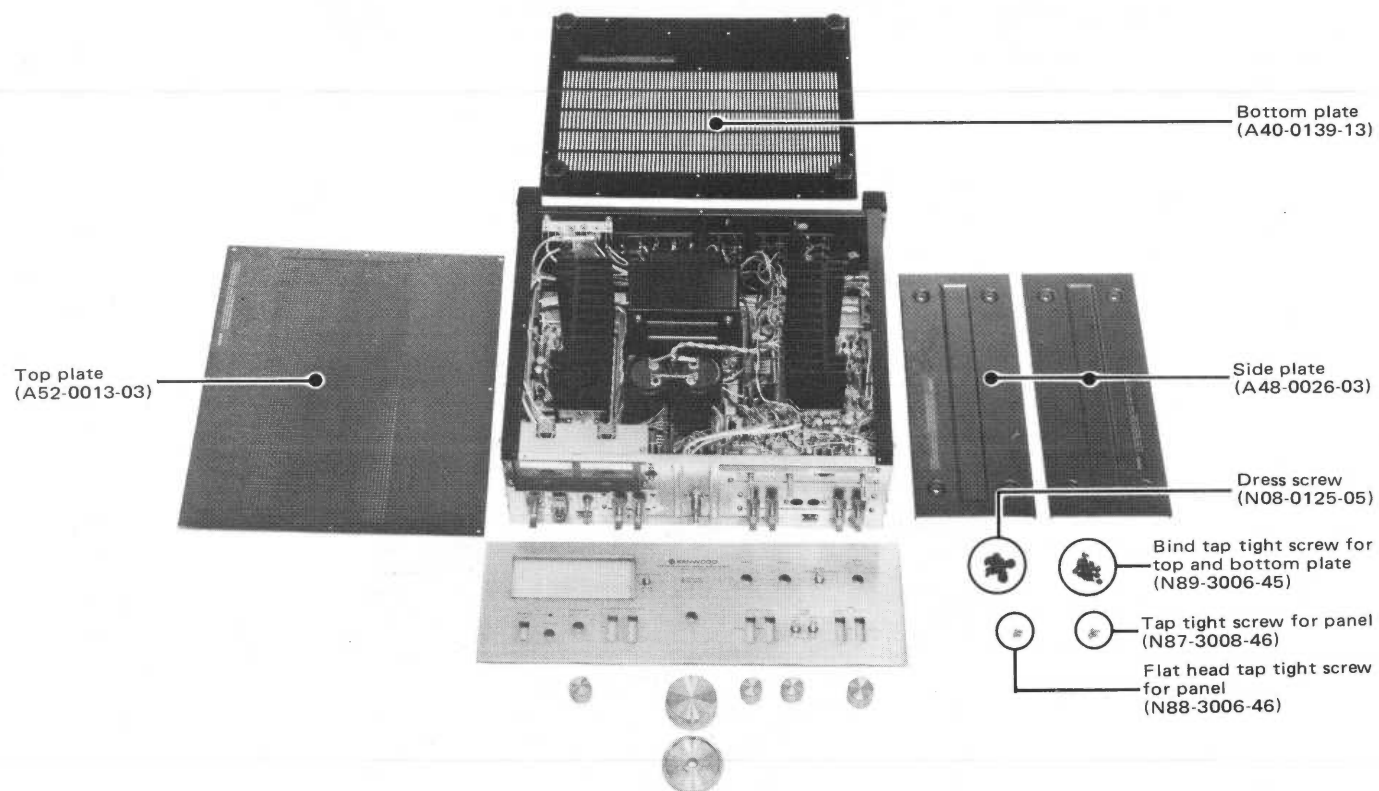
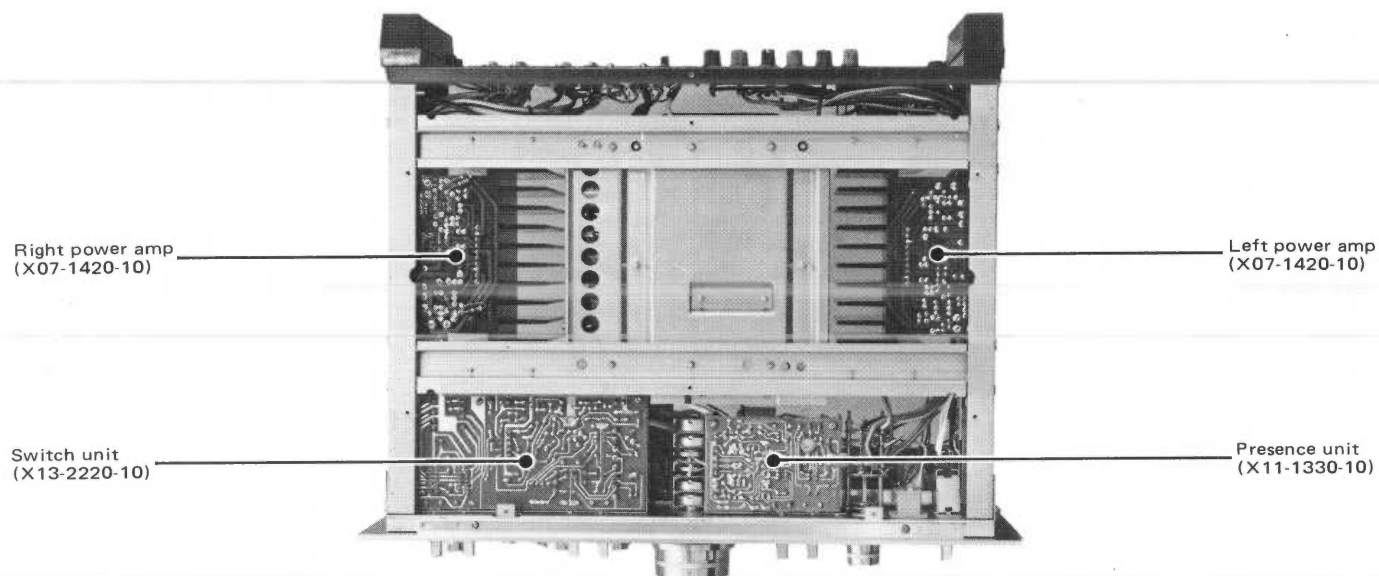
Symbol ✱ and symbol ● in parts list mean the new parts and the parts not being kept in stock, respectively.

EXTERNAL & INTERNAL VIEW

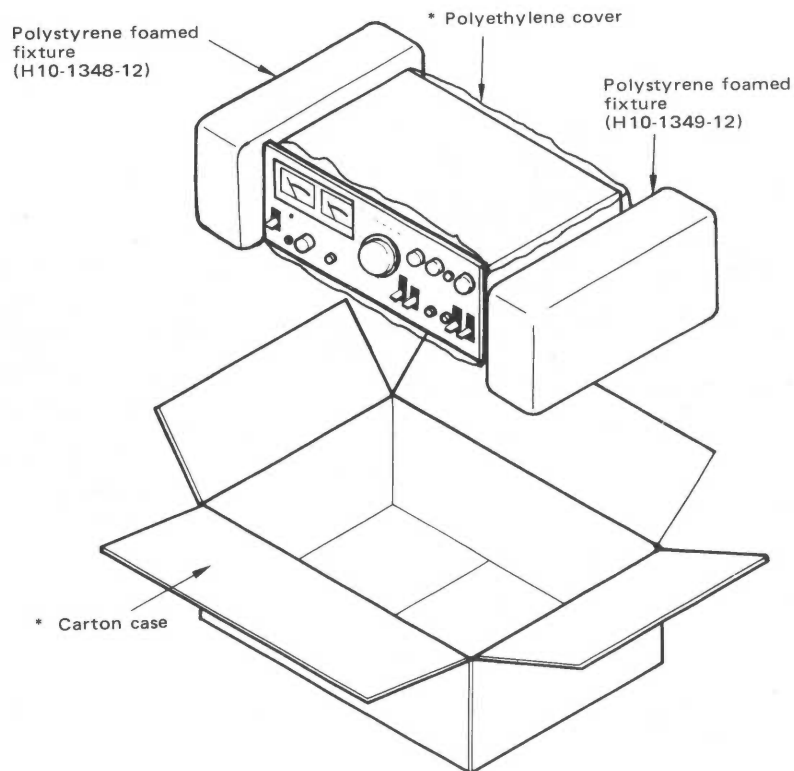
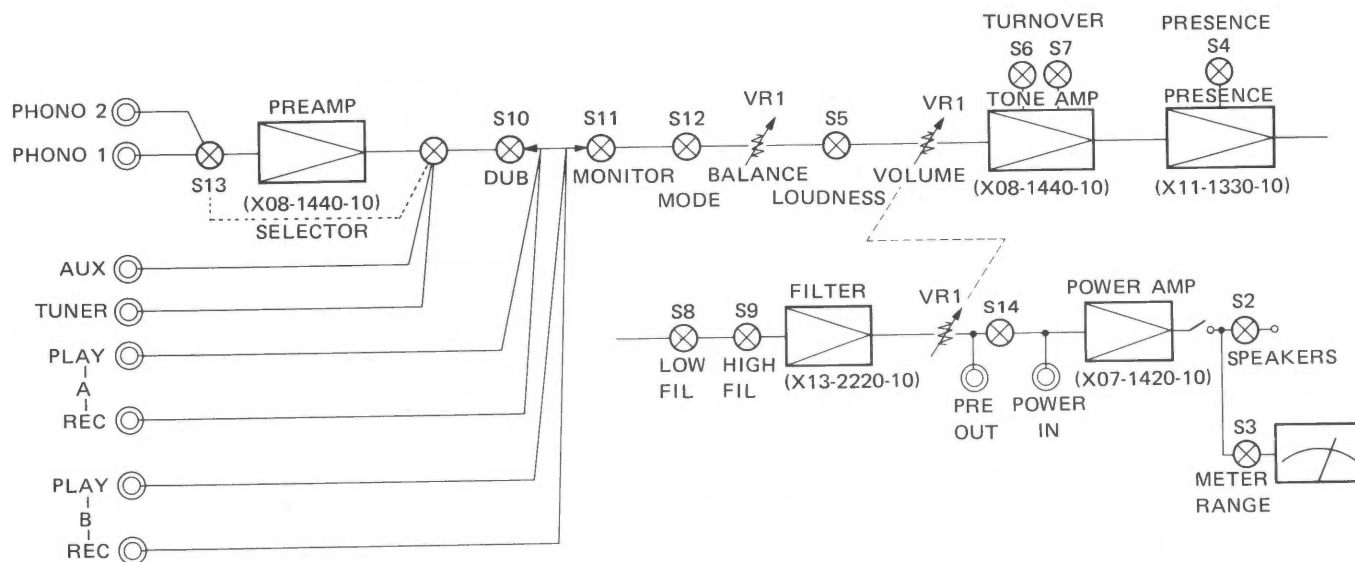


* Refer to "destinations' parts list".

INTERNAL VIEW/DISASSEMBLY



BLOCK DIAGRAM/PACKING



* Refer to Destinaitons' parts list.

CIRCUIT DESCRIPTIONS/ADJUSTMENTS/TROUBLESHOOTING

PREAMP SECTION

The preamp circuit is composed of a differential amp, emitter follower and a class A amp. The total gain of this circuit is 36 dB (63 times at 1 kHz). The circuit operates with a dual 28 volts which assures the wide dynamic range and a low distortion.

POWER AMP

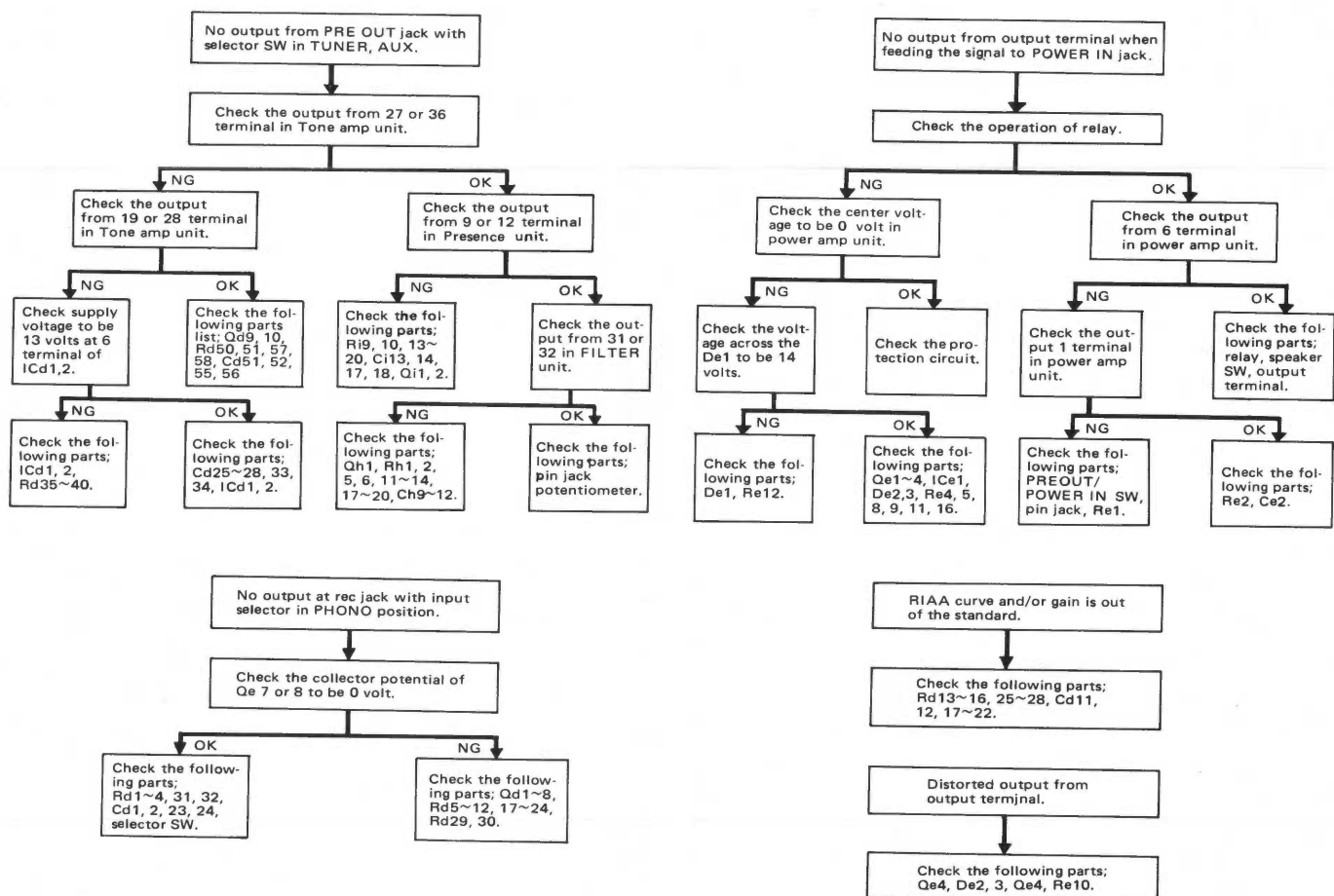
Power amp consists of a differential amp, driver amp, bias circuit, constant current circuit, ASO protection circuit, and complementary emitter follower output amp. The first stage, Qe1 and 2 are a differential amp and the subsequent stage, Qe3 is a class A amp. Qe4 acts as a constant current circuit and gives the constant current to ICe1. ASO protection circuit, which protects a power transistor for excessive current, complementary transistor, and power transistor are packed in the IC, which is called Darlington power pack.

TONE AMP

Tone amp circuit employs IC as buffer amp and NPN transistor as tone control amp.

METER RANGE ADJUSTMENT

Push the meter range pushbutton switch to 3W position. Connect the dummy load to the output terminal instead of the loudspeaker. Also connect the audio generator to AUX jack of the amplifier. Then turn VOLUME until the output power is 3W (4.9V/8Ω). Turn the PC trimmer potentiometer VRq1, 2 until the meter indicates 3W.



DESTINATIONS' PARTS LIST

Symbol ☆ : new parts, Symbol ● : the parts not being kept in stock. KA-9800 is the product for "AUDIO CLUB"

Ref. No.	U.S.A. (K)	Canada (P)	PX (U)	Australia (X)	Europe (W)	Scandinavia (L)	England (T)	KA-9800 M2	Other Area (M)	Description
—	A20-0971-12	A20-0971-12	A20-0971-12	A20-0971-12	A20-0971-12	A20-0971-12	A20-0992-12	A20-1080-02	A20-0971-12	Panel ass'y ☆
—	A20-0972-02	A20-0972-02	A20-0972-02	A20-0972-02	A20-0972-02	A20-0972-02	A20-0993-02	A20-1081-02	A20-0972-02	Panel ● ☆
—	A23-0594-02	A23-0594-02	A23-0595-02	A23-0595-02	A23-0596-02	A23-0597-02	A23-0597-02	A23-0595-02	A23-0595-02	Rear panel ● ☆
—	B40-1274-04	B40-1274-04	B40-1418-04	B40-1275-04	B40-1277-04	B40-1278-04	B40-1276-04	B40-1414-04	B40-1275-04	Model name plate ● ☆
—	B42-0611-04	—	—	—	—	—	—	—	—	Caution sticker x 4 ● ☆
—	B42-0552-04	B42-0552-04	—	—	B42-0024-04	—	—	—	—	SEV sticker ● ☆
—	B46-0056-00	B46-0055-10	—	—	—	—	—	—	—	Fuse sticker ● ☆
—	—	—	B46-0050-00	—	—	—	—	—	—	Warranty card
—	B50-1404-00	B50-1404-00	B50-1404-00	B50-1404-00	B50-1404-00	B50-1404-00	B50-1405-00	B50-1544-00	B50-1404-00	Instruction manual ☆
—	—	—	B58-0139-00	B58-0003-00	B58-0156-00	—	—	B58-0003-00	B58-0003-00	Power supply caution card ●
—	—	—	B58-0144-00	B58-0101-00	B58-0157-00	—	—	B58-0101-00	B58-0101-00	Power voltage selector caution card ●
—	B58-0043-00	B58-0043-00	—	—	—	—	—	—	—	Carton case caution card ●
—	—	—	B58-0146-00	B58-0108-00	B58-0108-00	—	—	B58-0108-00	B58-0108-00	Spare fuse caution card ●
—	—	—	—	—	—	—	B58-0214-04	—	—	Power cord caution card ●
—	—	—	B59-0018-00	—	—	—	—	—	—	KENWOOD service stations' list
C3.4	C91-0001-05	C91-0001-05	CK45E3D103PMU	CK45E3D103PMU	CK45E3D103PMU x 3	CK45E3D103PMU x 3	CK45E3D103PMU	CK45E3D103PMU	CK45E3D103PMU	Capacitor 0.01μF
—	D32-0075-04	D32-0075-04	D32-0075-04x2	D32-0075-04x2	D32-0075-04x2	D32-0075-04	D32-0075-04	D32-0075-04x2	D32-0075-04x2	Switch stopper (power voltage selector or pre out/power in)
—	E08-0225-05	E08-0225-05	E08-0225-05	E08-0225-05	—	—	—	E08-0225-05	E08-0225-05	AC outlet x 3
—	E30-0181-05	E30-0181-05	E30-0515-05 ☆	E30-0185-05	E30-0580-05	E30-0292-05	040-0304-05	E30-0515-05 ☆	E30-0515-05 ☆	Power cord
—	E90-0037-05	E90-0027-05	—	—	—	—	—	—	—	Fuse cap x 2
—	F05-6025-05	F05-6025-05	F05-6021-05	F05-6021-05	F05-6321-05	—	—	F05-6021-05	F05-6021-05	Fuse (6A)
—	—	—	F05-3022-05	F05-3022-05	F05-3121-05	F05-3121-05	F05-3121-05	F05-3022-05	F05-3022-05	Fuse (3A)
—	—	—	F09-0033-05	F09-0033-05	F09-0033-05x3	F09-0033-05x3	F09-0033-05	F09-0033-05	F09-0033-05	Capacitor cap x 2
—	H01-1439-04	H01-1551-04	H01-1440-04	H01-1439-04	H01-1440-04	H01-1440-04	H01-1441-04	H01-1594-04	H01-1439-04	Carton case ☆
—	—	H03-0515-04	—	—	H03-0454-04	H03-0454-04	H03-0455-04	—	—	Carton case ☆
—	H20-0394-04	H20-0394-04	H20-0394-04	H20-0394-04	H20-0394-04	H20-0394-04	H20-0394-04	H20-0394-04	H20-0416-04	Polyethylene cover
—	—	—	H25-0029-04	H25-0029-04	H25-0029-04	—	H25-0029-04	H25-0029-04	H25-0029-04	Polyethylene bag
—	—	—	—	—	—	—	—	—	H40-0004-04	Anti-rust paper
—	J02-0073-04	J02-0049-14	J02-0049-14	J20-0049-14	J20-0049-14	J20-0049-14	J20-0049-14	J20-0049-14	J20-0049-14	Leg x 4
—	—	—	J13-0033-15	J13-0033-15	J13-0031-05	J13-0031-05	J13-0031-05	J13-0033-15	J13-0033-15	Fuse holder
—	J41-0034-05	J41-0034-05	J41-0033-05	J41-0024-15	J41-0033-05	J41-0033-05	J41-0024-15	J41-0033-05	J41-0033-05	Power cord bushing
—	L04-0094-05	L04-0094-05	L30-0112-05	L03-0112-05	L09-0156-05	L09-0157-05	L09-0156-05	L03-0112-05	L03-0112-05	Power transformer ☆
S1	S59-2033-05	S59-2033-05	S59-2032-05	S59-2032-05	S59-2034-05	S59-2034-05	S59-2034-05	S59-2032-05	S59-2032-05	Lever switch (Power) ☆
—	—	—	S31-2001-05	S31-2001-05	S31-2001-05	—	—	S31-2001-05	S31-2001-05	Slide switch (power voltage selector)
—	X00-1650-11	X00-1650-11	X00-1650-21	X00-1651-21	X00-1650-61	X00-1650-61	X00-1650-61	X00-1650-21	X00-1650-21	Power supply unit ☆

PARTS LIST

☆ : New parts, ● : The parts not being kept in stock.

Ref. No.	Parts No.	Description	Re- marks
CAPACITOR			
C1,2 C5~12	C90-0336-05 CK45F1H403Z	Pair electrolytic 15,000 μ F 63WV Ceramic 0.04 μ F +80%, -20%	
RESISTOR			
R1,2 R3,4 R5,6	RC05GF2H331K PD14BY2B104J PD14BY2B394J	Carbon 330 Ω $\pm$ 10% 1/2W Carbon 100k Ω $\pm$ 5% 1/8W Carbon 390k Ω $\pm$ 5% 1/8W	
SEMICONDUCTOR			
—	V11-0405-05	LED GD-4-207RD	☆
POTENTIOMETER			
VR1	R11-9011-05	Potentiometer 6 gang	☆
VOLUME/BALANCE/SWITCH			
S2 S14	S01-2035-05 S31-2007-05	Rotary (SPEAKERS) Slide (PRE OUT/POWER IN)	☆
MISCELLANEOUS			
—	A13-0127-23	Left framework	● ☆
—	A13-0128-13	Right framework	● ☆
—	A13-0129-23	Left angle hardware	● ☆
—	A13-0130-23	Right angle hardware	● ☆
—	A13-0131-12	Angle hardware x 2	● ☆
—	A23-0182-32	Sub panel	● ☆
—	A40-0139-13	Bottom plate	● ☆
—	A48-0027-03	Side plate x 2	☆
—	A52-0015-03	Top plate	☆
—	B03-0107-04	Dress plate	☆
—	B07-0162-04	Ring x 3	☆
—	B07-0163-04	Ring	☆
—	B10-0189-04	Front glass	☆
—	B19-0183-04	Lighting acryl board	☆
—	B30-0108-15	Pilot lamp x 2	☆
—	B31-0240-05	Meter x 2	☆
—	B42-0009-04	Passed sticker	☆
—	D19-0050-14	Side board x 4	☆
—	E06-0501-05	DIN connector	☆
—	E11-0058-05 or	Phone jack	☆
—	E11-0060-15		☆
—	E13-0410-05	Pin jack (4P)	☆
—	E13-0804-05	Pin jack (8P) x 2	☆
—	E20-1203-05	Terminal block (12P)	☆
—	E30-0516-05	Mini-connector	☆
—	E30-0517-05	Mini-connector	☆
—	E30-0549-05	Mini-connector	☆
—	F19-0203-04	Blind board	● ☆
—	F19-0211-04	Blind board	● ☆
—	F31-0105-04	Reinforce hardware x 2	● ☆
—	G01-0312-04	Spring x 4	☆
—	G10-0013-04	Cushion	☆
—	G11-0051-14	Cushion x 2	☆
—	G11-0055-04	Cushion x 11	☆
—	G16-0058-04	Flet	● ☆
—	H10-1348-12	Left polystyrene foamed fixture	☆
—	H10-1349-12	Right polystyrene foamed fixture	☆
—	H25-0078-00	Instruction bag	
—	J20-0317-12	Power transformer mounting hardware	● ☆
Ref. No.	Parts No.	Description	Re- marks
—	J21-1396-13	Pilot lamp mounting hardware	● ☆
—	J21-1406-13	Meter mounting hardware	● ☆
—	J42-0065-04	Pilot lamp bushing	
—	K21-0299-04	Knob (VOLUME)	☆
—	K23-0213-04	Knob (BALANCE)	☆
—	K23-0214-04	Knob (SELECTOR)	☆
—	K23-0215-04	Knob (TONE, SPEAKERS) x 3	☆
—	K27-0038-04	Knob (LEVER) x 7	☆
—	K29-0247-04	Knob (PUSHBUTTON) x 3	☆
—	K29-0248-04	Knob (PUSHBUTTON)	☆
—	N08-0125-05	Dress screw x 8	
—	N08-0128-15	GND terminal x 2	
—	X07-1420-10	Power amp unit x 2	☆
—	X08-1440-10	Pre amp unit	☆
—	X11-1330-10	PRESENCE unit	☆
—	X13-2170-01	Meter amp unit	☆
—	X13-2220-10	Switch unit	☆
POWER SUPPLY (X00-1650-11, -21, -61)			
Ref. No.	Parts No.	Description	Re- marks
CAPACITOR			
Ck1,2	CK45E2H103P	Ceramic 0.01 μ F +100%, -0%	
Ck3	CE04W1H331EL	Electrolytic 330 μ F 50WV	
Ck4	CE04W1V331EL	Electrolytic 330 μ F 35WV	
Ck5	CE04W1H331EL	Electrolytic 330 μ F 50WV	
Ck6	CE04W1V331EL	Electrolytic 330 μ F 35WV	
Ck7	CE04W1H100EL	Electrolytic 10 μ F 50WV	
Ck8	CE04W1C101NP	Non-pole electrolytic 100 μ F 16WV	
Ck9	CE04W1E101MBR	Electrolytic 100 μ F 25WV	
Ck10,11	CK45E2H103P	Ceramic 0.01 μ F +100%, -0%	
RESISTOR			
Rk1,2	RN14AB3A121JB	Metal film 120 Ω $\pm$ 5% 1W	
Rk3	RN14AB3A221JB	Metal film 220 Ω $\pm$ 5% 1W	
Rk4	RN14AB3A271JB	Metal film 270 Ω $\pm$ 5% 1W	
Rk5	RN14AB3A222JB	Metal film 2.2k Ω $\pm$ 5% 1W	
Rk6	RC05GF2H182K	Carbon 1.8k Ω $\pm$ 10% 1/2W	
Rk7,8	PD14BY2E223JKW	Carbon 22k Ω $\pm$ 5% 1/4W	
Rk9	PD14BY2E682JKW	Carbon 6.8k Ω $\pm$ 5% 1/4W	
Rk10	PD14BY2E272JKW	Carbon 2.7k Ω $\pm$ 5% 1/4W	
Rk11	PD14BY2E333JKW	Carbon 33k Ω $\pm$ 5% 1/4W	
Rk12	PD14BY2E682JKW	Carbon 6.8k Ω $\pm$ 5% 1/4W	
Rk13	RN14AB3A561JB	Metal film 560 Ω $\pm$ 5% 1W	
Rk14	PD14BY2E823JKW	Carbon 82k Ω $\pm$ 5% 1/4W	
SEMICONDUCTOR			
Qk1	V03-0430-05	Transistor 2SC1746 (GR)	
Qk2	V04-0068-05	Transistor 2SD415 (Q)	
Dk1	V11-0347-05	Diode SS-5	
Dk2	V11-0348-05	Diode SS-5R	
Dk3,4	V11-0295-05	Diode W06B	
Dk5	V11-0219-05	Diode V06B	
Dk6,7	V11-0273-05	Diode 1S2076A	
DZk1,2	V11-0417-05	Zener diode EQB01-28	
MISCELLANEOUS			
—	F05-1021-05	Fuse (1A) (X00-1650-11)	
—	F05-1023-05	Fuse (1A) (X00-1650-21)	
—	F06-1021-05	Fuse (1A) (X00-1650-61)	
—	J13-0020-05	Fuse holder x2 (X00-1650-11, -21)	
—	J13-0039-05	Fuse holder x 2 (X00-1650-61)	
—	J21-1296-04	Left PC board mounting hardware	●

PARTS LIST

Ref. No.	Parts No.	Description	Re- marks
—	J21-1297-04	Right PC board mounting hardware	•
—	S51-4029-05	Relay (24V)	

POWER AMP (X07-1420-10)

Ref. No.	Parts No.	Description	Re- marks
CAPACITOR			
Ce1	CC45SL1H101K	Ceramic 100pF ±10%	☆
Ce2	C91-0019-05	Film 0.47μF 100WV	
Ce3	CE04W1H010EL	Electrolytic 1μF 50WV	
Ce4	CE04W1J470EL	Electrolytic 47μF 63WV	
Ce5	CE04W1A330EL	Electrolytic 33μF 10WV	
Ce6	CC45SL1H030C	Ceramic 3pF ±0.25pF	
Ce7	CC45SL1H220J	Ceramic 22pF ±5%	
Ce8	CE04W0J331EL	Electrolytic 330μF 6.3WV	
Ce9,10	CE04W0J470EL	Electrolytic 47μF 6.3WV	
Ce11	CQ93M1H224M	Mylar 0.22μF ±20%	
Ce12,13	CE04W1J010EL	Electrolytic 1μF 63WV	

PREAMP (X08-1440-10)

Ref. No.	Parts No.	Description	Re- marks
CAPACITOR			
Cd1,2	CS15E1A3R3M	Tantalum 3.3μF 10WV	
Cd3~6	CC45SL1H101K	Ceramic 100pF ±10%	
Cd7,8	CC45SL1H100D	Ceramic 10pF ±0.5pF	
Cd9,10	CE04W1C470	Electrolytic 47μF 16WV	
Cd11,12	CE04W1A101	Electrolytic 100μF 10WV	
Cd13,14	CC45SL1H100D	Ceramic 10pF ±0.5pF	

Ref. No.	Parts No.	Description	Re- marks
Cd15,16	CE04W1A101	Electrolytic 100μF 10WV	
Cd17,18	CQ93M1H122J	Mylar 0.0012μF ±5%	
Cd21,22	CQ93M1H392J	Mylar 0.0039μF ±5%	
Cd23,24	CE04W1E100	Electrolytic 10μF 25WV	
Cd25,26	CS15E1VR47M	Tantalum 0.47μF 35WV	
Cd27,28	CE04W1A101	Electrolytic 100μF 10WV	
Cd29~32	CC45SL1H270K	Ceramic 27pF ±10%	
Cd33,34	CE04W1E100	Electrolytic 10μF 25WV	
Cd35,36	CC45SL1H470K	Ceramic 47pF ±10%	
Cd37,38	CE04W1H010	Electrolytic 1μF 50WV	
Cd39~42	CQ93M1H102K	Mylar 0.001μF ±10%	
Cd43,44	CQ93M1H333K	Mylar 0.033μF ±10%	
Cd45,46	CQ93M1H563K	Mylar 0.056μF ±10%	
Cd47,48	CE04W1H010MBRE	Electrolytic 1μF 50WV	
Cd49,50	CC45SL1H100D	Ceramic 10pF ±0.5pF	
Cd51,52	CE04W1H010	Electrolytic 1μF 50WV	
Cd53,54	CE04W1A101	Electrolytic 100μF 10WV	
Cd55,56	CE04W1E100	Electrolytic 10μF 25WV	
Cd57,58	CE04W1V220	Electrolytic 22μF 35WV	
Cd59	CK45F1H403Z	Ceramic 0.04μF +80%, -20%	

PARTS LIST

METER AMP (X13-2170-01)

Ref. No.	Parts No.	Description	Re- marks
POTENTIOMETER			
VRd1,2	R08-5031-05	Potentiometer 50k Ω (C) x 2 (tone)	☆
SWITCH			
S12	S40-2061-05	Pushbutton (mode)	
S13	S29-4003-05	Slide rotary switch (input)	
MISCELLANEOUS			
—	E40-0371-05	Pin assembly (3P) x 3	
—	E40-0571-05	Pin assembly (5P) x 2	
—	J21-1405-03	Mounting hardware	●
—	J31-0129-04	Sleeve	

PRESENCE (X11-1330-10)

Ref. No.	Parts No.	Description	Re- marks
CAPACITOR			
CI1,2	CQ93M1H273J	Mylar 0.027 μ F $\pm$ 5%	
CI5,6	CQ93M1H562J	Mylar 0.0056 μ F $\pm$ 5%	
CI7,8	CQ93M1H102J	Mylar 0.001 μ F $\pm$ 5%	
CI9,10	CQ93M1H152J	Mylar 0.0015 μ F $\pm$ 5%	
CI11,12	CC45SL1H271K	Ceramic 270pF $\pm$ 5%	
CI13,14	CE04W1H010BR	Electrolytic 1 μ F 50WV	
CI15,16	CC45SL1H100D	Ceramic 10pF $\pm$ 0.5pF	
CI17,18	CE04W1E100	Electrolytic 10 μ F 25WV	
CI19,20	CE04W1A101	Electrolytic 100 μ F 10WV	
CI21,22	CQ93M1H563J	Mylar 0.056 μ F $\pm$ 5%	
RESISTOR			
RI1,2	PD14CY2E153J	Carbon 15k Ω $\pm$ 5% 1/4W	
RI3,4	RC05GF2H225K	Carbon 2.2M Ω $\pm$ 10% 1/2W	
RI5~8	PD14CY2E473J	Carbon 47k Ω $\pm$ 5% 1/4W	
RI9~12	PD14CY2E104J	Carbon 100k Ω $\pm$ 5% 1/4W	
RI13,14	PD14CY2E154J	Carbon 150k Ω $\pm$ 5% 1/4W	
RI15,16	PD14CY2E333J	Carbon 33k Ω $\pm$ 5% 1/4W	
RI17,18	PD14CY2E302J	Carbon 3k Ω $\pm$ 5% 1/4W	
RI19,20	PD14CY2E102J	Carbon 1k Ω $\pm$ 5% 1/4W	
RI21,22	PD14CY2E104J	Carbon 100k Ω $\pm$ 5% 1/4W	
RI25~32	RC05GF2H225K	Carbon 2.2M Ω $\pm$ 10% 1/2W	
RI33,34	PD14CY2E473J	Carbon 47k Ω $\pm$ 5% 1/4W	
SEMICONDUCTOR			
QI1,2	V03-0271-05	Transistor 2SC1345 (E) or (F)	
SWITCH			
S4	S32-2012-05	Lever (PRESENCE)	
S5	S32-4006-05	Lever (LOUDNESS)	
MISCELLANEOUS			
—	J21-1429-04	Unit mounting hardware	● ☆

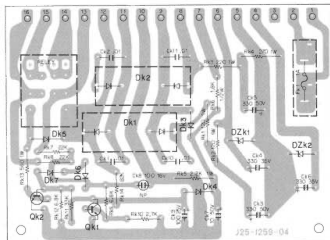
Ref. No.	Parts No.	Description	Re- marks
CAPACITOR			
Cq1,2	CQ93M1H223M	Mylar 0.022 μ F $\pm$ 20%	
Cq3,4	CE04W1A470	Electrolytic 47 μ F 10WV	
RESISTOR			
Rq1	PD14CY2E822J	Carbon 8.2k Ω $\pm$ 5% 1/4W	
Rq2	PD14BY2E822J	Carbon 8.2k Ω $\pm$ 5% 1/4W	
Rq3	PD14CY2E122J	Carbon 1.2k Ω $\pm$ 5% 1/4W	
Rq4	PD14BY2E122J	Carbon 1.2k Ω $\pm$ 5% 1/4W	
Rq7,8	PD14CY2E561J	Carbon 560 Ω $\pm$ 5% 1/4W	
Rq9,10	PD14CY2E182J	Carbon 1.8k Ω $\pm$ 5% 1/4W	
SEMICONDUCTOR			
Dq1,2	V11-0332-05	Diode 1N34A	
Dq3,4	V11-0051-05	Diode 1N601FT	☆
THq1,2	V22-0007-05	Thermister SDT-20	
POTENTIOMETER			
VRq1,2	R12-0026-05	PC trimmer 500 Ω (B)	
SWITCH			
S3	S40-2060-05	Pushbutton (meter)	☆
MISCELLANEOUS			
—	J21-1430-04	Unit mounting hardware	● ☆
—	J31-0029-04	Sleeve x 2	

SWITCH (X13-2220-10)

Ref. No.	Parts No.	Description	Re- marks
CAPACITOR			
Ch1,2	CQ93M1H332J	Mylar 0.0033 μ F $\pm$ 5%	
Ch3,4	CQ93M1H152J	Mylar 0.0015 μ F $\pm$ 5%	
Ch5,6	CQ93M1H473J	Mylar 0.047 μ F $\pm$ 5%	
Ch7,8	CQ93M1H183J	Mylar 0.018 μ F $\pm$ 5%	
Ch9,10	CS15E1V010M	Tantalum 1 μ F 35WV	
Ch11,12	CE04W1H3R3	Electrolytic 3.3 μ F 50WV	
Ch13,14	CE04W1V470	Electrolytic 47 μ F 35WV	
RESISTOR			
Rh1,2	PD14BY2E562J	Carbon 5.6k Ω $\pm$ 5% 1/4W	
Rh3,4	PD14BY2E105J	Carbon 1M Ω $\pm$ 5% 1/4W	
Rh5,6	PD14BY2E133J	Carbon 13k Ω $\pm$ 5% 1/4W	
Rh7,8	PD14BY2E105J	Carbon 1M Ω $\pm$ 5% 1/4W	
Rh9,10	PD14BY2E823J	Carbon 82k Ω $\pm$ 5% 1/4W	
Rh11,12	PD14BY2E334J	Carbon 330k Ω $\pm$ 5% 1/4W	
Rh13,14	PD14BY2E824J	Carbon 820k Ω $\pm$ 5% 1/4W	
Rh15,16	PD14BY2E222J	Carbon 2.2k Ω $\pm$ 5% 1/4W	
Rh17,18	RC05GF2H682K	Carbon 6.8k Ω $\pm$ 10% 1/2W	
Rh19,20	PD14BY2E221J	Carbon 220 Ω $\pm$ 5% 1/4W	
Rh21~28	RC05GF2H225K	Carbon 2.2M Ω $\pm$ 10% 1/2W	
SEMICONDUCTOR			
Qh1,2	V03-0271-05	Transistor 2SC1345 (E)	
SWITCH			
S6	S32-4006-05	Lever (TURNOVER)	
S7	S32-2012-05	Lever (TURNOVER)	
S8,9	S42-2004-05	Pushbutton (FILTER)	
S10,11	S32-4007-05	Lever (TAPE)	
MISCELLANEOUS			
—	J21-1399-03	PC board mounting hardware	● ☆

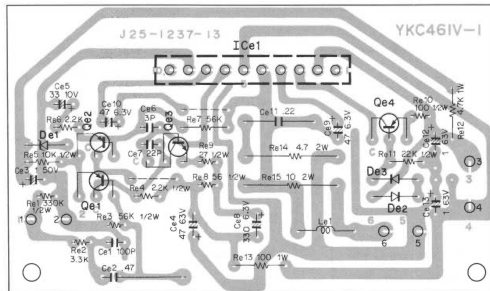
PC BOARD/SEMICONDUCTOR SUBSTITUTIONS

▼ POWER SUPPLY (X00-1650-11)



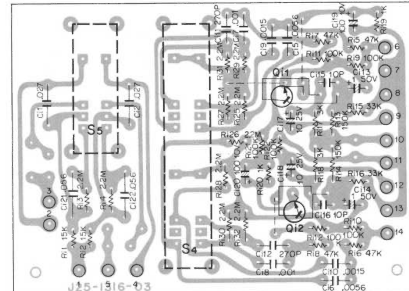
Qk1: 2SC1746 (GR), Qk2: 2SD415 (O) or (R), Dk1: SS-5, Dk2: SS-5R, Dk3, 4: W06B, Dk5: V06B, Dk6, 7: 1S2076A, DZ1, 2: EQB01-28

▼ POWER AMP (X07-1420-10)



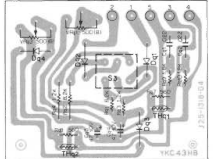
Qe1, 2: 2SA750 (I) (E) or (F), Qe3: 2SC1628 (O) or (Y), Qe4: 2SA818 (O) or (Y), ICe1: TA-100W, De1: YZ-140, De2: 1S2076

▼ PRESENCE (X11-1330-10)



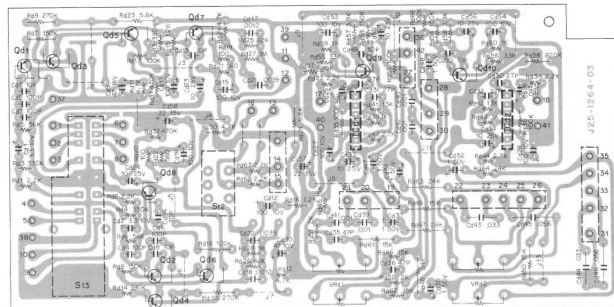
Q1, 2: 2SC1345 (E) or (F)

▼ METER (X13-2170-01)



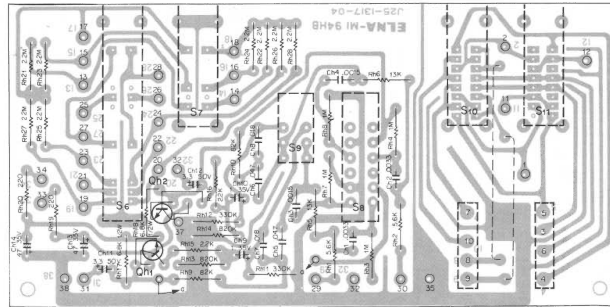
Dq1, 2: 1N34A, Dq3, 4: 1N601FT, Thq1, 2: SDT-20

▼ PREAMP (X08-1440-10)



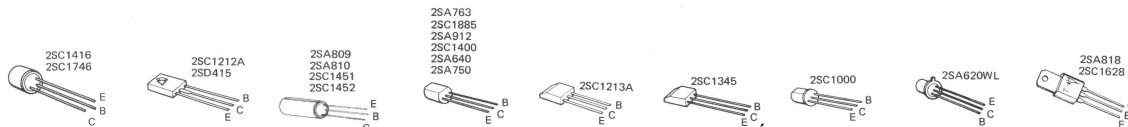
Qd1~4: 2SA620WL 4 or 5, Qd5, 6: 2SA640 (E) or (F), Qd7, 8: 2SC1400 (U) or (E), Qd9, 10: 2SC1345 (D) or (E), ICd1, 2: TA7129P

▼ SWITCH (X13-2220-10)

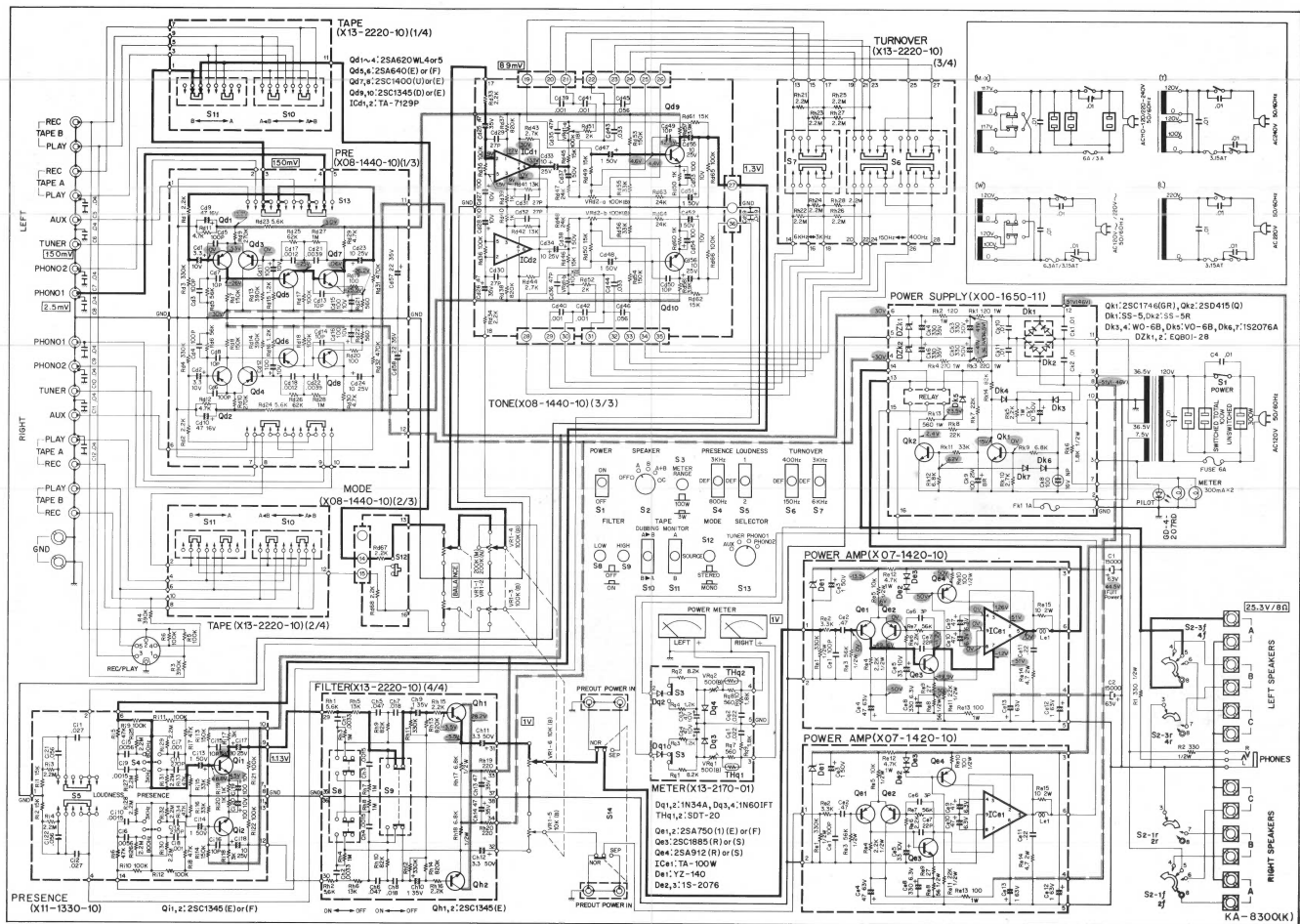


Qh1, 2: 2SC1345 (E)

Semiconductor name	Substitutions
POWER SUPPLY X00-1650-11 2SC1746 (GR) 2SD415 (O, R)	2SC1213A (B) or (C) 2SC1212A (B) or (C)
POWER AMP X07-1420-10 2SA750 (I, F) 2SA818 (O, Y) 2SC1345 (E, F) 2SC1628 (O, Y)	2SA620WLH 2SA818 (O, Y) 2SC1345 (E, F) 2SC1628 (O, Y)
PREAMP X08-1440-10 2SA620WL (4, 5) 2SA640 (E, F) 2SC1400 (U, E) 2SC1345 (D, E) TA7129P	2SA620WLH 2SA818 (O, Y) 2SC1345 (E, F) 2SC1628 (O, Y)
PRESENCE X11-1330-10 2SC1345 (E, F)	2SC1345 (E, F)
SWITCH X13-2220-10 2SC1345 (E)	2SC1345 (E)



SCHEMATIC DIAGRAM



DC voltage measured with 20 k Ω /V meter.

SPECIFICATIONS

POWER AMPLIFIER SECTION

80 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	85 + 85 watts 8 ohms at 1,000 Hz 100 + 100 watts 4 ohms at 1,000 Hz
Dynamic Power Output	380 watts (4 ohms)
Total Harmonic Distortion	0.1% at rated power into 8 ohms 0.04% at 1 watt power into 8 ohms at 20 Hz ~ 20,000 Hz
Intermodulation Distortion (60 Hz : 7 kHz 4 : 1)	0.1% at rated power into 8 ohms 0.04% at 1 watt power into 8 ohms
Power Bandwidth	5 Hz to 40,000 Hz
Signal to Noise Ratio (IHF A)	100 dB (short circuited)
Damping Factor	50 at 8 ohms
Input Sensitivity / Impedance	1.0V / 50 kohms
Speaker Impedance	Accept 4 ohms to 16 ohms

PREAMPLIFIER SECTION

Input Sensitivity / Impedance / Signal to Noise Ratio (IHF A)

Phono 1	2.5 mV / 50 kohms / 72 dB (5 mV)
Phono 2	2.5 mV / 50 kohms / 72 dB (5 mV)
Tuner	150 mV / 50 kohms / 90 dB
AUX	150 mV / 50 kohms / 90 dB
Tape	150 mV / 50 kohms / 90 dB

Maximum Input Level

Phono	260 mV (rms) T.H.D. 0.1% at 1,000 Hz
--------------	--------------------------------------

Output Level / Impedance

Tape REC (Pin)	150 mV
(Din)	30 mV / 80 kohms

Frequency Response

Phono	RIAA standard curve ± 0.3 dB
AUX & Tape	20 Hz to 40,000 Hz +0 dB -0.5 dB

Tone Control

Bass	150 Hz	± 5.0 dB at 100 Hz
	400 Hz	± 7.5 dB at 100 Hz
Treble	3 kHz	± 7.5 dB at 10,000 Hz
	6 kHz	± 5.0 dB at 10,000 Hz

Loudness Control (-30 dB)

1	+7.5 dB at 100 Hz,
2	+3.5 dB at 100 Hz

Low Filter

40 Hz, 12 dB / oct

High Filter

8,000 Hz 12 dB / oct

Presence

800 Hz	+6 dB
3 kHz	+6 dB

GENERAL

Power Requirement

AC 50/60 Hz 110 ~ 120V, 220 ~ 240V

Power Consumption

550 watts at full power

AC Outlet

Switched 2, Unswitched 1

Dimension

W 16-15/16" (430 mm), H 5-7/8" (149 mm),
D 14-13/16" (376 mm)

Weight

35.2 lbs. (16 kg)

KENWOOD ELECTRONICS, INC.

- 15777 SOUTH BROADWAY, GARDENA, CALIFORNIA 90248 U.S.A.
- 72-02 51ST AVENUE, WOODSIDE. N.Y. 11377 U.S.A.

TRIO-KENWOOD ELECTRONICS, N.V.

- HARENSESTEENWEG, 484. 1800 VILVOORDE, BELGIUM.

TRIO-KENWOOD ELECTRONICS, GmbH.

- 6056 HEUSENSTAMM, RUDOLF-BRAAS-STR. 20, WEST GERMANY

TRIO-KENWOOD CORPORATION

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