

MONO POWER AMPLIFIER

KAC-716

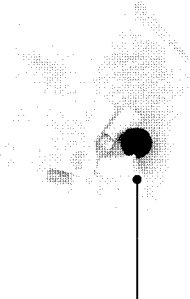
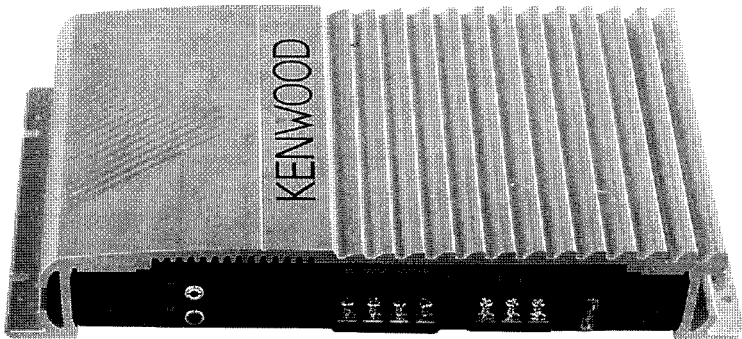
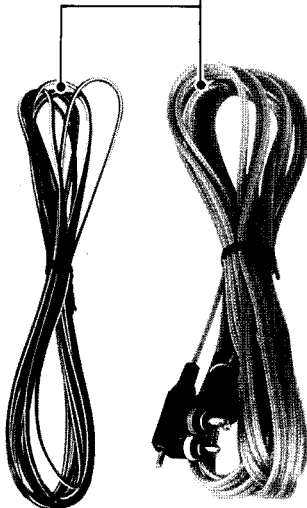
SERVICE MANUAL

KENWOOD

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B51-6963-00(MC) 3754

This unit is a monaural amplifier for bass sound reproduction only. It cannot be used as an ordinary stereo full-range amplifier.

Audio cord
(E30-4067-05)
M type only



Accessory
(W01-0745-05)
E, M type only

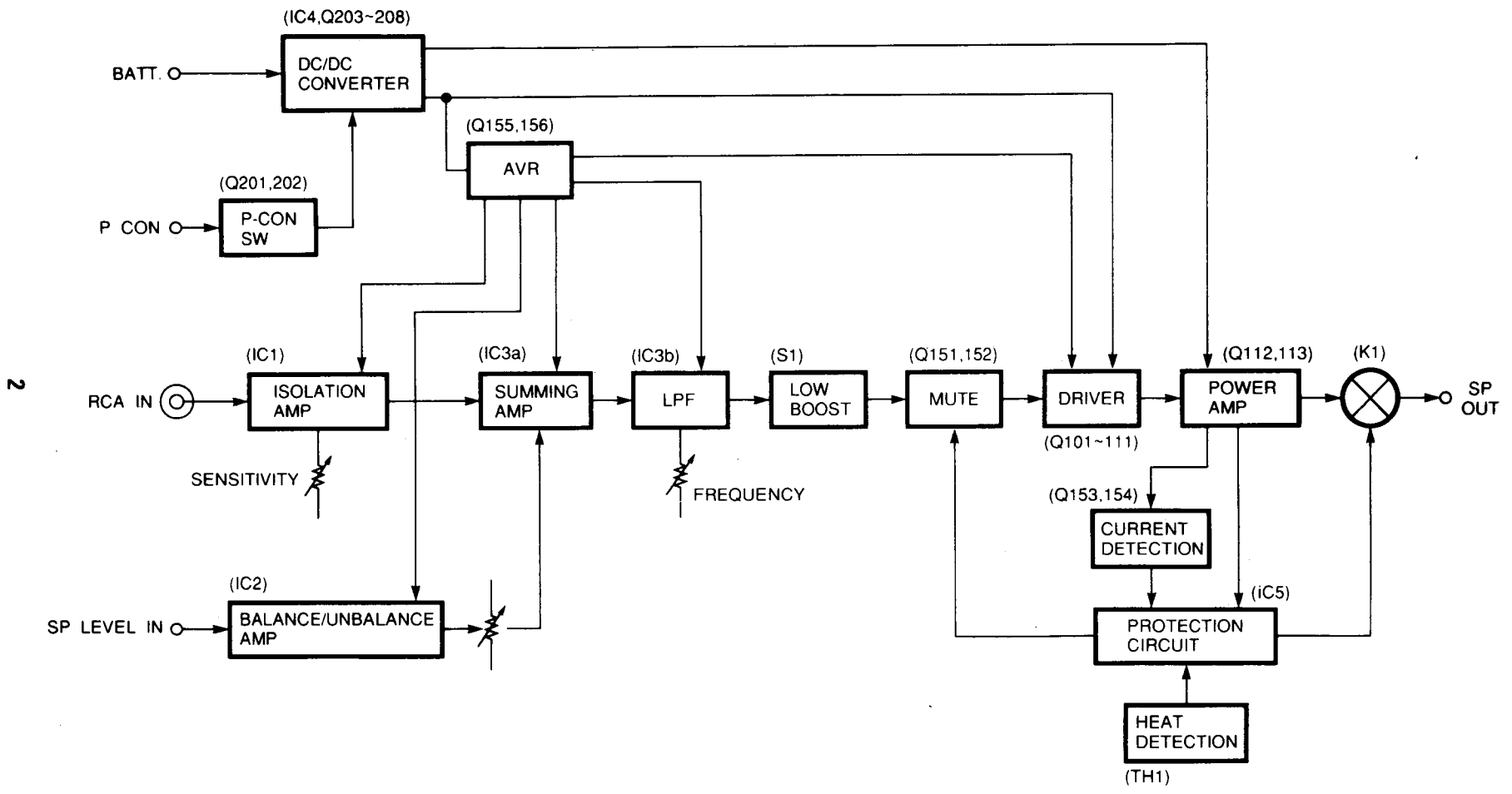


Screw set
(N99-1587-05)

Accessory
(W01-0748-05)

DC cord ass'y
(E30-4328-05)
M type only

BLOCK DIAGRAM

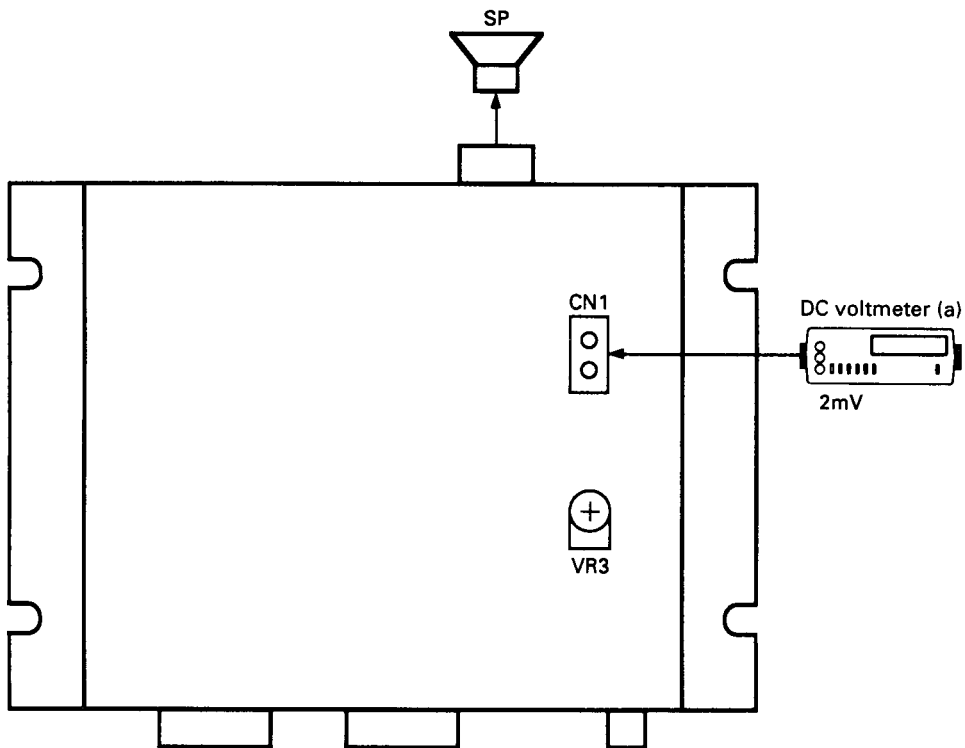


ADJUSTMENT

Adjustment

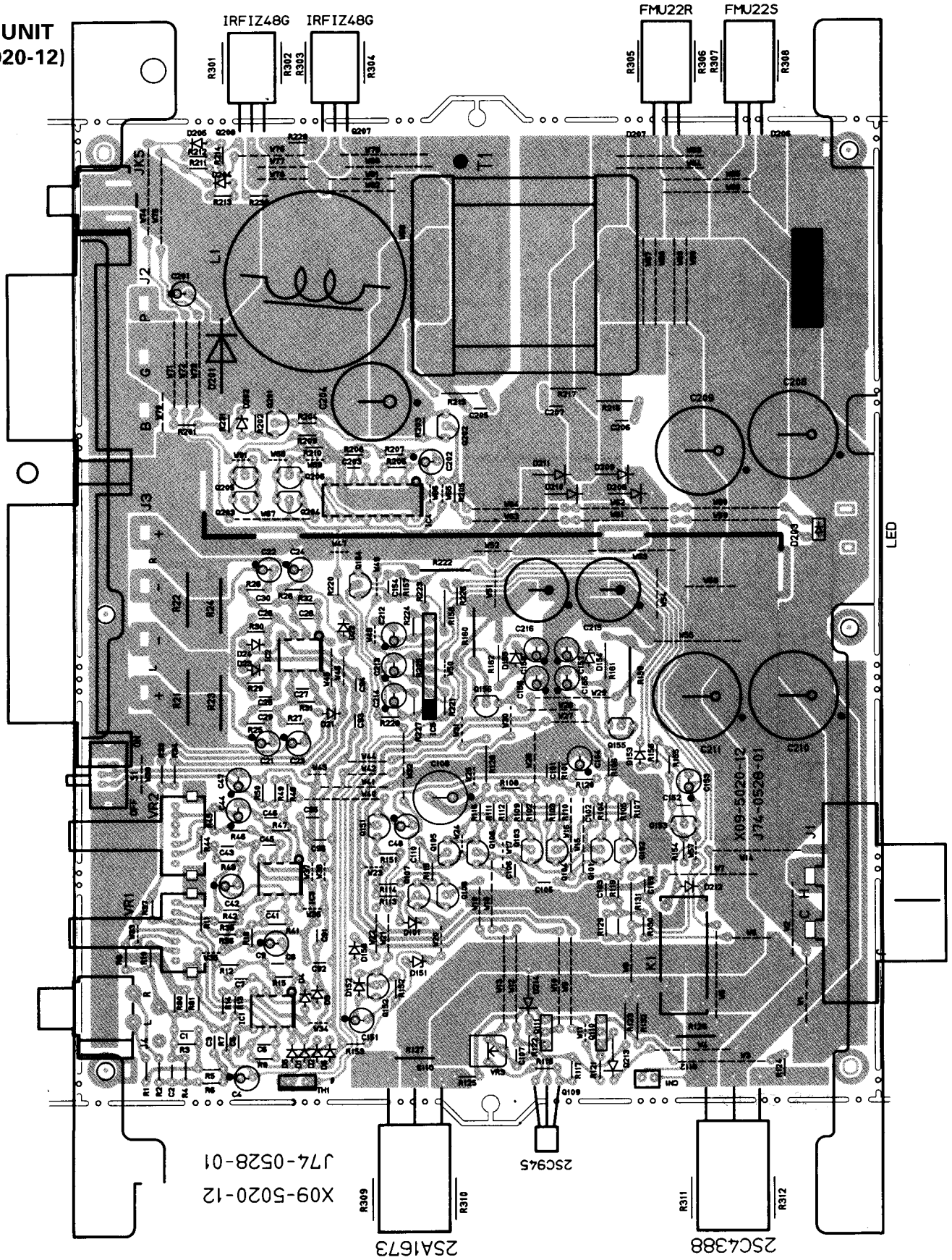
No.	Item	Input side setting	Output side setting	Receiver setting	Adjustment point	Adjustment method	Fig.
Connect a cassette deck.							
1	Non-signal current	-	Connect a DC voltmeter to CN1.	-	VR3	After sufficient aging, adjust to 2mV.	(a)

Adjustment Point



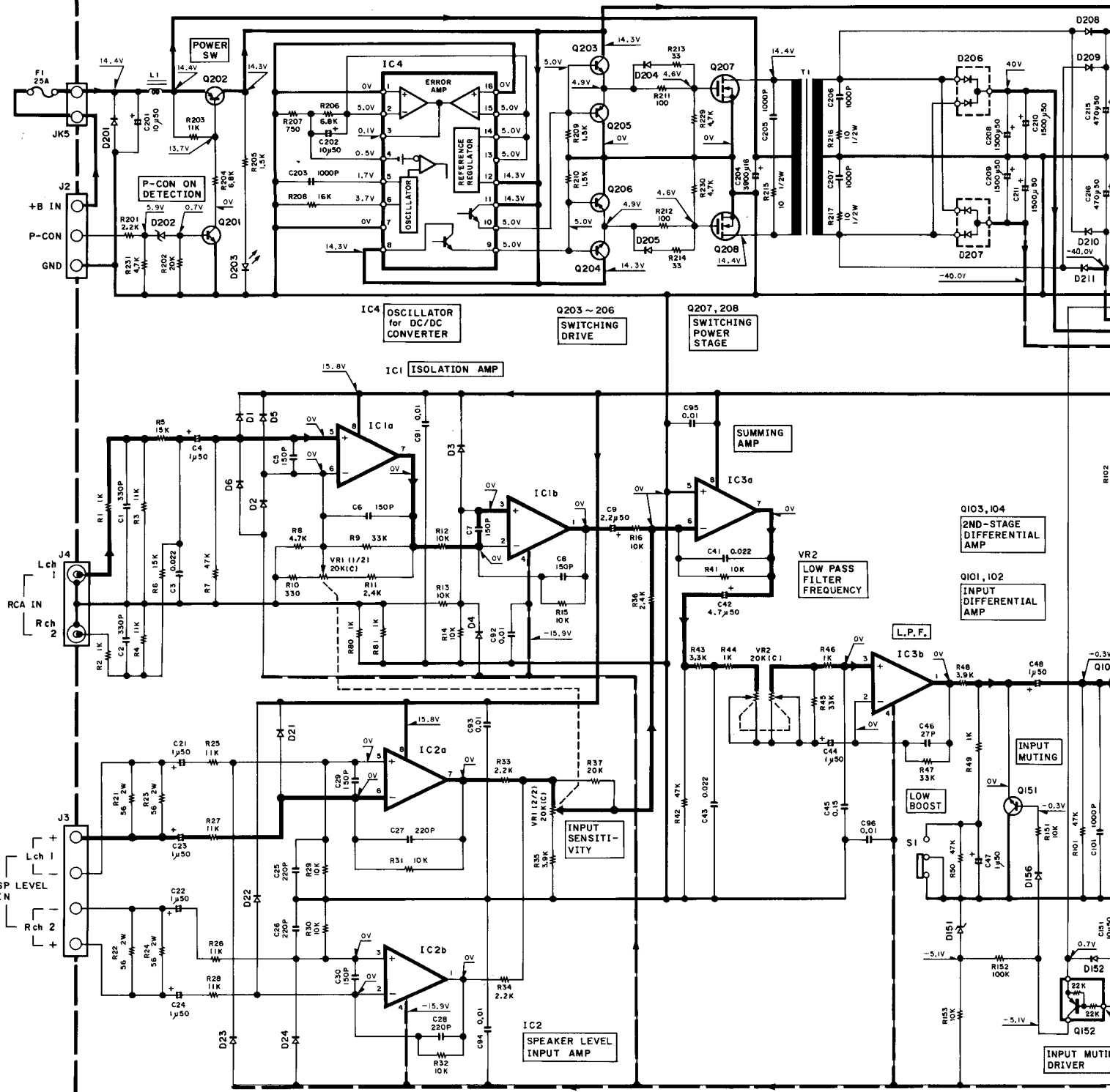
PC BOARD (COMPONENT SIDE VIEW)

AUDIO UNIT
(X09-5020-12)



Refer to the schematic diagram for the values of resistors and capacitors.

(X09-5020-12)



- | | | | | | |
|---|-----------------|------------------|-------------------------------|---------------------------|--------------------------|
| D1-6,21-24,101,153,156,204,205,212 : 1SS176 | D206 : FMU22S*A | IC1-3 : NJM4565D | Q101,102,109,151,201,203,204 | Q111 : 2SA1110(Q,S) | Q156,202 : 2SA1534A(R,S) |
| D151,202 : RD5.1JS(B2) | D207 : FMU22R*A | IC4 : μ PC494C | Q112 : 2SC4388L(B*5) | Q205,206 : 2SA733(A)(Q,P) | Q207,208 : IRF1248GLF24 |
| D152 : 1SS92 | D208-211 : EH1Z | IC5 : μ PC1237HA | Q103,104,108,154 : 2SA992(FE) | Q113 : 2SA1673L(B*5) | |
| D154,155 : RD16JS(B) | | | Q105-107,153 : 2SC1845(FE) | Q152 : DTA124ES | |
| Q201 : RM4Z | | | Q110 : 2SC2590(Q,P) | Q155 : 2SC3940A(R,S) | |

IRF1248GLF24

2SA1534A
2SA733 (A)
2SA992
2SC1845
2SC3940A
2SC945 (A)

2SA1110
2SC2590

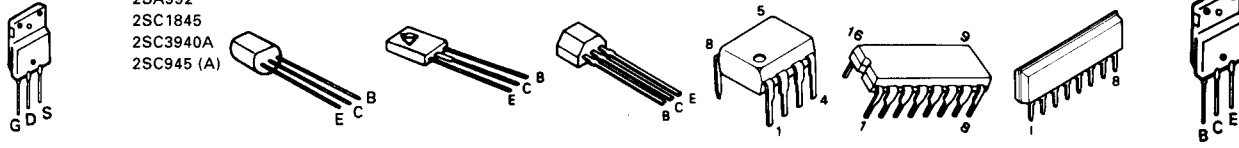
DTA124ES

NJM4565D

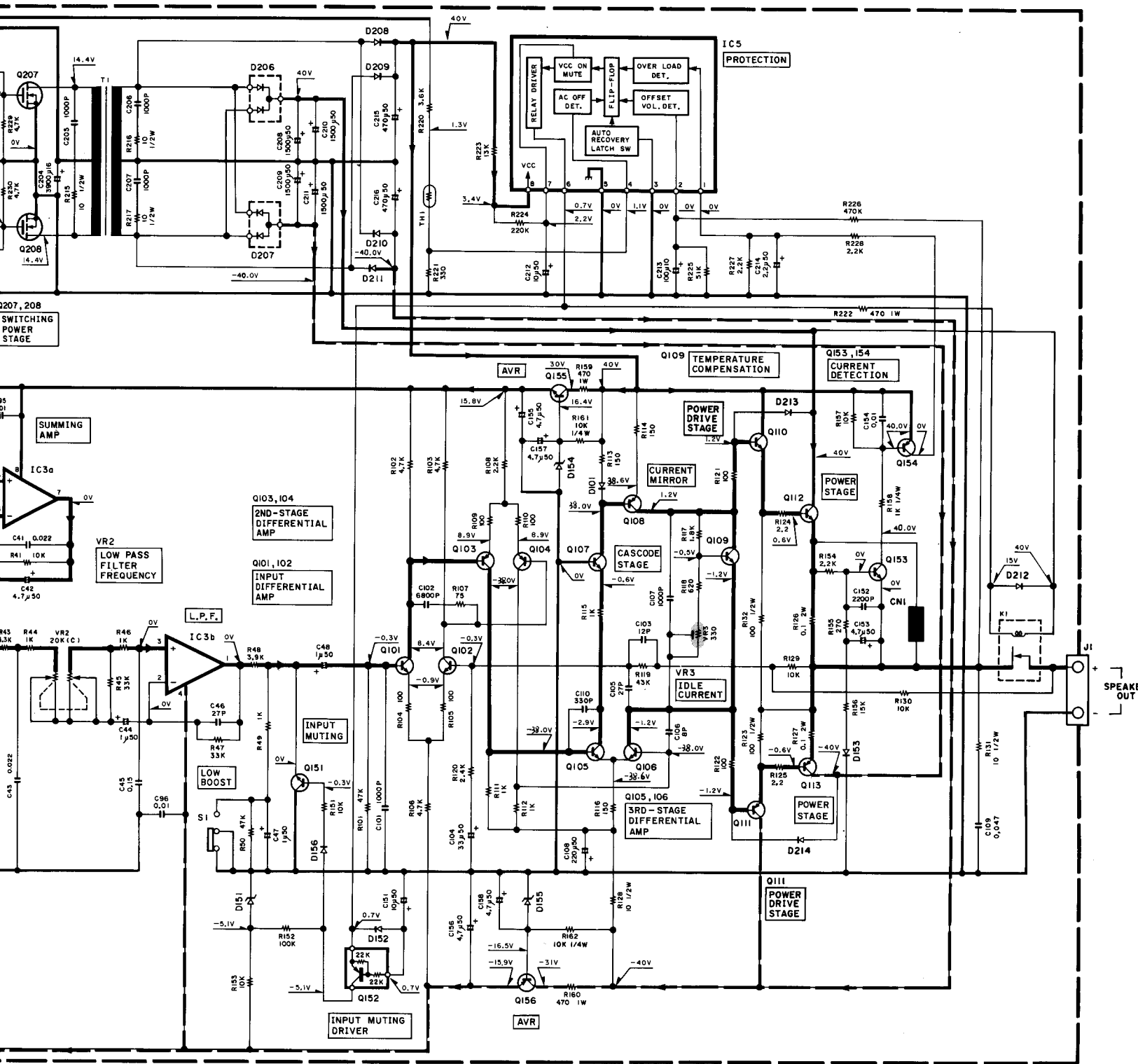
UPC494C

UPC1237HA

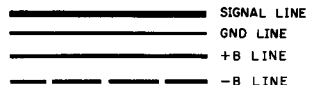
2SA1673LB*5
2SC4388LB*5



DC voltages are as measured w
Values may vary slightly due to va
ments or/and units.

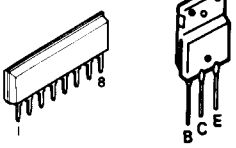


- 109,151,201,203,204 :25C945(A)(Q,P)
- 108,154 :25A992(F,E)
- 153 :25C1845(F,E)
- 155 :25C2590(Q,P)
- Q111 :2SA1110(Q,S)
- Q112 :2SC4388LB*5
- Q113 :2SA1673LB*5
- Q152 :DTA124ES
- Q155 :25C3940A(R,S)
- Q156,202 :2SA1534A(R,S)
- Q205,206 :2SA733(A)(Q,P)
- Q207,208 :IRFIZ48GLF24
- TH1 :PTH9M048E22T
- L1 :L33-1015-05



CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

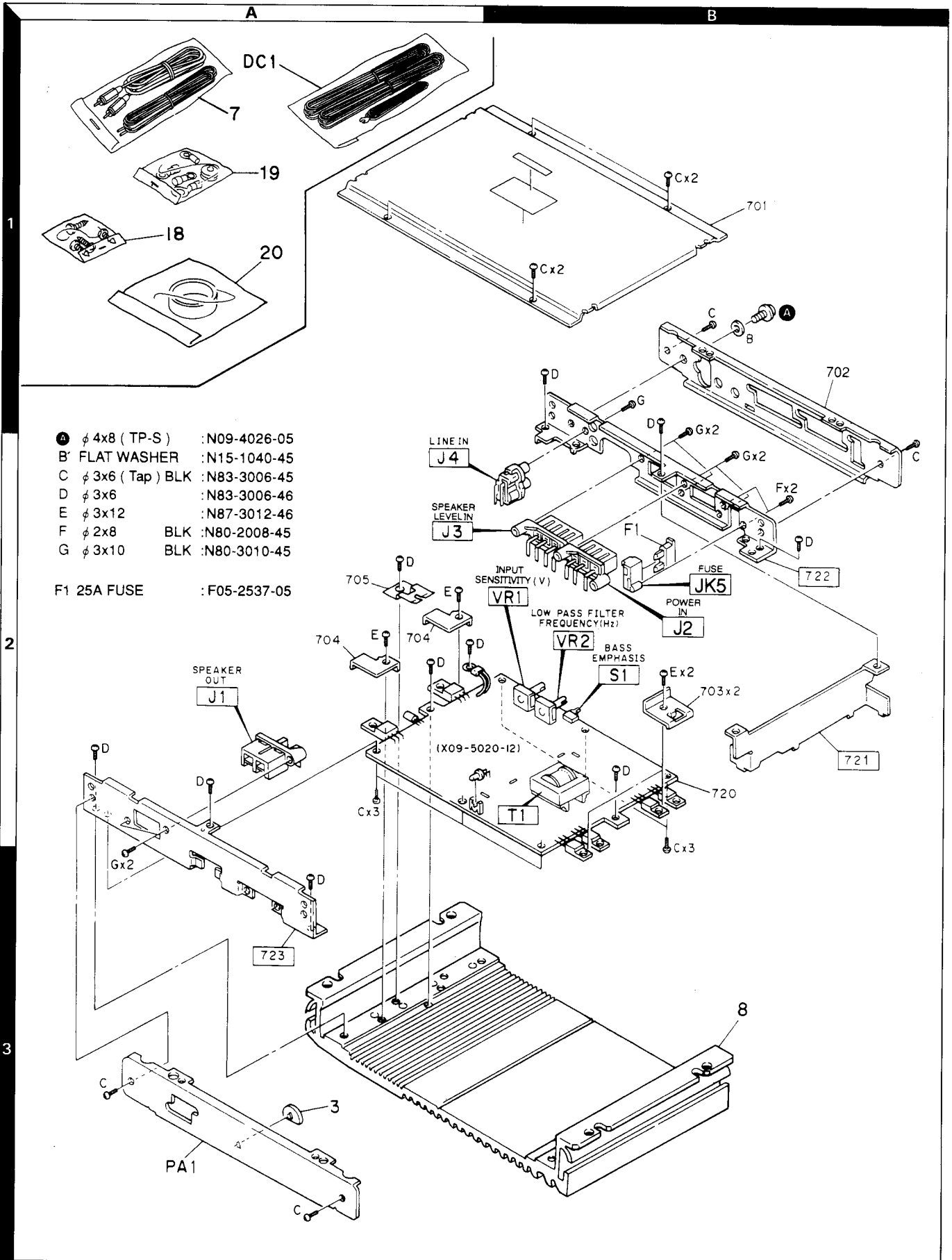
UPC1237HA 2SA1673LB*5
2SC4388LB*5



DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.



EXPLODED VIEW



- A ϕ 4x8 (TP-S) : N09-4026-05
 - B FLAT WASHER : N15-1040-45
 - C ϕ 3x6 (Tap) BLK : N83-3006-45
 - D ϕ 3x6 : N83-3006-46
 - E ϕ 3x12 : N87-3012-46
 - F ϕ 2x8 BLK : N80-2008-45
 - G ϕ 3x10 BLK : N80-3010-45
- F1 25A FUSE : F05-2537-05

7 Parts with the exploded numbers larger than 700 are not supplied.

KAC-716

× New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

PARTS LIST

Ref. No.	Address	New Parts	Parts No.	Description	Destination
参照番号	位置	新	部品番号	部品名/規格	仕向
KAC-716					
PA1	3A	*	A64-0786-03	PANEL	
3	3A		B19-0850-04	LIGHTING BOARD	
-			B46-0100-40	WARRANTY CARD	
-		*	B64-0788-00	INST.MANUAL (E,F,S)	K
-		*	B64-0789-00	INST.MANUAL (E,F)	E
-		*	B64-0790-00	INST.MANUAL (D,G)	E
-		*	B64-0791-00	INST.MANUAL (I,S)	E
-		*	B64-0793-00	INST.MANUAL (E,F,S)	M
7	1A		E30-4067-05	AUDIO CORD	M
DC1	1A	*	E30-4328-05	DC CORD ASSY	M
8	3B	*	F01-1495-01	HEAT SINK	
F1	2B		F05-2531-05	FUSE (25A)	
-		*	H12-2587-04	FIXTURE	
-		*	H12-2605-03	FIXTURE	
-			H25-0321-04	PROTECTION BAG (600X315X0.03)	
-			H25-0336-04	PROTECTION BAG (170X250X0.03)	
-		*	H54-0591-03	ITEM CARTON CASE	
-		*	H64-0627-04	OUTER CARTON CASE	
18	1A		N99-1587-05	SCREW SET	
A	1B		N09-4026-05	TAPPING SCREW (4X8,TP,S)	
B	1B		N15-1040-45	FLAT WASHER (4)	
C	1B		N83-3006-45	PAN HEAD TAPTITE SCREW	
D	2A		N83-3006-46	PAN HEAD TAPTITE SCREW	
E	2A		N87-3012-46	BRAZIER HEAD TAPTITE SCREW	
20	1A		W01-0748-05	ACCESSORY	
19	1A	*	W01-0745-05	ACCESSORY	EM
AUDIO UNIT (X09-5020-12)					
D203			B30-1342-05	LED	
C1 ,2			CC45FSL1H331J	CERAMIC 330PF J	
C3			CF92FV1H223J	MF-C 0.022UF J	
C4			CE04DW1H010M	ELECTRO 1.0UF 50WV	
C5 -8			CC45FSL1H151J	CERAMIC 150PF J	
C9			CE04DW1H2R2M	ELECTRO 2.2UF 50WV	
C10			CC45FSL1H221J	CERAMIC 220PF J	
C21 -24			CE04DW1H010M	ELECTRO 1.0UF 50WV	
C25 -28			CC45FSL1H221J	CERAMIC 220PF J	
C29 ,30			CC45FSL1H151J	CERAMIC 150PF J	
C41			CF92FV1H223J	MF-C 0.022UF J	
C42			CE04DW1H4R7M	ELECTRO 4.7UF 50WV	
C43			CF92FV1H223J	MF-C 0.022UF J	
C44			CE04DW1H010M	ELECTRO 1.0UF 50WV	
C45			CF92FV1H154J	MF-C 0.15UF J	
C46			CC45FSL1H270J	CERAMIC 27PF J	
C47 ,48			CE04DW1H010M	ELECTRO 1.0UF 50WV	
C91 -96			CK45FF1H103Z	CERAMIC 0.010UF Z	
C101			CF92FV1H102J	MF-C 1000PF J	
C102			CF92FV1H682J	MF-C 6800PF J	
C103			CC45FSL1H120J	CERAMIC 12PF J	

Ref. No.	Address	New Parts	Parts No.	Description	Destination
参照番号	位置	新	部品番号	部品名/規格	仕向
C104			CE04DW1H330M	ELECTRO 33UF 50WV	
C105			CC45FSL1H270J	CERAMIC 27PF J	
C106			CC45FSL1H080D	CERAMIC 8.0PF D	
C107			CF92FV1H102J	MF-C 1000PF J	
C108			CE04DW1H221M	ELECTRO 220UF 50WV	
C109			CF92FV1H473J	MF-C 0.047UF J	
C110			CC45FSL1H331J	CERAMIC 330PF J	
C151			CE04DW1H100M	ELECTRO 10UF 50WV	
C152			CK45FB1H222K	CERAMIC 2200PF K	
C153			CE04DW1H4R7M	ELECTRO 4.7UF 50WV	
C154			CK45FF1H103Z	CERAMIC 0.010UF Z	
C155-158			CE04DW1H4R7M	ELECTRO 4.7UF 50WV	
C201,202			CE04DW1H100M	ELECTRO 10UF 50WV	
C203			CF92FV1H102J	MF-C 1000PF J	
C204			C90-2788-05	ELECTRO 3900UF 16WV	
C205-207			CF92FV1H102J	MF-C 1000PF J	
C208-211			C90-2787-05	ELECTRO 1500UF 50WV	
C212			CE04DW1H100M	ELECTRO 10UF 50WV	
C213			CE04DW1A101M	ELECTRO 100UF 10WV	
C214			CE04DW1H2R2M	ELECTRO 2.2UF 50WV	
C215,216			CE04DW1H471M	ELECTRO 470UF 50WV	
CN1			E40-3640-05	PIN ASSY	
J1			E70-0810-05	SCREW TERMINAL BOARD	
J2			E70-0807-05	SCREW TERMINAL BOARD	
J3			E70-0811-05	SCREW TERMINAL BOARD	
J4			E63-0818-05	PHONE JACK	
JK5			J13-0602-05	FUSE HOLDER	
L1		*	L33-1015-05	CHOKO COIL	
T1			L19-0552-05	TRANSFORMER FOR CONVERTER	
C	2B		N83-3006-45	PAN HEAD TAPTITE SCREW	
D	2B		N83-3006-46	PAN HEAD TAPTITE SCREW	
F	2B		N80-2008-45	PAN HEAD TAPTITE SCREW	
G	2A		N80-3010-45	PAN HEAD TAPTITE SCREW	
R12 -15			RN14BK2C1002F	RN 10.0K F 1/6W	
R21 -24			RS14KB3D560J	FL-PROOF RS 56 J 2W	
R123			RD14DB2H101J	SMALL-RD 100 J 1/2W	
R126,127			R92-0205-05	METAL-PLATE 0.1 K 2W	
R128			RD14DB2H100J	SMALL-RD 10 J 1/2W	
R131			RD14DB2H100J	SMALL-RD 10 J 1/2W	
R132			RD14DB2H101J	SMALL-RD 100 J 1/2W	
R159,160			RS14KB3A471J	FL-PROOF RS 470 J 1W	
R215-217			RD14DB2H100J	SMALL-RD 10 J 1/2W	
R222			RS14KB3A471J	FL-PROOF RS 470 J 1W	
VR1 ,2			R10-0627-05	POTENTIOMETER(20KX2)	
VR3			R12-0605-05	TRIMMING POT.(220)	
K1			S76-0019-05	MAGNETIC RELAY	
S1			S62-0802-05	SLIDE SWITCH	
D1 -6			1SS176	DIODE	
D21 -24			1SS176	DIODE	
D101			1SS176	DIODE	
D151			RD5.1JS(B2)	ZENER DIODE	
D152			1SS92	DIODE	

E: Europe K: North America M: Other Areas

W: Without Europe

△ indicates safety critical components.

PARTS LIST

* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部 品 番 号	Description 部 品 名 / 規 格	Desti- nation 仕 向
D153			1SS176	DIODE	
D154, 155			RD16JS(B)	ZENER DIODE	
D156			1SS176	DIODE	
D201			RM4ZLF-J1	DIODE	
D202			RD5.1JS(B2)	ZENER DIODE	
D204, 205			1SS176	DIODE	
D206			FMU22S*A	DIODE	
D207			FMU22R*A	DIODE	
D208-211			EH1Z	DIODE	
D212			1SS176	DIODE	
D213, 214			1S2076A	DIODE	
IC1 -3			NJM4565D	IC(OP AMP X2)	
IC4			UPC494C	IC(SWITCHING REGULATOR)	
IC5			UPC1237HA	IC(POWER AMP)	
Q101, 102			2SC945(A)(Q,P)	TRANSISTOR	
Q103, 104			2SA992(F,E)	TRANSISTOR	
Q105-107			2SC1845(F,E)	TRANSISTOR	
Q108			2SA992(F,E)	TRANSISTOR	
Q109			2SC945(A)(Q,P)	TRANSISTOR	
Q110			2SC2590(Q,R)	TRANSISTOR	
Q111			2SA1110(Q,R)	TRANSISTOR	
Q112		*	2SC4388LB*5	TRANSISTOR	
Q113		*	2SA1673LB*5	TRANSISTOR	
Q151			2SC945(A)(Q,P)	TRANSISTOR	
Q152			DTA124ES	DIGITAL TRANSISTOR	
Q153			2SC1845(F,E)	TRANSISTOR	
Q154			2SA992(F,E)	TRANSISTOR	
Q155			2SC3940A(R,S)	TRANSISTOR	
Q156			2SA1534A(R,S)	TRANSISTOR	
Q201			2SC945(A)(Q,P)	TRANSISTOR	
Q202			2SA1534A(R,S)	TRANSISTOR	
Q203, 204			2SC945(A)(Q,P)	TRANSISTOR	
Q205, 206			2SA733(A)(Q,P)	TRANSISTOR	
Q207, 208		*	IRFIZ48GLF24	FET.	
TH1			PTH9M04BE222T	POSITIVE RESISTOR	

E: Europe K: North America M: Other Areas

W: Without Europe

⚠ indicates safety critical components.

KAC-716

SPECIFICATIONS

Specifications subject to change without notice.

Audio Section

Max Power Output (4 Ω).....	240 W \times 1 (at 100Hz)
Rated Power Output (4 Ω).....	120 W \times 1 (0.08 % THD at 100Hz)
Rated Power Output (2 Ω).....	160 W \times 1 (0.8 % THD at 100Hz)
Signal to Noise Ratio.....	100 dB
Sensitivity (MAX).....	0.15 V (rated output)
Sensitivity (MIN).....	4.0 V (rated output)
Input Impedance.....	10 k Ω
Low-Pass Filter (12 dB / oct.).....	30 ~ 200 Hz (Variable)

General

Operating Voltage.....	14.4 V (11 ~ 16 V allowable)
Current Consumption (1 kHz, 10% THD, 4 Ω).....	15 A
Dimensions (W \times H \times D).....	290 \times 52 \times 170 mm (11-7/16 \times 2-1/16 \times 6-11/16 in.)
Weight.....	2.4 kg (5.3 lb)

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