

STEREO POWER AMPLIFIER

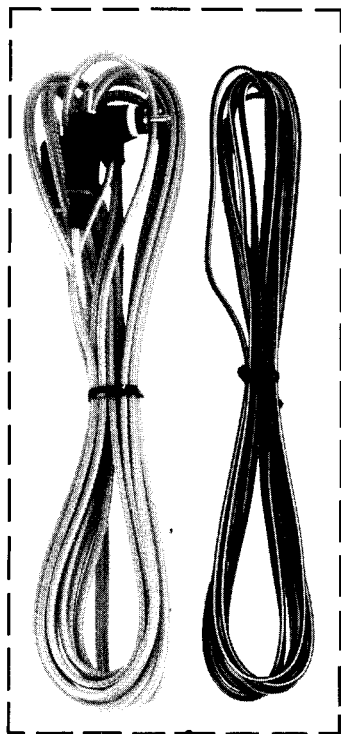
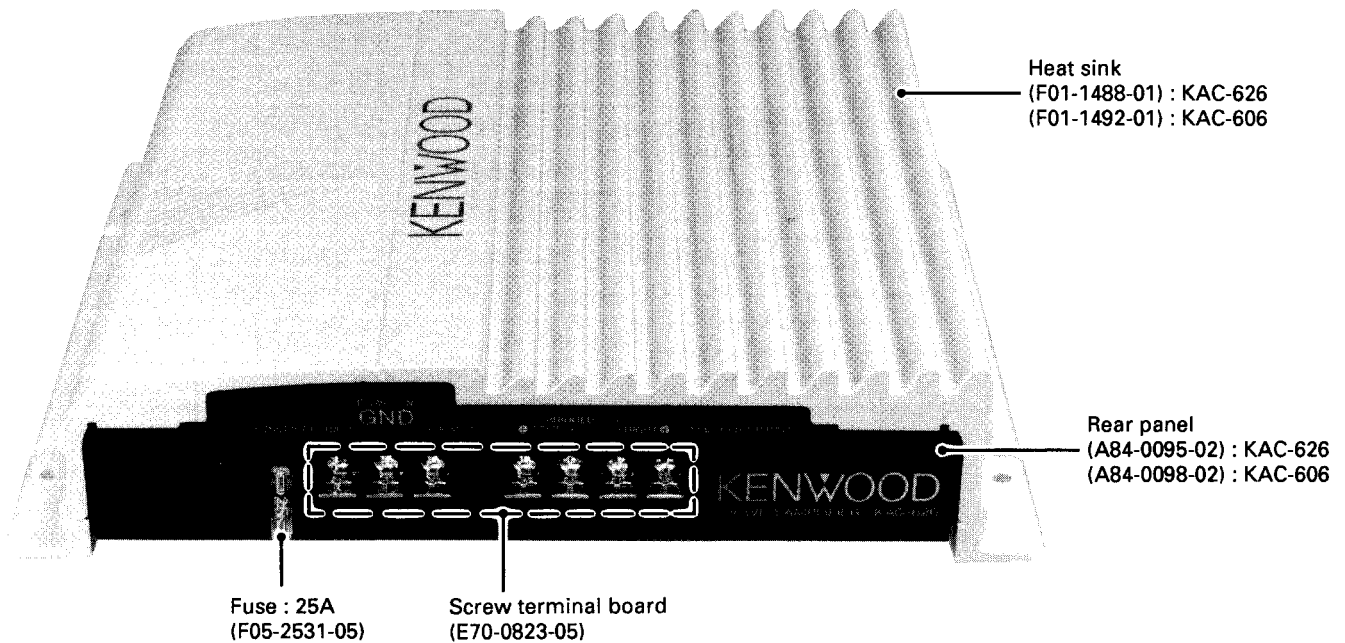
KAC-606/626

SERVICE MANUAL

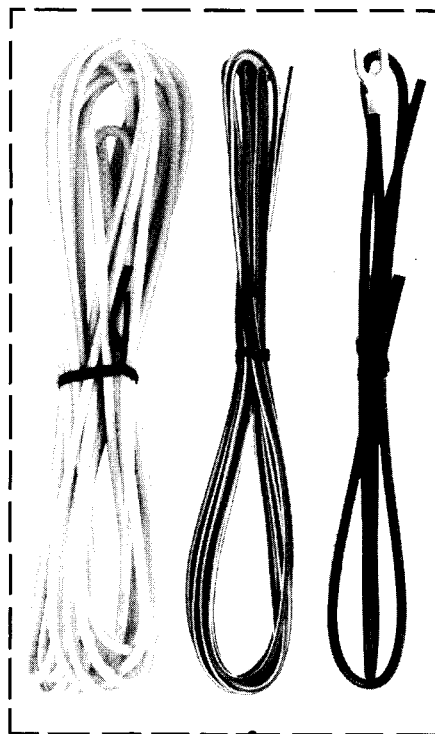
KENWOOD

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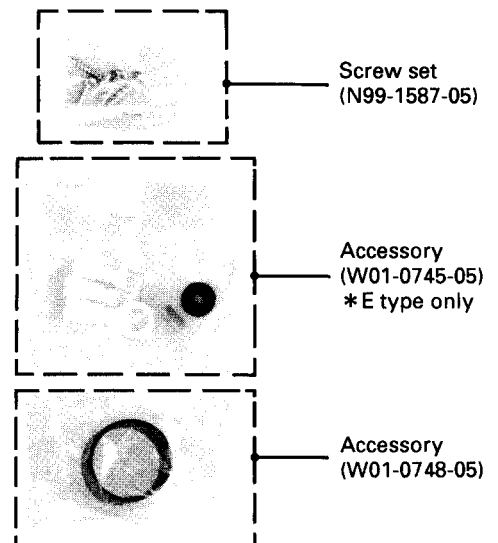
Photo is KAC-626



Audio cord
(E30-4067-05)
* E type only



DC cord assy
(E30-4328-05)
* E type only

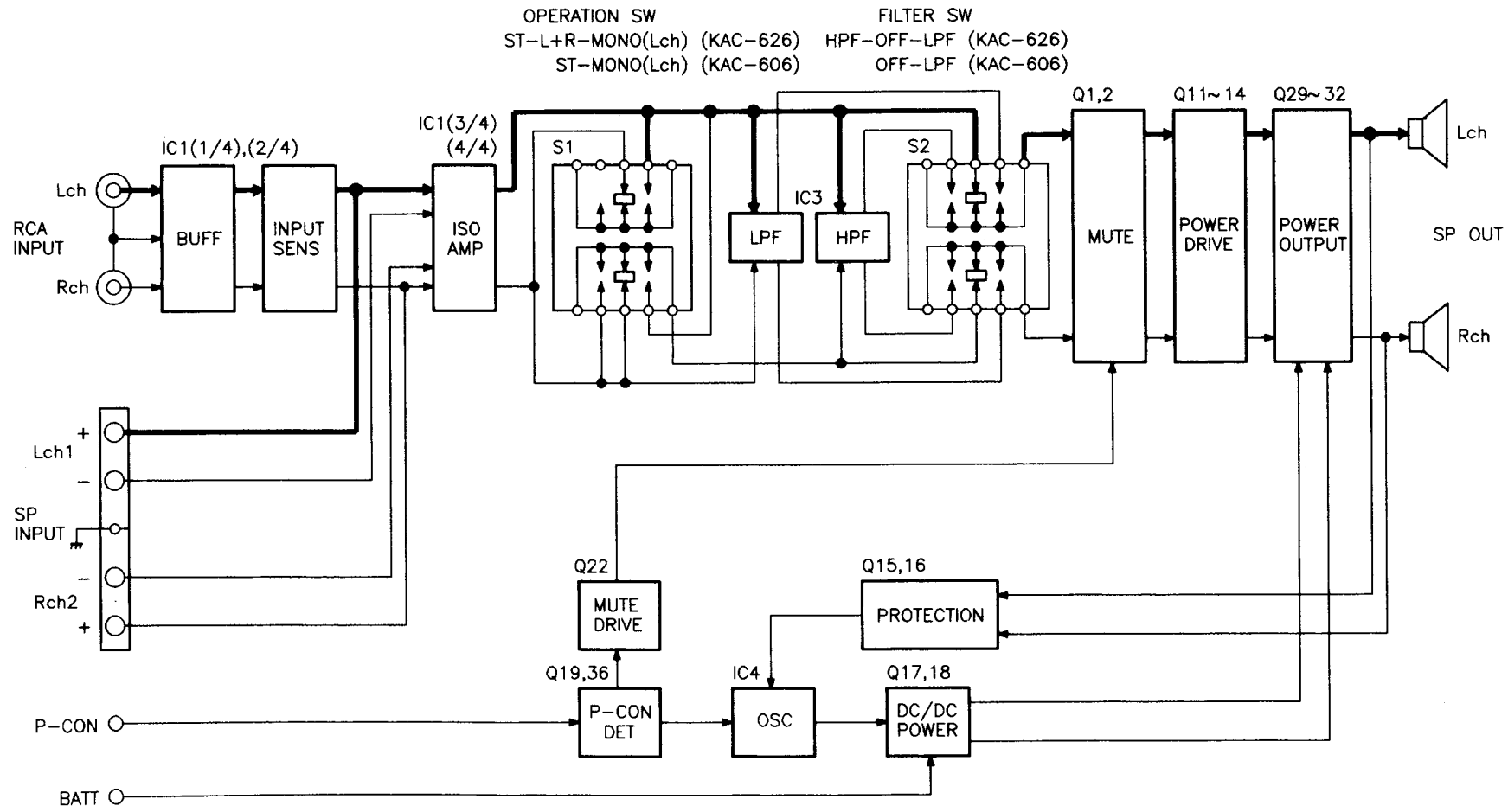


Screw set
(N99-1587-05)

Accessory
(W01-0745-05)
* E type only

Accessory
(W01-0748-05)

BLOCK DIAGRAM



CIRCUIT DESCRIPTION

Description of components

AUDIO UNIT (X09-5160-xx) -10:KAC-626 -11:KAC-606

Component	Component Name	Application/Functions	Operation/Condition/Compatibility
IC1	μ PU4574C	Isolation amp	
IC3	NJM4565D	L.P.F	
IC4	μ PC494C	Switching regulator	Oscillator for DC-DC converter.
Q1, 2	2SC945(A)(Q,P)	Muting transistor	
Q3 - 6	2SA733(A)(Q,P)	Differential amp	
Q7, 8	2SC945(A)(Q,P)	Differential amp	
Q9, 10	2SC945(A)(Q,P)	For temperature-compensating	
Q11, 12	2SC1627A	Power amp	
Q13, 14	2SA817A	Power amp	
Q15, 16	2SC945(A)(Q,P)	Protection for overcurrent	When overcurrent flows, turns IC4 off.
Q17, 18	IRFIZ34GLF24	Power switching	
Q19	2SC945(A)(Q,P)	P-con detector	
Q21	2SC3940A(R,S)	A-class power supply controller	
Q22	DTA124EL	Muting driver	
Q29, 30	2SC5100LB	Power stage	
Q31, 32	2SA1908LB	Power stage	
Q35	2SC945(A)(Q,P)	A-class muting	Operates when the power supply voltage fluctuates.
Q36	2SC945(A)(Q,P)	P-con detector	
Q37	2SA733(A)(Q,P)	Power switch	Turns power supply of IC4 ON/OFF.
Q38, 39	2SC945(A)(Q,P)	DC protection	
Q40	2SC945(A)(Q,P)	Overvoltage protection	

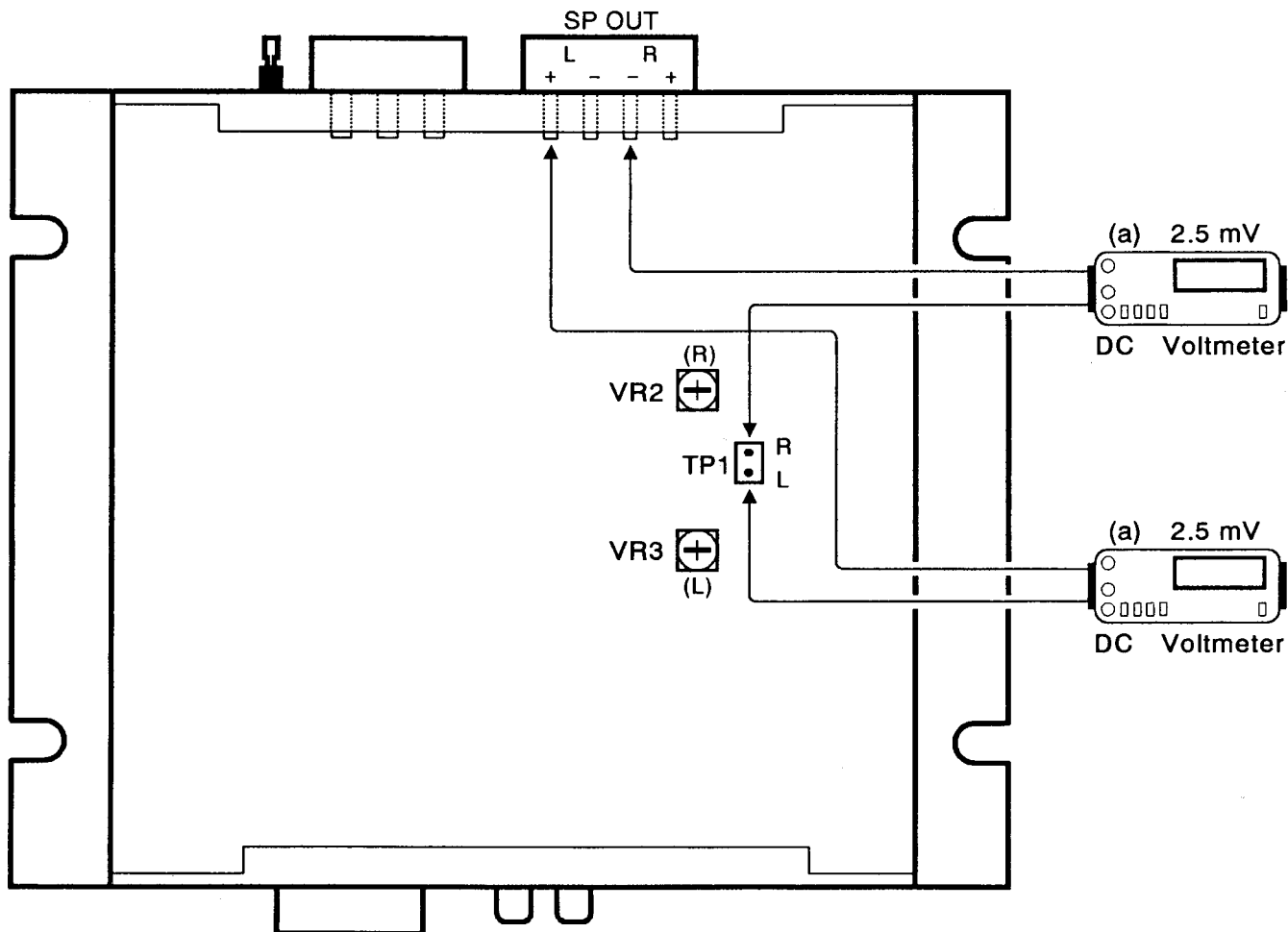
ADJUSTMENT/ABGLEICH

ADJUSTMENT

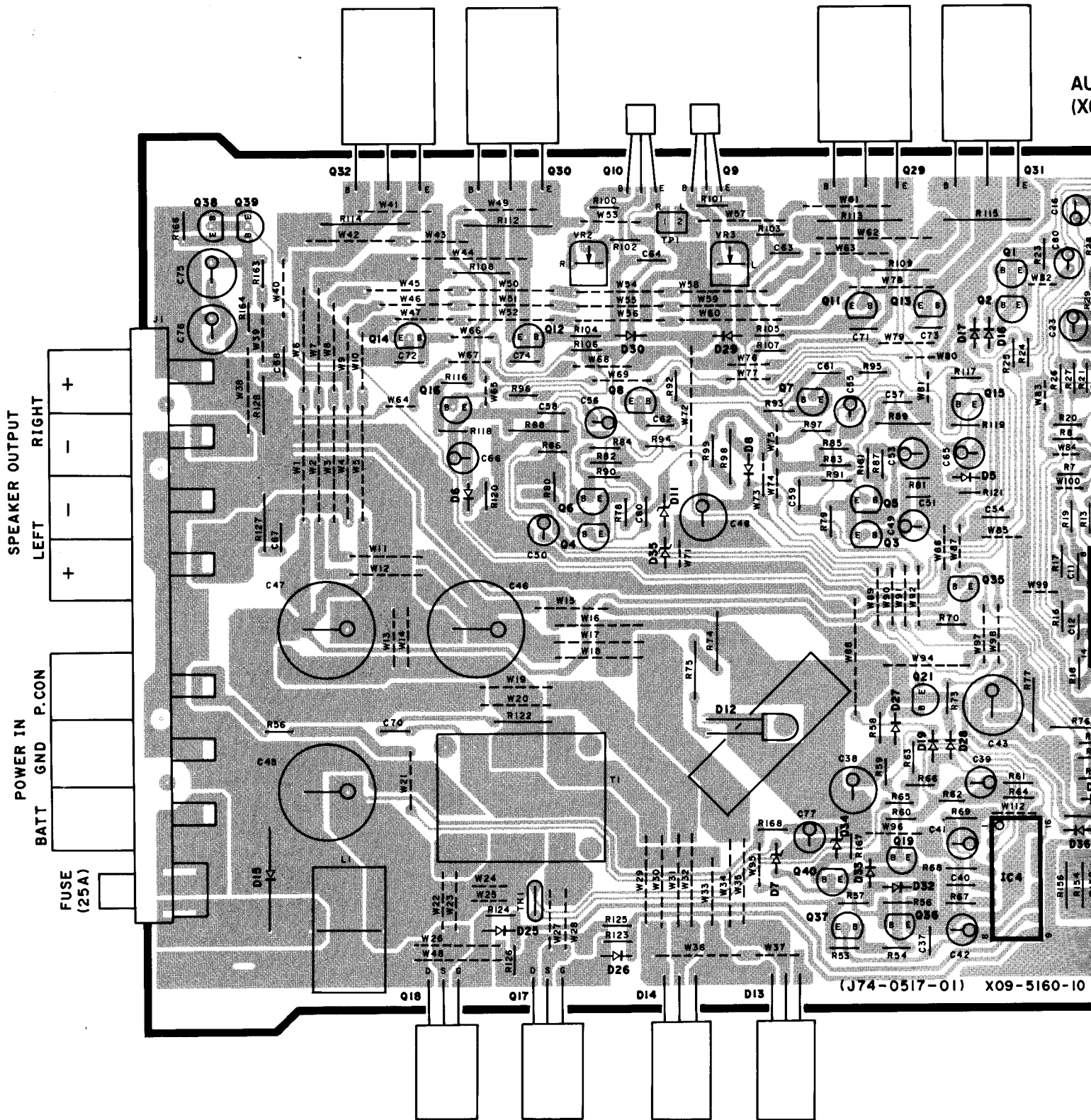
No	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	CASSETTE RECEIVER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
1	IDLE CURRENT	—	Connect a DC voltmeter to TP1 (L,R) and SP-OUT(L,R).	VOLUME : 0	VR2 (Rch) VR3 (Lch)	2.5mV	(a)

ABGLEICH

NR.	GEGENSTAND	EINGANGS-EINSTELLUNG	AUSGANG-EINSTELLUNG	VORSTÄRKER-EINSTELLUNG	ABGLEICHE-PUNKTE	ABGLEICHEEN FÜR	ABB
1	LEERLAUF-STROM	—	Einen Gleichspannungsmesser zu TP1 (L,R) und SP-OUT(L,R) anschließen.	VOLUME : 0	VR2 (Rch) VR3 (Lch)	2.5mV	(a)

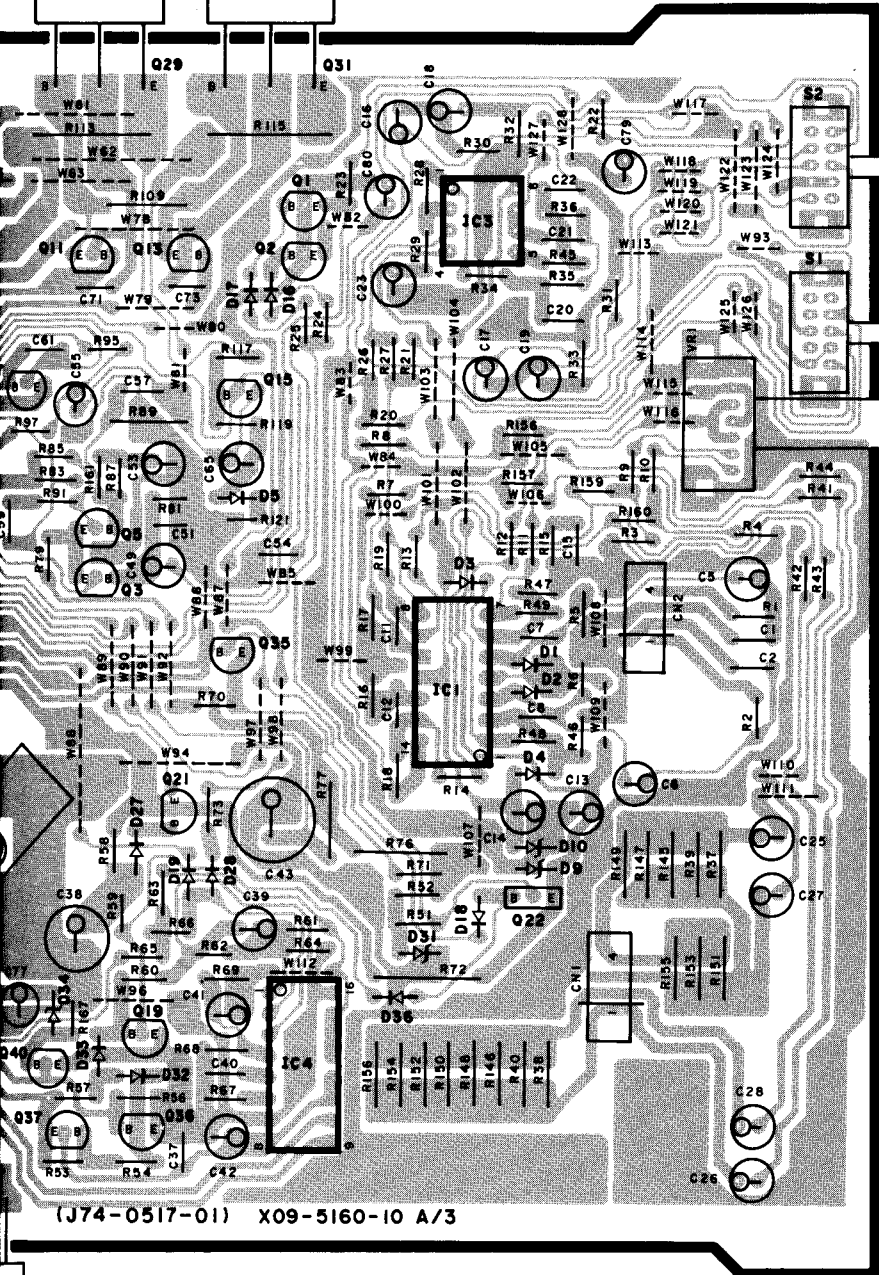


PC BOARD (Component Side View)



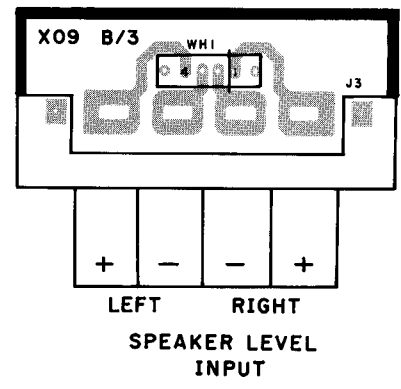
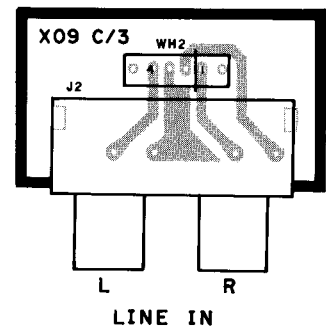
(J74-0517-01) X09-5160-10

AUDIO UNIT
 (X09-5160-XX) -10 : KAC-626, -11 : KAC-606



FILTER
 OPERATION

INPUT
 SENSITIVITY

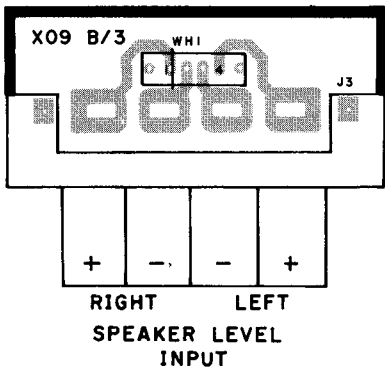
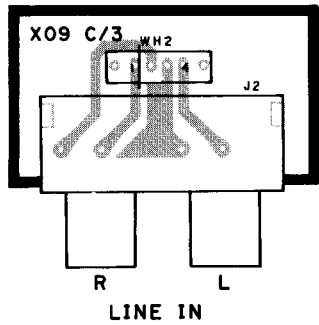
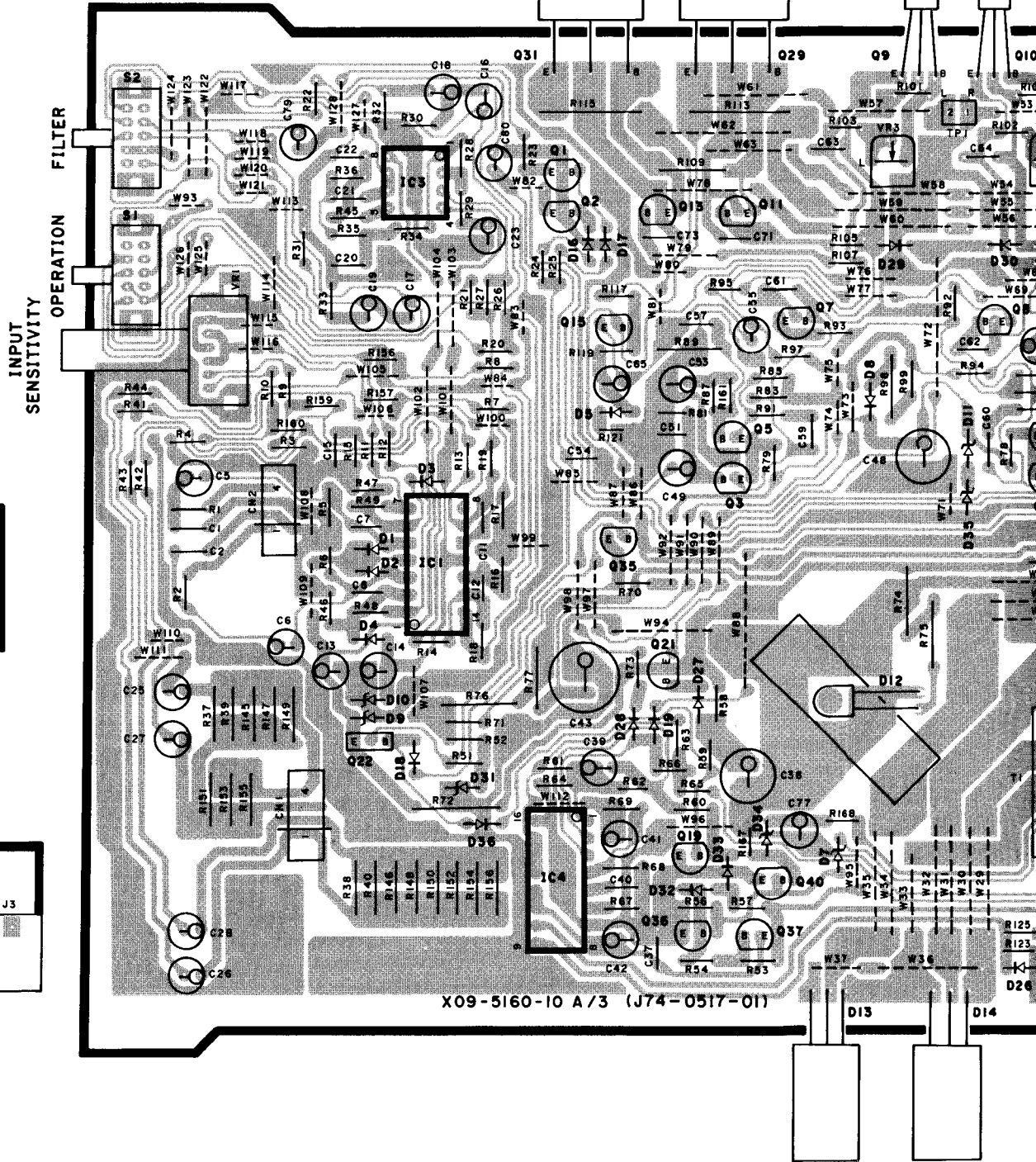


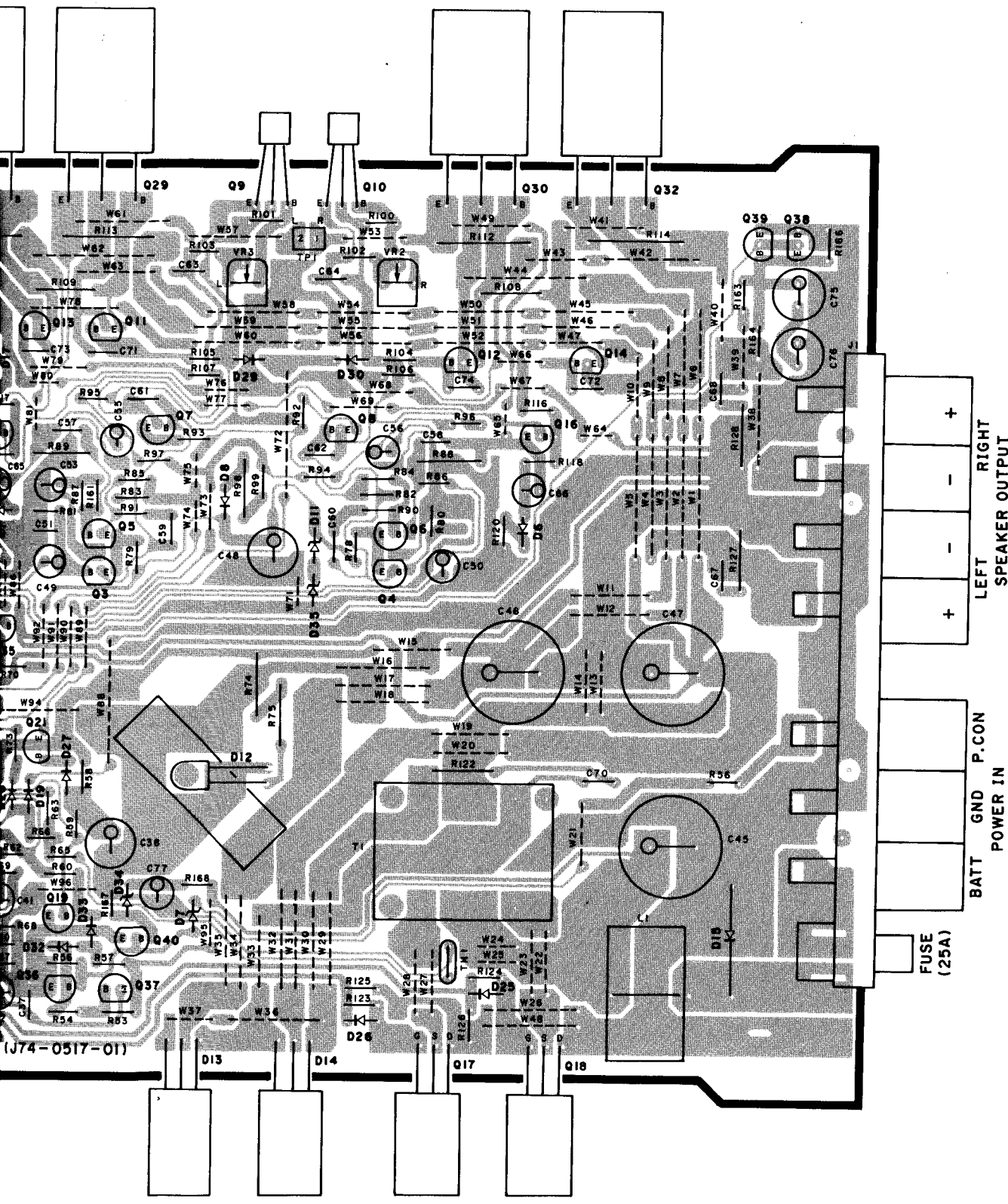
Ref.No.	Address
IC1	4G
IC3	3G
IC4	5F
Q1	2F
Q2	3F
Q3	4F
Q4	4D
Q5	4F
Q6	4D
Q7	3E
Q8	3D
Q9	2E
Q10	2D
Q11	3F
Q12	3D
Q13	3F
Q14	3C
Q15	3F
Q16	3C
Q17	6D
Q18	6C
Q19	5F
Q21	4F
Q22	5G
Q29	2F
Q30	2D
Q31	2G
Q32	2C
Q35	4F
Q36	6F
Q37	6E
Q38	2B
Q39	2B
Q40	5E

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

PC BOARD (Foil Side View)

AUDIO UNIT
 (X09-5160-XX) -10 : KAC-626, -11 : KAC-606

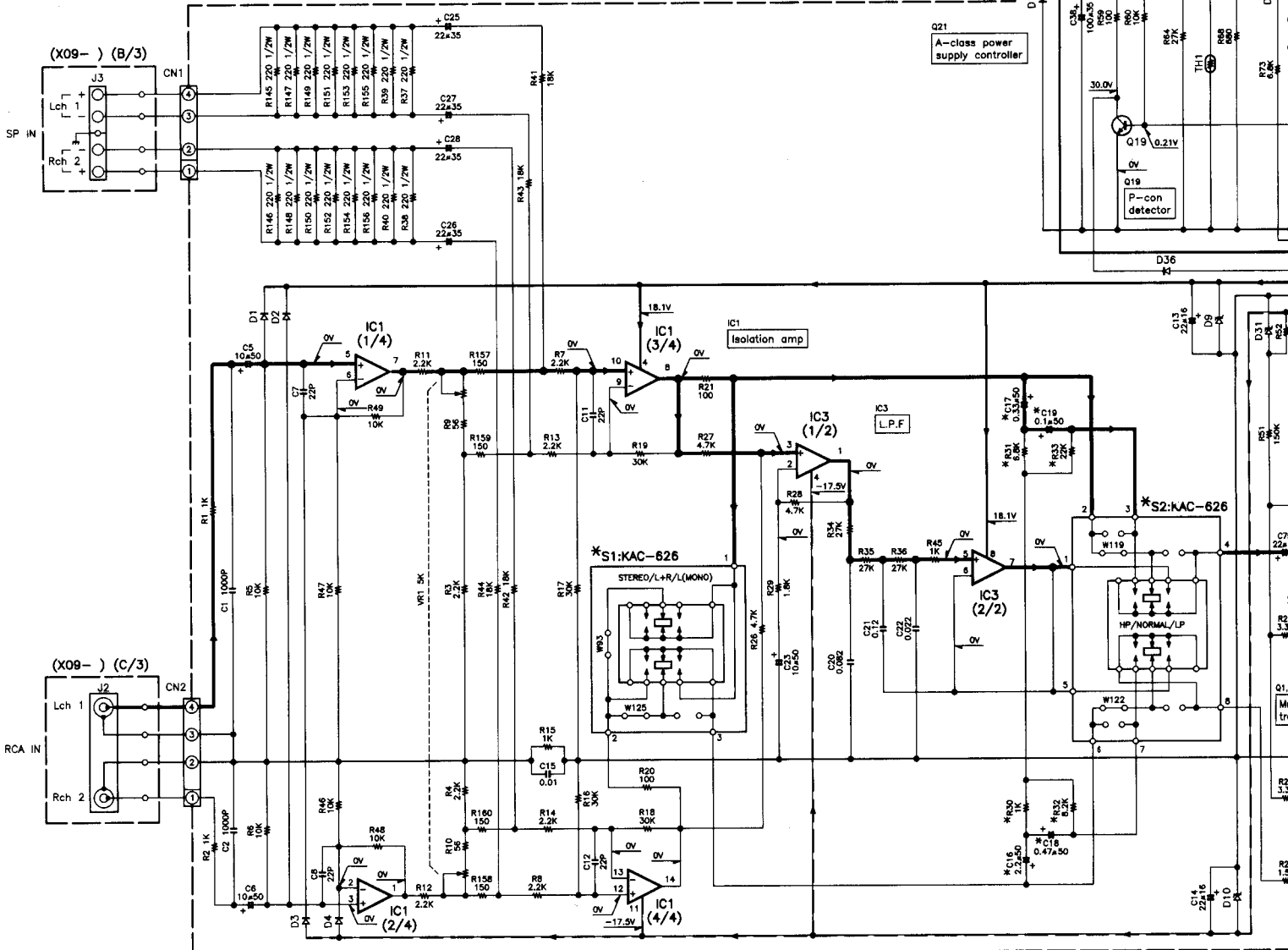




Ref.No.	Address
IC1	4O
IC3	3O
IC4	5O
Q1	2O
Q2	3O
Q3	4P
Q4	4Q
Q5	4P
Q6	4Q
Q7	3P
Q8	3Q
Q9	2Q
Q10	2Q
Q11	3P
Q12	3R
Q13	3P
Q14	3R
Q15	3O
Q16	3R
Q17	6R
Q18	6R
Q19	5P
Q21	4P
Q22	5N
Q29	2P
Q30	2R
Q31	2O
Q32	2S
Q35	4P
Q36	6P
Q37	6P
Q38	2S
Q39	2S
Q40	5P

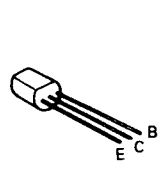
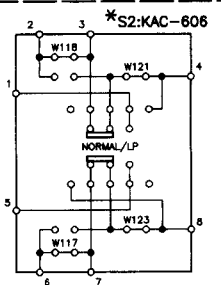
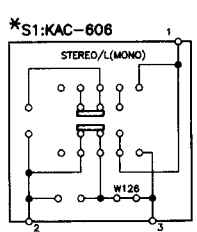
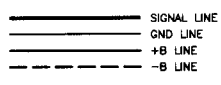
Refer to the schematic diagram for the values of resistors and capacitors.

- | | | | | |
|----------------|----------------------------------|----------------|-------------------------------|-------------|
| IC1 : UPC4574C | Q1,2,7~10,15,16,19,35,36,38~40 : | 2SC945(A)(Q,P) | D1~6,8,16~19,25~30,32,33,36 : | 1SS176 |
| IC3 : NJM4565D | Q3~6,37 | 2SA733(A)(Q,P) | D7 | RD7.5JS(B) |
| IC4 : UPC494C | Q11,12 | 2SC1627A | D9,10,34 | RD16JS(B) |
| | Q13,14 | 2SA817A | D11,35 | RD8.2JS(B) |
| | Q17,18 | IRFIZ34GLF24 | D12 | B30-1460-05 |
| | Q21 | 2SC3940A(R,S) | D13 | FMU22S+A |
| | Q22 | DTA124EL | D14 | FMU22R+A |
| | Q29,30 | 2SC5100LB | D15 | RM4ZLF-J1 |
| | Q31,32 | 2SA1908LB | O31 | RD5.1JS(B2) |

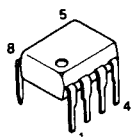


(X09-5160-XX)

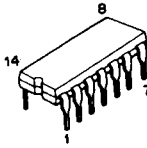
MODEL NAME	UNIT No.	S1,2	R30~33	C16~19
KAC-626	-10	S31-2630-05	YES	YES
MAC-606	-11	S62-0845-05	NO	NO



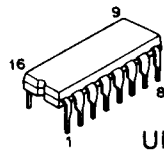
- 2SA733(A)
- 2SA817A
- 2SC1627A
- 2SC3940A
- 2SC945(A)



NJM4565D

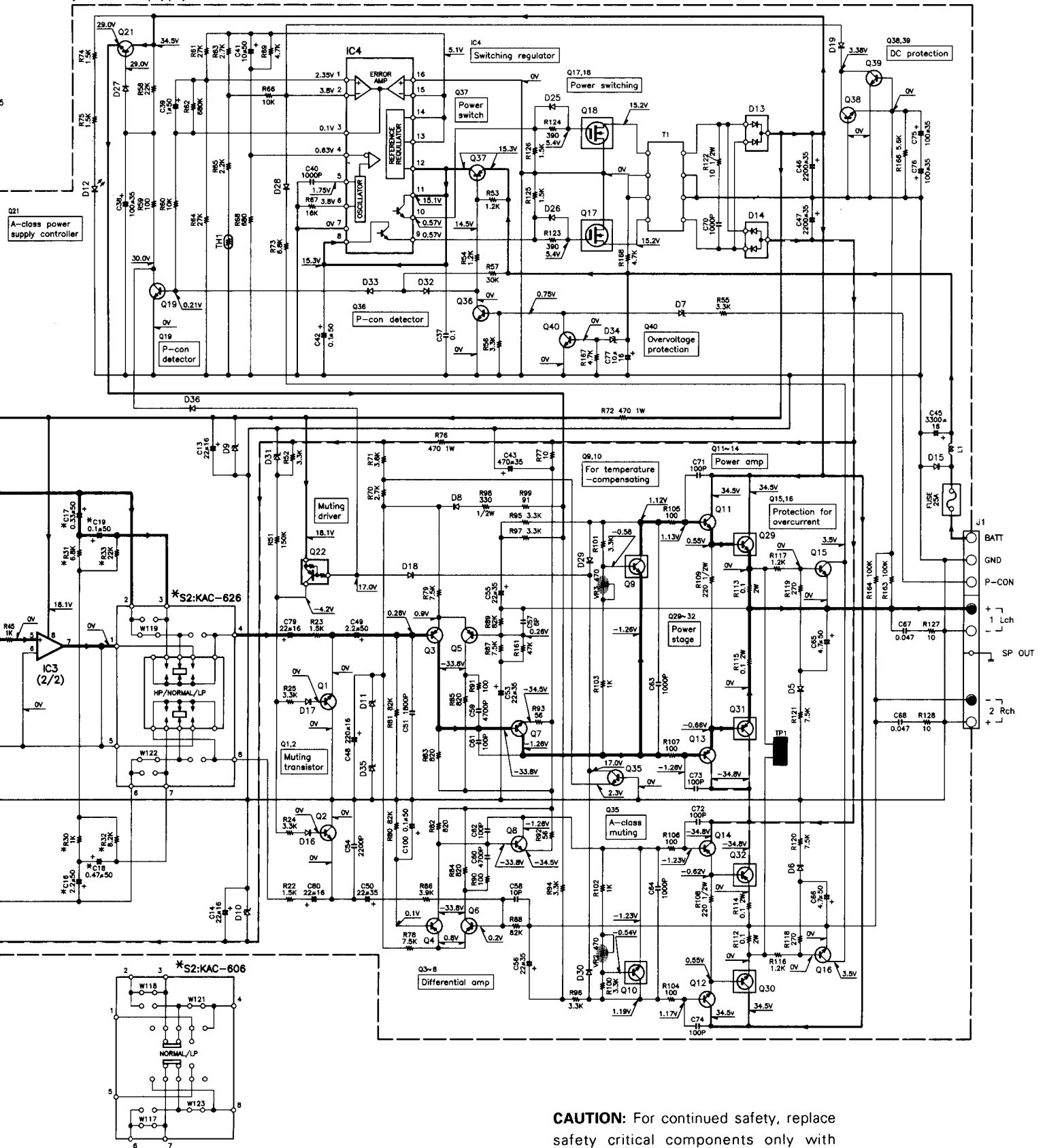


UPC4574C



UPC494C

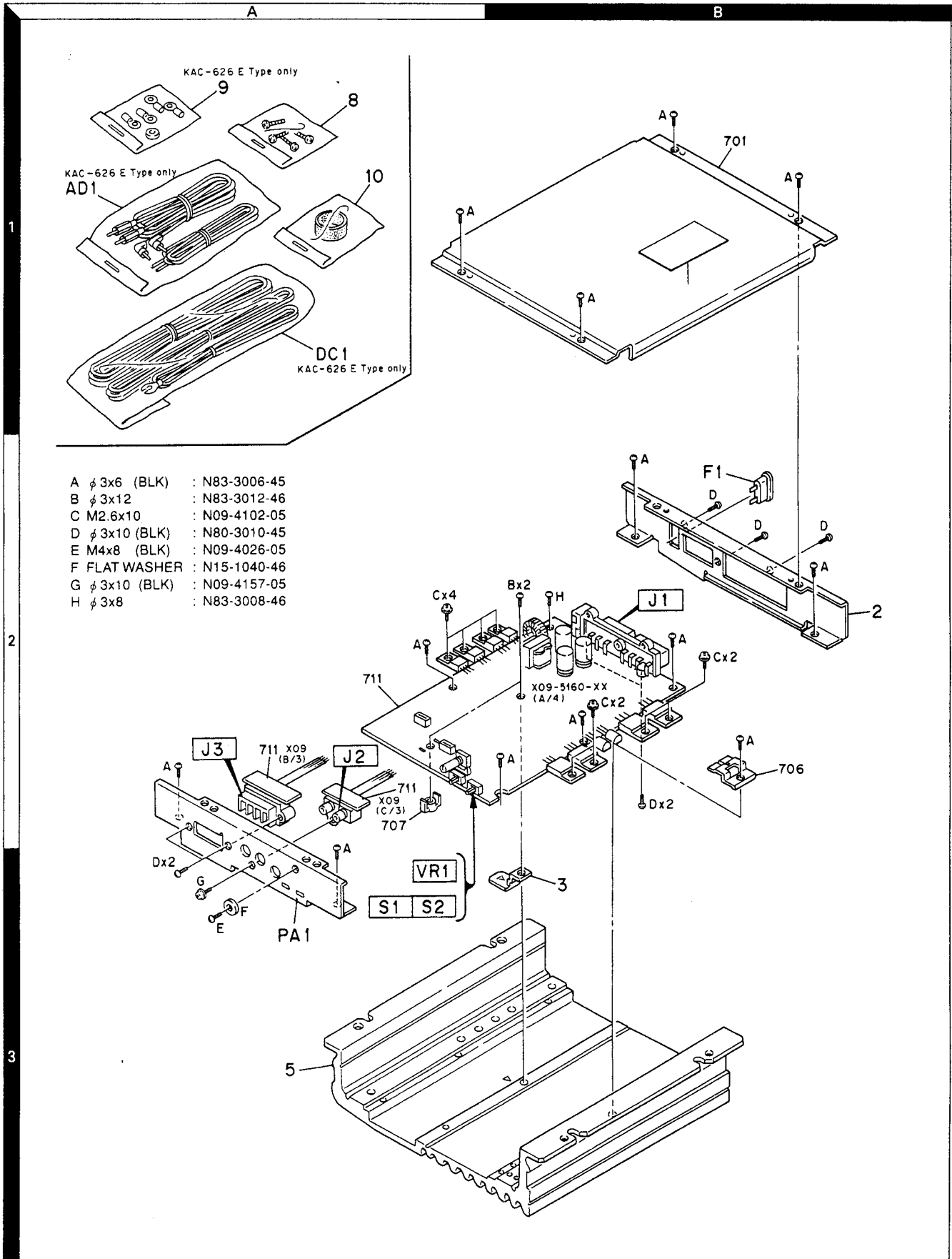
• DC voltage
impedance
slightly due
instruments



CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). \triangle Indicates safety critical components. 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.

• 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 3x6 (BLK) : N83-3006-45
- B ϕ 3x12 : N83-3012-46
- C M2.6x10 : N09-4102-05
- D ϕ 3x10 (BLK) : N80-3010-45
- E M4x8 (BLK) : N09-4026-05
- F FLAT WASHER : N15-1040-46
- G ϕ 3x10 (BLK) : N09-4157-05
- H ϕ 3x8 : N83-3008-46

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.

KAC-606/626
(X09-5160-1X)

Ref. No.	New Parts	Parts No.	Description	Destination
参照番号	新	部品番号	部品名/規格	仕向
KAC-606/626				
2	2B	* A84-0095-02	REAR PANEL (KAC-626)	KE
2	2B	* A84-0098-02	REAR PANEL (KAC-606)	K
PA1	3A	* A64-0758-02	PANEL (KAC-626)	KE
PA1	3A	* A64-0759-02	PANEL (KAC-606)	K
3	3B	* B19-1061-03	LIGHTING BOARD	
-		B46-0100-40	WARRANTY CARD	
-		* B64-0775-00	INST. MANUAL(ENG, FRE)	KK1
-		* B64-0776-00	INST. MANUAL(SPA)	KK1
-		* B64-0777-00	INST. MANUAL(ENG, FRE)(KAC-626)	E
-		* B64-0778-00	INST. MANUAL(GER, DUT)(KAC-626)	E
-		* B64-0779-00	INST. MANUAL(ITA, SPA)(KAC-626)	E
-		* B64-0780-00	INST. MANUAL(POR) (KAC-626)	E
AD1	1A	E30-4067-05	AUDIO CORD (KAC-626)	E
DC1	1A	* E30-4328-05	DC CORD ASSY (KAC-626)	E
5	3A	* F01-1488-01	HEAT SINK (KAC-626)	KE
5	3A	* F01-1492-01	HEAT SINK (KAC-606)	K
F1	2B	F05-2531-05	FUSE (25A)	1
-		H12-2587-04	PACKING FIXTURE	
-		* H12-2603-03	PACKING FIXTURE	
-		H25-0336-04	PROTECTION BAG (170X250X0.03)	
-		H25-0342-04	PROTECTION BAG (350X350X0.03)	
-		* H54-0588-03	ITEM CARTON CASE (KAC-626)	KE
-		* H54-0589-03	ITEM CARTON CASE (KAC-606)	K
8	1A	N99-1587-05	SCREW SET	
A	1B	N83-3006-45	PAN HEAD TAPTITE SCREW	
B	2B	N83-3012-46	PAN HEAD TAPTITE SCREW	
C	2B	N09-4102-05	SEMS (MACHINE SCREW)(M2.6X10)	
D	2B	N80-3010-45	PAN HEAD TAPTITE SCREW	
E	3A	N09-4026-05	TAPPING SCREW (4X8, TP, S)	
F	3A	N15-1040-46	FLAT WASHER (4)	
G	3A	N09-4157-05	SEMS (TAPTITE SCREW)	
H	2B	N83-3008-46	PAN HEAD TAPTITE SCREW	
9	1A	* W01-0745-05	ACCESSORY (KAC-626)	E
10	1A	* W01-0748-05	ACCESSORY(TUBE)	E
AUDIO UNIT (X09-5160-10 : KAC-626, 0-11 : KAC-606)				
D12	*	B30-1460-05	LED(RED)	
C1	,2	CF92FV1H102J	MF-C 1000PF	J
C5	,6	CE04DW1H100M	ELECTRO 10UF	50WV
C7	,8	CC45FSL1H220J	CERAMIC 22PF	J
C11	,12	CC45FSL1H220J	CERAMIC 22PF	J
C13	,14	CE04DW1C220M	ELECTRO 22UF	16WV
C15		CF92FV1H102J	MF-C 1000PF	J
C16		CE04DW1H2R2M	ELECTRO 2.2UF	50WV KE
C17		CE04DW1HR33M	ELECTRO 0.33UF	50WV KE
C18		CE04DW1HR47M	ELECTRO 0.47UF	50WV KE
C19		CE04DW1HOR1M	ELECTRO 0.1UF	50WV KE
C20		CF92FV1H823J	MF-C 0.082UF	J
C21		CF92FV1H124J	MF-C 0.12UF	J
C22		CF92FV1H223J	MF-C 0.022UF	J
C23		CE04DW1H100M	ELECTRO 10UF	50WV

Ref. No.	New Parts	Parts No.	Description	Destination
参照番号	新	部品番号	部品名/規格	仕向
C25	-28	CE04DW1V220M	ELECTRO 22UF	35WV
C37		CF92FV1H104J	MF-C 0.10UF	J
C38		CE04DW1V101M	ELECTRO 100UF	35WV
C39		CE04DW1H010M	ELECTRO 1.0UF	50WV
C40		CF92FV1H102J	MF-C 1000PF	J
C41		CE04DW1H100M	ELECTRO 10UF	50WV
C42		CE04DW1HOR1M	ELECTRO 0.1UF	50WV
C43		CE04DW1V471M	ELECTRO 470UF	35WV
C45		C90-2689-05	ELECTRO 3300UF	16WV
C46	,47	C90-2780-05	ELECTRO 2200UF	35WV
C48		CE04DW1C221M	ELECTRO 220UF	16WV
C49		CE04DW1H2R2M	ELECTRO 2.2UF	50WV
C50		CE04DW1V220M	ELECTRO 22UF	35WV
C51		CK45FB1H182K	CERAMIC 1800PF	K
C53		CE04DW1V220M	ELECTRO 22UF	35WV
C54		CK45FB1H222K	CERAMIC 2200PF	K
C55	,56	CE04DW1V220M	ELECTRO 22UF	35WV
C57		CC45FSL1H060D	CERAMIC 6.0PF	D
C58		CC45FSL1H100D	CERAMIC 10PF	D
C59	,60	CF92FV1H472J	MF-C 4700PF	J
C61	,62	CC45FSL1H101J	CERAMIC 100PF	J
C63	,64	CK45FB1H102K	CERAMIC 1000PF	K
C65	,66	CE04DW1H4R7M	ELECTRO 4.7UF	50WV
C67	,68	CF92FV1H473J	MF-C 0.047UF	J
C70		CF92FV1H102J	MF-C 1000PF	J
C71	-74	CC45FSL1H101J	CERAMIC 100PF	J
C75	,76	CE04DW1V101M	ELECTRO 100UF	35WV
C77		CE04DW1C100M	ELECTRO 10UF	16WV
C79	,80	CE04DW1C220M	ELECTRO 22UF	16WV
J1	*	E70-0823-05	SCREW TERMINAL BOARD	
J2	*	E63-0834-05	PHONE JACK	
J3	*	E70-0822-05	SCREW TERMINAL BOARD	KE
J3	*	E70-0824-05	SCREW TERMINAL BOARD	K
WH1	,2	E31-8122-05	LEAD WIRE	
L1		L33-1032-05	CHOKO COIL	
T1	*	L19-0549-05	TRANSFORMER FOR CONVERTER	
D	2B	N80-3010-45	PAN HEAD TAPTITE SCREW	
R37	-40	RD14DB2H221J	SMALL-RD 220	J 1/2W
R72		RS14KB3A471J	FL-PROOF RS 470	J 1W
R76		RS14KB3A471J	FL-PROOF RS 470	J 1W
R98		RD14DB2H331J	SMALL-RD 330	J 1/2W
R108,109		RD14DB2H221J	SMALL-RD 220	J 1/2W
R112-115		R92-2115-05	METAL FILMR 1	J 2W
R122		RD14DB2H100J	SMALL-RD 10	J 1/2W
R145-156		RD14DB2H221J	SMALL-RD 220	J 1/2W
VR1	*	R31-0209-05	VARIABLE RESISTOR	
VR2	,3	R12-0607-05	TRIMMING POT.(470)	
S1	,2	S31-2630-05	SLIDE SWITCH (KAC-626)	KE
S1	,2	* S62-0845-05	SLIDE SWITCH (KAC-606)	K
D1	-6	1SS176	DIODE	
D7		RD7.5JS(B)	ZENER DIODE	
D8		1SS176	DIODE	
D9	,10	RD16JS(B)	ZENER DIODE	

E: Europe K: North America M: Other Areas
W: Without Europe

△ indicates safety critical components.

KAC-606/626

SPECIFICATIONS

Specifications subject to change without notice.

Audio Section

Max Power Output (4 Ω)

2 Channel Mode 100W x 2
1 Channel Mode 300W x 1

Rated Power Output (4 Ω)

2 Channel Mode 50W x 2 (20Hz~20kHz, less than 0.08% THD)
1 Channel Mode 150W x 1 (1kHz, 0.8%THD)

Rated Power Output (2 Ω)

2 Channel Mode 75W x 2 (1kHz, 0.8%THD)

Frequency Response 10Hz~45kHz (+0, -1dB)

Signal to Noise Ratio 100dB

Sensitivity (MAX.) 0.15V (rated output)

Sensitivity (MIN.) 4.0V (rated output)

Input Impedance 10k Ω

High Pass Filter Frequency (KAC-626 only) 150Hz (12dB/oct.)

Low Pass Filter Frequency 80Hz (12dB/oct.)

General

Operating Voltage 14.4V (11~16V allowable)

Current Consumption (1kHz, 10% THD) 19A

Dimensions (W x H x D) 220 x 52 x 228mm (8-11/16 x 2-1/16 x 9 in.)

Weight 2.2kg (4.9 lb)

Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the U.S.A. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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