

POWER AMPLIFIER

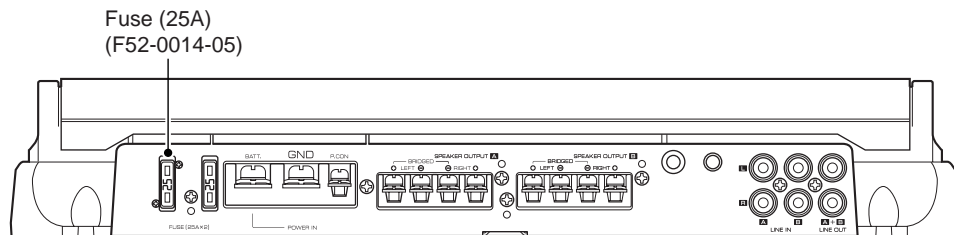
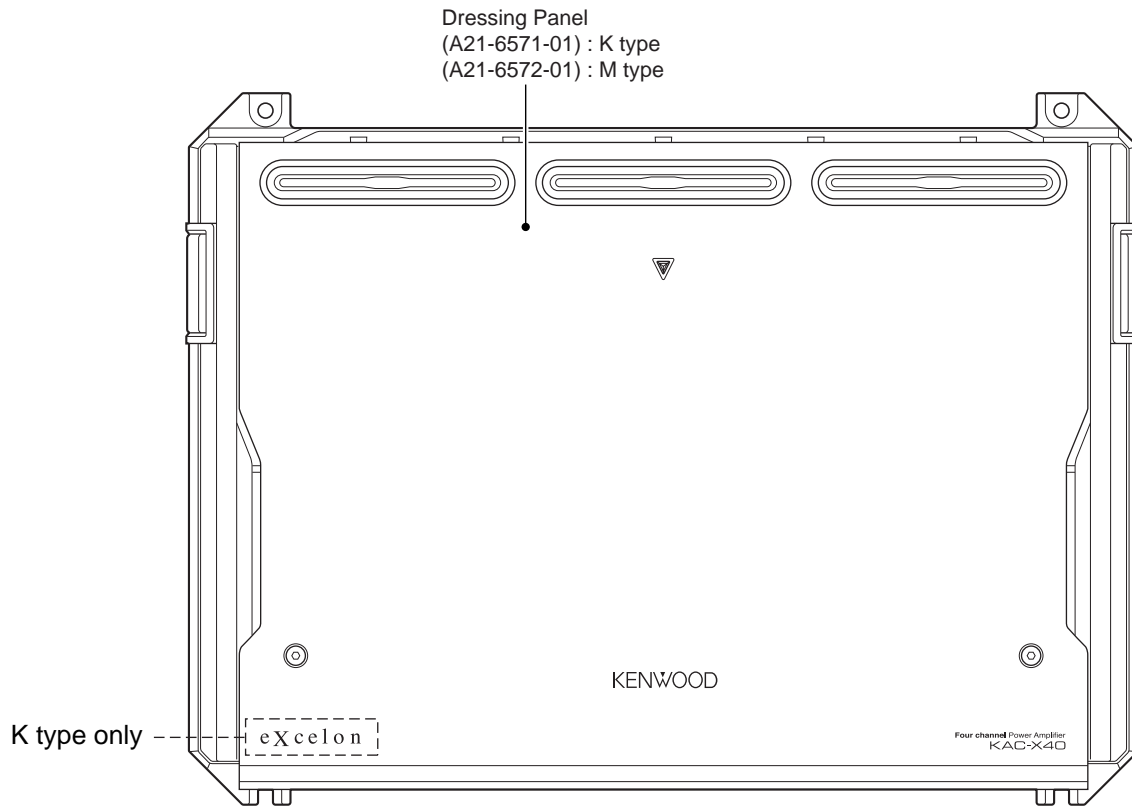
KAC-X40

SERVICE MANUAL

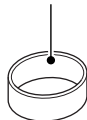
KENWOOD

Kenwood Corporation

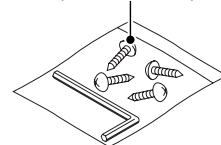
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B53-0485-00 (N) 719



Accessories
(W01-1606-05)



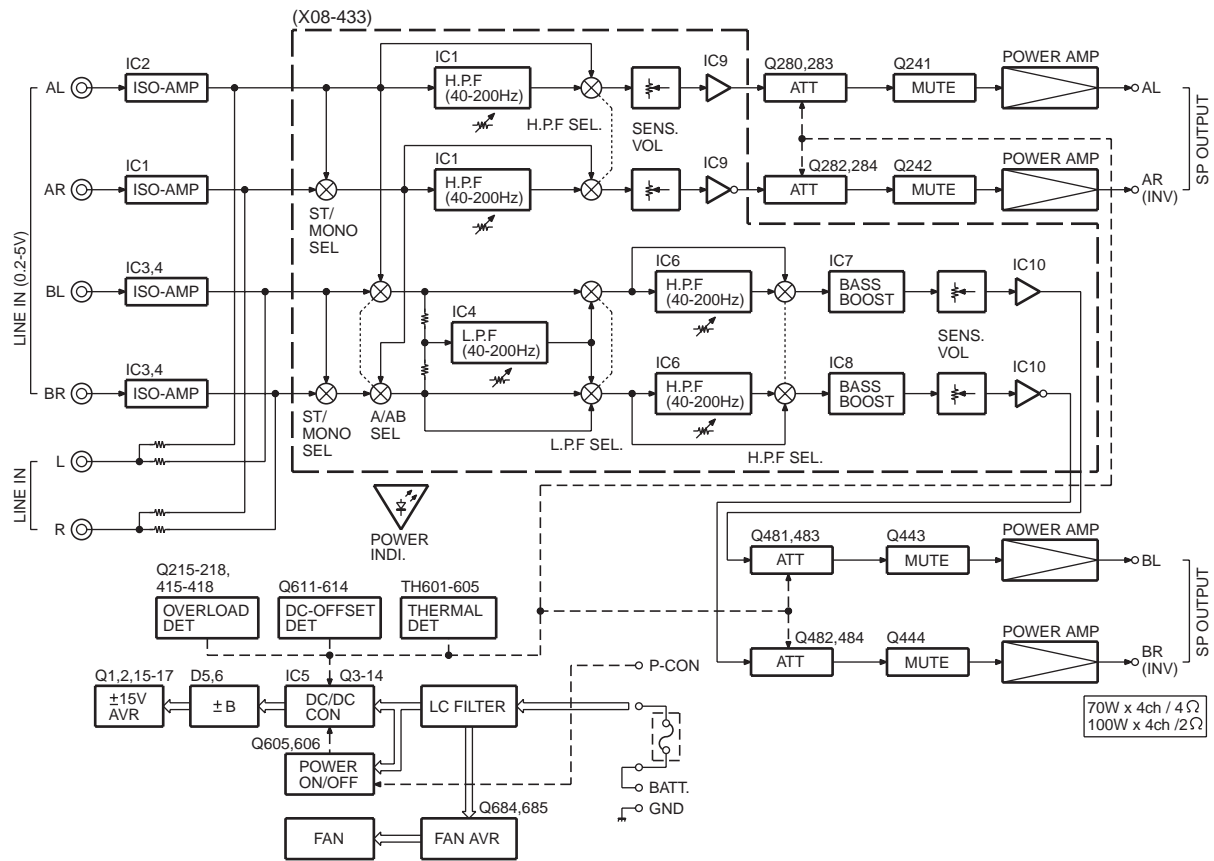
Screw set
(N99-1794-05)



This product uses Lead Free solder.



BLOCK DIAGRAM



COMPONENTS DESCRIPTION

● PREAMPLIFIER UNIT (X08-4330-10)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	HPS	HPF at side A 40-200Hz
IC4	LPF	LPF at side B 40-200Hz
IC6	HPF	HPF at side B 40-200Hz
IC7-8	BASS_BOOST	BASS_BOOST at side B 40-100Hz_0-18dB
IC9	X08 signal output	Lch output buffer at A side, Rch phase inversion, and output buffer
IC10	X08 signal output	Lch output buffer at B side, Rch phase inversion, and output buffer

COMPONENTS DESCRIPTION

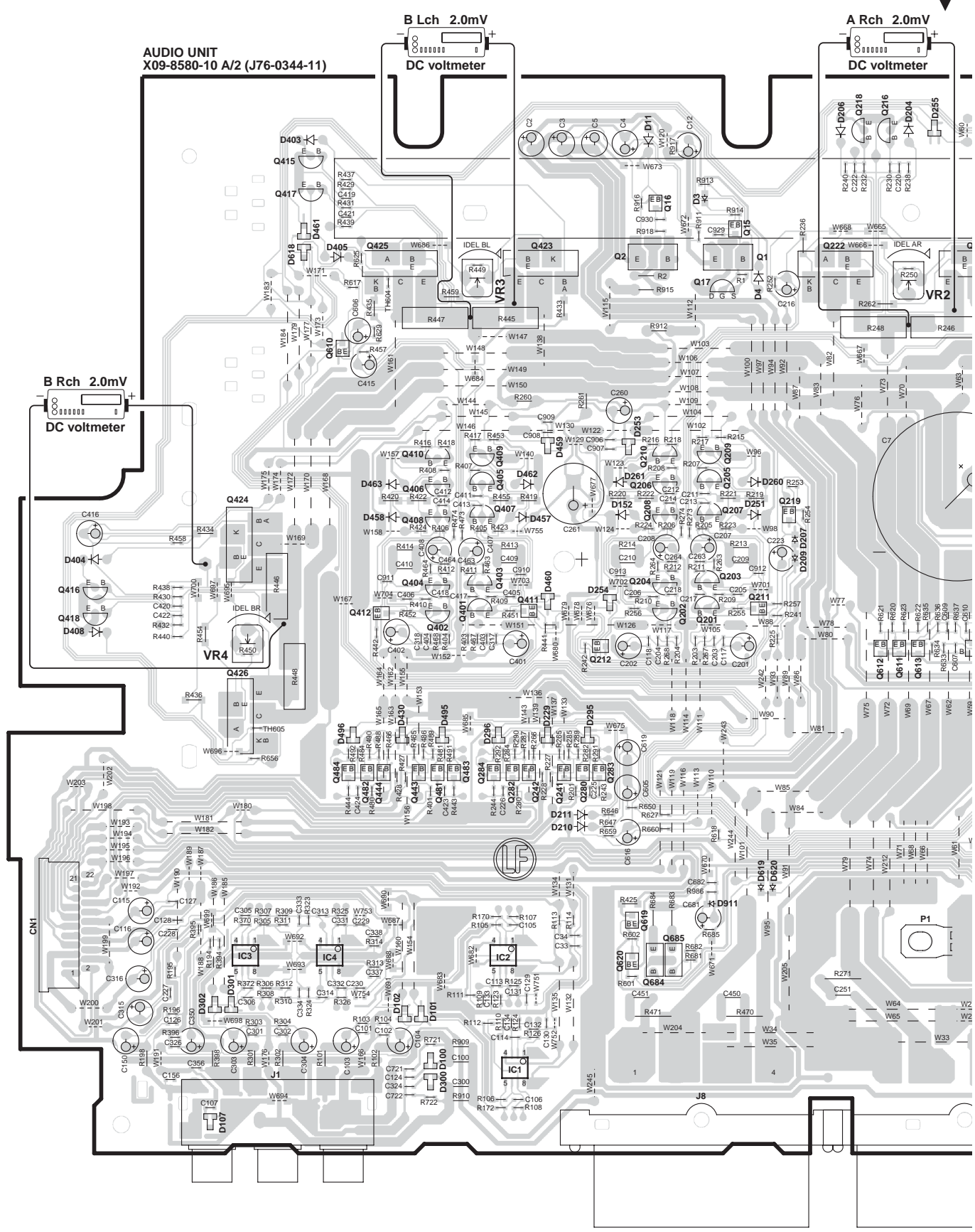
● AUDIO UNIT (X09-8580-10)

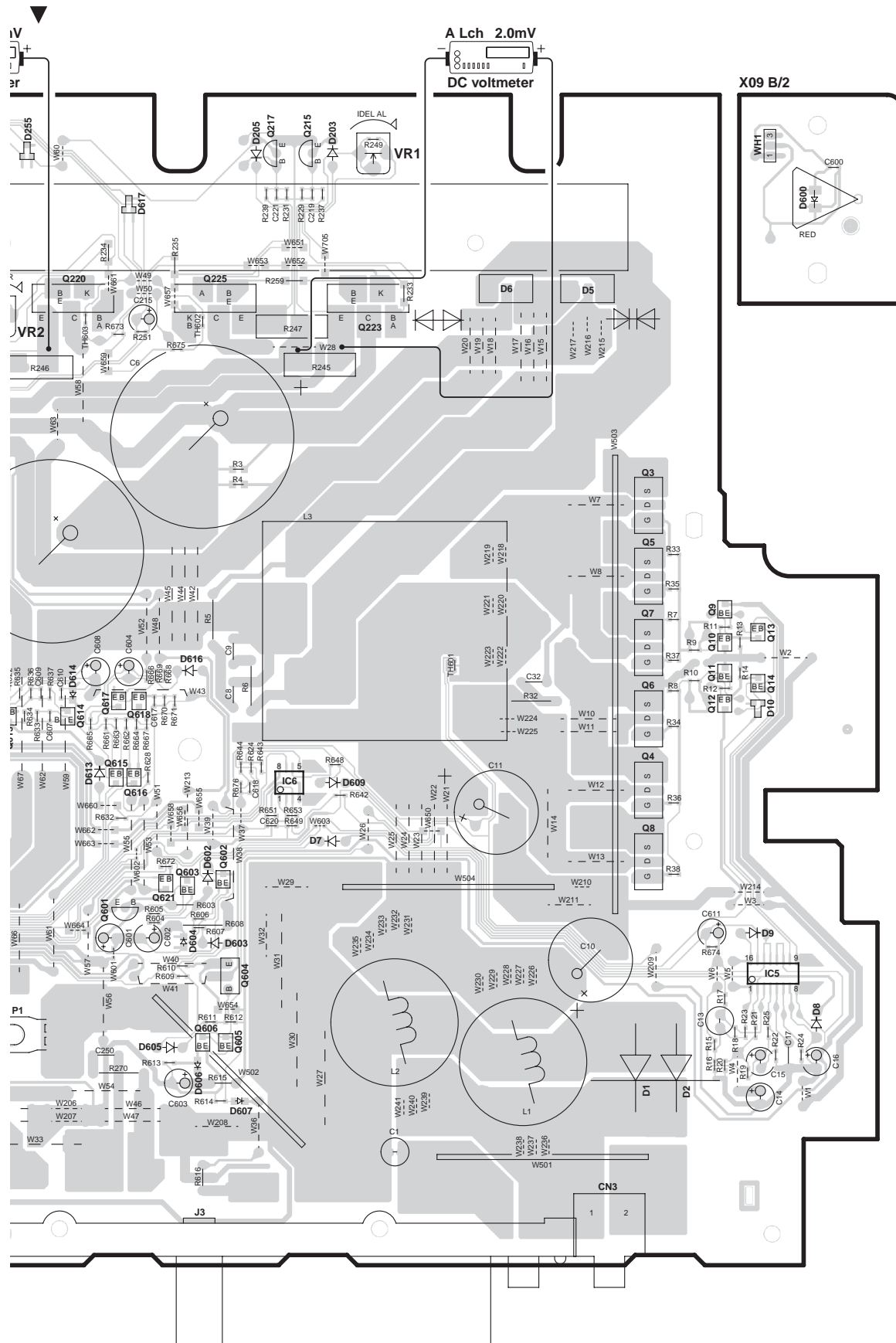
Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	Rch input buffer at side A and isolation	Rch input signal amplification (+6dB) and noise reduction in transmission quality at side A
IC2	Lch input buffer at side A and isolation	Lch input signal amplification (+6dB) and noise reduction in transmission quality at side A
IC3	L/Rch input buffer at side B	Input signal amplification (+6dB) at side B
IC4	L/Rch isolation at side B	Noise reduction in input signal transmission quality at side B
IC5	DC/DC control	Controlled by P-CON & protection circuit
IC6	ATT	Detects inside temperature and makes the necessary ATT.
Q1,15,17	+15VAVR	Operation while P-CON is turned on.
Q2,16	-15VAVR	Operation while P-CON is turned on.
Q3~8	DC/DC	Controlled by IC5.
Q9~12	DC/DC driver	Controlled by IC5.
Q13,14	DC/DC delay start circuit	Delays the start of DC/DC when P-CON is turned on.
Q201~204,401~404	ACLASS initial stage	Voltage amplification of small signal
Q205~210,407~410	ACLASS second stage	Voltage amplification of small signal
Q211,212,411,412	Constant current circuit	Makes current in ACLASS initial stage constant.
Q215,216,415,416	Over current limiter	Operation under the over current condition
Q217,218,417,418,610	Over current protection	Operation under the over current condition
Q220,222,223,225,423, Q425,426,428	AMP final stage	Current amplification of small signal
Q241,242,443,444	AUDIO MUTE	Controlled by Q603.
Q280,282,283,290, Q481~484	ATT	Controlled by IC6. Takes the level of -1.5dB or 3dB in response to changes in temperature (TH601-605)
Q601~606	P-CON control	Operates when P-CON is turned on/off.
Q611~614	DC protection	Operates when DC is detected in the SP output.
Q615~618	POP MUTE	Operation while P-CON is turned on.
Q619,620	LED driver	Operation while P-CON is turned on.
Q621	Power switch for thermistor	Operation while P-CON is turned on.
Q684,685	FAN AVR	Operation while P-CON is turned on.

ADJUSTMENT

NO.	ITEM	ALIGNMENT POINT	METHOD	ALIGN FOR	NOTE
1	IDEL CURRENT	VR1 (A Lch) VR2 (A Rch) VR3 (B Lch) VR4 (B Rch)	Connect a DC voltmeter between check land (Refer to PC BOARD)	2.0mV	After Power on 5minutes

KAC-X40 PC BOARD (FOIL SIDE VIEW)





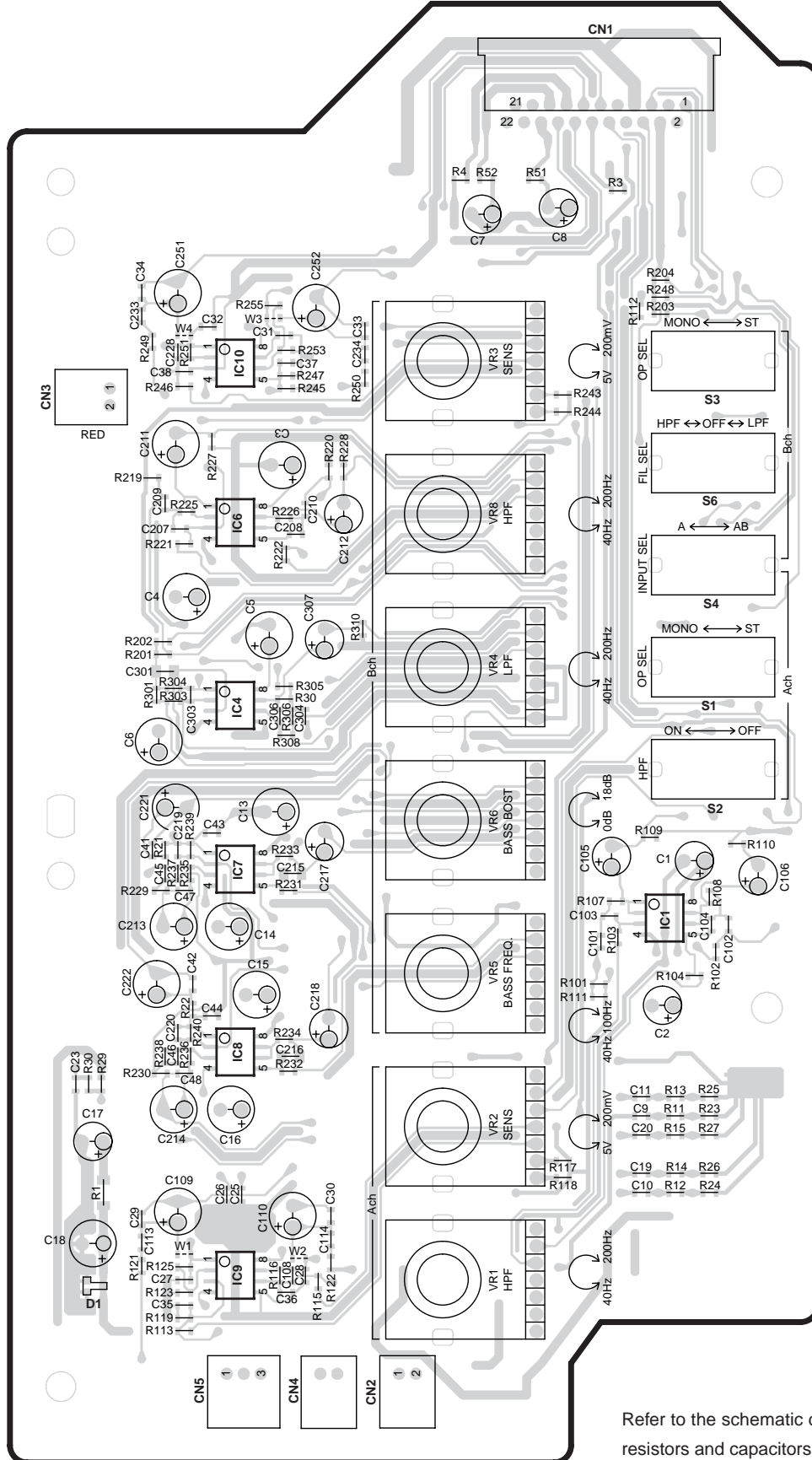
X09-8580-10

Ref. No.	Address	Ref. No.	Address
IC1	6C	Q284	5C
IC2	6C	Q401	4C
IC3	6B	Q402	4C
IC4	6B	Q403	4C
IC5	5I	Q404	4C
IC6	4G	Q405	3C
Q1	2D	Q406	3C
Q2	2D	Q407	4C
Q3	3H	Q408	4C
Q4	4H	Q409	3C
Q5	3H	Q410	3C
Q6	4H	Q411	4C
Q7	4H	Q412	4C
Q8	5H	Q415	2B
Q9	4I	Q416	4A
Q10	4I	Q417	2B
Q11	4I	Q418	4A
Q12	4I	Q423	2C
Q13	4I	Q424	4B
Q14	4I	Q425	2C
Q15	2D	Q426	4B
Q16	2D	Q443	5C
Q17	3D	Q444	5C
Q201	4D	Q481	5C
Q202	4D	Q482	5C
Q203	4D	Q483	5C
Q204	4D	Q484	5B
Q205	3D	Q601	5F
Q206	3D	Q602	5F
Q207	4D	Q603	5F
Q208	4D	Q604	5G
Q209	3D	Q605	6F
Q210	3D	Q606	6F
Q211	4D	Q610	3B
Q212	4D	Q611	4E
Q215	2G	Q612	4E
Q216	2E	Q613	4E
Q217	2G	Q614	4F
Q218	2E	Q615	4F
Q220	2F	Q616	5F
Q222	2E	Q617	4F
Q223	3G	Q618	4F
Q225	2F	Q619	5D
Q241	5D	Q620	6D
Q242	5C	Q621	5F
Q280	5C	Q684	6D
Q282	5D	Q685	6D
Q283	5D		6D

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

KAC-X40 PC BOARD (COMPONENT SIDE VIEW)

PREAMPLIFIER UNIT X08-4330-10 (J76-0352-12)



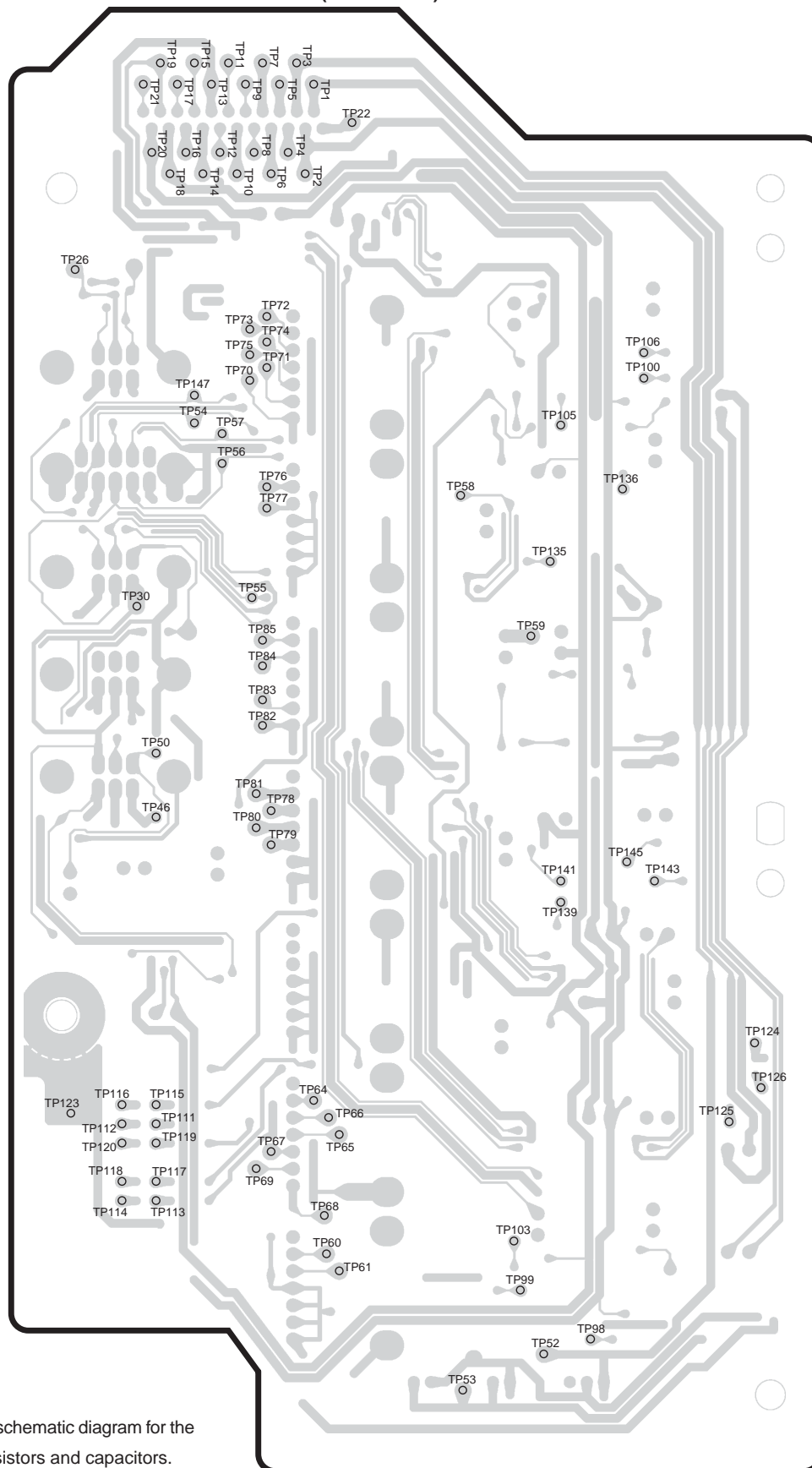
X08-4330-10

Ref. No.	Address
IC1	5N
IC4	4L
IC6	3L
IC7	5L
IC8	6L
IC9	6L
IC10	3L

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

PC BOARD (FOIL SIDE VIEW)

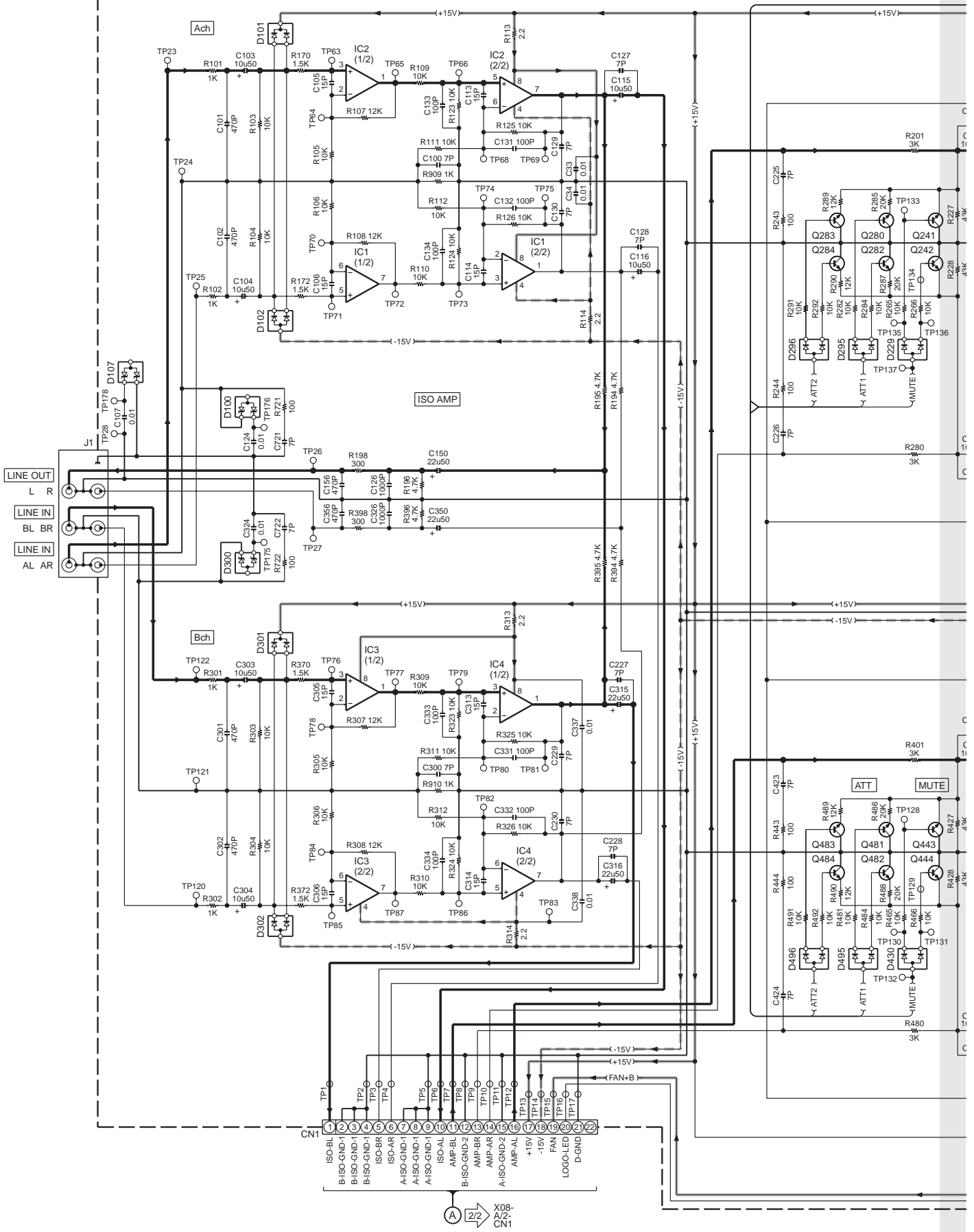
PREAMPLIFIER UNIT X08-4330-10 (J76-0352-12)



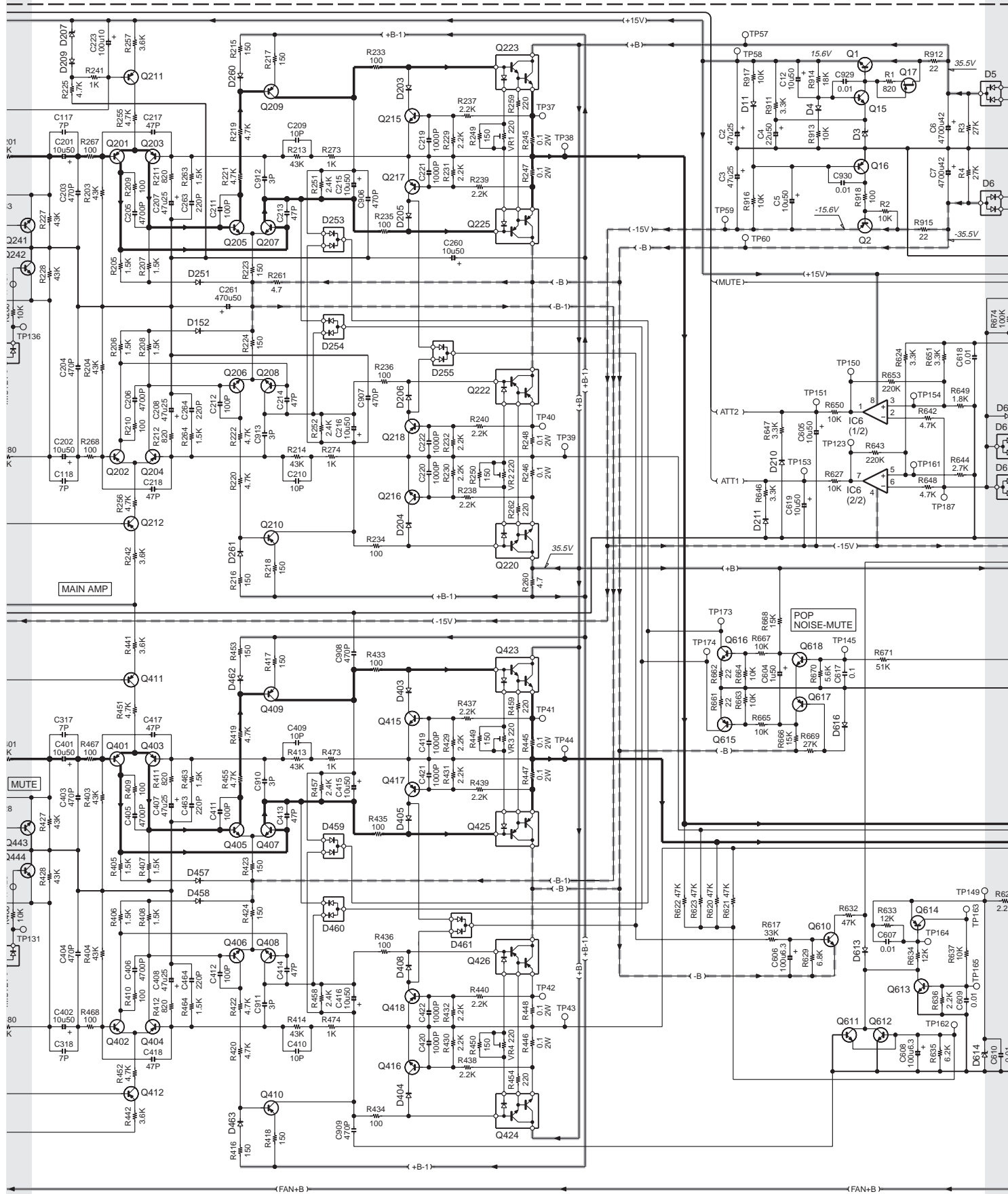
Refer to the schematic diagram for the values of resistors and capacitors.

KAC-X40

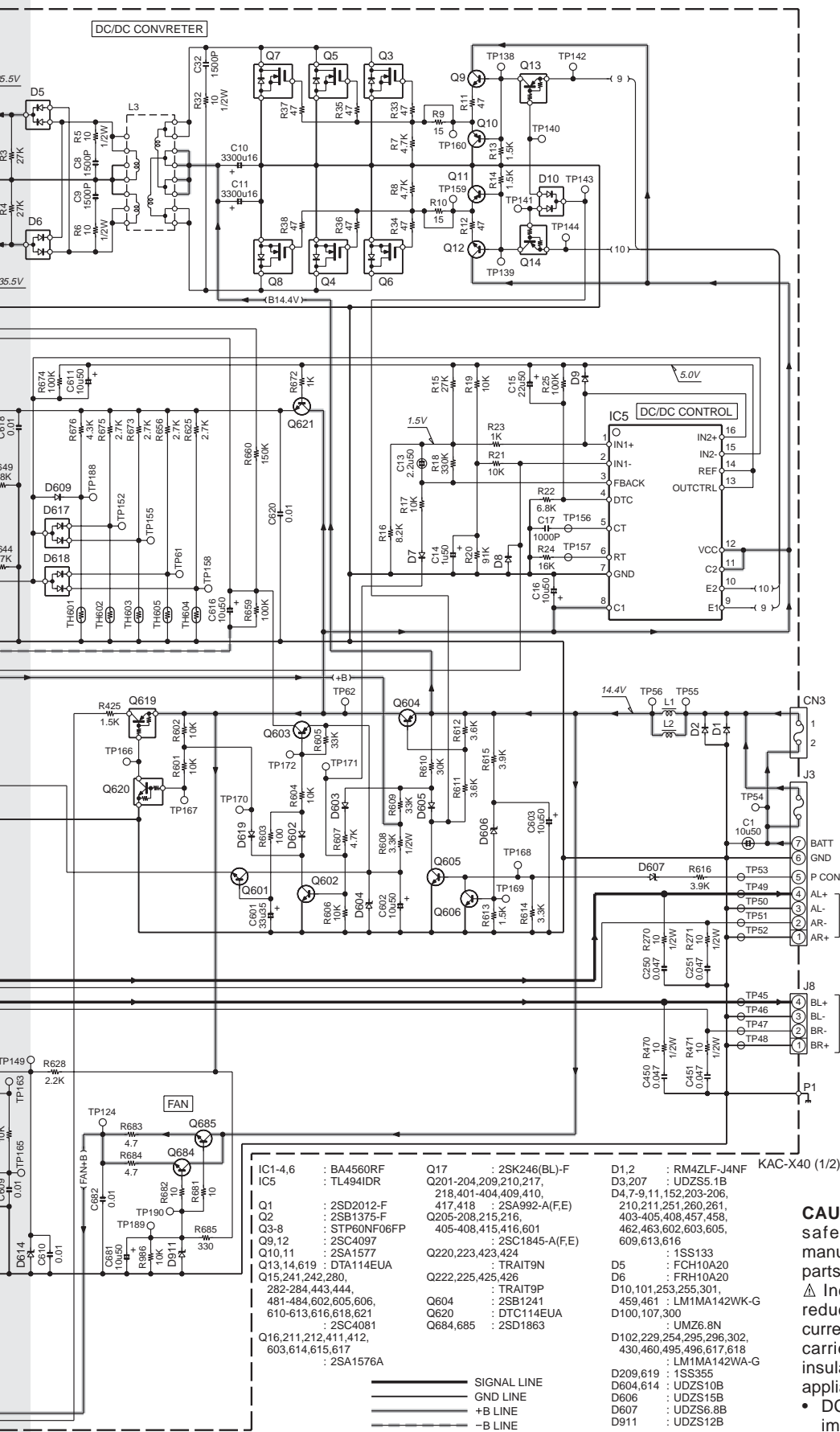
AUDIO UNIT (X09-8580-10) (A/2)



KAC-X40



KAC-X40



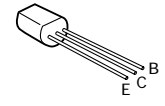
KAC-X40 (1/2)

IC1-4,6 : BA4560RF	Q17 : 2SK246(BL)-F	D1,2 : RM4ZLF-J4NF
IC5 : TL494IDR	Q201-204,209,210,217, 218,401-404,409,410, 417,418 : 2SA992-A(F,E)	D3,207 : UDZ55.1B
Q1 : 2SD2012-F	Q205-208,215,216, 405-408,415,416,601 : 2SC1845-A(F,E)	D4,7-9,11,152,203-206, 210,211,251,260,261, 403-405,408,457,458, 462,463,602,603,605, 609,613,616
Q2 : 2SB1375-F	Q220,223,423,424 : TRAIT9N	: 1SS133
Q3-8 : STP60NF06FP	Q222,225,425,426 : TRAIT9P	D5 : FCH10A20
Q9,12 : 2SC4097	Q604 : 2SB1241	D6 : FRH10A20
Q10,11 : 2SA1577	Q620 : DTC114EUA	D10,101,253,255,301, 459,461 : LM1MA142WK-G
Q13,14,619 : DTA114EUA	Q684,685 : 2SD1863	D100,107,300 : UMZ6.8N
Q15,241,242,280, 282-284,443,444, 481-484,602,605,606, 610-613,616,618,621 : 2SC4081		D102,229,254,295,296,302, 430,460,495,496,517,618 : LM1MA142WA-G
Q16,211,212,411,412, 603,614,615,617 : 2SA1576A		D209,619 : 1SS355

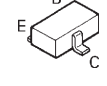
—	SIGNAL LINE
—	GND LINE
—	+B LINE
—	-B LINE

D604,614 : UDZS10B
D606 : UDZS15B
D607 : UDZS6.8B
D911 : UDZS12B

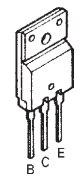
2SA992-A
2SC1845-A



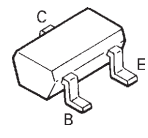
2SA1576A



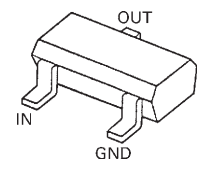
2SB1375-F
2SD2012-F



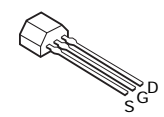
2SC4081



DTA114EUA
DTC114EUA



2SK246

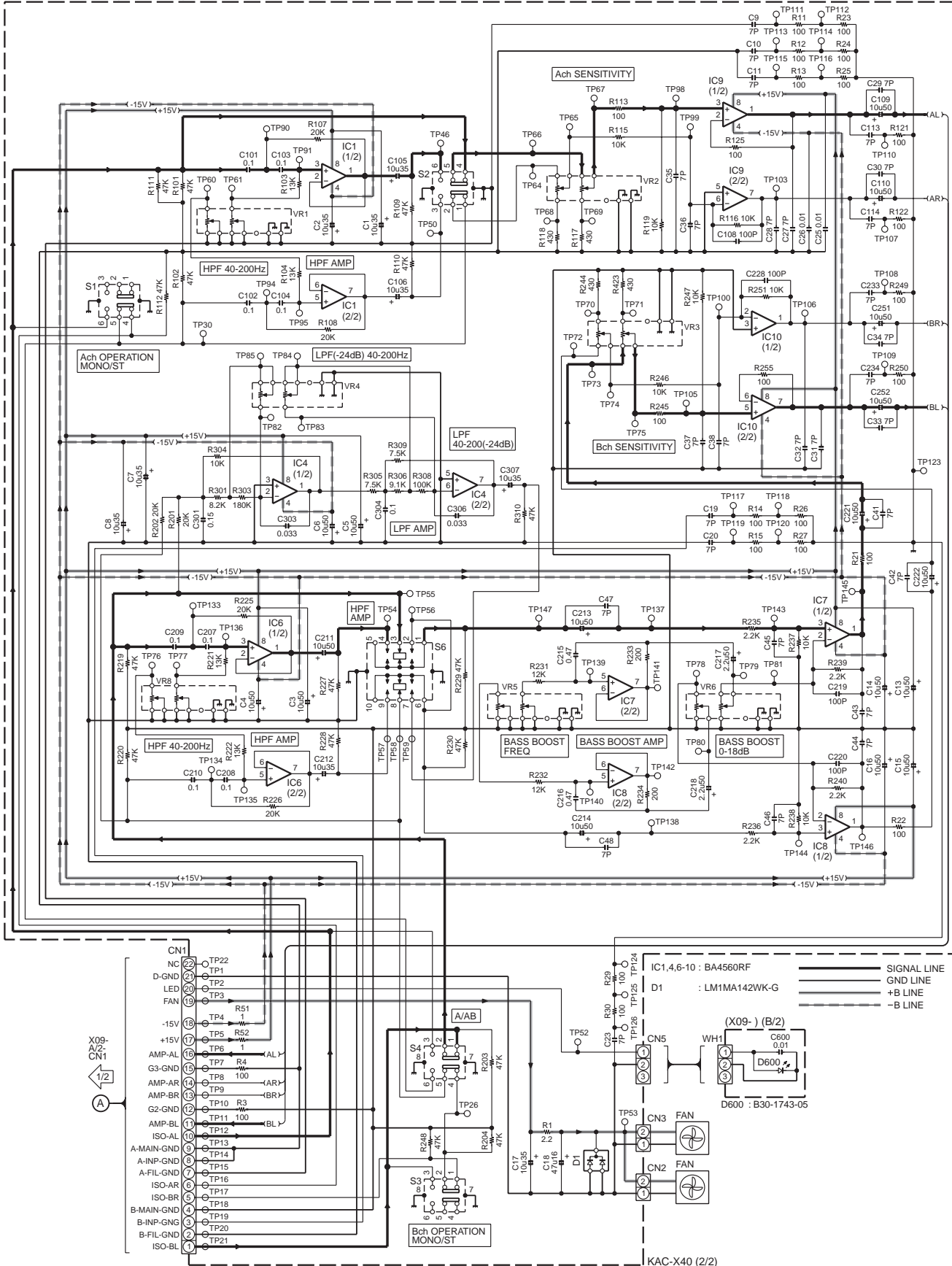


CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

⚠ 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.

PREAMPLIFIER UNIT (X08-4330-10)

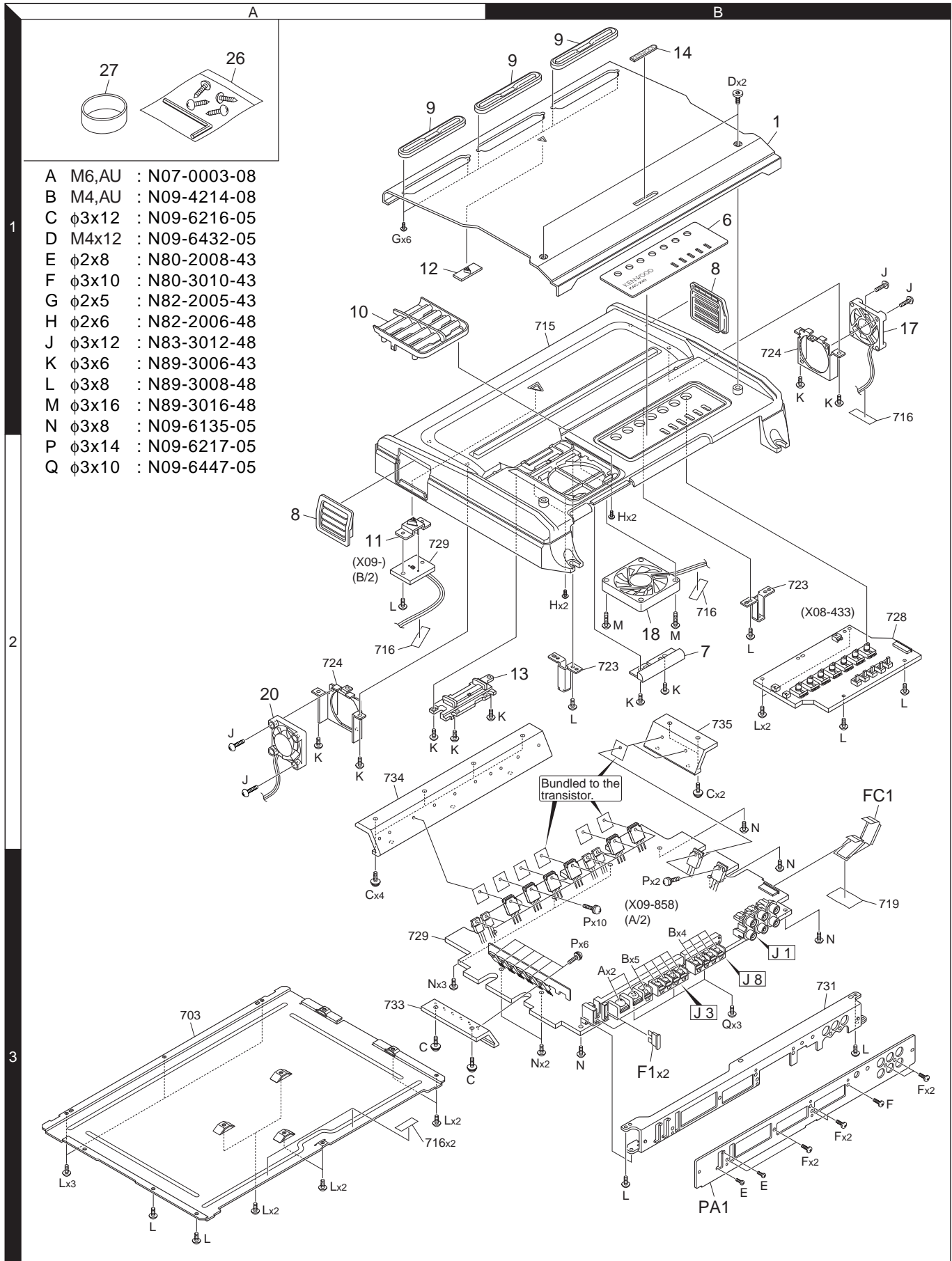


CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
 Δ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably 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.

KAC-X40

EXPLODED VIEW



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.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
KAC-X40						C105,106			CD04AS1V100M	ELECTRO 10UF 35WV	
1	1B	*	A21-6571-01	DRESSING PANEL	K	C108			CC73GCH1H101J	CHIP C 100PF J	
1	1B	*	A21-6572-01	DRESSING PANEL	M1	C109,110			CD04BJ1H100M	ELECTRO 10UF 50WV	
PA1	3B	*	A64-4087-12	PANEL		C113,114			CC73GCH1H070D	CHIP C 7.0PF D	
6	1B	*	B03-5088-22	DRESSING PLATE	K	C207-210			CK73GB1H104K	CHIP C 0.10UF K	
6	1B	*	B03-5089-12	DRESSING PLATE	M1	C211			CD04BJ1H100M	ELECTRO 10UF 50WV	
7	2B		B07-3194-03	ESCUTCHEON		C212			CD04AS1V100M	ELECTRO 10UF 35WV	
8	2A		B07-3197-02	ESCUTCHEON		C213,214			CD04BJ1H100M	ELECTRO 10UF 50WV	
9	1B	*	B07-3207-03	ESCUTCHEON		C215,216			CK73FB1E474K	CHIP C 0.47UF K	
10	1A	*	B07-3208-12	ESCUTCHEON		C217,218			CD04AS1H2R2M	ELECTRO 2.2UF 50WV	
11	2A		B19-2324-03	LIGHTING BOARD		C219,220			CC73GCH1H101J	CHIP C 100PF J	
12	1A	*	B19-2424-04	LIGHTING BOARD		C221,222			CD04BJ1H100M	ELECTRO 10UF 50WV	
13	2A	*	B19-2431-02	LIGHTING BOARD		C228			CC73GCH1H101J	CHIP C 100PF J	
14	1B		B43-0336-04	BADGE		C233,234			CC73GCH1H070D	CHIP C 7.0PF D	
-		*	B64-3520-00	INSTRUCTION MANUAL (ENG.FRE.SPA)	K	C251,252			CD04BJ1H100M	ELECTRO 10UF 50WV	
-		*	B64-3521-00	INSTRUCTION MA (ENG.T-CHI.S-CHI)	M1	C301			CK73FB1E154K	CHIP C 0.15UF K	
FC1	2B	*	E39-0886-05	FLAT CABLE		C303			CK73GB1H333K	CHIP C 0.033UF K	
17	1B		F09-1846-15	FAN		C304			CK73GB1H104K	CHIP C 0.10UF K	
18	2B		F09-1885-15	FAN		C306			CK73GB1H333K	CHIP C 0.033UF K	
20	2A	*	F09-2889-05	FAN		C307			CD04AS1V100M	ELECTRO 10UF 35WV	
△ F1	3B		F52-0014-05	FUSE (BLADE TYPE) 25A		CN1			E41-2202-05	FLAT CABLE CONNECTOR	
-		*	H54-3886-03	ITEM CARTON CASE	K	CN2,3			E41-1699-05	PIN ASSY	
-		*	H54-3887-03	ITEM CARTON CASE	M1	CN5			E41-1700-05	PIN ASSY	
26	1A		N99-1794-05	SCREW & WRENCH KEY SET		R1			RK73EB2E2R2J	CHIP R 2.2 J 1/4W	
A	3B		N07-0003-08	SCREW (M6,AU)		R3,4			RK73GB2A101J	CHIP R 100 J 1/10W	
B	3B		N09-4214-08	SCREW (M4,AU)		R11-15			RK73GB2A101J	CHIP R 100 J 1/10W	
C	3A		N09-6216-05	TAPTITE SCREW (3X12)		R21-27			RK73GB2A101J	CHIP R 100 J 1/10W	
D	1B	*	N09-6432-05	DRESSED SCREW (M4X12)		R29,30			RK73GB2A101J	CHIP R 100 J 1/10W	
E	3B		N80-2008-43	PAN HEAD TAPTITE SCREW		R51,52			RK73GB2A1R0J	CHIP R 1.0 J 1/10W	
F	3B		N80-3010-43	PAN HEAD TAPTITE SCREW		R101,102			RK73GB2A473J	CHIP R 47K J 1/10W	
G	1A		N82-2005-43	BINDING HEAD TAPTITE SCREW		R103,104			RK73GB2A133J	CHIP R 13K J 1/10W	
H	2B		N82-2006-48	BINDING HEAD TAPTITE SCREW		R107,108			RK73GB2A203J	CHIP R 20K J 1/10W	
J	2A		N83-3012-48	PAN HEAD TAPTITE SCREW		R109-112			RK73GB2A473J	CHIP R 47K J 1/10W	
K	2A		N89-3006-43	BINDING HEAD TAPTITE SCREW		R113			RK73GB2A101J	CHIP R 100 J 1/10W	
L	3A		N89-3008-48	BINDING HEAD TAPTITE SCREW		R115,116			RK73GB2A103J	CHIP R 10K J 1/10W	
M	2B		N89-3016-48	BINDING HEAD TAPTITE SCREW		R117,118			RK73GB2A431J	CHIP R 430 J 1/10W	
27	1A		W01-1606-05	ACCESSORIES		R119			RK73GB2A103J	CHIP R 10K J 1/10W	
						R121,122			RK73GB2A101J	CHIP R 100 J 1/10W	
PREAMPLIFIER UNIT (X08-4330-10)						R125			RK73GB2A101J	CHIP R 100 J 1/10W	
C1,2			CD04AS1V100M	ELECTRO 10UF 35WV		R201,202			RK73GB2A203J	CHIP R 20K J 1/10W	
C3-6			CD04BJ1H100M	ELECTRO 10UF 50WV		R203,204			RK73GB2A473J	CHIP R 47K J 1/10W	
C7,8			CD04AS1V100M	ELECTRO 10UF 35WV		R219,220			RK73GB2A473J	CHIP R 47K J 1/10W	
C9-11			CC73GCH1H070D	CHIP C 7.0PF D		R221,222			RK73GB2A133J	CHIP R 13K J 1/10W	
C13-16			CD04BJ1H100M	ELECTRO 10UF 50WV		R225,226			RK73GB2A203J	CHIP R 20K J 1/10W	
C17			CD04AS1V100M	ELECTRO 10UF 35WV		R227-230			RK73GB2A473J	CHIP R 47K J 1/10W	
C18			CD04AS1C470M	ELECTRO 47UF 16WV		R231,232			RK73GB2A123J	CHIP R 12K J 1/10W	
C19,20			CC73GCH1H070D	CHIP C 7.0PF D		R233,234			RK73GB2A201J	CHIP R 200 J 1/10W	
C23			CC73GCH1H070D	CHIP C 7.0PF D		R235,236			RK73GB2A222J	CHIP R 2.2K J 1/10W	
C25,26			CK73GB1H103K	CHIP C 0.010UF K		R237,238			RK73GB2A103J	CHIP R 10K J 1/10W	
C27-38			CC73GCH1H070D	CHIP C 7.0PF D		R239,240			RK73GB2A222J	CHIP R 2.2K J 1/10W	
C41-48			CC73GCH1H070D	CHIP C 7.0PF D		R243,244			RK73GB2A431J	CHIP R 430 J 1/10W	
C101-104			CK73GB1H104K	CHIP C 0.10UF K		R245			RK73GB2A101J	CHIP R 100 J 1/10W	
						R246,247			RK73GB2A103J	CHIP R 10K J 1/10W	
						R248			RK73GB2A473J	CHIP R 47K J 1/10W	

K : KAC-X40 (North America) M1 : KAC-X40 (Other Areas)

△ Indicates safety critical components.

PARTS LIST

PREAMPLIFIER UNIT (X08-4330-10)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R249,250			RK73GB2A101J	CHIP R 100 J 1/10W	
R251			RK73GB2A103J	CHIP R 10K J 1/10W	
R255			RK73GB2A101J	CHIP R 100 J 1/10W	
R301			RK73GB2A822J	CHIP R 8.2K J 1/10W	
R303			RK73GB2A184J	CHIP R 180K J 1/10W	
R304			RK73GB2A103J	CHIP R 10K J 1/10W	
R305			RK73GB2A752J	CHIP R 7.5K J 1/10W	
R306			RK73GB2A912J	CHIP R 9.1K J 1/10W	
R308			RK73GB2A104J	CHIP R 100K J 1/10W	
R309			RK73GB2A752J	CHIP R 7.5K J 1/10W	
R310			RK73GB2A473J	CHIP R 47K J 1/10W	
VR1			R31-0241-05	VARIABLE RESISTOR	
VR2,3			R31-0238-05	VARIABLE RESISTOR	
VR4,5			R31-0241-05	VARIABLE RESISTOR	
VR6			R31-0246-05	VARIABLE RESISTOR	
VR8			R31-0241-05	VARIABLE RESISTOR	
W1-4			R92-1252-05	CHIP R 0 OHM J 1/16W	
S1-4		*	S62-0879-05	SLIDE SWITCH	
S6		*	S62-0880-05	SLIDE SWITCH	
D1			LM1MA142WK-G	DIODE	
IC1			BA4560RF	ANALOGUE IC	
IC4			BA4560RF	ANALOGUE IC	
IC6-10			BA4560RF	ANALOGUE IC	

AUDIO UNIT (X09-8580-10)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
D600			B30-1743-05	LED (RED LED)	
C1			CD04AU1H100M	NP ELEC 10UF 50WV	
C2,3			CD04BJ1E470M	ELECTRO 47UF 25WV	
C4			CD04BJ1H220M	ELECTRO 22UF 50WV	
C5			CD04BJ1H100M	ELECTRO 10UF 50WV	
C6,7		*	C90-6842-05	ELECTR 4700UF 42WV	
C8,9			CK45FB1H152K	CERAMIC 1500PF K	
C10,11			C90-6816-05	ELECTR 3300UF 16WV	
C12			CD04BJ1H100M	ELECTRO 10UF 50WV	
C13			CD04AU1H2R2M	NP-ELEC 2.2UF 50WV	
C14			CD04BJ1H010M	ELECTRO 1.0UF 50WV	
C15			CD04BJ1H220M	ELECTRO 22UF 50WV	
C16			CD04BJ1H100M	ELECTRO 10UF 50WV	
C17			CQ93FMG1H102J	MYLAR 1000PF J	
C32			CK45FB1H152K	CERAMIC 1500PF K	
C33,34			CK73GB1H103K	CHIP C 0.010UF K	
C100			CC45FCH1H070D	CERAMIC 7.0PF D	
C101,102			CC73GCH1H471J	CHIP C 470PF J	
C103,104			CD04BJ1H100M	ELECTRO 10UF 50WV	
C105,106			CC73GCH1H150J	CHIP C 15PF J	
C107			CK73GB1H103K	CHIP C 0.010UF K	
C113,114			CC73GCH1H150J	CHIP C 15PF J	
C115,116			CD04BJ1H100M	ELECTRO 10UF 50WV	
C117,118			CC73GCH1H070D	CHIP C 7.0PF D	
C124			CK73GB1H103K	CHIP C 0.010UF K	
C126			CK73GB1H102K	CHIP C 1000PF K	
C127-130			CC73GCH1H070D	CHIP C 7.0PF D	
C131-134			CC73GCH1H101J	CHIP C 100PF J	
C150			CD04BJ1H220M	ELECTRO 22UF 50WV	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
C156			CC73GCH1H471J	CHIP C 470PF J	
C201,202			CD04BJ1H100M	ELECTRO 10UF 50WV	
C203,204			CC73GCH1H471J	CHIP C 470PF J	
C205,206			CK73GB1H472K	CHIP C 4700PF K	
C207,208			CD04BJ1E470M	ELECTRO 47UF 25WV	
C209,210			CC45FCH1H100D	CERAMIC 10PF D	
C211,212			CC73GCH1H101J	CHIP C 100PF J	
C213,214			CC73GCH1H470J	CHIP C 47PF J	
C215,216			CD04BJ1H100M	ELECTRO 10UF 50WV	
C217,218			CC73GCH1H470J	CHIP C 47PF J	
C219-222			CK73GB1H102K	CHIP C 1000PF K	
C223			CD04BJ1A101M	ELECTRO 100UF 10WV	
C225-230			CC73GCH1H070D	CHIP C 7.0PF D	
C250,251			CQ93FMG1H473J	MYLAR 0.047UF J	
C260			CD04BJ1H100M	ELECTRO 10UF 50WV	
C261		*	CD04BJ1H471M	ELECTRO 470UF 50WV	
C263,264			CC73GCH1H221J	CHIP C 220PF J	
C300			CC45FCH1H070D	CERAMIC 7.0PF D	
C301,302			CC73GCH1H471J	CHIP C 470PF J	
C303,304			CD04BJ1H100M	ELECTRO 10UF 50WV	
C305,306			CC73GCH1H150J	CHIP C 15PF J	
C313,314			CC73GCH1H150J	CHIP C 15PF J	
C315,316			CD04BJ1H220M	ELECTRO 22UF 50WV	
C317,318			CC73GCH1H070D	CHIP C 7.0PF D	
C324			CK73GB1H103K	CHIP C 0.010UF K	
C326			CK73GB1H102K	CHIP C 1000PF K	
C331-334			CC73GCH1H101J	CHIP C 100PF J	
C337,338			CK73GB1H103K	CHIP C 0.010UF K	
C350			CD04BJ1H220M	ELECTRO 22UF 50WV	
C356			CC73GCH1H471J	CHIP C 470PF J	
C401,402			CD04BJ1H100M	ELECTRO 10UF 50WV	
C403,404			CC73GCH1H471J	CHIP C 470PF J	
C405,406			CK73GB1H472K	CHIP C 4700PF K	
C407,408			CD04BJ1E470M	ELECTRO 47UF 25WV	
C409,410			CC45FCH1H100D	CERAMIC 10PF D	
C411,412			CC73GCH1H101J	CHIP C 100PF J	
C413,414			CC73GCH1H470J	CHIP C 47PF J	
C415,416			CD04BJ1H100M	ELECTRO 10UF 50WV	
C417,418			CC73GCH1H470J	CHIP C 47PF J	
C419-422			CK73GB1H102K	CHIP C 1000PF K	
C423,424			CC73GCH1H070D	CHIP C 7.0PF D	
C450,451			CQ93FMG1H473J	MYLAR 0.047UF J	
C463,464			CC73GCH1H221J	CHIP C 220PF J	
C600			CK73GB1H103K	CHIP C 0.010UF K	
C601			CD04BJ1V330M	ELECTRO 33UF 35WV	
C602,603			CD04BJ1H100M	ELECTRO 10UF 50WV	
C604			CD04BJ1H010M	ELECTRO 1.0UF 50WV	
C605			CD04BJ1H100M	ELECTRO 10UF 50WV	
C606			CD04BJ1A101M	ELECTRO 100UF 10WV	
C607			CK73GB1H103K	CHIP C 0.010UF K	
C608			CD04BJ1A101M	ELECTRO 100UF 10WV	
C609,610			CK73GB1H103K	CHIP C 0.010UF K	
C611			CD04BJ1H100M	ELECTRO 10UF 50WV	
C616			CD04BJ1H100M	ELECTRO 10UF 50WV	
C617			CK73GB1H104K	CHIP C 0.10UF K	

K : KAC-X40 (North America) M1 : KAC-X40 (Other Areas)

△ Indicates safety critical components.

PARTS LIST

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Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
C618			CK73GB1H103K	CHIP C 0.010UF K		R205-208			RK73GB2A152J	CHIP R 1.5K J 1/10W	
C619			CD04BJ1H100M	ELECTRO 10UF 50WV		R209,210			RK73GB2A101J	CHIP R 100 J 1/10W	
C620			CK73GB1H103K	CHIP C 0.010UF K		R211,212			RK73GB2A821J	CHIP R 820 J 1/10W	
C681			CD04BJ1H100M	ELECTRO 10UF 50WV		R213,214			RD14BB2C433J	RD 43K J 1/6W	
C682			CK73GB1H103K	CHIP C 0.010UF K		R215-218			RK73GB2A151J	CHIP R 150 J 1/10W	
C721,722			CC73GCH1H070D	CHIP C 7.0PF D		R219-222			RK73EB2E472J	CHIP R 4.7K J 1/4W	
C906-909			CC73GCH1H471J	CHIP C 470PF J		R223,224			RK73GB2A151J	CHIP R 150 J 1/10W	
C910-913			CC73GCH1H030C	CHIP C 3.0PF C		R225			RK73GB2A472J	CHIP R 4.7K J 1/10W	
C929,930			CK73GB1H103K	CHIP C 0.010UF K		R227,228			RK73GB2A433J	CHIP R 43K J 1/10W	
CN1			E41-2202-05	FLAT CABLE CONNECTOR		R229-232			RK73GB2A222J	CHIP R 2.2K J 1/10W	
J1			E63-0922-05	PIN JACK		R233-236			RK73EB2E101J	CHIP R 100 J 1/4W	
J3			E70-0838-05	SCREW TERMINAL BOARD		R237-240			RK73GB2A222J	CHIP R 2.2K J 1/10W	
J8			E70-0840-05	SCREW TERMINAL BOARD		R241			RK73GB2A102J	CHIP R 1.0K J 1/10W	
WH1			E39-0710-05	WIRING HARNESS		R242			RK73GB2A362J	CHIP R 3.6K J 1/10W	
△ CN3			J13-0602-05	FUSE HOLDER		R243,244			RK73GB2A101J	CHIP R 100 J 1/10W	
L1,2		*	L33-2413-05	CHOKO COIL		R245-248			R92-0205-05	METAL-PLATE 0.1 K 2W	
L3			L19-0772-05	TRANSFORMER FOR CONVERTER		R249,250			RK73GB2A151J	CHIP R 150 J 1/10W	
N	3B		N09-6135-05	TAPTITE SCREW (3X8 B-T)		R251,252			RK73GB2A242J	CHIP R 2.4K J 1/10W	
P	3B		N09-6217-05	TAPTITE SCREW (3X14)		R255,256			RK73GB2A472J	CHIP R 4.7K J 1/10W	
Q	3B		N09-6447-05	TAPTITE SCREW (3X10 P-T)		R257			RK73GB2A362J	CHIP R 3.6K J 1/10W	
R1			RK73GB2A821J	CHIP R 820 J 1/10W		R259			RK73EB2E221J	CHIP R 220 J 1/4W	
R2			RD14BB2C103J	RD 10K J 1/6W		R260,261			RD14NB2E4R7J	RD 4.7 J 1/4W	
R3,4			RK73FB2B273J	CHIP R 27K J 1/8W		R262			RK73EB2E221J	CHIP R 220 J 1/4W	
R5,6			RD14DB2H100J	SMALL-RD 10 J 1/2W		R263,264			RK73GB2A152J	CHIP R 1.5K J 1/10W	
R7,8			RK73GB2A472J	CHIP R 4.7K J 1/10W		R265,266			RK73GB2A103J	CHIP R 10K J 1/10W	
R9,10			RK73GB2A150J	CHIP R 15 J 1/10W		R267,268			RK73GB2A101J	CHIP R 100 J 1/10W	
R11,12			RK73GB2A470J	CHIP R 47 J 1/10W		R270,271			RD14DB2H100J	SMALL-RD 10 J 1/2W	
R13,14			RK73GB2A152J	CHIP R 1.5K J 1/10W		R273,274			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R15			RK73GB2A273J	CHIP R 27K J 1/10W		R280			RK73GB2A302J	CHIP R 3.0K J 1/10W	
R16			RK73GB2A822J	CHIP R 8.2K J 1/10W		R282			RK73GB2A103J	CHIP R 10K J 1/10W	
R17			RK73GB2A103J	CHIP R 10K J 1/10W		R284			RK73GB2A103J	CHIP R 10K J 1/10W	
R18			RK73GB2A334J	CHIP R 330K J 1/10W		R285			RK73GB2A203J	CHIP R 20K J 1/10W	
R19			RK73GB2A103J	CHIP R 10K J 1/10W		R287			RK73GB2A203J	CHIP R 20K J 1/10W	
R20			RK73GB2A913J	CHIP R 91K J 1/10W		R289,290			RK73GB2A123J	CHIP R 12K J 1/10W	
R21			RK73GB2A103J	CHIP R 10K J 1/10W		R291,292			RK73GB2A103J	CHIP R 10K J 1/10W	
R22			RK73GB2A682J	CHIP R 6.8K J 1/10W		R301,302			RD14BB2C102J	RD 1.0K J 1/6W	
R23			RK73GB2A102J	CHIP R 1.0K J 1/10W		R303-306			RK73GB2A103J	CHIP R 10K J 1/10W	
R24			RK73GB2A163J	CHIP R 16K J 1/10W		R307,308			RK73GB2A123J	CHIP R 12K J 1/10W	
R25			RK73GB2A104J	CHIP R 100K J 1/10W		R309-312			RK73GH2A103D	CHIP R 10K D 1/10W	
R32			RD14DB2H100J	SMALL-RD 10 J 1/2W		R313,314			RK73GB2A2R2J	CHIP R 2.2 J 1/10W	
R33-38			RK73GB2A470J	CHIP R 47 J 1/10W		R323-326			RK73GH2A103D	CHIP R 10K D 1/10W	
R101,102			RD14BB2C102J	RD 1.0K J 1/6W		R370			RK73GB2A152J	CHIP R 1.5K J 1/10W	
R103-106			RK73GB2A103J	CHIP R 10K J 1/10W		R372			RK73GB2A152J	CHIP R 1.5K J 1/10W	
R107,108			RK73GB2A123J	CHIP R 12K J 1/10W		R394-396			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R109-112			RK73GH2A103D	CHIP R 10K D 1/10W		R398			RD14BB2C301J	RD 300 J 1/6W	
R113,114			RK73GB2A2R2J	CHIP R 2.2 J 1/10W		R401			RK73GB2A302J	CHIP R 3.0K J 1/10W	
R123-126			RK73GH2A103D	CHIP R 10K D 1/10W		R403,404			RK73GB2A433J	CHIP R 43K J 1/10W	
R170			RK73GB2A152J	CHIP R 1.5K J 1/10W		R405-408			RK73GB2A152J	CHIP R 1.5K J 1/10W	
R172			RK73GB2A152J	CHIP R 1.5K J 1/10W		R409,410			RK73GB2A101J	CHIP R 100 J 1/10W	
R194-196			RK73GB2A472J	CHIP R 4.7K J 1/10W		R411,412			RK73GB2A821J	CHIP R 820 J 1/10W	
R198			RD14BB2C301J	RD 300 J 1/6W		R413,414			RD14BB2C433J	RD 43K J 1/6W	
R201			RK73GB2A302J	CHIP R 3.0K J 1/10W		R416-418			RK73GB2A151J	CHIP R 150 J 1/10W	
R203,204			RK73GB2A433J	CHIP R 43K J 1/10W		R419,420			RK73EB2E472J	CHIP R 4.7K J 1/4W	
						R422			RK73EB2E472J	CHIP R 4.7K J 1/4W	
						R423,424			RK73GB2A151J	CHIP R 150 J 1/10W	

K : KAC-X40 (North America) M1 : KAC-X40 (Other Areas)

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PARTS LIST

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Ref. No.	A d	N e w	Parts No.	Description	Desti- nation
R425			RK73EB2E152J	CHIP R 1.5K J 1/4W	
R427,428			RK73GB2A433J	CHIP R 43K J 1/10W	
R429-432			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R433-436			RK73EB2E101J	CHIP R 100 J 1/4W	
R437-440			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R441,442			RK73GB2A362J	CHIP R 3.6K J 1/10W	
R443,444			RK73GB2A101J	CHIP R 100 J 1/10W	
R445-448			R92-0205-05	METAL-PLATE 0.1 K 2W	
R449,450			RK73GB2A151J	CHIP R 150 J 1/10W	
R451,452			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R453			RK73GB2A151J	CHIP R 150 J 1/10W	
R454			RK73EB2E221J	CHIP R 220 J 1/4W	
R455			RK73EB2E472J	CHIP R 4.7K J 1/4W	
R457,458			RK73GB2A242J	CHIP R 2.4K J 1/10W	
R459			RK73EB2E221J	CHIP R 220 J 1/4W	
R463,464			RK73GB2A152J	CHIP R 1.5K J 1/10W	
R465,466			RK73GB2A103J	CHIP R 10K J 1/10W	
R467,468			RK73GB2A101J	CHIP R 100 J 1/10W	
R470,471			RD14DB2H100J	SMALL-RD 10 J 1/2W	
R473,474			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R480			RK73GB2A302J	CHIP R 3.0K J 1/10W	
R481			RK73GB2A103J	CHIP R 10K J 1/10W	
R484			RK73GB2A103J	CHIP R 10K J 1/10W	
R486			RK73GB2A203J	CHIP R 20K J 1/10W	
R488			RK73GB2A203J	CHIP R 20K J 1/10W	
R489,490			RK73GB2A123J	CHIP R 12K J 1/10W	
R491,492			RK73GB2A103J	CHIP R 10K J 1/10W	
R601,602			RK73GB2A103J	CHIP R 10K J 1/10W	
R603			RD14BB2C101J	RD 100 J 1/6W	
R604			RK73GB2A103J	CHIP R 10K J 1/10W	
R605			RK73GB2A333J	CHIP R 33K J 1/10W	
R606			RK73GB2A103J	CHIP R 10K J 1/10W	
R607			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R608			RD14DB2H332J	SMALL-RD 3.3K J 1/2W	
R609			RK73GB2A333J	CHIP R 33K J 1/10W	
R610			RK73GB2A303J	CHIP R 30K J 1/10W	
R611,612			RK73GB2A362J	CHIP R 3.6K J 1/10W	
R613			RK73GB2A152J	CHIP R 1.5K J 1/10W	
R614			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R615,616			RD14BB2C392J	RD 3.9K J 1/6W	
R617			RK73GB2A333J	CHIP R 33K J 1/10W	
R620-623			RK73GB2A473J	CHIP R 47K J 1/10W	
R624			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R625			RK73GB2A272J	CHIP R 2.7K J 1/10W	
R627			RK73GB2A103J	CHIP R 10K J 1/10W	
R628			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R629			RK73GB2A682J	CHIP R 6.8K J 1/10W	
R632			RK73GB2A473J	CHIP R 47K J 1/10W	
R633,634			RK73GB2A123J	CHIP R 12K J 1/10W	
R635			RK73GB2A622J	CHIP R 6.2K J 1/10W	
R636			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R637			RK73GB2A103J	CHIP R 10K J 1/10W	
R642			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R643			RK73GB2A224J	CHIP R 220K J 1/10W	
R644			RK73GB2A272J	CHIP R 2.7K J 1/10W	

Ref. No.	A d	N e w	Parts No.	Description	Desti- nation
R646,647			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R648			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R649			RK73GB2A182J	CHIP R 1.8K J 1/10W	
R650			RK73GB2A103J	CHIP R 10K J 1/10W	
R651			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R653			RK73GB2A224J	CHIP R 220K J 1/10W	
R656			RK73GB2A272J	CHIP R 2.7K J 1/10W	
R659			RK73GB2A104J	CHIP R 100K J 1/10W	
R660			RK73GB2A154J	CHIP R 150K J 1/10W	
R661,662			RK73GB2A220J	CHIP R 22 J 1/10W	
R663-665			RK73GB2A103J	CHIP R 10K J 1/10W	
R666			RK73GB2A153J	CHIP R 15K J 1/10W	
R667			RK73GB2A103J	CHIP R 10K J 1/10W	
R668			RK73GB2A153J	CHIP R 15K J 1/10W	
R669			RK73GB2A273J	CHIP R 27K J 1/10W	
R670			RK73GB2A562J	CHIP R 5.6K J 1/10W	
R671			RK73GB2A513J	CHIP R 51K J 1/10W	
R672			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R673			RK73GB2A272J	CHIP R 2.7K J 1/10W	
R674			RK73GB2A104J	CHIP R 100K J 1/10W	
R675			RK73GB2A272J	CHIP R 2.7K J 1/10W	
R676			RK73GB2A432J	CHIP R 4.3K J 1/10W	
R681,682			RK73GB2A100J	CHIP R 10 J 1/10W	
R683,684			RD14BB2C4R7J	RD 4.7 J 1/6W	
R685			RK73GB2A331J	CHIP R 330 J 1/10W	
R721,722			RK73GB2A101J	CHIP R 100 J 1/10W	
R909,910			RD14BB2C102J	RD 1.0K J 1/6W	
R911			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R912			RD14NB2E220J	RD 22 J 1/4W	
R913			RK73GB2A103J	CHIP R 10K J 1/10W	
R914			RK73GB2A183J	CHIP R 18K J 1/10W	
R915			RD14NB2E220J	RD 22 J 1/4W	
R916,917			RK73GB2A103J	CHIP R 10K J 1/10W	
R918			RK73GB2A101J	CHIP R 100 J 1/10W	
R986			RK73GB2A103J	CHIP R 10K J 1/10W	
VR1-4			R32-0340-05	SEMI FIXED VARIABLE RESISTOR	
W601-603			R92-1252-05	CHIP R 0 OHM J 1/16W	
W650-668			R92-2053-05	CHIP R 0 OHM J 1/8W	
W670-673			R92-2053-05	CHIP R 0 OHM J 1/8W	
W675-680			R92-2053-05	CHIP R 0 OHM J 1/8W	
W682-688			R92-2053-05	CHIP R 0 OHM J 1/8W	
W690-705			R92-2053-05	CHIP R 0 OHM J 1/8W	
W751-755			R92-1252-05	CHIP R 0 OHM J 1/16W	
D1,2			RM4ZLF-J4NF	DIODE	
D3			UDZS5.1B	ZENER DIODE	
D4			1SS133	DIODE	
D5			FCH10A20	DIODE	
D6			FRH10A20	DIODE	
D7-9			1SS133	DIODE	
D10			LM1MA142WK-G	DIODE	
D11			1SS133	DIODE	
D100			UMZ6.8N	ZENER DIODE	
D101			LM1MA142WK-G	DIODE	
D102			LM1MA142WA-G	DIODE	

K : KAC-X40 (North America) M1 : KAC-X40 (Other Areas)

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PARTS LIST

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Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
D107			UMZ6.8N	ZENER DIODE		Q217,218			2SA992-A (F,E)	TRANSISTOR	
D152			1SS133	DIODE		Q220			TRAIT9N	TRANSISTOR	
D203-206			1SS133	DIODE		Q222			TRAIT9P	TRANSISTOR	
D207			UDZS5.1B	ZENER DIODE		Q223			TRAIT9N	TRANSISTOR	
D209			1SS355	DIODE		Q225			TRAIT9P	TRANSISTOR	
D210,211			1SS133	DIODE		Q241,242			2SC4081	TRANSISTOR	
D229			LM1MA142WA-G	DIODE		Q280			2SC4081	TRANSISTOR	
D251			1SS133	DIODE		Q282-284			2SC4081	TRANSISTOR	
D253			LM1MA142WK-G	DIODE		Q401-404			2SA992-A (F,E)	TRANSISTOR	
D254			LM1MA142WA-G	DIODE		Q405-408			2SC1845-A (F,E)	TRANSISTOR	
D255			LM1MA142WK-G	DIODE		Q409,410			2SA992-A (F,E)	TRANSISTOR	
D260,261			1SS133	DIODE		Q411,412			2SA1576A	TRANSISTOR	
D295,296			LM1MA142WA-G	DIODE		Q415,416			2SC1845-A (F,E)	TRANSISTOR	
D300			UMZ6.8N	ZENER DIODE		Q417,418			2SA992-A (F,E)	TRANSISTOR	
D301			LM1MA142WK-G	DIODE		Q423,424			TRAIT9N	TRANSISTOR	
D302			LM1MA142WA-G	DIODE		Q425,426			TRAIT9P	TRANSISTOR	
D403-405			1SS133	DIODE		Q443,444			2SC4081	TRANSISTOR	
D408			1SS133	DIODE		Q481-484			2SC4081	TRANSISTOR	
D430			LM1MA142WA-G	DIODE		Q601			2SC1845-A (F,E)	TRANSISTOR	
D457,458			1SS133	DIODE		Q602			2SC4081	TRANSISTOR	
D459			LM1MA142WK-G	DIODE		Q603			2SA1576A	TRANSISTOR	
D460			LM1MA142WA-G	DIODE		Q604			2SB1241	TRANSISTOR	
D461			LM1MA142WK-G	DIODE		Q605,606			2SC4081	TRANSISTOR	
D462,463			1SS133	DIODE		Q610-613			2SC4081	TRANSISTOR	
D495,496			LM1MA142WA-G	DIODE		Q614,615			2SA1576A	TRANSISTOR	
D602,603			1SS133	DIODE		Q616			2SC4081	TRANSISTOR	
D604			UDZS10B	ZENER DIODE		Q617			2SA1576A	TRANSISTOR	
D605			1SS133	DIODE		Q618			2SC4081	TRANSISTOR	
D606			UDZS15B	ZENER DIODE		Q619			DTA114EUA	DIGITAL TRANSISTOR	
D607			UDZS6.8B	ZENER DIODE		Q620			DTC114EUA	DIGITAL TRANSISTOR	
D609			1SS133	DIODE		Q621			2SC4081	TRANSISTOR	
D613			1SS133	DIODE		Q684,685			2SD1863	TRANSISTOR	
D614			UDZS10B	ZENER DIODE		TH601-605			NCP18XH103J0S	THERMISTOR	
D616			1SS133	DIODE							
D617,618			LM1MA142WA-G	DIODE							
D619			1SS355	DIODE							
D911			UDZS12B	ZENER DIODE							
IC1-4			BA4560RF	ANALOGUE IC							
IC5			TL494IDR	ANALOGUE IC							
IC6			BA4560RF	ANALOGUE IC							
Q1			2SD2012-F	TRANSISTOR							
Q2			2SB1375-F	TRANSISTOR							
Q3-8			STP60NF06FP	FET							
Q9			2SC4097	TRANSISTOR							
Q10,11			2SA1577	TRANSISTOR							
Q12			2SC4097	TRANSISTOR							
Q13,14			DTA114EUA	DIGITAL TRANSISTOR							
Q15			2SC4081	TRANSISTOR							
Q16			2SA1576A	TRANSISTOR							
Q17			2SK246 (BL) -F	FET							
Q201-204			2SA992-A (F,E)	TRANSISTOR							
Q205-208			2SC1845-A (F,E)	TRANSISTOR							
Q209,210			2SA992-A (F,E)	TRANSISTOR							
Q211,212			2SA1576A	TRANSISTOR							
Q215,216			2SC1845-A (F,E)	TRANSISTOR							

K : KAC-X40 (North America) M1 : KAC-X40 (Other Areas)

△ Indicates safety critical components.

SPECIFICATIONS

CEA-2006

RMS Watts per channel @ 4 ohms, 1% THD+N 70W x 4
Signal to Noise Ratio (Reference: 1Watt into 4 ohms) 83dB

Audio Section

Max Power Output 800W
Rated Power Output (+B=12.0V)
Normal (4Ω) (20Hz~20kHz, 0.05% THD) 45W x 4
Normal (2Ω) (1kHz, 0.5% THD) 65W x 4
Bridged (4Ω) (1kHz, 0.5% THD) 120W x 2
Rated Power Output (+B=14.4V)
Normal (4Ω) (20Hz~20kHz, 0.05% THD) 70W x 4
Normal (2Ω) (1kHz, 0.5% THD) 100W x 4
Bridged (4Ω) (1kHz, 0.5% THD) 200W x 2
Frequency Response (+0, -3dB) 5Hz~70kHz
Sensitivity (rated output) (MAX.) 0.2V
Sensitivity (rated output) (MIN.) 5.0V

Input Impedance 10kΩ
Signal to Noise Ratio 105dB
Low Pass Filter Frequency (-24dB/oct.) (B channel)
..... 40~200Hz (variable)
High Pass Filter Frequency (-12dB/oct.) 40~200Hz (variable)
Bass Boost Circuit (B channel) 0~+18dB (variable)
Bass Boost Frequency (B channel) 40~100Hz (variable)

General

Operating Voltage 14.4V (11~16V allowable)
Current Consumption 47A
Installation Size (W x H x D) 380 x 65 x 286mm
..... 14-15/16 x 2-9/16 x 11-1/4inch
Weight 4.6kg (10.2lbs)

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

INSTALLATION

