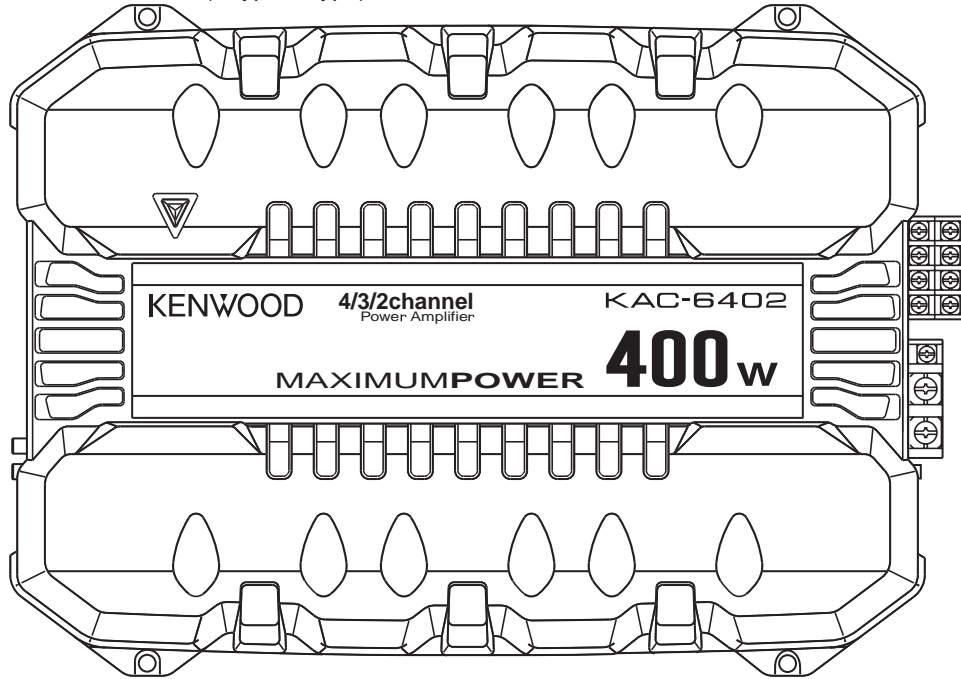


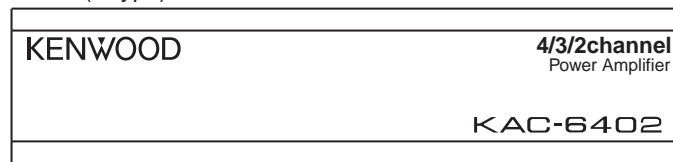
KAC-6402

SERVICE MANUAL

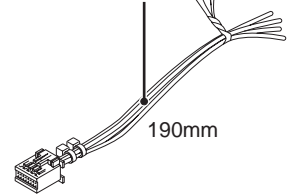
KAC-6402 (E type,M type)



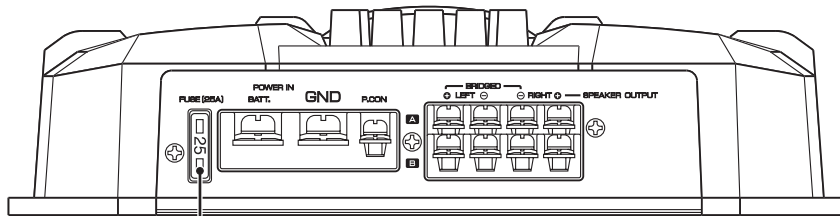
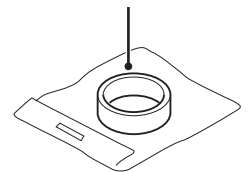
KAC-6402 (K type)



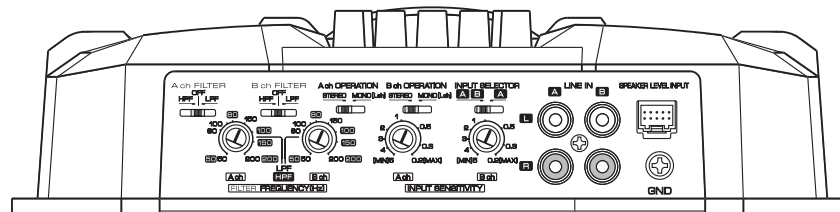
Connecting cord assy (E30-6144-05)



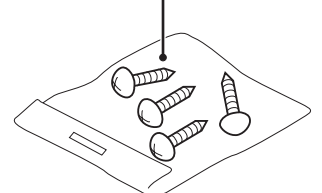
Accessory (W01-1606-05)



Fuse (F52-0014-05)

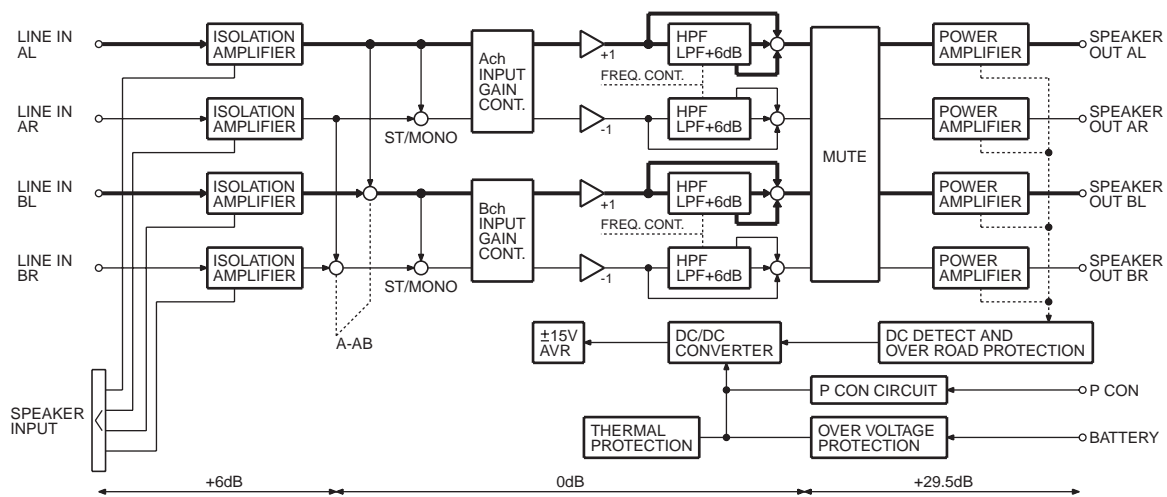


Screw set (N99-1587-05)



KAC-6402

BLOCK DIAGRAM



COMPONENTS DESCRIPTION

● AUDIO UNIT (X09-5890-10)

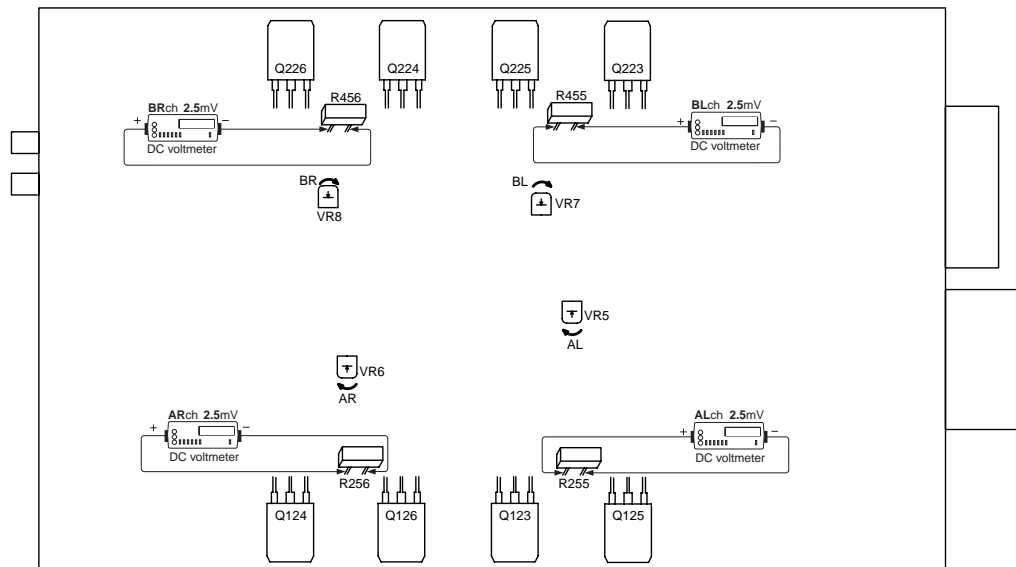
Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1,3	Buffer amplifier	Lowers impedance and amplify by 6dB
IC2,4	Isolation amplifier	Reduces common mode noise
IC5,9	Buffer amplifier	Rch operates as reverse amplifier
IC6,10	Reverse buffer amplifier	Reverse amplifier operation of 6dB
IC7,8,11,12	LPF/HPF	LPF and HPF with variable cut off
IC13	DC-DC converter	Oscillation and control of DC-DC converter
Q3,4	Constant voltage power supply	Constant voltage control of ±15V
Q5,6	DC-DC converter	Switching FET
Q7,8,9,10	DC-DC converter	Gate driver for Q5,6
Q11,12	DC-DC converter	ON/OFF of IC13 output
Q101,102,201,202	Input mute circuit	Shock noise absorption at power ON/OFF
Q103~106,203~206	Power amplifier	First step differential absorption
Q107~110,207~210	Power amplifier	Second step differential absorption
Q111,112,211,212	Power amplifier	Second step current mirror load
Q113,114,213,214	Power amplifier	Power amplification circuit bias temperature compensation
Q115~118,215~218	Power amplifier	Excess current detection
Q119~122,219~222	Power amplifier	Power amplification step darlington driver
Q123~126,223~226	Power amplifier	Power amplification step darlington output transistor
Q601	B-class step mute	Mute signal generation circuit: Normally ON
Q602	Mute circuit	Mute signal generation circuit: Normally OFF
Q603	Input mute	Mute signal generation circuit: Normally OFF
Q604	Power ON/OFF	Primary power supply control transistor: Normally ON
Q605	Power ON/OFF	Power control circuit
Q606	Power ON/OFF	Excess voltage protection circuit: Goes OFF when primary input voltage of 16V or less
Q610	Excess current detection	Goes ON when detecting excess current and turns OFF DC-DC converter
Q611,612	DC output voltage detection	Goes ON when detecting DC output voltage from power amplifier

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
Q613,614	DC output voltage detection	Latch circuit at DC detection
Q615,616	B-class step mute transistor	Circuit for turning OFF input of power amplification step
Q617,618	B-class step mute transistor	Driver for Q615,616: Normally ON
D1	Reverse connection protection for primary power supply	Melts off fuse when primary power supply is inversely connected
D2,3	AVR reference voltage	Control Q3,4 by Zenner voltage generated at D2,3
D4,5	Secondary power supply rectifier	
D6~9	Switching	Reverse flow prevention
D22,201,101,102	Temperature compensation	Makes 2nd step deferential transistor ΔV_{be} current constant
D32~37	Static protection	Prevents ope amp destruction by static
D103,104,203,204	Current mirror	2nd step deferential amplifier current mirror load
D105,106,205,206	B-class step mute	Reverse flow prevention
D107~110,207~210	Excess current detection	Reverse flow prevention
D229,430	Input mute	Reverse flow prevention of signal current
D601	LED control	D610 power indicator control
D602,603	Mute control	Reverse flow prevention
D604	AVR for mute	10V
D605	Power control	Reverse flow prevention
D606	Primary power supply excess voltage detectoin	Level shift
D607	Power control	Level shift

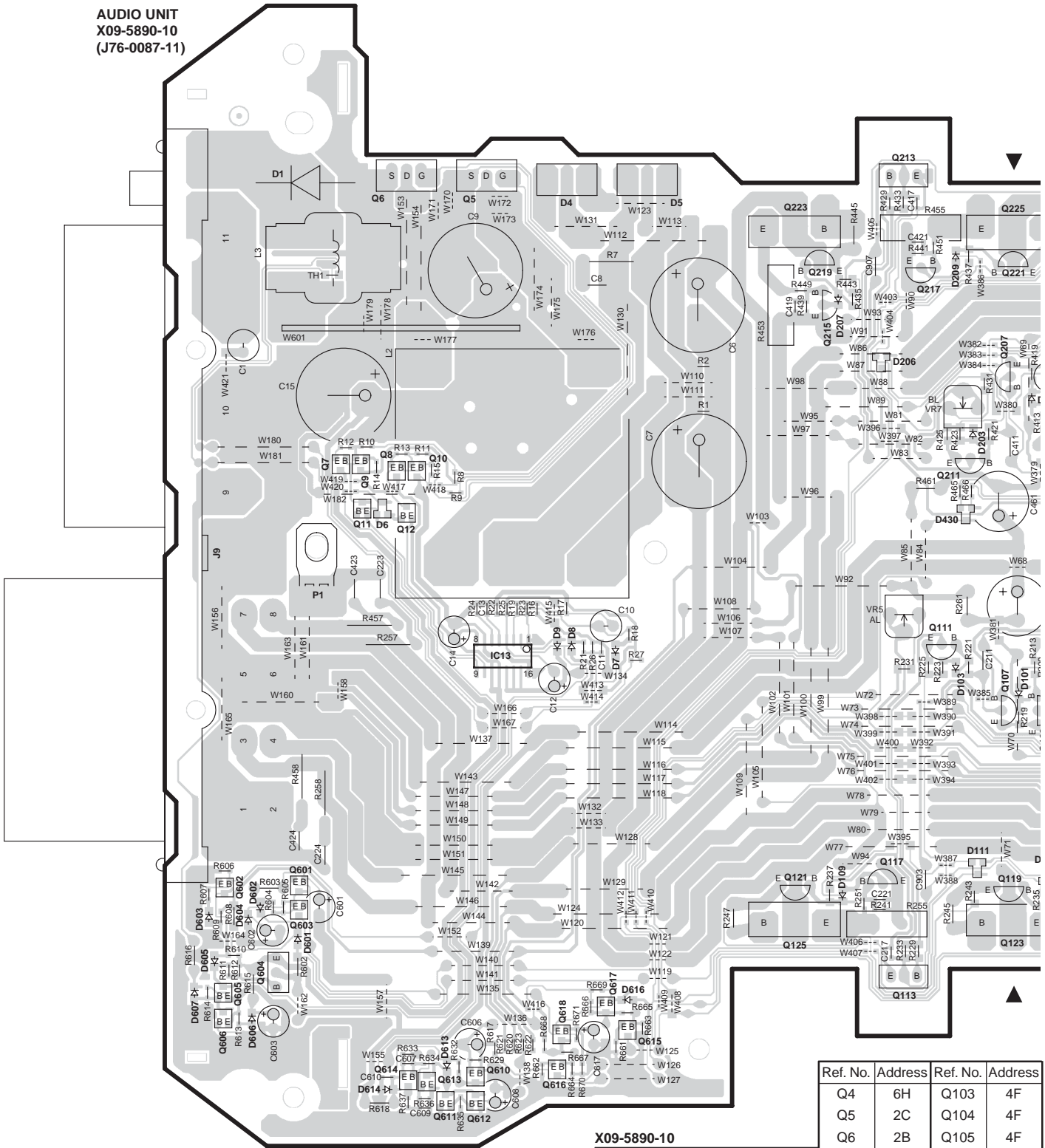
ADJUSTMENT

No.	Item	Alignment point	Method	Align for	Note
1	IDLE CURRENT	VR5 (ALch) VR6 (ARch) VR7 (BLch) VR8 (BRch)	Connect a DC voltmeter between emitter resistor	2.5mV	After Power on 5 minutes



KAC-6402 PC BOARD (FOIL SIDE VIEW)

AUDIO UNIT
X09-5890-10
(J76-0087-11)



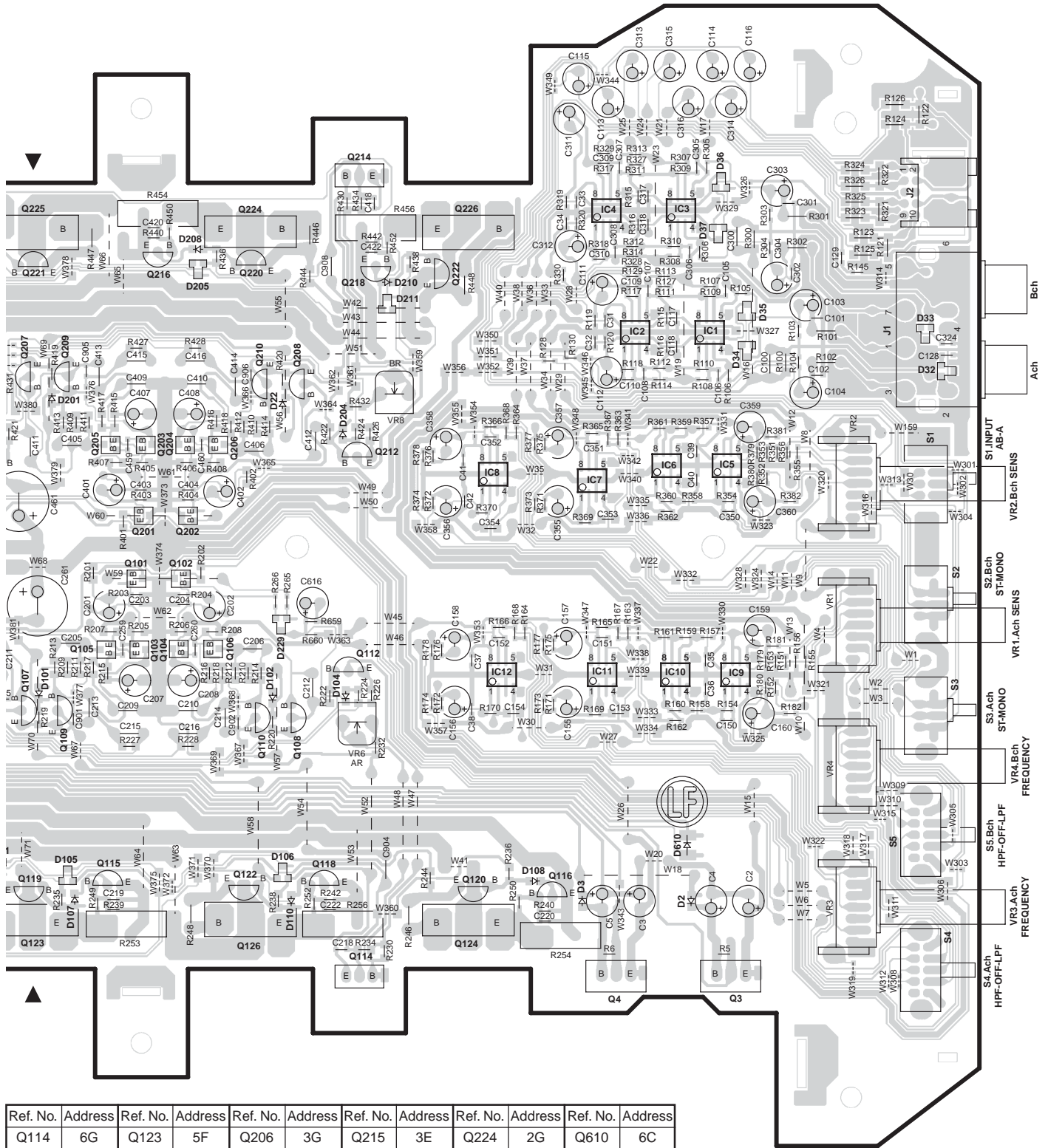
X09-5890-10

Ref. No.	Address	Ref. No.	Address
IC1	3I	IC8	3H
IC2	3H	IC9	4I
IC3	2I	IC10	4I
IC4	2H	IC11	4H
IC5	3I	IC12	4H
IC6	3I	IC13	4C
IC7	3H	Q3	6I

Ref. No.	Address	Ref. No.	Address
Q4	6H	Q103	4F
Q5	2C	Q104	4F
Q6	2B	Q105	4F
Q7	3B	Q106	4G
Q8	3C	Q107	4E
Q9	3B	Q108	5G
Q10	3C	Q109	5F
Q11	4B	Q110	5G
Q12	4C	Q111	4E
Q101	4F	Q112	4G
Q102	4F	Q113	6E

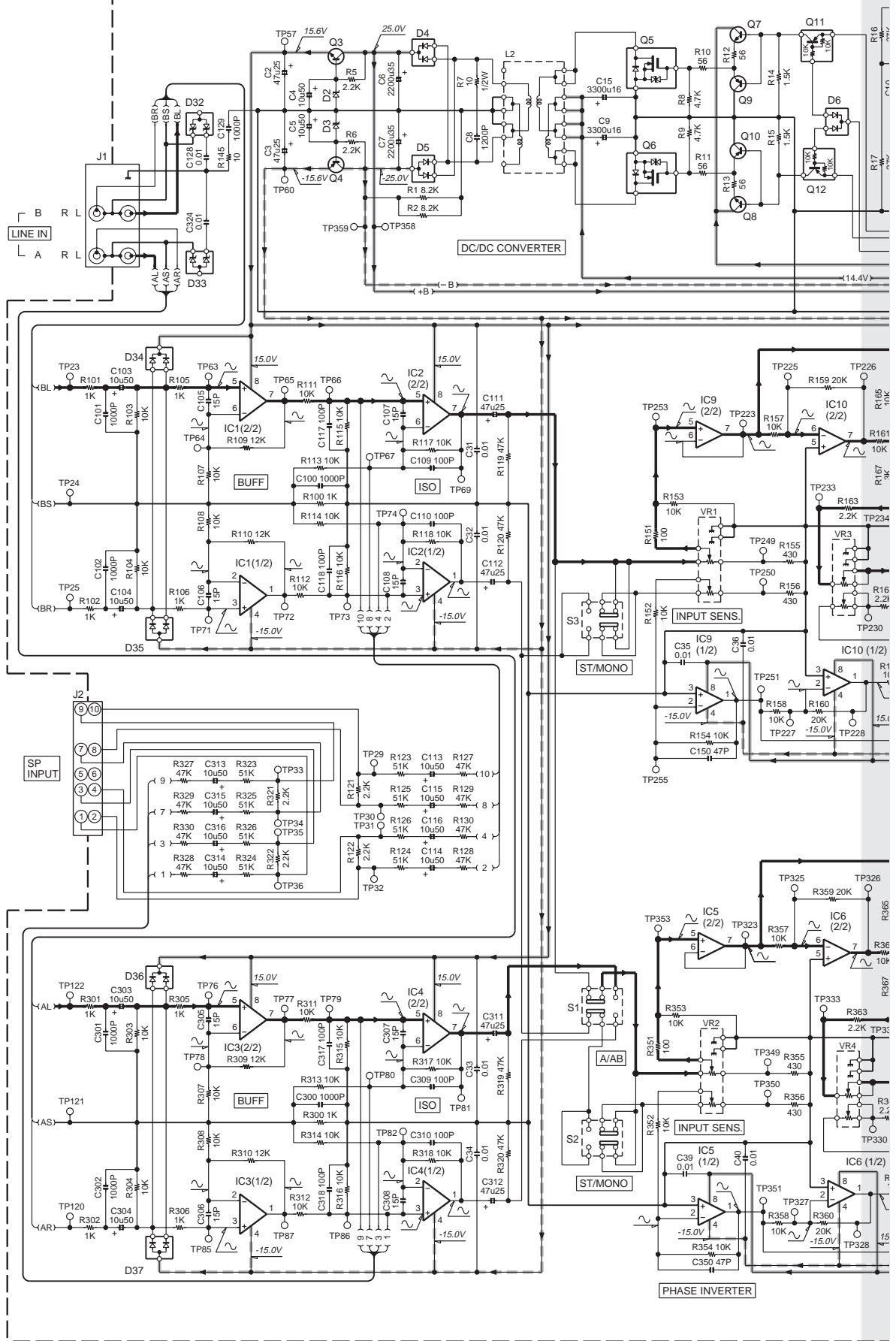
Refer to the schematic diagram for the values of resistors and capacitors.

KAC-6402

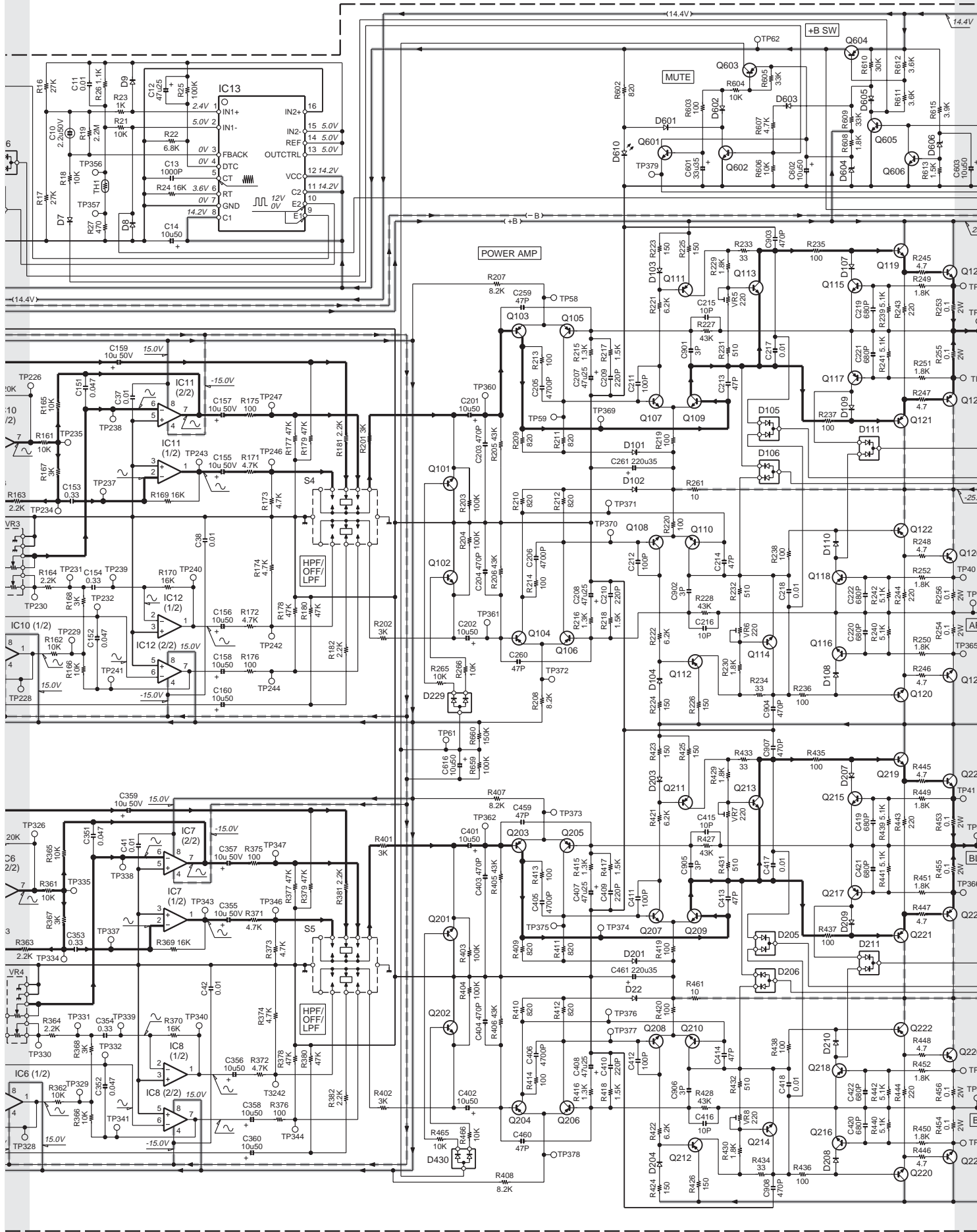


Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
Q114	6G	Q123	5F	Q206	3G	Q215	3E	Q224	2G	Q610	6C
Q115	5F	Q124	5H	Q207	3E	Q216	2F	Q225	2E	Q611	6C
Q116	5H	Q125	5D	Q208	3G	Q217	3E	Q226	2H	Q612	6C
Q117	5E	Q126	5G	Q209	3F	Q218	2G	Q601	5B	Q613	6C
Q118	5G	Q201	4F	Q210	3G	Q219	2D	Q602	5B	Q614	6C
Q119	5E	Q202	4F	Q211	3E	Q220	2G	Q603	5B	Q615	6D
Q120	5H	Q203	3F	Q212	3G	Q221	2F	Q604	6B	Q616	6C
Q121	5D	Q204	3F	Q213	2E	Q222	2H	Q605	6B	Q617	6D
Q122	5G	Q205	3F	Q214	2G	Q223	2D	Q606	6B	Q618	6C

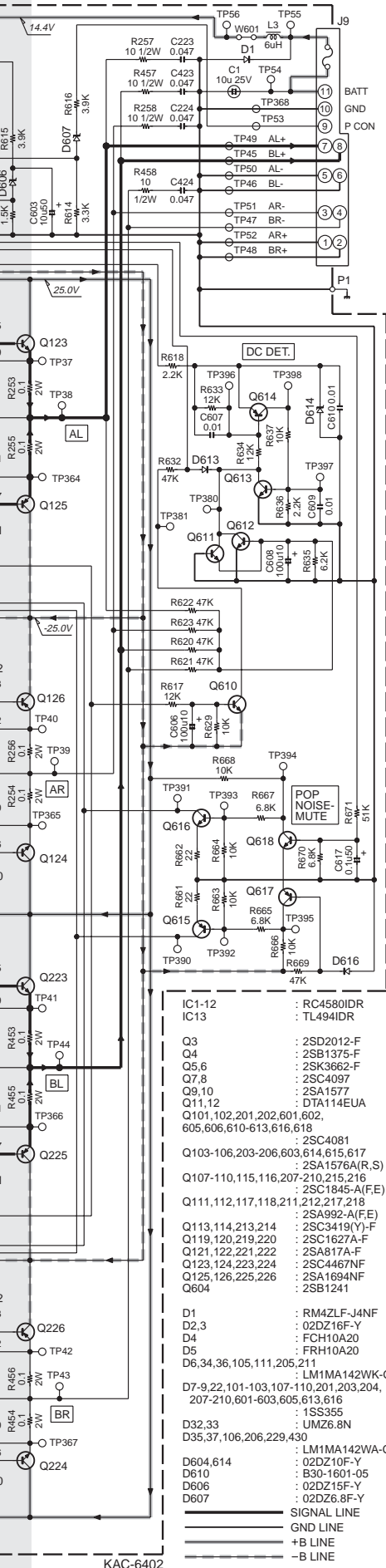
(X09-5890-10)



KAC-6402

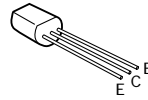


KAC-6402

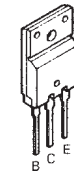


IC1-12	: RC4580IDR
IC13	: TL494IDR
Q3	: 2SD2012-F
Q4	: 2SB1375-F
Q5,6	: 2SK3662-F
Q7,8	: 2SC4097
Q9,10	: 2SA1577
Q11,12	: DTA114EUA
Q101,102,201,202,601,602,605,606,610-613,616,618	: 2SC4081
Q103-106,203-206,603,614,615,617	: 2SA1576A(R,S)
Q107-110,115,116,207-210,215,216	: 2SC1845-A(F,E)
Q111,112,117,118,211,212,217,218	: 2SA992-A(F,E)
Q113,114,213,214	: 2SC3419(V)-F
Q119,120,219,220	: 2SC1627A-F
Q121,122,221,222	: 2SA817A-F
Q123,124,223,224	: 2SC4467NF
Q125,126,225,226	: 2SA1694NF
Q604	: 2SB1241
D1	: RM4ZLF-J4NF
D2,3	: 02DZ16F-Y
D4	: FCH10A20
D5	: FRH10A20
D6,34,36,105,111,205,211	: LM1MA142WK-G
D7-9,22,101-103,107-110,201,203,204,207-210,601-603,605,613,616	: ISS355
D32,33	: UMZ6.8N
D35,37,106,206,229,430	: LM1MA142WA-G
D604,614	: 02DZ10F-Y
D610	: B30-1601-05
D606	: 02DZ15F-Y
D607	: 02DZ6.8F-Y
—	SIGNAL LINE
—	GND LINE
—	+B LINE
—	-B LINE

2SA817A-F
2SA992-A
2SC1627A-F
2SC1845-A



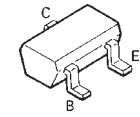
2SB1375-F
2SD2012-F



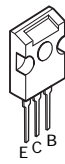
2SA1576A



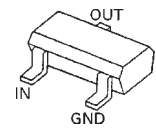
2SC4081



2SC3419



DTA114EUA

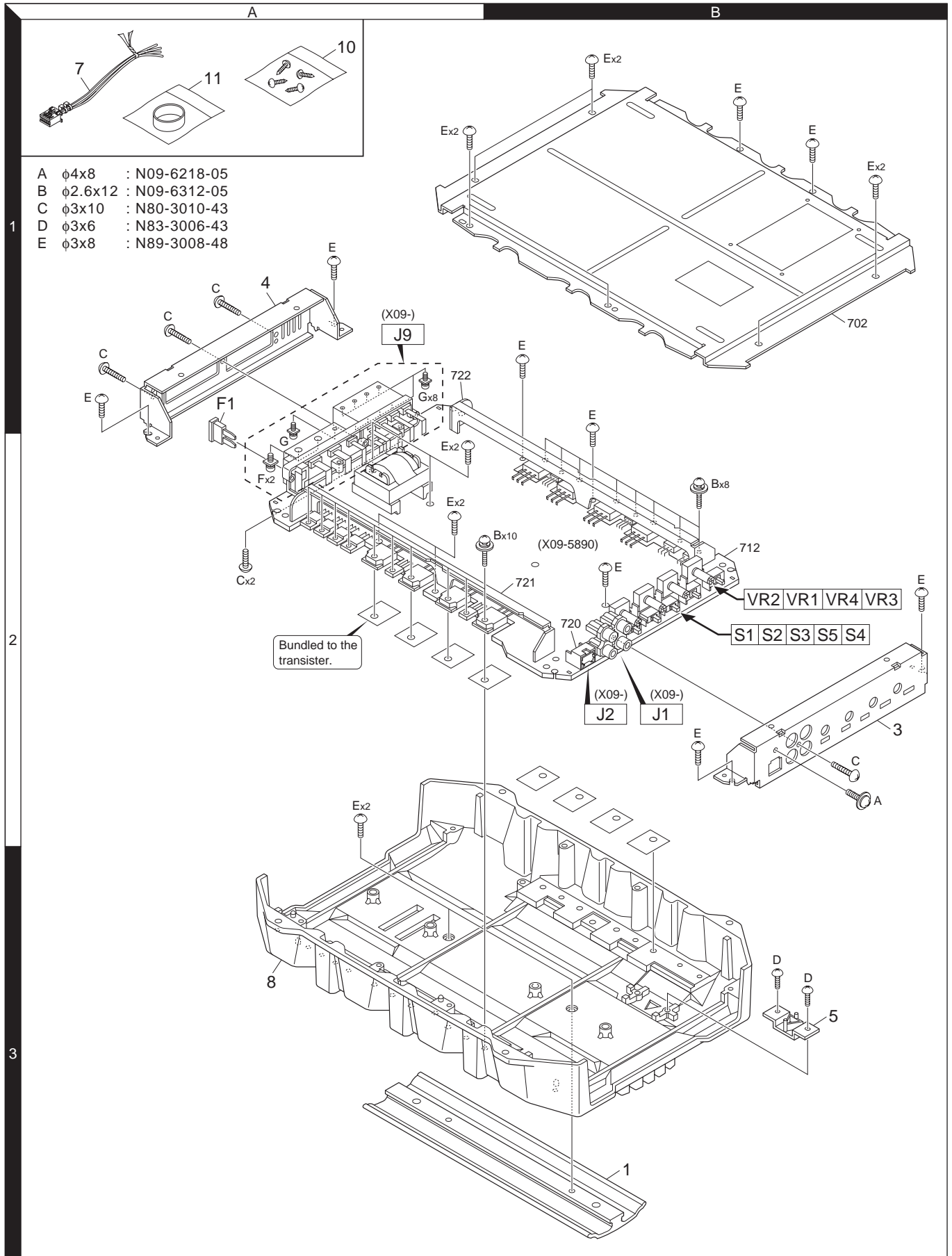


CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

⚠ 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.

EXPLODED VIEW



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

KAC-6402

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.	A d d	N e w	Parts No.	Description	Desti- nation
KAC-6402					
1	2B	*	A21-4488-02	DRESSING PANEL	K
1	2B	*	A21-4542-02	DRESSING PANEL	E1M1
3	2B	*	A64-3555-02	PANEL	
4	1A	*	A84-0386-02	REAR PANEL	
5	3B		B19-2324-03	LIGHTING BOARD	
-			B46-0100-50	WARRANTY CARD	
-		*	B64-3045-00	INSTRUCTION MANUAL (ENG.FRE.SPA.)	KE1
-		*	B64-3046-00	INSTR.MANUAL (GER.DUT.ITA.POR.)	E1
-		*	B64-3047-00	INSTRUCTION MANUAL (ENG.T-CHI.)	M1
7	1A		E30-6144-05	CONNECTING CORD ASSY	
8	3A	*	F01-1782-01	HEAT SINK	
△ F1	1A		F52-0014-05	FUSE (BLADE TYPE)	
-		*	H10-4939-13	POLYSTYRENE FOAMED FIXTURE	
-			H25-1192-04	PROTECTION BAG (370X440)	
-			H25-1200-04	PROTECTION BAG (250X350X0.03)	
-		*	H54-3448-03	ITEM CARTON CASE	K
-		*	H54-3449-03	ITEM CARTON CASE	M1
-		*	H54-3501-03	ITEM CARTON CASE	E1
10	1A		N99-1587-05	SCREW SET	
A	2B		N09-6218-05	TAPTITE SCREW (4X8)	
B	2B	*	N09-6312-05	SEMS (TAPTITE SCREW) (2.6X12)	
C	1A		N80-3010-43	PAN HEAD TAPTITE SCREW	
D	3B		N83-3006-43	PAN HEAD TAPTITE SCREW	
E	1B		N89-3008-48	BINDING HEAD TAPTITE SCREW	
F	1A		N07-0003-08	SEMS 6M-AU (ALTERNATIVE PARTS)	
G	2A		N09-4215-08	SEMS 4M-NI	
11	1A		W01-1606-05	ACCESSORIES	
AUDIO UNIT (X09-5890-10)					
D610			B30-1601-05	LED	
C1			C90-5557-05	ELECTRO 10UF 25WV	
C2,3			CD04BJ1E470M	ELECTRO 47UF 25WV	
C4,5			CD04BJ1H100M	ELECTRO 10UF 50WV	
C6,7			CD04AZ1V222M	ELECTRO 2200UF 35WV	
C8			CK45FB1H122K	CERAMIC 1200PF K	
C9		*	CD04AY1C332M	ELECTRO 3300UF 16WV	
C10			C90-5563-05	ELECTRO 2.2UF 50WV	
C11			CK73GB1H103K	CHIP C 0.010UF K	
C12			CD04BJ1E470M	ELECTRO 47UF 25WV	
C13			CC73GCH1H102J	CHIP C 1000PF J	
C14			CD04BJ1H100M	ELECTRO 10UF 50WV	
C15		*	CD04AY1C332M	ELECTRO 3300UF 16WV	
C31-42			CK73GB1H103K	CHIP C 0.010UF K	
C100			CK45FB1H102K	CERAMIC 1000PF K	
C101,102			CK73GB1H102K	CHIP C 1000PF K	
C103,104			CD04BJ1H100M	ELECTRO 10UF 50WV	
C105-108			CC73GCH1H150J	CHIP C 15PF J	
C109,110			CC73GCH1H101J	CHIP C 100PF J	
C111,112			CD04BJ1E470M	ELECTRO 47UF 25WV	
C113-116			CD04BJ1H100M	ELECTRO 10UF 50WV	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
C117,118			CC73GCH1H101J	CHIP C 100PF J	
C128			CK73GB1H103K	CHIP C 0.010UF K	
C129			CK73GB1H102K	CHIP C 1000PF K	
C150			CC73GCH1H470J	CHIP C 47PF J	
C151,152			CK73GB1H473K	CHIP C 0.047UF K	
C153,154			CK73FB1H334K	CHIP C 0.33UF K	
C155-160			CD04BJ1H100M	ELECTRO 10UF 50WV	
C201,202			CD04BJ1H100M	ELECTRO 10UF 50WV	
C203,204			CK73GB1H471K	CHIP C 470PF K	
C205,206			CK45FB1H472K	CERAMIC 4700PF K	
C207,208			CD04BJ1E470M	ELECTRO 47UF 25WV	
C209,210			CC45FSL1H221J	CERAMIC 220PF J	
C211,212			CC45FSL1H101J	CERAMIC 100PF J	
C213,214			CC45FSL1H470J	CERAMIC 47PF J	
C215,216			CC45FSL1H100D	CERAMIC 10PF D	
C217,218			CK73GB1H103K	CHIP C 0.010UF K	
C219-222			CK73GB1H681K	CHIP C 680PF K	
C223,224			CQ92FM1H473J	MYLAR 0.047UF J	
C259,260			CC73GCH1H470J	CHIP C 47PF J	
C261		*	CD04BJ1V221M	ELECTRO 220UF 35WV	
C300			CK45FB1H102K	CERAMIC 1000PF K	
C301,302			CK73GB1H102K	CHIP C 1000PF K	
C303,304			CD04BJ1H100M	ELECTRO 10UF 50WV	
C305-308			CC73GCH1H150J	CHIP C 15PF J	
C309,310			CC73GCH1H101J	CHIP C 100PF J	
C311,312			CD04BJ1E470M	ELECTRO 47UF 25WV	
C313-316			CD04BJ1H100M	ELECTRO 10UF 50WV	
C317,318			CC73GCH1H101J	CHIP C 100PF J	
C324			CK73GB1H103K	CHIP C 0.010UF K	
C350			CC73GCH1H470J	CHIP C 47PF J	
C351,352			CK73GB1H473K	CHIP C 0.047UF K	
C353,354			CK73FB1H334K	CHIP C 0.33UF K	
C355-360			CD04BJ1H100M	ELECTRO 10UF 50WV	
C401,402			CD04BJ1H100M	ELECTRO 10UF 50WV	
C403,404			CK73GB1H471K	CHIP C 470PF K	
C405,406			CK45FB1H472K	CERAMIC 4700PF K	
C407,408			CD04BJ1E470M	ELECTRO 47UF 25WV	
C409,410			CC45FSL1H221J	CERAMIC 220PF J	
C411,412			CC45FSL1H101J	CERAMIC 100PF J	
C413,414			CC45FSL1H470J	CERAMIC 47PF J	
C415,416			CC45FSL1H100D	CERAMIC 10PF D	
C417,418			CK73GB1H103K	CHIP C 0.010UF K	
C419-422			CK73GB1H681K	CHIP C 680PF K	
C423,424			CQ92FM1H473J	MYLAR 0.047UF J	
C459,460			CC73GCH1H470J	CHIP C 47PF J	
C461		*	CD04BJ1V221M	ELECTRO 220UF 35WV	
C601			CD04BJ1V330M	ELECTRO 33UF 35WV	
C602,603			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	
C616			CD04BJ1H100M	ELECTRO 10UF 50WV	
C617			CD04BJ1H0R1M	ELECTRO 0.1UF 50WV	
C901,902			CC73GCH1H030C	CHIP C 3.0PF C	

E1 : Europe K : North America M1 : Other Areas

△ Indicates safety critical components.

PARTS LIST

AUDIO UNIT (X09-5890-10)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
C903,904			CC45FSL1H471J	CERAMIC 470PF J		R205,206			RK73FB2B433J	CHIP R 43K J 1/8W	
C905,906			CC73GCH1H030C	CHIP C 3.0PF C		R207,208			RK73FB2B822J	CHIP R 8.2K J 1/8W	
C907,908			CC45FSL1H471J	CERAMIC 470PF J		R209-212			RK73FB2B821J	CHIP R 820 J 1/8W	
J1		*	E63-0929-05	PIN JACK		R213,214			RK73FB2B101J	CHIP R 100 J 1/8W	
J2			E58-1031-05	RECTANGULAR RECEPTACLE		R215,216			RK73FB2B132J	CHIP R 1.3K J 1/8W	
J9		*	E70-0841-05	SCREW TERMINAL BOARD		R217,218			RK73FB2B152J	CHIP R 1.5K J 1/8W	
L2		*	L19-0775-05	TRANSFORMER FOR CONVERTER		R219,220		*	RK73FB2B101J	CHIP R 100 J 1/8W	
L3			L33-1920-05	CHOKE COIL		R221,222			RK73FB2B622J	CHIP R 6.2K J 1/8W	
C	2A		N80-3010-43	PAN HEAD TAPTITE SCREW		R223-226			RK73FB2B151J	CHIP R 150 J 1/8W	
R1,2			RK73FB2B822J	CHIP R 8.2K J 1/8W		R227,228			RK73FB2B433J	CHIP R 43K J 1/8W	
R5,6			RK73GB2A222J	CHIP R 2.2K J 1/10W		R229,230			RK73FB2B182J	CHIP R 1.8K J 1/8W	
R7			RD14DB2H100J	SMALL-RD 10 J 1/2W		R231,232			RK73FB2B511J	CHIP R 510 J 1/8W	
R8,9			RK73GB2A472J	CHIP R 4.7K J 1/10W		R233,234			RK73FB2B330J	CHIP R 33 J 1/8W	
R10-13			RK73GB2A560J	CHIP R 56 J 1/10W		R235-238			RK73FB2B101J	CHIP R 100 J 1/8W	
R14,15			RK73GB2A152J	CHIP R 1.5K J 1/10W		R239-242			RK73GB2A512J	CHIP R 5.1K J 1/10W	
R16,17			RK73GB2A273J	CHIP R 27K J 1/10W		R243,244			RK73FB2B221J	CHIP R 220 J 1/8W	
R18			RK73GB2A103J	CHIP R 10K J 1/10W		R245-248			RD14NB2E4R7J	RD 4.7 J 1/4W	
R19			RK73GB2A225J	CHIP R 2.2M J 1/10W		R249-252			RK73GB2A182J	CHIP R 1.8K J 1/10W	
R21			RK73GB2A103J	CHIP R 10K J 1/10W		R253-256			R92-0205-05	METAL-PLATE 0.1 K 2W	
R22			RK73GB2A682J	CHIP R 6.8K J 1/10W		R257,258			RD14DB2H100J	SMALL-RD 10 J 1/2W	
R23			RK73GB2A102J	CHIP R 1.0K J 1/10W		R261			RD14NB2E100J	RD 10 J 1/4W	
R24			RK73GB2A163J	CHIP R 16K J 1/10W		R265,266			RK73GB2A103J	CHIP R 10K J 1/10W	
R25			RK73GB2A104J	CHIP R 100K J 1/10W		R300			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R26			RK73GB2A112J	CHIP R 1.1K J 1/10W		R301,302			RD14BB2C102J	RD 1.0K J 1/6W	
R27			RK73GB2A471J	CHIP R 470 J 1/10W		R303,304			RK73GB2A103J	CHIP R 10K J 1/10W	
R100			RK73EB2E102J	CHIP R 1.0K J 1/4W		R305,306			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R101,102			RD14BB2C102J	RD 1.0K J 1/6W		R307,308			RK73GB2A103J	CHIP R 10K J 1/10W	
R103,104			RK73GB2A103J	CHIP R 10K J 1/10W		R309,310			RK73GB2A123J	CHIP R 12K J 1/10W	
R105,106			RK73GB2A102J	CHIP R 1.0K J 1/10W		R311-318			RN73GH1J103D	CHIP R 10K D 1/16W	
R107,108			RK73GB2A103J	CHIP R 10K J 1/10W		R319,320			RK73GB2A473J	CHIP R 47K J 1/10W	
R109,110			RK73GB2A123J	CHIP R 12K J 1/10W		R321,322			RK73EB2E222J	CHIP R 2.2K J 1/4W	
R111-118			RN73GH1J103D	CHIP R 10K D 1/16W		R323-326			RK73EB2E513J	CHIP R 51K J 1/4W	
R119,120			RK73GB2A473J	CHIP R 47K J 1/10W		R327-330			RK73GB2A473J	CHIP R 47K J 1/10W	
R121,122			RK73EB2E222J	CHIP R 2.2K J 1/4W		R351			RK73GB2A101J	CHIP R 100 J 1/10W	
R123-126			RK73EB2E513J	CHIP R 51K J 1/4W		R352-354			RK73GB2A103J	CHIP R 10K J 1/10W	
R127-130			RK73GB2A473J	CHIP R 47K J 1/10W		R355,356			RK73GB2A431J	CHIP R 430 J 1/10W	
R145			RK73GB2A100J	CHIP R 10 J 1/10W		R357,358			RK73GB2A103J	CHIP R 10K J 1/10W	
R151			RK73GB2A101J	CHIP R 100 J 1/10W		R359,360			RK73GB2A203J	CHIP R 20K J 1/10W	
R152-154			RK73GB2A103J	CHIP R 10K J 1/10W		R361,362			RK73GB2A103J	CHIP R 10K J 1/10W	
R155,156			RK73GB2A431J	CHIP R 430 J 1/10W		R363,364			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R157,158			RK73GB2A103J	CHIP R 10K J 1/10W		R365,366			RK73GB2A103J	CHIP R 10K J 1/10W	
R159,160			RK73GB2A203J	CHIP R 20K J 1/10W		R367,368			RK73GB2A302J	CHIP R 3.0K J 1/10W	
R161,162			RK73GB2A103J	CHIP R 10K J 1/10W		R369,370			RK73GB2A163J	CHIP R 16K J 1/10W	
R163,164			RK73GB2A222J	CHIP R 2.2K J 1/10W		R371-374			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R165,166			RK73GB2A103J	CHIP R 10K J 1/10W		R375,376			RK73GB2A101J	CHIP R 100 J 1/10W	
R167,168			RK73GB2A302J	CHIP R 3.0K J 1/10W		R377-380			RK73GB2A473J	CHIP R 47K J 1/10W	
R169,170			RK73GB2A163J	CHIP R 16K J 1/10W		R381,382			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R171-174			RK73GB2A472J	CHIP R 4.7K J 1/10W		R401,402			RK73FB2B302J	CHIP R 3.0K J 1/8W	
R175,176			RK73GB2A101J	CHIP R 100 J 1/10W		R403,404			RK73GB2A104J	CHIP R 100K J 1/10W	
R177-180			RK73GB2A473J	CHIP R 47K J 1/10W		R405,406			RK73FB2B433J	CHIP R 43K J 1/8W	
R181,182			RK73GB2A222J	CHIP R 2.2K J 1/10W		R407,408			RK73FB2B822J	CHIP R 8.2K J 1/8W	
R201,202			RK73FB2B302J	CHIP R 3.0K J 1/8W		R409-412			RK73FB2B821J	CHIP R 820 J 1/8W	
R203,204			RK73GB2A104J	CHIP R 100K J 1/10W		R413,414			RK73FB2B101J	CHIP R 100 J 1/8W	
						R415,416			RK73FB2B132J	CHIP R 1.3K J 1/8W	
						R417,418			RK73FB2B152J	CHIP R 1.5K J 1/8W	

E1 : Europe K : North America M1 : Other Areas

△ Indicates safety critical components.

PARTS LIST

AUDIO UNIT (X09-5890-10)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R419,420			RK73FB2B101J	CHIP R 100 J 1/8W	
R421,422		*	RK73FB2B622J	CHIP R 6.2K J 1/8W	
R423-426			RK73FB2B151J	CHIP R 150 J 1/8W	
R427,428			RK73FB2B433J	CHIP R 43K J 1/8W	
R429,430			RK73FB2B182J	CHIP R 1.8K J 1/8W	
R431,432			RK73FB2B511J	CHIP R 510 J 1/8W	
R433,434			RK73FB2B330J	CHIP R 33 J 1/8W	
R435-438			RK73FB2B101J	CHIP R 100 J 1/8W	
R439-442			RK73GB2A512J	CHIP R 5.1K J 1/10W	
R443,444			RK73FB2B221J	CHIP R 220 J 1/8W	
R445-448			RD14NB2E4R7J	RD 4.7 J 1/4W	
R449-452			RK73GB2A182J	CHIP R 1.8K J 1/10W	
R453-456			R92-0205-05	METAL-PLATE 0.1 K 2W	
R457,458			RD14DB2H100J	SMALL-RD 10 J 1/2W	
R461			RD14NB2E100J	RD 10 J 1/4W	
R465,466			RK73GB2A103J	CHIP R 10K J 1/10W	
R602			RK73EB2E821J	CHIP R 820 J 1/4W	
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			RK73EB2E182J	CHIP R 1.8K J 1/4W	
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			RK73GB2A123J	CHIP R 12K J 1/10W	
R618			RD14BB2C222J	RD 2.2K J 1/6W	
R620-623			RK73GB2A473J	CHIP R 47K J 1/10W	
R629			RK73GB2A103J	CHIP R 10K 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	
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	
R663,664			RK73GB2A103J	CHIP R 10K J 1/10W	
R665			RK73GB2A682J	CHIP R 6.8K J 1/10W	
R666			RK73GB2A103J	CHIP R 10K J 1/10W	
R667			RK73GB2A682J	CHIP R 6.8K J 1/10W	
R668			RK73GB2A103J	CHIP R 10K J 1/10W	
R669			RK73GB2A473J	CHIP R 47K J 1/10W	
R670			RK73GB2A682J	CHIP R 6.8K J 1/10W	
R671			RK73GB2A513J	CHIP R 51K J 1/10W	
VR1,2		*	R31-0232-15	VARIABLE RESISTOR	
VR3,4		*	R31-0215-15	VARIABLE RESISTOR	
VR5-8		*	R32-0116-05	SEMI FIXED VARIABLE RESISTOR	
W301-305			R92-1252-05	CHIP R 0 OHM J 1/16W	
W306,307			R92-2053-05	CHIP R 0 OHM J 1/8W	
W308			R92-1252-05	CHIP R 0 OHM J 1/16W	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
W309-311			R92-2053-05	CHIP R 0 OHM J 1/8W	
W312-315			R92-1252-05	CHIP R 0 OHM J 1/16W	
W316-318			R92-2053-05	CHIP R 0 OHM J 1/8W	
W319,320			R92-1252-05	CHIP R 0 OHM J 1/16W	
W321			R92-2053-05	CHIP R 0 OHM J 1/8W	
W322			R92-1252-05	CHIP R 0 OHM J 1/16W	
W323-325			R92-2053-05	CHIP R 0 OHM J 1/8W	
W326			R92-1252-05	CHIP R 0 OHM J 1/16W	
W327-329			R92-2053-05	CHIP R 0 OHM J 1/8W	
W330,331			R92-1252-05	CHIP R 0 OHM J 1/16W	
W332-336			R92-2053-05	CHIP R 0 OHM J 1/8W	
W337,338			R92-1252-05	CHIP R 0 OHM J 1/16W	
W339,340			R92-2053-05	CHIP R 0 OHM J 1/8W	
W341,342			R92-1252-05	CHIP R 0 OHM J 1/16W	
W343			R92-2053-05	CHIP R 0 OHM J 1/8W	
W344-349			R92-1252-05	CHIP R 0 OHM J 1/16W	
W350-352			R92-2053-05	CHIP R 0 OHM J 1/8W	
W353,354			R92-1252-05	CHIP R 0 OHM J 1/16W	
W355-363			R92-2053-05	CHIP R 0 OHM J 1/8W	
W364-366			R92-1252-05	CHIP R 0 OHM J 1/16W	
W367			R92-2053-05	CHIP R 0 OHM J 1/8W	
W368			R92-1252-05	CHIP R 0 OHM J 1/16W	
W369-371			R92-2053-05	CHIP R 0 OHM J 1/8W	
W372			R92-1252-05	CHIP R 0 OHM J 1/16W	
W373-375			R92-2053-05	CHIP R 0 OHM J 1/8W	
W376,377			R92-1252-05	CHIP R 0 OHM J 1/16W	
W378-381			R92-2053-05	CHIP R 0 OHM J 1/8W	
W382-389			R92-1252-05	CHIP R 0 OHM J 1/16W	
W390-402			R92-2053-05	CHIP R 0 OHM J 1/8W	
W403-407			R92-1252-05	CHIP R 0 OHM J 1/16W	
W408			R92-2053-05	CHIP R 0 OHM J 1/8W	
W409-412			R92-1252-05	CHIP R 0 OHM J 1/16W	
W413			R92-2053-05	CHIP R 0 OHM J 1/8W	
W414			R92-1252-05	CHIP R 0 OHM J 1/16W	
W415			R92-2053-05	CHIP R 0 OHM J 1/8W	
W416-420			R92-1252-05	CHIP R 0 OHM J 1/16W	
W421			R92-2053-05	CHIP R 0 OHM J 1/8W	
S1-3			S62-0842-05	SLIDE SWITCH	
S4,5			S31-2630-05	SLIDE SWITCH	
D1			RM4ZLF-J4NF	DIODE	
D2,3			02DZ16F-Y	ZENER DIODE	
D4			FCH10A20	DIODE	
D5			FRH10A20	DIODE	
D6			LM1MA142WK-G	DIODE	
D7-9			1SS355	DIODE	
D22			1SS355	DIODE	
D32,33			UMZ6.8N	ZENER DIODE	
D34			LM1MA142WK-G	DIODE	
D35			LM1MA142WA-G	DIODE	
D36			LM1MA142WK-G	DIODE	
D37			LM1MA142WA-G	DIODE	
D101-104			1SS355	DIODE	
D105			LM1MA142WK-G	DIODE	
D106			LM1MA142WA-G	DIODE	

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PARTS LIST

AUDIO UNIT (X09-5890-10)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
D107-110			1SS355	DIODE		Q617			2SA1576A(R,S)	TRANSISTOR	
D111			LM1MA142WK-G	DIODE		Q618			2SC4081	TRANSISTOR	
D201			1SS355	DIODE		TH1			NT732ATTD103J	THERMISTOR	
D203,204			1SS355	DIODE							
D205			LM1MA142WK-G	DIODE							
D206			LM1MA142WA-G	DIODE							
D207-210			1SS355	DIODE							
D211			LM1MA142WK-G	DIODE							
D229			LM1MA142WA-G	DIODE							
D430			LM1MA142WA-G	DIODE							
D601-603			1SS355	DIODE							
D604			02DZ10F-Y	ZENER DIODE							
D605			1SS355	DIODE							
D606			02DZ15F-Y	ZENER DIODE							
D607			02DZ6.8F-Y	ZENER DIODE							
D613			1SS355	DIODE							
D614			02DZ10F-Y	ZENER DIODE							
D616			1SS355	DIODE							
IC1-12			RC4580IDR	ANALOGUE IC							
IC13			TL494IDR	ANALOGUE IC							
Q3			2SD2012-F	TRANSISTOR							
Q4			2SB1375-F	TRANSISTOR							
Q5,6			2SK3662-F	FET							
Q7,8			2SC4097	TRANSISTOR							
Q9,10			2SA1577	TRANSISTOR							
Q11,12			DTA114EUA	DIGITAL TRANSISTOR							
Q101,102			2SC4081	TRANSISTOR							
Q103-106			2SA1576A(R,S)	TRANSISTOR							
Q107-110			2SC1845-A(F,E)	TRANSISTOR							
Q111,112			2SA992-A(F,E)	TRANSISTOR							
Q113,114			2SC3419(Y)-F	TRANSISTOR							
Q115,116			2SC1845-A(F,E)	TRANSISTOR							
Q117,118			2SA992-A(F,E)	TRANSISTOR							
Q119,120			2SC1627A-F	TRANSISTOR							
Q121,122			2SA817A-F	TRANSISTOR							
Q123,124			2SC4467NF	TRANSISTOR							
Q125,126			2SA1694NF	TRANSISTOR							
Q201,202			2SC4081	TRANSISTOR							
Q203-206			2SA1576A(R,S)	TRANSISTOR							
Q207-210			2SC1845-A(F,E)	TRANSISTOR							
Q211,212			2SA992-A(F,E)	TRANSISTOR							
Q213,214			2SC3419(Y)-F	TRANSISTOR							
Q215,216			2SC1845-A(F,E)	TRANSISTOR							
Q217,218			2SA992-A(F,E)	TRANSISTOR							
Q219,220			2SC1627A-F	TRANSISTOR							
Q221,222			2SA817A-F	TRANSISTOR							
Q223,224			2SC4467NF	TRANSISTOR							
Q225,226			2SA1694NF	TRANSISTOR							
Q601,602			2SC4081	TRANSISTOR							
Q603			2SA1576A(R,S)	TRANSISTOR							
Q604			2SB1241	TRANSISTOR							
Q605,606			2SC4081	TRANSISTOR							
Q610-613			2SC4081	TRANSISTOR							
Q614,615			2SA1576A(R,S)	TRANSISTOR							
Q616			2SC4081	TRANSISTOR							

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KAC-6402

SPECIFICATIONS

Audio Section

Max Power Output	400W
Rated Power Output	
Normal (4Ω) (20Hz~20kHz, 0.08% THD)	35W x 4
Normal (4Ω) (DIN : 45324 , +B=14.4V)	35W x 4
Normal (2Ω) (1kHz, 0.8% THD)	50W x 2
Bridged (4Ω) (1kHz, 0.8% THD)	100W x 2
Frequency Response (+0, -3dB)	10Hz~45kHz
Sensitivity (rated output)	
MAX.	0.2V
MIN.	5.0V
Signal to Noise Ratio	100dB
Input Impedance	10kΩ
Low Pass Filter Frequency (12dB/oct.)	50~200Hz (variable)
High Pass Filter Frequency (12dB/oct.)	50~200Hz (variable)

General

Operating Voltage	14.4V (11~16V allowable)
Current Consumption	25A
Dimensions (W x H x D)	330 x 59 x 242 mm (13 x 2-5/16 x 9-8/16 inch)
Weight	3.0kg (6.6 lbs)

CEA-2006

RMS Watts per channel @ 4Ω < 1% THD+N	40W x 4
RMS Watts per channel @ 2Ω < 1% THD+N	50W x 4

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

Installation

