

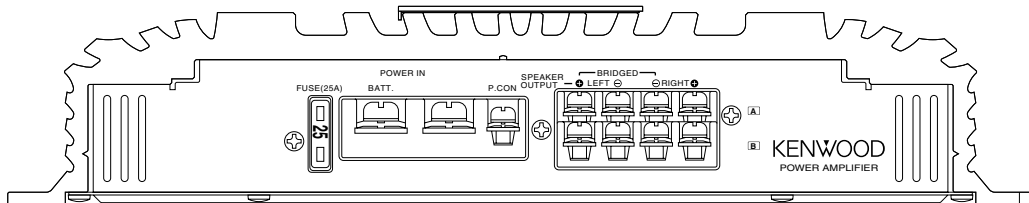
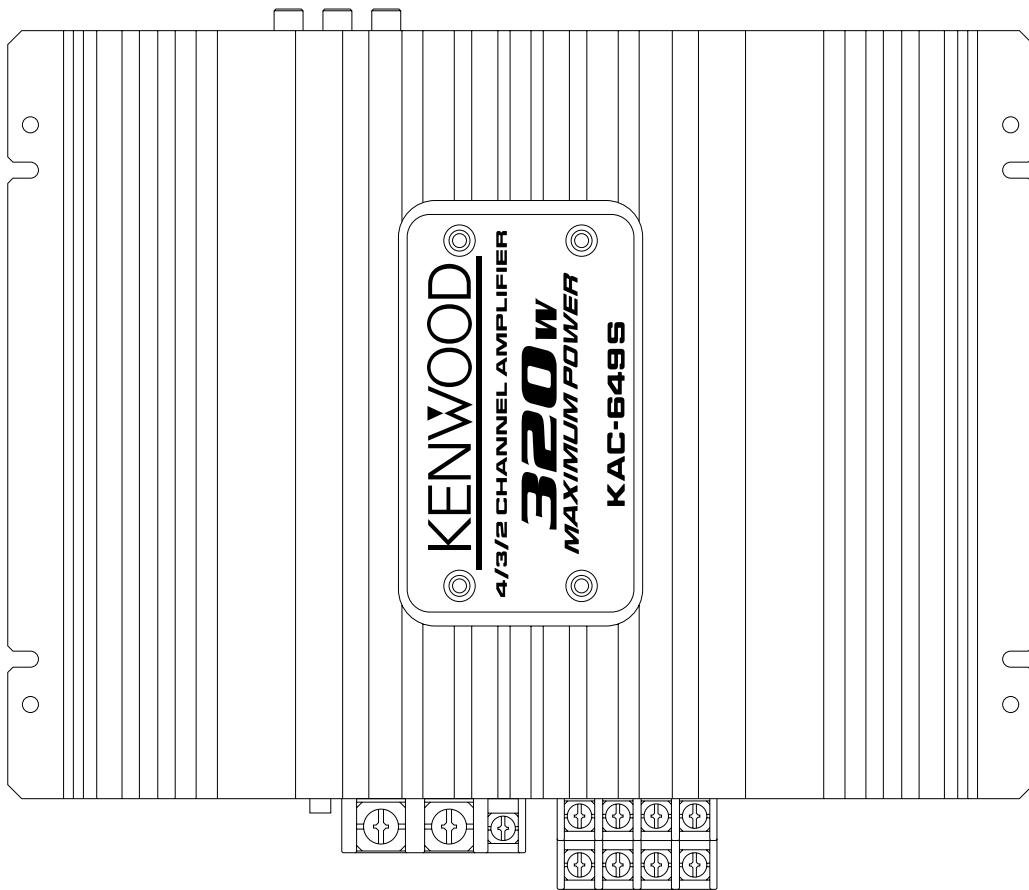
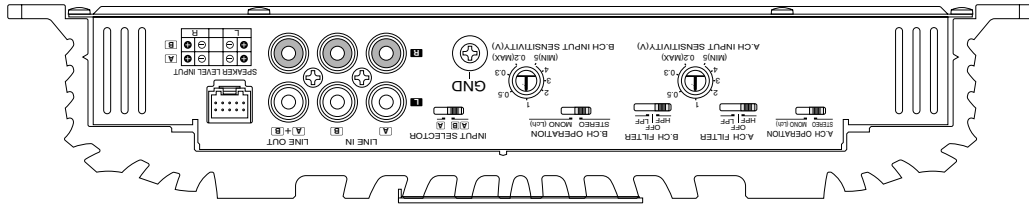
POWER AMPLIFIER

# KAC-649S

## SERVICE MANUAL

# KENWOOD

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B51-7802-00 (K) 3387



# KAC-649S

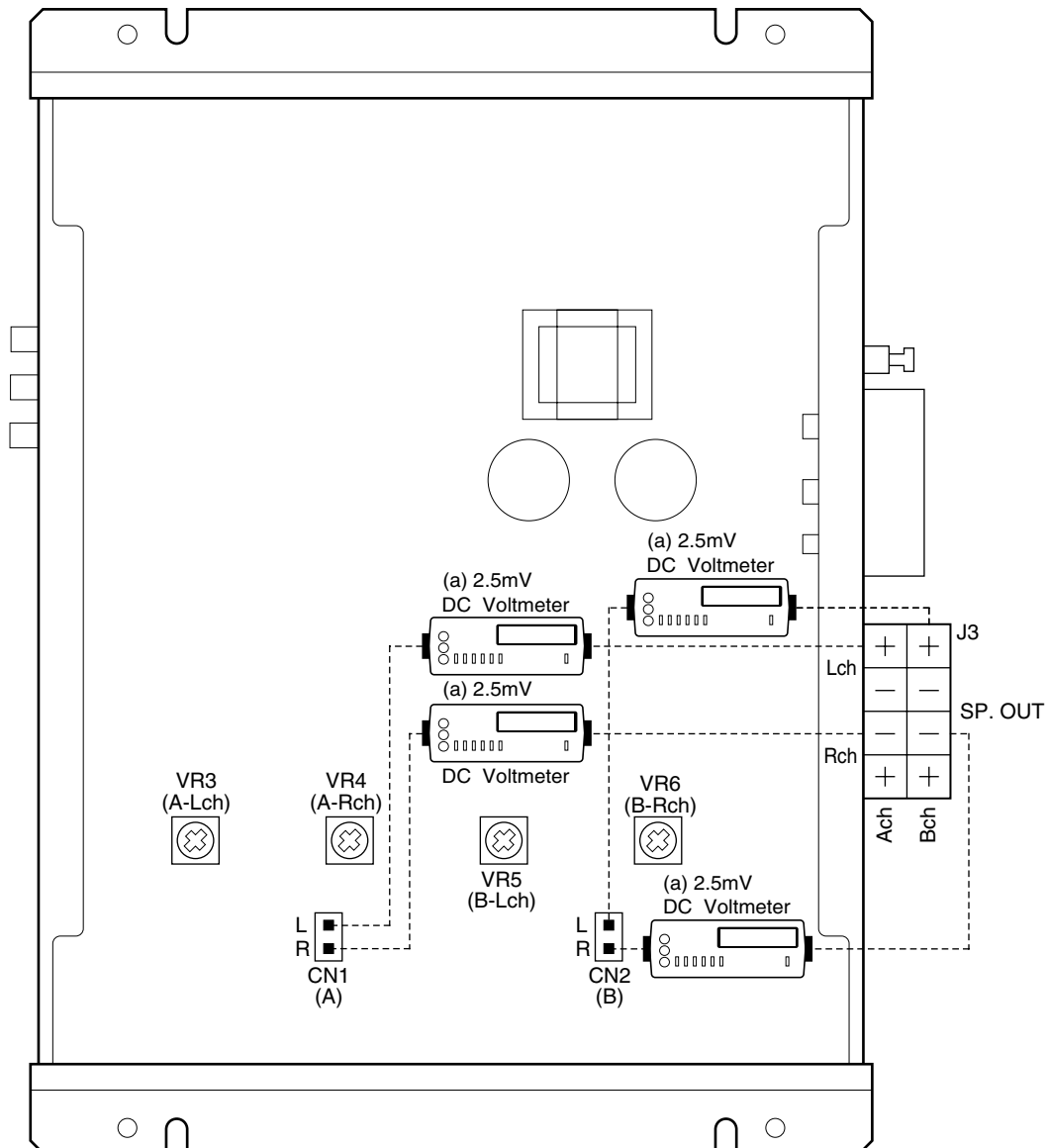
## COMPONENT DESCRIPTION

### AUDIO UNIT (X09-5420-10)

REF. No.	FUNCTION	OPERATION
Q1-4	MUTE	Decreases shock noise in first moment when P.CON. turns on or off.
Q5-12	DIFFERENTIAL AMPLIFIER	
Q13	RIPPLE FILTER	
Q14-17	DIFFERENTIAL AMPLIFIER	
Q18-21	TEMPERATURE COMPENSATION	Detects temperature of the heat sink, and protects bias current drift.
Q22-29	OVER-CURRENT PROTECTION	Detects over-current, and limits the power stage current.
Q30-37	POWER AMPLIFIER DRIVER	
Q38-45	POWER STAGE	
Q46	P.CON. DETECTION	Detects P.CON-ON, and turns Q47 on or off.
Q47	POWER SWITCH	Supplies power to IC5.
Q48	MUTE ON/OFF	Turns Q49 on or off.
Q49	MUTE DRIVER	
Q50,51	SWITCHING POWER STAGE	
Q52	OVER-CURRENT PROTECTION	The detected over-current stops IC5's working.
Q53	OVER-VOLTAGE PROTECTION	When over-voltage puts on BATT, Q53 turns P.CON. off.
Q54,55	CONSTANT VOLTAGE POWER SUPPLY	Supplies + and - 15V power.
Q56,57	SWITCHING DRIVER	
Q58-61	DIFFERENTIAL AMPLIFIER	
IC1,2	INPUT BUFFER / ISOLATION AMPLIFIER	Makes an input signal 6 more dB signal, and cancels automobile noise.
IC3,4	IC3,4 (1/2) : LPF IC3,4 (2/2) : INVERTER	
IC5	SWITCHING REGULATOR	Oscillator for DC/DC converter.

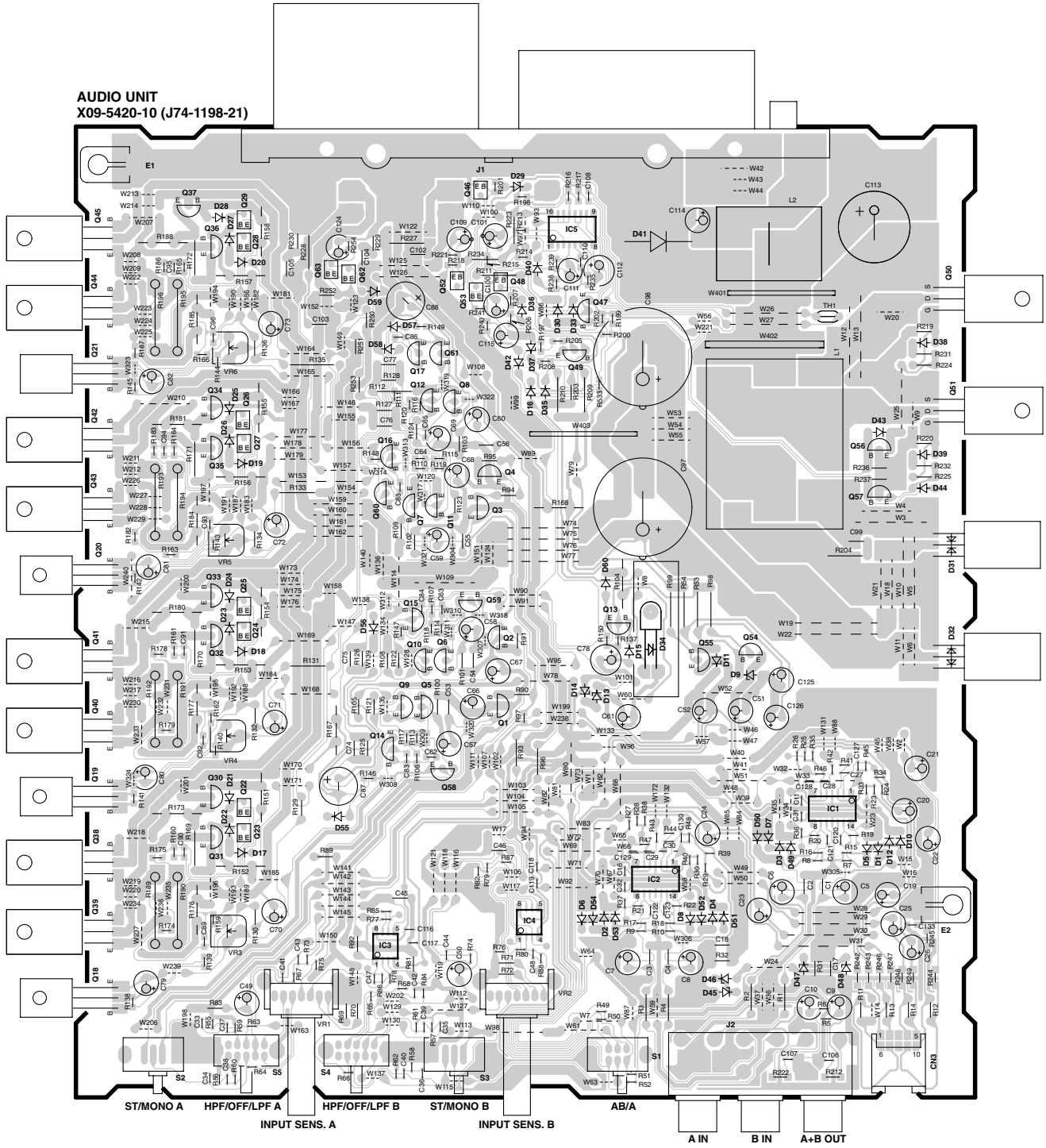
## ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	RECEIVER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
Connect a cassette receiver or CD receiver.							
1	IDEL CURRENT	-	Connect a DC voltmeter between CN1/CN2 and J1 (SP.OUT, L+/R-)	VOLUME : 0	(A) VR3 (L ch) VR4 (R ch) (B) VR5 (L ch) VR6 (R ch)	2.5mV	(a)



# PC BOARD (Component side view)

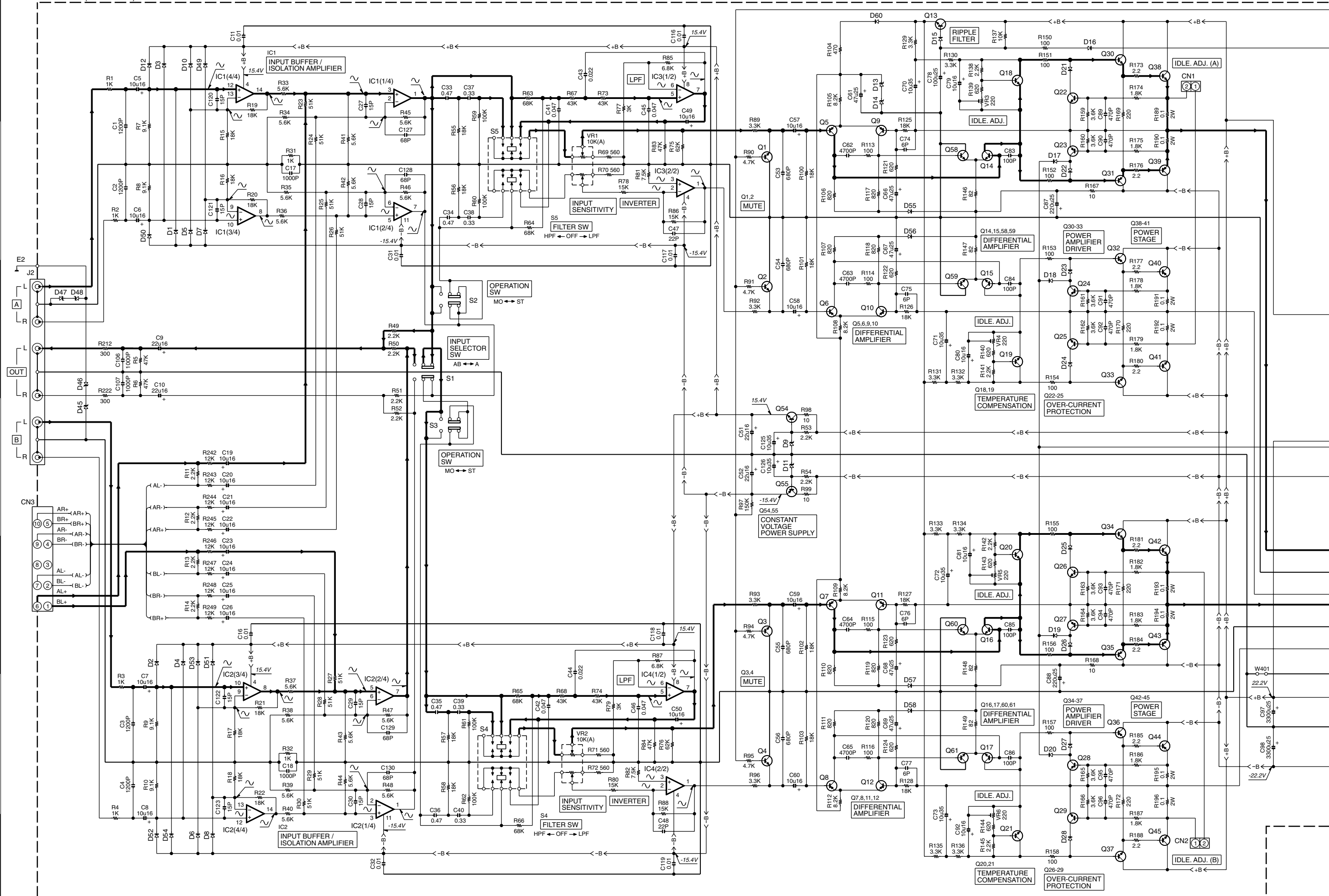
AUDIO UNIT  
X09-5420-10 (J74-1198-21)



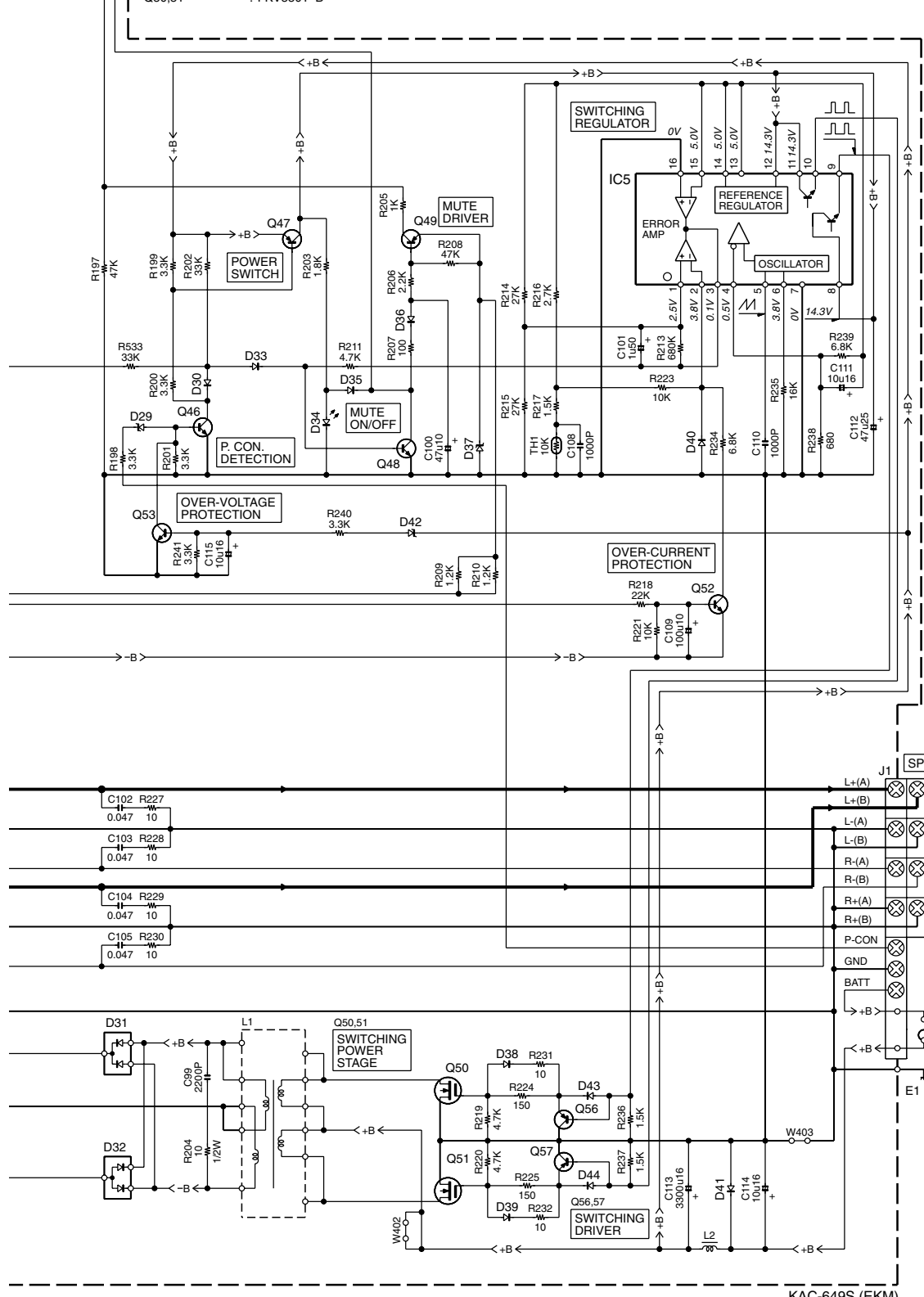
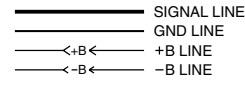
(X09-5420-10)

Ref.No.	IC1	IC2	IC3	IC4	IC5	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
Address	4D	5C	5B	5C	2C	4C	4C	3C	3C	4B	4B	3B	3B	4B	4B	3B	3B	4C	4B	4B	3B	3B	5A	4A	3A
Ref.No.	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q35	Q36	Q37	Q38	Q39	Q40					
Address	3A	4B	5B	4B	4B	3B	3B	2B	2B	4A	5A	4A	4A	3B	3B	2B	2A	5A	5A	4A					
Ref.No.	Q41	Q42	Q43	Q44	Q45	Q46	Q47	Q48	Q49	Q50	Q51	Q52	Q53	Q54	Q55	Q56	Q57	Q58	Q59	Q60	Q61	Q62	Q63		
Address	4A	3A	3A	2A	2A	2C	2C	2C	3C	2E	3E	2B	2C	4D	4D	3D	3D	4B	4C	3B	3B	2B	2B		

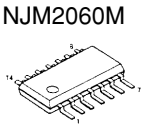
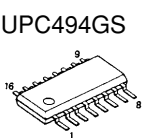
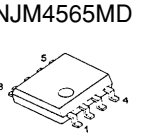
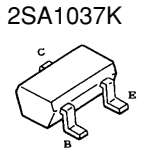
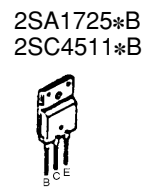
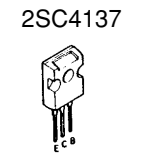
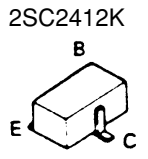
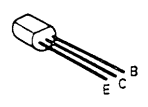
Refer to the schematic diagram for the value of resistors and capacitors.



- |                        |                  |                       |               |
|------------------------|------------------|-----------------------|---------------|
| IC1,2                  | : NJM2060M       | D1-8,10,12,15-28,30,  |               |
| IC3,4                  | : NJM4565MD      | 33,35,36,38-40,43,44, |               |
| IC5                    | : UPC494GS       | 49-58,60              | : 1S5133      |
| Q1-4,13-17,58-61       | : 2SC945(A)(Q,P) | D9,11,42              | : RD16JS(B)   |
| Q5-12,47,49,56,57      | : 2SA733(A)(Q,P) | D13,14                | : RD8,2JS(B)  |
| Q18-21                 | : 2SC4137(V,W)   | D29                   | : RD7,5JS(B)  |
| Q22,25,26,29,46,48,52, |                  | D31                   | : FMU22S-A    |
| 53                     | : 2SC2412K       | D32                   | : FMU22R-A    |
| Q23,24,27,28           | : 2SA1037K       | D34                   | : B30-1460-05 |
| Q30,33,34,37,54        | : 2SC1627A       | D37                   | : RD10JS(B)   |
| Q31,32,35,36,55        | : 2SA817A        | D41                   | : 1N5406-M    |
| Q38,41,42,45           | : 2SC4511*B      | D45-48                | : RD5,1JS(B)  |
| Q39,40,43,44           | : 2SA1725*B      |                       |               |
| Q50,51                 | : FKV550T*B      |                       |               |



- 2SA733(A)
- 2SA817A
- 2SC1627A
- 2SC945(A)
- 2SC2412K
- 2SC4137
- 2SA1725\*B
- 2SC4511\*B
- 2SA1037K
- NJM4565MD
- UPC494GS
- NJM2060M



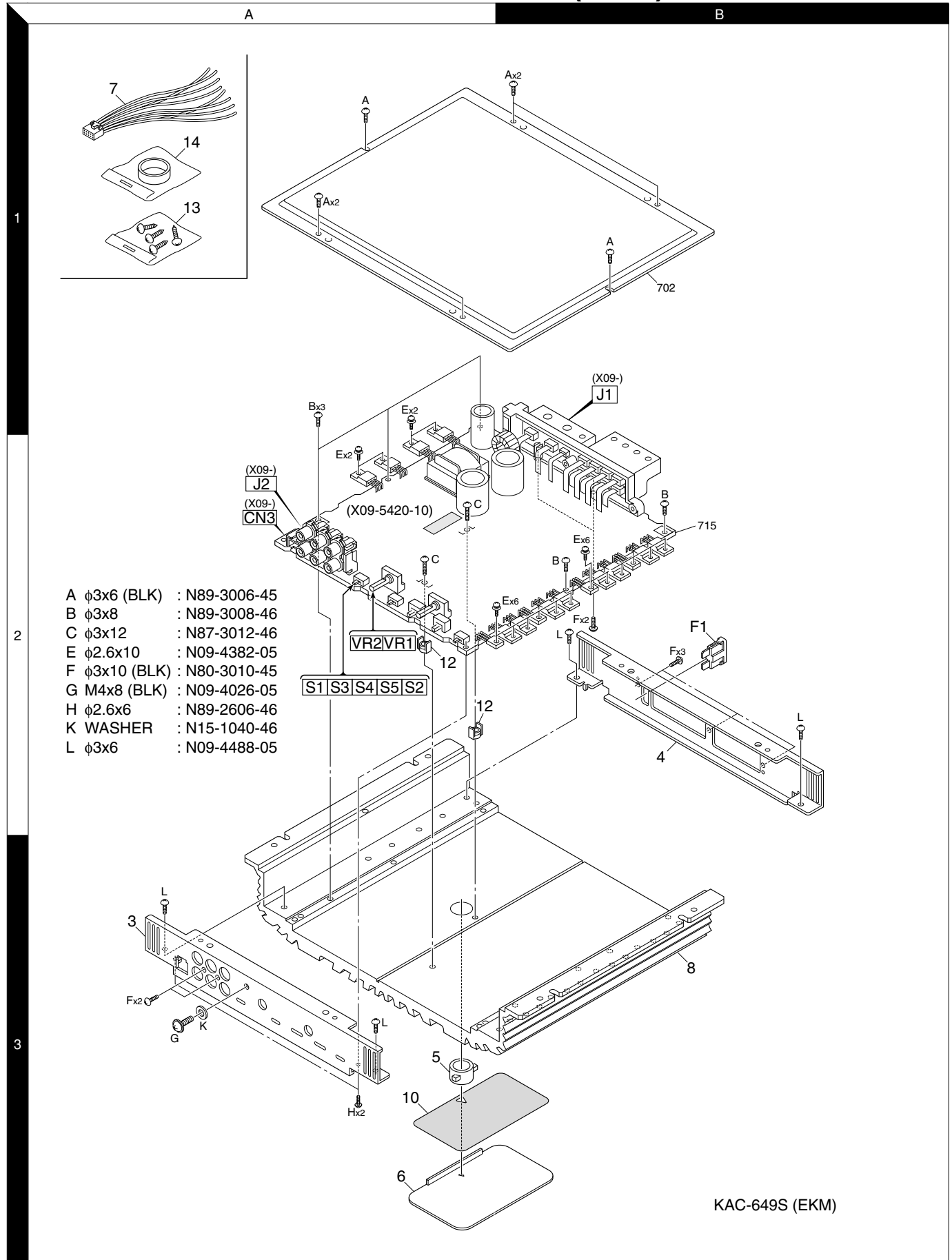
KAC-649S (EKM)

# KAC-649S

## KENWOOD

# KAC-649S

## EXPLODED VIEW (UNIT)



## PARTS LIST

\* New Parts

Parts without Part No. are not supplied.

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

Teile ohne Parts No. werden nicht geliefert.

(X09-5420-10)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
<b>KAC-649S</b>					
3	3A	*	A64-2375-02	FRONT PANEL	
4	2B	*	A84-0284-02	REAR PANEL	
5	3A		B19-2082-04	LIGHTING BOARD	
6	3A	*	B43-1282-03	BADGE	
-			B46-0100-50	WARRANTY CARD	
-		*	B64-1986-00	INST. MANUAL (ENGLISH)	KE1
-		*	B64-1987-00	INST. MANUAL (FRENCH,SPANISH)	KE1
-		*	B64-1988-00	INST. MANUAL (GERMAN,DUTCH)	E1
-		*	B64-1989-00	INST. MANUAL (ITA,POR)	E1
-		*	B64-1990-00	INST. MANUAL (ENGLISH,CHINESE)	M1
7	1A		E30-4949-05	CONNECTING CORD ASSY	
8	3B	*	F01-1663-01	HEAT SINK	
F1	2B		F52-0014-05	FUSE (BLADE TYPE) (25A)	
10	3A		H30-0543-04	ADHESIVE DOUBLE-COATED TAPE	
-			H10-4645-03	POLYSTYRENE FOAMED FIXTURE	
-			H25-0321-04	PROTECTION BAG (600X315X0.03)	
-			H25-0336-04	PROTECTION BAG (170X250X0.03)	
-		*	H54-2081-03	ITEM CARTON CASE	
12	2A		J30-1066-04	SPACER	
13	1A		N99-1587-05	SCREW SET	
A	1A		N89-3006-45	BINDING HEAD TAPTITE SCREW	
B	1A		N89-3008-46	BINDING HEAD TAPTITE SCREW	
C	2A		N87-3012-46	BRAZIER HEAD TAPTITE SCREW	
E	2B		N09-4382-05	TAPTITE SCREW (2.6X10)	
F	2B		N80-3010-45	PAN HEAD TAPTITE SCREW	
G	3A		N09-4026-05	TAPPING SCREW (4X8,TP,S)	
H	3A		N89-2606-46	BINDING HEAD TAPTITE SCREW	
K	2A		N15-1040-46	FLAT WASHER	
L	2B	*	N09-4488-05	TAPTITE SCREW (3X6)	
14	1A		W01-1516-05	TERMINAL COVER SET	
<b>AUDIO UNIT (X09-5420-10)</b>					
D34			B30-1460-05	LED (RED)	
C1 -4			CF92FV1H122J	MF-C 1200PF	J
C5 -8			CE04DW1C100M	ELECTRO 10UF	16WV
C9 ,10			CE04DW1C220M	ELECTRO 22UF	16WV
C11			CK73GB1H103K	CHIP C 0.010UF	K
C16			CK73GB1H103K	CHIP C 0.010UF	K
C17 ,18			CF92FV1H102J	MF-C 1000PF	J
C19 -26			CE04DW1C100M	ELECTRO 10UF	16WV
C27 -30			CC73GCH1H150J	CHIP C 15PF	J
C31 ,32			CK73GB1H103K	CHIP C 0.010UF	K
C33 -36			CK73GB1A474K	CHIP C 0.47UF	K
C37 -40			CK73GB1A334K	CHIP C 0.33UF	K
C41 ,42			CK73GB1E473K	CHIP C 0.047UF	K
C43 ,44			CK73GB1E223K	CHIP C 0.022UF	K
C45 ,46			CF92FV1H473J	MF-C 0.047UF	J
C47 ,48			CC73GCH1H220J	CHIP C 22PF	J
C49 ,50			CE04DW1C100M	ELECTRO 10UF	16WV
C51 ,52			CE04DW1C220M	ELECTRO 22UF	16WV

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
C53 -56			CK45FB1H681K	CERAMIC 680PF	K
C57 -60			CE04DW1C100M	ELECTRO 10UF	16WV
C61			CE04DW1E470M	ELECTRO 47UF	25WV
C62 -65			CK73GB1H472K	CHIP C 4700PF	K
C66 -69			CE04DW1E470M	ELECTRO 47UF	25WV
C70 -73			CE04DW1V100M	ELECTRO 10UF	35WV
C74 -77			CC45FSL1H060D	CERAMIC 6.0PF	D
C78			CE04DW1E101M	ELECTRO 100UF	25WV
C79 -82			CE04DW1C100M	ELECTRO 10UF	16WV
C83 -86			CC73GCH1H101J	CHIP C 100PF	J
C87 ,88			CE04DW1E221M	ELECTRO 220UF	25WV
C89 -96			CC73GCH1H471J	CHIP C 470PF	J
C97 ,98			C90-5376-05	ELECTRO 3300UF	25WV
C99			CF92FV1H222J	MF-C 2200PF	J
C100			CE04DW1A470M	ELECTRO 47UF	10WV
C101			CE04DW1H010M	ELECTRO 1.0UF	50WV
C102-105			CF92FV1H473J	MF-C 0.047UF	J
C106-108			CK73GB1H102K	CHIP C 1000PF	K
C109			CE04DW1A101M	ELECTRO 100UF	10WV
C110			CK73GB1H102K	CHIP C 1000PF	K
C111			CE04DW1C100M	ELECTRO 10UF	16WV
C112			CE04DW1E470M	ELECTRO 47UF	25WV
C113			C90-2689-05	ELECTRO 3300UF	16WV
C114,115			CE04DW1C100M	ELECTRO 10UF	16WV
C116-119			CK73GB1H103K	CHIP C 0.010UF	K
C120-123			CC73GCH1H150J	CHIP C 15PF	J
C125,126			CE04DW1V100M	ELECTRO 10UF	35WV
C127-130			CC73GCH1H680J	CHIP C 68PF	J
CN1 ,2			E40-3640-05	PIN ASSY	
CN3			E58-0919-05	RECTANGULAR RECEPTACLE	
E1 ,2			E23-0149-05	TERMINAL	
J1			E70-0833-05	SCREW TERMINAL BOARD	
J2			E63-0874-05	PIN JACK	
L1			L19-0556-05	TRANSFORMER FOR CONVERTER	
L2		*	L33-1809-05	CHOKE COIL	
F	2B		N80-3010-45	PAN HEAD TAPTITE SCREW	
R1 -4			RD14BB2C102J	RD 1.0K	J 1/6W
R5 -6			RK73GB1J473J	CHIP R 47K	J 1/16W
R7 -10			RK73GB1J912J	CHIP R 9.1K	J 1/16W
R11 -14			RD14BB2C222J	RD 2.2K	J 1/6W
R15 -22			RK73GB1J183J	CHIP R 18K	J 1/16W
R23 -30			RK73GB1J513J	CHIP R 51K	J 1/16W
R31 ,32			RD14BB2C102J	RD 1.0K	J 1/6W
R33 -48			RK73GB1J562J	CHIP R 5.6K	J 1/16W
R49 -52			RK73GB1J222J	CHIP R 2.2K	J 1/16W
R53 ,54			RD14BB2C222J	RD 2.2K	J 1/6W
R55 -58			RK73GB1J183J	CHIP R 18K	J 1/16W
R59 -62			RK73GB1J104J	CHIP R 100K	J 1/16W
R63 -66			RK73GB1J683J	CHIP R 68K	J 1/16W
R67 ,68			RK73GB1J433J	CHIP R 43K	J 1/16W
R69 -72			RD14BB2C561J	RD 560	J 1/6W
R73 ,74			RK73GB1J433J	CHIP R 43K	J 1/16W
R75 ,76			RK73GB1J623J	CHIP R 62K	J 1/16W

E : Europe K : North America M : Other Areas

⚠ indicates safety critical components.



## PARTS LIST

\* New Parts

Parts without **Part No.** are not supplied.

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Teile ohne **Parts No.** werden nicht geliefert.

(X09-5420-10)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R77			RK73GB1J302J	CHIP R 3.0K J 1/16W	
R78			RK73GB1J153J	CHIP R 15K J 1/16W	
R79			RK73GB1J302J	CHIP R 3.0K J 1/16W	
R80			RK73GB1J153J	CHIP R 15K J 1/16W	
R81			RD14BB2C752J	RD 7.5K J 1/6W	
R82			RK73GB1J752J	CHIP R 7.5K J 1/16W	
R83			RD14BB2C473J	RD 47K J 1/6W	
R84			RK73GB1J473J	CHIP R 47K J 1/16W	
R85			RK73GB1J682J	CHIP R 6.8K J 1/16W	
R86			RK73GB1J153J	CHIP R 15K J 1/16W	
R87			RK73GB1J682J	CHIP R 6.8K J 1/16W	
R88			RK73GB1J153J	CHIP R 15K J 1/16W	
R89			RD14BB2C332J	RD 3.3K J 1/6W	
R90 ,91			RD14BB2C472J	RD 4.7K J 1/6W	
R92 ,93			RD14BB2C332J	RD 3.3K J 1/6W	
R94 ,95			RD14BB2C472J	RD 4.7K J 1/6W	
R96			RD14BB2C332J	RD 3.3K J 1/6W	
R97			RK73GB1J154J	CHIP R 150K J 1/16W	
R98 ,99			RD14BB2E100J	RD 10 J 1/4W	
R100-103			RD14BB2C183J	RD 18K J 1/6W	
R104			RD14NB2E471J	RD 470 J 1/4W	
R105			RD14BB2C822J	RD 8.2K J 1/6W	
R106,107			RK73GB1J821J	CHIP R 820 J 1/16W	
R108,109			RD14BB2C822J	RD 8.2K J 1/6W	
R110,111			RK73GB1J821J	CHIP R 820 J 1/16W	
R112			RD14BB2C822J	RD 8.2K J 1/6W	
R113-116			RK73GB1J101J	CHIP R 100 J 1/16W	
R117-120			RK73GB1J821J	CHIP R 820 J 1/16W	
R121-124			RD14BB2C621J	RD 620 J 1/6W	
R125-128			RD14BB2C183J	RD 18K J 1/6W	
R129-136			RD14BB2C332J	RD 3.3K J 1/6W	
R137			RK73GB1J103J	CHIP R 10K J 1/16W	
R138			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R139,140			RK73GB1J621J	CHIP R 620 J 1/16W	
R141,142			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R143,144			RK73GB1J621J	CHIP R 620 J 1/16W	
R145			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R146-149			RK73GB1J820J	CHIP R 82 J 1/16W	
R150			RK73GB1J101J	CHIP R 100 J 1/16W	
R151-158			RD14NB2E101J	RD 100 J 1/4W	
R159-166			RK73GB1J362J	CHIP R 3.6K J 1/16W	
R167,168			RD14NB2E100J	RD 10 J 1/4W	
R169-172			RD14BB2E221J	RD 220 J 1/4W	
R173			RD14NB2E2R2J	RD 2.2 J 1/4W	
R174,175			RK73GB1J182J	CHIP R 1.8K J 1/16W	
R176,177			RD14NB2E2R2J	RD 2.2 J 1/4W	
R178,179			RK73GB1J182J	CHIP R 1.8K J 1/16W	
R180,181			RD14NB2E2R2J	RD 2.2 J 1/4W	
R182,183			RK73GB1J182J	CHIP R 1.8K J 1/16W	
R184,185			RD14NB2E2R2J	RD 2.2 J 1/4W	
R186,187			RK73GB1J182J	CHIP R 1.8K J 1/16W	
R188			RD14NB2E2R2J	RD 2.2 J 1/4W	
R189-196			R92-2115-05	METAL FILM 0.1 J 2W	
R197			RK73GB1J473J	CHIP R 47K J 1/16W	
R198-201			RK73GB1J332J	CHIP R 3.3K J 1/16W	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R202			RK73GB1J333J	CHIP R 33K J 1/16W	
R203			RD14BB2C182J	RD 1.8K J 1/6W	
R204			RD14DB2H100J	SMALL-RD 10 J 1/2W	
R205			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R206			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R207			RK73GB1J101J	CHIP R 100 J 1/16W	
R208			RK73GB1J473J	CHIP R 47K J 1/16W	
R209,210			RD14BB2E122J	RD 1.2K J 1/4W	
R211			RD14BB2C472J	RD 4.7K J 1/6W	
R212			RK73EB2B301J	CHIP R 300 J 1/8W	
R213			RK73GB1J684J	CHIP R 680K J 1/16W	
R214,215			RK73GB1J273J	CHIP R 27K J 1/16W	
R216			RK73GB1J272J	CHIP R 2.7K J 1/16W	
R217			RK73GB1J152J	CHIP R 1.5K J 1/16W	
R218			RK73GB1J223J	CHIP R 22K J 1/16W	
R219,220			RD14BB2C472J	RD 4.7K J 1/6W	
R221			RK73GB1J103J	CHIP R 10K J 1/16W	
R222			RK73EB2B301J	CHIP R 300 J 1/8W	
R223			RD14BB2C103J	RD 10K J 1/6W	
R224,225			RD14BB2C151J	RD 150 J 1/6W	
R227-230			RD14BB2E100J	RD 10 J 1/4W	
R231,232			RD14BB2C100J	RD 10 J 1/6W	
R233			RK73GB1J103J	CHIP R 10K J 1/16W	
R234			RD14BB2C682J	RD 6.8K J 1/6W	
R235			RK73GB1J163J	CHIP R 16K J 1/16W	
R236,237			RD14BB2C152J	RD 1.5K J 1/6W	
R238			RK73GB1J681J	CHIP R 680 J 1/16W	
R239			RK73GB1J682J	CHIP R 6.8K J 1/16W	
R240,241			RK73GB1J332J	CHIP R 3.3K J 1/16W	
R242-249			RK73EB2B123J	CHIP R 12K J 1/8W	
R501-532			RD14BB2E472J	RD 4.7K J 1/4W	
R533			RK73GB1J333J	CHIP R 33K J 1/16W	
VR1 ,2			R31-0232-05	VARIABLE RESISTOR	
VR3 -6			R32-0030-05	SEMI FIXED VARIABLE RESISTOR	
W304-324			R92-1252-05	CHIP R 0 OHM	
S1 -3			S62-0842-05	SLIDE SWITCH	
S4 ,5			S31-2630-05	SLIDE SWITCH	
D1 -8			1SS133	DIODE	
D9			RD16JS(B)	ZENER DIODE	
D10			1SS133	DIODE	
D11			RD16JS(B)	ZENER DIODE	
D12			1SS133	DIODE	
D13 ,14			RD8.2JS(B)	ZENER DIODE	
D15 -28			1SS133	DIODE	
D29			RD7.5JS(B)	ZENER DIODE	
D30			1SS133	DIODE	
D31			FMU22S*A	DIODE	
D32			FMU22R*A	DIODE	
D33			1SS133	DIODE	
D35 ,36			1SS133	DIODE	
D37			RD10JS(B)	ZENER DIODE	
D38 -40			1SS133	DIODE	
D41			1N5406-M	DIODE	
D42			RD16JS(B)	ZENER DIODE	

E : Europe K : North America M : Other Areas

⚠ indicates safety critical components.

## PARTS LIST

\* New Parts


Parts without **Part 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	Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
D43 ,44			1SS133	DIODE							
D45 -48			RD5.1JS(B)	ZENER DIODE							
D49 -58			1SS133	DIODE							
D60			1SS133	DIODE							
IC1 ,2			NJM2060M	ANALOGUE IC							
IC3 ,4			NJM4565MD	IC(OP AMP X2)							
IC5			UPC494GS	ANALOGUE IC							
Q1 -4			2SC945(A)(Q,P)	TRANSISTOR							
Q5 -12			2SA733(A)(Q,P)	TRANSISTOR							
Q13 -17			2SC945(A)(Q,P)	TRANSISTOR							
Q18 -21			2SC4137(V,W)	TRANSISTOR							
Q22			2SC2412K	TRANSISTOR							
Q23 ,24			2SA1037K	TRANSISTOR							
Q25 ,26			2SC2412K	TRANSISTOR							
Q27 ,28			2SA1037K	TRANSISTOR							
Q29			2SC2412K	TRANSISTOR							
Q30			2SC1627A	TRANSISTOR							
Q31 ,32			2SA817A	TRANSISTOR							
Q33 ,34			2SC1627A	TRANSISTOR							
Q35 ,36			2SA817A	TRANSISTOR							
Q37			2SC1627A	TRANSISTOR							
Q38			2SC4511*B	TRANSISTOR							
Q39 ,40			2SA1725*B	TRANSISTOR							
Q41 ,42			2SC4511*B	TRANSISTOR							
Q43 ,44			2SA1725*B	TRANSISTOR							
Q45			2SC4511*B	TRANSISTOR							
Q46			2SC2412K	TRANSISTOR							
Q47			2SA733(A)(Q,P)	TRANSISTOR							
Q48			2SC2412K	TRANSISTOR							
Q49			2SA733(A)(Q,P)	TRANSISTOR							
Q50 ,51			FKV550T*B	FET							
Q52 ,53			2SC2412K	TRANSISTOR							
Q54			2SC1627A	TRANSISTOR							
Q55			2SA817A	TRANSISTOR							
Q56 ,57			2SA733(A)(Q,P)	TRANSISTOR							
Q58 -61			2SC945(A)(Q,P)	TRANSISTOR							
TH1			ERT-D2ZHL103S	THERMISTOR							

E : Europe    K : North America    M : Other Areas

 indicates safety critical components.

# KAC-649S

## SPECIFICATIONS

### Audio Section

Rated Power Output (4Ω)	
A, B Channel (20-20KHz, 0.08% THD).....	30W x 4
A, B Channel (DIN45324, +B=14.4V) .....	30W x 4
Rated Power Output (2Ω)	
A, B Channel (1KHz, 0.8% THD) .....	40W x 4
Bridged Power Output (4Ω, 1KHz, 0.8% THD) .....	80W x 2
Max Power Output (4Ω, Normal) .....	60W x 4
Max Power Output (4Ω, Bridge).....	160W x 2
Low Pass Filter (A, B channel, 12dB/oct.) .....	80Hz
High Pass Filter (A, B channel, 12dB/oct.).....	150Hz
Frequency Response (+0, -3dB).....	5Hz - 50KHz
Signal to Noise Ratio .....	100dB
Sensitivity (Max) (rated output) .....	0.2V
Sensitivity (Min) (rated output) .....	5.0V
Input Impedance .....	10KΩ

### General

Operating Voltage (11V-16V allowable).....	14.4V
Current Consumption (1KHz, 10% THD) .....	18A
Installation Size (Width x Height x Depth).....	261mm x 57mm x 220mm
Weight.....	3.0Kg

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

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