

POWER AMPLIFIER

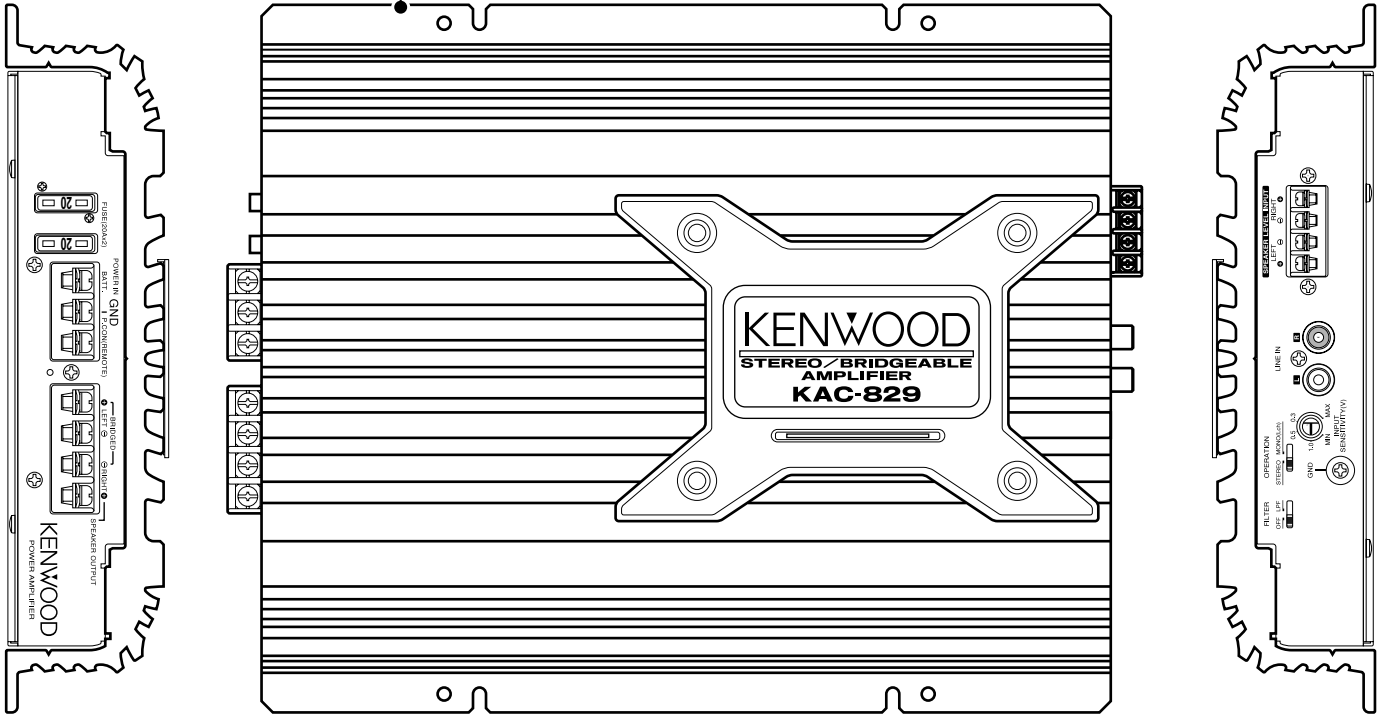
KAC-829

SERVICE MANUAL

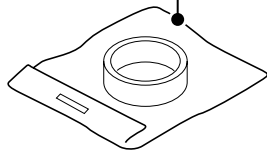
KENWOOD

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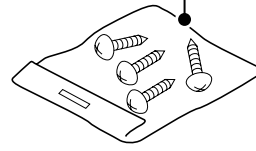
Heat sink
(F01-1657-01)



Accessory
(W01-1516-05)

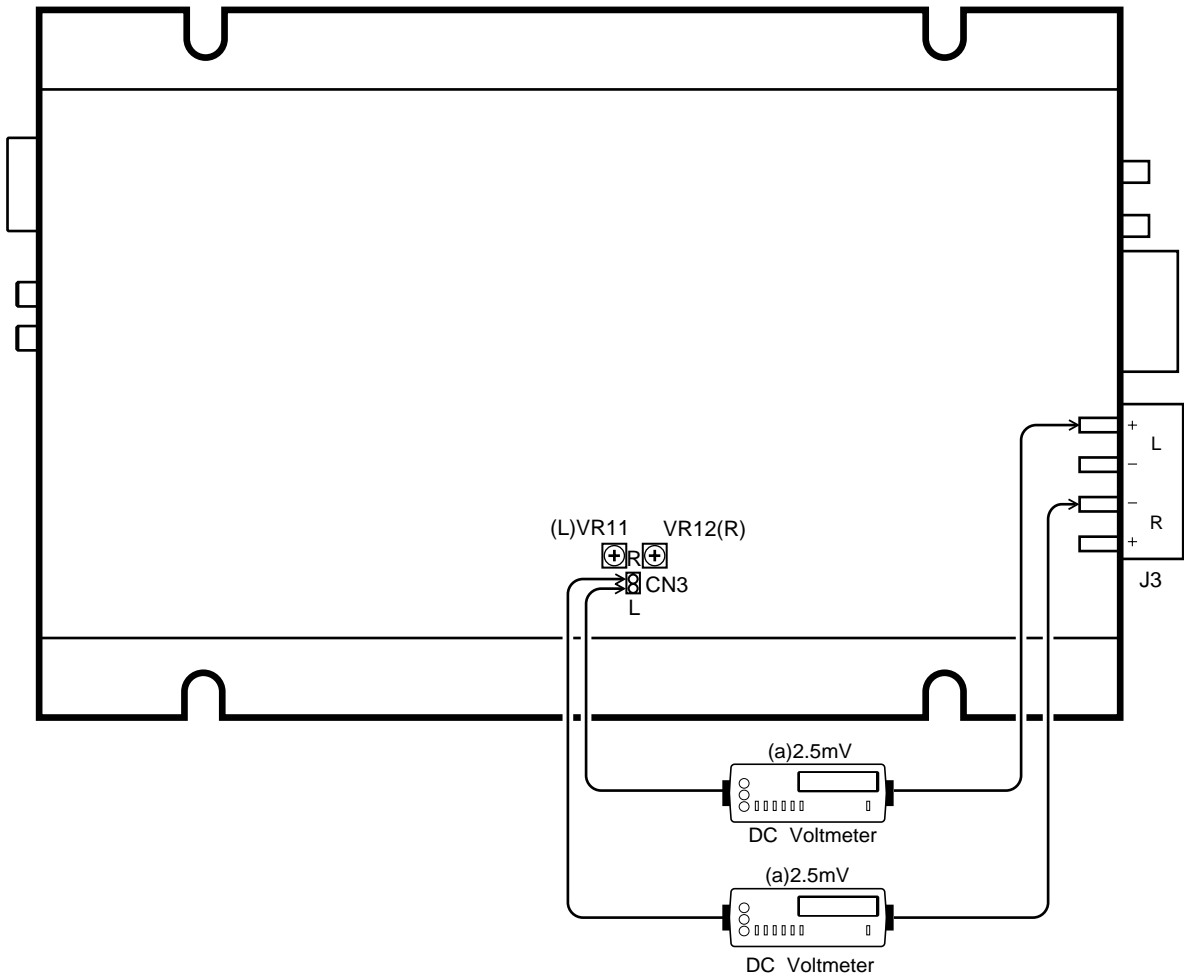


Screw set
(N99-1587-05)



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 CN3 (L/R) and J3 (SP.OUT,L+/R-)	VOLUME : 0	VR11 (L ch) VR12 (R ch) (X09-)	2.5mV	(a)

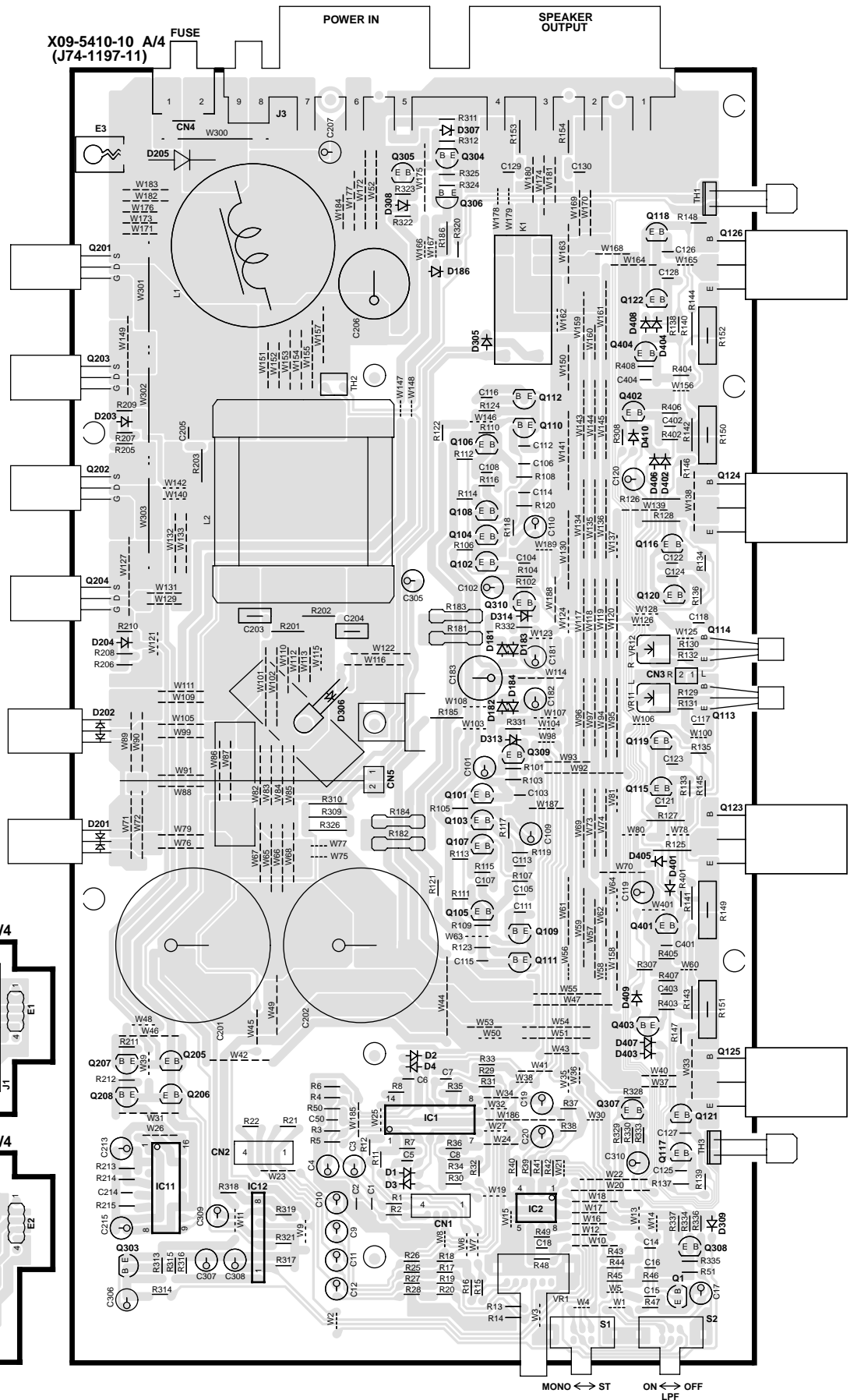


PC BOARD (Component side view)

AUDIO UNIT (X09-5410-10)

(X09-5410-10)

Ref. No.	Address
IC1	6D
IC2	6D
IC11	6B
IC12	6C
Q1	6E
Q101	4D
Q102	3D
Q103	4D
Q104	3D
Q105	5D
Q106	3D
Q107	5D
Q108	3D
Q109	5D
Q110	3D
Q111	5D
Q112	3D
Q113	4E
Q114	4E
Q115	4D
Q116	3D
Q117	6E
Q118	2D
Q119	4D
Q120	4D
Q121	6E
Q122	2D
Q123	4E
Q124	3E
Q125	5E
Q126	2E
Q201	2B
Q202	3B
Q203	3B
Q204	3B
Q205	5B
Q206	6B
Q207	6B
Q208	6B
Q303	6B
Q304	2D
Q305	2C
Q306	2D
Q307	6D
Q308	6E
Q309	4D
Q310	4D
Q401	5D
Q402	3D
Q403	5D
Q404	2D



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

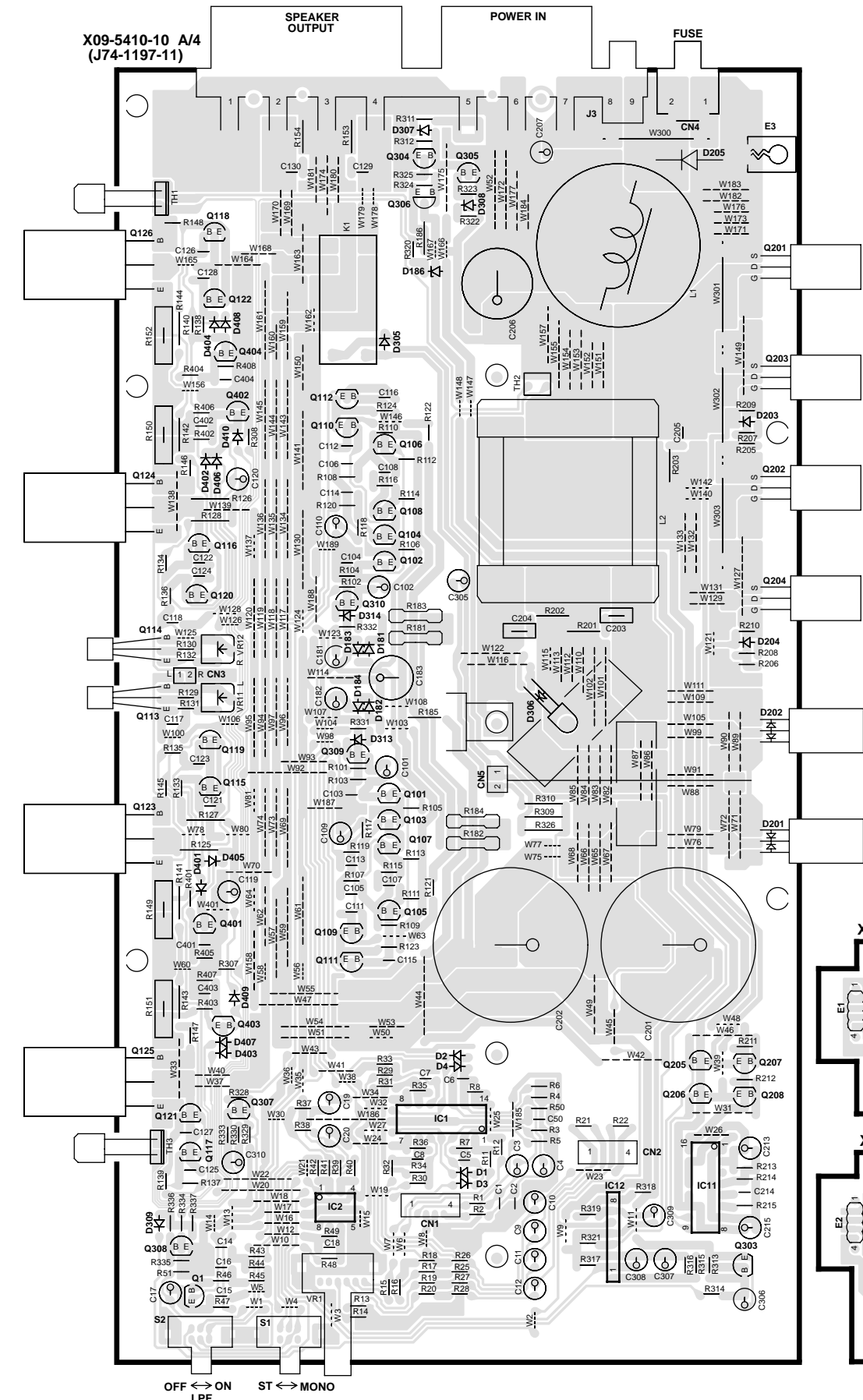
PC BOARD (Foil side view)

AUDIO UNIT (X09-5410-10)

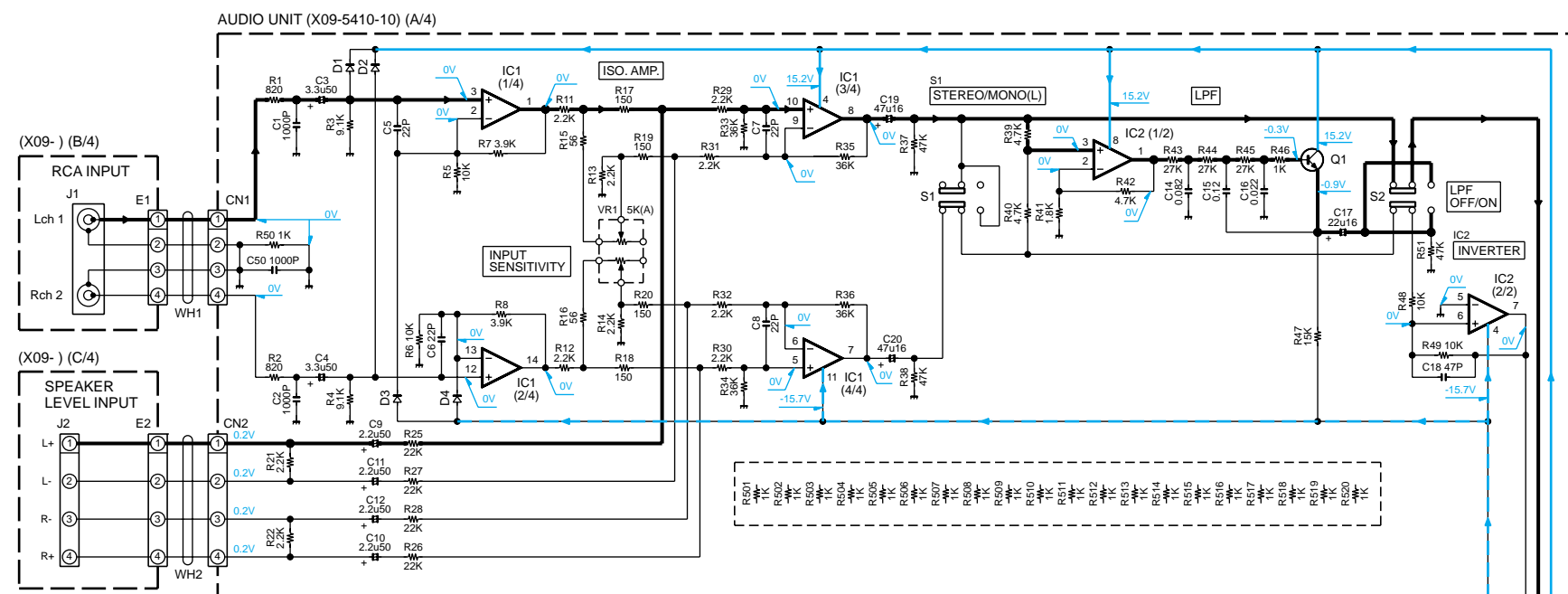
(X09-5410-10)

(X09-5410-10)

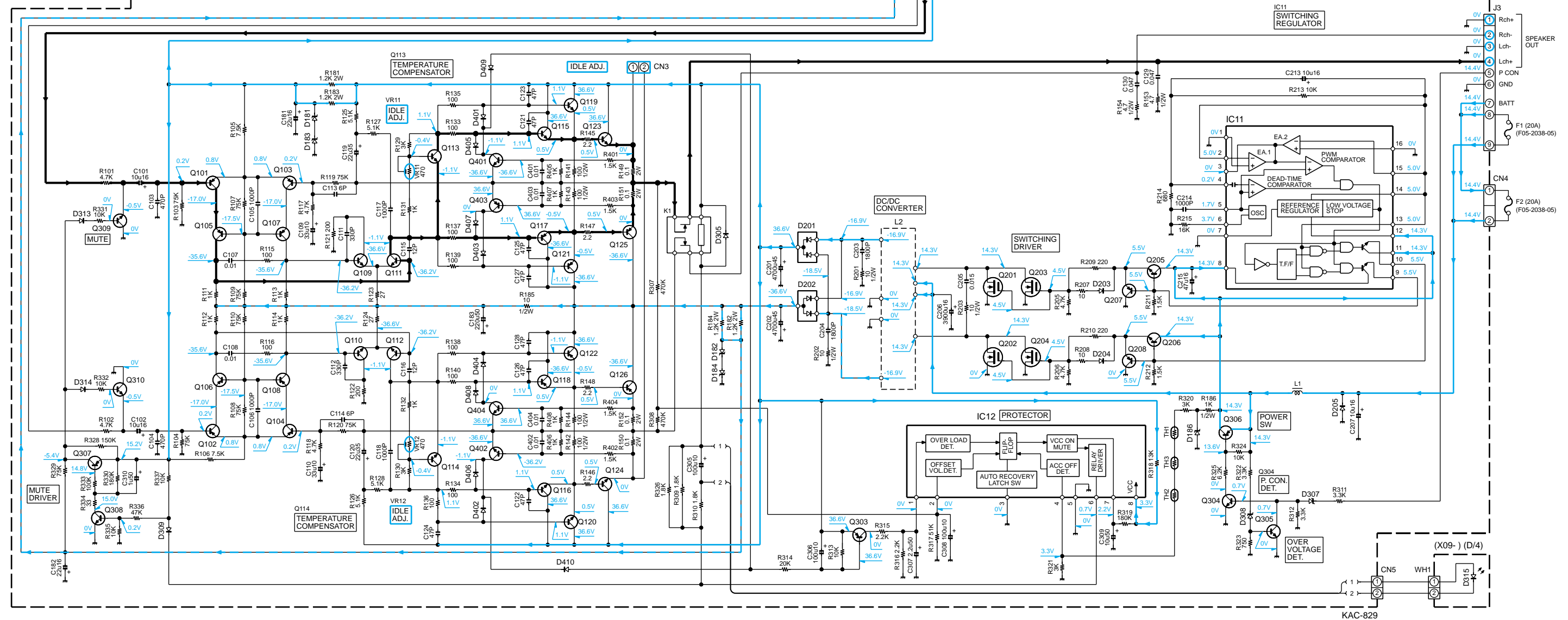
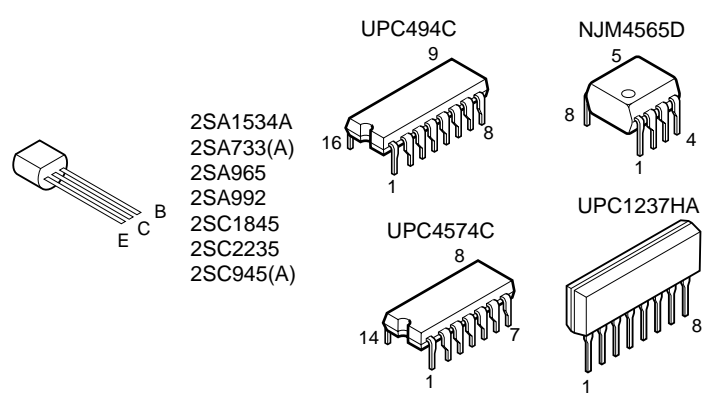
Ref. No.	Address
IC1	6H
IC2	6G
IC11	6I
IC12	6H
Q1	6G
Q101	4H
Q102	3G
Q103	4H
Q104	3G
Q105	5H
Q106	3G
Q107	5H
Q108	3G
Q109	5G
Q110	3G
Q111	5G
Q112	3G
Q113	4F
Q114	4F
Q115	4G
Q116	3G
Q117	6G
Q118	2G
Q119	4G
Q120	4G
Q121	6F
Q122	2G
Q123	4F
Q124	3F
Q125	5F
Q126	2F
Q201	2I
Q202	3I
Q203	3I
Q204	3I
Q205	6I
Q206	6I
Q207	6I
Q208	6I
Q303	6I
Q304	2G
Q305	2H
Q306	2G
Q307	6G
Q308	6F
Q309	4G
Q310	4G
Q401	5G
Q402	3G
Q403	5G
Q404	3G



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



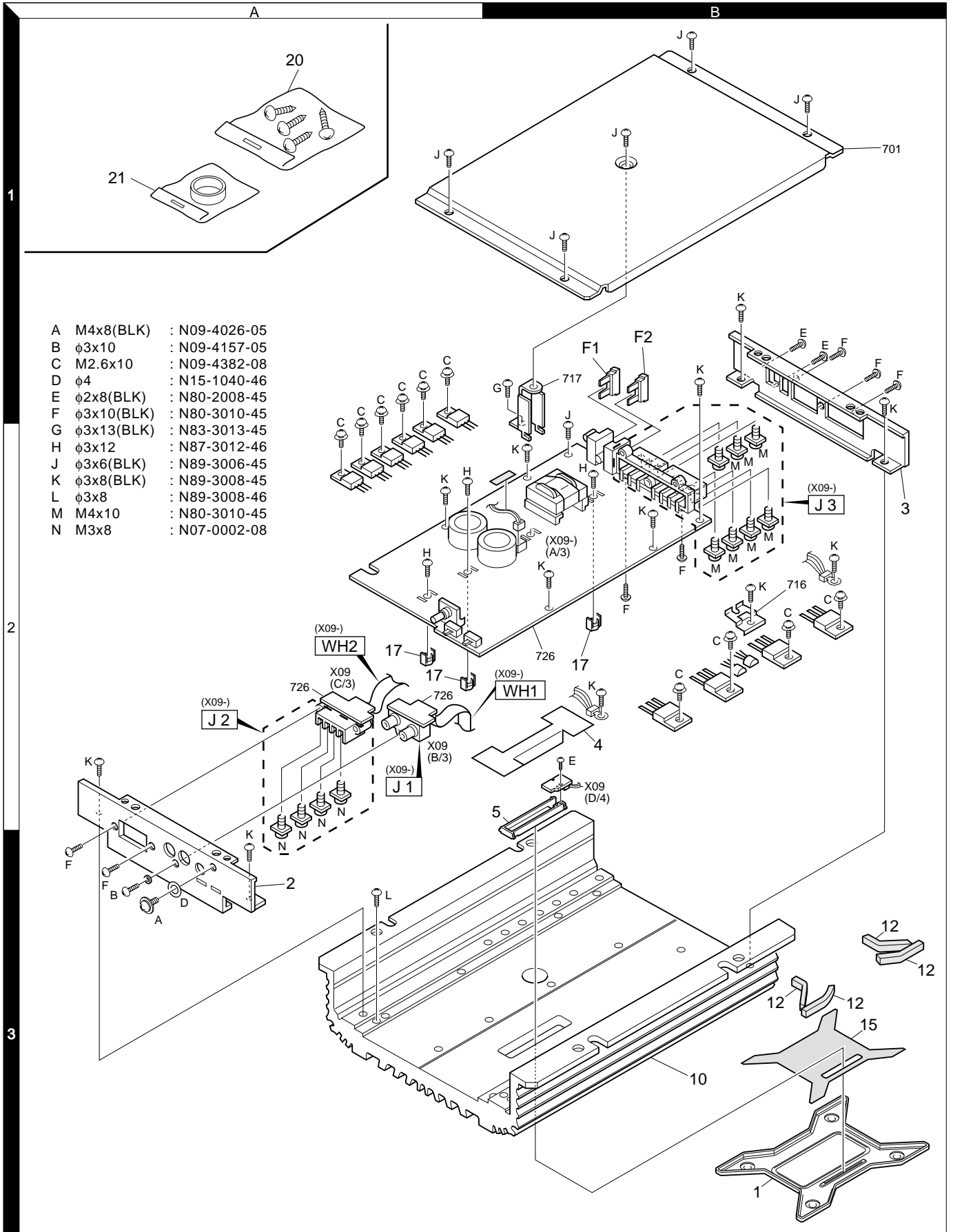
- IC1 : UPC4574C
 IC2 : NJM4565D
 IC11 : UPC494C
 IC12 : UPC1237HA
- Q1,205,206,304,305,308-310 : 2SC945(A)(Q,P)
 Q101-108,207,208,307 : 2SA733(A)(Q,P)
 Q109-112,401,402 : 2SC1845(F,E)
 Q113,114 : 2SA945(A)(Q)
 Q115,116,119,120 : 2SC2235
 Q117,118,121,122 : 2SA965
 Q123,124 : 2SC4388LB+5
 Q125,126 : 2SA1673LB+5
 Q201-204 : IRF110NLF24
 Q303,403,404 : 2SA992(F,E)
 Q306 : 2SA1534A(R,S)
- D1-4,203,204,305,309,313,314,401-410 : 1S133
 D181-184,307 : RD7.5JS(B)
 D186 : RD10JS(B)
 D201 : FML22S+A
 D202 : FML22R+A
 D205 : 1N5406-M
 D308 : RD15JS(B)
 D315 : B30-1613-05



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 in struments or/and units.

EXPLODED VIEW



PARTS LIST

* New Parts

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

Les articles non mentionnes 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	Des- tina- tion
KAC-829					
1	3B	*	A21-4087-02	DRESSING PANEL	
2	3A		A64-2331-02	PANEL	
3	2B		A84-0277-02	REAR PANEL	
4	2B		B11-1337-03	REFLECTION SHEET	
5	2B		B19-2083-03	LIGHTING BOARD	
-			B46-0100-50	WARRANTY CARD	
-		*	B64-1949-00	INSTRUCTION MANUAL E	
-		*	B64-1950-00	INSTRUCTION MANUAL F,S	
10	3B	*	F01-1657-01	HEAT SINK	
△ F1,2	1B		F52-0013-05	FUSE (BLADE TYPE)	
12	3B		G16-1190-04	SHEET	
-			H10-4644-03	POLYSTYRENE FOAMED FIXTURE	
-			H21-1117-04	PROTECTION SHEET	
-			H25-0336-04	PROTECTION BAG (170X250X0.03)	
15	3B		H30-0542-03	ADHESIVE DOUBLE-COATED TAPE	
-		*	H54-2067-03	ITEM CARTON CASE	
17	2A		J30-1066-04	SPACER	
20	1A		N99-1587-05	SCREW SET	
A	3A		N09-4026-05	TAPPING SCREW (4X8,TP,S)	
B	3A		N09-4157-05	SEMS (TAPTITE SCREW)	
C	1A		N09-4382-05	TAPTITE SCREW (2.6X10)	
D	3A		N15-1040-46	FLAT WASHER (φ4)	
E	1B		N80-2008-45	PAN HEAD TAPTITE SCREW	
F	1B		N80-3010-45	PAN HEAD TAPTITE SCREW	
G	1B		N83-3013-45	PAN HEAD TAPTITE SCREW	
H	2A		N87-3012-46	BRAZIER HEAD TAPTITE SCREW	
J	1B		N89-3006-45	BINDING HEAD TAPTITE SCREW	
K	1B		N89-3008-45	BINDING HEAD TAPTITE SCREW	
L	3A		N89-3008-46	BINDING HEAD TAPTITE SCREW	
21	1A		W01-1516-05	ACCESSORY	
AUDIO UNIT (X09-5410-10)					
D315			B30-1613-05	LED (BLUE)	
C1 ,2			CK45FB1H102K	CERAMIC 1000PF K	
C3 ,4			CE04DW1H3R3M	ELECTRO 3.3UF 50WV	
C5 -8			CC45FCH1H220J	CERAMIC 22PF J	
C9 -12			CE04DW1H2R2M	ELECTRO 2.2UF 50WV	
C14			CF92FV1H823J	MF-C 0.082UF J	
C15			CF92FV1H124J	MF-C 0.12UF J	
C16			CF92FV1H223J	MF-C 0.022UF J	
C17			CE04DW1C220M	ELECTRO 22UF 16WV	
C18			CC45FSL1H470J	CERAMIC 47PF J	
C19 ,20			CE04DW1C470M	ELECTRO 47UF 16WV	
C50			CF92FV1H102J	MF-C 1000PF J	
C101,102			CE04DW1C100M	ELECTRO 10UF 16WV	
C103,104			CK45FB1H471K	CERAMIC 470PF K	
C105,106			CF92FV1H102J	MF-C 1000PF J	
C107,108			CF92FV1H103J	MF-C 0.010UF J	
C109,110			CE04DW1A330M	ELECTRO 33UF 10WV	
C111,112			CC45FSL1H331J	CERAMIC 330PF J	

Ref. No.	A d d	N e w	Parts No.	Description	Des- tina- tion
C113,114			CC45FSL1H060D	CERAMIC 6.0PF D	
C115,116			CC45FSL1H120J	CERAMIC 12PF J	
C117,118			CF92FV1H102J	MF-C 1000PF J	
C119,120			CE04DW1V220M	ELECTRO 22UF 35WV	
C121-128			CC45FSL1H470J	CERAMIC 47PF J	
C129,130			CF92FV1H473J	MF-C 0.047UF J	
C181,182			CE04DW1C220M	ELECTRO 22UF 16WV	
C183			CE04DW1H221M	ELECTRO 220UF 50WV	
C201,202			C90-2994-05	ELECTRO 4700UF 45WV	
C203,204			CF92FV1H182J	MF-C 1800PF J	
C205			CF92FV1H153J	MF-C 0.015UF J	
C206			C90-2921-05	ELECTRO 3900UF 16WV	
C207			CE04DW1C100M	ELECTRO 10UF 16WV	
C213			CE04DW1C100M	ELECTRO 10UF 16WV	
C214			CF92FV1H102J	MF-C 1000PF J	
C215			CE04DW1C470M	ELECTRO 47UF 16WV	
C305,306			CE04DW1A101M	ELECTRO 100UF 10WV	
C307			CE04DW1H2R2M	ELECTRO 2.2UF 50WV	
C308			CE04DW1A101M	ELECTRO 100UF 10WV	
C309			CE04DW1H100M	ELECTRO 10UF 50WV	
C310			CE04DW1H010M	ELECTRO 1.0UF 50WV	
C401-404			CF92FV1H103J	MF-C 0.010UF J	
CN1 ,2			E40-9472-05	FLAT CABLE CONNECTOR	
CN3			E40-3640-05	PIN ASSY	
CN5			E40-3246-05	PIN ASSY	
E3			E23-0149-05	TERMINAL	
J1			E63-0834-05	PIN JACK	
J2			E70-0824-05	SCREW TERMINAL BOARD	
J3			E70-0823-05	SCREW TERMINAL BOARD	
WH1			E39-0417-05	WIRING HARNESS	
△ CN4			J13-0602-05	FUSE HOLDER	
L1			L33-1015-05	CHOKE COIL	
L2			L19-0569-05	TRANSFORMER FOR CONVERTER	
R141-144			RD14DB2H101J	SMALL-RD 100 J 1/2W	
R149-152			R92-0205-05	METAL-PLATE 0.1 K 2W	
R153,154			RD14DB2H4R7J	SMALL-RD 4.7 J 1/2W	
R181-184			RS14KB3D122J	FL-PROOF RS 1.2K J 2W	
R185			RD14DB2H100J	SMALL-RD 10 J 1/2W	
R186			RD14DB2H102J	SMALL-RD 1.0K J 1/2W	
R201-203			RD14DB2H100J	SMALL-RD 10 J 1/2W	
VR1			R31-0209-05	VARIABLE RESISTOR	
VR11,12			R32-0032-05	SEMI FIXED VARIABLE RESISTOR	
K1			S76-0804-05	MAGNETIC RELAY	
S1 ,2			S62-0845-05	SLIDE SWITCH	
D1 -4			1SS133	DIODE	
D181-184			RD7.5JS(B)	ZENER DIODE	
D186			RD10JS(B)	ZENER DIODE	
D201			FML22S*A	DIODE	
D202			FML22R*A	DIODE	
D203,204			1SS133	DIODE	
D205			1N5406-M	DIODE	
D305			1SS133	DIODE	

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Ref. No.	A d d	N e w	Parts No.	Description	Des- tina- tion
D307			RD7.5JS(B)	ZENER DIODE	
D308			RD15JS(B)	ZENER DIODE	
D309			1SS133	DIODE	
D313,314			1SS133	DIODE	
D401-410			1SS133	DIODE	
IC1			UPC4574C	IC(OP AMP X4)	
IC2			NJM4565D	ANALOGUE IC	
IC11			UPC494C	IC(SWITCHING REGULATOR)	
IC12			UPC1237HA	IC(POWER AMP)	
Q1			2SC945(A)(Q,P)	TRANSISTOR	
Q101-108			2SA733(A)(Q,P)	TRANSISTOR	
Q109-112			2SC1845(F,E)	TRANSISTOR	
Q113,114			2SC945(A)(Q)	TRANSISTOR	
Q115,116			2SC2235	TRANSISTOR	
Q117,118			2SA965	TRANSISTOR	
Q119,120			2SC2235	TRANSISTOR	
Q121,122			2SA965	TRANSISTOR	
Q123,124			2SC4388LB*5	TRANSISTOR	
Q125,126			2SA1673LB*5	TRANSISTOR	
Q201-204			IRFI1010N	FET	
Q205,206			2SC945(A)(Q,P)	TRANSISTOR	
Q207,208			2SA733(A)(Q,P)	TRANSISTOR	
Q303			2SA992(F,E)	TRANSISTOR	
Q304,305			2SC945(A)(Q,P)	TRANSISTOR	
Q306			2SA1534A(R,S)	TRANSISTOR	
Q307			2SA733(A)(Q,P)	TRANSISTOR	
Q308-310			2SC945(A)(Q,P)	TRANSISTOR	
Q401,402			2SC1845(F,E)	TRANSISTOR	
Q403,404			2SA992(F,E)	TRANSISTOR	
TH1			PTH9M04BD222T	POSITIVE RESISTOR	
TH2			PTH9L04BD222TS	POSITIVE RESISTOR	
TH3			PTH9M04BD222T	POSITIVE RESISTOR	

KAC-829

SPECIFICATIONS

Audio Section

Max Power Output (4Ω)	
Normal	200W × 2
Bridge	600W × 1
Rated Power Output (4Ω)	
Normal (20Hz ~ 20kHz, 0.08% THD)	100W × 2
Normal (DIN45324, +B =14.4V)	100W × 2
Bridge (1kHz, 0.8% THD)	300W × 1
Rated Power Output (2Ω)	
Normal (1kHz, 0.8% THD)	150W × 2
Frequency Response (+0, -1dB)	5Hz ~ 50kHz
Signal to Noise Ratio	100dB
Sensitivity (MAX) (rated output)	0.2V
Sensitivity (MIN) (rated output)	5.0V
Input Impedance	10kΩ
Low Pass Filter (12dB/oct.)	80Hz

General

Operating Voltage (11V ~ 16V allowable)	14.4V
Current Consumption (1kHz, 10% THD)	28A
Dimensions (Width × Height × Depth)	221mm × 57mm × 300mm
Weight	3.8kg

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