

# STEREO INTEGRATED AMPLIFIER

# KAF-1030/3030R/3030R-S

## SERVICE MANUAL

# KENWOOD

© 2000-3/B51-5611-00 (K/K) 1704

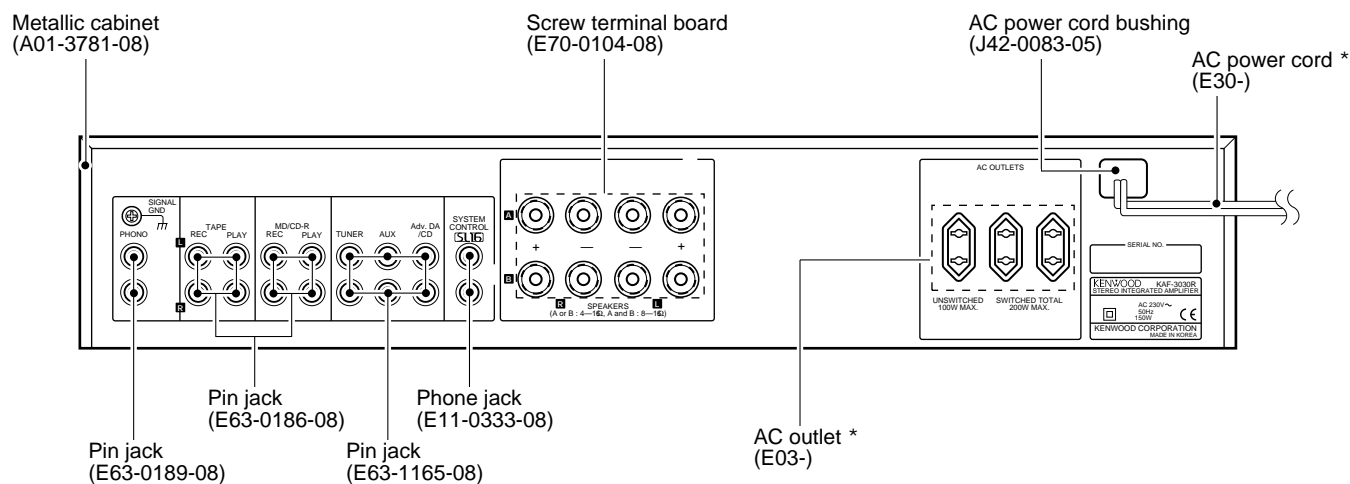
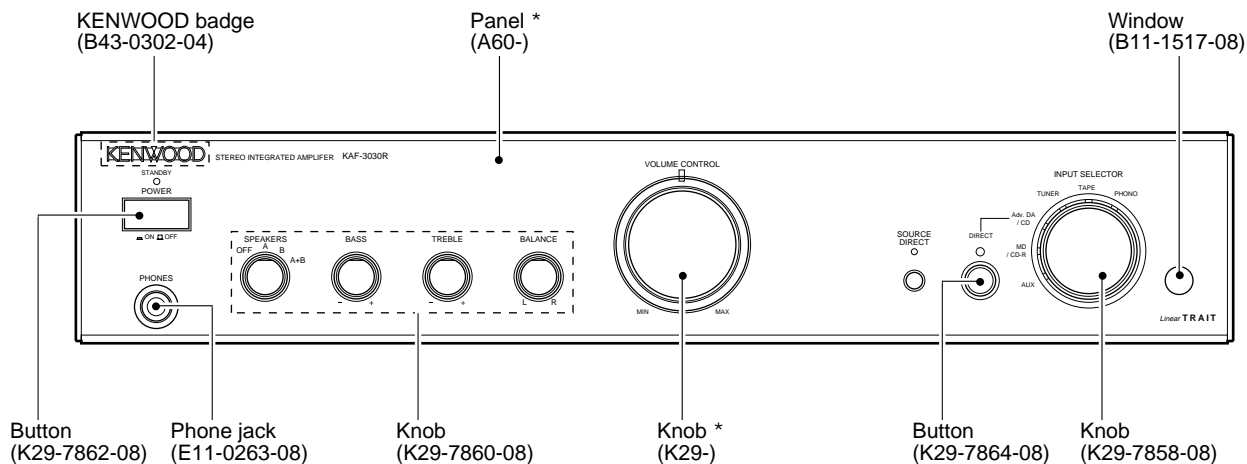


Illustration is KAF-3030R.  
\* Refer to parts list on page 16.

**Caution:** No connection of ground line if disassemble the unit.  
Please connect the ground line on rear panel, PCBs, Chassis and some others.



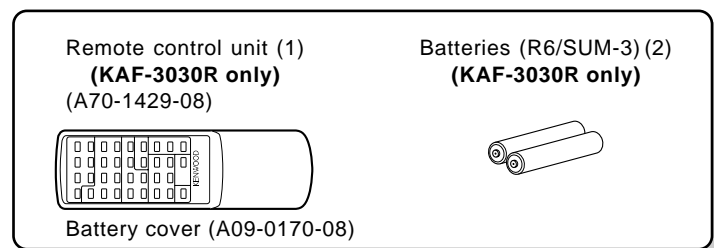
# KAF-1030/3030R

## CONTENTS / ACCESSORIES

### Contents

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### Accessories



### Cautions

#### *Operation to reset*

The microcomputer may fall into malfunction (impossibility to operate, erroneous display, etc.) when the power cord is unplugged while power is ON or due to an external factor. In this case, execute the following procedure to reset the microcomputer and return it to normal condition.

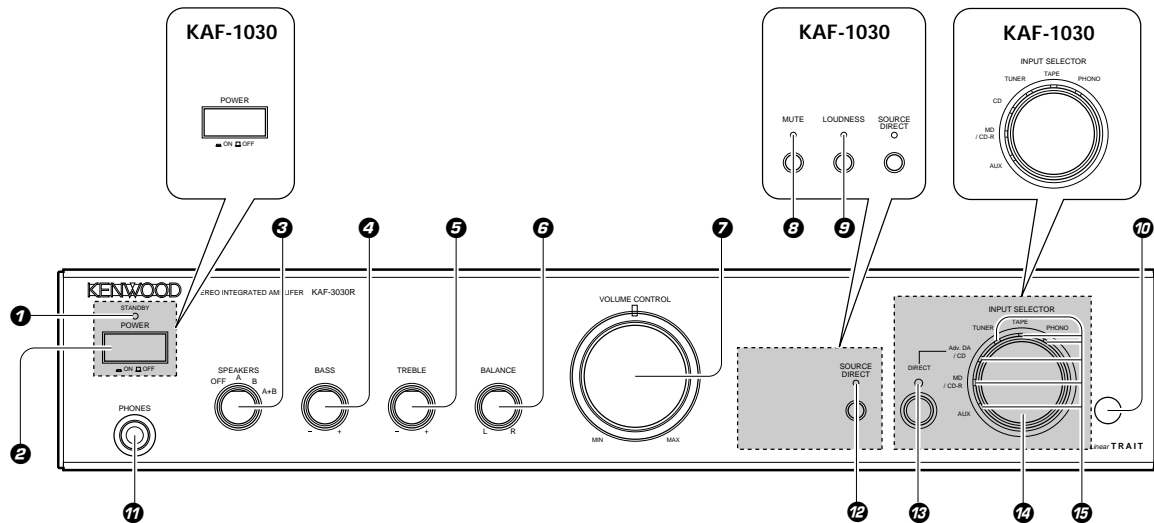
Set the POWER to OFF then, while holding down the SOURCE DIRECT key, set the POWER switch to ON.

- Please note that resetting the microcomputer clears the contents stored in it and returns it to the condition when it left the factory.

# KAF-1030/3030R

## CONTROLS

### Main unit




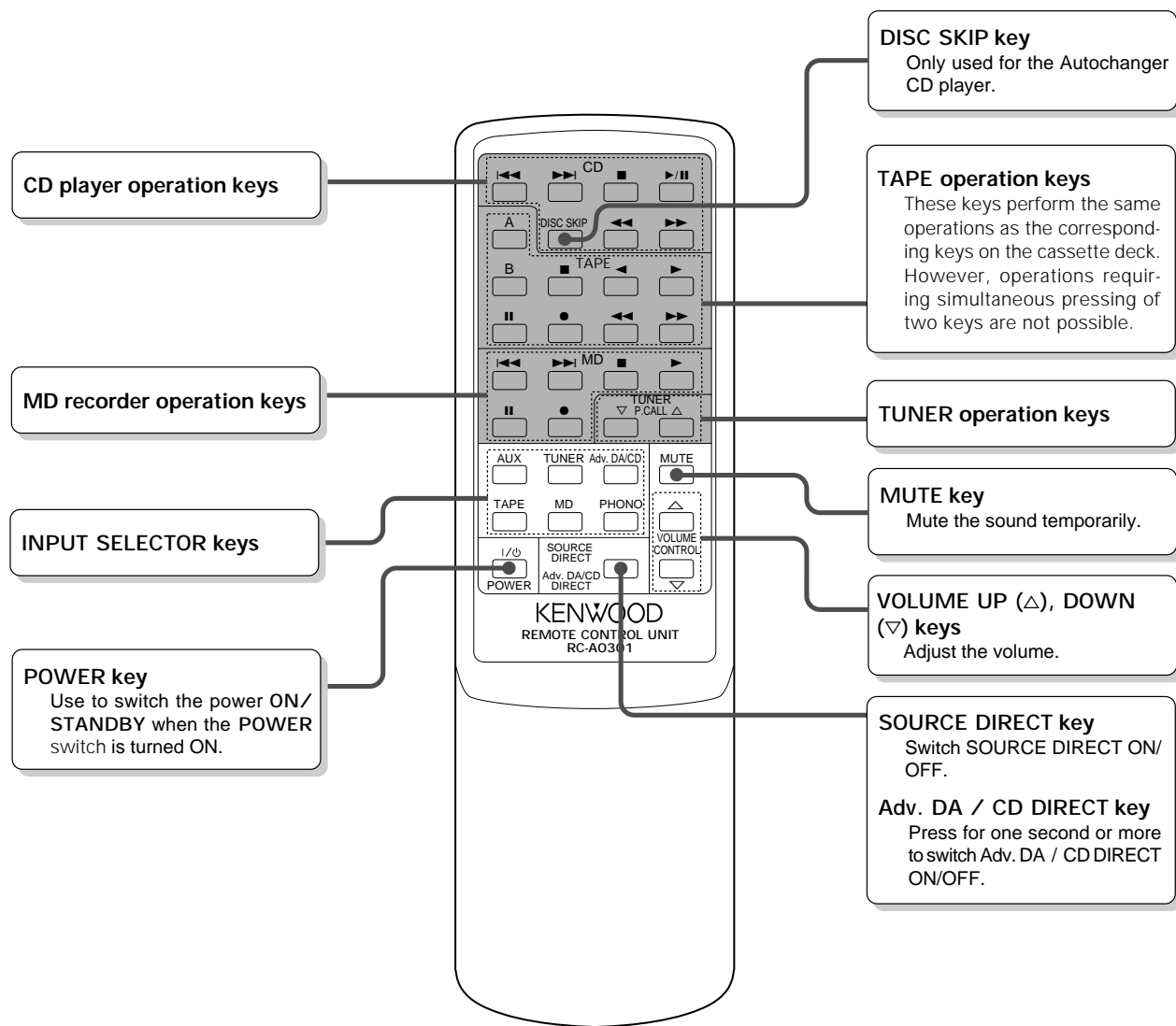
- 1** **STANDBY indicator (KAF-3030R only)**
- 2** **POWER switch**
- 3** **SPEAKERS A/B switches**  
Turn to select the A and/or B speakers systems.
- 4** **BASS knob**  
To adjust low frequencies.
- 5** **TREBLE knob**  
To adjust high frequencies.
- 6** **BALANCE knob**  
Adjust the volume balance between left and right.
- 7** **VOLUME CONTROL knob**  
Adjust the volume.
- 8** **MUTE key/indicator (KAF-1030 only)**  
Mute the sound temporarily.
- 9** **LOUDNESS key/indicator (KAF-1030 only)**  
Use to emphasize deep bass sounds.
- 10** **Remote Sensor (KAF-3030R only)**
- 11** **PHONES jack**  
Used for headphone listening.
- 12** **SOURCE DIRECT key/indicator**  
To listen to a source with high quality sound.
- 13** **Adv. DA / CD DIRECT key/indicator (KAF-3030R only)**  
To listen to a Advanced Digital Audio source with high quality sound.
- 14** **INPUT SELECTOR knob**  
Turn to select the input sources.
- 15** **INPUT indicator**  
An indicator lights for the source selected with the **INPUT SELECTOR** knob.

# KAF-1030/3030R

## CONTROLS

### Remote control unit (KAF-3030R only)

The  part of the illustration designates keys that can be used to operate KENWOOD components connected with the system control. The rest of the illustration designates keys that have the same functions as the keys on the main unit.



Model: RC-A0301  
Infrared ray system

# KAF-1030/3030R

## CIRCUIT DESCRIPTIONS

### 1. Microprocessor

#### Pin description

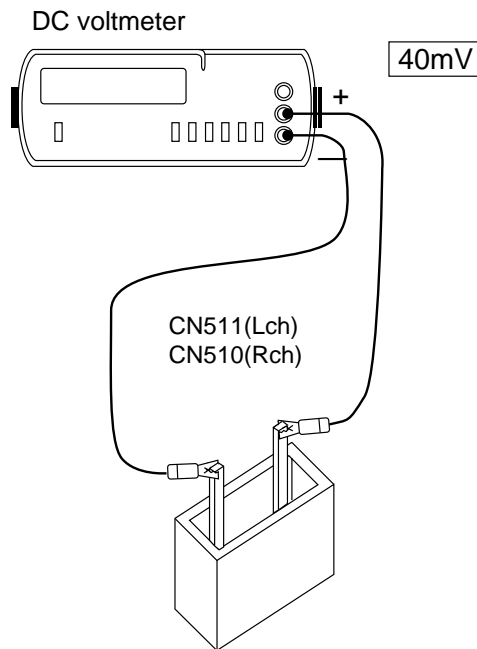
Pin No.	Pin Name	I/O	Description	ACTIVE	
				H	L
1	VDD	-	Power supply(+5.0V).		
2	REMOCON	I	Remote control signal input. KAF-3030 only		
3	VDD	-	Power supply(+5.0V).		
4,5	NC	-	Unused.		
6	MAIN MUTE	O	Control port of audio muting.	OFF	ON
7	MD REC MUTE	O	MD REC muting control.		
8	TAPE REC MUTE	O	TAPE REC muting control.		
9	POWER RELAY	O	Control port of standby relay.		
10	SP. RELAY A	O	A speaker relay control.		
11	SP. RELAY B	O	B speaker relay control.		
12	DVD RELAY	O	DVD relay control port.		
13-15	NC	-	Unused.		
16	SP. A IN	I	Input port of A speaker selector.		
17	SP. B IN	I	Input port of B speaker selector.		
18	NC	-	Unused.		
19	STB	O	Strobe output to input selector.		
20	CLK	O	Clock output to input selector.		
21	DATA	O	Data output to input selector.		
22	SYSCON DATA	I/O	System serial data input/output. KAF-3030 only		
23	SYSCON BUSY	I/O	System serial busy input/output. KAF-3030only		
24	KEY IN	I	Input port of key signal.		
25	VOLUME DOWN	O	Control port of motor volume(down).	ON	OFF
26	VOLUME UP	O	Control port of motor volume(up).	ON	OFF
27	MD/CD-R LED	O	Control port of MD/CD-R LED.		
28	TAPE LED	O	Control port of TAPE LED.		
29	AUX LED	O	Control port of AUX LED.		
30	RESET	I	Reset signal input.		
31	EXTAL	-	10MHz oscillator.		
32	XTAL	-	10MHz oscillator.		
33	VSS	-	Ground.		
34	TUNER LED	O	Control port of TUNER LED.		
35	CD/AD-DA CD	O	Control port of CD/AD-DA CD LED.		
36	PHONO LED	O	Control port of PHONO LED.		
37	DVD DIRECT LED	O	Control port of DVD DIRECT LED.		
38	SOURCE LED	O	Control port of SOURCE LED. KAF-3030 only		
39	LOUDNESS LED	O	Control port of SOURCE LED. KAF-1030 only		
40	MUTE LED	O	Control port of MUTE LED. KAF-1030 only		
41	STNDBY LED	O	Control port of STANDBY LED. KAF-3030 only		
42	MAIN VOL. LED	O	Control port of vol. LED.		
43	LOUDNESS	O	Control port of loudness. LED. KAF-1030 only	OFF	ON
44-71	NC	-	Unused.		
72	VDD	-	Power supply(+5.0V).		
73	NC	-	Unused.		
74,75	ENCODER IN	I	Data input of encoder(input selector).		
76,77	ENCODER SP	-	Unused.		
78	POWER OFF	I	Power off signal input.	OFF	ON
79	PROTECTION	I	Detection port of protection.	OFF	ON
80	3030/1030 SEL	-	Unused.		

# KAF-1030/3030R

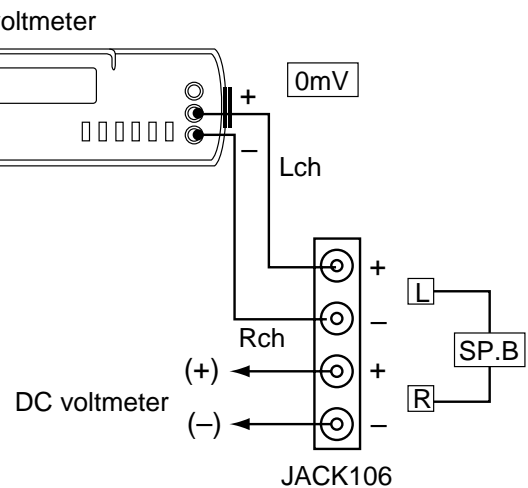
## ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	AMPLIFIER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
Unless otherwise specified, the individual switches should be set as following : POWER : ON      SPEAKER : B      SELECTOR : CD							
1	IDLE CURRENT	—	Connect a DC voltmeter as figure CN511 (Lch), CN510 (Rch). (MAIN PCB)	VOLUME : 0	VR203 (Lch) VR204 (Rch) (MAIN PCB)	40 mV	(a)
2	OFF SET	—	Connect a DC voltmeter to speaker terminal (JACK106) as figure.	VOLUME : 0	VR201 (Lch) VR202 (Rch) (MAIN PCB)	0 mV	(b)

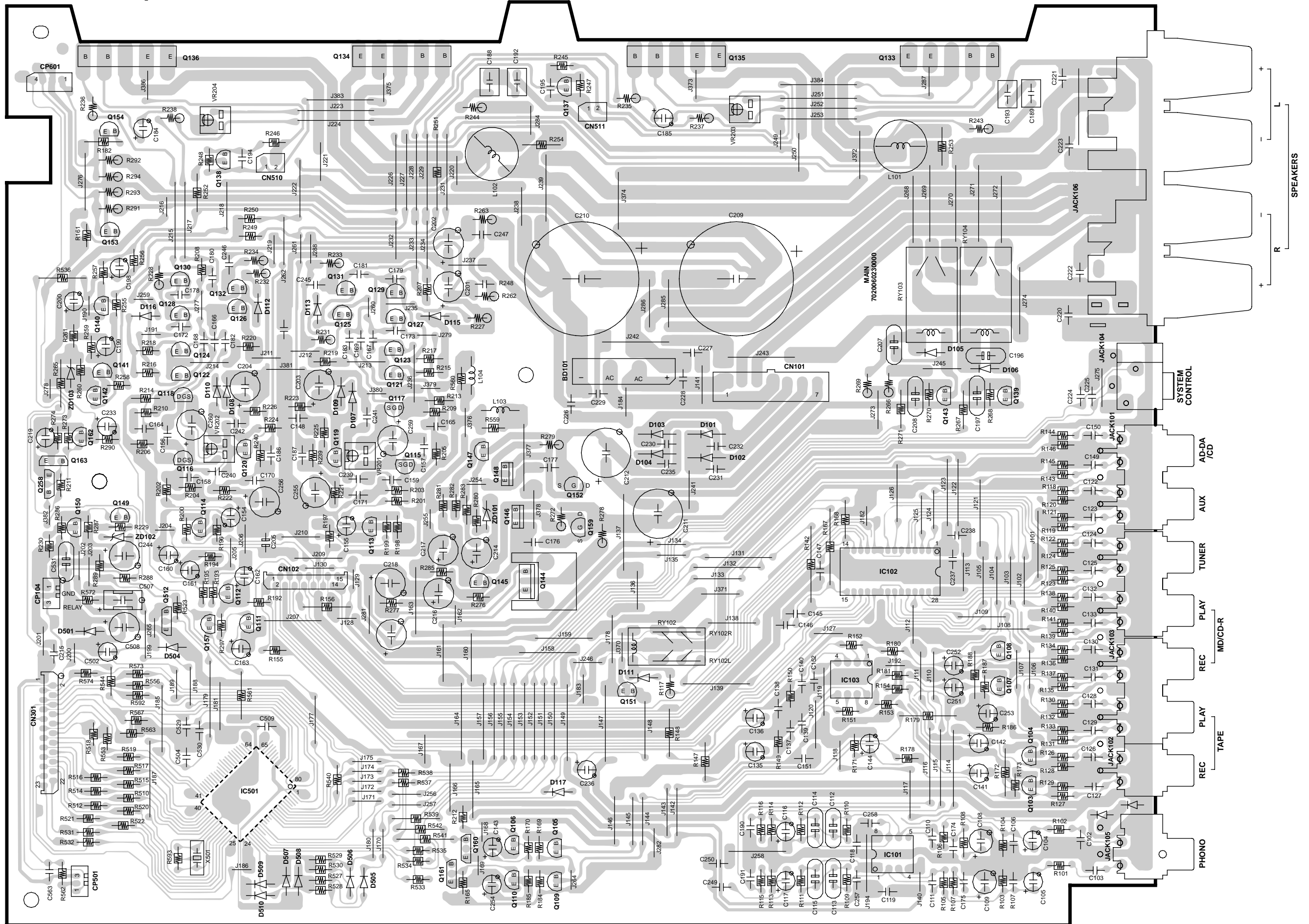
(a)



(b)



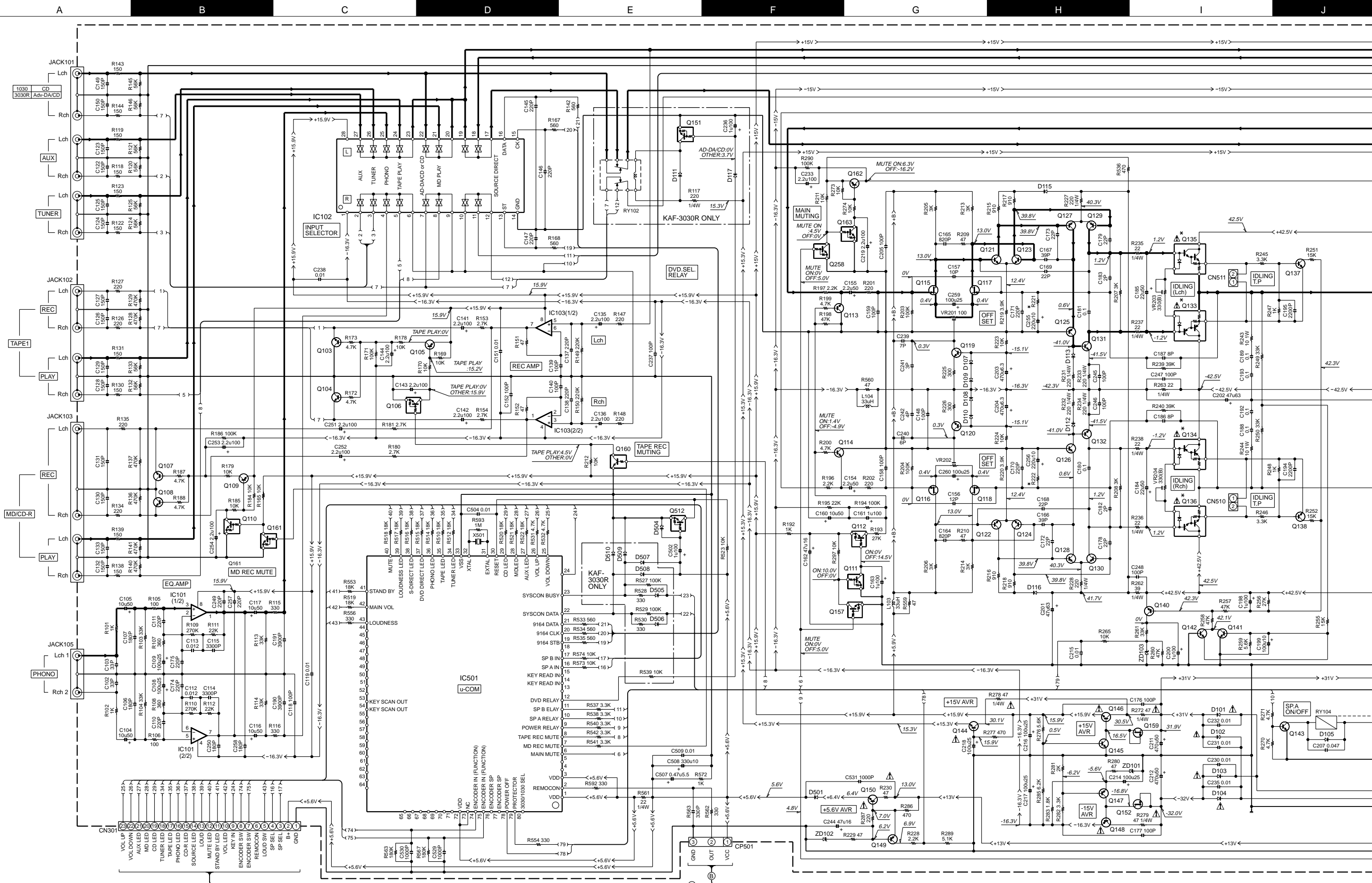
# PC BOARD(Component side view)



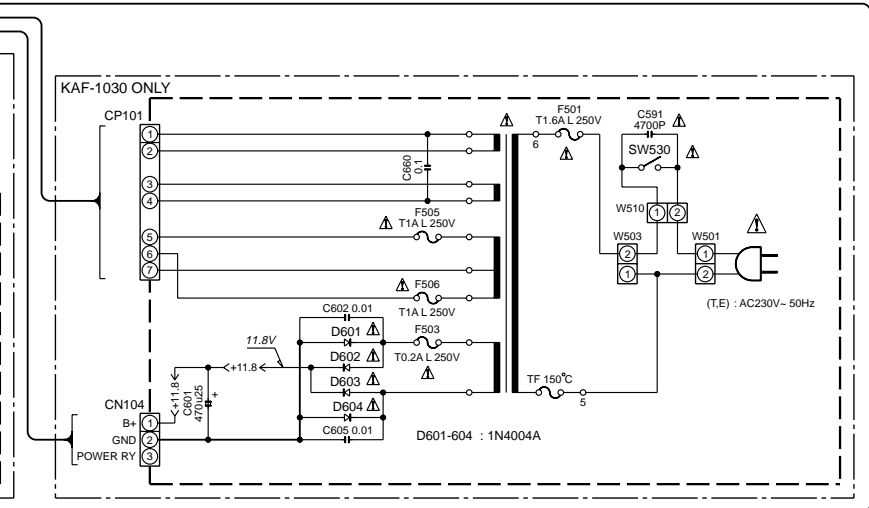
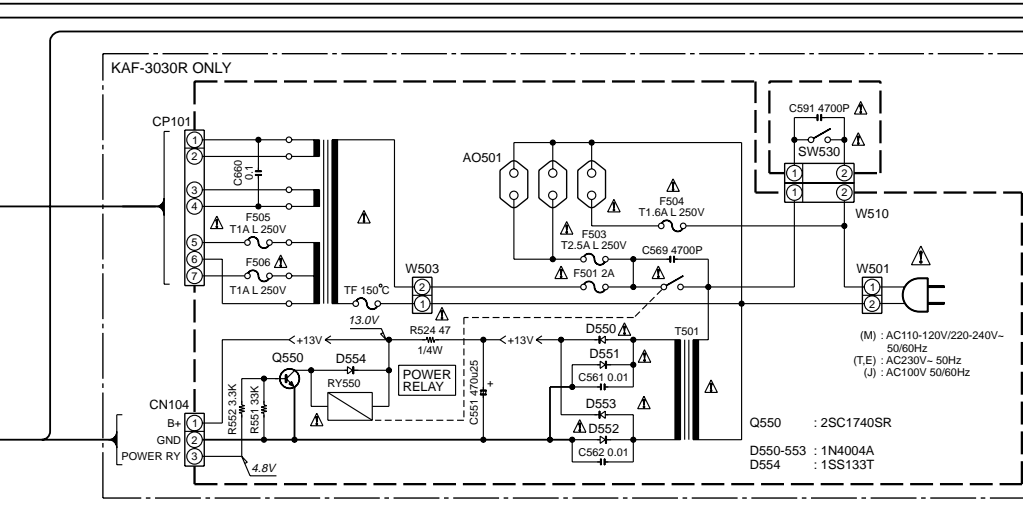
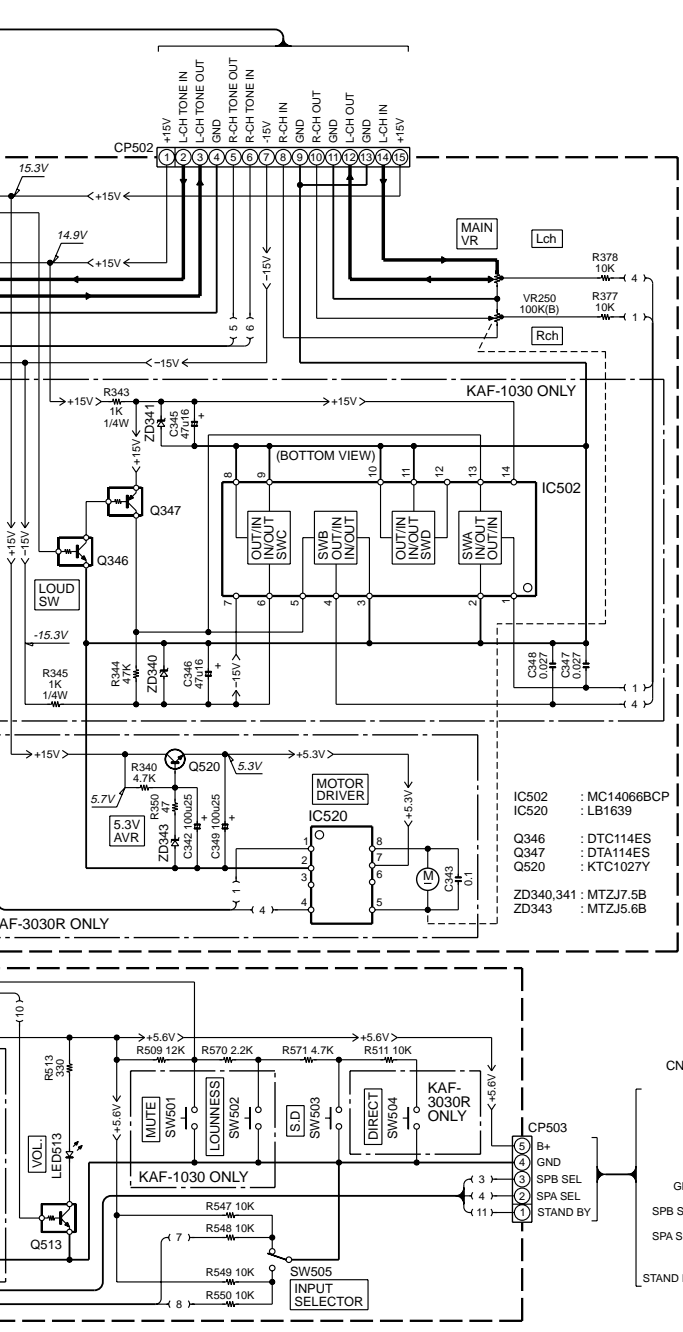
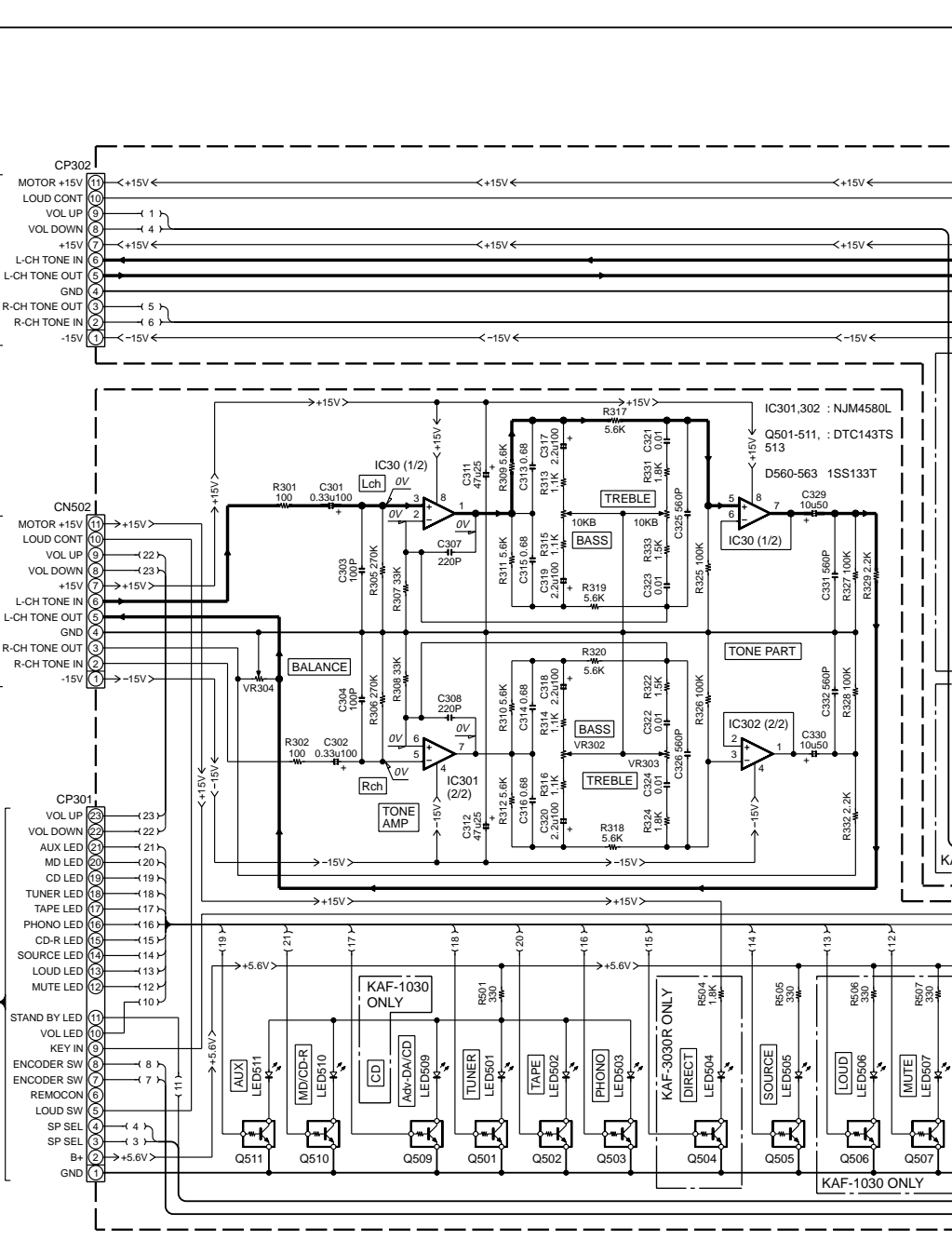
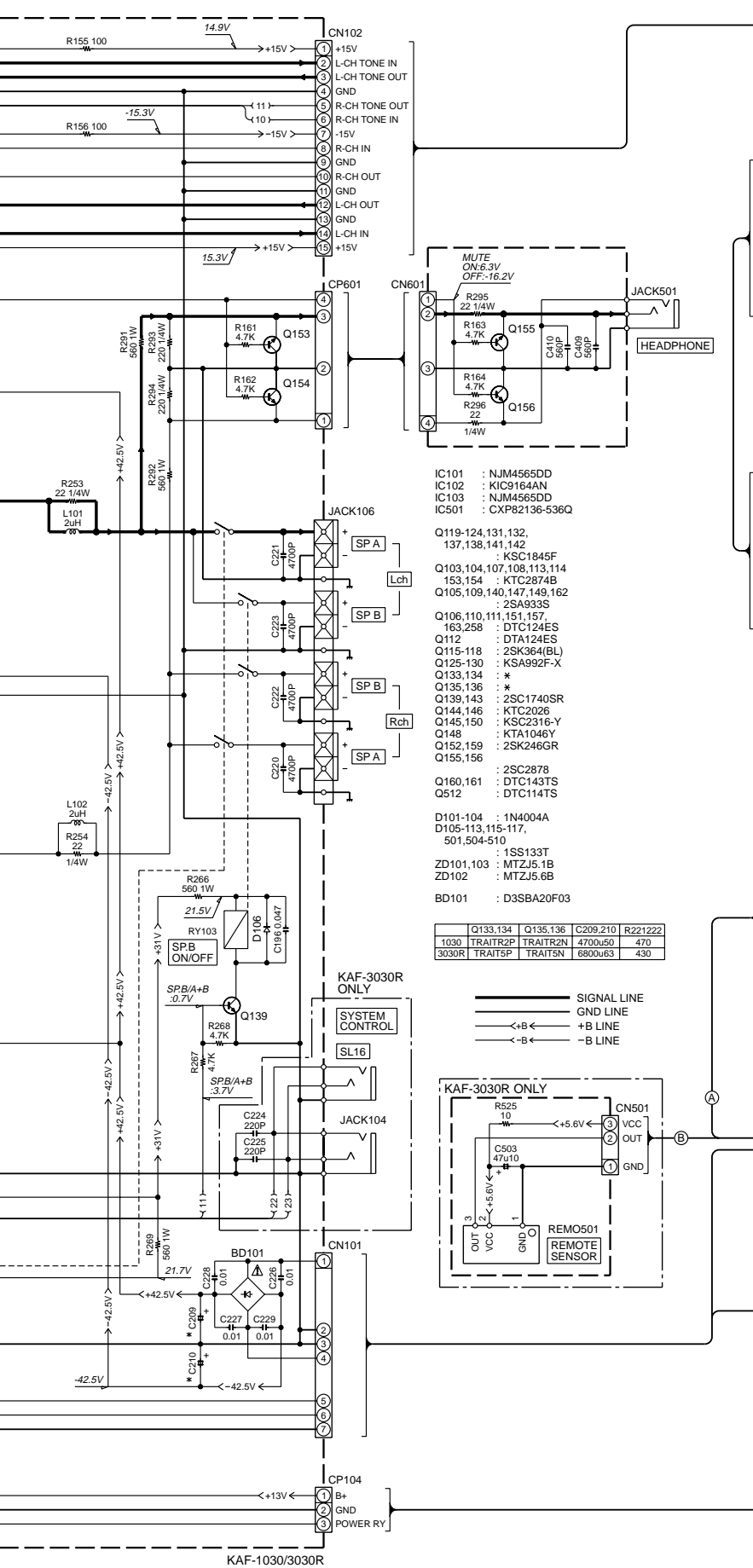
Refer to the schematic diagram for the value of resistors and capacitors.







- DTA114ES    2SA933S  
 DTA124ES    2SC1740SR  
 DTC114ES  
 DTC114TS  
 DTC124ES  
 DTC143TS
- TRAIT5N  
 TRAIT5P
- 2SC2878
- MC1406BCP
- NJM4580L
- 2SK364



**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). 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.

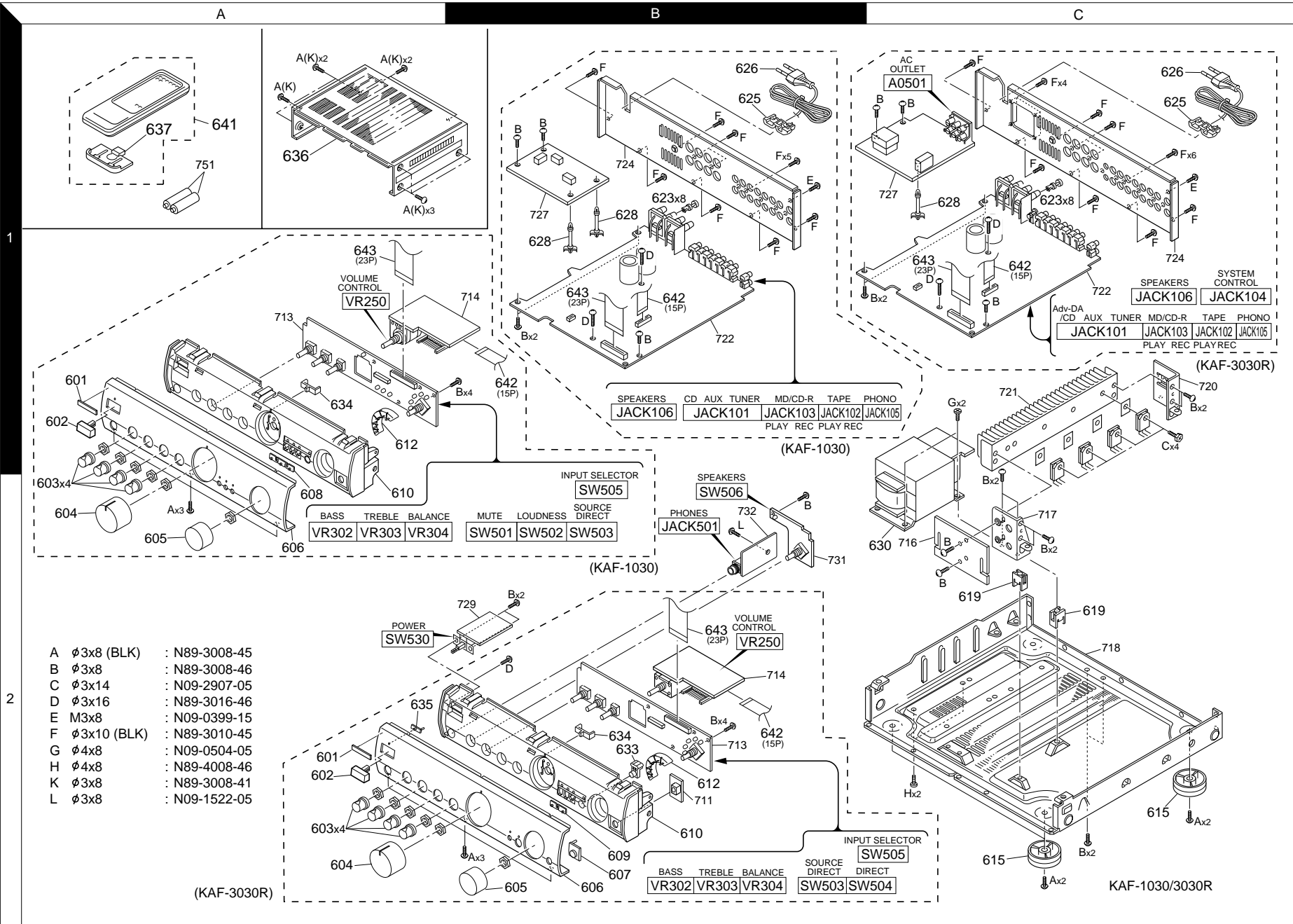
The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.

KAF-1030  
KAF-3030R

# KAF-1030/3030R

Y08-5772-70

## KENWOOD



EXPLODED VIEW (UNIT)

KAF-1030/3030R

\* 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-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
<b>KAF-1030/3030R/3030R-S</b>						
601	1A,2A	*	B43-0302-04	BADGE	5630000611010	
602	1A,2A	*	K29-7862-08	BUTTON,POWER	5090210621000	
602	1A,2A	*	K29-7863-08	BUTTON,POWER	5097210621100	3
603	2A	*	K29-7860-08	KNOB,CON	5087210271000	
603	2A	*	K29-7861-08	KNOB,CON	5087210271100	3
604	2A	*	K29-7855-08	KNOB,VOL	5087210241000	1
604	2A	*	K29-7856-08	KNOB,VOL	5087210251000	3
604	2A	*	K29-7857-08	KNOB,VOL	5087210251100	3
605	2A,2B	*	K29-7858-08	KNOB,FUN	5087210261000	
605	2B	*	K29-7859-08	KNOB,FUN	5087210261100	3
606	2A	*	A60-1895-08	PANEL	3067210298000	1
606	2B	*	A60-1896-08	PANEL	3067210298100	3
606	2B	*	A60-1897-08	PANEL	3067210298110	3
607	2B	*	B11-1517-08	WINDOW,REMOCON	5070210323000	3
608	2A	*	B19-1624-08	LENS,LOUD	3710210103000	1
609	2B	*	B19-1626-08	LENS,DIRECT	3710210123000	3
610	2A	*	A22-1847-08	FRAME	3210210081000	1
610	2B	*	A22-1848-08	FRAME	3210210081200	3
610	2B	*	A22-1849-08	FRAME	3217210081100	3
612	1A,2B	*	B19-1625-08	LENS,FUN	3710210113000	
615	2C	*	J02-1404-13	FOOT ASSY	4008000601030	
619	2C	*	J19-5725-08	SUPPORTER,X2	4070001601010	
623	1B,1C	*	N29-0035-05	RIVET,SPKR	1560000112010	
625	1B,1C	*	J42-0083-05	STOPPER,AC CORD	4380210002000	
626	1B,1C	*	E30-2718-05	CORD AC	L061040011010	EES
626	1B,1C	*	E30-2892-08	CORD AC	L061000290010	TTS
628	1B,1C	*	J19-6124-08	SUPPORTER,PCB	4070020113010	
630	2C	*	L07-2901-08	POWER TRANS	8200740630010	1
630	2C	*	L07-2902-08	POWER TRANS	8200760800010	3
633	2B	*	K29-7864-08	BUTTON,DIRECT	5090210651000	3
633	2B	*	K29-7865-08	BUTTON,DIRECT	5097210651100	3
634	1A,2B	*	B19-1622-08	LENS,VOL	3710210083000	
635	2A	*	B19-1623-08	LENS,POWER	3710210093000	3
636	1A	*	A01-3781-08	CABINET	3000210116000	ET
636	1A	*	A01-3782-08	CABINET	3007210116100	3
637	1A	*	A09-0170-08	BATTERY COVER		3
641	1A	*	A70-1429-08	REMOCON(RC-A0301)	8300000320020	3
642	1B,1C	*	E35-2687-08	CABLE,FLAT,15P	L301151150010	
643	1A,1B	*	E35-2688-08	CABLE,FLAT,23P	L301181230010	
-		*	B46-0310-03	WARRANTY CARD	5720001980101	ET
-		*	B46-0350-00	QUESTIONAIRE	5777011230010	TTS
-		*	B60-4527-08	INST MANUAL(EN)	5707210350040	TTS
-		*	B60-4528-08	INST MANUAL(ES)	5707210350010	EES
-		*	B60-4529-08	INST MANUAL(FR)	5707210350020	EES
-		*	B60-4530-08	INST MANUAL(GE)	5707210350050	EES
-		*	B60-4531-08	INST MANUAL(IT)	5707210350060	EES
-		*	B60-4532-08	INST MANUAL(NE)	5707210350070	EES
-		*	G13-2505-08	CUSHION SNOW	6230210174000	
-		*	H25-1573-08	POLY BAG,SET	6337000409030	
-		*	H25-1601-08	POLY BAG	6337000240010	EES
-		*	H50-3620-08	BOX GIFT	6007210170000	ET
-		*	H50-3622-08	BOX GIFT	6007210170020	3
-		*	H50-3623-08	BOX GIFT	6007210170010	3

L : Scandinavia K : USA P : Canada R : Mexico C : China I : Malaysia 1 : KAF-1030  
 Y : PX(Far East,Hawaii) T : England E : Europe G : Germany V : China(Shanghai) S : SILVER 3 : KAF-3030R  
 Y : AAFES(Europe) X : Australia Q : Russia H : Korea M : Other Areas  $\Delta$  indicates safety critical components.

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
<b>ELECTRICAL PARTS</b>						
LED501-3		*	B30-2545-05	LED,P15-RD	K500052016010	
LED504		*	B30-2551-05	LED,BLUE	K500036000010	3
LED505		*	B30-2545-05	LED,P15-RD	K500052016010	
LED506,7		*	B30-2545-05	LED,P15-RD	K500052016010	1
LED508		*	B30-2545-05	LED,P15-RD	K500052016010	3
LED509-11		*	B30-2524-05	LED,P15-RD	K500052016010	
LED513		*	B30-2524-05	LED,P15-RD	K500052016010	
C102,103			CC45FSL1H330J	CERAMIC	33PF	J
C104,105			CE04KW1H100M	ELECTRO	10UF	50WV
C106,107			CC45FSL1H181J	CERAMIC	180PF	J
C108,109			CE04KW1E101M	ELECTRO	100UF	25WV
C110,111			CC45FSL1H221J	CERAMIC	220PF	J
C112,113			CQ92FM1H123J	MYLAR	0.012UF	J
C114,115			CQ92FM1H332J	MYLAR	3300PF	J
C116,117			CE04KW1H100M	ELECTRO	10UF	50WV
C118			CC45FSL1H101J	CERAMIC	100PF	J
C119			CK45FB1H103K	CERAMIC	0.010UF	K
C122-133			CC45FSL1H151J	CERAMIC	150PF	J
C135,136			CE04KW2A2R2M	ELECTRO	2.2UF	100WV
C137,138			CC45FSL1H221J	CERAMIC	220PF	J
C139,140			CC45FSL1H101J	CERAMIC	100PF	J
C141-144			CE04KW2A2R2M	ELECTRO	2.2UF	100WV
C145-147			CC45FSL1H221J	CERAMIC	220PF	J
C148			CC45FSL1H101J	CERAMIC	100PF	J
C149,150			CC45FSL1H151J	CERAMIC	150PF	J
C151			CK45FB1H103K	CERAMIC	0.010UF	K
C152			CC45FSL1H101J	CERAMIC	100PF	J
C154,155			CE04KW1H2R2M	ELECTRO	2.2UF	50WV
C156			CC45FSL1H120J	CERAMIC	12PF	J
C157			CC45FSL1H100D	CERAMIC	10PF	D
C158,159			CC45FSL1H101J	CERAMIC	100PF	J
C160			CE04KW1H100M	ELECTRO	10UF	50WV
C161			CE04KW2A010M	ELECTRO	1.0UF	100WV
C162			CE04KW1C470M	ELECTRO	47UF	16WV
C163			CE04KW2A010M	ELECTRO	1.0UF	100WV
C164,165			CK45FB1H821K	CERAMIC	820PF	K
C166,167			CC45FSL1H390J	CERAMIC	39PF	J
C168,169			CC45FSL1H220J	CERAMIC	22PF	J
C170,171			CC45FSL1H221J	CERAMIC	220PF	J
C172,173			CC45FSL1H220J	CERAMIC	22PF	J
C174,175			CC45FSL1H221J	CERAMIC	220PF	J
C176,177			CC45FSL1H101J	CERAMIC	100PF	J
C178,179			CC45FSL1H220J	CERAMIC	22PF	J
C180,181			CK45FB1H104Z	CERAMIC	0.10UF	Z
C182,183			CC45FSL1H020C	CERAMIC	2.0PF	C
C184,185			CE04KW1H220M	ELECTRO	22UF	50WV
C186,187			CC45FSL1H080D	CERAMIC	8.0PF	D
C188,189			CQ92FM1H104J	MYLAR	0.10UF	J
C190,191			CQ92FM1H392J	MYLAR	3900PF	J
C192,193			CQ92FM1H104J	MYLAR	0.10UF	J
C194,195			CK45FB1H222Z	CERAMIC	2200PF	Z
C196			CQ92FM1H473J	MYLAR	0.047UF	J

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3

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
C198			CE04KW2A010M	ELECTRO 1.0UF 100WV		
C199			CE04KW1A101M	ELECTRO 100UF 10WV		
C200			CE04KW2A010M	ELECTRO 1.0UF 100WV		
C201,202			CE04KW1J470M	ELECTRO 47UF 63WV		
C203,204			CE04KW0J471M	ELECTRO 470UF 6.3WV		
C205			CC45FSL1H101J	CERAMIC 100PF J		
C207			CQ92FM1H473J	MYLAR 0.047UF J		
C209,210		*	C90-3939-08	ELECTRO 4700UF 50WV		1
C209,210		*	C90-3940-08	ELECTRO 6800UF 63WV		3
C211,212			CE04KW1H471M	ELECTRO 470UF 50WV		
C214			CE04KW1E101M	ELECTRO 100UF 25WV		
C215			CK45FB1H103K	CERAMIC 0.010UF K		
C216,217			CE04KW1E101M	ELECTRO 100UF 25WV		
C218			CE04KW1E101M	ELECTRO 100UF 25WV		
C219			CE04KW2A2R2M	ELECTRO 2.2UF 100WV		
C220-223			CQ92FM1H472J	MYLAR 4700PF J		
C224,225			CC45FSL1H221J	CERAMIC 220PF J		3
C226-232			CK45FB2H103Z	CERAMIC 0.010UF Z		
C233			CE04KW2A2R2M	ELECTRO 2.2UF 100WV		
C235			CK45FB2H103Z	CERAMIC 0.010UF Z		
C236			CE04KW2A010M	ELECTRO 1.0UF 100WV		3
C237			CC45FSL1H101J	CERAMIC 100PF J		
C238			CK45FB1H103K	CERAMIC 0.010UF K		
C239			CC45FSL1H070C	CERAMIC 7.0PF C		
C240			CC45FSL1H060D	CERAMIC 6.0PF D		
C241			CC45FSL1H030C	CERAMIC 3.0PF C		
C242			CC45FCH1H040C	CERAMIC 4.0PF C		
C244			CE04KW1C470M	ELECTRO 47UF 16WV		
C245-248			CC45FSL1H101J	CERAMIC 100PF J		
C249			CC45FSL1H221J	CERAMIC 220PF J		
C250			CC45FSL1H181J	CERAMIC 180PF J		
C251-254			CE04KW2A2R2M	ELECTRO 2.2UF 100WV		
C255,256			CE04KW1A221M	ELECTRO 220UF 10WV		
C257			CC45FSL1H221J	CERAMIC 220PF J		
C258			CC45FSL1H181J	CERAMIC 180PF J		
C259,260			CE04KW1E101M	ELECTRO 100UF 25WV		
C301,302			CE04KW2AR33M	ELECTRO 0.33UF 100WV		
C303,304			CC45FSL1H101J	CERAMIC 100PF J		
C307,308			CC45FCH1H221J	CERAMIC 220PF J		
C311,312			CE04KW1E470M	ELECTRO 47UF 25WV		
C313-316			CQ92FM1H684J	MYLAR 0.68UF J		
C317-320			CE04KW2A2R2M	ELECTRO 2.2UF 100WV		
C321-324			CQ92FM1H103J	MYLAR 0.010UF J		
C325,326			CK45FB1H561J	CERAMIC 560PF J		
C329,330			CE04KW1H100M	ELECTRO 10UF 50WV		
C331,332			CK45FB1H561J	CERAMIC 560PF J		
C342			CE04KW1E101M	ELECTRO 100UF 25WV		3
C343			CK45FB1H104Z	CERAMIC 0.10UF Z		3
C345,346			CE04KW1C470M	ELECTRO 47UF 16WV		1
C347,348			CQ92FM1H273J	MYLAR 0.027UF J		1
C349			CE04KW1E101M	ELECTRO 100UF 25WV		3
C409,410			CK45FB1H561J	CERAMIC 560PF J		
C502			CE04KW2A010M	ELECTRO 1.0UF 100WV		
C503			CE04KW1A470M	ELECTRO 47UF 10WV		3
C504			CK45FB1H103K	CERAMIC 0.010UF K		

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
C507			C90-3741-08	BACKUP C 0.047F 5.5WV		
C508			CE04KW1A331M	ELECTRO 330UF 10WV		
C509			CQ92FM1H103J	MYLAR 0.010UF J		
C529,530			CK45FB1H102Z	CERAMIC 1000PF Z		
C531			CQ92FM1H102J	MYLAR 1000PF J		
C551			CE04KW1E471M	ELECTRO 470UF 25WV		3
C561,562			CK45FB2H103Z	CERAMIC 0.010UF Z		3
C563			CC45FSL1H331J	CERAMIC 330PF J		
C569		*	C91-1571-08	CERAMIC 0.0047UF 250VAC		3
C591		*	C91-1571-08	CERAMIC 0.0047UF 250VAC		
C601			CE04KW1E471M	ELECTRO 470UF 25WV		1
C602			CK45FB2H103Z	CERAMIC 0.010UF Z		1
C605			CK45FB2H103Z	CERAMIC 0.010UF Z		1
C660			CK45FB1E104Z	CERAMIC 0.10UF Z		
AO501			E03-0322-08	SOCKET,POWER G435000150000	TTS	3
AO501			E03-0338-08	SOCKET,POWER G435000160020	EES	3
CN102		*	E40-8703-08	CN,FPC,15P L131520451545		
CN301		*	E40-8704-08	CN,FPC,23P L131520452345		
CP301		*	E40-8702-08	CN,FPC,23P L131520442345		
CP502		*	E40-8701-08	CN,FPC,15P L131520441545		
JACK101		*	E63-0187-08	RCA,6P G603060046020		1
JACK101		*	E63-1165-08	RCA,6P G603060046070		3
JACK102,103			E63-0186-08	RCA,4P G602040045000		
JACK104			E11-0333-08	JACK,D3.5 G401496000010		3
JACK105			E63-0189-08	RCA,2P G601020044000		
JACK106			E70-0104-08	BOARD SCREW,8P G61408103600A		
JACK501			E11-0263-08	JACK,D6.5 G402038400040		
F501			F05-1623-05	FUSE,1.6A G650162251160		1
F501			F06-2021-05	FUSE,2A G650202251160		3
F503			F05-2015-05	FUSE,0.2A G650201251160		1
F503			F05-2525-05	FUSE,2.5A G650252251160		3
F504			F05-1623-05	FUSE,1.6A G650162251160		3
F505,506			F06-1022-05	FUSE,1A G650102251160		
L101,102			L39-1374-08	COIL,2UH D310030000010		
L103,104			L40-3301-17	COIL,33UH D330330700520		
T501			L07-1987-08	POWER TRANS 8200280004000		3
X501			L78-0294-05	RESONATOR E830100000050		
R117			RN14BK2E2200F	RN 220 F 1/4W		3
R227,228			RN14BK2E2200F	RN 220 F 1/4W		
R230			RD14BB2C470J	RD 47 J 1/6W		
R231-234			RN14BK2E2200F	RN 220 F 1/4W		
R235-238			RN14BK2E22R0F	RN 22 F 1/4W		
R243,244			RS14GB3A100J	FL-PROOF RS 10 J 1W		
R262			RN14BK2E39R0F	RN 39 F 1/4W		
R263			RN14BK2E22R0F	RN 22 F 1/4W		
R266			RS14GB3A561J	FL-PROOF RS 560 J 1W		
R269			RS14GB3A561J	FL-PROOF RS 560 J 1W		
R272			RN14BK2E47R0F	RN 47 F 1/4W		
R278			RN14BK2E47R0F	RN 47 F 1/4W		
R279			RN14BK2E47R0F	RN 47 F 1/4W		
R291,292			RS14GB3A561J	FL-PROOF RS 560 J 1W		
R293,294			RN14BK2E2200F	RN 220 F 1/4W		
R295,296			RN14BK2E22R0F	RN 22 F 1/4W		
R343			RN14BK2E1001F	RN 1.00K F 1/4W		1

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PARTS LIST KAF-1030/3030R

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△ R345			RN14BK2E1001F	RN 1.00K F 1/4W		1
R524			RN14BK2E47R0F	RN 47 F 1/4W		3
VR201,202			R12-0604-05	VR,SEMI C544101015100		
VR203,204			R12-0606-05	VR,SEMI C544331015010		
VR250		*	R39-0029-08	VR,ROTARY C455121405100		1
VR250		*	R39-0030-08	VR,ROTARY C495121400260		3
VR302,303		*	R39-0028-08	VR,ROTARY C454121300400		
VR304		*	R39-0027-08	VR,ROTARY C452112400150		
RY102		*	S76-0113-08	RELAY G680000250010		3
RY103,104			S76-0076-05	RELAY G680242000000		
RY550			S76-0090-05	RELAY G680090502010		3
SW501,502			S70-0044-08	SW,TACT G180215050010		1
SW503			S70-0044-08	SW,TACT G180215050010		
SW504			S70-0044-08	SW,TACT G180215050010		3
SW505			T99-0643-08	SW,ENCODER G121161220010		
SW506		*	S60-0038-08	SW,ROTARY G120141200010		
SW530		*	S68-0131-08	SW,PUSH G000122006030		
△ BD101		*	D3SBA20F03	DIODE,5A		
△ D101-104			1N4004A	DIODE		
D105-110			1SS133T	DIODE		3
D111			1SS133T	DIODE		
D112,113			1SS133T	DIODE		
D115,116			1SS133T	DIODE		3
D117			1SS133T	DIODE		
D501			1SS133T	DIODE		3
D504			1SS133T	DIODE		
D505-510			1SS133T	DIODE		3
△ D550-553			1N4004A	DIODE		3
D554			1SS133T	DIODE		3
D560-563			1SS133T	DIODE		
△ D601-604			1N4004A	DIODE		1
IC101			NJM4565DD	IC		
IC102			KIC9164AN	IC		
IC103			NJM4565DD	IC		
IC301,302			NJM4580L	IC(OP AMP X2)		
IC501		*	CXP82316-536Q	IC		
IC502			MC14066BCP	IC(BILATERAL SWITCH X4)		1
IC520		*	LB1639	IC		3
Q103,104		*	KTC2874B	TRANSISTOR		
Q105			2SA933S	TRANSISTOR		
Q106			DTC124ES	TRANSISTOR		
Q107,108		*	KTC2874B	TRANSISTOR		
Q109			2SA933S	TRANSISTOR		
Q110,111			DTC124ES	TRANSISTOR		
Q112			DTA124ES	TRANSISTOR		
Q113,114		*	KTC2874B	TRANSISTOR		
Q115-118			2SK364(BL)	FET		
Q119-124			KSC1845F	TRANSISTOR		
Q125-130			KSA992F-X	TRANSISTOR		
Q131,132			KSC1845F	TRANSISTOR		
△ Q133,134			TRAITR2P	TRANSISTOR J501150000030		1
△ Q133,134		*	TRAIT5P	TRANSISTOR J581050000010		3
△ Q135,136			TRAITR2N	TRANSISTOR J503150000030		1
△ Q135,136		*	TRAIT5N	TRANSISTOR J583050000010		3

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Q137,138			KSC1845F	TRANSISTOR		
Q139			2SC1740SR	TRANSISTOR		
Q140			2SA933S	TRANSISTOR		
Q141,142			KSC1845F	TRANSISTOR		
Q143			2SC1740SR	TRANSISTOR		
△ Q144			KTC2026	TRANSISTOR		
Q145			KSC2316-Y	TRANSISTOR		
△ Q146			KTC2026	TRANSISTOR		
Q147			2SA933S	TRANSISTOR		
△ Q148		*	KTA1046Y	TRANSISTOR		
Q149			2SA933S	TRANSISTOR		
△ Q150			KSC2316-Y	TRANSISTOR		3
Q151			DTC124ES	TRANSISTOR		
Q152			2SK246GR	FET		
Q153,154		*	KTC2874B	TRANSISTOR		
Q155,156			2SC2878	TRANSISTOR		
Q157			DTC124ES	TRANSISTOR		
Q159			2SK246GR	FET		
Q160,161			DTC143TS	TRANSISTOR		
Q162			2SA933S	TRANSISTOR		
Q163			DTC124ES	TRANSISTOR		
Q258			DTC124ES	TRANSISTOR		
Q346			DTC114ES	TRANSISTOR		1
Q347			DTA114ES	TRANSISTOR		1
Q501-503			DTC143TS	TRANSISTOR		
Q504			DTC143TS	TRANSISTOR		3
Q505			DTC143TS	TRANSISTOR		
Q506,507			DTC143TS	TRANSISTOR		1
Q508			DTC143TS	TRANSISTOR		3
Q509-511			DTC143TS	TRANSISTOR		
Q512			DTC114TS	TRANSISTOR		
Q513			DTC143TS	TRANSISTOR		
Q520			KTC1027Y	TRANSISTOR		3
Q550			2SC1740SR	TRANSISTOR		3
REMO501		*	W02-2765-08	MODULE,REMO E940000140020		3
ZD101			MTZJ5.1B	ZENER DIODE		
ZD102			MTZJ5.6B	ZENER DIODE		
ZD103			MTZJ5.1B	ZENER DIODE		
ZD340,341			MTZJ7.5B	ZENER DIODE		1
ZD343			MTZJ5.6B	ZENER DIODE		3

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PARTS LIST

KAF-1030/3030R

# KAF-1030/3030R

## SPECIFICATIONS

### KAF-3030R

<b>Rated output power</b>	
(DIN) 1 kHz	
at 8 Ω .....	50 W + 50 W
at 4 Ω .....	75 W + 75 W
(IEC/DIN) from 63 Hz to 12.5 kHz, 0.7 % T.H.D.	
at 8 Ω .....	50 W + 50 W
at 4 Ω .....	75 W + 75 W
<b>Effective output power</b>	
Except UK and Europe	
(EIAJ) 1 kHz, 10 % T.H.D.	
at 8 Ω .....	60 W + 60 W
at 4 Ω .....	90 W + 90 W
<b>Damping factor</b> .....	42 (50 Hz)
<b>Total harmonic distortion</b>	
.....	0.02 % (20 Hz ~ 20 kHz, 25 W, 8 Ω)
.....	0.002 % (1 kHz, 25 W, 8 Ω)
<b>Frequency response (IHF'66)</b>	
Adv. DA / CD DIRECT .....	5 Hz ~ 100 kHz, +0 dB, -3 dB
Adv. DA / CD, MD/CD-R, TUNER, TAPE, AUX .....	5 Hz ~ 60 kHz, +0 dB, -3 dB
PHONO 'RIAA' response ...	20 Hz ~ 20 kHz, +1.0 dB, -1.0 dB
<b>Maximum input level</b>	
PHONO (MM) .....	100 mV, 0.5 % T.H.D. at 1 kHz
<b>Signal to noise ratio</b>	
PHONO (MM) .....	72 dB (IHF'66)
Adv. DA / CD, MD/CD-R, TUNER, TAPE, AUX .....	100 dB (IHF'66)
Adv. DA / CD DIRECT .....	102 dB (IHF'66)
PHONO (MM) .....	60 dB (DIN, 50 mW output)
Adv. DA / CD, MD/CD-R, TUNER, TAPE, AUX .....	60 dB (DIN, 50 mW output)
<b>Input sensitivity/impedance</b>	
PHONO (MM) .....	2.5 mV/33 kΩ
Adv. DA / CD, MD/CD-R, TUNER, TAPE, AUX .....	200 mV/47 kΩ
<b>Tone control</b>	
BASS .....	±6 dB (at 100 Hz)
TREBLE .....	±6 dB (at 10 kHz)
<b>Output level/impedance</b>	
MD/CD-R REC, TAPE REC, .....	200 mV/2.7 kΩ
<b>General</b>	
<b>Power consumption</b> .....	150 W
<b>AC outlet</b>	
SWITCHED .....	2 (total 200 W max.)
UNSWITCHED .....	1 (100 W max.)
<b>Dimensions</b> .....	
	W: 440 mm
	H: 95 mm
	D: 400 mm
<b>Weight (net)</b> .....	7.8 kg

### KAF-1030

<b>Rated output power</b>	
(DIN) 1 kHz	
at 8 Ω .....	40 W + 40 W
at 4 Ω .....	60 W + 60 W
(IEC/DIN) from 63 Hz to 12.5 kHz, 0.7 % T.H.D.	
at 8 Ω .....	40 W + 40 W
at 4 Ω .....	60 W + 60 W
<b>Effective output power</b>	
Except UK and Europe	
(EIAJ) 1 kHz, 10 % T.H.D.	
at 8 Ω .....	55 W + 55 W
at 4 Ω .....	75 W + 75 W
<b>Damping factor</b> .....	42 (50 Hz)
<b>Total harmonic distortion</b>	
.....	0.02 % (20 Hz ~ 20 kHz, 20 W, 8 Ω)
.....	0.002 % (1 kHz, 20 W, 8 Ω)
<b>Frequency response (IHF'66)</b>	
SOURCE DIRECT .....	5 Hz ~ 85 kHz, +0 dB, -3 dB
CD, MD/CD-R, TUNER, TAPE, AUX .....	5 Hz ~ 60 kHz, +0 dB, -3 dB
PHONO 'RIAA' response ...	20 Hz ~ 20 kHz, +1.0 dB, -1.0 dB
<b>Maximum input level</b>	
PHONO (MM) .....	100 mV, 0.5 % T.H.D. at 1 kHz
<b>Signal to noise ratio</b>	
PHONO (MM) .....	72 dB (IHF'66)
CD, MD/CD-R, TUNER, TAPE, AUX .....	100 dB (IHF'66)
PHONO (MM) .....	60 dB (DIN, 50 mW output)
CD, MD/CD-R, TUNER, TAPE, AUX .....	60 dB (DIN, 50 mW output)
<b>Input sensitivity/impedance</b>	
PHONO (MM) .....	2.5 mV/33 kΩ
CD, MD/CD-R, TUNER, TAPE, AUX .....	200 mV/47 kΩ
<b>Tone control</b>	
BASS .....	±6 dB (at 100 Hz)
TREBLE .....	±6 dB (at 10 kHz)
<b>LOUDNESS control</b>	
VOLUME at -30 dB level .....	+9 dB (at 100 Hz)
<b>Output level/impedance</b>	
MD/CD-R REC, TAPE REC, .....	200 mV/2.7 kΩ
<b>General</b>	
<b>Power consumption</b> .....	130 W
<b>Dimensions</b> .....	
	W: 440 mm
	H: 95 mm
	D: 400 mm
<b>Weight (net)</b> .....	7.2 kg



1. KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.
2. The full performance may not be exhibited in extremely cold locations (below freezing).

# KAF-1030/3030R

**Note:**

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

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