

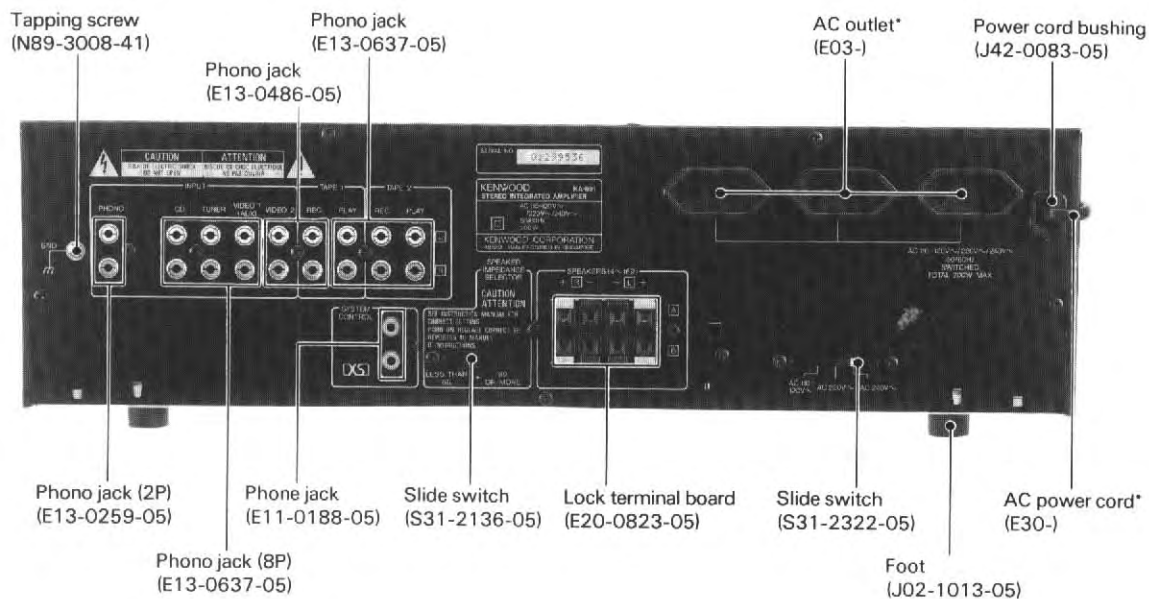
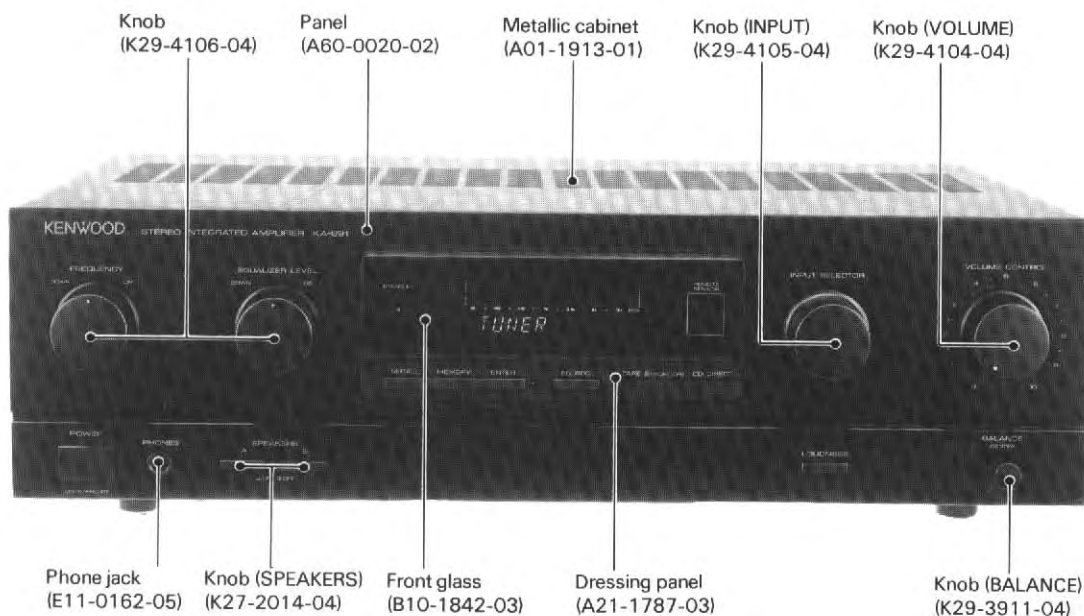


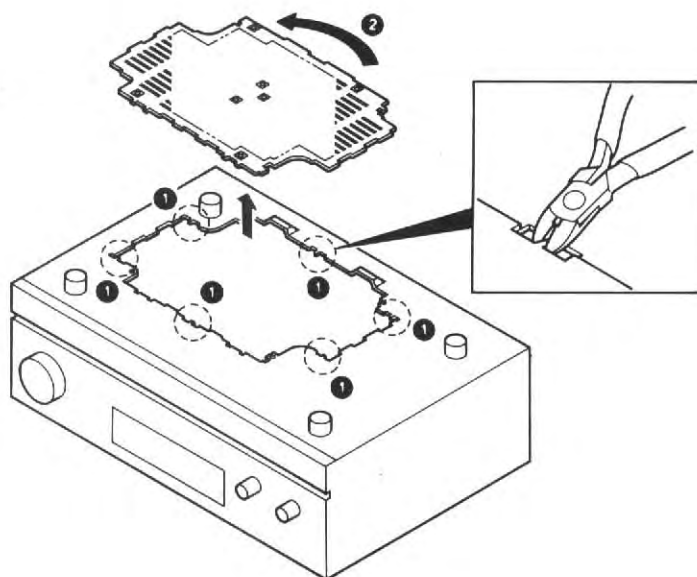
Photo is KA-891M.

* Refer to parts list on page 24.

DISASSEMBLY FOR REPAIR

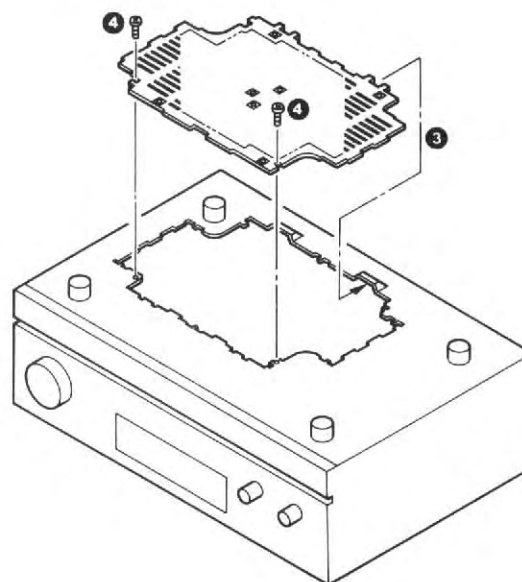
How to remove the repairing chassis

- 1 Cut the 6 parts **1** of the repairing chassis. Remove the repairing chassis from main chassis.



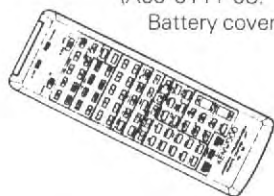
After repair

- 2 Turn the repairing chassis 180 degrees in the arrow direction **2**.
- 3 Insert the 2 claws **3** into main chassis.
- 4 Lock to the main chassis by 2 screws (M3 x 6) **4**.

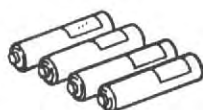


Accessories

Remote control unit.....1
(A70-0512-05)
(A09-0111-08;
Battery cover)



Battery ("AAA" or "R03") 4



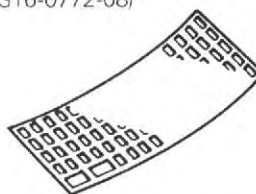
AC plug adaptor.....1
(except for some areas)
For the unit with a European AC
plug in areas other than Europe.
(E03-0115-05)



System control cord 1
(E30-1392-05)



Overlay sheet 1
(G16-0772-08)



INSTRUCTION MANUAL

B60-0341-00 (ENGLISH)
B60-0342-00 (FRENCH)
B60-0343-00 (SP, AR, CH)

REMOTE CONTROL OPERATION

Names of controls (AUDIO mode)

Keys masked with  are functions which are not supported with this product.

LEARN indicator

Blinks or lights steadily during programming procedure.

LEARN/USE switch

Normally set to the USE position. Set to the LEARN position when programming remote control signals.

Tape deck/video deck operation keys

The TAPE A and TAPE B keys allow to operate a double cassette tape deck. When using a single cassette tape deck, use the TAPE A keys. A video deck can also be operated by programming the control signals of a video deck in the AUX mode.

Numeric keys

When the CD source is selected, these keys can be used as the numeric keys of the CD player.

When the TUNER source is selected, they can be used as the numeric keys of the tuner.

How to enter numerals:

For 23 press [+10] twice and [3]

For 40 press [+10] four times and [0]

TUNER operation keys

BAND: Switches the bands.

P.SCAN: Scans the preset stations.

DIRECT: In conjunction with the numeric keys, tunes stations directly (The DIRECT key cannot be used with the KT-591/S)

Input selector keys

Switches the input selector on the amplifier.

TRANSMIT indicator

Lights up while the remote control signal is being transmitted.

MODE switch

Selects the mode to be used.

CD player operation keys

Operate the CD player.

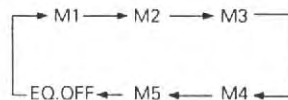
DISC: The DISC key can be used as the disc selector key of a multi-disc player with a disc changer. For details, read the instruction manual provided with the CD player.

Turntable operation keys

Control the start/stop of turntable.

Amplifier's equalizer operation keys

M.CALL: Recalls programmed patterns.



EFFECT: Turns the graphic equalizer effect ON/OFF.

VOLUME CONTROL keys

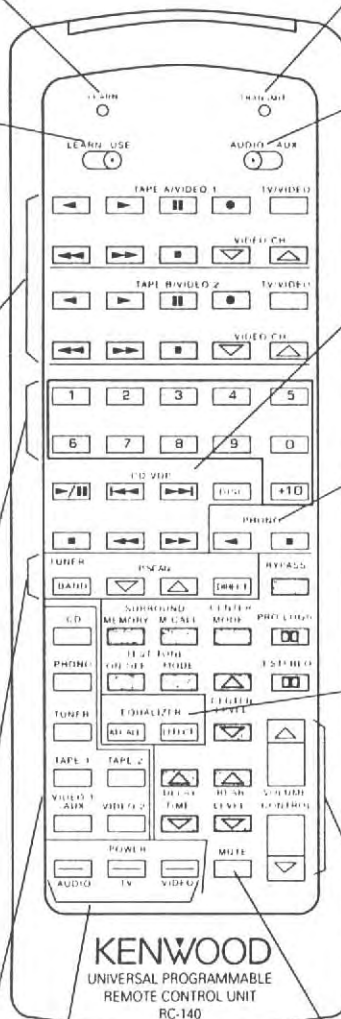
Adjust the volume. During operation, the VOLUME CONTROL on the front turns and the indicator on the knob blinks at high speed.

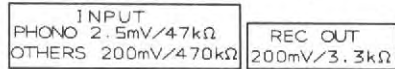
MUTE key

Press to reduce the volume temporarily. During operation, the indicator on the VOLUME CONTROL knob blinks.

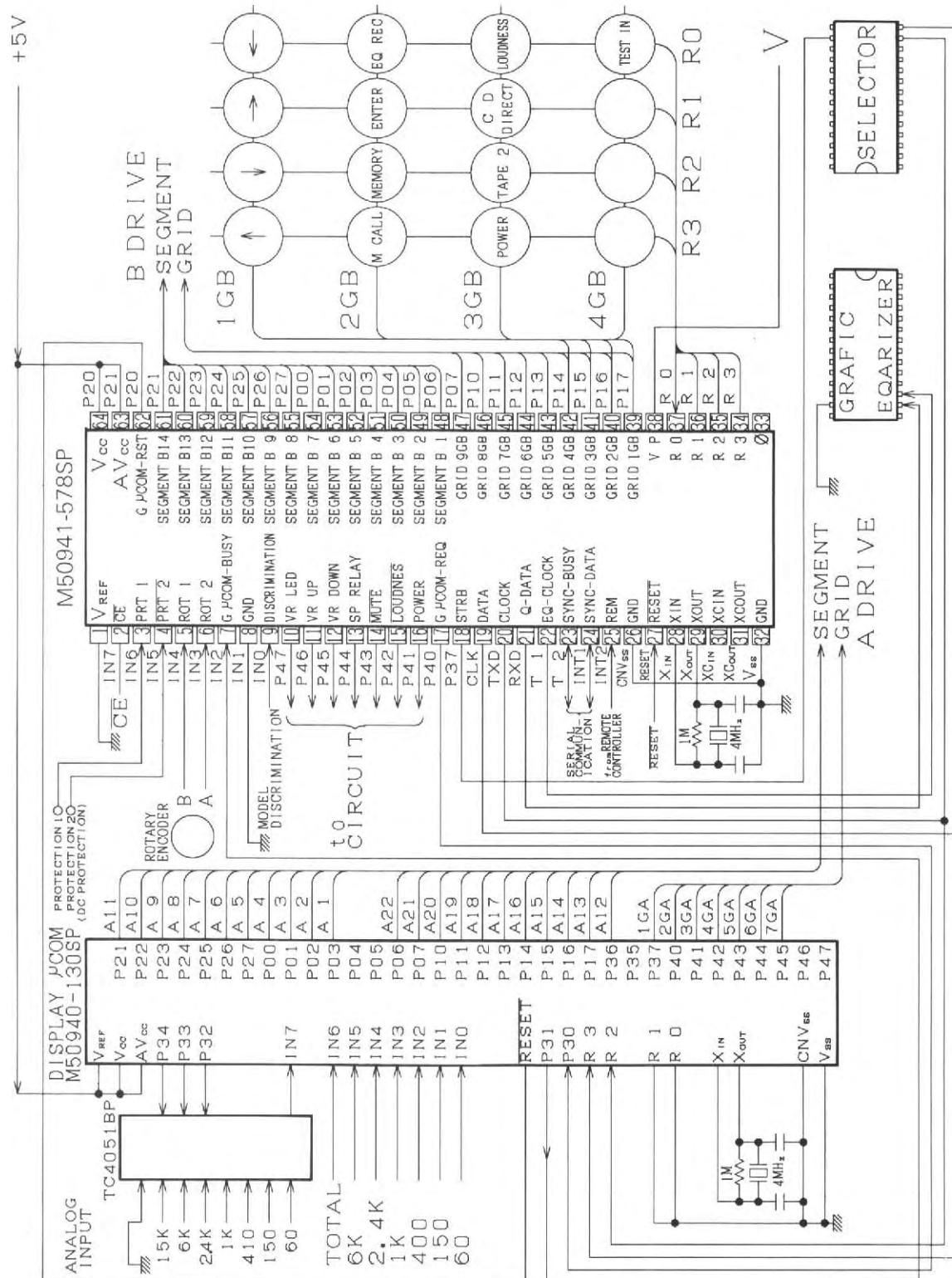
POWER keys

Turn the power of components ON/OFF. For the TV and VIDEO keys, specific control signals should be programmed





CIRCUIT DESCRIPTION



CIRCUIT DESCRIPTION

Pin description

Pin No.	Pin Name	I/O	Name	Description
1	VREF	I	OV	GND
2	IN 7	I	CE	Chip enable
3	IN 6	I	PRT 1	Protection
4	IN 5	I	PRT 2	DC protection
5	IN 4	I	ROT 1	Rotary encoder
6	IN 3	I	ROT 2	Rotary encoder
7	IN 2	I	G μ COM-BUSY	Display μ -COM busy
8	IN 1	I		
9	IN 0	I		
10	P4 7	O	VR LED	Volume LED
11	P4 6	O	VR UP	Volume up
12	P4 5	O	VR DOWN	Volume down
13	P4 4	O	SP RELAY	Speaker relay
14	P4 3	O	MUTE	Mute
15	P4 2	O	LOUDNESS	Loudness
16	P4 1	O	POWER	Power
17	P4 0	O	G μ COM-REQ	Display μ -COM request
18	P3 7 S-RDY	O	STRB	Strobe (Selector)
19	P3 6 CLK	O	DATA	Data (Selector, Display μ -COM)
20	P3 5 TXD	O	CLOCK	Clock (Selector Display μ -COM)
21	P3 4 RXD	O	EQ-DATA	Data for GE
22	P3 3 T1	O	EQ-CLOCK	Clock for GE
23	P3 2 T2	I/O	SYNC-BUSY	Syncro busy
24	P3 1 INT1	I/O	SYNC-DATA	Syncro data
25	P3 0 INT2	I	REM	Remote controller input
26	CNVSS	I	GND	
27	RESET	I	RESET	Reset
28	XIN	I	XIN	Clock
29	XOUT	O	XOUT	Clock
30	XCIN	I	XCIN	GND
31	XCOUT	O	XCOUT	
32	Vss	I	GND	GND
33	ϕ	O	ϕ	Timing output
34	R3	I	R3	Key return input 3
35	R2	I	R2	Key return input 2
36	R1	I	R1	Key return input 1
37	R0	I	R0	Key return input 0
38	VP	I	VP	Pull-down voltage
39	P1 7	O	GRID 1GB	Grid
40	P1 6	O	GRID 2GB	Grid
41	P1 5	O	GRID 3GB	Grid
42	P1 4	O	GRID 4GB	Grid
43	P1 3	O	GRID 5GB	Grid
44	P1 2	O	GRID 6GB	Grid

CIRCUIT DESCRIPTION

Pin No.	Pin Name	I/O	Name	Description
45	P1 1	O	GRID 7GB	Grid
46	P1 0	O	GRID 8GB	Grid
47	P0 7	O	GRID 9GB	Grid
48	P0 6	O	SEGMENT B1	Segment
49	P0 5	O	SEGMENT B2	Segment
50	P0 4	O	SEGMENT B3	Segment
51	P0 3	O	SEGMENT B4	Segment
52	P0 2	O	SEGMENT B5	Segment
53	P0 1	O	SEGMENT B6	Segment
54	P0 0	O	SEGMENT B7	Segment
55	P2 7	O	SEGMENT B8	Segment
56	P2 6	O	SEGMENT B9	Segment
57	P2 5	O	SEGMENT B10	Segment
58	P2 4	O	SEGMENT B11	Segment
59	P2 3	O	SEGMENT B12	Segment
60	P2 2	O	SEGMENT B13	Segment
61	P2 1	O	SEGMENT B14	Segment
62	P2 0	O	G μ COM-RST	Display μ -COM reset
63	P2 1	O	AV _{CC}	
64	P2 0	O	V _{CC}	V _{CC}

TEST mode

1. Setting method

Insert AC plug to the power supply under pressing CD DIRECT key.

2. Confirm the following checks

- 2-1 FL all light (Spectrum analyzer sections do not light)
- 2-2 This is all lighting is canceled by operating an other key.
- 2-3 EQ FREQ kob operation
Select the frequency
- 2-4 EQ LEVEL kob operation
3 point of MAX, CENTER and MIN.

2-5 M. CALL key operation

- M1: MAX segments of all frequency turn ON.
- M2: MIN segments of all frequency turn ON.
- M3: Flat
- M4: Flat
- M5: Flat

2-6 CD DIRECT key operation

VOLUME UP

2-7 TAPE 2 key operation

VOLUME DOWN

INITIALIZATION

Insert AC plug to the power supply under pressing ENTER key.

ADJUSTMENT/REGLAGE/ABGLEICH

ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	AMPLIFIER SETTING	ALIGNMENT POINTS	ALIGN FOR	FIG.
Unless otherwise specified, set the respective switches as follows: POWER: ON SPEAKER: B REC OUT: OFF SELECTOR: PHONO							
1	IDLE CURRENT	—	Connect a DC voltmeter across CP1 (L) CP2 (R) (X09-)	VOLUME: 0	VR1 (L) VR2 (R) (X09-)	18mV	(a)

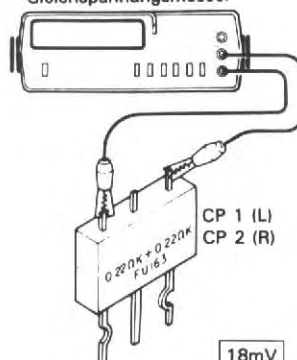
REGLAGES

N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DE L'AMPLIFICATEUR	POINTS DE L'ALIGNMENT	ALIGNER POUR	FIG.
Sauf indication contraire, régler comme suit les commandes respectives: POWER: ON SPEAKER: B REC OUT: OFF SELECTOR: PHONO							
1	COURANT DE POLARISATION	—	Connecter un voltmètre de CC SUR CP1 (G) CP2 (D) (X09-)	VOLUME: 0	VR1 (G) VR2 (D) (X09-)	18mV	(a)

ABGLEICH

NR.	GENGENSTAND	EINGANGS- EINSTELLUNG	AUSANG- EINSTELLUNG	VORSTÄRKER- EINSTELLUNG	ABGLEICHE- PUNKTE	ABGLEICHEN FÜR	ABB.
Wenn nicht anders angegeben, die einzelnen Schalter wie folgt einstellen: POWER: ON SPEAKER: B REC OUT: OFF SELECTOR: PHONO							
1	LEERLAUFSTROM	—	Einen Gleichspannungs- messer über CP1 (L) CP2 (R) anschließen. (X09-)	VOLUME: 0	VR1 (L) VR2 (R) (X09-)	18mV	(a)

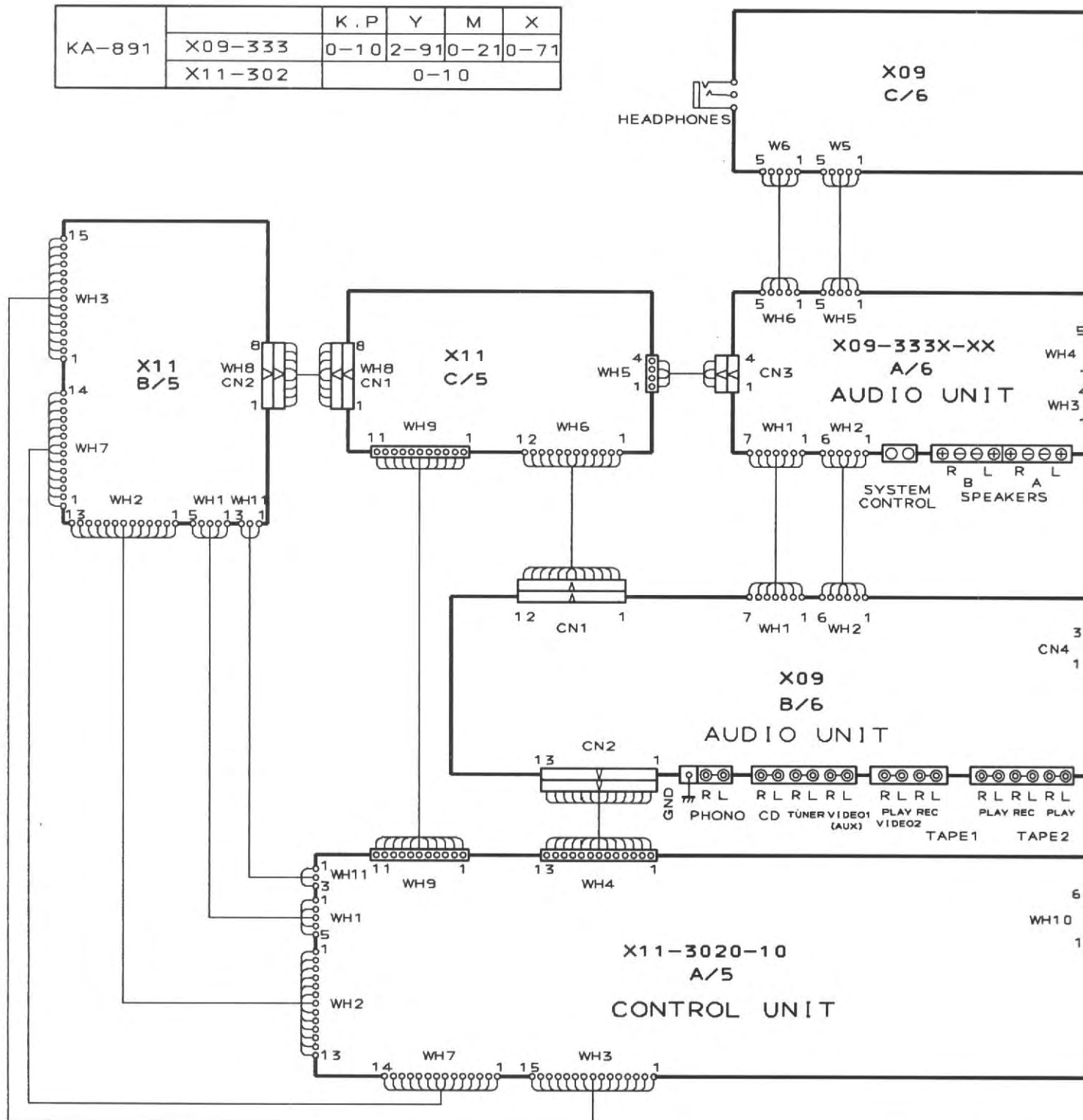
(a) DC voltmeter
Voltmètre de CC
Gleichspannungsmesser



KA-891 KA

WIRING DIAGRAM

KA-891		K . P	Y	M	X
	X09-333	0-10	2-91	0-21	0-71
	X11-302	0-10			



KA-891

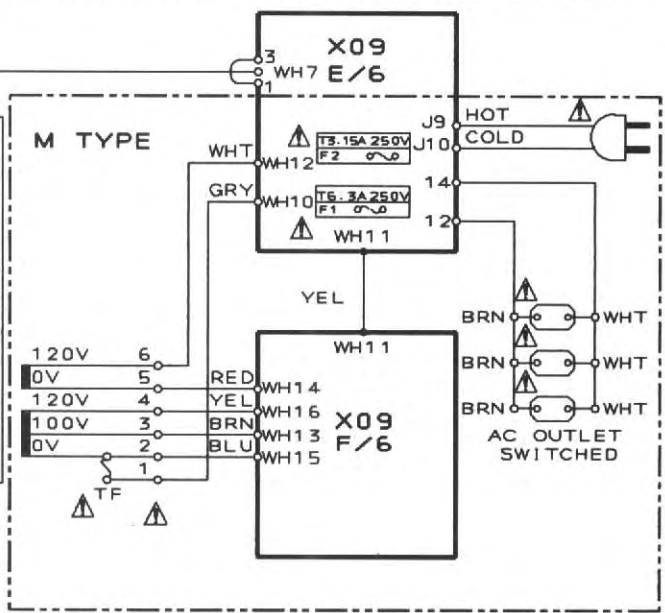
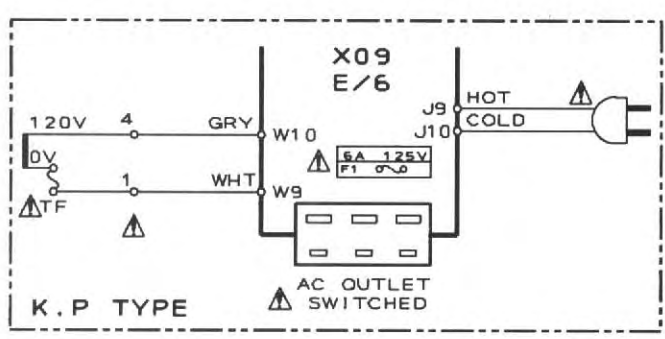
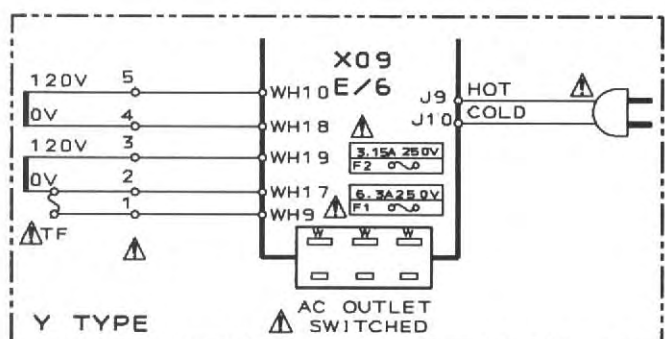
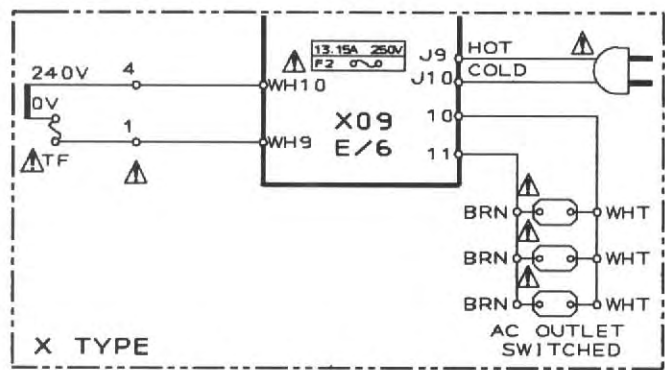
WIRING DIAGRAM

09
/6

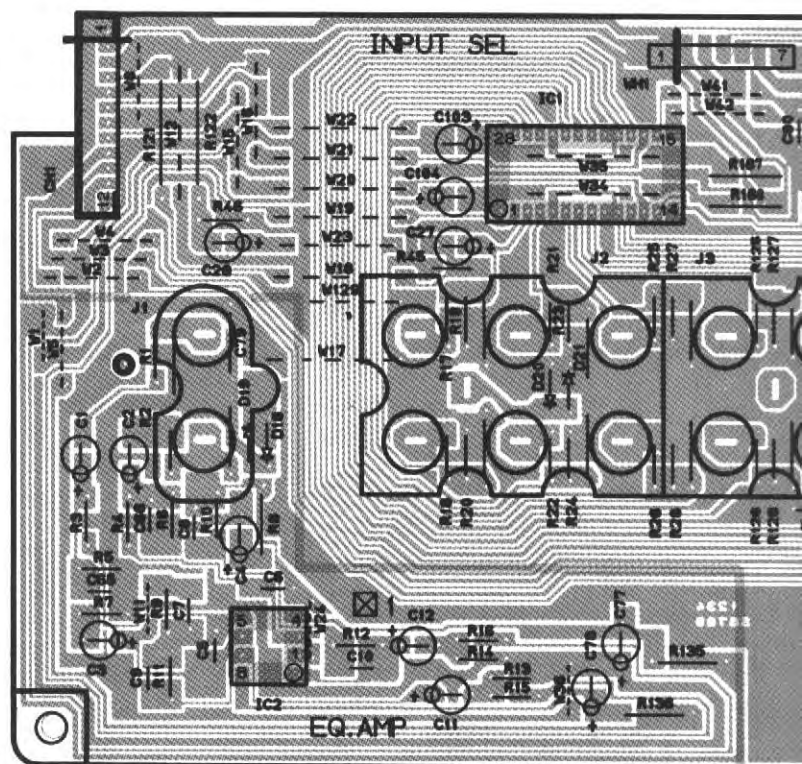
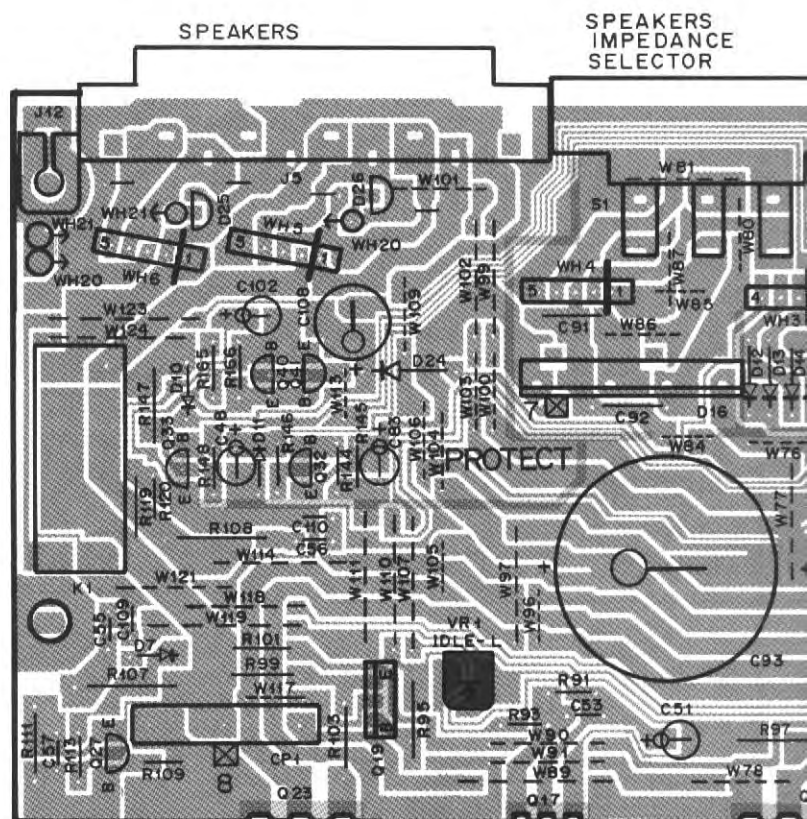
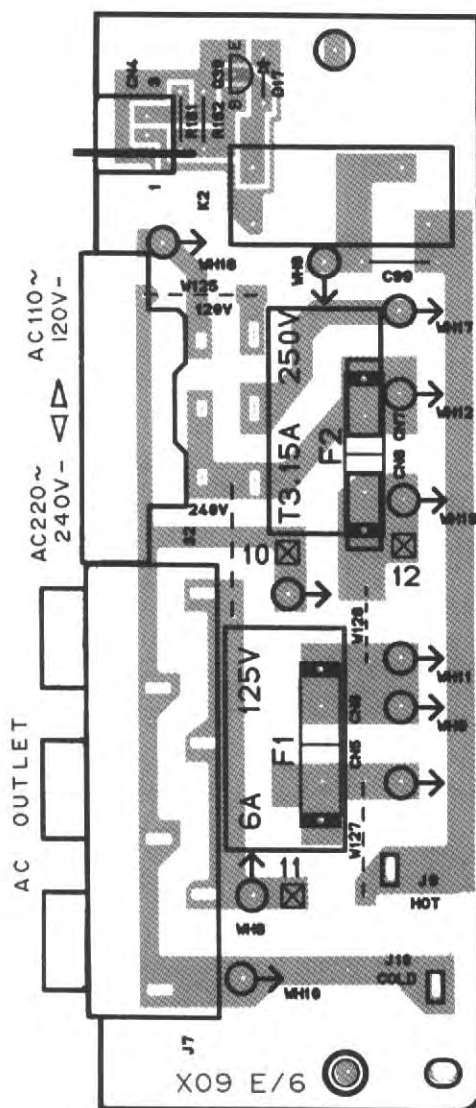
333X-XX
A/6
O UNIT

SYSTEM
CONTROL

L R L R L R L
PLAY REC PLAY REC
TAPE1 TAPE2



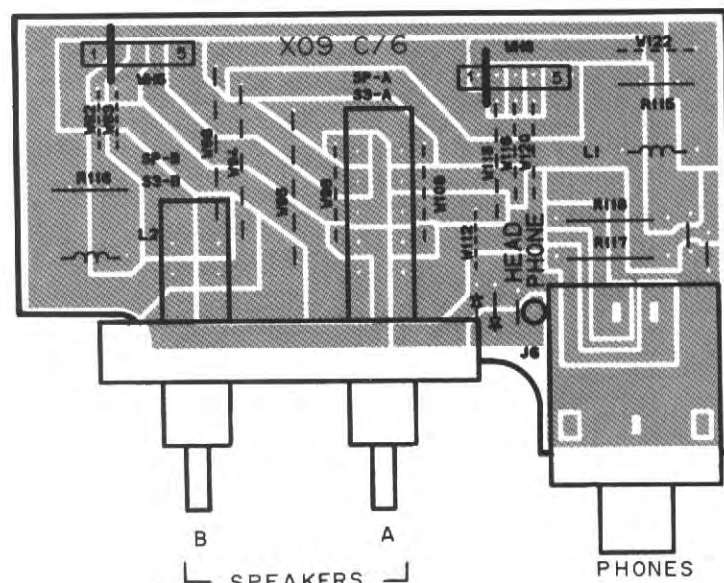
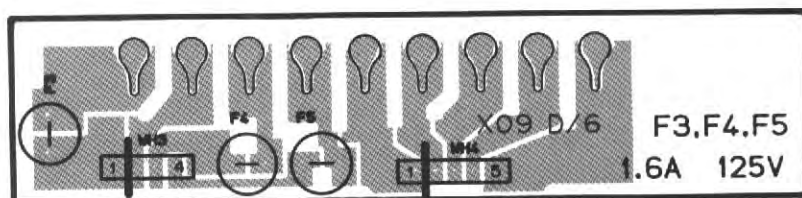
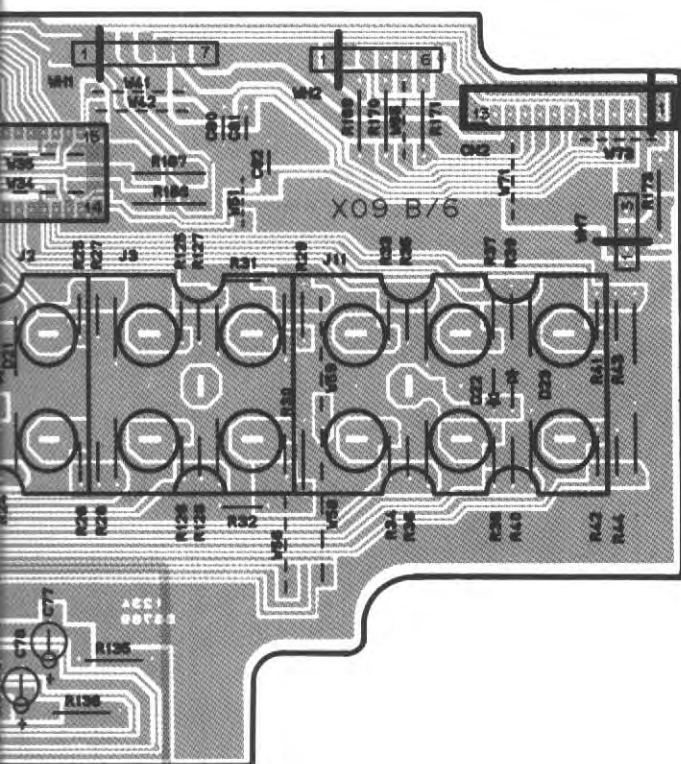
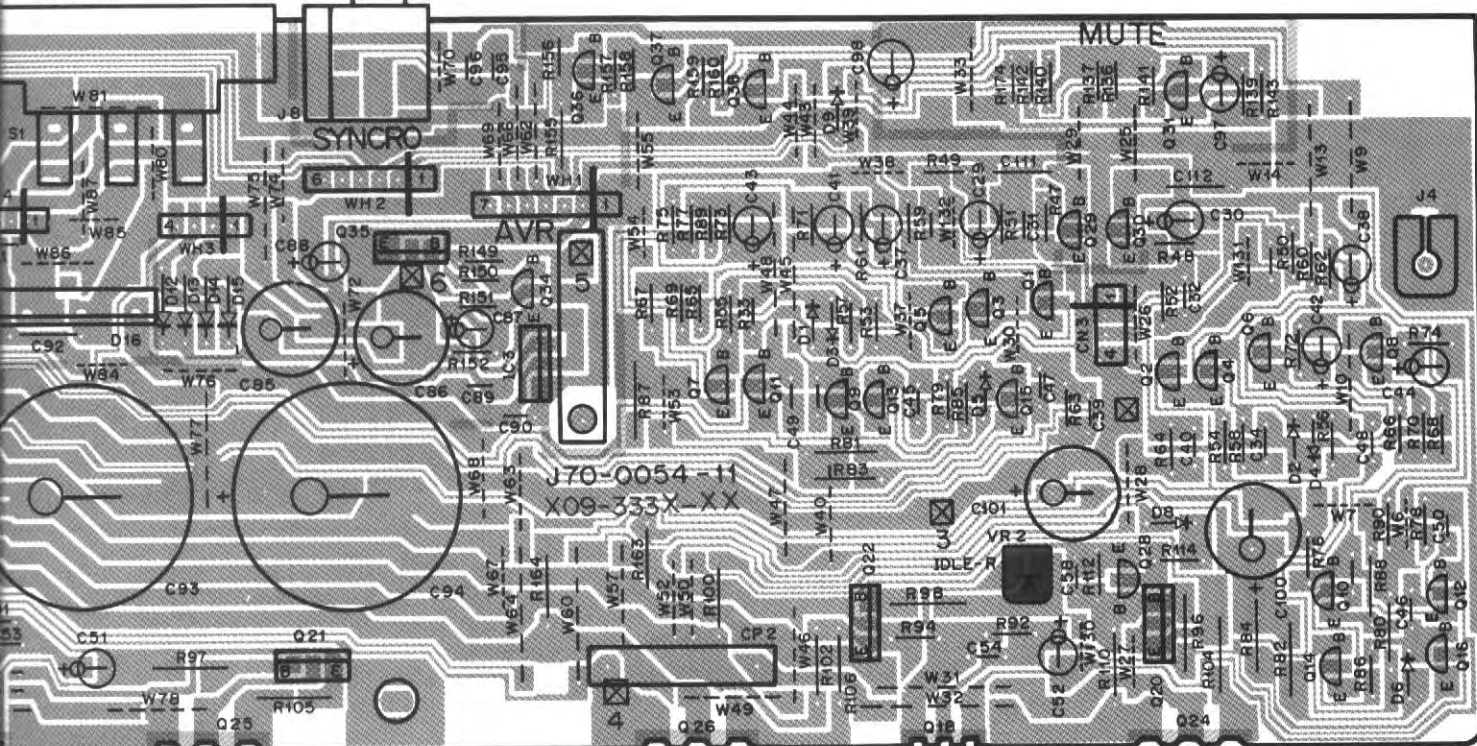
- **AUDIO UNIT**

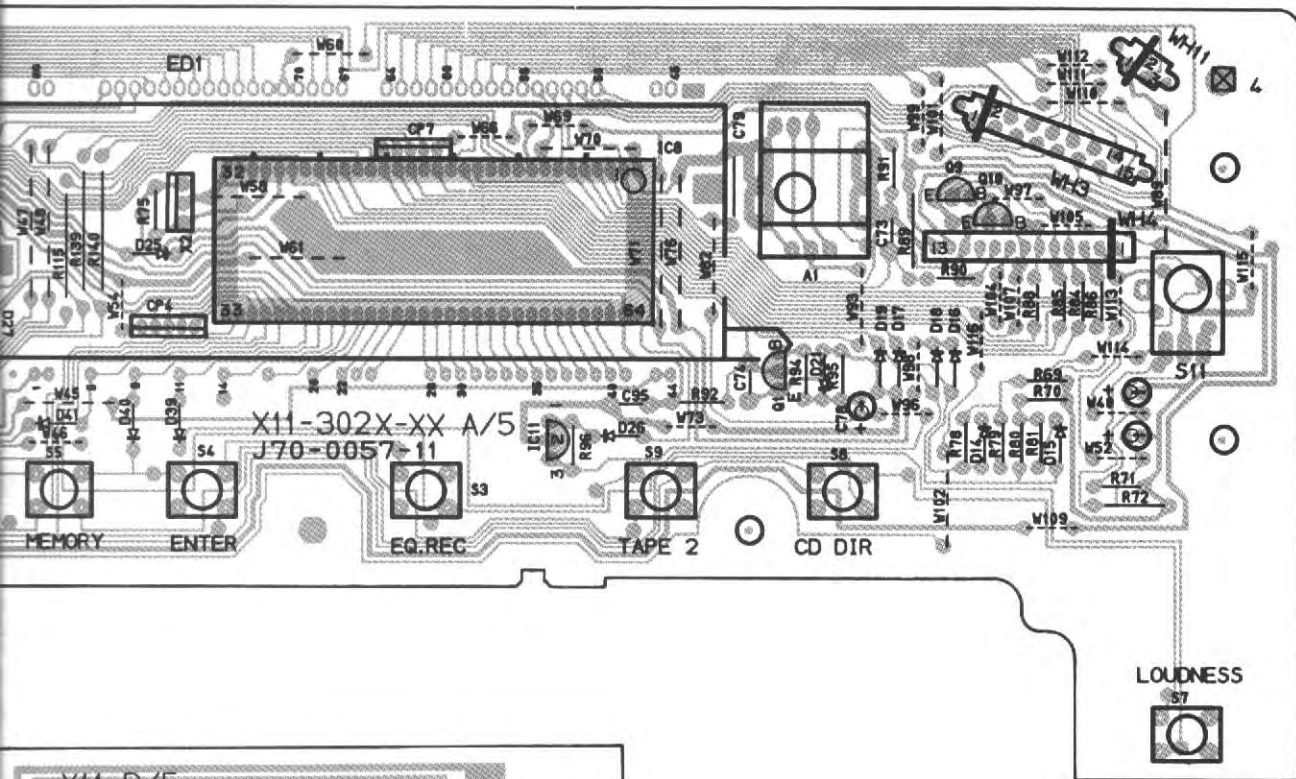


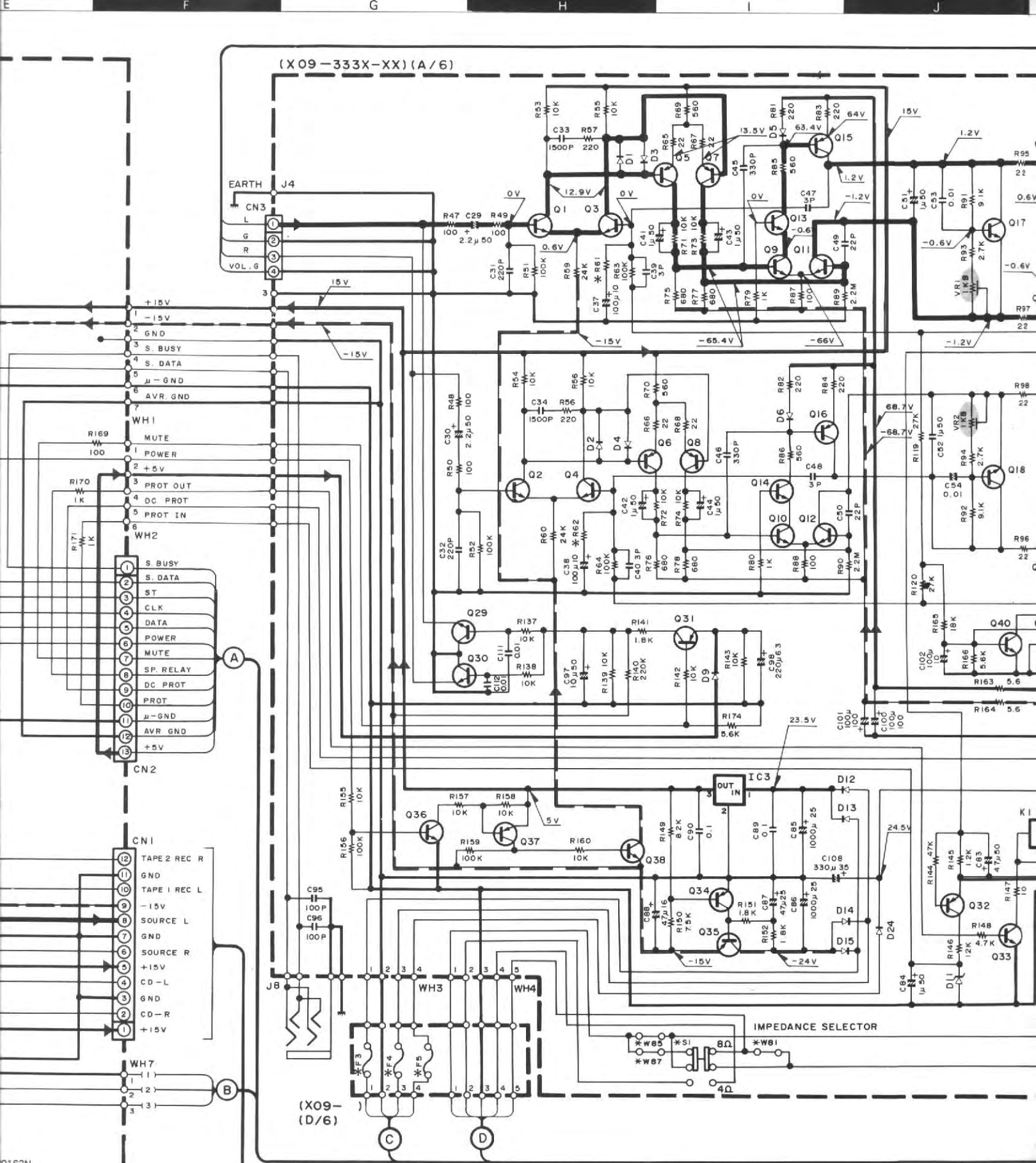
Refer to the schematic diagram for the values of resistors and capacitors.

SPEAKERS
IMPEDANCE
SELECTOR

PHONO







9163N
PC4570C-A
SS104A or 1SS131

(X09-333X-XX) (D/6) *

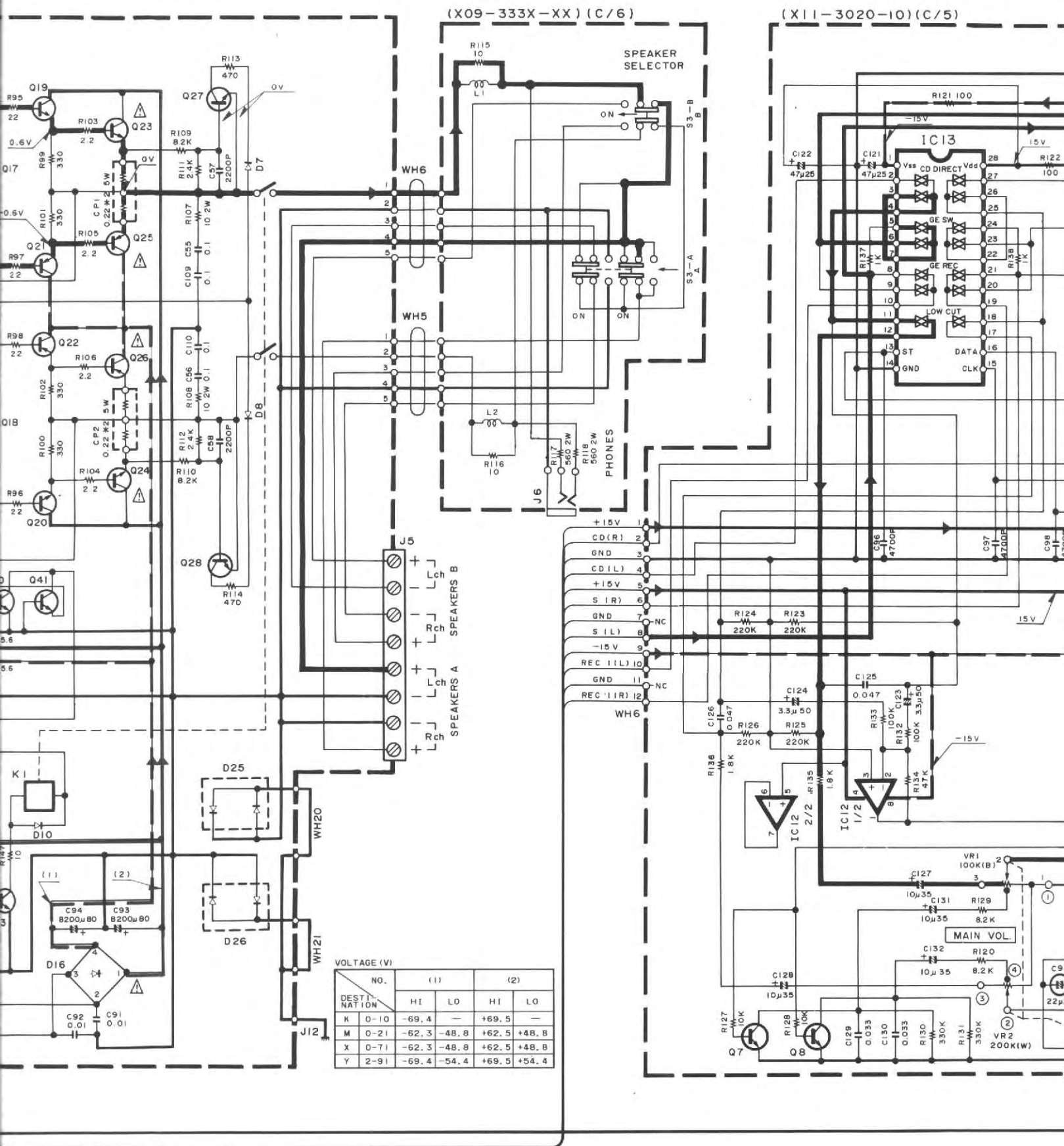
DES-TINATION	REF. NO.	F3-5
K	0-10	T1.6A 125V
M	0-21	T1.6A 250V
X	0-71	T1.6A 250V
Y	2-91	T1.6A 125V

(X09-333X-XX) (A/6) *

DES-TINATION	REF. NO.	R61, 62	WB1, 85	WB7	S1
K	0-10	510	YES	NO	NO
M	0-21	560	NO	YES	YES
X	0-71	560	NO	YES	YES
Y	2-91	510	NO	YES	YES

(X09-333X-XX) (A/6)

IC3	: μ PC7815HF or TA7815S	Q19, 20
Q1~4	: 2SC1845(F, E)	Q21, 22
Q5~8	: 2SA992(F, E)	Q23, 24
Q9~14	: 2SC2632(Q, R, S)	Q25, 26
Q15, 16	: 2SA1124(Q, R, S)	Q27, 28
Q17, 18	: 2SC4137	Q29, 30



: 2SC3944(Q, R, S)
: 2SA1535(Q, R, S)
: 2SC2921
: 2SA1215
: 2SC2631(R, S)
: 2SC2878(B)

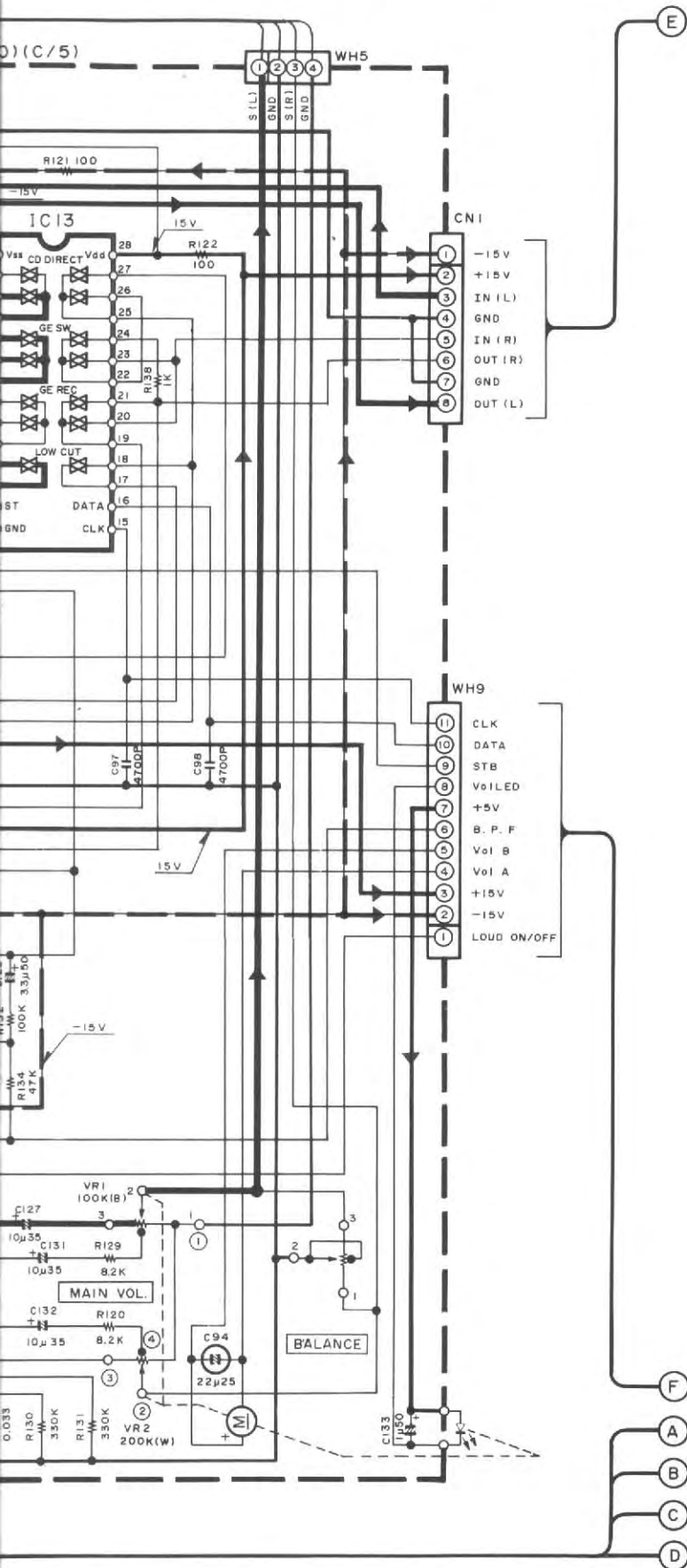
Q31, 34, 37
Q32
Q33, 39
Q35
Q36, 38, 40, 41

: 2SA933S(Q, R) or 2SA1048(Y, GR)
: 2SA1123(R, S)
: 2SC2003(L, K)
: 2SB941
: 2SC1740S(Q, R) or 2SC2458(Y, GR)

D1~10
D11
D12~15, 24
D16
D25, 26

: HSS104A or 1SS131
: HZS4.7N(B) or RD4.7ES(B)
: S5688B or RD4.7ES(B)
: D5SBA20F03 or RBV-602LFA
: MA177

(X11-3020-10) (C/5)
IC12
IC13
Q7, 8



(X11-3020-10) (C/5)

IC12 : NJM4565L
IC13 : TC9162N
Q7, 8 : 2SC2878(B)

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

2SA1123
2SA1124
2SA992
2SC1845
2SC2003
2SC2631
2SC2632
2SC2878
2SC3244

XR-1091DCP
LB1294

UPC
UPC
PST

DTC124ES
2SA1048
2SA933S
2SC1740S
2SC2458

TA8409S

TC9
TC9

2SA1215
2SC2921

M5229P

UPC4570C-A

M5
M5

2SC4137

TA7
TA7

2SA1535
2SB941
2SC3944

RZ7305L

Y08-4320-10

CAUTION: For continued safety, replace safety components only with manufacturer's recommended parts list. ⚠ Indicates safety critical components. Risk of electric shock, leakage-current or resistance shall be carried out (exposed parts are acceptable) before the appliance is returned to the supply circuit.

DC voltages are as measured with a high impedance meter. Values may vary slightly due to variations in individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec une haute impédance. Les valeurs peuvent différer à cause des variations inhérentes aux appareils et des mesures individuelles.

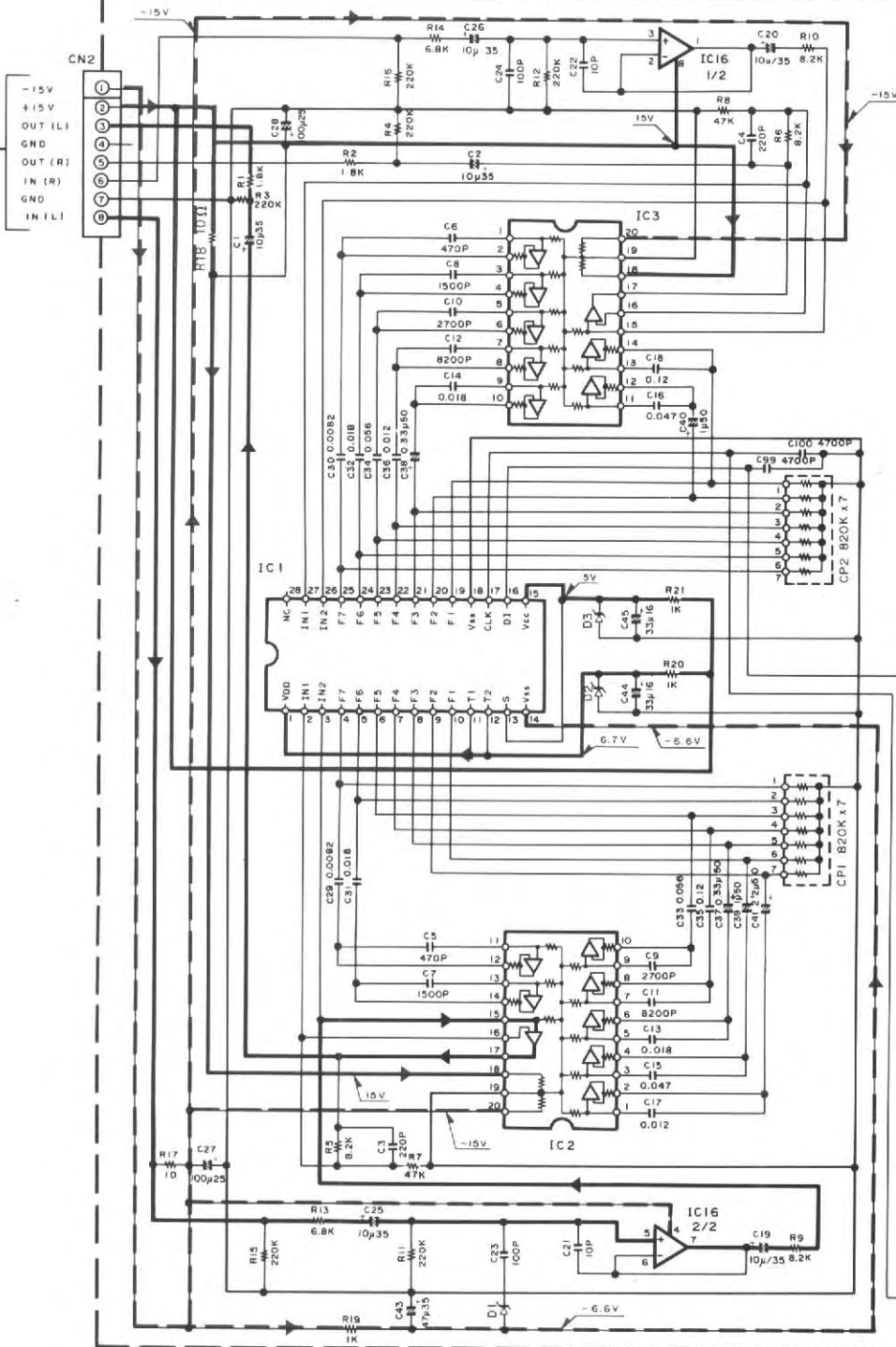
Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Die Meßwerte aufgrund von Unterschieden zwischen Instrumenten oder Geräten u. U. geringfügig.



Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

KA-891
KENWOOD

(X11-3020-10) (B/5)



(X11-3020-10) (B/5)

IC1 : RZ7305L
IC2, 3 : M5229P
IC4 : M50940-130SP
IC5, 7 : XR-109/DCP
IC6 : XRU4051B
IC14, 15 : LB1294
IC16 : μPC4570C-A

D1, 2 : HZS6.8N(B2) or RD6.8ES(B2)
D3 : HZS5.1N(B2) or RD5.1ES(B2)
D4~11, 23 : HSS104 or 1SS133
D12, 13 : HZS5.6N(B2) or RD5.6ES(B2)

G. DATA
P. RES
G. CLK
P. RED
+15V
-15V
-5V
L + R
P. CLK
P. DATA
GND
+5V

WH2

CP1 820K x 7
CP2 820K x 7
CP3 47K x 5
CP4 47K x 5
CP5 100K

IC14

IC15

IC16

IC17

IC18

IC19

IC20

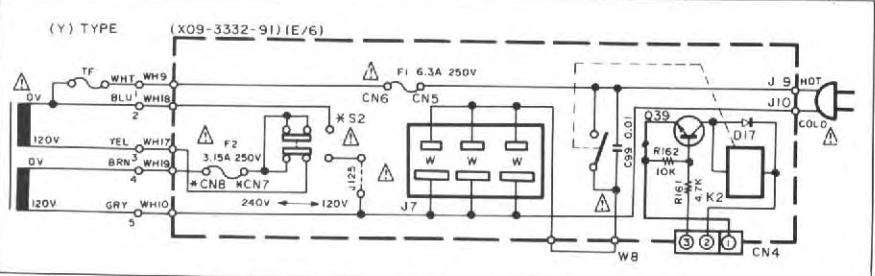
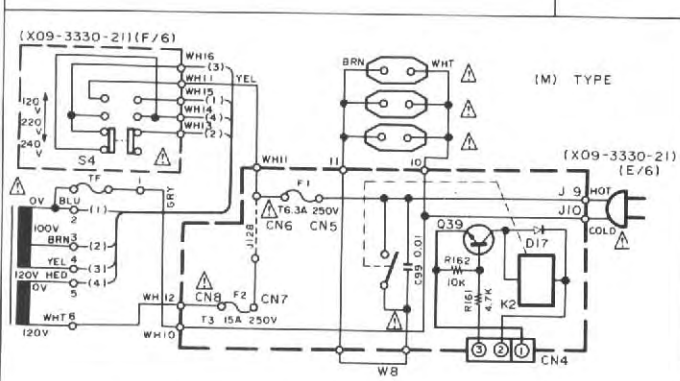
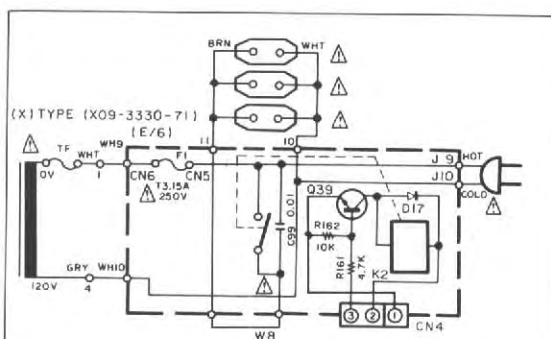
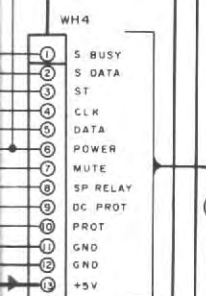
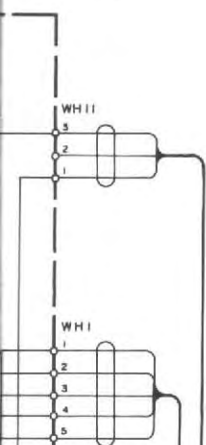
IC21

IC22

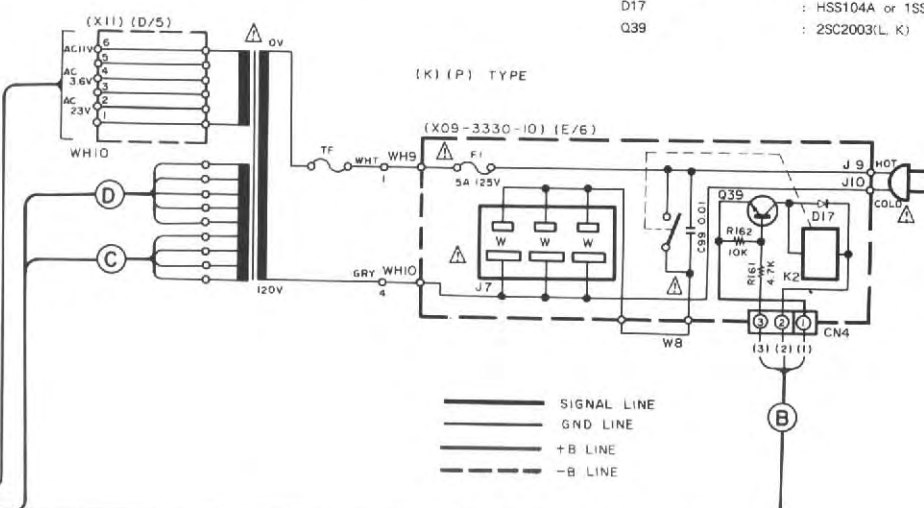
: 2SC1740S(Q, R) or 2SC2485(Y, GR)
 : 2SA933S(Q, R) or 2SA1048(Y, GR)
 : 2SC3244(D, E)

D14~21, 24~27
 29, 39~41
 D22
 D28
 D30
 D31~35
 D37
 A1
 ED1

: HSS104 or 1SS133
 : HZS3.9N(B2) or RD3.9ES(B2)
 : HZS8.2N(B2) or RD8.2ES(B2)
 : B30-1291-05
 : S5686B
 : HZS5.1N(B2) or RD5.1ES(B2)
 : W02-1046-05 or W02-1043-05
 : FIP16AMW20



(X09-333X-XX) (E/6)
 D17 : HSS104A or 1SS131
 Q39 : 2SC2003(L, K)



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

with a high impedance voltmeter due to variations between individuals.

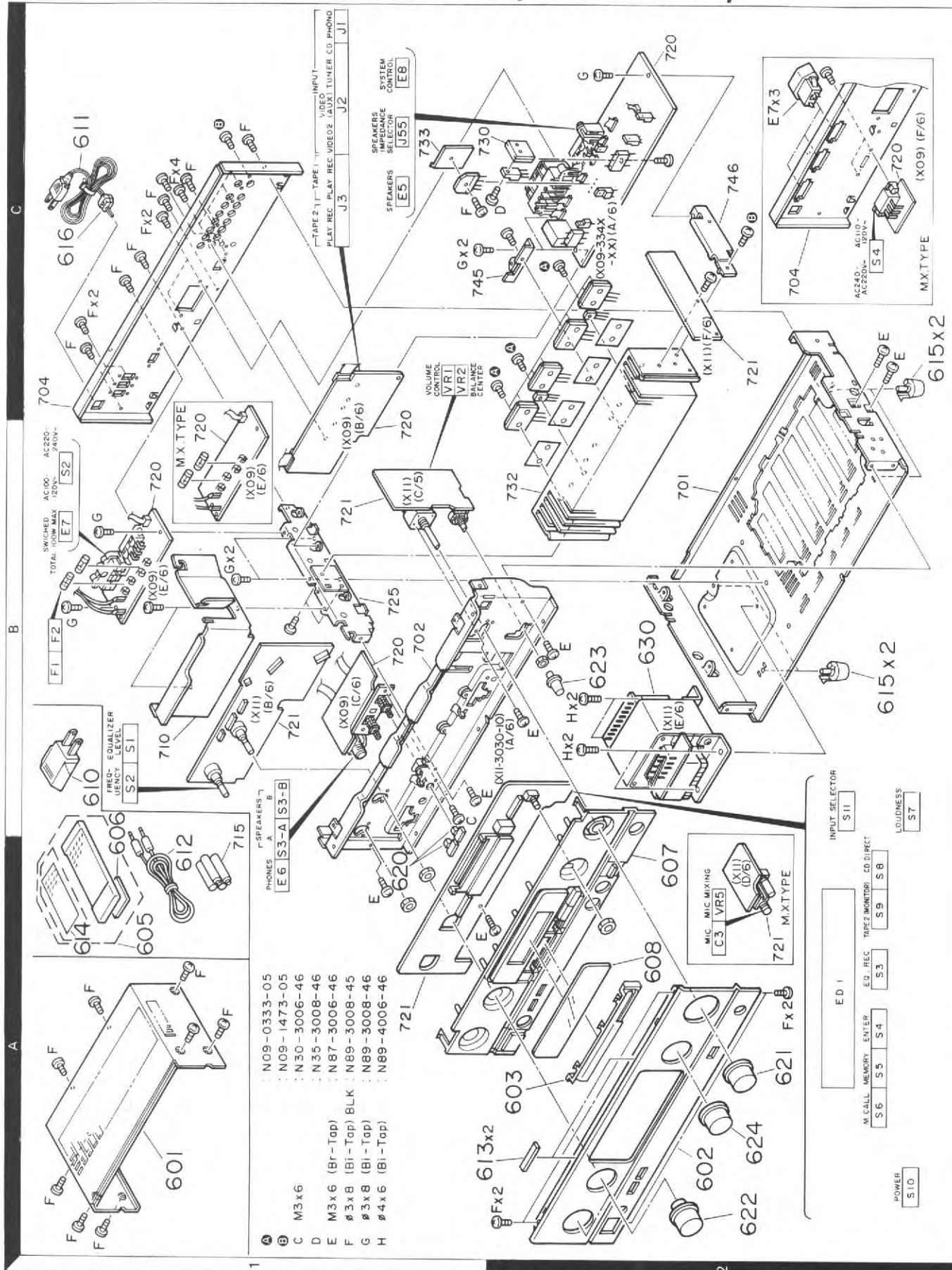
mesurées avec un voltmètre à haute impédance, les valeurs peuvent différer légèrement d'un appareil à l'autre et des instruments.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

Y08-4320-10

KA-891
KENWOOD

EXPLODED VIEW (MECHANISM)



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

PARTS LIST

Destination list

	SINGAPORE MADE
KA-891	K, P, Y, M, X

Audio unit

X09-3330-10	KA-891K, P
X09-3330-21	KA-891M
X09-3330-71	KA-891X
X09-3332-91	KA-891Y

Control unit

X11-3020-10	KA-891K, P, Y, M, X
-------------	---------------------

No.1

* 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. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
KA-891					
601	1A	* A01-1913-01	METALLIC CABINET		
602	2A	* A60-0020-02	PANEL		
603	2A	* A21-1787-03	DRESSING PANEL		
604	1A, 1B	* A70-0512-05	REMOTE CONTROLLER ASSY		
605	1A	* A09-0111-08	BATTERY COVER		
606					
607	1A, 2A	* B01-0479-01	PANEL ESCUTCHEON		
608	2A	* B10-1842-03	FRONT GLASS		
-		* B46-0092-03	WARRANTY CARD		
-		* B46-0094-03	WARRANTY CARD		
-		* B46-0095-03	WARRANTY CARD		
-		* B46-0096-23	WARRANTY CARD		
-		* B46-0121-03	WARRANTY CARD		
-		* B58-0513-04	CAUTION CARD (PRESET220-240)		
-		* B60-0341-00	INSTRUCTION MANUAL (ENGLISH)		
-		* B60-0342-00	INSTRUCTION MANUAL (FRENCH)		
-		* B60-0343-00	INSTRUCTION MANUAL (SP, AR, CH)		
610	1B	E03-0115-05	AC PLUG ADAPTER		
611	1C	E30-0459-05	AC POWER CORD		
611	1C	E30-0612-05	AC POWER CORD		
611	1C	E30-1341-05	AC POWER CORD		
611	1C	E30-2209-05	AC POWER CORD		
612	1A	E30-1392-05	CORD WITH PLUG		
E7	1B	E03-0055-05	AC OUTLET		
E7	1B	E03-0114-05	AC OUTLET		
613	2A	G11-0155-14	SOFT TAPE (40X9X2)		
614	1A	G16-0772-08	REMOTE CONTROLLER ENTRY SHEET		
-		H50-0018-04	ITEM CARTON CASE		
-		H10-5091-02	POLYSTYRENE FOAMED FIXTURE		
-		H10-5092-02	POLYSTYRENE FOAMED FIXTURE		
-		H25-0223-04	PROTECTION BAG (750X350X0.03)		
-		H25-0232-04	PROTECTION BAG (235X350X0.03)		
615	2B, 2C	J02-1013-05	FOOT		
616	1C	J42-0083-05	POWER CORD BUSHING		
-		J61-0307-05	WIRE BAND		
620	1A, 1B	K27-2014-04	KNOB SPEAKERS		
621	2A	* K29-4104-04	KNOB VOLUME		
622	2A	* K29-4106-04	KNOB FREQUENCY, EQ LEVEL		
623	2B	* K29-3911-04	KNOB BALANCE		
624	2A	* K29-4105-04	KNOB INPUT SELECTOR		
630	2B	L07-0260-05	POWER TRANSFORMER		
630	2B	* L07-0261-05	POWER TRANSFORMER		
630	2B	* L07-0262-05	POWER TRANSFORMER		
630	2B	* L07-0263-05	POWER TRANSFORMER		
630	2B	* L07-0264-05	POWER TRANSFORMER		
B	1C	N89-3008-41	TAPPING SCREW (M3X8)		
C	1B	N30-3006-46	PAN HEAD MACHIN SCREW		
E	1A, 2B	N87-3006-46	BRAZIER HEAD TAPITITE SCREW		
F	1A, 1B	N89-3008-45	BINDING HEAD TAPITITE SCREW		
G	1B, 2C	N89-3008-46	BINDING HEAD TAPITITE SCREW		
H	2B	N89-4006-46	BINDING HEAD TAPITITE SCREW		

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PARTS LIST

No.3

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

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
F1		F05-6321-05	FUSE (SEMKO) (250V T6.3A)	M	
F2		F05-6324-05	FUSE (SEMKO) (250V 6.3A)	Y	
F3		F05-3121-05	FUSE (SEMKO) (250V T3.15A)	M	
F4		F05-3123-05	FUSE (SEMKO) (250V T3.15A)	Y	
F5		F53-0018-05	FUSE (SEMKO) (250V 3.15A)	MX	
F6		F53-0032-05	FUSE (SEMKO) (250V 3.15A)	KPY	
F7		J13-0075-05	FUSE CLIP	YM	
F8		J13-0075-05	FUSE CLIP	KPX	
L1		L39-0085-05	PHASE-COMPENSATION COIL		
A	2C	N09-0333-05	TAPPING SCREW (3X12)		
D	2C	N35-3008-46	BINDING HEAD MACHIN SCREW		
E	1C	N89-3008-46	BINDING HEAD TAPITE SCREW		
G	1B, 2C	N89-3008-46	BINDING HEAD TAPITE SCREW		
CP1	2	R90-0187-05	MULTI-COMP 0.22X2	K	5W
R81		RD14NB25221J	FL-PR00F R0 220	J	1/4W
R82		RD14NB25221J	FL-PR00F R0 220	J	1/4W
R83		RD14NB25221J	FL-PR00F R0 220	J	1/4W
R84		RD14NB25221J	FL-PR00F R0 220	J	1/4W
R87		RD14NB25101J	RD 100	J	1/4W
R88		RD14NB25101J	FL-PR00F R0 100	J	1/4W
R95	-98	RD14NB25220J	RD 22	J	1/4W
R99	-102	RD14NB25331J	FL-PR00F R0 330	J	1/4W
R103		RD14NB25222J	FL-PR00F R0 2.2	J	1/4W
R104	105	RD14NB25222J	RD 2.2	J	1/4W
R106		RD14NB25222J	FL-PR00F R0 2.2	J	1/4W
R107	108	RS14KB30100J	FL-PR00F RS 10	J	2W
R115	116	RD14NB25100J	RD 10	J	1/4W
R117	118	RS14KB30561J	FL-PR00F RS 560	J	2W
R147		RD14NB25100J	RD 10	J	1/4W
R163	164	RD14NB25256J	FL-PR00F R0 5.6	J	1/4W
R167	168	RD14NB25201J	RD 22	J	1/4W
VR1	2	R12-1618-05	TRIMMING POT. (1K)		
K1		S51-2092-05	MAGNETIC RELAY		
K2		S51-1052-05	MAGNETIC RELAY		
S1		S31-2136-05	SLIDE SWITCH IMPEDANCE SELECT	YMX	
S2		S31-2131-05	SLIDE SWITCH VOLTAGE SELECT	Y	
S3		S42-2163-05	MULTIPLE PUSH SWITCH SPEAKERS		
S4		S31-2322-05	SLIDE SWITCH VOLTAGE SELECT	M	
D1	-10	HSS104A	D100E		
D1	-10	1SS131	D100E		
D11		HZ54.7N(B)	ZENER DIODE		
D11		RD4.7ES(B)	ZENER DIODE		
D12	-15	S5688B	D100E		
D12	-15	1SR139-100	D100E		
D16		D5BA20F03	D100E		
D16		RBV-602LFA	D100E		
D17	-23	HSS104A	D100E		
D17	-23	1SS131	D100E		
D24		S5688B	D100E		
D24		1SR139-100	D100E		
D25		MA177	D100E		
D26		MA177	D100E		

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No.2

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Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
AUDIO UNIT (X09-333X-XX)					
C1	2	CE04LW1H100M	ELECTR0 100UF 50WV		
C3	4	CE04LW1A101M	ELECTR0 10WV		
C5	6	CK45FB1H561K	CERAMIC 560PF		
C7	8	C092FM1H123J	MYLAR 0.012UF		
C9	10	C092FM1H332J	MYLAR 3300PF		
C11	12	CE04LW1H4R7M	ELECTR0 4.7UF 50WV		
C17	30	CE04LW1H282M	ELECTR0 2.2UF 50WV		
C31	32	C045FSL1H221J	CERAMIC 220PF		
C33	34	C092FM1H152J	MYLAR 1500PF		
C37	38	CE04LW1A101M	ELECTR0 100UF 10WV		
C39	40	C045FSL1H030C	CERAMIC 3.0PF		
C41	44	CE04LW1H010M	ELECTR0 1.0UF 50WV		
C45	46	C045FSL1H331J	CERAMIC 330PF		
C47	48	C045FSL1H030C	CERAMIC 3.0PF		
C49	50	C045FSL1H220J	CERAMIC 22PF		
C51	52	CE04LW1H010M	ELECTR0 1.0UF 50WV		
C53	54	CK45FSL1H032J	CERAMIC 0.010UF		
C55	56	C092FM1H104J	MYLAR 0.10UF		
C57	58	C092FM1H222J	MYLAR 2200PF		
C65	66	C045FSL1H221J	CERAMIC 220PF		
C77	78	CE04LW1C220M	ELECTR0 22UF 16WV		
C79		C91-0769-05	CERAMIC 0.01UF		
C80	81	CK45FB1H102K	CERAMIC 1000PF		
C82		CK45FB1H332K	CERAMIC 3300PF		
C83		CE04LW1H4R7M	ELECTR0 4.7UF 50WV		
C84		CE04LW1H010M	ELECTR0 1.0UF 50WV		
C85	86	CE04LW1E102M	ELECTR0 1000UF 25WV		
C87		CE04LW1E470M	ELECTR0 47UF 25WV		
C88		CE04LW1C470M	ELECTR0 47UF 16WV		
C89	90	C092FM1H104J	MYLAR 0.10UF		
C91	92	CK45FSL1H03P	CERAMIC 0.010UF		
C93	94	C092-1868-05	ELECTR0 8200UF	P	
C95	96	C045FSL1H101J	CERAMIC 100PF		
C97		CE04LW1H100M	ELECTR0 100UF 50WV		
C98		CE04LW1V221M	ELECTR0 220UF 6.3WV		
C99		C91-0647-05	CERAMIC 0.01UF	P	
C100	101	CE04LW2A101M	ELECTR0 100UF 10WV		
C102		CE04LW1A101M	ELECTR0 100UF 10WV		
C103	104	CE04LW1C220M	ELECTR0 22UF 16WV		
C108		CE04LW1V331M	ELECTR0 330UF 35WV		
C109	110	C092FM1H104J	MYLAR 0.10UF	J	
C111	112	C91-0769-05	CERAMIC 0.01UF	K	
J1		E13-0259-05	PHONE JACK PHONO		
J2		E13-0637-05	PHONE JACK CD, TUNER, VIDEO1		
J3		E13-0486-05	PHONE JACK VIDEO2, TAPE1(REC)		
J5		E20-0823-05	LOCK TERMINAL BOARD SPEAKERS		
J6		E11-0162-05	PHONE JACK HEAD PHONE		
J7		E03-0093-05	AC OUTLET	KPY	
J8		E11-0188-05	PHONE JACK SYSTEM CONTROL		
J11		E13-0637-05	PHONE JACK TAPE1(PLAY), TAPE2		
F1		F05-3121-05	FUSE (SEMKO) (250V T3.15A)	X	
F1		F05-6029-05	FUSE (UL)	KP	

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PARTS LIST

No.5

* New Parts
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Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕
C41, 42		CE04LW1H2R2M	ELECTR0	50WV
C43		CE04LW1V4R7M	ELECTR0	35WV
C44, 45		CE04LW1C330M	ELECTR0	16WV
C51		CE04LW1V100M	ELECTR0	35WV
C52		CK45FE1H103Z	CERAMIC	0.010UF
C53		CE04LW1E101M	ELECTR0	25WV
C54		CE04LW1E101M	MYLAR	100PF
C55, 56		CE04LW1E101M	ELECTR0	25WV
C57		CC45FSL1H101J	CERAMIC	100PF
C61		CE04LW1E101M	ELECTR0	25WV
C62		CQ92FM1H102J	MYLAR	1000PF
C71, 72		CE04JW1H010M	ELECTR0	1.0UF
C73, 74		CK45FE1H103Z	CERAMIC	0.010UF
C75		CE04LW0221M	ELECTR0	220UF
C76		C90-1828-05	BACKUP	0.047F
C77		CK45FE1H232Z	CERAMIC	0.022UF
C78		CE04JW1H0R1M	ELECTR0	0.1UF
C79		C91-0768-05	CERAMIC	0.01UF
C80		CE04JW0221M	ELECTR0	220UF
C81		C90-1283-05	ELECTR0	6.3WV
C82		CE04JW1C100M	ELECTR0	3.3UF
C83		CE04JW1V100M	ELECTR0	16WV
C84		CK45FE1H103Z	CERAMIC	0.010UF
C85, 88		CE04EW1V221M	ELECTR0	220UF
C89, 90		CE04JW1H100M	ELECTR0	35WV
C91		CF92PV1H104J	MF	0.10UF
C92		CE04LW0221M	ELECTR0	220UF
C93		CF92PV1H104J	MF	0.10UF
C94		NP-BLEC	NP-BLEC	6.3WV
C95		C90-1353-05	MF	25WV
C96, 100		CF92PV1H104J	MF	0.10UF
C101, 102		C91-0765-05	CERAMIC	820PF
C103, 122		CK45FE1H103Z	CERAMIC	0.010UF
C121, 122		CE04LW1E470M	ELECTR0	47UF
C123, 124		CE04LW1H3R3M	ELECTR0	25WV
C125, 126		CF92PV1H473J	MF	3.3UF
C127, 128		CE04LW1V100M	ELECTR0	0.047UF
C129, 130		CE04LW1H333J	MF	35WV
C131, 132		CE04LW1V100M	ELECTR0	0.033UF
C133, 135		CE04LW1H010M	ELECTR0	10UF
C134, 135		CF92PV1H104J	MF	1.0UF
X1, 2		L78-0244-05	RES0NATOR	4MHz
CP1, 2		R90-0491-05	MULTI-COMP	820KX7
CP3		R90-0818-05	MULTI-COMP	J 1/6W
CP4		R90-0809-05	MULTI-COMP	J 1/6W
CP5		R90-0291-05	MULTI-COMP	J 1/6W
CP6		R90-0203-05	MULTI-COMP	J 1/6W
CP7, 18		R90-0487-05	MULTI-COMP	J 1/6W
R66, 67		R014G82E100J	FL-PR00F RS	J 1/4W
R106, 107		RS14K83A331J	FL-PR00F RS	J 1W
R109, 110		R014N32E1R0J	RD	J 1/4W
R121, 122		R014N32E101J	RD	J 1/4W
VR1		R29-5052-05	POTENTIOMETER	100
VR2		R01-5078-05	POTENTIOMETER BALANCE	J 1/4W

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No.4

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Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕
IC1		TC9163N	IC(BILATERAL SWITCH X16)	
IC2		UPC4570C-A	IC	
IC3		TA7815S	IC(REGULATOR)GULATOR/ +15V)	
IC3		UPC7815SHF	IC(VOLTAGE REGULATOR/ +15V)	
Q1, 4		2SC1845(F,E)	TRANSISTOR	
Q5, 8		2SA932(F,E)	TRANSISTOR	
Q9, 14		2SC2632(Q,R,S)	TRANSISTOR	
Q15, 16		2A1124(Q,R,S)	TRANSISTOR	
Q17, 18		2SC4137	TRANSISTOR	
Q19, 20		2SC3944(Q,R,S)	TRANSISTOR	
Q21, 22		2A1535(Q,R,S)	TRANSISTOR	
Q23, 24		2SC2521	TRANSISTOR	
Q25, 26		2SA1215	TRANSISTOR	
Q27, 28		2SC2831(R,S)	TRANSISTOR	
Q29, 30		2SC2878(B)	TRANSISTOR	
Q31		2SA1048(Y,GR)	TRANSISTOR	
Q31		2SA933S(Q,R)	TRANSISTOR	
Q32		2A1123(R,S)	TRANSISTOR	
Q33		2SC2003(L,K)	TRANSISTOR	
Q34		2SA1048(Y,GR)	TRANSISTOR	
Q34		2SA933S(Q,R)	TRANSISTOR	
Q35		2SB941	TRANSISTOR	
Q36		2SC1740S(Q,R)	TRANSISTOR	
Q37		2SC2458(Y,GR)	TRANSISTOR	
Q37		2SA1048(Y,GR)	TRANSISTOR	
Q37		2SA933S(Q,R)	TRANSISTOR	
Q38		2SC1740S(Q,R)	TRANSISTOR	
Q38		2SC2458(Y,GR)	TRANSISTOR	
Q39		2SC2003(L,K)	TRANSISTOR	
Q40, 41		2SC1740S(Q,R)	TRANSISTOR	
Q40, 41		2SC2458(Y,GR)	TRANSISTOR	
CONTROL UNIT (X11-3020-10)				
D30		B30-1291-05	LE0(LN210PSLX(V)-(T44))	
C1, 2		CE04LW1V100M	ELECTR0	35WV
C3, 4		CC45FSL1H221J	CERAMIC	10UF
C5, 6		CQ92FM1H471J	MYLAR	220PF
C7, 8		CQ92FM1H152J	MYLAR	470PF
C9, 10		CQ92FM1H272J	MYLAR	1500PF
C11, 12		CQ92FM1H822J	MYLAR	2700PF
C13, 14		CQ92FM1H183J	MYLAR	8200PF
C15, 16		CF92PV1H473J	MF	0.018UF
C17, 18		CF92PV1H124J	MF	0.047UF
C19, 20		CE04LW1V100M	ELECTR0	0.12UF
C21, 22		CC45FSL1H100D	CERAMIC	10PF
C23, 24		CC45FSL1H101J	CERAMIC	100PF
C25, 26		CE04LW1V100M	ELECTR0	10UF
C27, 28		CE04LW1E101M	ELECTR0	100UF
C29, 30		CQ92FM1H822J	MYLAR	8200PF
C31, 32		CQ92FM1H183J	MYLAR	0.018UF
C33, 34		CF92PV1H583J	MF	0.056UF
C35, 36		CF92PV1H124J	MF	0.12UF
C37, 38		CE04LW1H333M	ELECTR0	0.33UF
C39, 40		CE04LW1H010M	ELECTR0	1.0UF

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PARTS LIST

No.7

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Ref. No. 参照番号	Address 位置	New Parts	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 任	Re- marks 備考
A1			W02-1046-05	ELECTRIC CIRCUIT MODULE		

E: Scandinavia & Europe K: USA P: Canada
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No.6

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Ref. No. 参照番号	Address 位置	New Parts	Parts No. 部品番号	Description 部 品 名 / 規 格	Desti- nation 仕	Re- marks 備考
S1 S2 S3	2 -10	*	S60-0007-05	ROTARY SWITCH FREQUENCY LEVEL		
			S40-1064-05	PUSH SWITCH KEY BOARD		
S11	-11		T99-0509-05	SPEED DETECTOR FUNCTION		
D1 D2 D3	2 D1 D3		HZ56.8N(32)	ZENER DIODE		
			R06.8ES(32)	ZENER DIODE		
D3	-11		HZ55.1N(32)	ZENER DIODE		
			R05.1ES(32)	ZENER DIODE		
D4 -11	-11		HSS104	DIODE		
D4 -11	-11		ISS133	DIODE		
D12 -13	-13		HZ55.6N(32)	ZENER DIODE		
			R05.6ES(32)	ZENER DIODE		
D14 -21	-21		HSS104	DIODE		
			ISS133	DIODE		
D22 D23 D27	2 D22 D23 D27		HZ54.7N(32)	ZENER DIODE		
			R04.7ES(32)	ZENER DIODE		
D28	-27		HSS104	DIODE		
			ISS133	DIODE		
D28	-27		HZ58.2N(32)	ZENER DIODE		
D28 D29 D31 D31	2 D28 D29 D31 D31		R08.2ES(32)	ZENER DIODE		
			HSS104	DIODE		
D36 D36 D37 D37 D39 -41	3 D36 D36 D37 D37 D39 -41		ISS133	DIODE		
			HSS104	DIODE		
D39 -41	-41		HZ55.1N(32)	ZENER DIODE		
			R05.1ES(32)	ZENER DIODE		
D39 -41	-41		HSS104	DIODE		
D39 -41	-41		ISS133	DIODE		
D39 -41	-41		FLP16ANW20	FLUORESCENT INDICATOR TUBE		
			R27305L	IC(ELECTRONIC VOLUME)		
D39 -41	-41		W5229P	IC(7CH GRAPHIC EQUALIZER)		
			W50940-130SP	IC		
D39 -41	-41		XR-1091DCP	IC(GE DISPLAY FILTER)		
			XR04051B	IC		
D39 -41	-41		XR-1091DCP	IC(GE DISPLAY FILTER)		
			W50941-578SP	IC(MICROPROCESSOR)		
D39 -41	-41		T8A09S	IC(MOTOR CONTROL)		
D39 -41	-41		T87305S	IC(REGULATOR)		
			PCF7808HF	IC(VOLTAGE REGULATOR/ -5V)		
D39 -41	-41		U51329D	IC		
			NJW456SL	IC		
D39 -41	-41		TC9162N	IC(ANALOG SWITCH ARRAY)		
D39 -41	-41		LB1294	IC(6CH DARLINGTON DRIVER)		
			UPC4570C-A	IC		
D39 -41	-41		25C1740S(Q,R)	TRANSISTOR		
			25C2458(Y,GR)	TRANSISTOR		
D39 -41	-41		25A1048(Y,GR)	TRANSISTOR		
D39 -41	-41		25A933S(Q,R)	TRANSISTOR		
			25C3244(D,E)	TRANSISTOR		
D39 -41	-41		25C2878(B)	DIGITAL TRANSISTOR		
			DTIC124ES	DIGITAL TRANSISTOR		
D39 -41	-41		W02-1043-05	OPTIC RECEIVING MODULE		

SPECIFICATIONS

(For U.S.A. and Canada)

Rated Power Output

125 watts per channel minimum RMS, both channels driven, at 8 Ω from 20 Hz to 20,000 Hz with no more than 0.03% total harmonic distortion. (FTC)

Total Harmonic Distortion LINE input to SPEAKER output

20 Hz to 20,000 Hz	0.03% at rated power into 8 Ω
Frequency Response	10 Hz to 50 kHz, +0 dB, -3 dB
Input Sensitivity/Impedance	
Phono	2.5 mV/47 k Ω
Tuner/Tape/CD/VIDEO	200 mV/47 k Ω
Signal-to-noise Ratio (IHF-A)	
Phono	75 dB for 2.5 mV input
Tuner/Tape/CD/VIDEO	100 dB
Phono Maximum Input Level	100 mV, T.H.D. 0.5% at 1 kHz
Output Level/Impedance	
Tape REC (Pin)	200 mV/3.3 k Ω
Phono Frequency Response	RIAA standard curve ± 0.5 dB (20 Hz to 20,000 Hz)
Graphic equalizer control	
(60 Hz, 150 Hz, 400 Hz, 1 kHz, 2.4 kHz, 6 kHz, 15 kHz)	± 10 dB
Loudness Control	+8 dB at 100 Hz (at -30 dB VOLUME Level)

General

Power Consumption	2.8 A
AC outlets	
SWITCHED	3; (Total 100 W, 0.8 A max.)
Dimensions	W: 440 mm (17-5/8")
	H: 133 mm (5-1/4")
	D: 281 mm (11-1/16")
Weight (Net)	9.5 kg (20.9 lb)

Note:

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

Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the U.S.A. (K) 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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