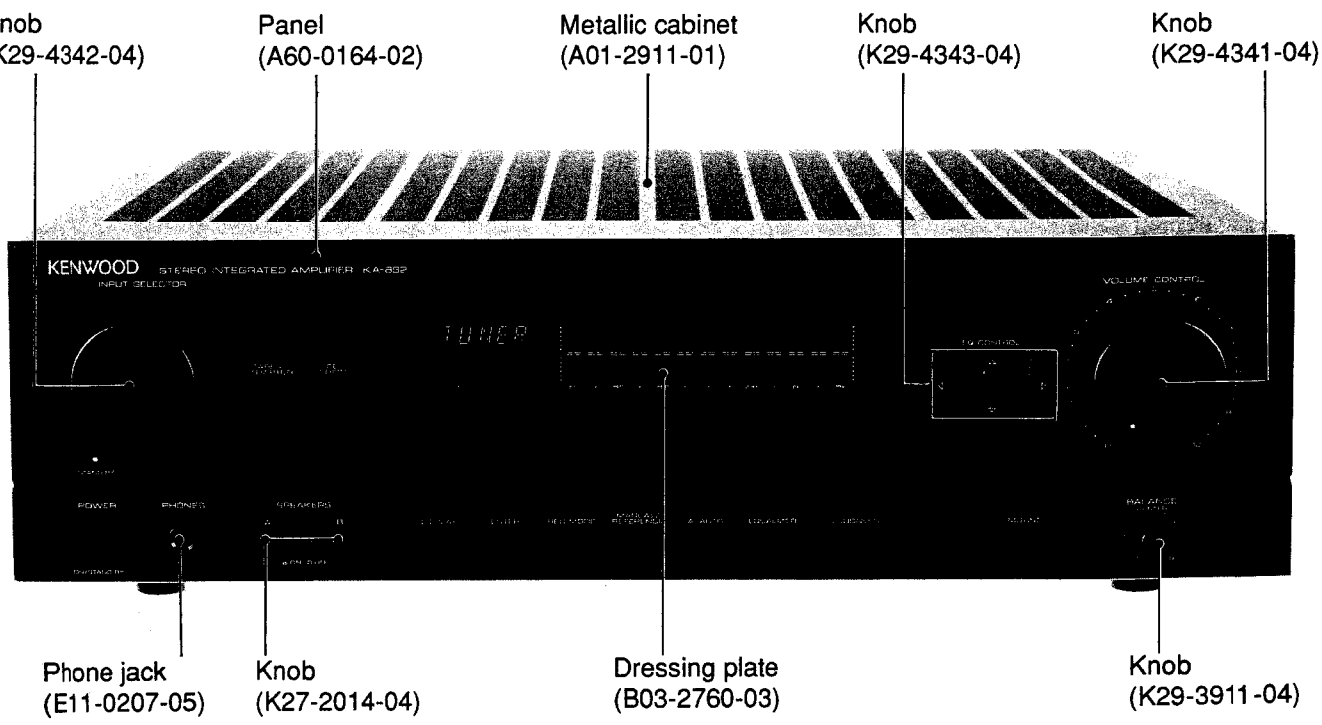
STEREO INTEGRATED AMPLIFIER

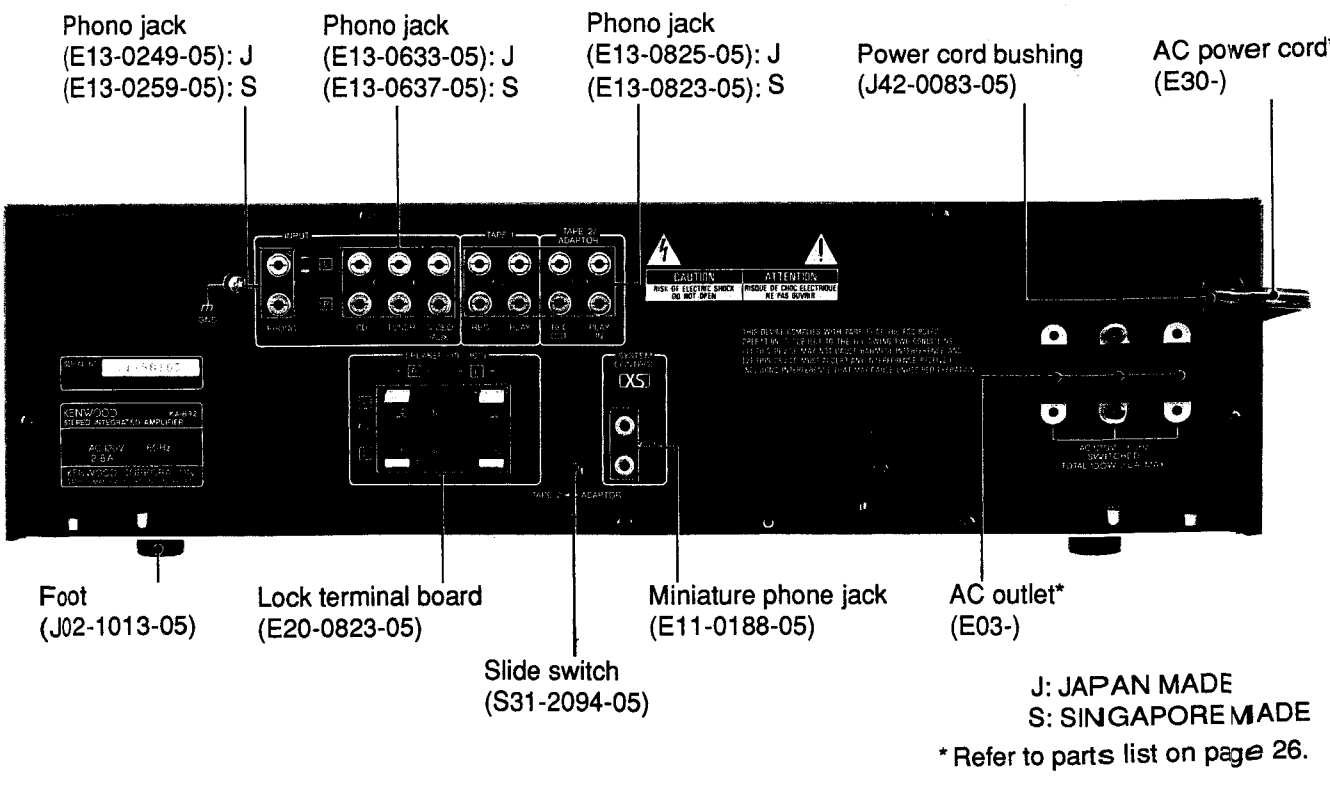
KA-892

SERVICE MANUAL

KENWOOD

B51-4470-00 (S) 2365





J: JAPAN MADE
S: SINGAPORE MADE

* Refer to parts list on page 26.

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CONTENTS

Supplied Remote Controller Table

The supplied remote controller model and method of packaging varies according to system grade and destination market.

	K	P	M, X, Y
KA-892	RC-992 OR RC-160	RC-160	RC-992

Supplied with the amplifier.

Selected by the distributor according to the grade of the system and placed inside the outer carton (not supplied with the amplifier).

The RC-992 is a general system remote controller.
The RC-160 is a system remote controller with running function.

Protection circuit

While the protection circuit is operating, the indicator's alphanumeric display section flashes "[------]".
The protection circuit operates when it detects power transistor over-current or output section DC drift.

Explanation of Back Panel Switch

This switches the input/output function of the TAPE 2/ ADAPTOR.

TAPE (a) [□] ADAPTOR (b)

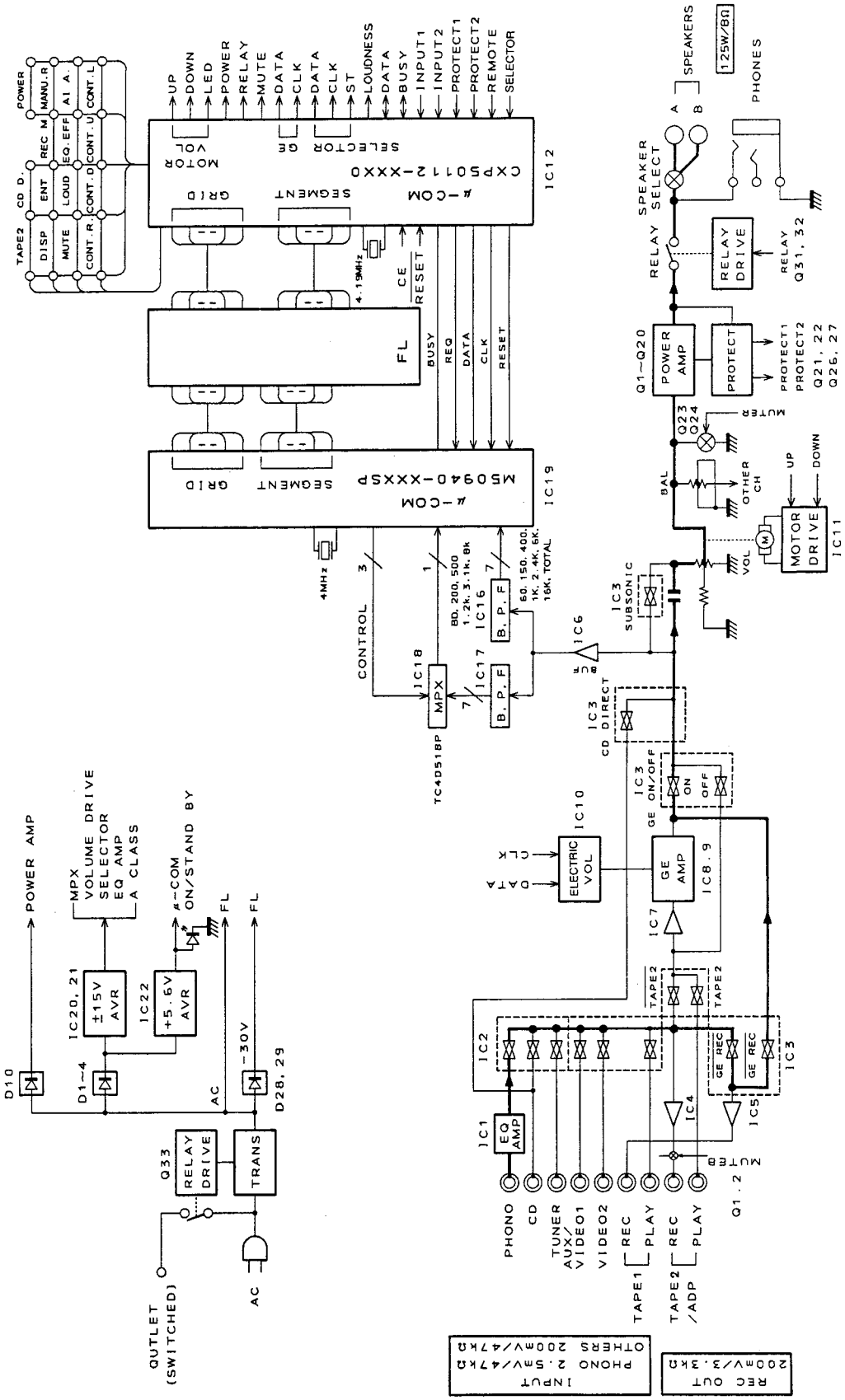
(a) Conventional tape monitor function

(b) When this switch is set to the ADAPTOR side, it operates as follows:

(1) When the front panel TAPE 2/ADPT switch is turned on, the MAIN VR lowers once to zero and then rises again, stopping near the middle.
(2) While ① is in progress, no keys function besides the power switch.
(3) While the TAPE 2/ADPT switch is on, the MAIN VR cannot be remote-controlled; other functions work normally.
(4) When the TPAE 2/ADPT switch is turned off, the MAIN VR automatically lowers to zero, and henceforth all functions, including MAIN VR, work normally.

This function was included with the surround processors SS-592 and SS-992 in mind and is irrelevant except when used with these two surround processors.

BLOCK DIAGRAM



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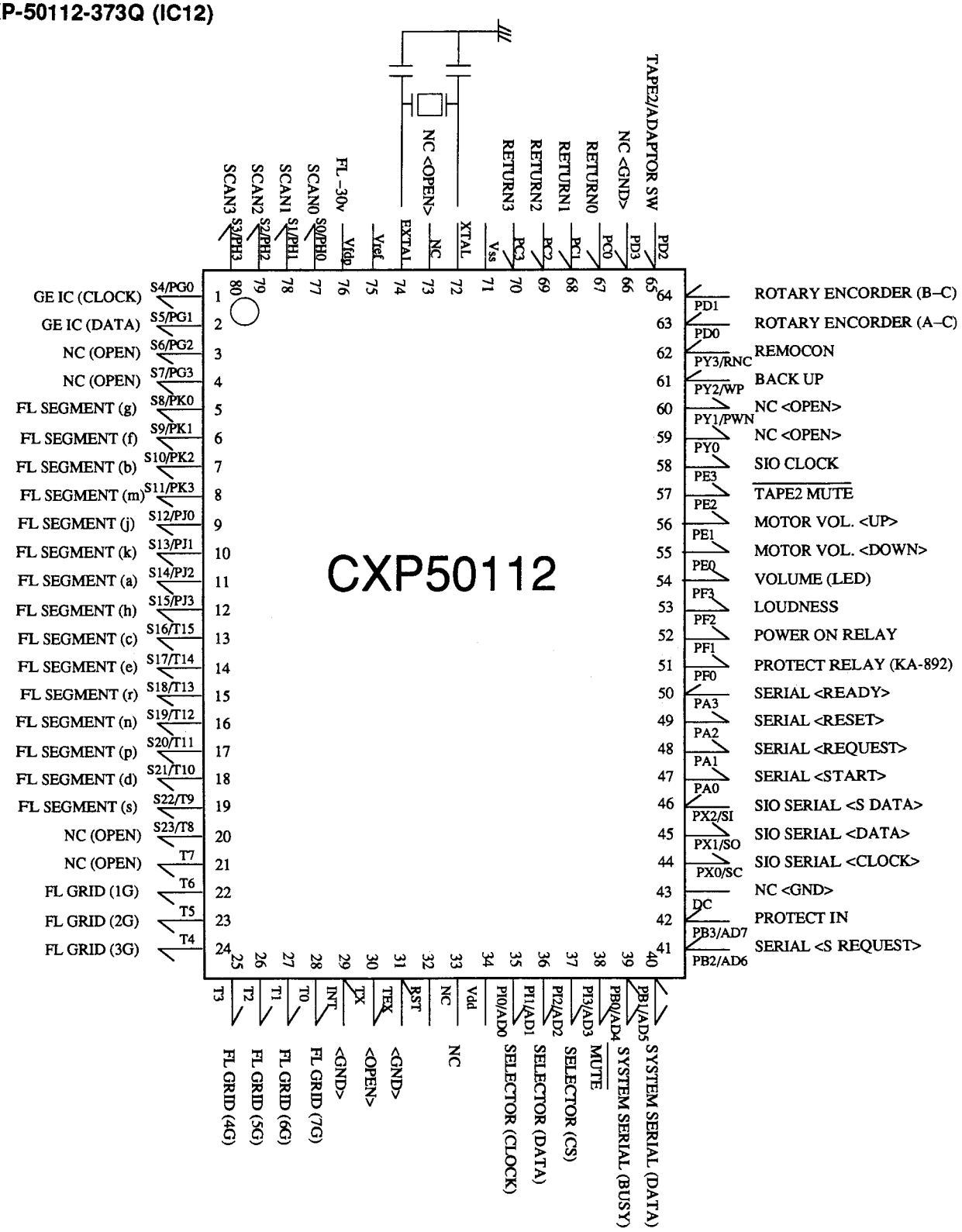
CIRCUIT DESCRIPTION

Micro Processor Diagram
Main μ-com
CXP-50112-373Q (IC12)



CIRCUIT DESCRIPTION

Pin Description main μ-com CXP50112-373Q (IC12)

Pin No.	Pin Name	I/O	Name	Description
1	S4/PG0	O	GE IC CLOCK (NJU7305)	GE IC CLOCK output
2	S5/PG1	O	GE IC DATA (NJU7305)	GE IC DATA output
3	S6/PG2	–	NC (OPEN)	
4	P7/PG3	–	NC (OPEN)	
5	S8/PK0	O	FL SEGMENT (g)	FL segment (g)
6	S9/PK1	O	FL SEGMENT (f)	FL segment (f)
7	S10/PK2	O	FL SEGMENT (b)	FL segment (b)
8	S11/PK3	O	FL SEGMENT (m)	FL segment (m)
9	S12/PJ0	O	FL SEGMENT (j)	FL segment (j)
10	S13/PJ1	O	FL SEGMENT (k)	FL segment (k)
11	S14/PJ2	O	FL SEGMENT (a)	FL segment (a)
12	S15/PJ3	O	FL SEGMENT (h)	FL segment (h)
13	S16/T15	O	FL SEGMENT (c)	FL segment (c)
14	S17/T14	O	FL SEGMENT (e)	FL segment (e)
15	S18/T13	O	FL SEGMENT (r)	FL segment (r)
16	S19/T12	O	FL SEGMENT (n)	FL segment (n)
17	S20/T11	O	FL SEGMENT (p)	FL segment (p)
18	S21/T10	O	FL SEGMENT (d)	FL segment (d)
19	S22/T9	O	FL SEGMENT (s)	FL segment (s)
20	S23/T8	–	NC (OPEN)	
21	S23/T7	–	NC (OPEN)	
22	S23/T6	O	FL GRID (1G)	FL grid (1G)
23	S23/T5	O	FL GRID (2G)	FL grid (2G)
24	S23/T4	O	FL GRID (3G)	FL grid (3G)
25	S23/T3	O	FL GRID (4G)	FL grid (4G)
26	S23/T2	O	FL GRID (5G)	FL grid (5G)
27	S23/T1	O	FL GRID (6G)	FL grid (6G)
28	S23/T0	O	FL GRID (7G)	FL grid (7G)
29	INT	I	NC (GND)	External interrupt (No used)
30	TX	–	NC (OPEN)	32kHz T/C clock output (No used)
31	TEX	I	NC (GND)	32kHz T/C clock input (No used)
32	RST	I/O		Microprocessor reset
33	NC	–		
34	V_{DD}	–		Power supply
35	PI0/AD0	O	SERECTOR (CLOCK)	Serector (TC9162/TC9163) CLOCK output
36	PI1/AD1	O	SERECTOR (DATA)	Serector (TC9162/TC9163) DATA output
37	PI2/AD2	O	SERECTOR (CS)	Serector (TC9162/TC9163) CS output
38	PI3/AD3	O	MUTE	MUTE output
39	PB0/AD4	I/O	SERIAL (BUSY)	Serial "BUSY"
40	PB1/AD5	I/O	SERIAL (DATA)	Serial "DATA"
41	PB2/AD6	I	SERIAL (SLAVE REQUEST)	Serial "S REQUEST" (communication)
42	PB3/AD7	I	PROTECT IN	Protection input
43	EC	–	NC (GND)	
44	PX0/SC	O	SIO CLOCK	SIO serial CLOCK (communication)

CIRCUIT DESCRIPTION

CXP50112-373Q (IC12)

Pin No.	Pin Name	I/O	Name	Description
45	PX1/SO	O	SIO DATA OUT	SIO serial DATA (communication)
46	PX2/SI	I	SIO DATA IN	SIO serial DATA (communication)
47	PA0	O	SERIAL (START)	Serial "START" (communication)
48	PA1	O	SERIAL (REQUEST)	Serial "REQUEST" (communication)
49	PA2	O	SERIAL (RESET)	Serial "RESET" (communication)
50	PA3	I	SERIAL (READY)	Serial "READY" (communication)
51	PF0	O	PROTECTION RELAY	Protection relay
52	PF1	O	POWER ON RELAY	Power on relay
53	PF2	–	NC (GND)	
54	PF3	O	MASTER VOLUME (LED)	LED
55	PE0	O	MOTOR VOLUME <DOWN>	Motor volume "DOWN" output
56	PE1	O	MOTOR VOLUME <UP>	Motor volume "UP" output
57	PE2	O	TAPE 2 MUTE	TAPE 2 MUTE output
58	PE3	O	SERIAL SIO (CLOCK OUT)	SIO external CLOCK output
59	PY0	–	NC (OPEN)	
60	PY1/PWM	–	NC (OPEN)	
61	PY2/WP	I	BACK UP	Backup input
62	PY3/RMC	I	REMOCON	Remote control signal input
63	PD0	I	ROTARY ENCODER (A–C)	Rotary encoder input pin
64	PD1	I	ROTARY ENCODER (B–C)	Rotary encoder input pin
65	PD2	I	TAPE2/ADAPTOR	TAPE 2/Adaptor selector switch input pin
66	PD3	–	NC (GND)	
67	PC0	I	RETURN 0	Key return 0
68	PC1	I	RETURN 1	Key return 1
69	PC2	I	RETURN 2	Key return 2
70	PC3	I	RETURN 3	Key return 3
71	Vss	–		GND
72	XTAL	–		CLOCK output
73	NC	–	NC (OPEN)	
74	EXTAL	I		CLOCK input
75	VREF	–		Voltage detection reference voltage pin (No used)
76	VFDP	–		FL load power supply pin
77	S0/PH0	O	SCAN 0	Key scan 0
78	S1/PH1	O	SCAN 1	Key scan 1
79	S2/PH2	O	SCAN 2	Key scan 2
80	S3/PH3	O	SCAN 3	Key scan 3

CIRCUIT DESCRIPTION

Test Mode Specifications

As shown below, this unit has three test modes.

TEST 1.....Test mode using the main unit's keys
TEST 2.....RAM contents initial setting mode
TEST 3.....Test mode using serial terminal

Addition: The RAM contents are returned to initial settings by unplugging from the AC power outlet during TEST 1 and TEST 3 modes.

Setting methods

1) TEST 1: Plug into the AC power outlet while pressing the CD DIRECT key
2) TEST 2: Plug into the AC power outlet while pressing the ENTER key
3) TEST 3: With POWER OFF, transmit serial code TEST ON (71H)

Usage methods

Operate the TEST 1 mode than all FL and LED indicators go on. Operate the TEST 2 mode then microprocessor is initial setting and POWER OFF mode (shipping mode).
Operate the TEST 3 mode then start serial operation in accordance with serial code list on next page.

1) TEST 1 (Operation through the main unit's keys)
   a) Operate ony key to cancel all the FL and LED indicators that go on.
   b) MASTER VOLUME
      The following keys are applied to VOLUME UP / STOP / DOWN, operating as follows.
      VOLUME UP = continuous increase with the control UP key.
      VOLUME STOP = stops UP/DOWN with the LEFT/ RIGHT key.
      VOLUME DOWN = continuous decrease with the control DOWN key.

c) Graphic equalizer
   Input of the EQ. ON key causes the following modes to repeat.
   → Equalizer OFF
   ↑ ↓
   ↑ Equalizer ON (Level ALL MINIMUM)
   ↑ ↓
   ↑ Equalizer ON (Level ALL FLAT)
   ↑ ↓
   ← Equalizer ON (Level ALL MAXIMUM)

2) TEST 3 (Serial pin operation)
   Normally the received serial code is sent just as it is. However, the following codes are exceptions:

TEST OFF (70H)	Serial code not sent
TEST ON (71H)	Serial code not sent
POWER (8CH)	System ON/OFF code (25H/26H) sent
SELECTOR [PHONO] (80H)	Position code (73H) sent
SELECTOR [CD] (81H)	Position code (74H) sent
SELECTOR [TUNER] (82H)	Position code (72H) sent
SELECTOR [TAPE1] (83H)	Position code (76H) sent
SELECTOR [TAPE2] (84H)	ON OFF code ON/ OFF=(7DH/7EH) sent
SELECTOR [VIDEO1] (87H)	Position code (7AH) sent
SELECTOR [VIDEO2] (88H)	Position code (77H) sent

Master volume

Uses the Volume UP (8FH)/DOWN (8EH) keys and continues to work when one transmission is carried out.
Also, when stopping KEY OFF (90H) is sent.

Note: Only the color-differentiated codes on the separate serial code chart operate.

TYPE / FUNC.	GRAPHIC EQUALIZER				TUNER				AMPLIFIER							CD
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	32Hz UP	32Hz DOWN	EQ REC ON/OFF	R1	0/10	AUTO/ MANU	CLEAR	TEST OFF	PHONO	KEY OFF	DELAY TIME MIN	VISUAL FIX	SP.A			
1	55Hz UP	55Hz DOWN	DISP 2	R2	1	P.SCAN	ADJUST	TEST ON	CD/LD	UP/DOWN third stage OFF	DELAY TIME MAX	1	SP.B			
2	90Hz UP	90Hz DOWN		R3	2	ENTER (MEMORY)	PROGRAM PRO1		TUNER	UP/DOWN third stage ON	PRESENCE LEVE MIN	2	LOUDNESS			⊠/⊠ PLAY/PAU
3	150Hz UP	150Hz DOWN	DISP (Roh)	R4	3	KEY OFF	SLEEP		(TAPE A) TAPE 1	Initial condition setting	PRESENCE LEVE MAX	3	SUBSONIC FILTER			□ STOP
4	240Hz UP	240Hz DOWN	DISP (Loh)	R5	4	Test frequency setting	EXE		(TAPE B) TAPE 2	FL.LED full illumination	CENT MOD ON/OFF	4	ADPT/ TAPE3			CHECK
5	400Hz UP	400Hz DOWN		FLAT	5	Initial condition setting	DISPLAY		AV/AUX	DECK adjustment mode setting	TEST ON/OFF	5	BYPASS			CLEAR
6	620Hz UP	620Hz DOWN	REC MODE	POWER	6	FL/LED full illumation	C.CHECK		DAT	CD.SOURCE DIRECT	TEST TONE MOD	BASS CON DOWN	DSP			OPEN/ CLOSE
7			REAK HOL ON/OFF	EQ ON/OFF	7	DIRECT	PRO2		(VIDEO) VIDEO 1	DAT DIRECT	WOOFER ON/OFF	BASS CONTL UP	DOLBY 3STEREO			SKIP UP
8	1kHz UP	1kHz DOWN	UP/DOWN third stage ON	M1	8	DIGIT			VIDEO 2	CD REC	CENTER LEVE MIN		DOLBY PRO LOGI			SKIP DOWN
9	1.6kHz UP	1.6kHz DOWN	UP/DOWN third stage OFF	M2	9	CHARATER			VIDEO 3	FRONT /REAR	CENTER LEVE MAX		LINE STRAIGHT			P-MODE
A	2.6kHz UP	2.6kHz DOWN	Initial condition setting	M3	POWER	SNDC			VDP	SURROUND ON/OFF	MEMORY SAVE	TITLE ON/OFF	INPUT LEVEL –			SPACE
B	4.2kHz UP	4.2kHz DOWN	EQ test memory settings	M4	BAND	P.SCAN–			AUX	SURROUND MODE	MEMORY OUT	TITLE SHIFT	INPUT LEVEL +			TIME DISPLAY
C	6.8kHz UP	6.8kHz DOWN	FL.LD full illumination	M5	(FM) BAND	+10			POWER	REAR LEVE MIN	REAR BAL –ANC Roh	TITLE →(R)	DSP LOGIC			+10
D	10kHz UP	10kHz DOWN		MEMORY	(AM) BAND				MUTE	REAR LEVE MAX	REAR BALLANCE	TITLE ←(L)	REAR LEV (MID)			EDIT
E	16kHz UP	16kHz DOWN		DISPLAY	(LW/TV) DOWN				MAIN VOL DOWN	MOTOR VL ALL DOWN	REC OUT SEL VID1	TITLE SET	CENT LEV (MID)			RANDOM
F			KEY OFF	REVERSE	UP				MAIN VOL UP	MOTOR VL ALL UP	MENU	DSPS	PRESENCE LEV (MID)			REPEAT

□ : After receiving code, a code that issues the SEL CODE, SYSTEM ON/OFF code.

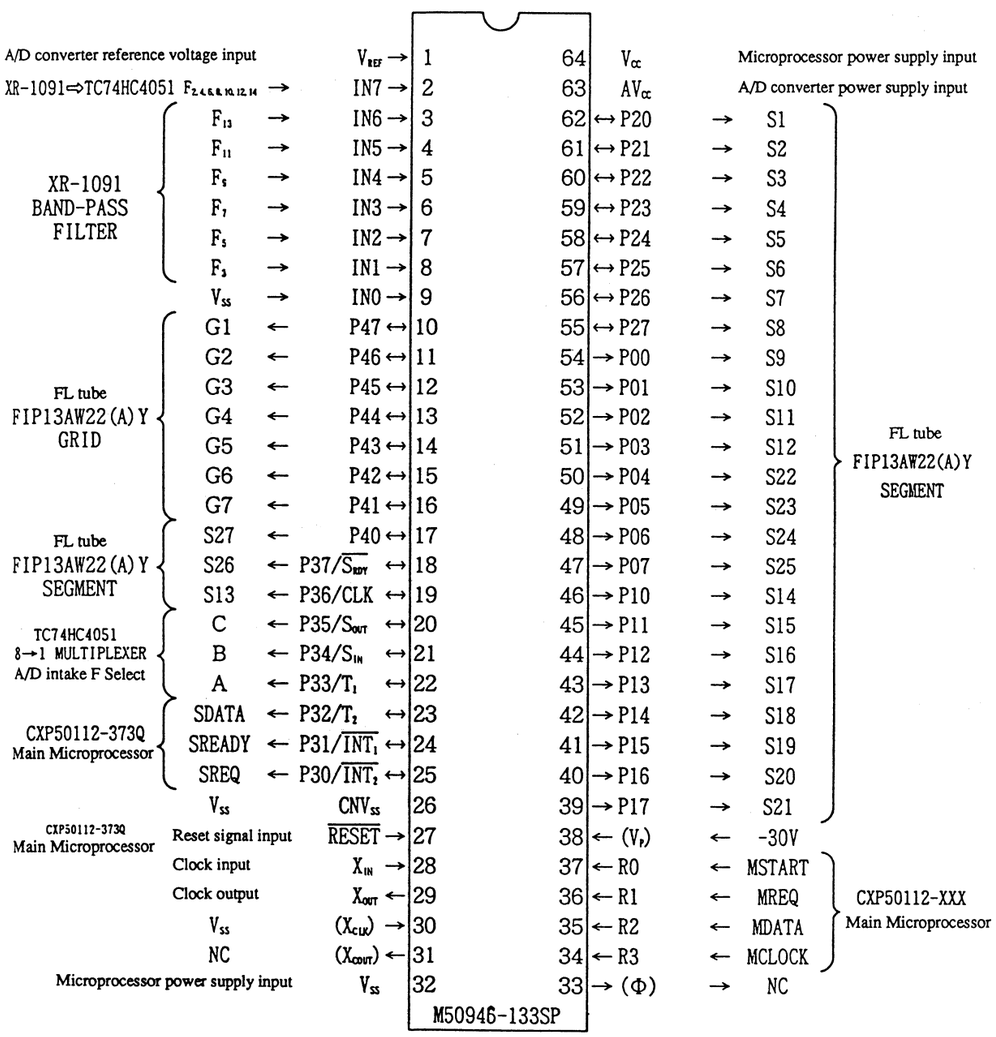
▨ : After receiving code, a code that issues the same code as the input code.

▭ : After receiving code, a code that issues no code.

CIRCUIT DESCRIPTION

Microprocessor Pin Layout Diagram

GE control and display μ-com M50946-133SP (IC19)



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CIRCUIT DESCRIPTION

Pin Description sub μ-com M50946-133SP (IC19)

Pin No.	Pin Name	I/O	Name	Description
1	VREF		VREF	A/D converter reference power supply input
2	IN7	I	F2, F4, F6, F8, F10, F12, F14	Analog signal input through the multiplexer TC74HC4051 F2: 63Hz, F4: 160Hz, F6: 400Hz, F8: 1kHz, F10: 2.5kHz, F12: 6.3kHz, F14: 16kHz
3	IN6	I	F13	10kHz analog signal input (signal input directly from the filter circuit)
4	IN5	I	F11	3.9kHz analog signal input (signal input directly from the filter circuit)
5	IN4	I	F9	1.5kHz analog signal input (signal input directly from the filter circuit)
6	IN3	I	F7	625Hz analog signal input (signal input directly from the filter circuit)
7	IN2	I	F5	250Hz analog signal input (signal input directly from the filter circuit)
8	IN1	I	F3	98Hz analog signal input (signal input directly from the filter circuit)
9	IN0	I	Vss	Unused (analog input pin)
10	P47	O	G1	FL tube grid G1 (Pin number 77) drive signal input H: on L: off
11	P46	O	G2	FL tube grid G2 (Pin number 76) drive signal input H: on L: off
12	P45	O	G3	FL tube grid G3 (Pin number 75) drive signal input H: on L: off
13	P44	O	G4	FL tube grid G4 (Pin number 74) drive signal input H: on L: off
14	P43	O	G5	FL tube grid G5 (Pin number 73) drive signal input H: on L: off
15	P42	O	G6	FL tube grid G6 (Pin number 72) drive signal input H: on L: off
16	P41	O	G7	FL tube grid G7 (Pin number 71) drive signal input H: on L: off
17	P40	O	S27	FL tube segment S27 (Pin number 44) drive signal input H: on L: off
18	P37 (SRDY)	O	S26	FL tube segment S26 (Pin number 43) drive signal input H: on L: off
19	P36 (CLK)	O	S13	FL tube segment S13 (Pin number 42) drive signal input H: on L: off
20	P35 (SOUT)	O	C	Multiplexer TC74HC4051 control signal output (TC74HC4051: F2, 4, 6, 8, 10, 12, 14 for analog signal selection)
21	P34 (SIN)	O	B	Multiplexer TC74HC4051 control signal output
22	P33 (T1)	O	A	Multiplexer TC74HC4051 control signal output
23	P32 (T2)	O	SDATA	Sub microprocessor serial DATA signal output
24	P31 (INT1)	O	SREADY	Sub microprocessor serial DATA communicability signal output H: data communications possible L: data communications impossible
25	P30 (INT2)	O	SREQ	Sub microprocessor serial DATA send request signal output H: Sub microprocessor DATA send request L: others
26	CNVss		Vss	Unused (microprocessor internal mode switching)
27	RESET	I	RESET	Reset signal detect H: others L: reset
28	XIN	I	XIN	System clock input (4.0MHz resonator)
29	XOUT	O	XOUT	System clock input (4.0MHz resonator)
30	XCIN	I	Vss	Unused (clock input pin)
31	XCOUT	O	NC	Unused (clock output pin)
32	Vss			GND
33	Φ	O	NC	Unused (system clock 1/4 cycle output)
34	R3	I	MCLOCK	Main microprocessor serial DATA communications CLOCK signal input
35	R2	I	MDATA	Main microprocessor serial DATA signal input
36	R1	I	MREQ	Main microprocessor serial DATA send request signal input H: Main microprocessor DATA send request L: others
37	R0	I	MSTART	Main microprocessor serial DATA communications start signal input H: Main-Sub data communications start L: others
38	Vp	I	–30V	PULL DOWN V input –30V
39	P17	O	S21	FL tube segment S21 (Pin number 45) drive signal input H: on L: off
40	P16	O	S20	FL tube segment S20 (Pin number 46) drive signal input H: on L: off

CIRCUIT DESCRIPTION

M50940-133SP (IC19)

Pin No.	Pin Name	I/O	Name	Description
41	P15	O	S19	FL tube segment S19 (Pin number 47) drive signal input H: on L: off
42	P14	O	S18	FL tube segment S18 (Pin number 48) drive signal input H: on L: off
43	P13	O	S17	FL tube segment S17 (Pin number 49) drive signal input H: on L: off
44	P12	O	S16	FL tube segment S16 (Pin number 50) drive signal input H: on L: off
45	P11	O	S15	FL tube segment S15 (Pin number 51) drive signal input H: on L: off
46	P10	O	S14	FL tube segment S14 (Pin number 52) drive signal input H: on L: off
47	P07	O	S25	FL tube segment S25 (Pin number 53) drive signal input H: on L: off
48	P06	O	S24	FL tube segment S24 (Pin number 54) drive signal input H: on L: off
49	P05	O	S23	FL tube segment S23 (Pin number 55) drive signal input H: on L: off
50	P04	O	S22	FL tube segment S22 (Pin number 56) drive signal input H: on L: off
51	P03	O	S12	FL tube segment S12 (Pin number 57) drive signal input H: on L: off
52	P02	O	S11	FL tube segment S11 (Pin number 58) drive signal input H: on L: off
53	P01	O	S10	FL tube segment S10 (Pin number 59) drive signal input H: on L: off
54	P00	O	S9	FL tube segment S09 (Pin number 60) drive signal input H: on L: off
55	P27	O	S8	FL tube segment S08 (Pin number 61) drive signal input H: on L: off
56	P26	O	S7	FL tube segment S07 (Pin number 62) drive signal input H: on L: off
57	P25	O	S6	FL tube segment S06 (Pin number 63) drive signal input H: on L: off
58	P24	O	S5	FL tube segment S05 (Pin number 64) drive signal input H: on L: off
59	P23	O	S4	FL tube segment S04 (Pin number 65) drive signal input H: on L: off
60	P22	O	S3	FL tube segment S03 (Pin number 66) drive signal input H: on L: off
61	P21	O	S2	FL tube segment S02 (Pin number 67) drive signal input H: on L: off
62	P20	O	S1	FL tube segment S01 (Pin number 68) drive signal input H: on L: off
63	AVcc		AVcc	A/D converter power supply input +5V
64	Vcc		Vcc	Microprocessor power supply input +5V

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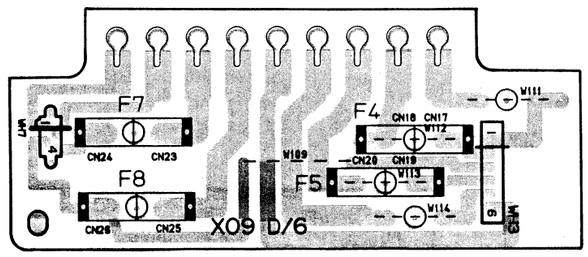
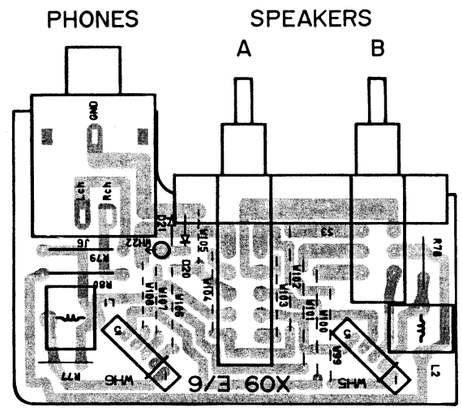
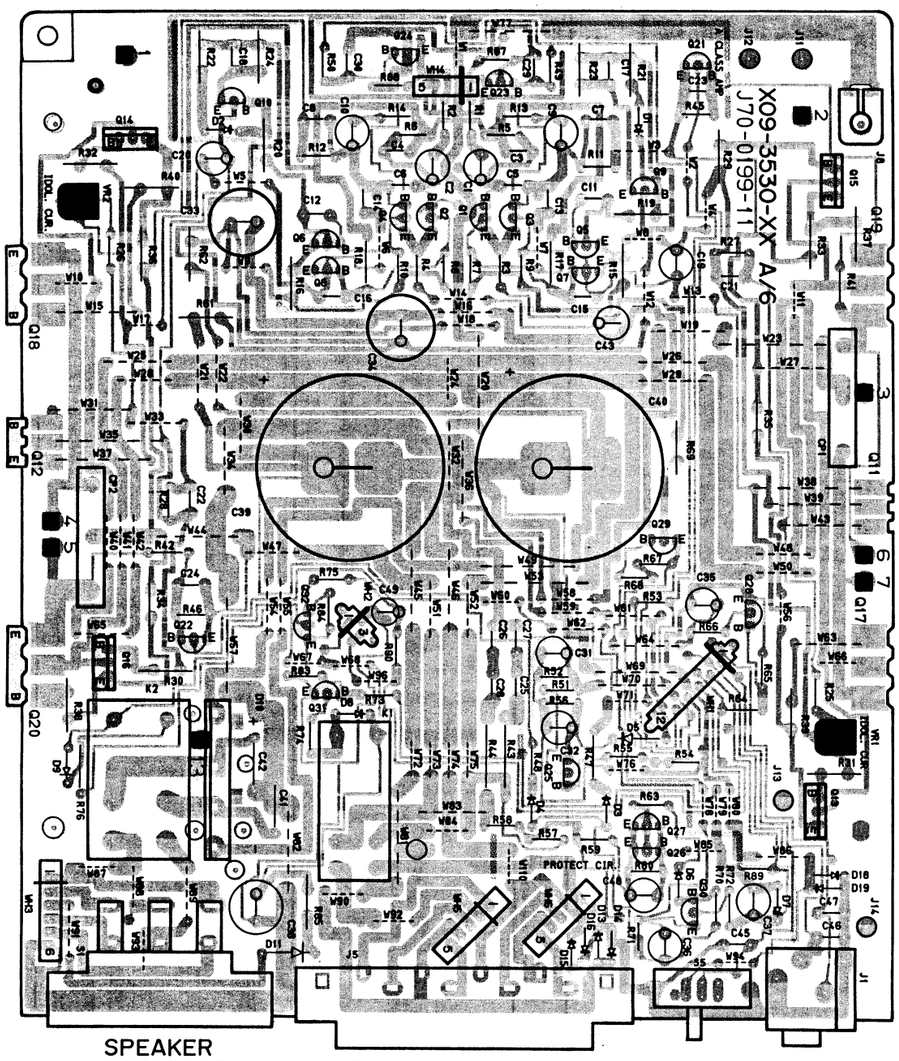
WIRING DIAGRAM

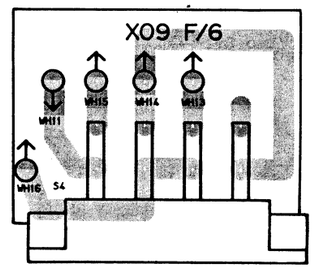
KA-892	K.P	Y	M	X	M
X09-353X-XX	0-10	2-91	0-21	0-71	0-22
X11-324X-XX			0-10		0-21

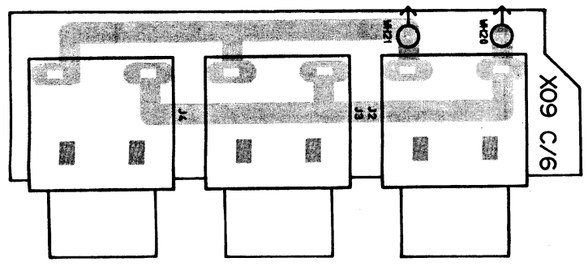
PC BOARD (Component side view)

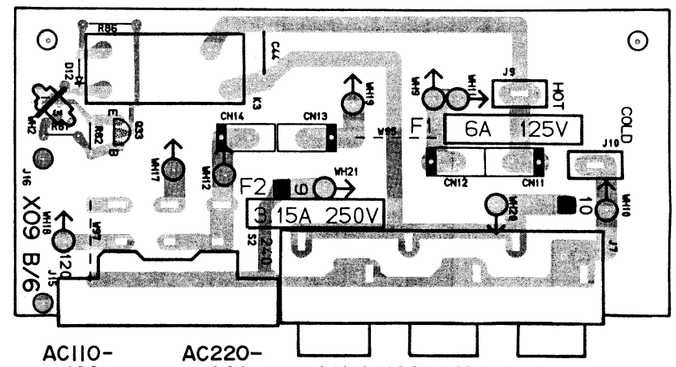






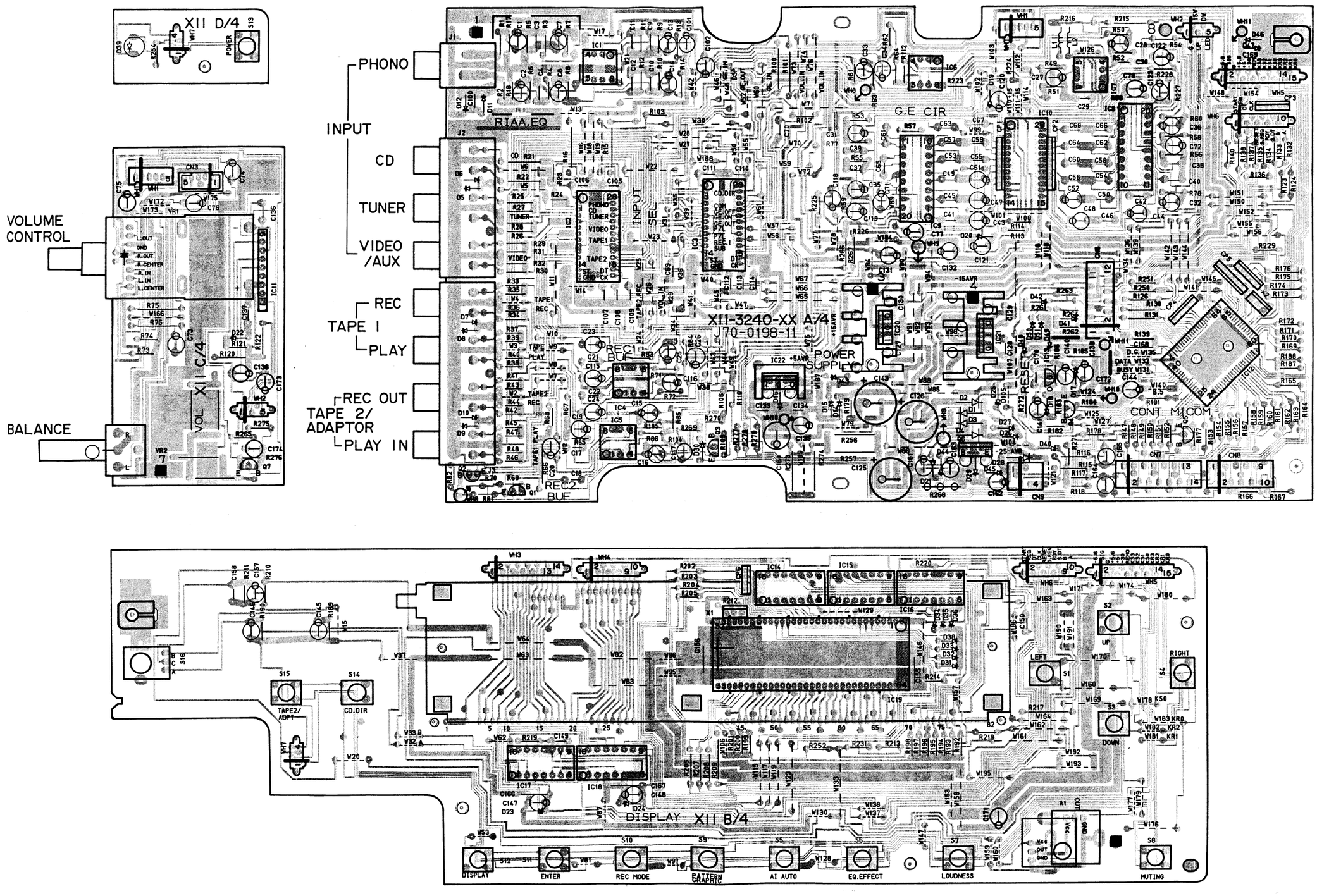






Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (Component side view)



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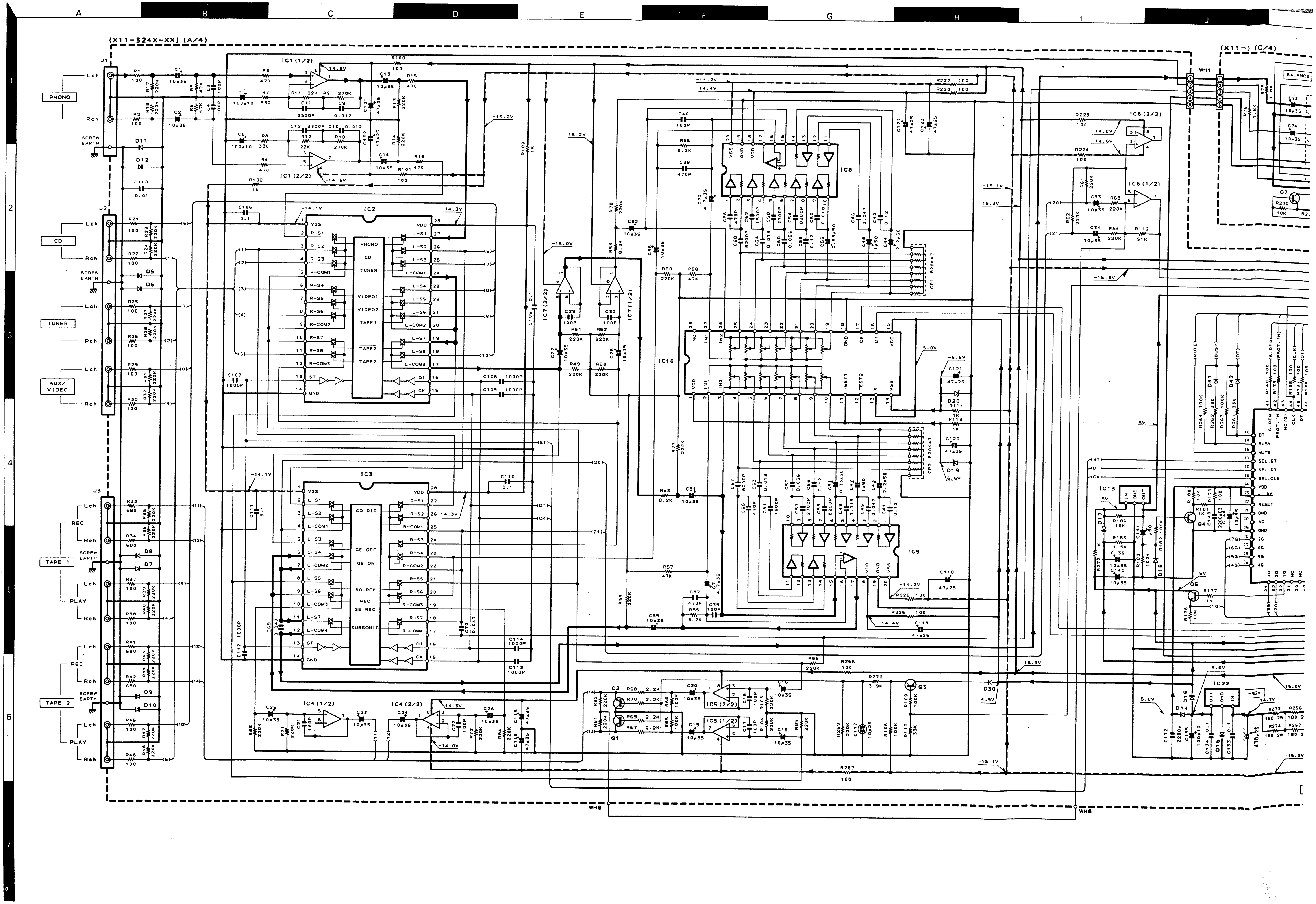
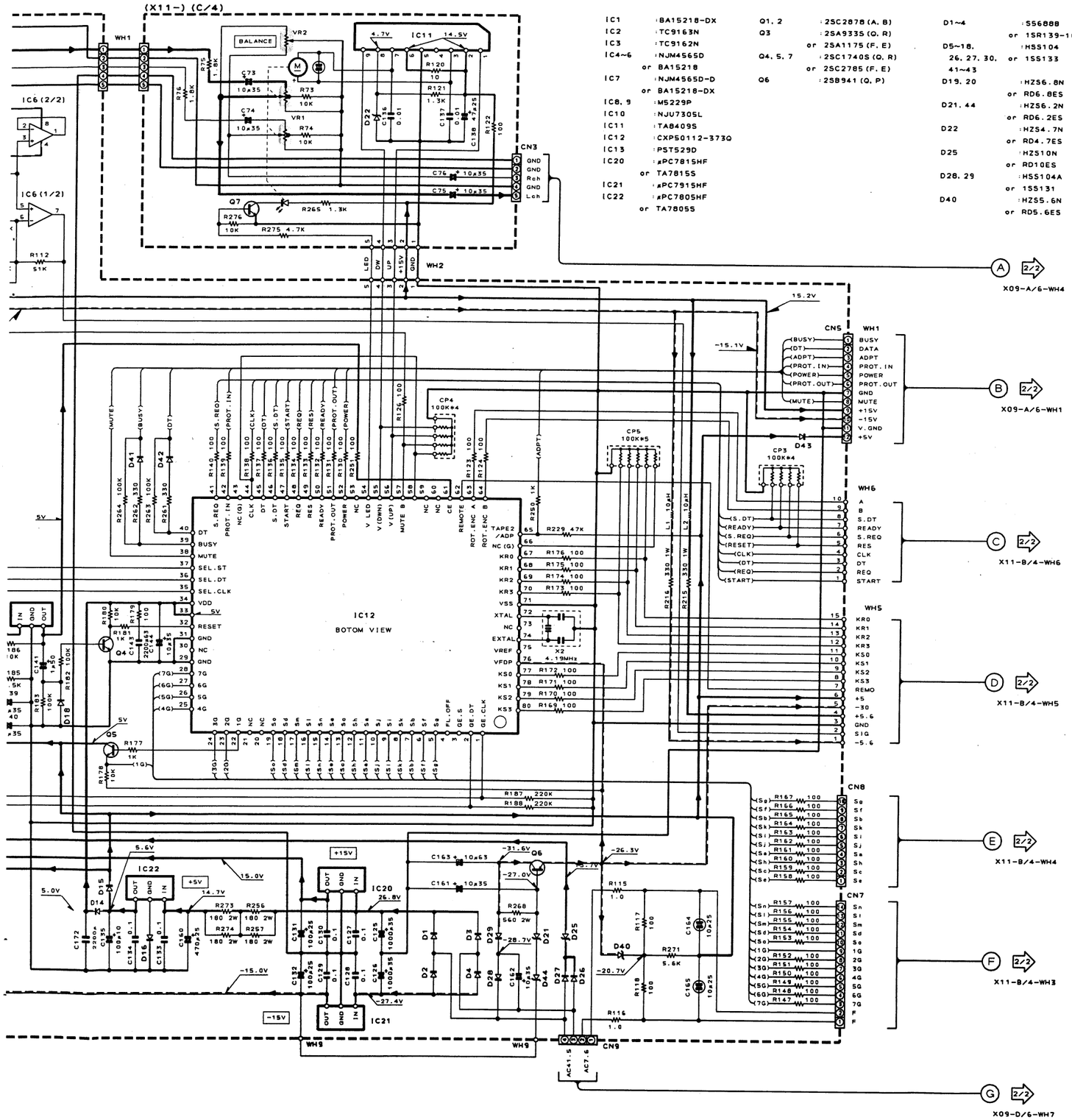


A
B
C
D
E
F
G
H
I
J
(X11-324X-XX) (A/4)
(X11-) (C/4)
J1
J2
J3
PHONO
CD
TUNER
AUX/
VIDEO
TAPE 1
TAPE 2
Lch
Rch
REC
PLAY
SCREW
EARTH
IC1 (1/2)
IC1 (2/2)
IC2
IC3
IC4 (1/2)
IC4 (2/2)
IC5 (1/2)
IC5 (2/2)
IC6 (1/2)
IC6 (2/2)
IC7 (1/2)
IC7 (2/2)
IC8
IC9
IC10
IC13
IC22
PHONO
CD
TUNER
VIDEO1
VIDEO2
TAPE1
TAPE2
CD DIR
GE OFF
GE ON
SOURCE
REC
GE REC
SUBSONIC
VSS
VDD
GND
ST
DI
CK
NC
IN1
IN2
DT
VCC
TEST1
TEST2
CP1 820K×7
CP2 820K×7
BALANCE
WH1
WH8
BUSY
MUTE
SEL.ST
SEL.DT
SEL.CLK
RESET
5V
5.0V
5.6V
6.6V
-6.6V
14.8V
-14.6V
14.3V
14.4V
-14.2V
-14.1V
-15.0V
15.2V
-15.2V
15.3V
-15.1V
4.9V
14.7V
+5V

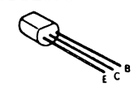


IC1	:BA15218-DX
IC2	:TC9163N
IC3	:TC9162N
IC4~6	:NJM4565D
or	BA15218
IC7	:NJM4565D-D
or	BA15218-DX
IC8, 9	:M5229P
IC10	:NJU7305L
IC11	:TA8409S
IC12	:CXP50112-373Q
IC13	:PST529D
IC20	:μPC7815HF
or	TA7815S
IC21	:μPC7915HF
IC22	:μPC7805HF
or	TA7805S

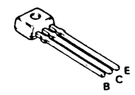
Q1, 2	:2SC2878 (A, B)
Q3	:2SA933S (Q, R)
or	2SA1175 (F, E)
Q4, 5, 7	:2SC1740S (Q, R)
or	2SC2785 (F, E)
Q6	:2SB941 (Q, P)

D1~4	:S56888
or	1SR139-100
D5~18, 26, 27, 30, 41~43	:HSS104 or 1SS133
D19, 20	:HZS6.8N
or	RD6.8ES
D21, 44	:HZS6.2N
or	RD6.2ES
D22	:HZS4.7N
or	RD4.7ES
D25	:HZS10N
or	RD10ES
D28, 29	:HSS104A
or	1SS131
D40	:HZS5.6N
or	RD5.6ES

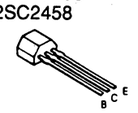
2SA1123
2SA992
2SC2003
2SC2631
2SC2632A
2SC2878



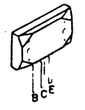
2SA1175
2SC2785



2SA1048
2SA933S
2SC1740S
2SC2458

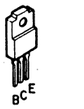


2SA1215
2SC2921

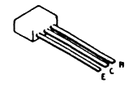


2SC4137

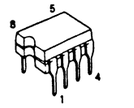
2SA1535
2SB941
2SC3944



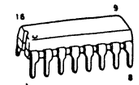
2SA1309A
2SC3311A



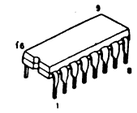
BA152118
BA15218-DX
NJM4565D
NJM4565D-D



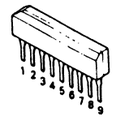
LB1294



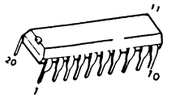
TC4051BP



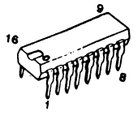
TA8409S



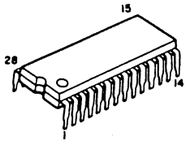
M5229P



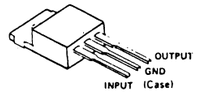
XR-1091ECP



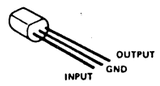
NJU7305L



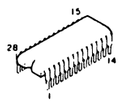
UPC7805HF
UPC7815HF



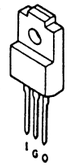
PST529D



TC9162N
TC9163N



TA7805S
TA7815S



UPC7915HF

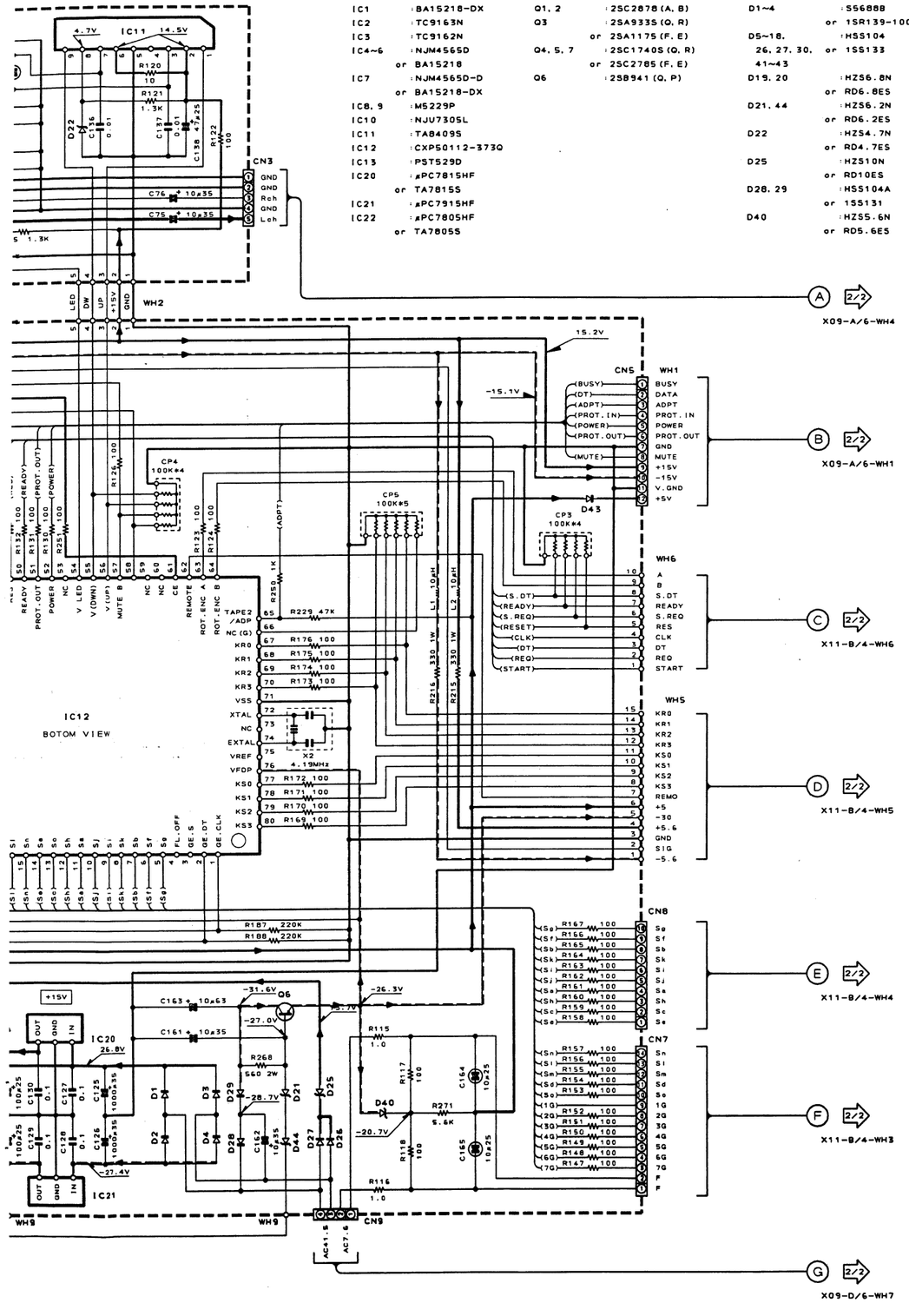
DC voltages are as m
ter with no signal inpu
tions between individu

Les tensions c.c. doiv
haute impédance sans
férer légèrement du fa
et aux instruments de

Die angegebenen Gle
hochohmigen Spar
gemessen. Dabei schw
terschieden zwischen
U. gering fügig.

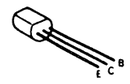
CAUTION: For conti
nents only with mar
parts list). ⚠ Indicate
risk of electric shock,
shall be carried out (e
the supply circuit) bef
er.

SIGNAL LINE
GND LINE
+B LINE
-B LINE

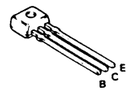


IC1	:BA15218-DX	Q1, 2	:2SC2878 (A, B)	D1~4	:S56888
IC2	:TC9163N	Q3	:2SA933S (Q, R)		or 1SR139-100
IC3	:TC9162N		or 2SA1175 (F, E)	D5~18, 26, 27, 30, 41~43	:HSS104
IC4~6	:NJM4565D	Q4, 5, 7	:2SC1740S (Q, R)		or 1SS133
	or BA15218		or 2SC2785 (F, E)	D19, 20	:HZS6.8N
IC7	:NJM4565D-D	Q6	:2SB941 (Q, P)		or RD6.8ES
	or BA15218-DX			D21, 44	:HZS6.2N
IC8, 9	:M5229P				or RD6.2ES
IC10	:NJU7305L			D22	:HZS4.7N
IC11	:TA8409S				or RD4.7ES
IC12	:CXP50112-373Q			D25	:HZS10N
IC13	:PST529D				or RD10ES
IC20	:µPC7815HF			D28, 29	:HSS104A
	or TA7815S				or 1SS131
IC21	:µPC7915HF			D40	:HZS5.6N
IC22	:µPC7805HF				or RD5.6ES
	or TA7805S				

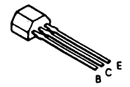
2SA1123
2SA992
2SC2003
2SC2631
2SC2632A
2SC2878



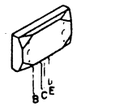
2SA1175
2SC2785



2SA1048
2SA933S
2SC1740S
2SC2458



2SA1215
2SC2921



2SC4137

2SA1535
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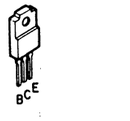
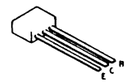
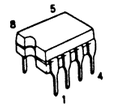
2SC3944



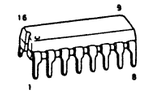
2SA1309A
2SC3311A



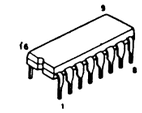
BA152118
BA15218-DX
NJM4565D
NJM4565D-D



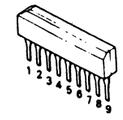
LB1294



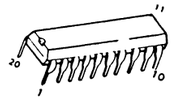
TC4051BP



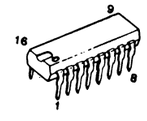
TA8409S



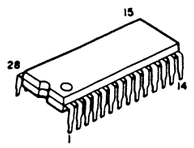
M5229P



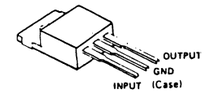
XR-1091ECP



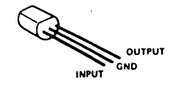
NJU7305L



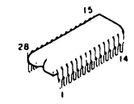
UPC7805HF
UPC7815HF



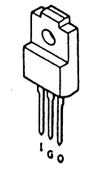
PST529D



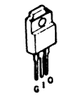
TC9162N
TC9163N



TA7805S
TA7815S



UPC7915HF



DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

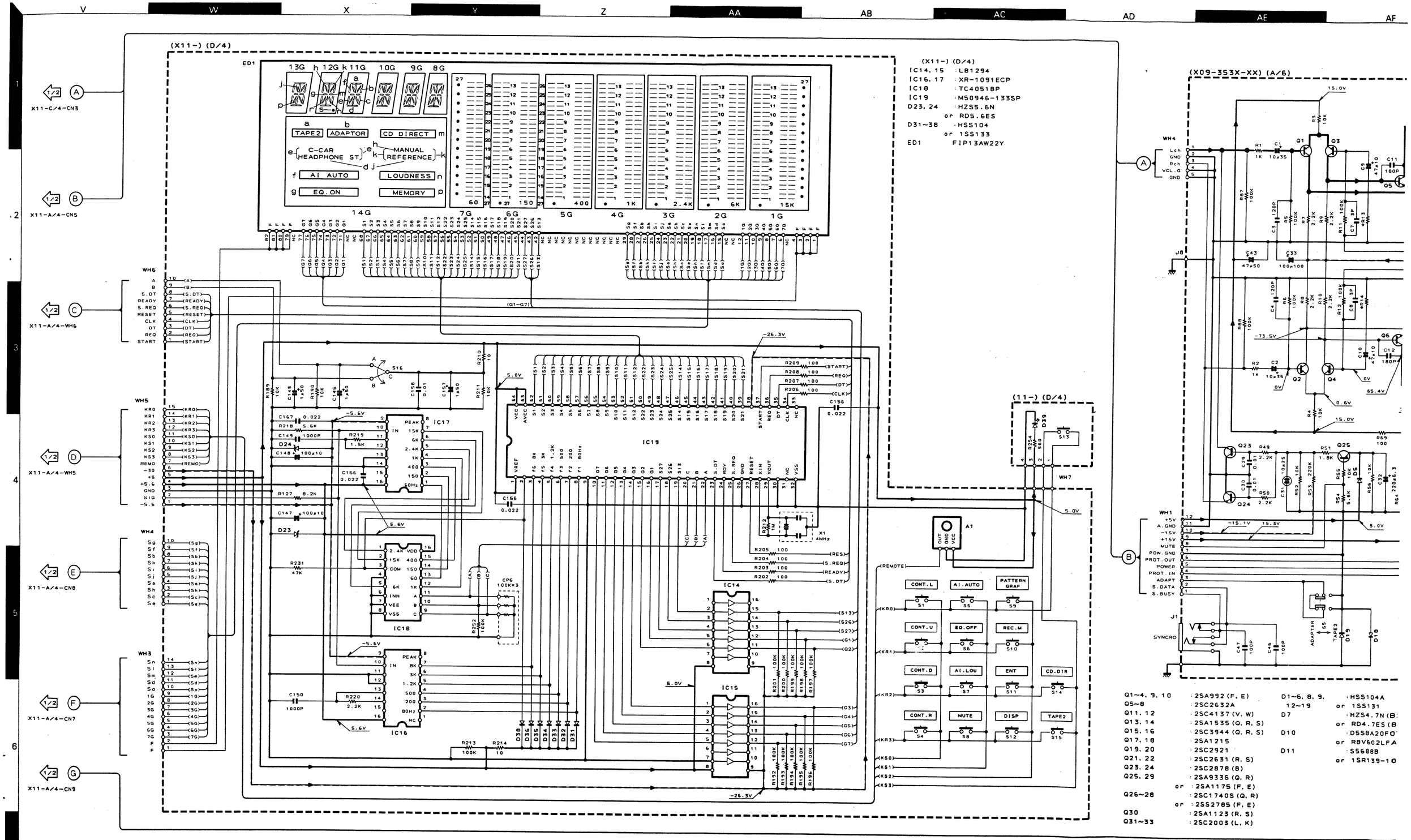
Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser ohne Eingangssignal gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

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.

Y08-4530-10

KA-892

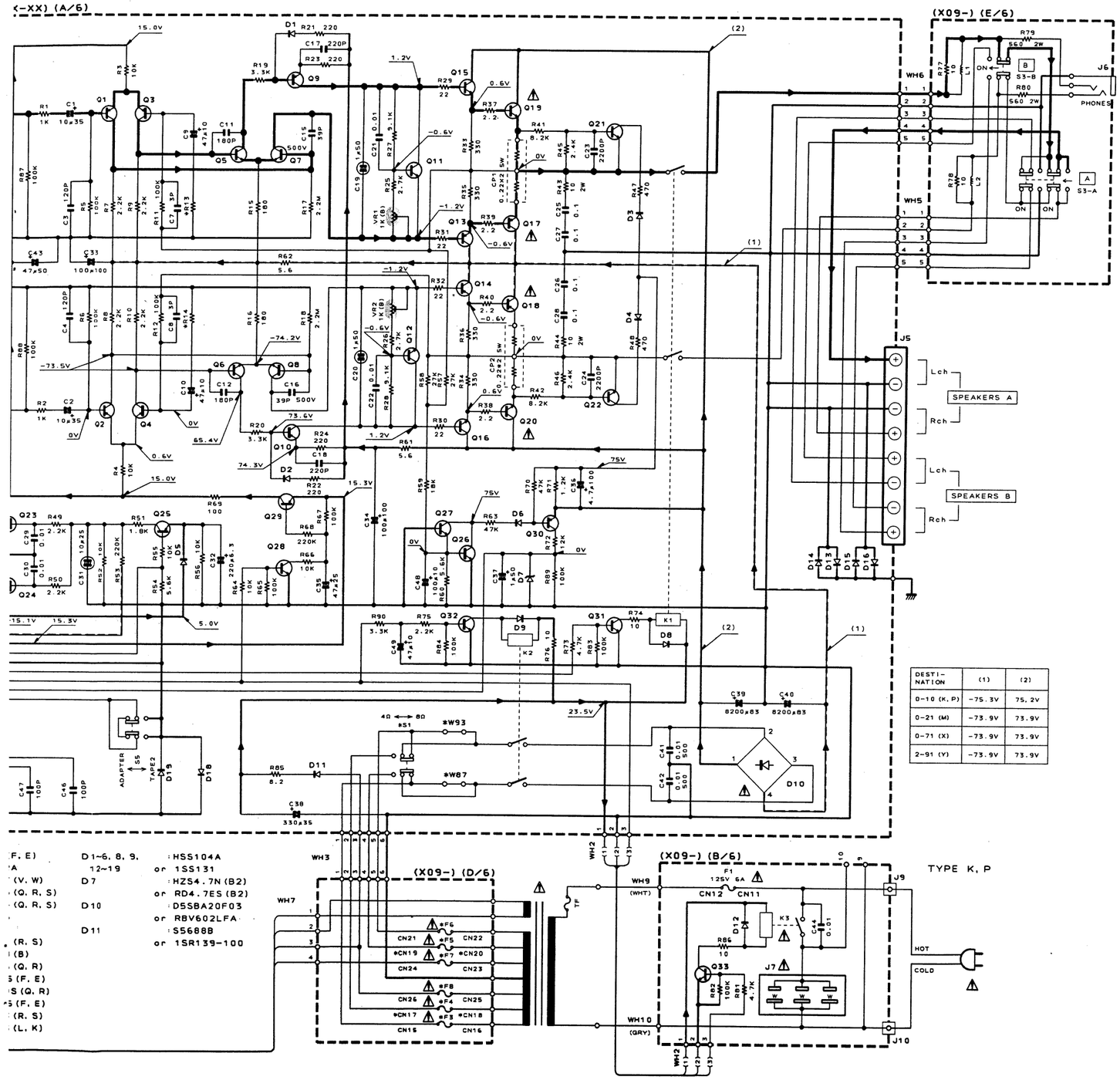
KENWOOD



(X11-) (D/4)

IC14, 15	: LB1294
IC16, 17	: XR-1091ECP
IC18	: TC4051BP
IC19	: M50946-133SP
D23, 24	: HZS5.6N
	or RD5.6ES
D31~38	: HSS104
	or 1SS133
ED1	: FIP13AW22Y

Q1~4, 9, 10	: 2SA992 (F, E)	D1~6, 8, 9, 12~19	: HSS104A
Q5~8	: 2SC2632A		or 1SS131
Q11, 12	: 2SC4137 (V, W)	D7	: HZS4.7N (B)
Q13, 14	: 2SA1535 (Q, R, S)		or RD4.7ES (B
Q15, 16	: 2SC3944 (Q, R, S)	D10	: D5SBA20FD
Q17, 18	: 2SA1215		or RBV602LFA
Q19, 20	: 2SC2921	D11	: S5688B
Q21, 22	: 2SC2631 (R, S)		or 1SR139-10
Q23, 24	: 2SC2878 (B)		
Q25, 29	: 2SA933S (Q, R)		
	or : 2SA1175 (F, E)		
Q26~28	: 2SC1740S (Q, R)		
	or : 2SS2785 (F, E)		
Q30	: 2SA1123 (R, S)		
Q31~33	: 2SC2003 (L, K)		



	DESTINATION			
REF. NO.	0-10 (K, P)	0-21 (M)	0-71 (X)	2-91 (Y)
R13, 14	510	560	560	560
W87, 93	YES	NO	NO	NO
S1	NO	YES	YES	YES
F1	125V 6A	250V T6.3A	250V T3.15A	250V 6.3A
F2	NO	250V T3.15A	NO	250V 3.15A
F3, 6	125V 6A	250V T6.3A	250V T6.3A	250V 6.3A
F4, 5	NO	250V T6.3A	250V T6.3A	250V 6.3A
F7, 8	250V 2A	250V T2A	250V T2A	250V 2A
CN17, 18 CN19, 20	NO	YES	YES	YES

DESTINATION	(1)	(2)
0-10 (K, P)	-75.3V	75.2V
0-21 (M)	-73.9V	73.9V
0-71 (X)	-73.9V	73.9V
2-91 (Y)	-73.9V	73.9V

F, E)	D1~6, 8, 9, 12~19 :HSS104A or 1SS131
'A	D7 :HZS4.7N (B2) or RD4.7ES (B2)
(V, W)	D10 :D5SBA20F03 or RBV602LFA
(Q, R, S)	D11 :S5688B or 1SR139-100
(Q, R, S)	
(R, S)	
(B)	
(Q, R)	
5 (F, E)	
S (Q, R)	
5 (F, E)	
(R, S)	
(L, K)	

DC voltages are as measu
ter with no signal input. Va
tions between individual ins

Les tensions c.c. doivent ê
haute impédance sans sign
férer légèrement du fait des
et aux instruments de mesu

Die angegebenen Gleichsp
hochohmigen Spannung
gemessen. Dabei schwank
terschieden zwischen einz
U. geringfügig.

CAUTION: For continuec
nents only with manufac
parts list). ⚠ Indicates sa
risk of electric shock, leaka
shall be carred out (expos
the supply circuit) before t
er.

SIGNAL LINE
GND LINE
+B LINE
-B LINE

REF.NO.	DESTINATION			
	0-10 (K, P)	0-21 (M)	0-71 (X)	2-91 (Y)
R13, 14	510	560	560	560
W87, 93	YES	NO	NO	NO
S1	NO	YES	YES	YES
F1	125V 6A	250V T6.3A	250V T3.15A	250V 6.3A
F2	NO	250V T3.15A	NO	250V 3.15A
F3, 6	125V 6A	250V T6.3A	250V T6.3A	250V 6.3A
F4, 5	NO	250V T6.3A	250V T6.3A	250V 6.3A
F7, 8	250V 2A	250V T2A	250V T2A	250V 2A
CN17, 18 CN19, 20	NO	YES	YES	YES

DESTINATION	(1)	(2)
0-10 (K, P)	-75.3V	75.2V
0-21 (M)	-73.9V	73.9V
0-71 (X)	-73.9V	73.9V
2-91 (Y)	-73.9V	73.9V

TYPE K, P

TYPE Y

TYPE X

TYPE M

DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

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

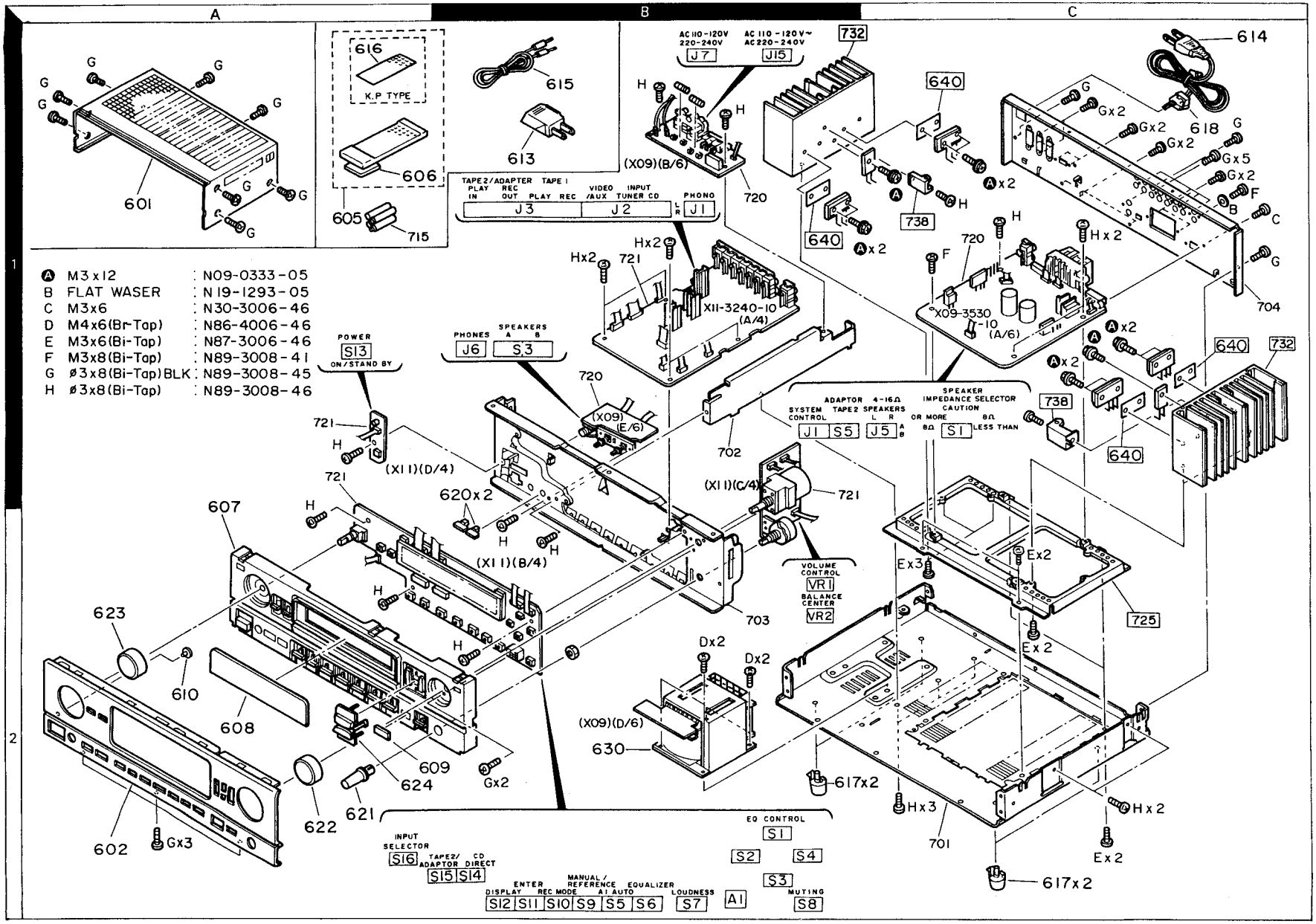
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably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

SIGNAL LINE
GND LINE
+B LINE
-B LINE

Y08-4530-10

KA-892

KENWOOD



Ⓐ M3x12 : N09-0333-05
B FLAT WASER : N19-1293-05
C M3x6 : N30-3006-46
D M4x6(Br-Tap) : N86-4006-46
E M3x6(Bi-Tap) : N87-3006-46
F M3x8(Bi-Tap) : N89-3008-41
G ø3x8(Bi-Tap)BLK : N89-3008-45
H ø3x8(Bi-Tap) : N89-3008-46

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

× 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.

No. 1

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
KA-892 (SINGAPORE MADE)						
601	1A	*	A01-2911-01	METALLIC CABINET		
602	2A	*	A60-0164-02	PANEL		
605	1A	*	A70-0590-05	REMOTE CONTROLLER ASSY	P	
605	1A	*	A70-0591-05	REMOTE CONTROLLER ASSY	YMX	
606	1A		A09-0086-08	BATTERY COVER (A70-0590-05)	P	
606	1A	*	A09-0112-08	BATTERY COVER (A70-0591-05)	YMX	
607	2A	*	B01-0484-01	PANEL ESCUTCHEON		
608	2A	*	B03-2760-03	DRESSING PLATE FRONT GLASS		
609	2A	*	B03-2763-04	DRESSING PLATE OPTIC RECEIVIHG		
610	2A	*	B19-1518-04	LIGHTING BOARD		
-			B46-0092-13	WARRANTY CARD	K	
-			B46-0094-03	WARRANTY CARD	Y	
-			B46-0095-03	WARRANTY CARD	Y	
-		*	B46-0096-33	WARRANTY CARD	X	
-			B46-0121-13	WARRANTY CARD	P	
-			B58-0513-04	CAUTION CARD (PRESET220-240)	Y	
-		*	B60-0708-00	INSTRUCTION MANUAL (ENGLISH)		
-		*	B60-0709-00	INSTRUCTION MANUAL (FRENCH)	P	
-		*	B60-0710-00	INSTRUCTION MANUAL (SP,AL.CH)	M	
⚠612	2C		E03-0114-05	AC OUTLET	X	
⚠613	1B		E03-0115-05	AC PLUG ADAPTER	M	
⚠614	1C		E30-0459-05	AC POWER CORD	M	
⚠614	1C		E30-0812-05	AC POWER CORD	Y	
⚠614	1C		E30-1341-05	AC POWER CORD	X	
⚠614	1C		E30-2209-05	AC POWER CORD	KP	
615	1B		E30-1392-05	CORD WITH PLUG		
616	1A		G16-0756-08	REMOTE CONTROL UNIT ENTRYSHEET	P	
		*	H50-0214-04	ITEM CARTON CASE	KPYX	
		*	H50-0262-04	ITEM CARTON CASE	M	
-		*	H10-5250-02	POLYSTYRENE FOAMED FIXTURE		
-		*	H10-5251-02	POLYSTYRENE FOAMED FIXTURE		
-			H25-0223-04	PROTECTION BAG (750X350X0.03)		
-			H25-0232-04	PROTECTION BAG (235X350X0.03)		
617	2B,2C		J02-1013-05	FOOT		
⚠618	1C		J42-0083-05	POWER CORD BUSHING		
-			J61-0307-05	WIRE BAND		
620	2B		K27-2014-04	KNOB SPEAKER		
621	2A		K29-3911-04	KNOB BALANCE		
622	2A	*	K29-4341-04	KNOB VOLUME CONTROL		
623	2A	*	K29-4342-04	KNOB INPUT SELECTOR		
624	2A	*	K29-4343-04	KNOB EQ CONTROL		
⚠630	2B	*	L07-0450-05	POWER TRANSFORMER	KP	
⚠630	2B	*	L07-0452-05	POWER TRANSFORMER	YM	
⚠630	2B	*	L07-0453-05	POWER TRANSFORMER	X	
B	1C		N19-1293-05	FLAT WASHER GND		
C	1C		N30-3006-46	PAN HEAD MACHIN SCREW		
D	2B		N86-4006-46	BINDING HEAD TAPTITE SCREW		
E	2C		N87-3006-46	BRAZIER HEAD TAPTITE SCREW		
F	1C		N89-3008-41	BINDING HEAD TAPTITE SCREW GND		

L:Scandinavia K:USA P:Canada
Y:PX(Far East, Hawaii) T:England E:Europe
Y:AAFES(Europe) X:Australia M:Other Areas

J: Japan made
S: Singapore made

⚠ indicates safety critical components.

× 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.

No. 2

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
G	1A,1C		N89-3008-45	BINDING HEAD TAPTITE SCREW		
H	1B,2B		N89-3008-46	BINDING HEAD TAPTITE SCREW		
KA-892 (JAPAN MADE)						
601	1A	*	A01-2911-01	METALLIC CABINET		
602	2A	*	A60-0164-02	PANEL		
605	1A	*	A70-0591-05	REMOTE CONTROLLER ASSY		
606	1A		A09-0112-08	BATTERY COVER		
607	2A	*	B01-0484-01	PANEL ESCUTCHEON		
608	2A	*	B03-2760-03	DRESSING PLATE		
609	2A	*	B03-2763-04	DRESSING PLATE		
610	2A	*	B19-1518-04	LIGHTING BOARD		
-		*	B60-0708-00	INSTRUCTION MANUAL (ENGLISH)		
-		*	B60-0710-00	INSTRUCTION MANUAL (SP,AL,CH)		
⚠613	1B		E03-0115-05	AC PLUG ADAPTER		
⚠614	1C		E30-0459-05	AC POWER CORD		
615	1B		E30-1392-05	CORD WITH PLUG		
		*	H50-0324-04	ITEM CARTON CASE		
-		*	H10-5298-02	POLYSTYRENE FOAMED FIXTURE		
-		*	H10-5299-02	POLYSTYRENE FOAMED FIXTURE		
-			H25-0223-04	PROTECTION BAG (750X350X0.03)		
-			H25-0232-04	PROTECTION BAG (235X350X0.03)		
617	2B,2C		J02-1013-05	FOOT		
⚠618	1C		J42-0083-05	POWER CORD BUSHING		
-			J61-0307-05	WIRE BAND		
620	2B		K27-2014-04	KNOB SPEAKER		
621	2A		K29-3911-04	KNOB BALANCE		
622	2A	*	K29-4341-04	KNOB VOLUME CONTROL		
623	2A	*	K29-4342-04	KNOB INPUT SELECTOR		
624	2A	*	K29-4343-04	KNOB EQ CONTROL		
⚠630	2B	*	L07-0452-05	POWER TRANSFORMER		
B	1C		N19-1293-05	FLAT WASHER GND		
C	1C		N30-3006-46	PAN HEAD MACHIN SCREW		
D	2B		N86-4006-46	BINDING HEAD TAPTITE SCREW		
E	2C		N87-3006-46	BRAZIER HEAD TAPTITE SCREW		
F	1C		N89-3008-41	BINDING HEAD TAPTITE SCREW GND		
G	1A,1C		N89-3008-45	BINDING HEAD TAPTITE SCREW		
H	1B,2B		N89-3008-46	BINDING HEAD TAPTITE SCREW		
AUDIO UNIT (X09-3530-10: K, P 0-21: M (J), 0-22: M (S), 0-71: X, 2-91: Y)						
C1 ,2			CE04KW1V100M	ELECTRO 10UF 35WV		J
C1 ,2			CE04LW1V100M	ELECTRO 10UF 35WV		S
C3 ,4			CC45FSL1H121J	CERAMIC 120PF J		
C7 ,8			CC45FSL1H030C	CERAMIC 3.0PF C		
C9 ,10			CE04KW1A470M	ELECTRO 47UF 10WV		J
C9 ,10			CE04LW1A470M	ELECTRO 47UF 10WV		S
C11 ,12			CC45FSL1H181J	CERAMIC 180PF J		
C15 ,16		*	CC45FSL2H390J	CERAMIC 39PF J		
C17 ,18			CC45FSL1H221J	CERAMIC 220PF J		
C19 ,20			CE04HW1H010M	NP-ELEC 1.0UF 50WV		
C21 ,22			CK45FF1H103Z	CERAMIC 0.010UF Z		
C23 ,24			CQ92FM1H222J	MYLAR 2200PF J		
C25 -28			CF92FV1H104J	MF 0.10UF J		
C29 ,30			CK45FF1H103Z	CERAMIC 0.010UF Z		

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⚠ indicates safety critical components.

× 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.

No. 3

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格			Destination 仕向	Remarks 備考
C31			CE04HW1E100M	NP-ELEC	10UF	25WV		
C32			CE04KW0J221M	ELECTR⊘	220UF	6.3WV		J
C32			CE04LW0J221M	ELECTR⊘	220UF	6.3WV		S
C33 ,34			CE04KW2A101M	ELECTR⊘	100UF	100WV		J
C33 ,34			CE04LW2A101M	ELECTR⊘	100UF	100WV		S
C35			CE04KW1E470M	ELECTR⊘	47UF	25WV		J
C35			CE04LW1E470M	ELECTR⊘	47UF	25WV		S
C36			CE04KW2A4R7M	ELECTR⊘	4.7UF	100WV		J
C36			CE04LW2A4R7M	ELECTR⊘	4.7UF	100WV		S
C37			CE04KW1H010M	ELECTR⊘	1.0UF	50WV		J
C37			CE04LW1H010M	ELECTR⊘	1.0UF	50WV		S
C38		*	CE04EW1V331M	ELECTR⊘	330UF	35WV		S
C38			CE04KW1V331M	ELECTR⊘	330UF	35WV		J
C39 ,40		*	C90-3448-05	ELECTR⊘	8200UF	83WV		
C41 ,42			CK45FE2H103P	CERAMIC	0.010UF	P		
C43			CE04KW1H470M	ELECTR⊘	47UF	50WV		J
C43			CE04LW1H470M	ELECTR⊘	47UF	50WV		S
⚠C44			C91-0647-05	CERAMIC	0.01UF	P		
C46 ,47			CC45FSL1H101J	CERAMIC	100PF	J		
C48			CE04KW1A101M	ELECTR⊘	100UF	10WV		J
C48			CE04LW1A101M	ELECTR⊘	100UF	10WV		S
C49			CE04KW1A470M	ELECTR⊘	47UF	10WV		J
C49			CE04LW1A470M	ELECTR⊘	47UF	10WV		S
J1			E11-0188-05	MINIATURE PH⊘NE JACK SYNCR⊘				
⚠J2 -4			E03-0108-05	AC ⊘UTLET			M	
J5			E20-0823-05	L⊘CK TERMINAL B⊘ARD SPEAKER				
J6		*	E11-0207-05	PH⊘NE JACK HEAD PH⊘NE				
⚠J7			E03-0093-05	AC ⊘UTLET			KPY	
640	1B,1C		F20-1285-05	INSULATING B⊘ARD FINAL TR				
⚠F1			F05-3121-05	FUSE (SEMK⊘)	(250V T3.15A)		X	
⚠F1			F05-6029-05	FUSE (UL)			KP	
⚠F1			F05-6321-05	FUSE (SEMK⊘)	(250V T6.3A)		M	
⚠F1			F05-6324-05	FUSE	(250V 6.3A)		Y	
⚠F2			F05-3121-05	FUSE (SEMK⊘)	(250V T3.15A)		M	
⚠F2			F05-3123-05	FUSE	(250V 3.15A)		Y	
⚠F3			F05-6029-05	FUSE (UL)			KP	
⚠F3 -6			F05-6321-05	FUSE (SEMK⊘)	(250V T6.3A)		MX	
⚠F3 -6			F05-6324-05	FUSE	(250V 6.3A)		Y	
⚠F6			F05-6029-05	FUSE (UL)			KP	
F7 ,8			F04-2025-05	FUSE (UL)	(250V 2A)		KP	
⚠F7 ,8			F04-2026-05	FUSE	(250V 2A)		Y	
⚠F7 ,8			F06-2021-05	FUSE (SEMK⊘)	(250V T2A)		MX	
CN11-26			J13-0075-05	FUSE CLIP			YM	
CN11,12			J13-0075-05	FUSE CLIP			KPX	
CN15-26			J13-0075-05	FUSE CLIP			X	
CN15,16			J13-0075-05	FUSE CLIP			KP	
CN21-26			J13-0075-05	FUSE CLIP			KP	
L1 ,2			L39-0085-05	PHASE-C⊘MPENSATI⊘N C⊘IL				
A	1B,1C		N09-0333-05	TAPPING SCREW (3X12)				
H	1C		N89-3008-46	BINDING HEAD TAPTITE SCREW				
CP1 ,2			R90-0826-05	MULTI-C⊘MP	0.22X2	J 5W		
R15 ,16			RD14NB2E181J	RD	180	J 1/4W		
R19 ,20			RD14NB2E332J	RD	3.3K	J 1/4W		

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× New Parts
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No. 4

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格			Destination 仕向	Remarks 備考
R21 -24			RD14NB2E221J	RD	220	J 1/4W		
R29 -32			RD14NB2E220J	RD	22	J 1/4W		
R33 -36			RD14NB2E331J	RD	330	J 1/4W		
R37 -40			RD14NB2E2R2J	RD	2.2	J 1/4W		
R43 ,44			RS14KB3D100J	FL-PR⊘⊘F RS	10	J 2W		
R61 ,62			RD14NB2E5R6J	RD	5.6	J 1/4W		
R69			RD14NB2E101J	RD	100	J 1/4W		
R77 ,78			RD14NB2E100J	RD	10	J 1/4W		
R79 ,80			RS14KB3D561J	FL-PR⊘⊘F RS	560	J 2W		
R85		*	RD14NB2E8R2J	RD	8.2	J 1/4W		
VR1 ,2			R12-1616-05	TRIMMING P⊘T.(1K) BIAS				
K1			S51-2078-05	MAGNETIC RELAY				
K2		*	S76-0016-05	MAGNETIC RELAY				
K2		*	S76-0017-05	MAGNETIC RELAY				
⚠K3			S51-1053-05	MAGNETIC RELAY				
S1			S31-2136-05	SLIDE SWITCH IMPEDANCE SELECT			YMX	
⚠S2			S31-2131-05	SLIDE SWITCH V⊘LTAGE SELECT			Y	
S3			S42-2163-05	MULTIPLE PUSH SWITCH SPEAKER				
⚠S4			S31-2322-05	SLIDE SWITCH V⊘LTAGE SELECT			M	
S5			S31-2094-05	SLIDE SWITCH (ADAPTOR/TAPE2)				
D1 -6			HSS104A	DI⊘DE				
D1 -6			1SS131	DI⊘DE				
D7			HZS4.7N(B2)	ZENER DI⊘DE				
D7			RD4.7ES(B2)	ZENER DI⊘DE				
D8 ,9			HSS104A	DI⊘DE				
D8 ,9			1SS131	DI⊘DE				
D10			D5SBA20F03	DI⊘DE				
D10			RBV-602LFA	DI⊘DE				
D11			S5688B	DI⊘DE				
D11			1SR139-100	DI⊘DE				
D12 -16			HSS104A	DI⊘DE				
D12 -16			1SS131	DI⊘DE				
D18 ,19			HSS104A	DI⊘DE				
D18 ,19			1SS131	DI⊘DE				
Q1 -4			2SA992(F,E)	TRANSISTⓄR				
Q5 -8			2SC2632A	TRANSISTⓄR				
Q9 ,10			2SA992(F,E)	TRANSISTⓄR				
Q11 ,12			2SC4137(V,W)	TRANSISTⓄR				
Q13 ,14			2SA1535(Q,R,S)	TRANSISTⓄR				
Q15 ,16			2SC3944(Q,R,S)	TRANSISTⓄR				
Q17 ,18			2SA1215	TRANSISTⓄR				
Q19 ,20			2SC2921	TRANSISTⓄR				
Q21 ,22			2SC2631(R,S)	TRANSISTⓄR				
Q23 ,24			2SC2878(B)	TRANSISTⓄR				
Q25			2SA1048(Y,GR)	TRANSISTⓄR				J
Q25			2SA1175(F,E)	TRANSISTⓄR				S
Q25			2SA1309A(Q,R)	TRANSISTⓄR				J
Q25			2SA933S(Q,R)	TRANSISTⓄR				S
Q26 -28			2SC1740S(Q,R)	TRANSISTⓄR				S
Q26 -28			2SC2458(Y,GR)	TRANSISTⓄR				J
Q26 -28			2SC2785(F,E)	TRANSISTⓄR				S
Q26 -28			2SC3311A(Q,R)	TRANSISTⓄR				J
Q29			2SA1048(Y,GR)	TRANSISTⓄR				J
Q29			2SA1175(F,E)	TRANSISTⓄR				S

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PARTS LIST

KA-892

* New Parts
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Les articles non mentionnes dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

No. 5

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
Q29			2SA1309A(Q,R)	TRANSISTOR		J
Q29			2SA933S(Q,R)	TRANSISTOR		S
Q30			2SA1123(R,S)	TRANSISTOR		
Q31 -33			2SC2003(L,K)	TRANSISTOR		
CONTROL UNIT (X11-3240-10: K, P, Y, M (J), X, 0-21: M (S)						
D39			B30-1291-05	LED(LN21CPSLX(V)-(TA4))		
C1 ,2			CE04KW1V100M	ELECTRO 10UF 35WV		J
C1 ,2			CE04LW1V100M	ELECTRO 10UF 35WV		S
C3 ,4			CC45FSL1H101J	CERAMIC 100PF J		
C7 ,8			CE04KW1A101M	ELECTRO 100UF 10WV		S
C7 ,8			CE04KW1A101M	ELECTRO 100UF 10WV		J
C9 ,10			CQ92FM1H123J	MYLAR 0.012UF J		
C11 ,12			CQ92FM1H332J	MYLAR 3300PF J		
C13 -16			CE04KW1V100M	ELECTRO 10UF 35WV		J
C13 -16			CE04LW1V100M	ELECTRO 10UF 35WV		S
C17 ,18			CC45FSL1H101J	CERAMIC 100PF J		
C19 ,20			CE04KW1V100M	ELECTRO 10UF 35WV		J
C19 ,20			CE04LW1V100M	ELECTRO 10UF 35WV		S
C21 ,22			CC45FSL1H101J	CERAMIC 100PF J		
C23 -28			CE04KW1V100M	ELECTRO 10UF 35WV		J
C23 -28			CE04LW1V100M	ELECTRO 10UF 35WV		S
C29 ,30			CC45FSL1H101J	CERAMIC 100PF J		
C31 -36			CE04KW1V100M	ELECTRO 10UF 35WV		J
C31 -36			CE04LW1V100M	ELECTRO 10UF 35WV		S
C37 ,38			CK45FB1H471K	CERAMIC 470PF K		
C39 ,40			CC45FSL1H101J	CERAMIC 100PF J		
C41 ,42			CF92FV1H124J	MF 0.12UF J		
C43 ,44			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		J
C43 ,44			CE04LW1H2R2M	ELECTRO 2.2UF 50WV		S
C45 ,46			CF92FV1H473J	MF 0.047UF J		
C47 ,48			CE04KW1H010M	ELECTRO 1.0UF 50WV		J
C47 ,48			CE04LW1H010M	ELECTRO 1.0UF 50WV		S
C49 ,50			CQ92FM1H183J	MYLAR 0.018UF J		
C51 ,52			CE04KW1HR33M	ELECTRO 0.33UF 50WV		J
C51 ,52			CE04LW1HR33M	ELECTRO 0.33UF 50WV		S
C53 ,54			CQ92FM1H822J	MYLAR 8200PF J		
C55 ,56			CF92FV1H124J	MF 0.12UF J		
C57 ,58			CQ92FM1H272J	MYLAR 2700PF J		
C59 ,60			CF92FV1H563J	MF 0.056UF J		
C61 ,62			CQ92FM1H152J	MYLAR 1500PF J		
C63 ,64			CQ92FM1H183J	MYLAR 0.018UF J		
C65 ,66			CK45FB1H471K	CERAMIC 470PF K		
C67 ,68			CQ92FM1H822J	MYLAR 8200PF J		
C69 ,70			CF92FV1H473J	MF 0.047UF J		
C71 ,72			CE04KW1V4R7M	ELECTRO 4.7UF 35WV		J
C71 ,72			CE04LW1V4R7M	ELECTRO 4.7UF 35WV		S
C73 -76			CE04KW1V100M	ELECTRO 10UF 35WV		J
C73 -76			CE04LW1V100M	ELECTRO 10UF 35WV		S
C100			CK45FF1H103Z	CERAMIC 0.010UF Z		
C101,102			CE04KW1E470M	ELECTRO 47UF 25WV		J
C101,102			CE04LW1E470M	ELECTRO 47UF 25WV		S
C105,106			CF92FV1H104J	MF 0.10UF J		
C107-109			CK45FB1H102K	CERAMIC 1000PF K		
C110,111			CF92FV1H104J	MF 0.10UF J		

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No. 6

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
C112-114			CK45FB1H102K	CERAMIC 1000PF K		
C115,116			CE04KW1E470M	ELECTRO 47UF 25WV		J
C115,116			CE04LW1E470M	ELECTRO 47UF 25WV		S
C117			CE04HW1E100M	NP-ELEC 10UF 25WV		
C118-123			CE04KW1E470M	ELECTRO 47UF 25WV		J
C118-123			CE04LW1E470M	ELECTRO 47UF 25WV		S
C125,126			CE04KW1V102M	ELECTRO 1000UF 35WV		J
C125,126			CE04LW1V102M	ELECTRO 1000UF 35WV		S
C127-130			CF92FV1H104J	MF 0.10UF J		
C131,132			CE04KW1E101M	ELECTRO 100UF 25WV		J
C131,132			CE04LW1E101M	ELECTRO 100UF 25WV		S
C133,134			CF92FV1H104J	MF 0.10UF J		
C135			CE04KW1A101M	ELECTRO 100UF 10WV		
C136,137			CK45FF1H103Z	CERAMIC 0.010UF Z		
C138			CE04KW1E470M	ELECTRO 47UF 25WV		J
C138			CE04LW1E470M	ELECTRO 47UF 25WV		S
C139,140			CE04KW1V100M	ELECTRO 10UF 35WV		J
C139,140			CE04LW1V100M	ELECTRO 10UF 35WV		S
C141			CE04KW1H010M	ELECTRO 1.0UF 50WV		J
C141			CE04LW1H010M	ELECTRO 1.0UF 50WV		S
C143			CE04KW0J222M	ELECTRO 2200UF 6.3WV		J
C143			CE04LW0J222M	ELECTRO 2200UF 6.3WV		S
C144			CE04KW1V100M	ELECTRO 10UF 35WV		J
C144			CE04LW1V100M	ELECTRO 10UF 35WV		S
C145,146			CE04KW1H010M	ELECTRO 1.0UF 50WV		J
C145,146			CE04LW1H010M	ELECTRO 1.0UF 50WV		S
C147,148			CE04KW1A101M	ELECTRO 100UF 10WV		
C149,150			CQ92FM1H102J	MYLAR 1000PF J		
C155,156			C91-0085-05	CERAMIC 0.022UF N		
C157			CE04KW1H010M	ELECTRO 1.0UF 50WV		J
C157			CE04LW1H010M	ELECTRO 1.0UF 50WV		S
C158			CK45FF1H103Z	CERAMIC 0.010UF Z		
C160			CE04KW1E221M	ELECTRO 220UF 25WV		J
C160			CE04LW1E221M	ELECTRO 220UF 25WV		S
C161			CE04KW1V100M	ELECTRO 10UF 35WV		J
C161			CE04LW1V100M	ELECTRO 10UF 35WV		S
C162			CE04KW1H100M	ELECTRO 10UF 50WV		J
C162			CE04LW1H100M	ELECTRO 10UF 50WV		S
C163			CE04KW1J100M	ELECTRO 10UF 63WV		J
C163			CE04LW1J100M	ELECTRO 10UF 63WV		S
C164,165			CE04HW1E100M	NP-ELEC 10UF 25WV		
C166,167			C91-0085-05	CERAMIC 0.022UF N		
J1			E13-0249-05	PHONO JACK PHONO		J
J1			E13-0259-05	PHONO JACK PHONO		S
J2			E13-0633-05	PHONO JACK CD,TUNER,AUX/VIDEO		J
J2			E13-0637-05	PHONO JACK CD,TUNER,AUX/VIDEO		S
J3			E13-0823-05	PHONO JACK TAPE1,TAPE2		S
J3			E13-0825-05	PHONO JACK TAPE1,TAPE2		J
L1 ,2			L40-1001-17	SMALL FIXED INDUCTOR(10UH,K)		
X1			L78-0244-05	RESONATOR		
X2			L78-0267-05	RESONATOR		
H	1B		N89-3008-46	BINDING HEAD TAPTITE SCREW		

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No. 7

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
CP1 ,2			R90-0491-05	MULTI-COMP 820KX7 J 1/6W		
CP3 ,4			R90-0482-05	MULTI-COMP 100KX4 J 1/6W		
CP5			R90-0855-05	MULTI-COMP 100KX5 J		
CP6			R90-0850-05	MULTI-COMP 100KX3 J 1/6W		
R115,116			RD14GB2E1ROJ	FL-PROOF RD 1.0 J 1/4W		
R185			RS14KB3A152J	FL-PROOF RS 1.5K J 1W		
R215,216			RS14KB3A331J	FL-PROOF RS 330 J 1W		
R256,257			RS14KB3D181J	FL-PROOF RS 180 J 2W		
R268			RS14KB3D561J	FL-PROOF RS 560 J 2W		
R273,274			RS14KB3D181J	FL-PROOF RS 180 J 2W		
VR1		*	R29-5064-05	MOTOR VR 100KB X2 VOLUME		
VR2			R01-5066-05	POTENTIOMETER 200KB BALANCE		
S1 -15			S40-1064-05	PUSH SWITCH KEY BOARD		
S16			T99-0509-05	ROTARY ENCODER		
D1 -4			S5688B	DIODE		
D1 -4			1SR139-100	DIODE		
D5 -12			HSS104	DIODE		
D5 -12			1SS133	DIODE		
D14 -18			HSS104	DIODE		
D14 -18			1SS133	DIODE		
D19 ,20			HZS6.8N(B2)	ZENER DIODE		
D19 ,20			RD6.8ES(B2)	ZENER DIODE		
D21			HZS6.2N(B2)	ZENER DIODE		
D21			RD6.2ES(B2)	ZENER DIODE		
D22			HZS4.7N(B2)	ZENER DIODE		
D22			RD4.7ES(B2)	ZENER DIODE		
D23 ,24			HZS5.6N(B2)	ZENER DIODE		
D23 ,24			RD5.6ES(B2)	ZENER DIODE		
D25			HZS10N(B2)	ZENER DIODE		
D25			RD10ES(B2)	ZENER DIODE		
D26 ,27			HSS104	DIODE		
D26 ,27			1SS133	DIODE		
D28 ,29			HSS104A	DIODE		
D28 ,29			1SS131	DIODE		
D30 -36			HSS104	DIODE		
D30 -36			1SS133	DIODE		
D38			HSS104	DIODE		
D38			1SS133	DIODE		
D40			HZS5.6N(B2)	ZENER DIODE		
D40			RD5.6ES(B2)	ZENER DIODE		
D41 -43			HSS104	DIODE		
D41 -43			1SS133	DIODE		
D44			HZS6.2N(B2)	ZENER DIODE		
D44			RD6.2ES(B2)	ZENER DIODE		
ED1		*	FIP13AW22Y	FLUORESCENT INDICATOR TUBE		
IC1		*	BA15218-DX	IC(OP AMP X2)		
IC2			TC9163N	IC(BILATERAL SWITCH X16)		
IC3			TC9162N	IC(ANALOG SWITCH ARRAY)		
IC4 -6			BA15218	IC(OP AMP X2)		
IC4 -6			NJM4565D	IC(OP AMP X2)		
IC7		*	BA15218-DX	IC(OP AMP X2)		
IC7			NJM4565D-D	IC(OP AMP X2)		
IC8 ,9			M5229P	IC(7CH GRAPHIC EQUALIZER)		
IC10			NJU7305L	IC(ELECTRIC VOLUME)		

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No. 8

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
IC11			TA8409S	IC(MOTOR CONTROL)		
IC12		*	CXP50112-373Q	IC(MICROPROCESSOR)		
IC13			PST529D	IC(SYSTEM RESET)		
IC14,15			LB1294	IC(6CH DARLINGTON DRIVER)		
IC16,17		*	XR-1091ECP	IC(EQUALIZER FILTER)		
IC18			TC4051BP	IC(8CH MPX/ DE-MPX)		
IC19		*	M50946-133SP	IC(MICROPROCESSOR)		
IC20			TA7815S	IC(VOLTAGE REGULATOR/ +15V)		
IC20			UPC7815HF	IC(VOLTAGE REGULATOR/ +15V)		
IC21			UPC7915HF	IC(VOLTAGE REGULATOR/ -15V)		
IC22			TA7805S	IC(VOLTAGE REGULATOR/ +5V)		
IC22			UPC7805HF	IC(VOLTAGE REGULATOR/ +5V)		
Q1 ,2			2SC2878(A,B)	TRANSISTOR		
Q3			2SA1175(F,E)	TRANSISTOR		
Q3			2SA933S(Q,R)	TRANSISTOR		
Q4 ,5			2SC1740S(Q,R)	TRANSISTOR		
Q4 ,5			2SC2785(F,E)	TRANSISTOR		
Q6			2SB941(Q,P)	TRANSISTOR		
Q7			2SC1740S(Q,R)	TRANSISTOR		
Q7			2SC2785(F,E)	TRANSISTOR		
A1			W02-1043-05	OPTIC RECEIVING MODULE		
A1			W02-1046-05	OPTIC RECEVIIHG MODULE		

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PARTS LIST

KA-892

KA-892

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 kΩ
Tuner/Tape/CD/VIDEO	200 mV/47 kΩ
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 kΩ
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 (17-5/6") 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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