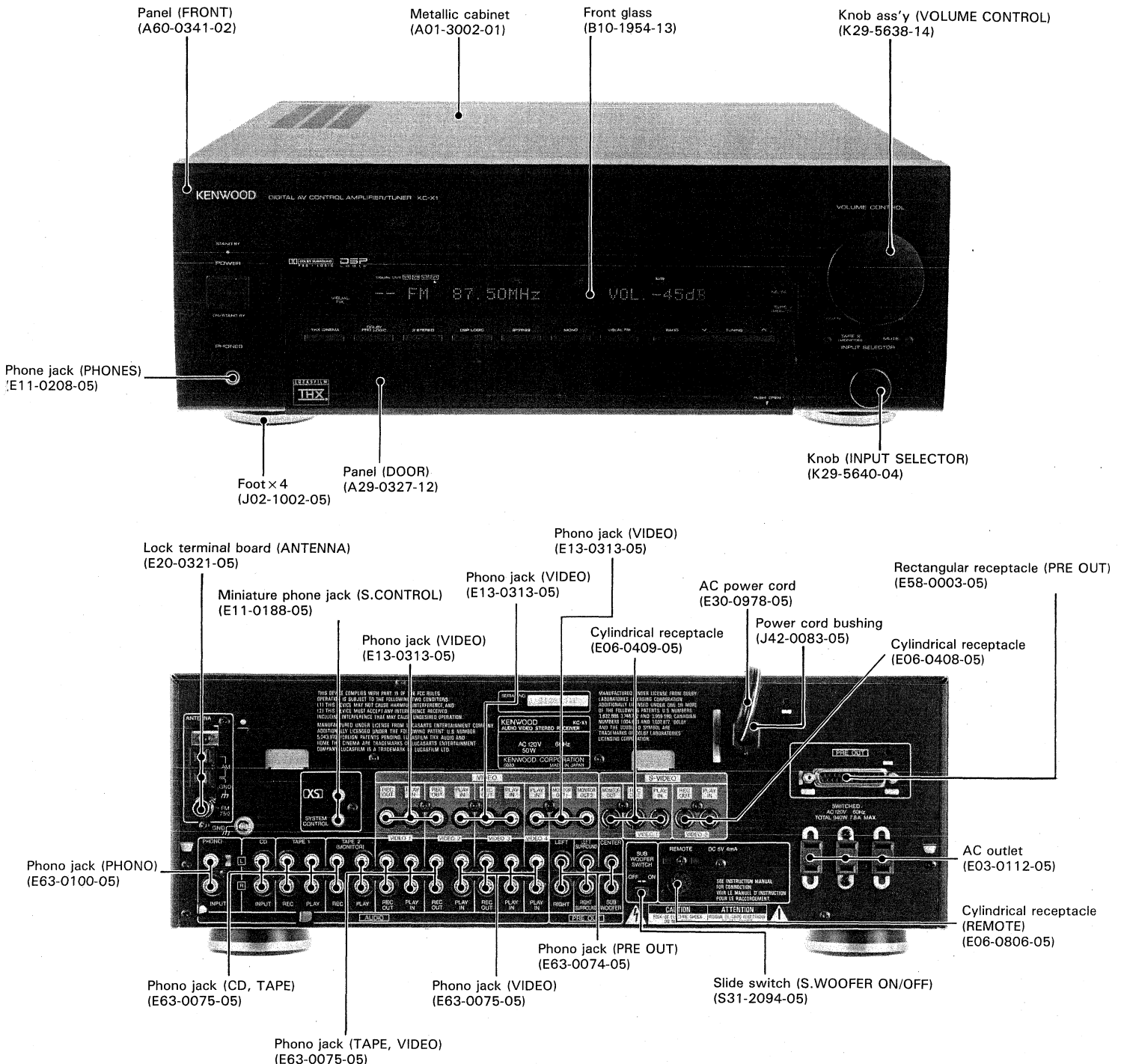


KC-X1

SERVICE MANUAL

KENWOOD

©1993-3 PRINTED IN JAPAN
B51-4703-00 (MC) 2088

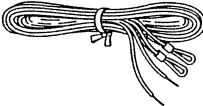
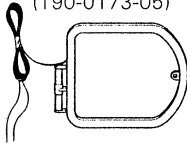
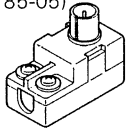
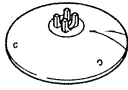
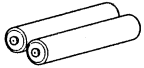

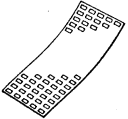



KC-X1

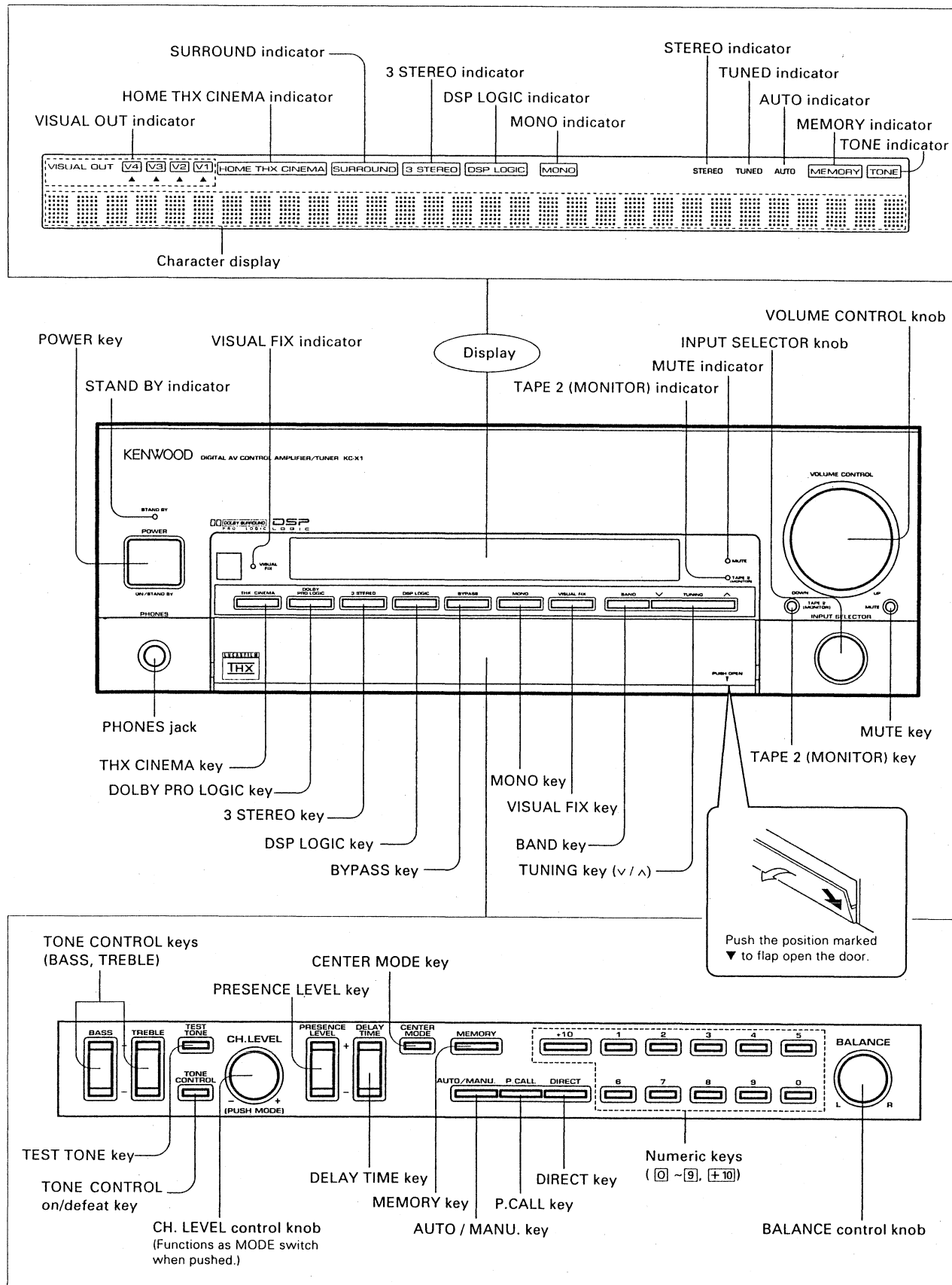
CONTENTS

ACCESSORIES	2	4. Display control driver: LC75711E (X14: IC15, 16) ...	23
CONTROLS AND INDICATORS	3	5. Control of selector IC and speaker relay	26
DISASSEMBLY FOR REPAIR	7	ADJUSTMENT	27
BLOCK DIAGRAM	11	P.C. BOARD (Component side view)	29
CIRCUIT DESCRIPTION		SCHEMATIC DIAGRAM	39
1. Outline of THX system	13	EXPLODED VIEW	67
2. Main microprocessor μ PD78044GF-024 (X14: IC14) ...	14	PARTS LIST	69
3. Control microprocessor μ PD78043GF-020 (X14: IC18) ..	20	SPECIFICATIONS	75

ACCESSORIES

FM indoor antenna	1	AM loop antenna	1
(T90-0176-05)		(T90-0173-05)	
			
75 Ω /300 Ω antenna adaptor	1	Loop antenna stand	1
(T90-0185-05)		(J19-2815-04)	
			
Batteries ("R03" or "AAA")	2	Remote control unit	1
		(X94-1030-21)	
		Battery cover (A09-0140-03)	
Overlay sheet	1		
(G16-0804-04)		Audio cord	3
		(E30-2293-05)	
			

CONTROLS AND INDICATORS

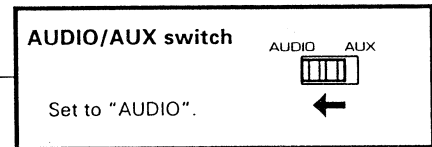
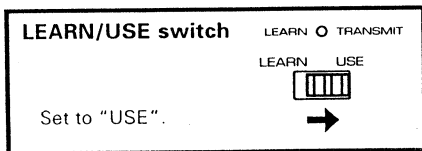


KC-X1

CONTROLS AND INDICATORS

Names and functions of remote control keys (AUDIO mode)

To remote control KENWOOD components connected to this unit via the system control cords, set the LEARN/USE switch and AUDIO/AUX switch as shown in the illustrations below.



LEARN/TRANSMIT indicator

The LED lights when a remote control signal is transmitted by pressing a key and during programming a remote control signal from another remote control unit.

POWER key

Press to turn the power of the main unit ON/OFF.

Cassette deck operation keys

With double cassette deck:
The TAPE A keys control deck A and TAPE B keys control deck B.

With single cassette deck:
Use the TAPE B keys to control the deck.
(The TAPE A keys do not function.)

- * When this remote control unit is used to operate the cassette deck, connect a system control cord between it and the main unit, and its output to the TAPE 1 jacks of the main unit.

Numeric keys

When listening to CD:
These function as the numeric keys of the CD player.

When listening to radio:
These function as the numeric keys of the tuner.

LD player operation keys

These keys can control the playback, pause, stop and search of the LD player.

- * Only when operating these keys, point the remote control unit toward the LD player.
- * Do not connect the LD player using a system control cord.

Surround operation keys

THX CINEMA key
DOLBY PRO LOGIC key
DOLBY 3 STEREO key
MONO key
DSP LOGIC key
BYPASS key: Press to cancel the surround effect.

Select the surround mode.

Tuner operation keys

- BAND** key: Press to select the frequency band.
- P.CALL** keys: Press to recall the preset stations in sequence.
- DIRECT** key: Use together with the numeric keys to specify a station to be recalled.

Graphic equalizer operation keys

- EFFECT** key: Press to turn the graphic equalizer ON/OFF.
- M.CALL** key: Press to recall preset equalizer patterns in sequence.

CD player operation keys

These keys can control the playback, pause, stop, search and skip of the CD player.

When a multi-disc player is used, the kind of disc can be selected with the **DISC** key.

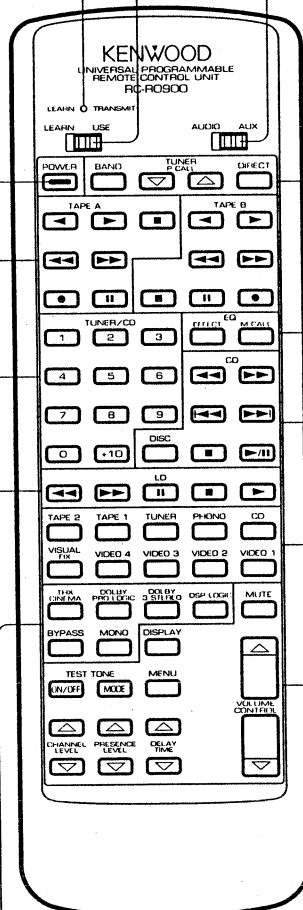
Input selector keys

Press one of these keys to select a desired input source.

When the **VISUAL FIX** key is pressed, the current video input is fixed, so that only the audio input can be selected from other input sources.

Volume and other control keys

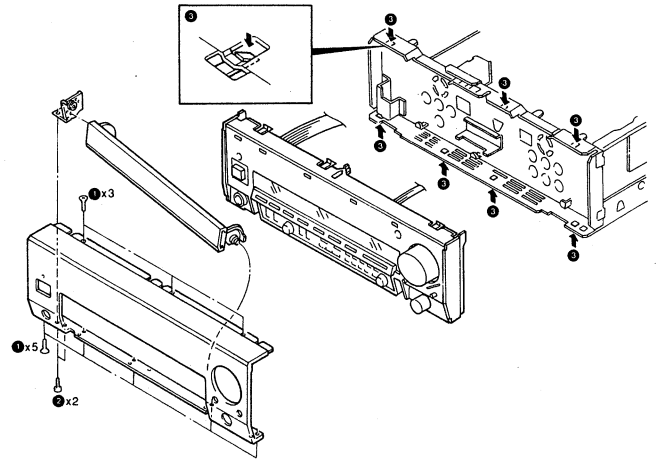
- MUTE** key: Mutes the playback sound temporarily.
- VOLUME CONTROL** keys; Adjusts the overall volume of the played sound.
- DISPLAY** key: Press to switch the content of the display on the main unit. (Input source display/surround mode display)
- MENU** key: Press to display the menu on the TV monitor screen.
- TEST TONE ON/OFF** key; Use during surround play for various setting operations.
- TEST TONE MODE** key
- CHANNEL LEVEL** keys
- PRESENCE LEVEL** keys



DISASSEMBLY FOR REPAIR

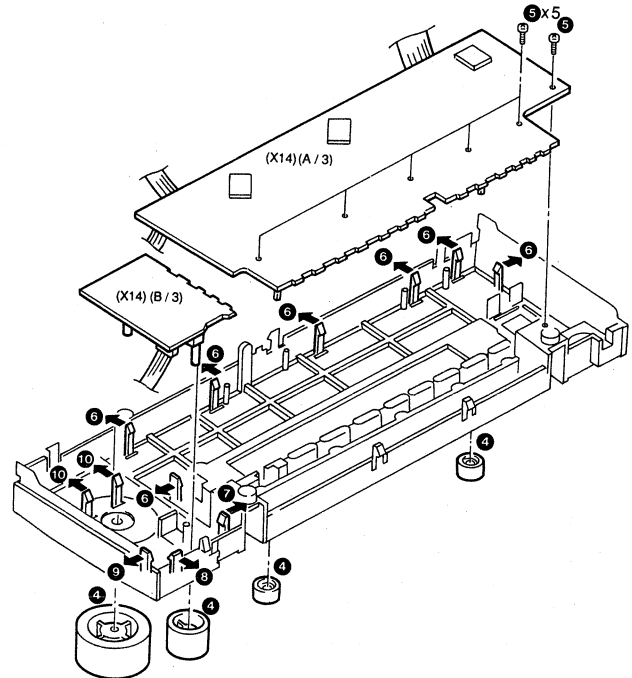
Removing the panel and panel escutcheon

1. Remove the eight screws (1), then detach the front panel.
2. Remove the two screws (2), then detach the lower door panel.
3. Detach the panel escutcheon by disengaging the seven hooks (3).



Removing the (X14) (A/3) and (X14) (B/3) boards

1. Remove the four knobs (4).
2. Remove the six screws (5).
3. Detach the FL display board (X14) (A/3) by disengaging the seven hooks (6).
4. Detach the Volume selector board (X14) (B/3) by disengaging the five hooks in order of (7), (8), (9) then (10).

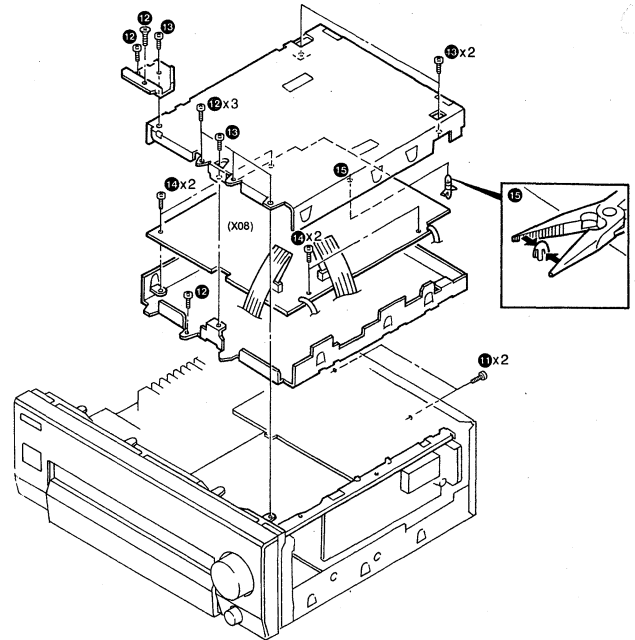


KC-X1

DISASSEMBLY FOR REPAIR

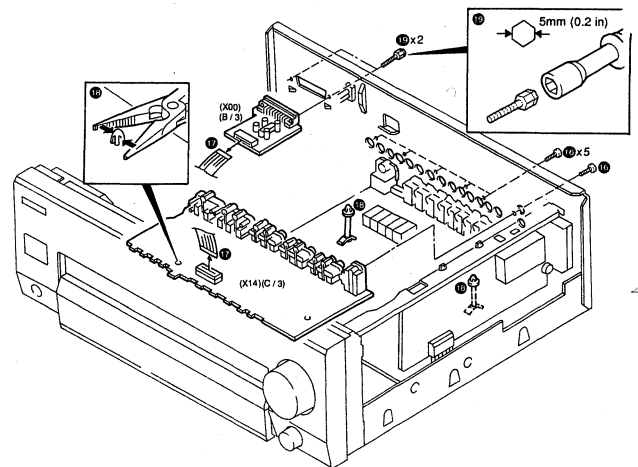
Removing the (X08) board

1. Remove the two screws (11).
2. Remove the six screws (12), then lift the shield plate.
3. Remove the four screws (13), then detach the shield plate reinforcing hardware and upper shield plate.
4. Remove the four screws (14).
5. Remove the unit holder (15), then detach the board (X08).



Removing the (X14) (C/3) and (X00) (B/3) boards

1. Remove the six screws (16).
2. Unplug the two connectors (17).
3. Remove the two unit holders (18), then detach the Video board (X14) (C/3).
4. Remove the two hex-head screws (19) using a box driver (5 mm (0.2 in.)), then detach the DB25 terminal board (X00) (B/3).



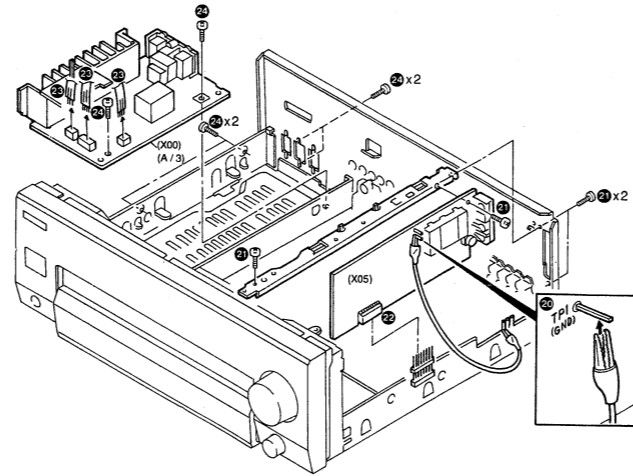
KC-X1

KC-X1

DISASSEMBLY FOR REPAIR

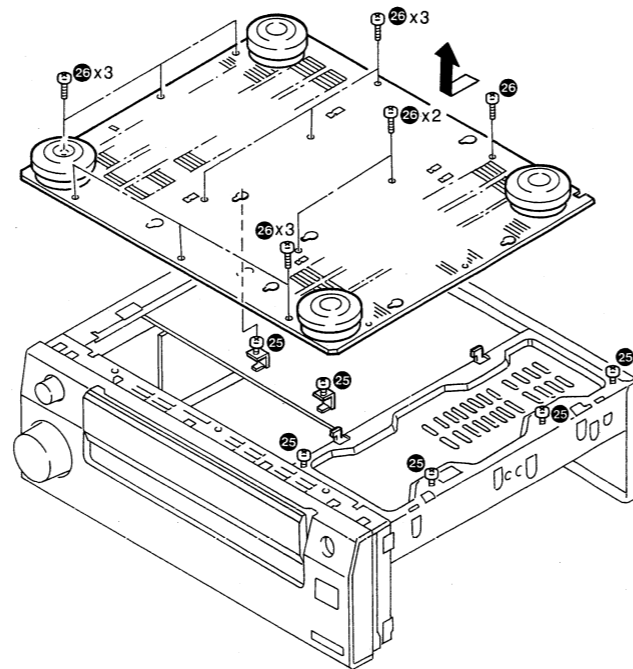
Removing the (X00) (A/3) and (X05) boards

1. Attach the clips of cord to TP1 and the chassis (20).
2. Remove the four screws (21), then detach the frame.
3. Unplug the connector (22), then detach the Tuner board (X05).
4. Unplug the three connectors (23).
5. Remove the six screws (24), then detach the Power board (X00) (A/3).



Removing the bottom panel

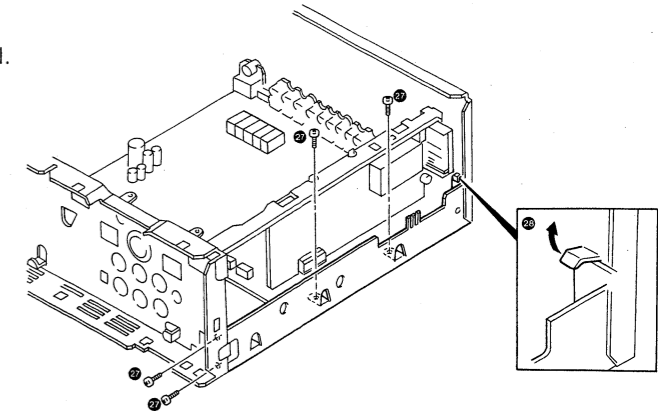
1. Loosen the six screws (25).
2. Remove the twelve screws (26), and slide the bottom panel slightly toward the front panel side.



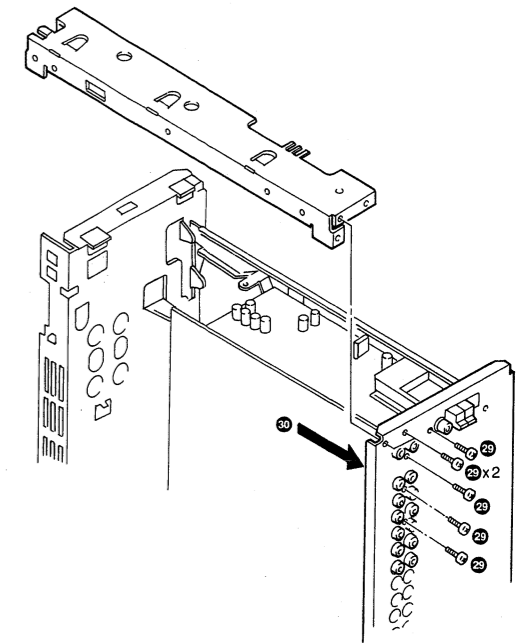
DISASSEMBLY FOR REPAIR

Removing the bottom right frame

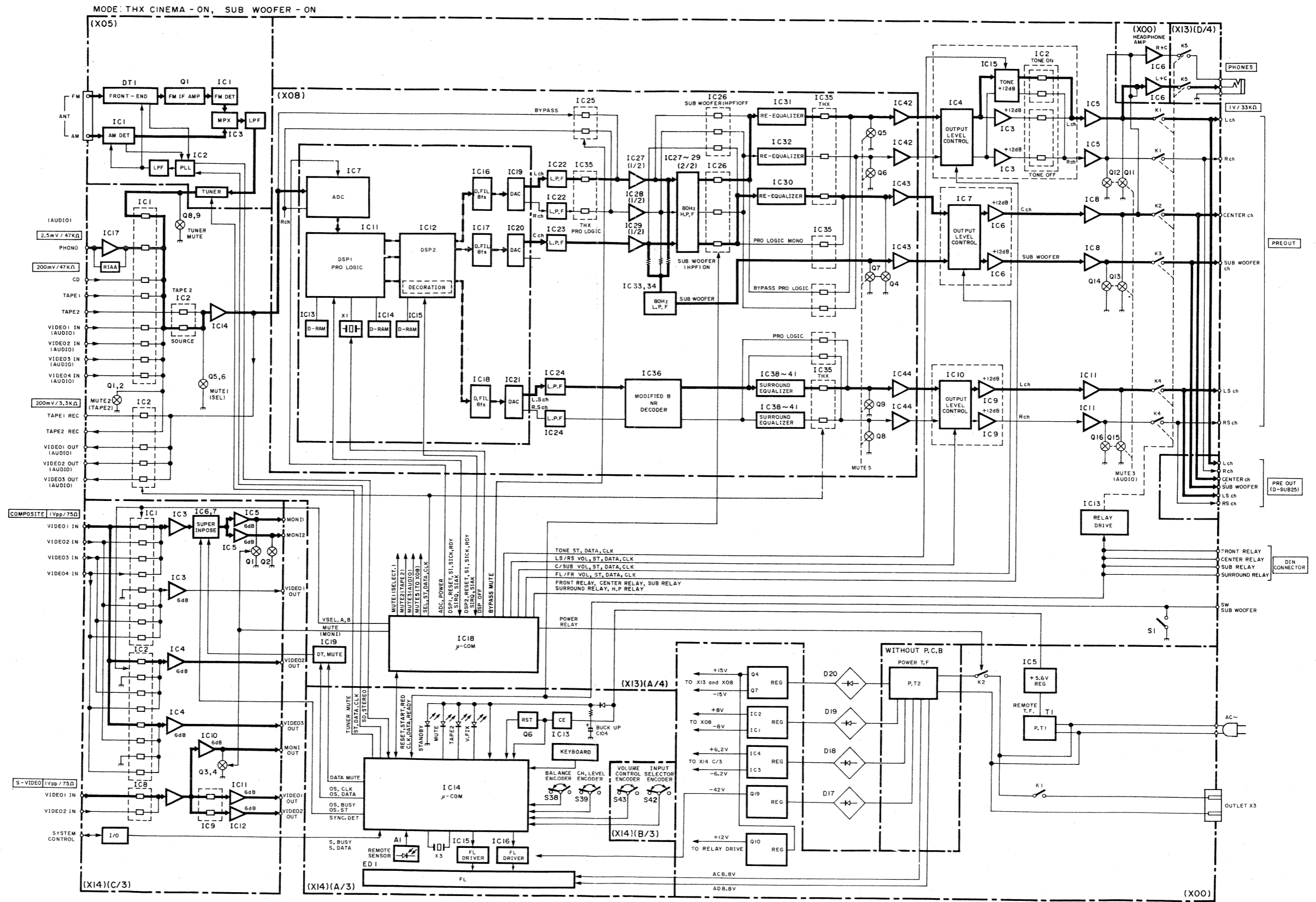
1. Remove the four screws (27).
2. Stand up the claw (28) on the bottom right of the rear panel.



3. Place the set with the right side panel facing up, and remove the six screws (29).
4. Detach the right frame by pushing the rear panel toward the outer direction (30).



KC-X1 KC-X1 BLOCK DIAGRAM



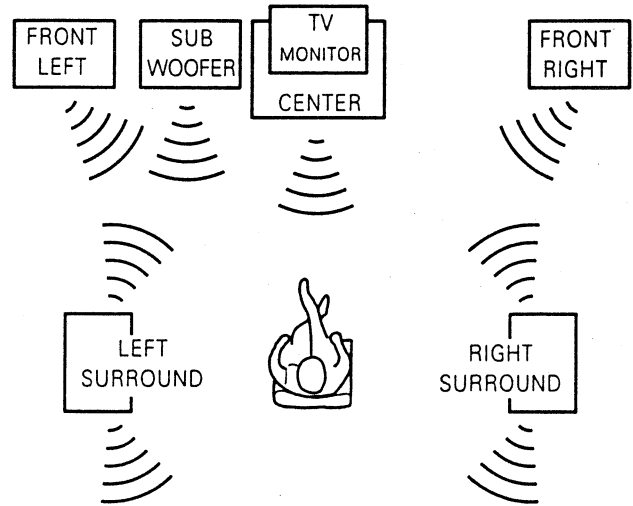
CIRCUIT DESCRIPTION

1. Outline of THX system

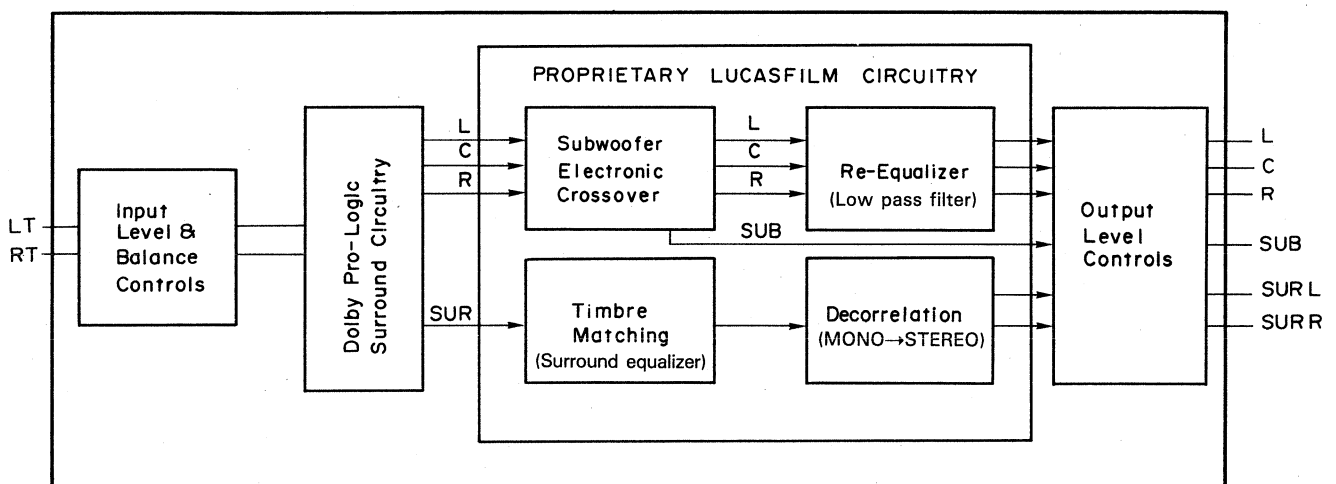
The THX system reproduces a similar Dolby Surround acoustic effect to movie theaters from a video software program carrying the **DD** DOLBY SURROUND mark.

The differences between the THX and the Dolby Surround function are as follows:

- (1) In the video software carrying the **DD** DOLBY SURROUND mark, the high frequencies are enhanced assuming reproduction in a large place such as movie theaters (because high frequencies tend to be attenuated in a large place due to the distance between the speakers and audience).
In consequence, the THX applies re-equalization to the signal to prevent excessive high frequencies when the program is played in home.
- (2) The rear component of the Dolby Surround signal is monaural but, to obtain more feeling of presence, the THX reproduces the rear component in simulated stereo by decelerating the rear left and right pitches by 1/100.
- (3) To obtain an equivalent feeling of presence to movie theaters, the THX uses the same quality of speakers for the front and center channels. The rear (surround) speakers are located directly to the left and right of the listeners and their sounds are radiated so that the listener does not sense the source of surround sound.



THX system



KC-X1

CIRCUIT DESCRIPTION

2. Main microprocessor: μ PD78044GF-024 (X14: IC14)

2-1. Function description

(1) Feature

Audio input (9 channels)	CD, PHONO, TUNER, TAPE1, TAPE2, VIDEO1, VIDEO2, VIDEO3, VIDEO4
Video input (4 channels)	VIDEO1 (PLAY/REC), VIDEO2 (PLAY/REC), VIDEO3 (PLAY/REC), VIDEO4 (PLAY)
Surround mode	DOLBY PRO•LOGIC, 3 STEREO, THX CINEMA, DSP LOGIC, MONO
Center mode	NORMAL, WIDEBAND, PHANTOM (PRO•LOGIC, THX) NORMAL, WIDEBAND (3 STEREO)
User memory	Tuner random 40 station preset

(2) Control object

FL display (X14; EDI: FIP30XM1AA)	
LED (X14: D60~63)	
IC LM7001 (X05: IC2) LC75711E (X14: IC15, 16) μ PD6450CX-514 (X14: IC6) μ PD78043GF-020 (X13: IC18)	PLL FL driver (FL: FIP30XM1AA) OSD Control microprocessor

2-2. Destination setting

Setting switch		Destination	Band	Received frequency range	Channel space	Reference frequency
Channel space 50kHz/100kHz (Pin 56)	AM SHORT/ LONG selection 1610kHz/1700kHz (Pin 55)					
High	Low	K1	FM	87.5 ~ 108.0 MHz	100 kHz	50 kHz
			AM	530 ~ 1610 kHz	10 kHz	10 kHz
High	High	K2	FM	87.5 ~ 108.0 MHz	100 kHz	50 kHz
			AM	530 ~ 1700 kHz	10 kHz	10 kHz
Low	—	E	FM	87.5 ~ 108.0 MHz	50 kHz	50 kHz
			AM	531 ~ 1602 kHz	9 kHz	9 kHz

CIRCUIT DESCRIPTION

2-3. Initial setting

(1) Setting method

While pressing the POWER key, plug the power cord to the AC wall outlet.

POWER	OFF
AUDIO selector	TUNER
TAPE 2	OFF
VIDEO selector	VIDEO 1
BAND	FM
Frequency	Lower limit of FM
AUTO/MONO	AUTO
Preset channel display	""--"
Preset channel frequency	Refer to figure 1.
Surround	BYPASS
Front (Left, Right)	0 dB
Center	0 dB
Rear (Left, Right)	0 dB
Sub woofer	0 dB
Center mode	
PRO LOGIC	NORMAL
3-STEREO	NORMAL
THX CINEMA	WIDEBAND
MASTER VOLUME	-45 dB

(Figure 1)

Destina- tion CH	K1		K2		E	
	BAND	Frequency	BAND	Frequency	BAND	Frequency
1	FM	98.00	FM	98.00	FM	98.00
2	FM	108.00	FM	108.00	FM	108.00
3	AM	630	AM	630	AM	630
4	AM	990	AM	990	AM	990
5	AM	1440	AM	1440	AM	1440
6	AM	1610	AM	1700	AM	1602
7	FM	87.50	FM	87.50	FM	87.50
8	FM	98.50	FM	98.50	FM	98.50
9	AM	530	AM	530	AM	531
10	FM	89.10	FM	89.10	FM	89.10
11~40	FM	87.50	FM	87.50	FM	87.50

Frequency unit FM : MHz
AM : kHz

KC-X1

CIRCUIT DESCRIPTION

2-4. Test mode

(1) Setting method

While pressing the TUNING DOWN key, plug the power cord to the AC wall outlet.

When the test mode is entered, the FL tube display all lights.

(2) Key and functions valid in test mode.

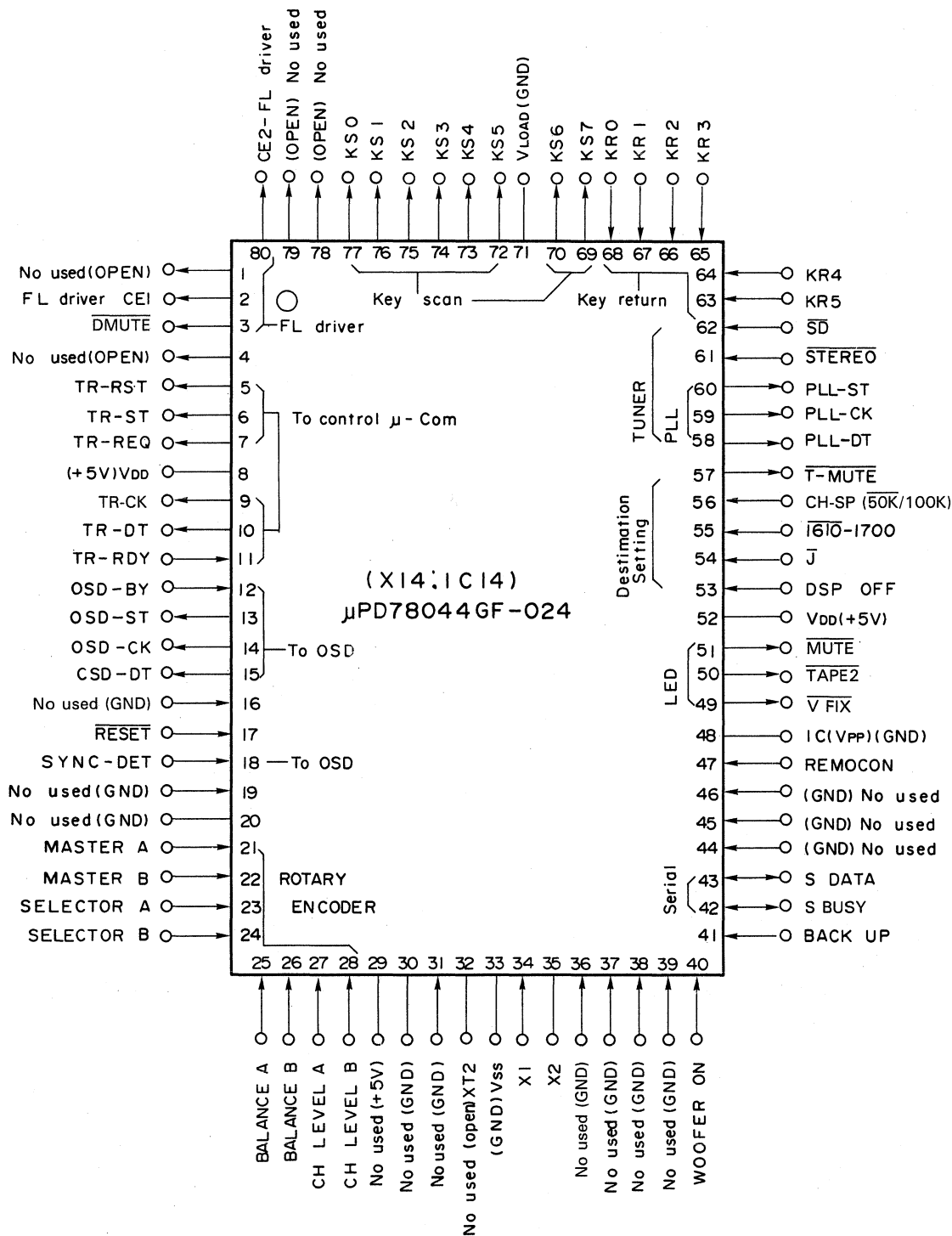
Input key	Function
V. FIX	Each time the key is pressed, the FL test mode alternates. → FLL all lights mode → Grid test mode → Segment test mode
When the following key is pressed, the FL tube display turn off.	
TAPE 2	Each time the key is pressed, the MASTER VOLUME level alternates. → +18 dB → 0 dB → -12 dB → -52 dB → -61 dB
0	Recall preset channel No. 10.
DELAY TIME $\Delta \nabla$	The delay time alternates. THX, PROLOGIC : 15 ms ↔ 30 ms DSP LOGIC : 1 ms ↔ 40 ms ↔ 80 ms
PRESENCE LEVEL $\Delta \nabla$	The presence level alternates. 0 dB ↔ -10 dB ↔ -20 dB
CHANNEL LEVEL $\Delta \nabla$	Each channel level alternates. -12 dB ↔ 0 dB ↔ +12 dB
Other keys	Normal State

(3) Method of cancelling the test mode

While pressing the POEWR key, plug the power cord to the AC wall outlet.

CIRCUIT DESCRIPTION

2-5. Pin connection



KC-X1

CIRCUIT DESCRIPTION

2-6. Pin description

Pin No.	Name	I/O	Description
1	—	O	(OPEN)
2	CE1	O	FL driver output CE1
3	DMUTE	O	DATA MUTE
4	—	O	(OPEN)
5	TR RST	O	Control microprocessor communication RESET
6	TR ST	O	Control microprocessor communication START
7	TR REQ	O	Control microprocessor communication REQ
8	VDD	—	(+5 V)
9	TR CK	O	Control microprocessor communication CLOCK
10	TR DT	O	Control microprocessor communication DATA
11	TR RDY	I	Control microprocessor communication READY
12	OSD BY	I	OSD IC input BUSY
13	OSD ST	O	OSD IC output STROBE
14	OSD CK	O	FL driver IC and OSD IC output CLOCK
15	OSD DT	O	FL driver IC and OSD IC output DATA
16	—	I	(GND)
17	RESET	I	Reset pin
18	SYNC DET	I	OSD video selection input. Internal/External
19	—	I	(GND)
20	—	—	(GND)
21	MASTER A	I	Encoder input MASTER A
22	MASTER B	I	Encoder input MASTER B
23	SELECTOR A	I	Encoder input SELECTOR A
24	SELECTOR B	I	Encoder input SELECTOR B
25	BALANCE A	I	Encoder input BALANCE A
26	BALANCE B	I	Encoder input BALANCE B
27	CH LEVEL A	I	Encoder input CH LEVEL A
28	CH LEVEL B	I	Encoder input CH LEVEL B
29	—	—	A/D analog power supply (+5 V)
30	—	—	A/D constant voltage input (GND)
31	—	I	(GND)
32	—	—	(Open)
33	VSS	—	(GND)
34	X1	I	Oscillator pin
35	X2	—	Oscillator pin
36~39	—	I	(GND)

CIRCUIT DESCRIPTION

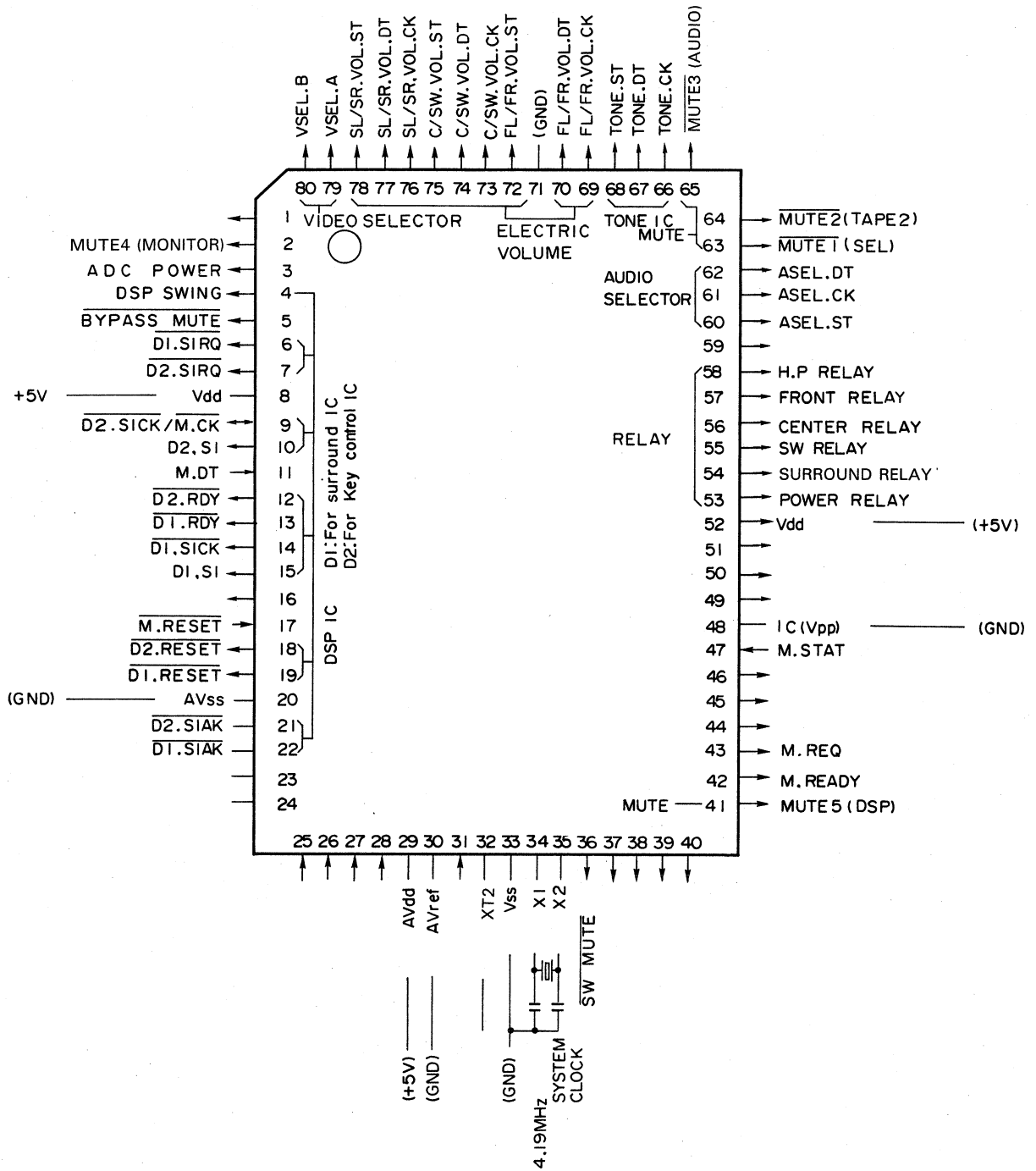
Pin No.	Name	I/O	Description
40	WOOFER ON	I	Sub woofer ON/OFF
41	BACKUP	I	Back up input
42	SBUSY	I/O	Serial BUSY
43	SDATA	I/O	Serial DATA
44~46	—	I	(GND)
47	REMOCON	I	Remote control signal input
48	—	—	(GND)
49	V. FIX	O	V. FIX (LED)
50	TAPE 2	O	TAPE 2 (LED)
51	MUTE	O	MUTE (LED)
52	VDD	—	+5 V
53	DSPOFF	I	DSP ON MODE/DSP OFF MODE
54	J	I	Destination J selection
55	1610/1700	I	AM SHORT/LONG selection
56	CH SP	I	CH. SPACE 50 kHz/100 kHz
57	T MUTE	O	TUNER MUTE
58	PLL DT	O	PLL IC DATA
59	PLL CK	O	PLL IC CLOCK
60	PLL ST	O	PLL IC STROBE
61	STEREO	I	STEREO detection signal input
62	SD	I	SD input
63~68	KR5~0	I	Key return 5~Key return 0
69, 70	KS7, 6	O	Key scan 7, 6
71	VLOAD	—	(GND)
72~77	KS5~0	O	Key scan 5~Key scan 0
78, 79	—	O	(OPEN)
80	CE2	O	FL driver CE2

KC-X1

CIRCUIT DESCRIPTION

3. Control microprocessor: μ PD78043GF-020 (X14: IC18)

3-1. Pin connection



CIRCUIT DESCRIPTION

3-2. Pin description

Pin No.	Name	I/O	Description
1	—	O (I)	No used
2	MUTE 4 (MONITOR)	O	MUTE 4 (Monitor (VIDEO) mute) Low: MUTE OFF, High: MUTE ON
3	ADC POWER	O	Power supply to A/D convertor IC (CS5339-KP) Low: Power OFF, High: Power ON
4	DSP SWING	O	Oscillation to DSP IC (LC83016E) Low: Oscillation, High: No oscillation
5	$\overline{\text{BYPASS MUTE}}$	O	Surround bypass mute Low: BYPASS, High: SURROUND
6	$\overline{\text{D1. SIRQ}}$	O	DSP1 (LC83016E) → SIRQ (Request pin)
7	$\overline{\text{D2. SIRQ}}$	O	DSP2 (LC83016E) → SIRQ (Request pin)
8	Vdd		+5 V
9	$\overline{\text{D2. SICK}}$	I	DSP2 (LC83016E) → SICK (Clock pin)
	M. CK	O	Main μ -com (μ PD78044) → Communication clock pin
10	D2. SI	O	DSP2 (LC83016E) → SI (Data pin)
11	M. DT	I	Main μ -com (μ PD78044) → Communication data pin
12	$\overline{\text{D2. RDY}}$	O	DSP2 (LC83016E) → READY (Ready pin)
13	$\overline{\text{D1. RDY}}$	O	DSP1 (LC83016E) → READY (Ready pin)
14	$\overline{\text{D1. SICK}}$	O	DSP1 (LC83016E) → SICK (Clock pin)
15	D1. SI	O	DSP1 (LC83016E) → SI (Data pin)
16	—	O (I)	No used
17	$\overline{\text{M. RESET}}$	I	Main μ -com (μ PD78044) → Communication reset pin
18	$\overline{\text{D2. RESET}}$	O	DSP2 (LC83016E) → RES (Reset pin)
19	$\overline{\text{D1. RESET}}$	O	DSP1 (LC83016E) → RES (Reset pin)
20	AVss		GND
21	$\overline{\text{D2. SIAK}}$	I	DSP2 (LC83016E) → SIAK (Acknowledge pin)
22	$\overline{\text{D1. SIAK}}$	I	DSP1 (LC83016E) → SIAK (Acknowledge pin)
23~28	—	I	No used
29	AVdd		+5 V
30	AVref		GND
31	—	I	No used
32	XT2		No used
33	Vss		GND
34	X1	I	Oscillator 4.19 MHz
35	X2		Oscillator 4.19 MHz
36~40	—	O	No used
41	MUTE 5 (DSP)	O	MUTE 5 (DSP mute) Low: MUTE OFF, High: MUTE ON
42	M. READY	O	Main μ -com (μ PD78044) → Communication READY pin
43	M. REQ	I	Main μ -com (μ PD78044) → Communication REQUEST pin
44~46	—	O (I)	No used
47	M. START	I	Main μ -com (μ PD78044) → Communication START pin

KC-X1

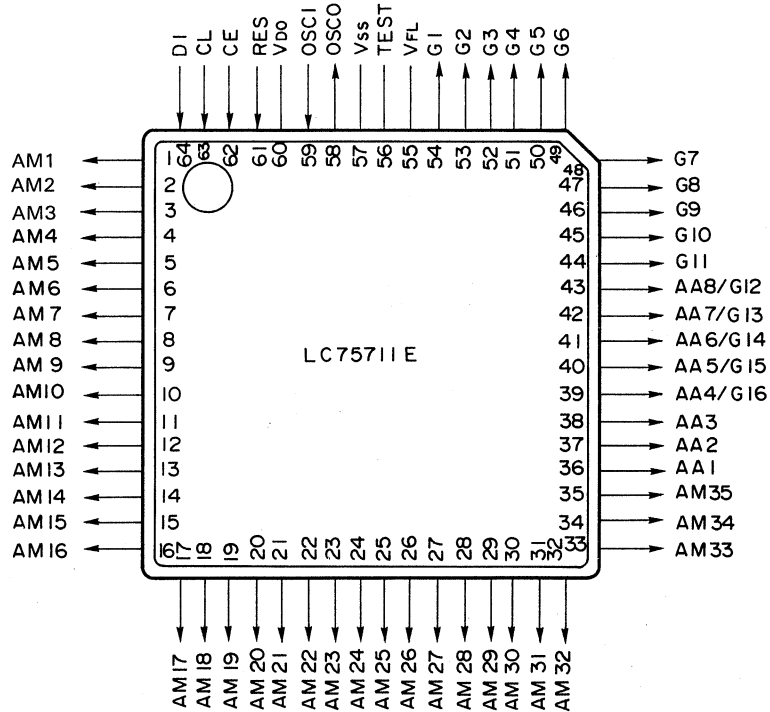
CIRCUIT DESCRIPTION

Pin No.	Name	I/O	Description
48	IC (Vpp)		GND
49~51	—	O (I)	No used
52	Vdd		+5 V
53	POWER RELAY	O	Power relay
54	SURROUND RELAY	O	Surround (Rear L/R ch) speaker relay
55	SW RELAY	O	Sub woofer speaker relay
56	CENTER RELAY	O	Center speaker relay
57	FRONT RELAY	O	Front (L/R ch) speaker relay
58	H.P. RELAY	O	Headphone relay
59	—	O (I)	No used
60	ASEL. ST	O	Audio selector IC (NJU7311L/TC9163N/TC9164N) → ST (Strobe pin)
61	ASEL. CK	O	Audio selector IC (NJU7311L/TC9163N/TC9164N) → CK (Clock pin)
62	ASEL. DT	O	Audio selector IC (NJU7311L/TC9163N/TC9164N) → DATA (Data pin)
63	MUTE 1 (SELECTOR)	O	MUTE 1 (Selector selection mute) Low: MUTE ON, High: MUTE OFF
64	MUTE 2 (TAPE 2)	O	MUTE 2 (TAPE 2 selection mute) Low: MUTE ON, High: MUTE OFF
65	MUTE 3 (AUDIO)	O	MUTE 3 (Output mute) Low: MUTE ON, High, MUTE OFF
66	TONE. CK	O	Electric tone IC (TC9184P) → CK (Clock pin)
67	TONE. DT	O	Electric tone IC (TC9184P) → DATA (Data pin)
68	TONE. ST	O	Electric tone IC (TC9184P) → STB (Strobe pin)
69	FL/FR VOL. CK	O	FL/FR ch Electric volume IC (TC9213P) → CK (Clock pin)
70	FL/FR VOL. DT	O	FL/FR ch Electric volume IC (TC9213P) → DATA (Data pin)
71	Vload		GND
72	FL/FR VOL. ST	O	FL/FR ch Electric volume IC (TC9213P) → STB (Strobe pin)
73	C/SW VOL. CK	O	CENTER/SUBWOOFER ch Electric volume IC (TC9213P) → CK
74	C/SW VOL. DT	O	CENTER/SUBWOOFER ch Electric volume IC (TC9213P) → DATA
75	C/SW VOL. ST	O	CENTER/SUBWOOFER ch Electric volume IC (TC9213P) → STB
76	SL/SR VOL. CK	O	LS/RS ch Electric volume IC (TC9213P) → CK (Clock pin)
77	SL/SR VOL. DT	O	LS/RS ch Electric volume IC (TC9213P) → DATA (Data pin)
78	SL/SR VOL. ST	O	LS/RS ch Electric volume IC (TC9213P) → STB (Strobe pin)
79	VSEL. A	O	Video selector IC (MC74HC4052N/MC74HC4053N) → A
80	VSEL. B	O	Video selector IC (MC74HC4052N/MC74HC4053N) → B

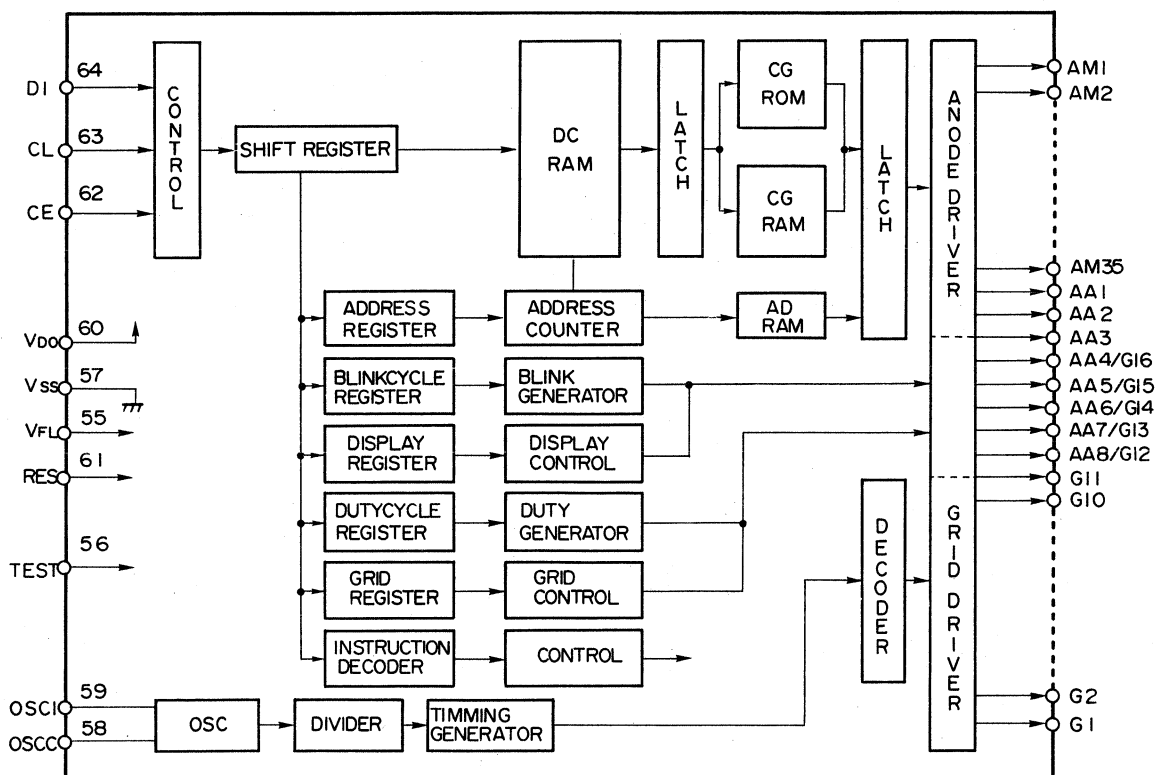
CIRCUIT DESCRIPTION

4. Display control driver: LC75711E (X14: IC15, 16)

4-1. Pin connection



4-2. Block diagram



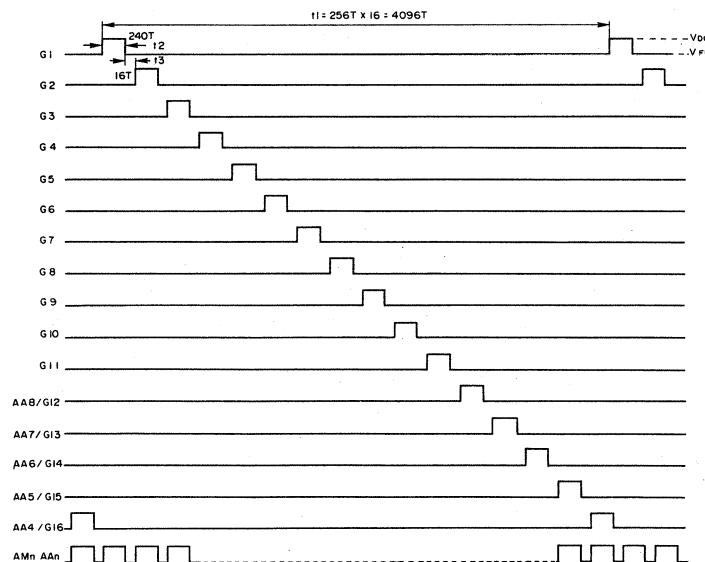
KC-X1

CIRCUIT DESCRIPTION

4-3. Pin function

Pin No.	Pin name	Circuit design	Function
1 ~ 35 36 ~ 38	AM1 ~ AM35 AA1 ~ AA3		Anode output terminals With built-in pull-down resistors.
39 ~ 43	AA4/G16 AA5/G15 AA6/G14 AA7/G13 AA8/G12		Anode/grid output terminals These terminals become the grid output terminals when the number of display columns selected with the "display column specification" instruction is between 12 and 16 columns. With built-in pull-down resistors.
44 ~ 54	G1 ~ G11		Grid output terminals With built-in pull-down resistors.
55	VFL		Driver circuitry power terminal
56	TEST		LSI test terminal Always connect to Vss for use.
57	Vss		Logic circuitry power terminal, GND
58, 59	OSC1 OSC0		External C and R connection terminals for oscillator
60	VDD		Logic circuitry power terminal, +5 V typ
61	$\overline{\text{RES}}$		System reset input terminal
62 ~ 64	DI CL CE		Serial data transfer terminals DI : Transfer data CL : Sync clock CE : Chip enable

4-4. Grid timing chart



t1 : Frame cycle
t2 : Display timing
t3 : Blanking time

$T = \frac{3}{f_{osc}}$
(fosc: Generating frequency)

CIRCUIT DESCRIPTION

5. Control of selector IC and speaker relay

5-1. Audio selector

Selector IC name	(X08: IC35) NJU7311L							(X13: IC2) TC9164N①	
	2	3	5	6	8	9	11	10	11
Pin No.	27	26	24	23	20	21	18	19	18
Selector pin name	THX	THX	THX	THX	THX	THX	SURROUND	TONE	TONE
Surround mode	ON	OFF	ON	OFF	ON	OFF	UND	OFF	ON
BYPASS		○		○		○		▲	△
PROLOGIC		○		○		○		○	
3 STEREO		○		○		○		○	
THX CINEMA	○		○		○			○	
DSP LOGIC		○		○		○		○	
MONO		○		○		○		○	

Selector IC name	(X13: IC1) TC9163N								
	Lch	27	26	25	23	22	21	19	18
Pin No.	Rch	2	3	4	6	7	8	10	11
Selector pin name		TUNER	PHONO	CINEMA	TAPES	VIDEO 1	VIDEO 2	VIDEO 3	VIDEO 4
Selector position		R	O	D	1	1	2	3	4
TUNER		○			○				
TAPE 1									
VIDEO 1						○			
VIDEO 2							○		
VIDEO 3								○	
VIDEO 4									○
CD				○					
PHONO			○						

Selector IC name	(X13: IC2) TC9164N ②						
	Lch	2	3	4	5	7	8
Pin No.	Rch	27	26	25	24	22	21
Selector pin name		VIDEO 3	VIDEO 2	VIDEO 1	TAPES	SURROUND	TAPES
Selector position		3	2	1	1	1	2
TUNER		○	○	○	○	◆	◇
TAPE 1		○	○	○	○	◆	◇
VIDEO 1		○	○		○	◆	◇
VIDEO 2		○		○	○	◆	◇
VIDEO 3			○	○	○	◆	◇
VIDEO 4		○	○	○	○	◆	◇
CD		○	○	○	○	◆	◇
PHONO		○	○	○	○	◆	◇

○: ON ◇: With TAPE 2 ON △: With TONE CONTROL ON
 Blank; OFF ◆: With TAPE 2 OFF ▲: With TONE CONTROL OFF

5-2. Video selector

Selector IC name	(X14: IC1, IC2) MC74HC4052N			(X14: IC8, IC9) MC74HC4053N				
	Control pin	INHIBIT (6pin)	B (9pin)	A (10pin)	INHIBIT (6pin)	C (9pin)	B (10pin)	A (11pin)
VIDEO 1		L	L	L	L	L	L	L
VIDEO 2		L	L	H	L	H	H	H
VIDEO 3		L	H	L	X			
VIDEO 4		L	H	H				

H: High L: Low

5-3. Line out relay

Line out relay	Surround mode	THX		PROLOGIC		3 STEREO		DSPLOGIC	MONO		
		N	W	P	N	W	P	N	W	Normally	PP
Front (L/Rch) relay (X13: K1)		○	○	○	○	○	○	○	○	×	○
Center (Cch) relay (X13: K2)		○	○	×	○	○	×	○	○	○	×
Rear (LS/RSch) relay (X13: K4)		○	○	○	○	○	○	×	×	○	×
Headphone relay (X13: K5)		○	○	○	○	○	○	○	○	○	○

○: ON ×: OFF

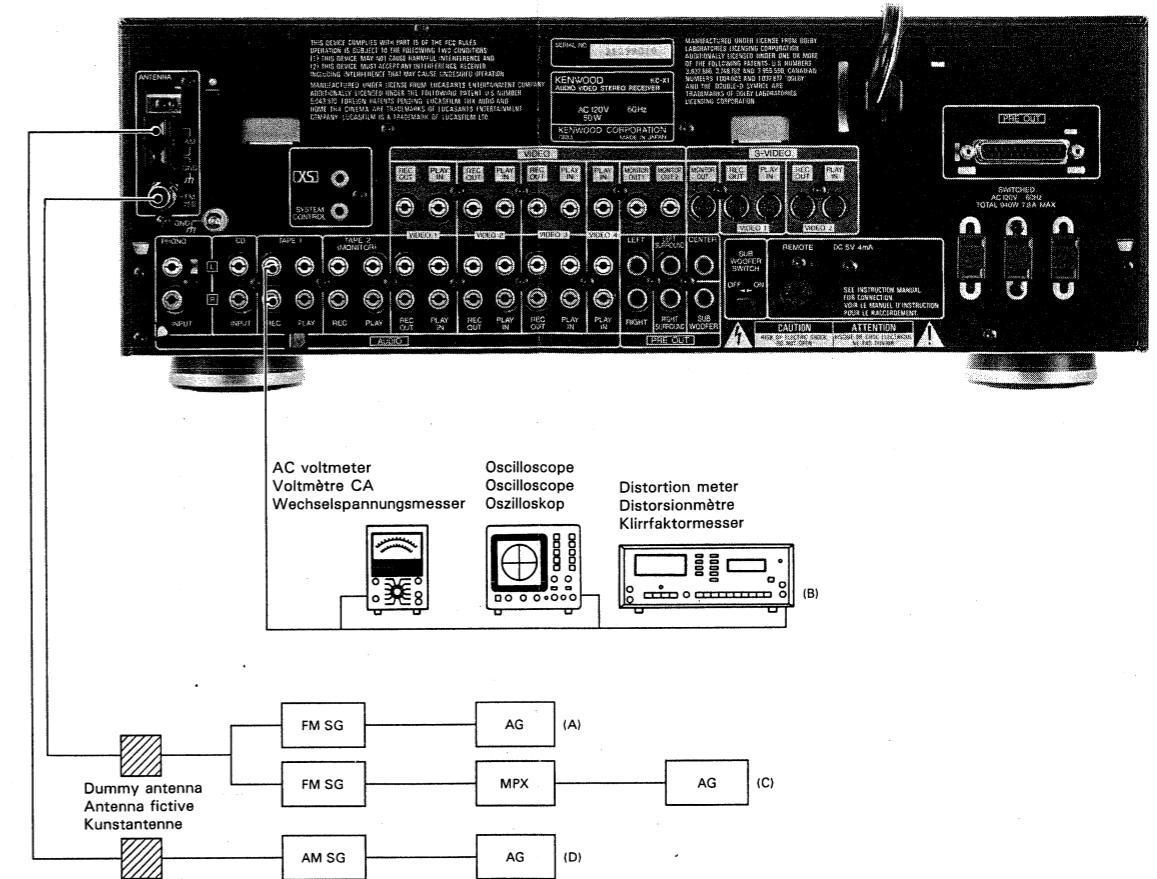
N ; "NORMAL" mode
 W ; "WIDEBAND" mode
 P ; "PHANTOM" mode
 PP ; "PHANTOM" mode (THX and PROLOGIC mode ON).

ADJUSTMENT

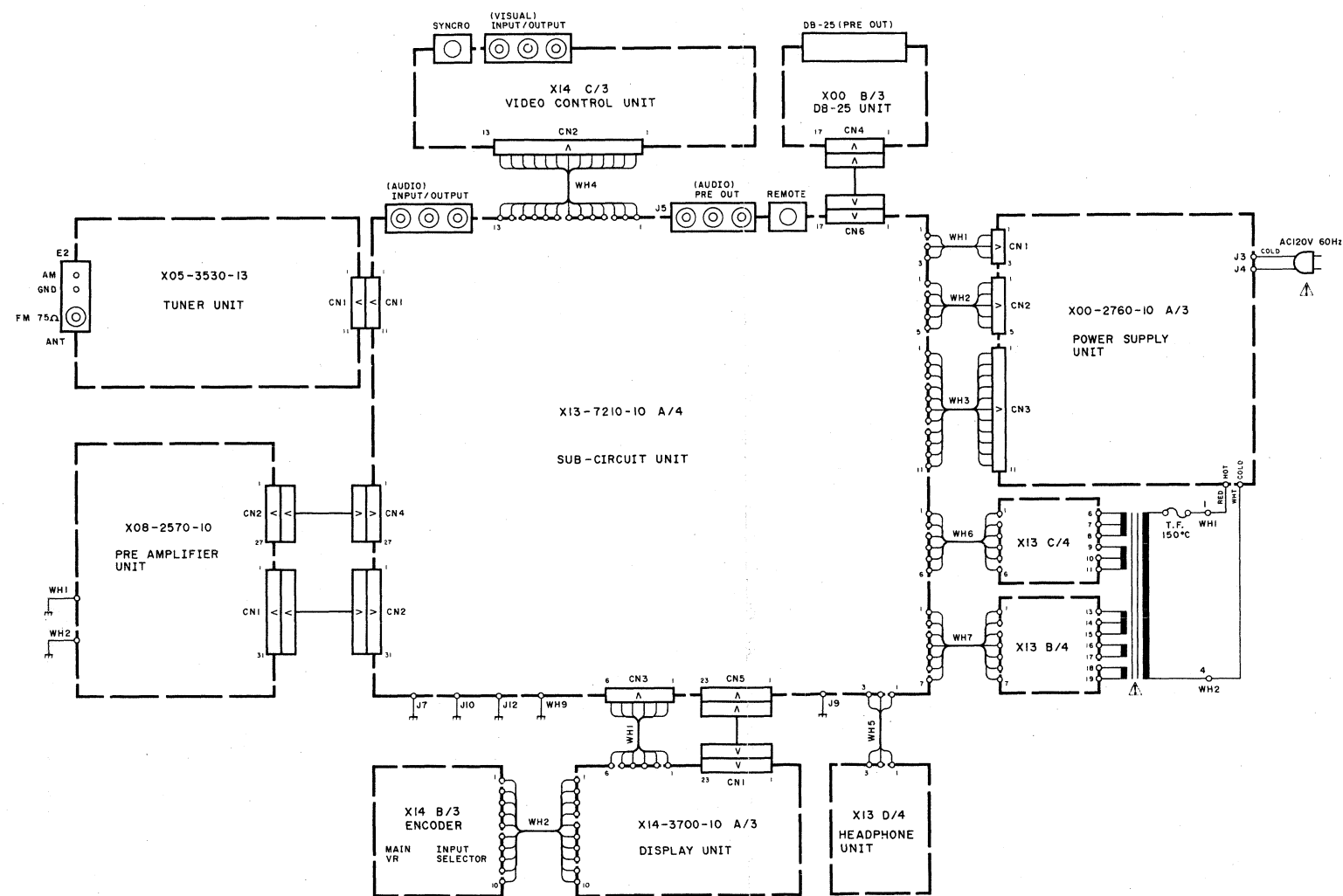
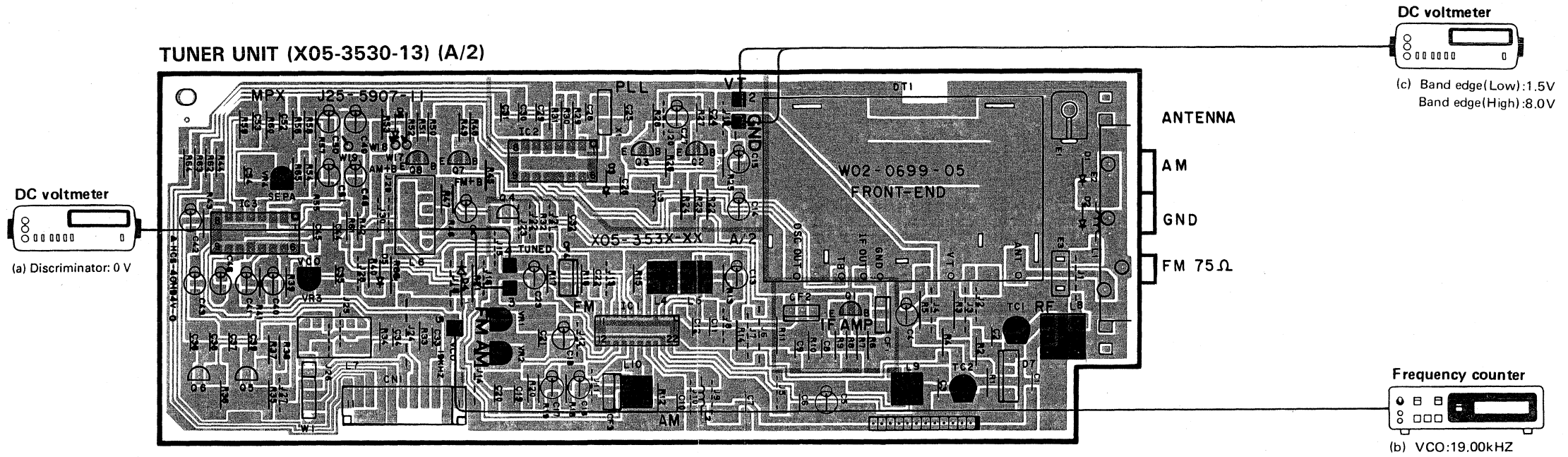
No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
FM SECTION (X05-) SELECTOR: FM							
1	DISCRIMINATOR	(A) 98.0MHz 1kHz, ±175kHz dev 60dBμ(Ant input)	Connect a DC voltmeter between TP3 and TP4. (X05-)	AUTO or MONO 98.0MHz	L4 (X05-)	0V	(a)
2	DISTORTION (MONO)	(C) 98.0MHz 1kHz, ±68.25kHz dev Selector: L or R Pilot: ±6.75kHz dev 60dBμ(Ant input)	(B)	98.0MHz	L5 (X05-)	Minimum distortion	
3	VCO	(A) 98.0MHz 0 dev 100dBμ(Ant input)	Connect a frequency counter between TP5 and GND. (X05-)	AUTO 98.0MHz	VR3 (X05-)	19.00kHz	(b)
4	DISTORTION (STEREO)	(C) 98.0MHz 1kHz, ±68.25kHz dev Selector: L or R Pilot: ±6.75kHz dev 60dBμ(Ant input)	(B)	98.0MHz	T1 (W02-)	Minimum distortion. (L or R)	
5	SEPARATION	(C) 98.0MHz Stereo signal 60dBμ(Ant input)	(B)	AUTO 98.0MHz	VR4 (X05-)	Minimum crosstalk	
6	TUNING LEVEL	(A) 98.0MHz 0dev 14dBμ(Ant input) 750	(B)	AUTO or MONO 98.0MHz	VR1 (X05-)	Adjust VR1 and stop at the point where ED1(TUNED) goes on.	
AM SECTION (X05-) SELECTOR: AM							
(1)	BAND EDGE (Low)	-	Connect a DC voltmeter between TP1(GND) and TP2. (X05-)	-	L9 (X05-)	1.5V	(c)
(2)	BAND EDGE (High)	-	Connect a DC voltmeter between TP1(GND) and TP2. (X05-)	-	TC2 (X05-)	8.0V	(c)
Repeat alignments (1) and (2) several times.							
(3)	RF ALIGNMENT (1)	(D) 600kHz 20dBμ(Ant input)	(B)	-	L8 (X05-)	Maximum amplitude and symmetry of the oscilloscope display.	
(4)	RF ALIGNMENT (2)	(D) 1400kHz 20dBμ(Ant input)	(B)	-	TC1 (X05-)	Maximum amplitude and symmetry of the oscilloscope display.	
Repeat alignments (3) and (4) several times.							
(5)	IF TRANSFORMER	(D) 1000kHz 20dBμ(Ant input)	(B)	-	L10 (X05-)	Maximum amplitude and symmetry of the oscilloscope display.	
(6)	TUNING LEVEL	(D) 1000kHz 36dBμ(Ant input)	(B)	-	VR2 (X05-)	Adjust VR2 and stop at the point where ED1(TUNED) goes on.	

ADJUSTMENT

System connections

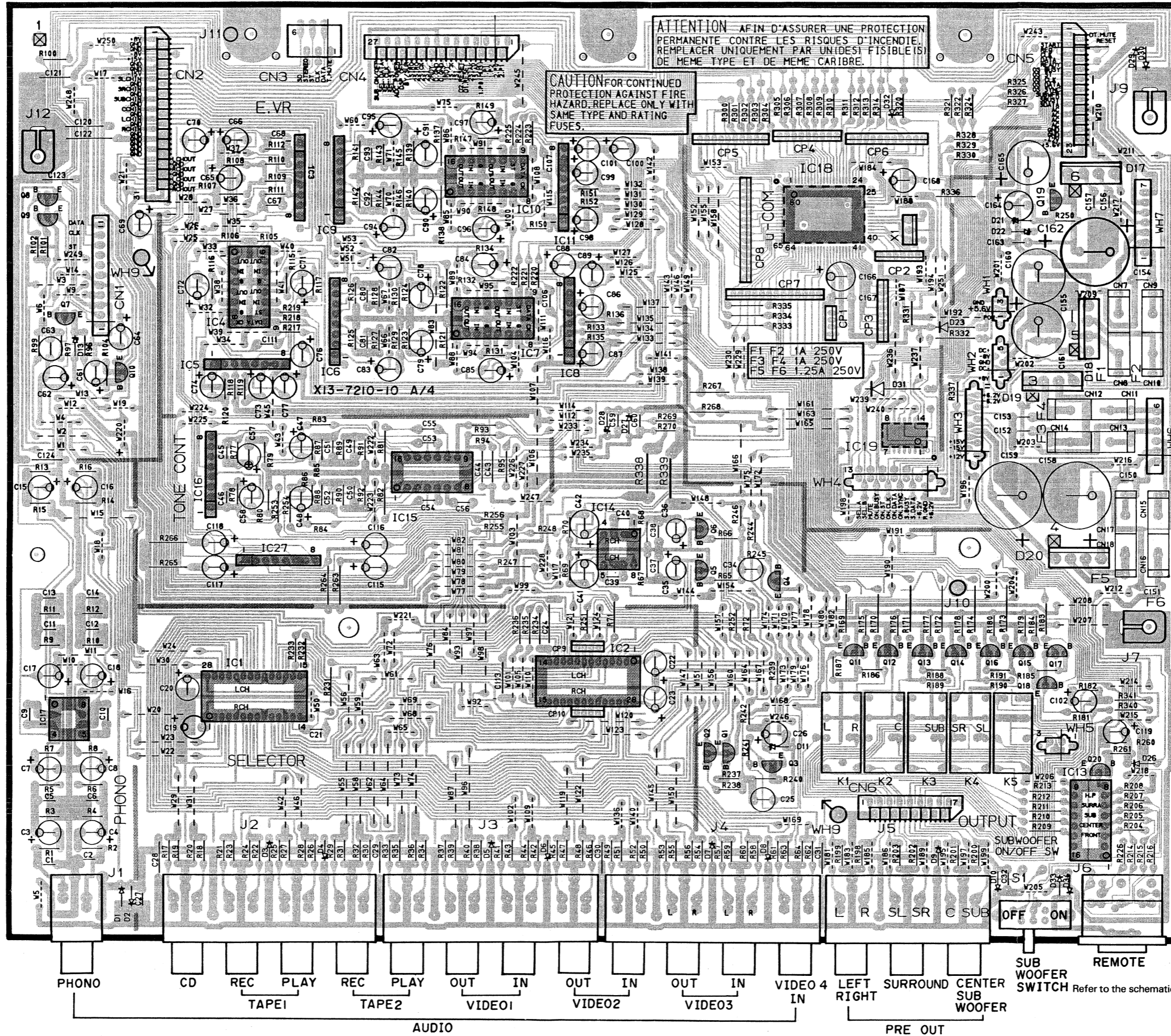


P.C. BOARD (Component side view)



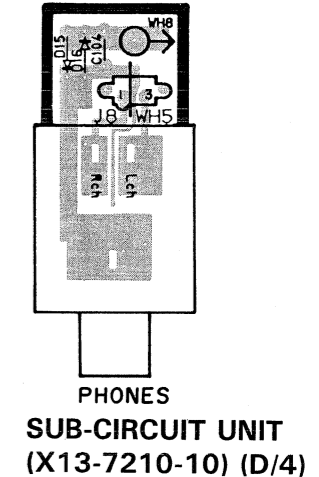
Refer to the schematic diagram for the values of resistors and capacitors.

P.C. BOARD (Component side view)
SUB-CIRCUIT UNIT (X13-7210-10) (A/4)



ATTENTION AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE, REMPLACER UNIQUEMENT PAR UN DESI FISIBLE(S) DE MEME TYPE ET DE MEME CARIBRE.

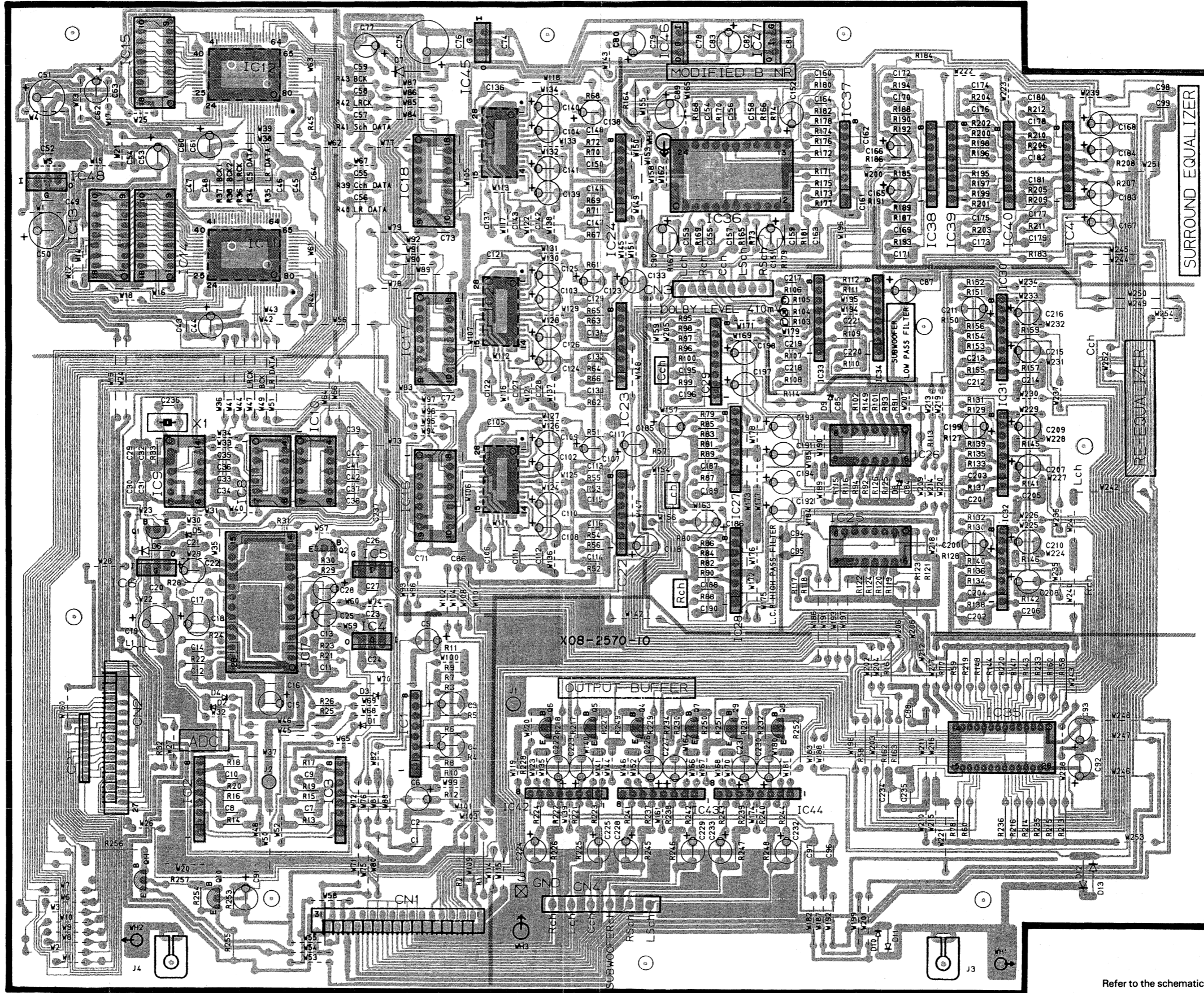
CAUTION FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE AND RATING FUSES.



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

P.C. BOARD (Component side view)

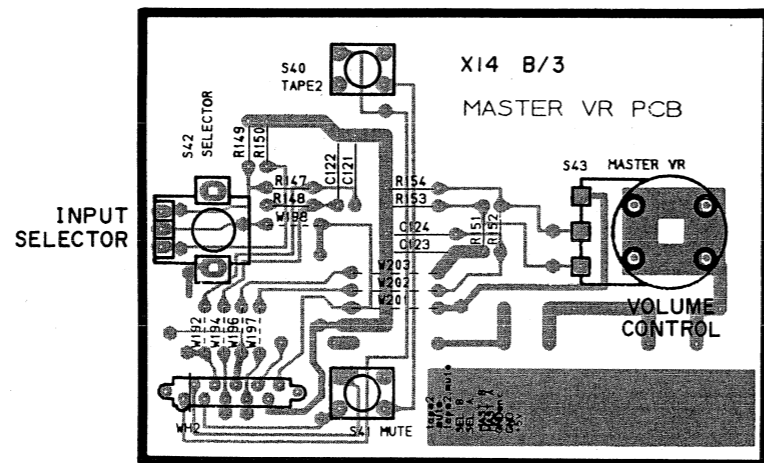
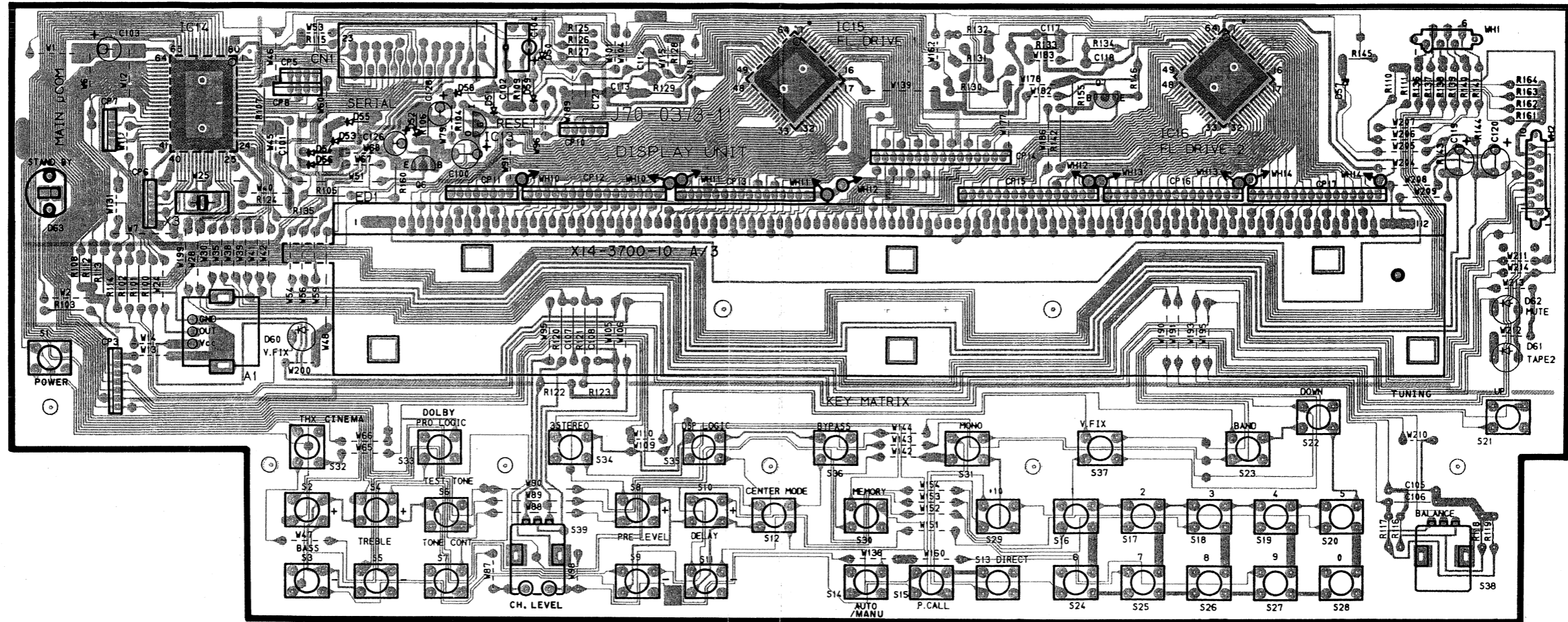
PREAMPLIFIER UNIT (X08-2570-10)



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

P.C. BOARD (Component side view)

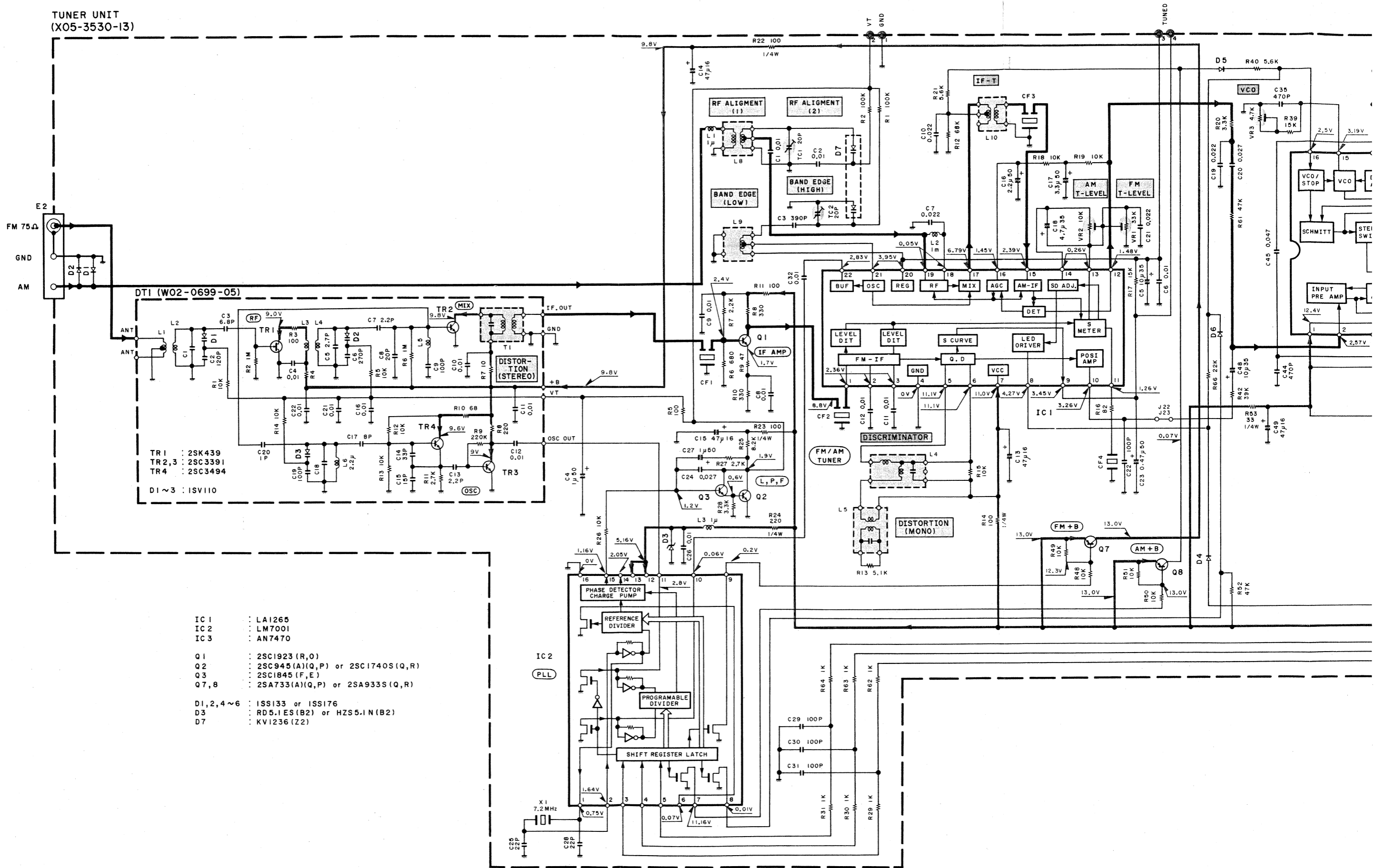
DISPLAY UNIT (X14-3700-10) (A/3)

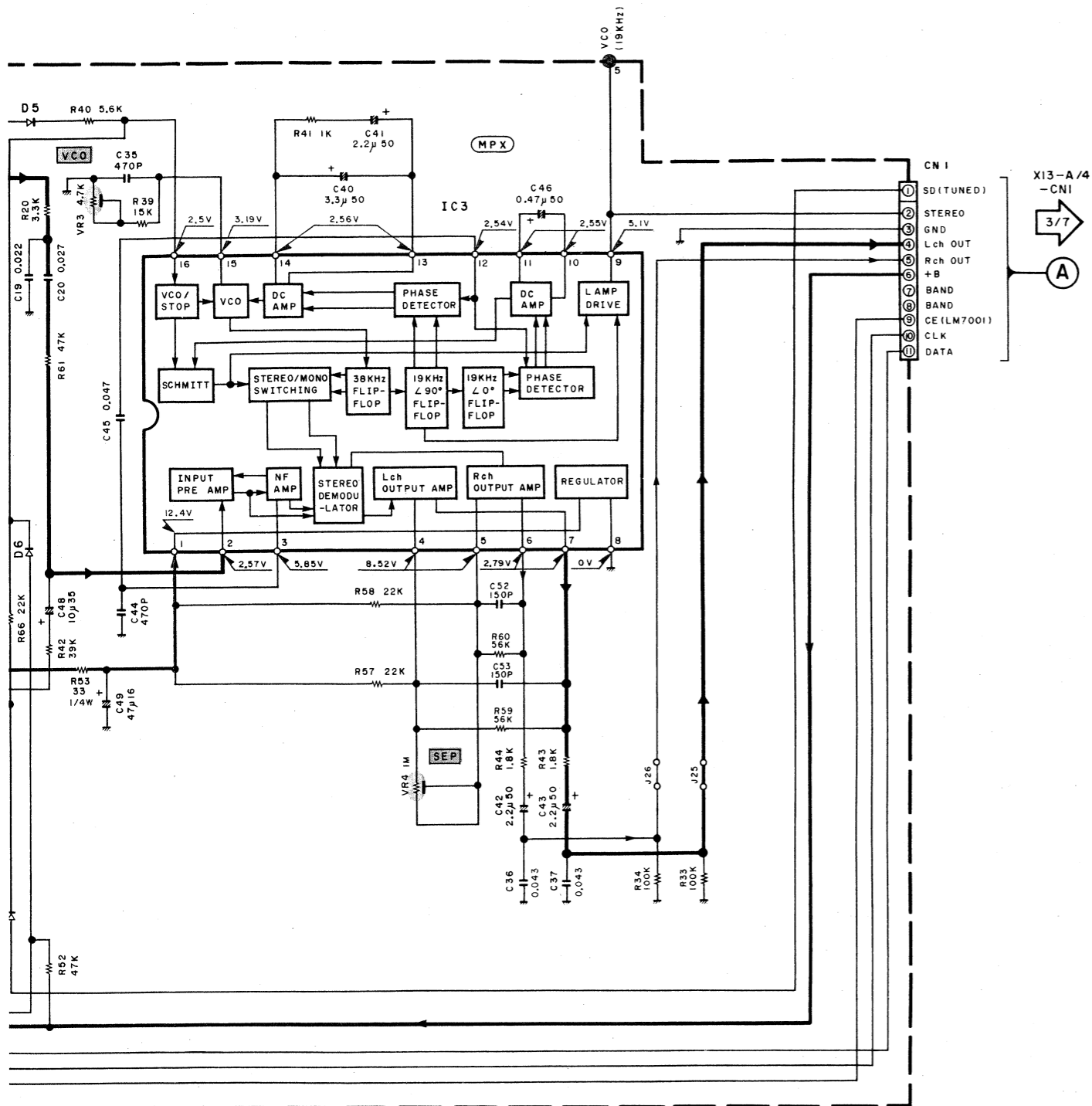


DISPLAY UNIT (X14-3700-10) (B/3)

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

TUNER UNIT
(X05-3530-13)





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

KC-X1 (K) (1/7)

X13-A/4
 - CNI
 3/7
 A

- | | | | | | |
|------------|------------|------------|--------------|--------------|------------|
| 2SA733 (A) | 2SC1845 | 2SC1923 | 2SC2003 | 2SC2878 | 2SC945 (A) |
| 2SB772 | 2SA1048 | 2SA933S | 2SC1740S | 2SC2458 | 2SD2061 |
| 2SA1309A | 2SC3311A | MC74HCU04N | MC74HC74AN | TC74HCU04AP | TC74HC74AP |
| MM1067XD | XRU4053B | LM7001 | MC74HC4052N | MC74HC4053N | TC9184P |
| AN7470 | BA12003 | TC4053BP | TC74HC4052AP | TC74HC4053AP | TC9213P |
| M5238L | NJM4580D-D | NJU7311L | NJU7312L | NJU7313L | MC14577BP |
| TA7805S | TA7808S | XRA17805T | XRA17808T | UPC7905HF | UPC7908HF |
| TA79005S | TA79008S | NJM4556L | PST529D | SM5840HP | MC74HC08AF |
| TC9163N | TC9164N | NE657N | LA1265 | LC83016E | PCM1700U |
| LC75711E | | | | | |

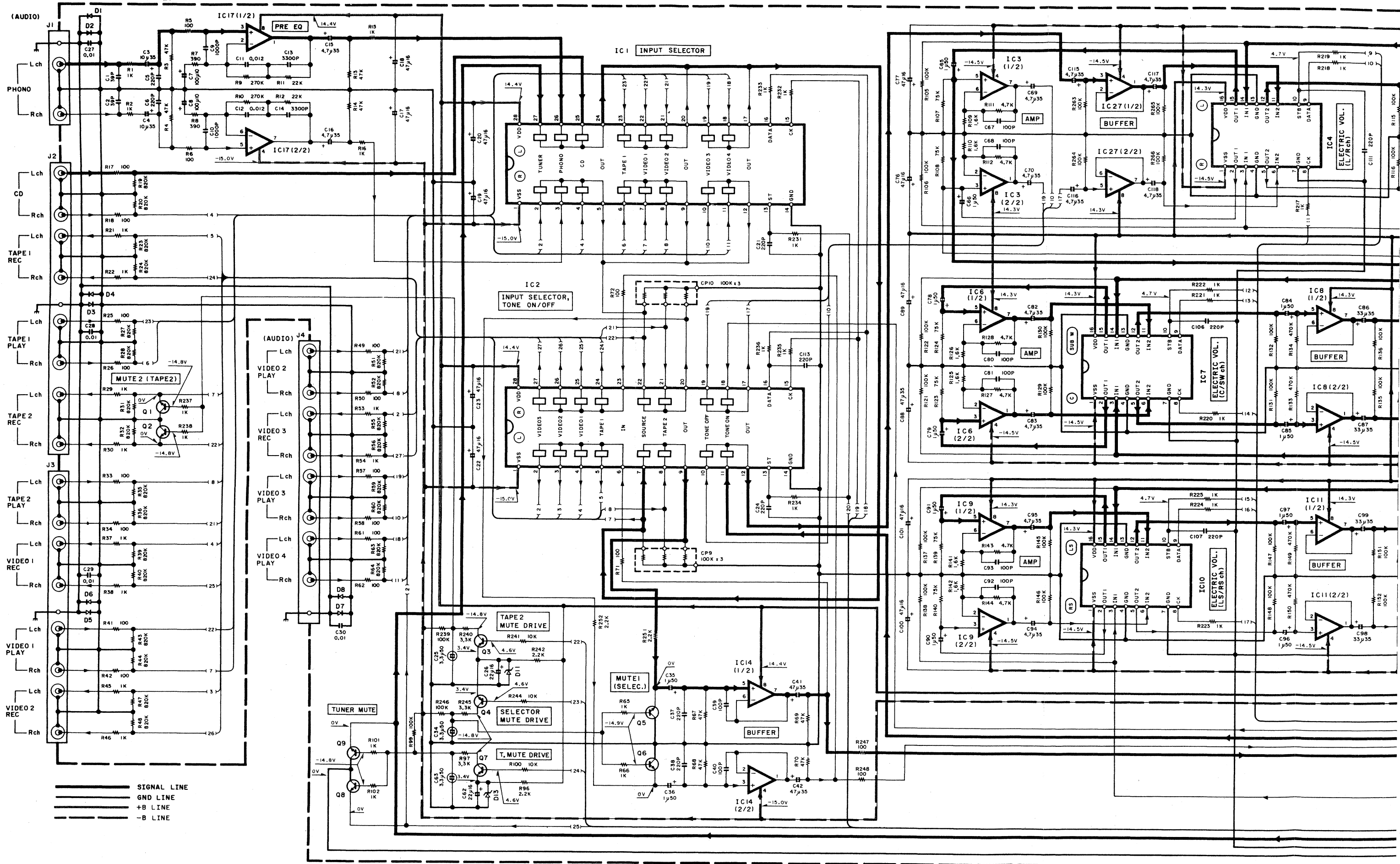
DC voltages are as measured with a high-impedance voltmeter during reception of the FM broadcast signal (with a signal strength of 60 dB at the ANT terminal). Values may vary slightly due to variations between individual instruments or/and units. Values in parentheses are as measured during reception of the AM broadcast signal (with a signal strength of 60 dB at the ANT terminal).

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.

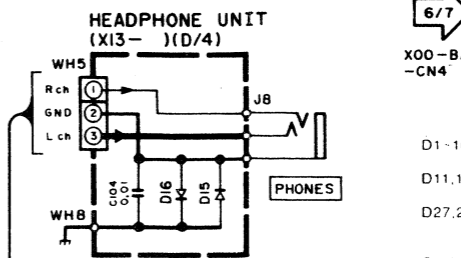
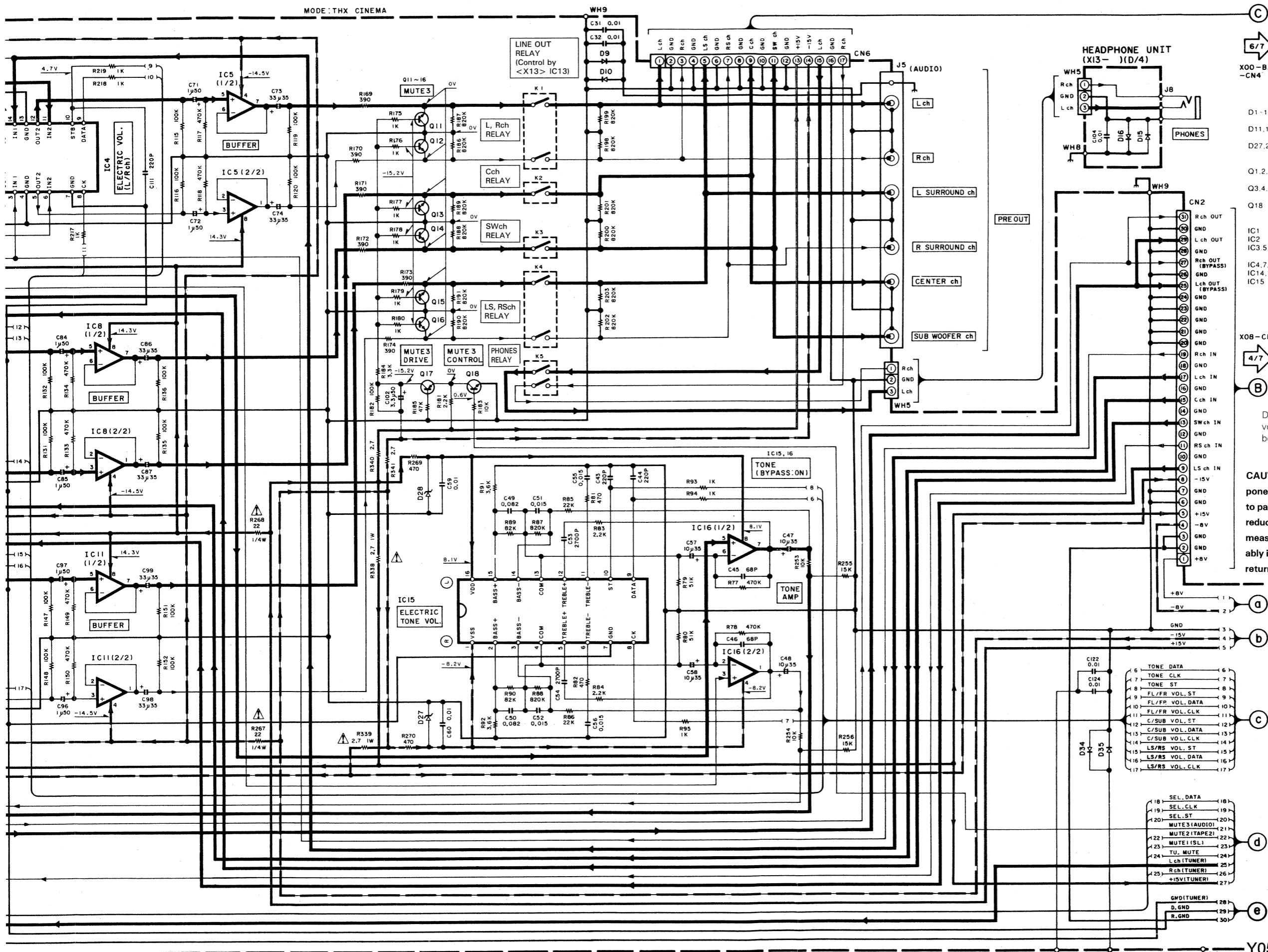
Y05-2740-10

KC-X1
KENWOOD

SUB-CIRCUIT UNIT
(X13-7210-10)(A/4)(1/2)



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



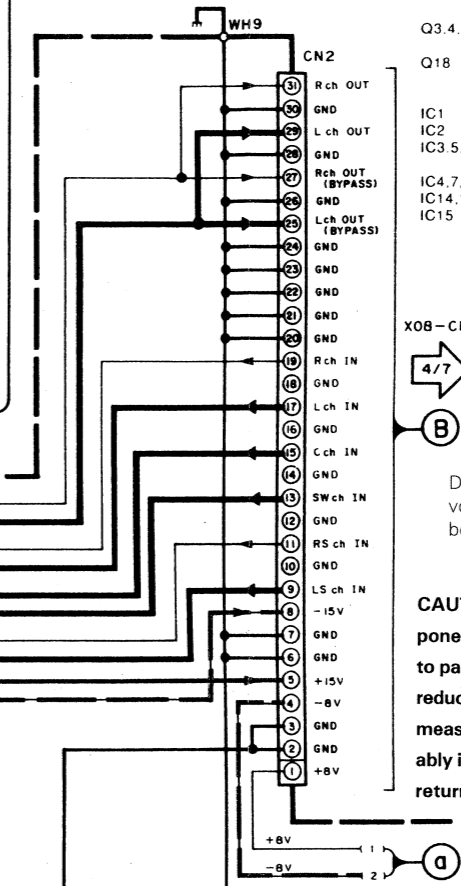
6/7
X00-B/3
-CN4

- D1-10 15, 16 33, 34
1SS133 or HSS104
- D11, 13 RD33ES(B2)
- or HZS3 3N(B2)
- D27, 28 RD8.2ES(B2)
- or HZS8 2N(B2)
- Q1, 2, 5, 6, 8, 9, 11-16
2SC2878(B)
- Q3, 4, 7, 17 2SA1309A(O.R)
- or 2SA1048(Y.G.R)
- Q18 2SC2458(Y.G.R)
- or 2SC3311A(O.R)
- IC1 NJU7312L or TC9163N
- IC2 NJU7313L or TC9164N
- IC3 5, 6, 8, 9, 11, 16, 27
NJM4580L-D
- IC4, 7, 10 TC9213P
- IC14, 17 NJM4580D-D
- IC15 TC9184P

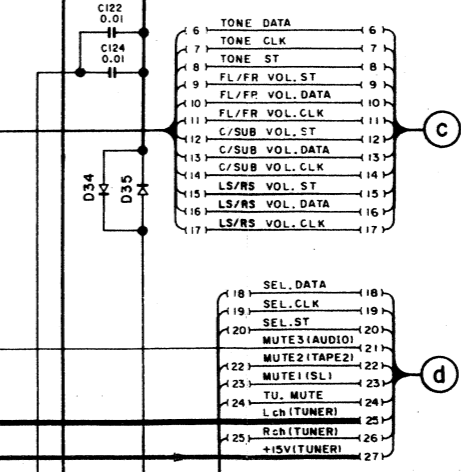
X08-CN1
4/7
B

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

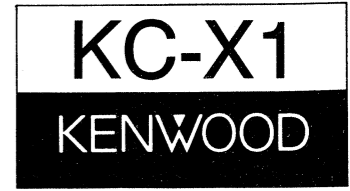
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably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



X13-A/4-2/2
3/7
C

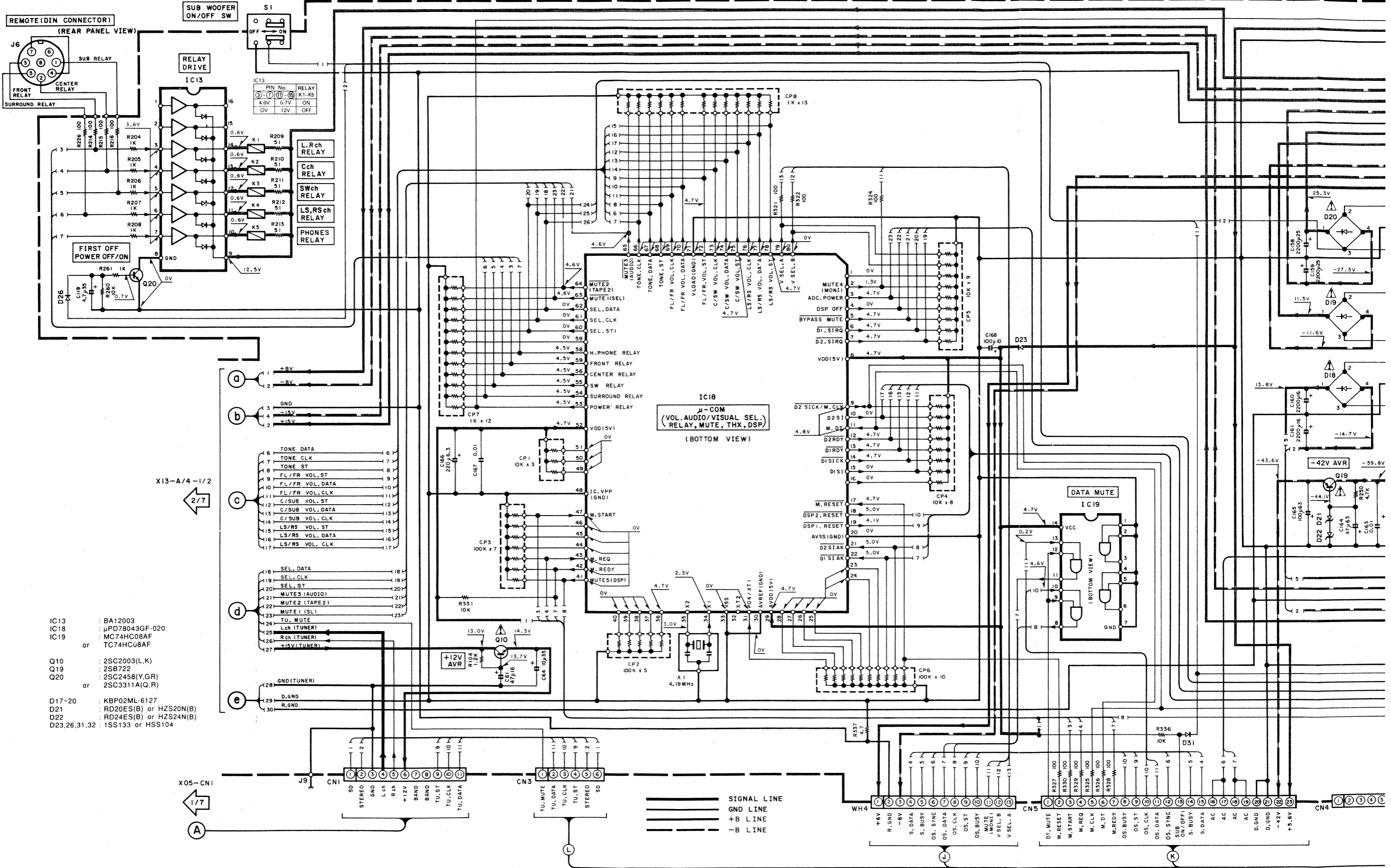


KC-X1 (K) (2/7)



Y05-2740-10

SUB-CIRCUIT UNIT
(X13-7210-10)(A/4)(2/2)

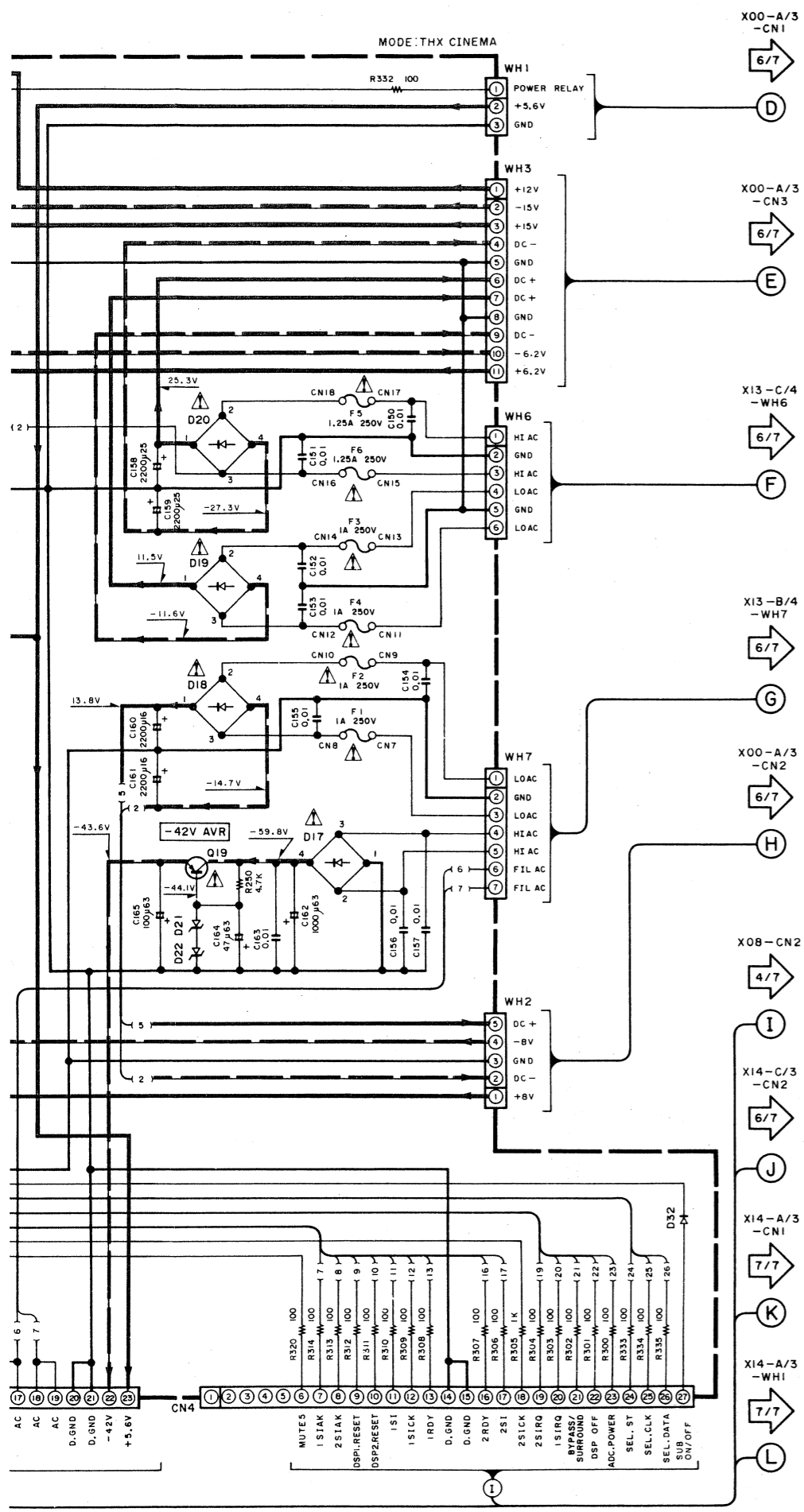


PIN No.	RELAY
①	K1-K5
②	ON
③	4.0V
④	6.7V
⑤	ON
⑥	12V
⑦	OFF

- IC13 : BA12003
- IC18 : μPD78043GF-020
- IC19 : MC74HC08AF or TC74HC08AF
- Q10 : 2SC2003(L,K)
- Q19 : 2SB722
- Q20 : 2SC2458(Y,GR) or 2SC3311A(Q,R)
- D17-20 : KBP02ML-6127
- D21 : RD20ES(B) or HZS20N(B)
- D22 : RD24ES(B) or HZS24N(B)
- D23,26,31,32 : 1SS133 or HSS104

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

1
2
3
4
5
6
7



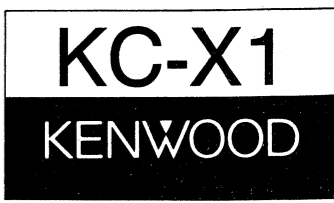
KC - X1(K)(3/7)

- 2SA733 (A)
- 2SC1845
- 2SC1923
- 2SC2003
- 2SC2878
- 2SC945 (A)
- 2SB772
- 2SA1048
- 2SA933S
- 2SC1740S
- 2SC2458
- 2SD2061
- 2SA1309A
- 2SC3311A
- MC74HCU04N
- MC74HC74AN
- TC74HCU04AP
- TC74HC74AP
- MM1067XD
- XRU4053B
- LM7001
- MC74HC4052N
- MC74HC4053N
- TC9184P
- AN7470
- BA12003
- TC4053BP
- TC74HC4052AP
- TC74HC4053AP
- TC9213P
- M5238L
- NJM4580D-D
- NJU7311L
- NJU7312L
- NJU7313L
- MC14577BP
- PST529D
- SM5840HP
- MC74HC08AF
- TC74HC08AF
- TC9163N
- TC9164N
- NE657N
- LA1265
- LC83016E
- PCM1700U
- LC75711E
- TA7805S
- TA7808S
- XRA17805T
- XRA17808T
- UPC7905HF
- UPC7908HF
- TA79005S
- TA79008S
- NJM4556L

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

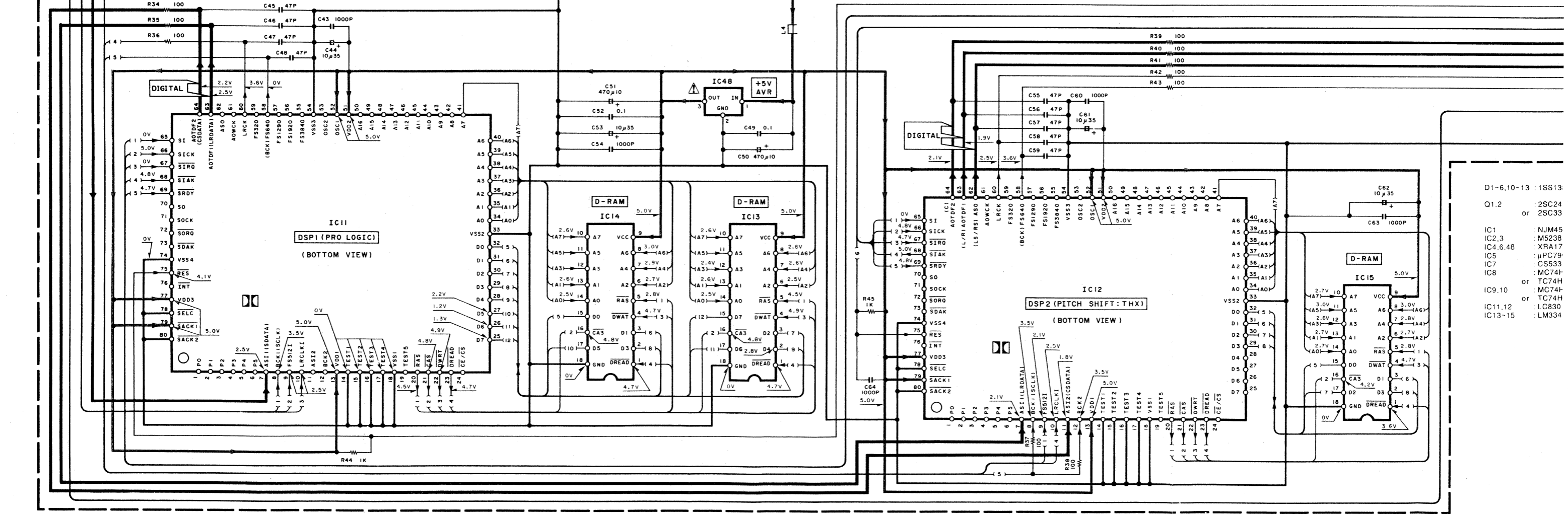
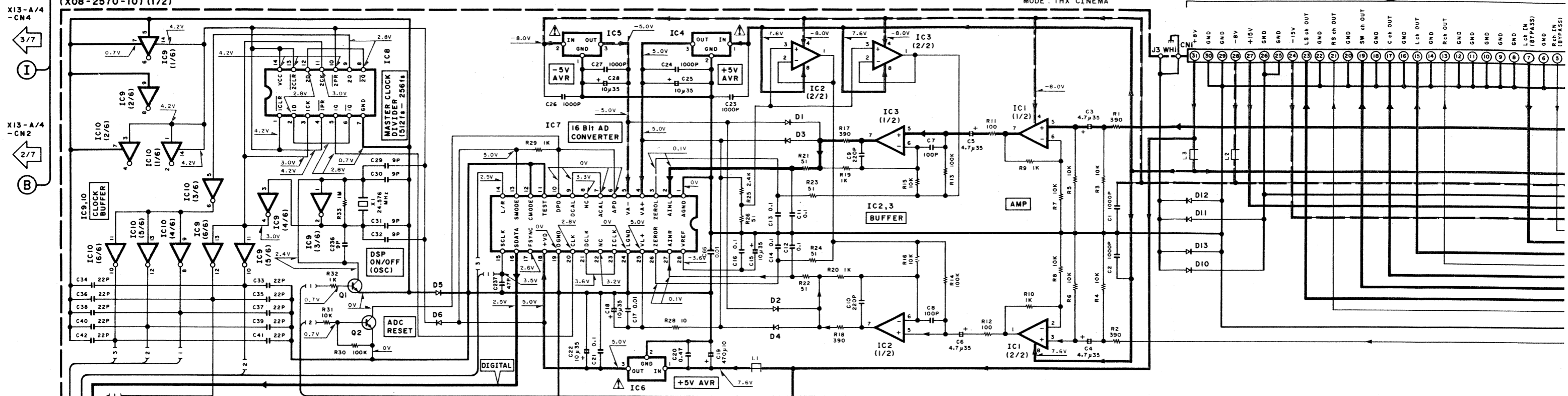
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably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

Y05-2740-10

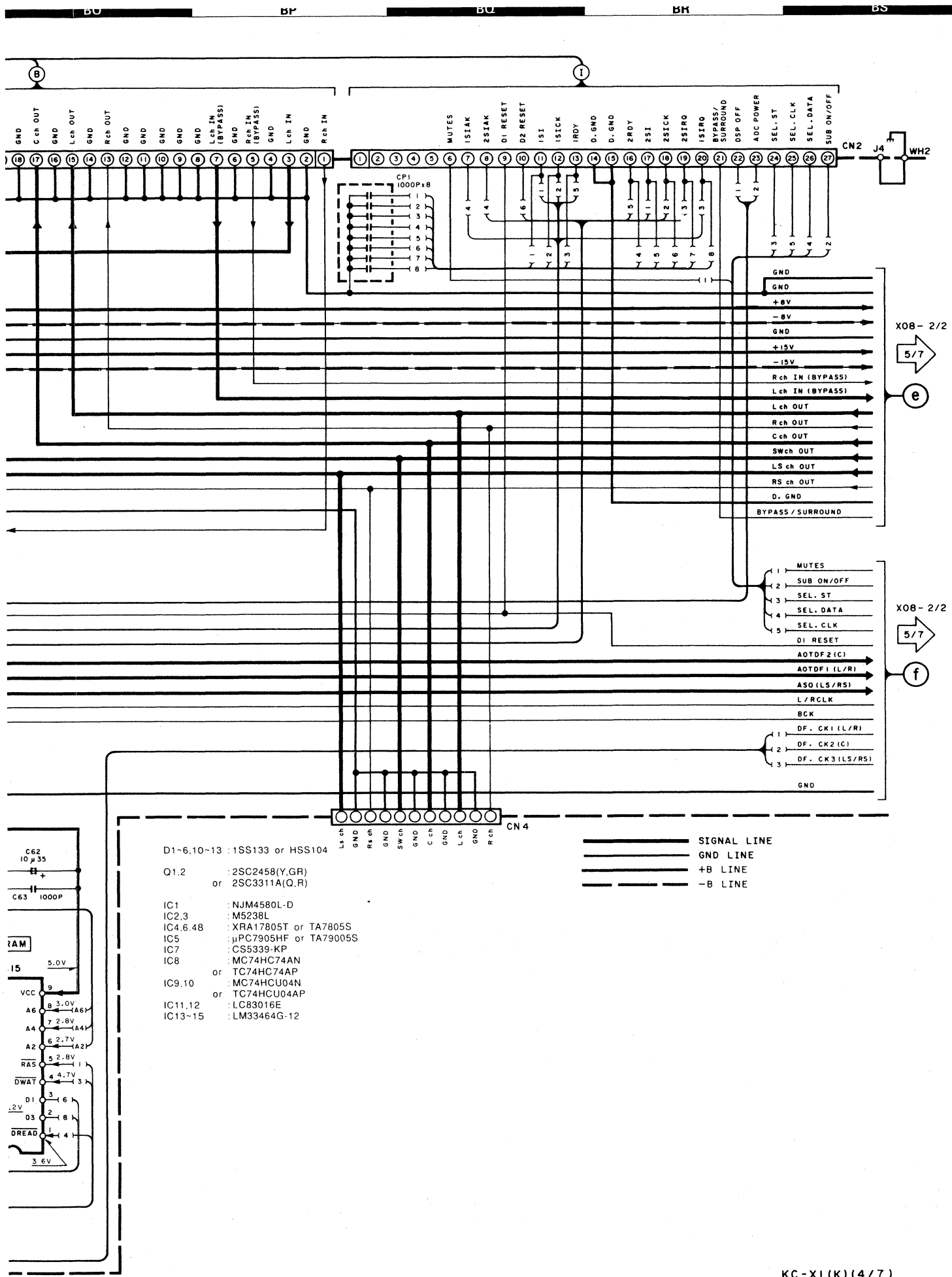


**PREAMPLIFIER UNIT
(X08-2570-10) (1/2)**

MODE: THX CINEMA



- D1-6,10-13 : 1SS13
- Q1.2 : 2SC24 or 2SC33
- IC1 : NJM45
- IC2,3 : M5238
- IC4,6,48 : XRA17
- IC5 : μPC79
- IC7 : CS533
- IC8 : MC74H or TC74H
- IC9,10 : MC74H or TC74H
- IC11,12 : LC830
- IC13-15 : LM334



KC-X1(K)(4/7)

- 2SA733 (A)
- 2SC1845
- 2SC1923
- 2SC2003
- 2SC2878
- 2SC945 (A)
- 2SB772
- 2SA1048
- 2SA933S
- 2SC1740S
- 2SC2458
- 2SD2061
- 2SA1309A
- 2SC3311A
- MC74HCU04N
- MC74HC74AN
- TC74HCU04AP
- TC74HC74AP
- MM1067XD
- XRU4053B
- LM7001
- MC74HC4052N
- MC74HC4053N
- TC9184P
- AN7470
- BA12003
- TC4053BP
- TC74HC4052AP
- TC74HC4053AP
- TC9213P

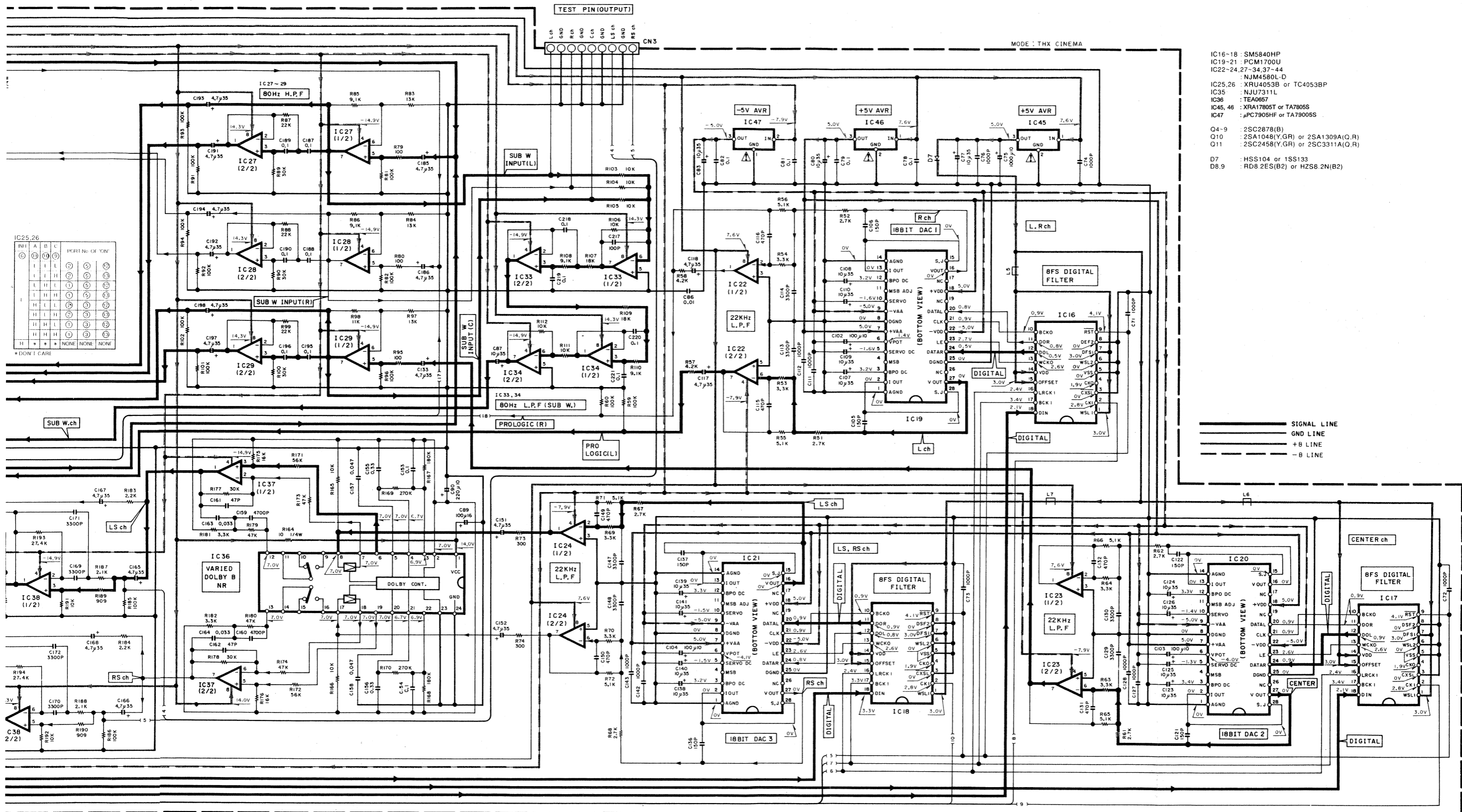
- M5238L
- NJM4580D-D
- NJU7311L
- NJU7312L
- NJU7313L
- MC14577BP
- PST529D
- SM5840HP
- MC74HC08AF
- TC74HC08AF
- TC9163N
- TC9164N
- NE657N
- LA1265
- LC83016E
- PCM1700U
- LC75711E
- TA7805S
- TA7808S
- XRA17805T
- XRA17808T
- UPC7905HF
- UPC7908HF
- TA79005S
- TA79008S
- NJM4556L

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

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). \triangle 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.

Y05-2740-10



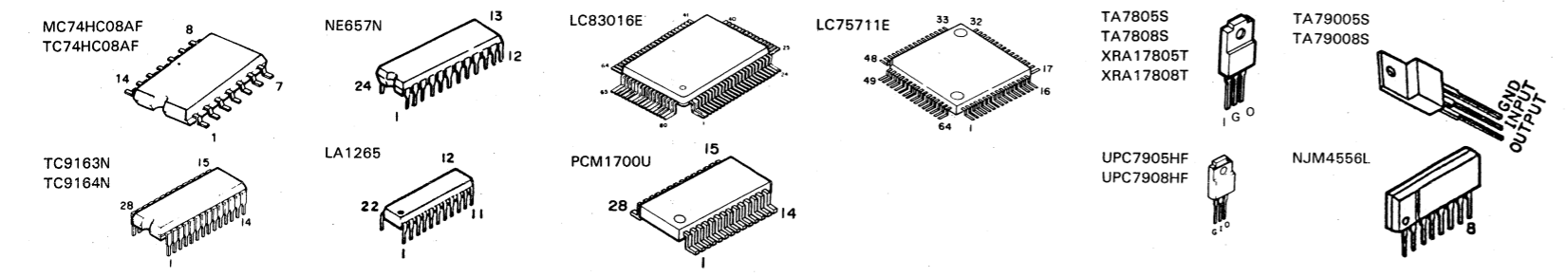
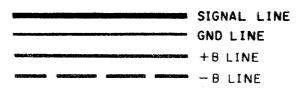


- IC16-18 : SM5840HP
- IC19-21 : PCM1700U
- IC22-24,27-34,37-44 : NJM4560L-D
- IC25,26 : XRU4053B or TC4053BP
- IC35 : NJU7311L
- IC36 : TEA0857
- IC45, 46 : XRA17805T or TA7805S
- IC47 : μ PC7905HF or TA79005S
- Q4-9 : 2SC2878(B)
- Q10 : 2SA1048(Y,GR) or 2SA1309A(Q,R)
- Q11 : 2SC2458(Y,GR) or 2SC3311A(Q,R)
- D7 : HSS104 or 1SS133
- D8,9 : RD8 2ES(B2) or HZS8 2N(B2)

IC25,26

PORT NO. OF 'COM'	A	B	C
1	(1)	(2)	(3)
2	(4)	(5)	(6)
3	(7)	(8)	(9)
4	(10)	(11)	(12)
5	(13)	(14)	(15)
6	(16)	(17)	(18)
7	(19)	(20)	(21)
8	(22)	(23)	(24)
9	(25)	(26)	(27)
10	(28)	(29)	(30)
11	(31)	(32)	(33)
12	(34)	(35)	(36)
13	(37)	(38)	(39)
14	(40)	(41)	(42)
15	(43)	(44)	(45)
16	(46)	(47)	(48)
17	(49)	(50)	(51)
18	(52)	(53)	(54)
19	(55)	(56)	(57)
20	(58)	(59)	(60)
21	(61)	(62)	(63)
22	(64)	(65)	(66)
23	(67)	(68)	(69)
24	(70)	(71)	(72)
25	(73)	(74)	(75)
26	(76)	(77)	(78)
27	(79)	(80)	(81)
28	(82)	(83)	(84)
29	(85)	(86)	(87)
30	(88)	(89)	(90)
31	(91)	(92)	(93)
32	(94)	(95)	(96)
33	(97)	(98)	(99)
34	(100)	(101)	(102)
35	(103)	(104)	(105)
36	(106)	(107)	(108)
37	(109)	(110)	(111)
38	(112)	(113)	(114)
39	(115)	(116)	(117)
40	(118)	(119)	(120)
41	(121)	(122)	(123)
42	(124)	(125)	(126)
43	(127)	(128)	(129)
44	(130)	(131)	(132)
45	(133)	(134)	(135)
46	(136)	(137)	(138)
47	(139)	(140)	(141)
48	(142)	(143)	(144)
49	(145)	(146)	(147)
50	(148)	(149)	(150)

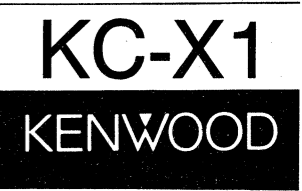
* DON'T CARE



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

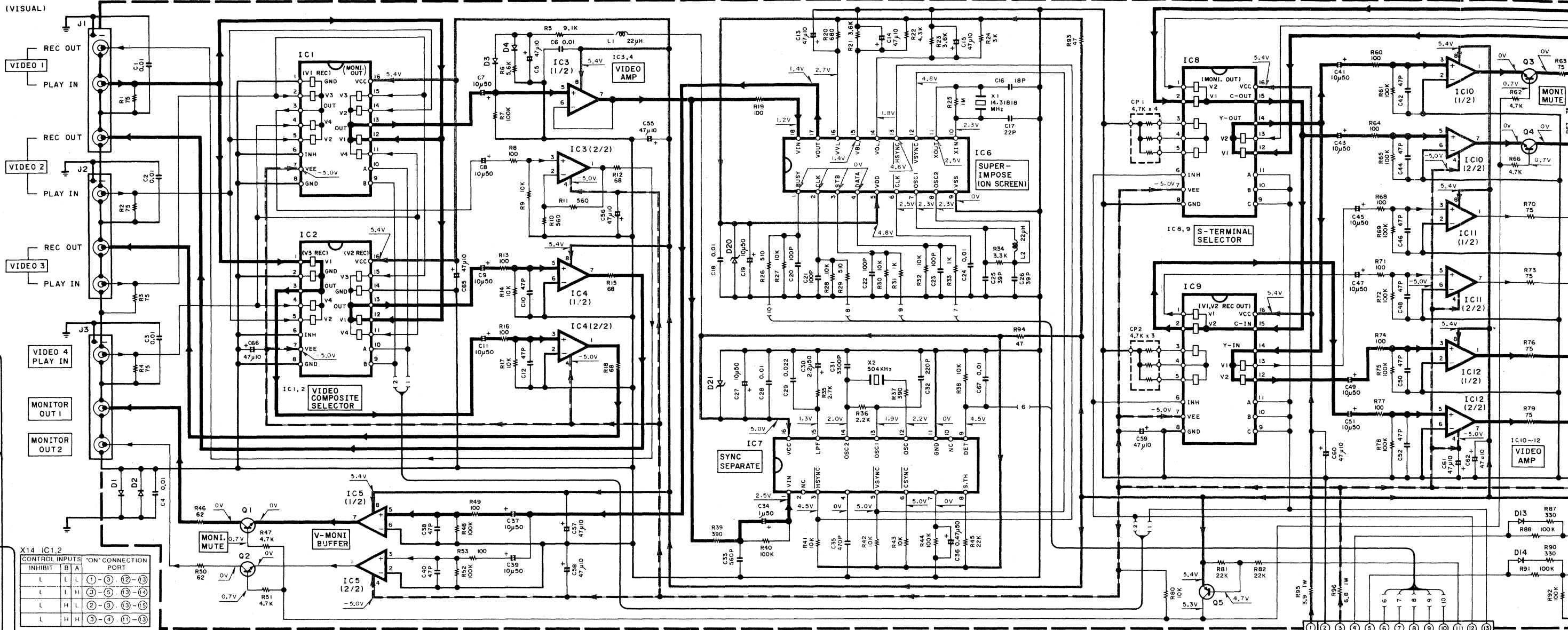
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Δ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably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

Y05-2740-10



KC-X1 (K) (5/7)

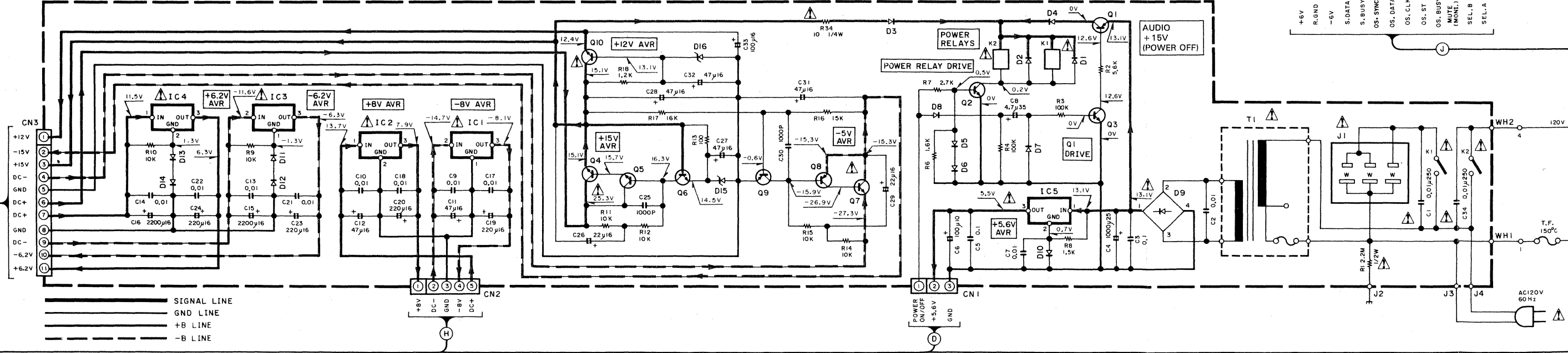
VIDEO CONTROL UNIT (X14-3700-10)(C/3)



X14 IC1,2 CONTROL INPUTS

INHIBIT	B	A	"ON" CONNECTION PORT
L	L	(1)-(2)	(7)-(8)
L	H	(3)-(4)	(9)-(10)
L	H	(5)-(6)	(11)-(12)
L	H	(3)-(4)	(9)-(10)
L	H	(5)-(6)	(11)-(12)

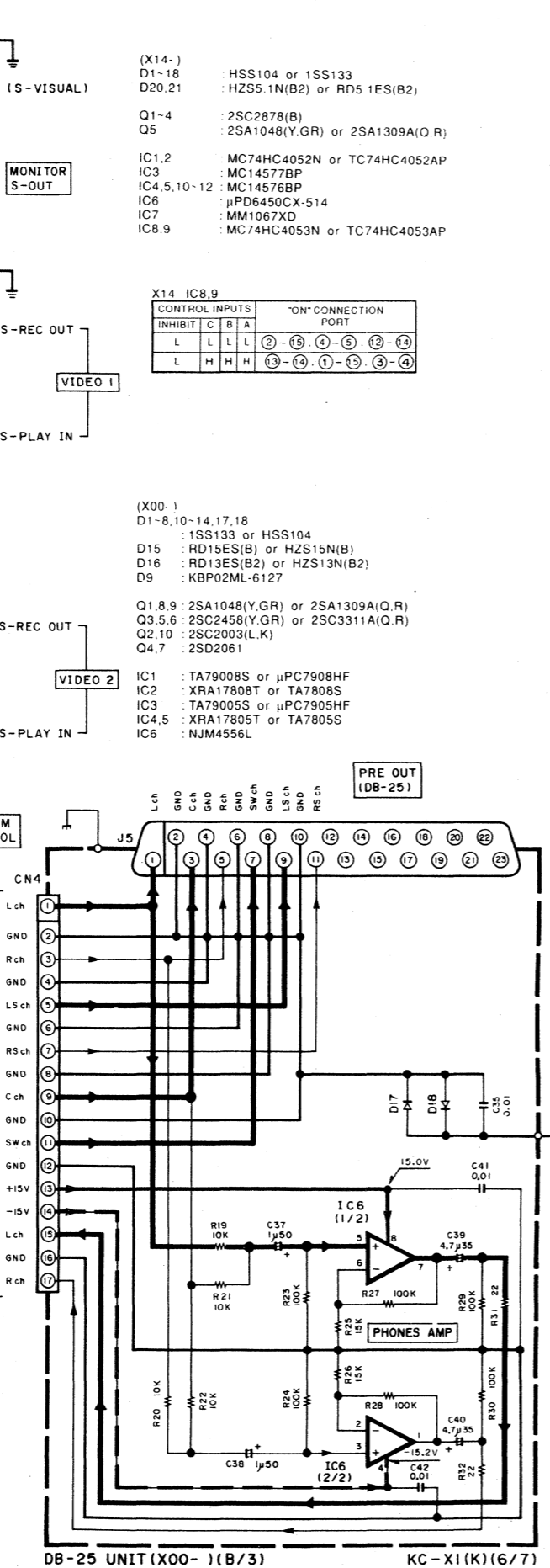
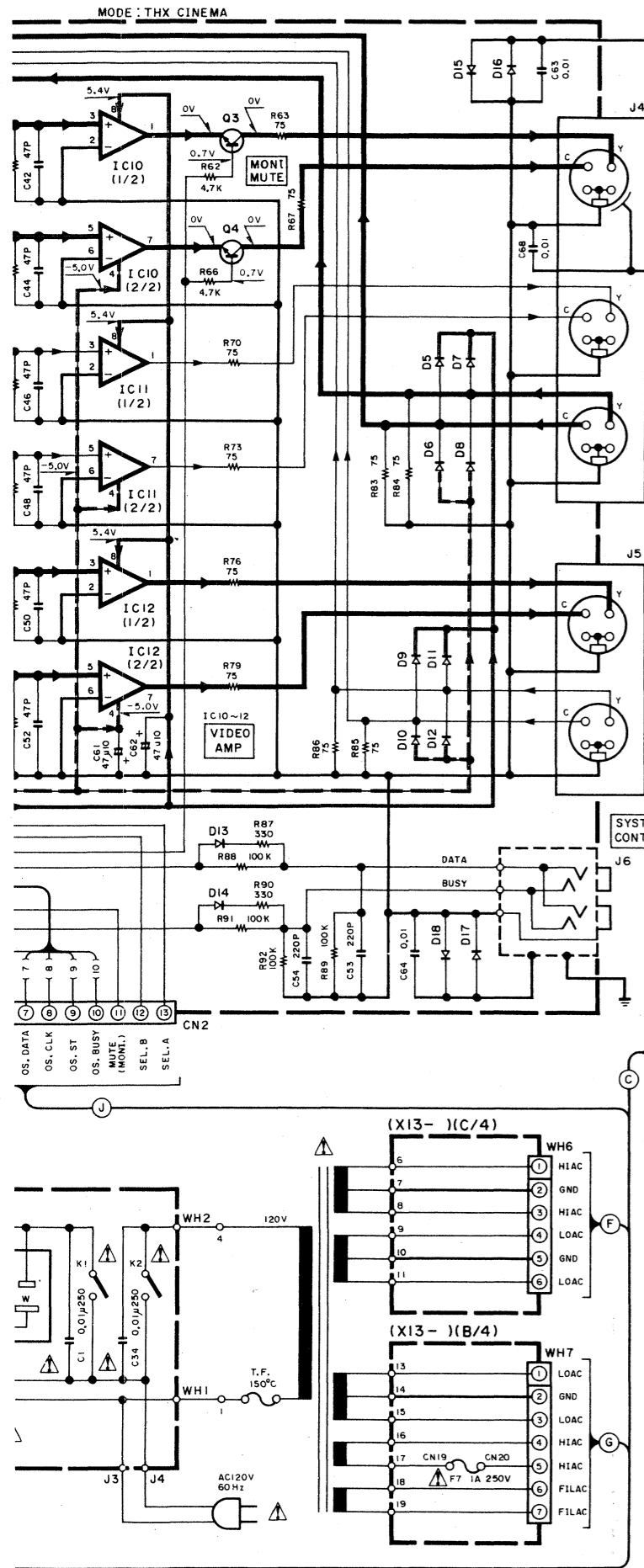
POWER SUPPLY UNIT (X00-2760-10)(A/3)



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

1
 2
 3
 4
 5
 6
 7

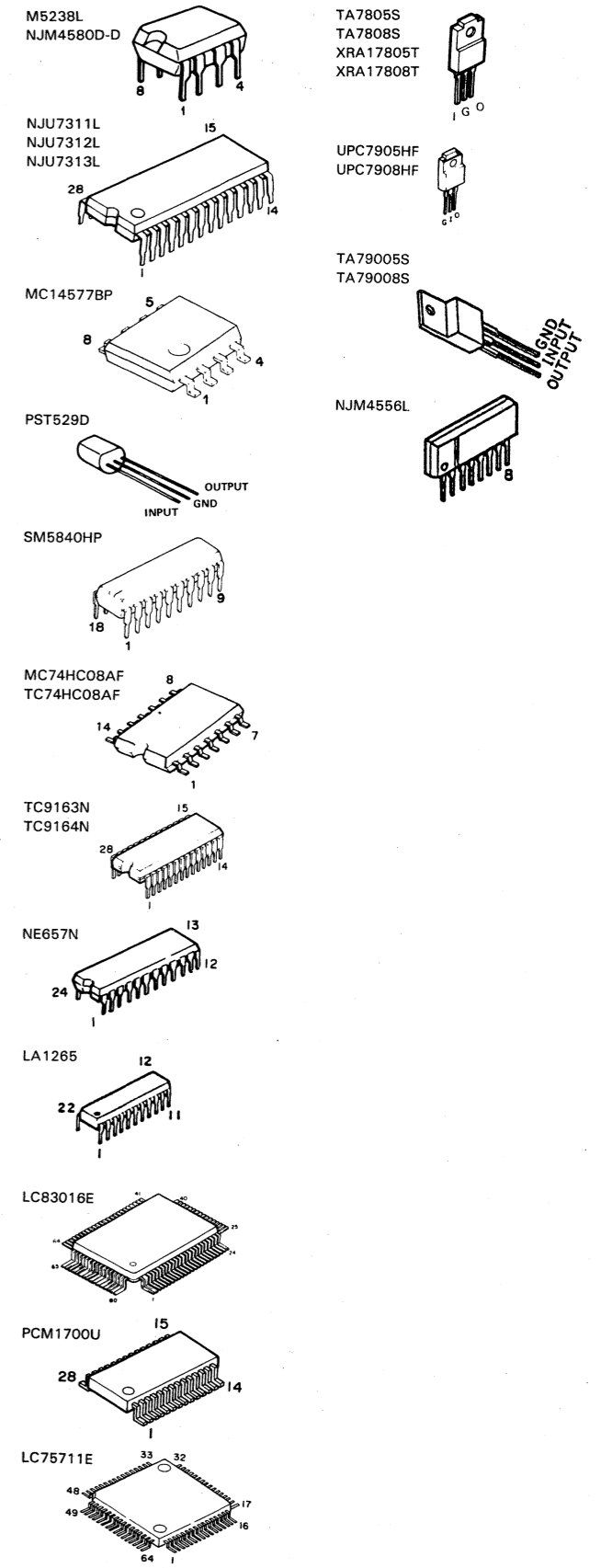
X13-A/4 -CN6 2/7
 X13-A/4 -WH1 3/7
 X13-A/4 -WH3 3/7
 X13-A/4 -WH6 3/7
 X13-A/4 -WH7 3/7
 X13-A/4 -WH2 3/7
 X13-A/4 -WH4 3/7



- (X14-)
 D1-18 : HSS104 or 1SS133
 D20,21 : HZS5.1N(B2) or RD5 1ES(B2)
 Q1-4 : 2SC2878(B)
 Q5 : 2SA1048(Y.GR) or 2SA1309A(O.R)
 IC1,2 : MC74HC4052N or TC74HC4052AP
 IC3 : MC14577BP
 IC4,5,10-12 : MC14576BP
 IC6 : μ PD6450CX-514
 IC7 : MM1067XD
 IC8,9 : MC74HC4053N or TC74HC4053AP

- (X00-)
 D1-8,10-14,17,18 : 1SS133 or HSS104
 D15 : RD15ES(B) or HZS15N(B)
 D16 : RD13ES(B2) or HZS13N(B2)
 D9 : KBP02ML-6127
 Q1,8,9 : 2SA1048(Y.GR) or 2SA1309A(O.R)
 Q3,5,6 : 2SC2458(Y.GR) or 2SC3311A(O.R)
 Q2,10 : 2SC2003(L.K)
 Q4,7 : 2SD2061
 IC1 : TA79008S or μ PC7908HF
 IC2 : XRA17808T or TA7808S
 IC3 : TA79005S or μ PC7905HF
 IC4,5 : XRA17805T or TA7805S
 IC6 : NJM4556L

- 2SA733 (A)
- 2SC1845
- 2SC1923
- 2SC2003
- 2SC2878
- 2SC945 (A)
- 2SB772
- 2SA1048
- 2SA933S
- 2SC1740S
- 2SC2458
- 2SD2061
- 2SA1309A
- 2SC3311A
- MC74HC04N
- MC74HC74AN
- TC74HC04AP
- TC74HC74AP
- MM1067XD
- XRU4053B
- LM7001
- MC74HC4052N
- MC74HC4053N
- TC9184P
- AN7470
- BA12003
- TC4053BP
- TC74HC4052AP
- TC74HC4053AP
- TC9213P



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

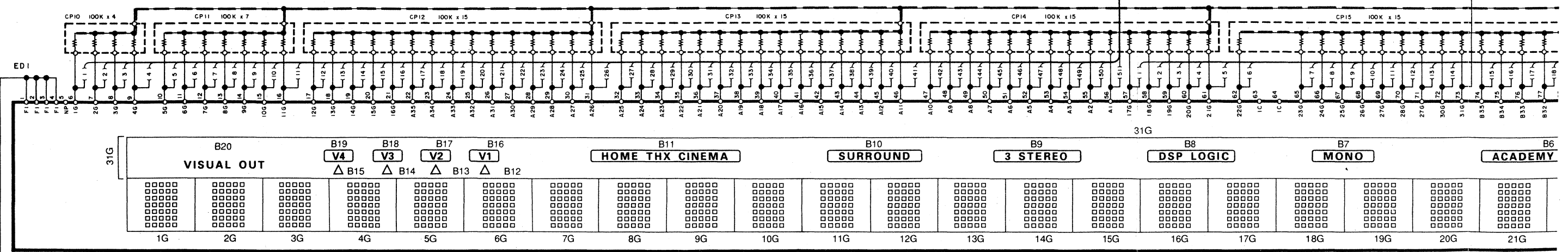
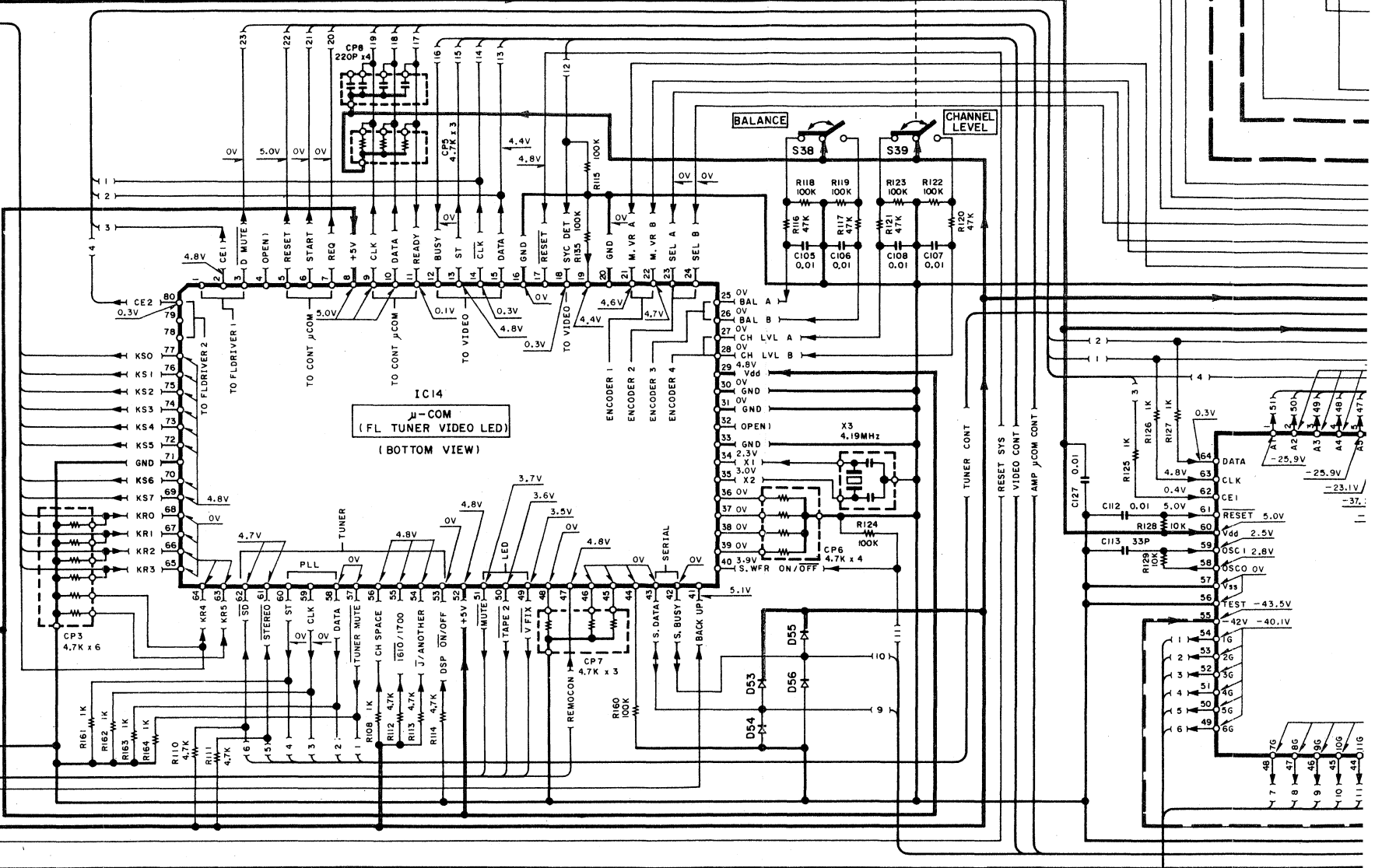
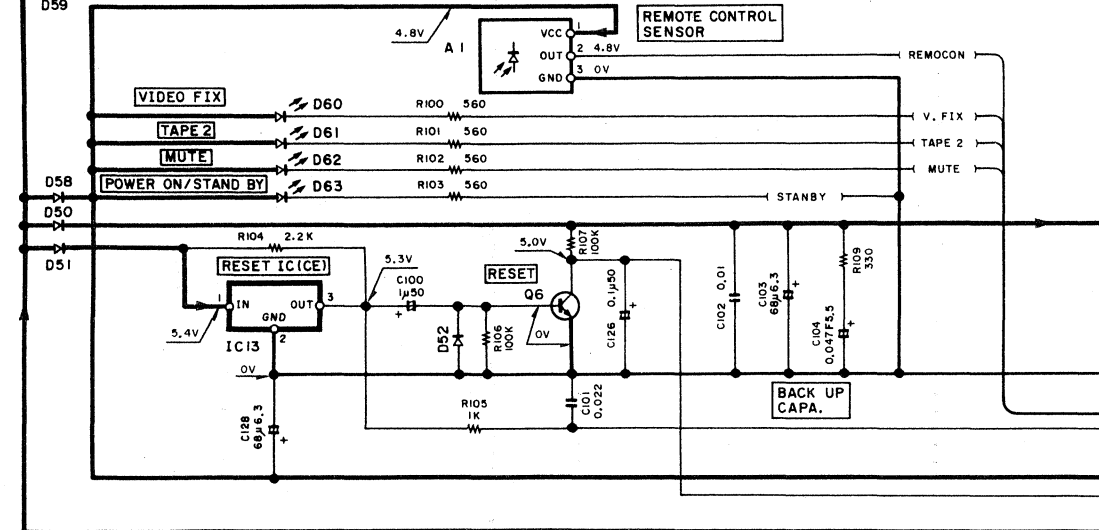
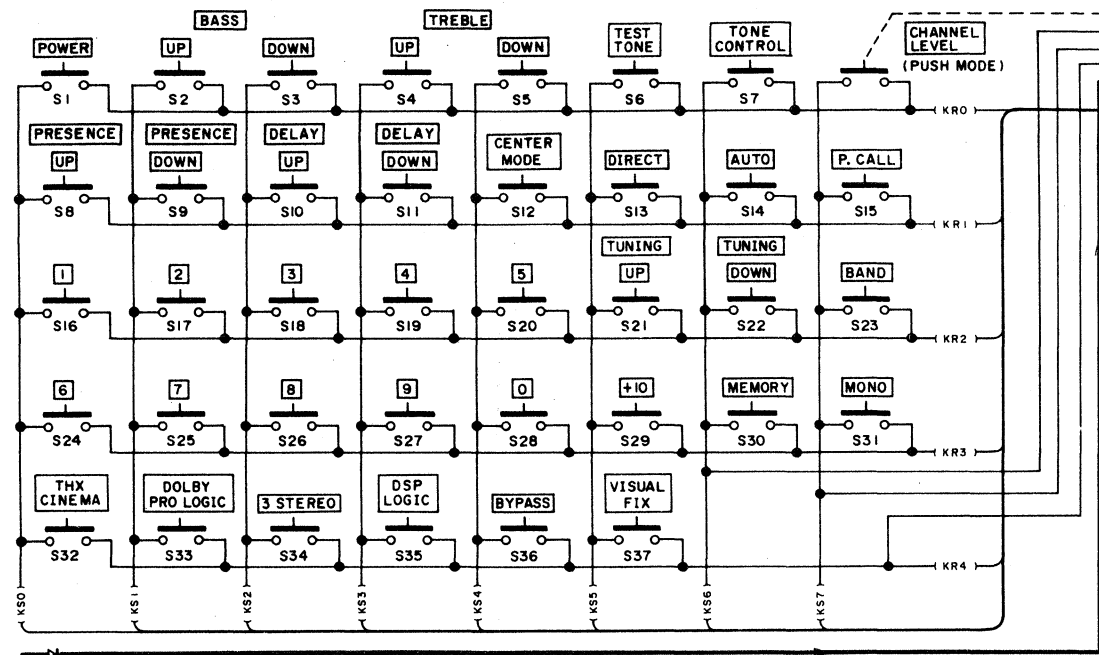
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably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

DISPLAY UNIT (X14-3700-10) (A/3)

MODE: THX CINEMA

ENCODER (X14-3700-10) (A/3)

X13-A/4 -CN5
3/7
K
X13-A/4 -CN3
3/7
L



2

3

4

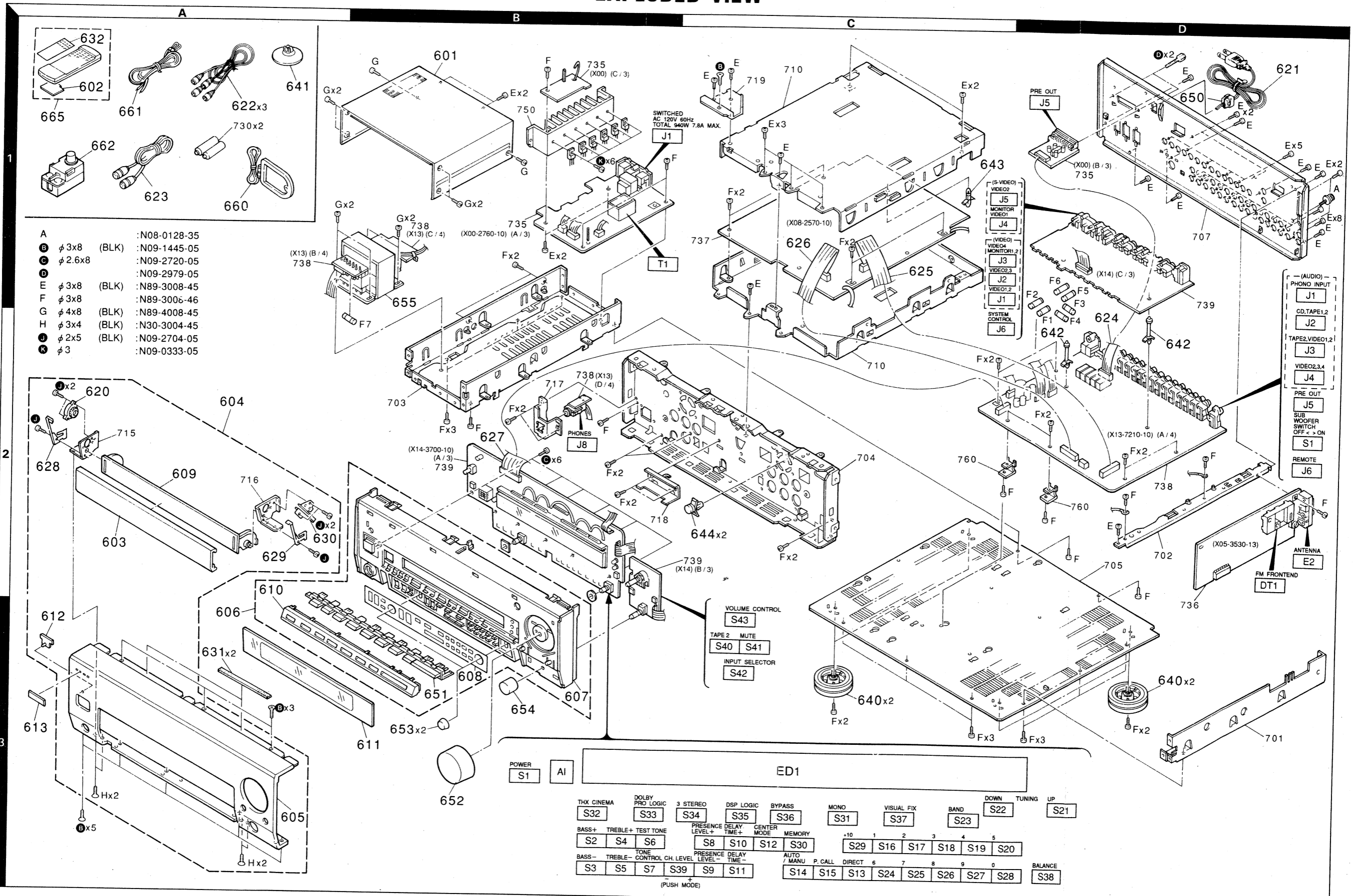
5

6

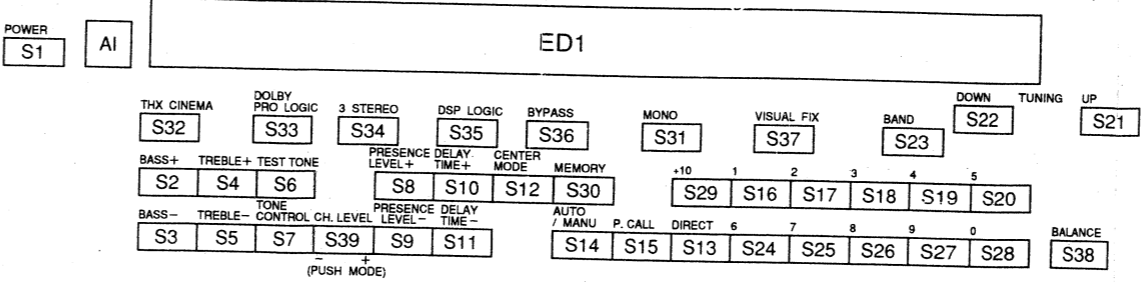
7

KC-X1 KC-X1

EXPLODED VIEW



- A :N08-0128-35
- B ϕ 3x8 (BLK) :N09-1445-05
- C ϕ 2.6x8 :N09-2720-05
- D :N09-2979-05
- E ϕ 3x8 (BLK) :N89-3008-45
- F ϕ 3x8 :N89-3006-46
- G ϕ 4x8 (BLK) :N89-4008-45
- H ϕ 3x4 (BLK) :N30-3004-45
- I ϕ 2x5 (BLK) :N09-2704-05
- N ϕ 3 :N09-0333-05



* 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 向標
KC-X1				
601	1B	A01-3002-01	METALLIC CABINET	
602	1A	A09-0100-03	BATTERY COVER	
603	2A	A29-0377-12	PANEL (TOP)	
604	2A	A60-0340-21	PANEL ASSY	
605	3A	A60-0341-02	PANEL (FRONT)	
606	3A	B01-0495-22	PANEL ESCUTCHEON ASSY	
607	3B	B01-0496-21	PANEL ESCUTCHEON	
608	3B	B03-2813-03	DRESSING PLATE	
609	2A	B07-2235-12	ESCUTCHEON	
610	2A	B07-2236-12	ESCUTCHEON	
611	3B	B10-1954-13	FRONT GLASS	
612	3A	B12-0219-04	INDICATOR	K
613	3A	B43-0287-04	KENWOOD BADGE	P
-	-	B46-0092-33	WARRANTY CARD	
-	-	B46-0121-23	WARRANTY CARD	
-	-	B46-0197-00	QUESTIONNAIRE CARD	
-	-	B60-1086-00	INSTRUCTION MANUAL (ENGLISH)	
-	-	B60-1087-00	INSTRUCTION MANUAL (FRENCH)	
620	2A	D39-0200-05	DAMPER	
621	1D	E30-0978-05	AC POWER CORD	
622	1A	E30-2293-05	AUDIO CORD	
623	1A	E30-2732-05	CORD WITH DIN CONNECTOR	
624	1C	E35-0566-05	FLAT CABLE (17P)	
625	1C	E35-0567-05	FLAT CABLE (31P)	
626	1C	E35-0568-05	FLAT CABLE (27P)	
627	2B	E35-0574-05	FLAT CABLE (23P)	
628	2A	G02-1009-04	FLAT SPRING (L)	
629	2A	G02-1010-04	FLAT SPRING (R)	
630	2A	G02-1011-04	FLAT SPRING	
631	3A	G11-0191-04	SOFT TAPE	
632	1A	G16-0804-04	OVERLAY SHEET (REMOCON)	
-	-	H10-2430-02	POLYSTYRENE FOAMED FIXTURE (L)	
-	-	H10-2431-02	POLYSTYRENE FOAMED FIXTURE (R)	
-	-	H25-0230-04	PROTECTION BAG (235X350X0.03)	
-	-	H25-0319-04	PROTECTION BAG	
-	-	H50-0528-04	ITEM CARTON CASE	
640	3C, 3D	J02-1002-05	FOOT	
641	1A	J19-2815-04	ANTENNA HOLDER (STAND)	
642	2D	J19-3208-05	UNIT HOLDER	
643	1C	J19-3300-05	UNIT HOLDER	
644	2C	J19-3325-05	UNIT HOLDER	
650	1D	J42-0083-05	POWER CORD BUSHING	
-	-	J61-0307-05	WIRE BAND	
651	3B	K29-5637-22	KNOB (THX CINEMA etc.)	
652	3B	K29-5638-14	KNOB ASSY (VOLUME CONTROL)	
653	3B	K29-5639-04	KNOB (CH. LEVEL, BALANCE)	
654	3B	K29-5640-04	KNOB (INPUT SELECTOR)	
655	1B	L07-0637-05	POWER TRANSFORMER	

L:Scandinavia

K:USA

P:Canada

T:England

E:Europe

X:Australia

M:Other Areas

Δ indicates safety critical components.

* 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 向標
D1 -8		1S5133	DIODE	
D9		KB902ML-6127	DIODE	
D10 -14		H55104	DIODE	
D11 -14		1S5133	DIODE	
D15		HZ515N(B)	ZENER DIODE	
D15		RD155S(B)	ZENER DIODE	
D16		HZ513N(B2)	ZENER DIODE	
D16		RD135S(B2)	ZENER DIODE	
D17 -18		H55104	DIODE	
D17 -18		1S5133	DIODE	
IC1		TA79008S	IC (VOLTAGE REGULATOR / -8V)	
IC1		UPC7308F	IC (VOLTAGE REGULATOR / +8V)	
IC2		TA7808S	IC (VOLTAGE REGULATOR / +8V)	
IC2		XRA17-08T	IC (VOLTAGE REGULATOR / +8V)	
IC3		TA79005S	IC (VOLTAGE REGULATOR / -5V)	
IC3		UPC7905HF	IC (VOLTAGE REGULATOR / -5V)	
IC4 -5		TA7805S	IC (VOLTAGE REGULATOR / +5V)	
IC4 -5		XRA17805T	IC (VOLTAGE REGULATOR / +5V)	
IC6		NJM4556L	IC (OP AMP)	
Q1		2SA1048(Y, GR)	TRANSISTOR	
Q1		2SA1309A (G, R)	TRANSISTOR	
Q2		2SC2003 (L, K)	TRANSISTOR	
Q3		2SC2458 (Y, GR)	TRANSISTOR	
Q3		2SC3311 (A, G, R)	TRANSISTOR	
Q4		2SD2061	TRANSISTOR	
Q5 -6		2SC2458 (Y, GR)	TRANSISTOR	
Q5 -6		2SC3111 (A, G, R)	TRANSISTOR	
Q6 -9		2SD2061 (Y, GR)	TRANSISTOR	
Q6 -9		2SA1309A (G, R)	TRANSISTOR	
Q8 -9		2SC2003 (L, K)	TRANSISTOR	
Q10		2SC2003 (L, K)	TRANSISTOR	
TUNER UNIT (X05-3530-13)				
C -2		CK45FF1H103Z	CERAMIC	
C3		CC93FCH1H391J	CERAMIC	
C4		CE04KW1H010M	ELECTRO	
C5		CE04KW1V100M	ELECTRO	
C6		CK45FF1H103Z	CERAMIC	
C7		CK45FF1H223Z	CERAMIC	
C8 -9		CK45FF1H103Z	CERAMIC	
C10		CK45FF1H223Z	CERAMIC	
C11 -12		CK45FF1H103Z	CERAMIC	
C13 -15		CE04KW1C470M	ELECTRO	
C16		CE04KW1H282M	ELECTRO	
C17		CE04KW1H383M	ELECTRO	
C18		CE04KW1V487M	ELECTRO	
C19		CF92FV1H223J	MF	
C20		CF92FV1H273J	MF	
C21		CK45FF1H223Z	CERAMIC	
C22		CC45FSL1H101J	CERAMIC	
C23		CE04KW1HR47M	ELECTRO	
C24		CF92FV1H273J	MF	
C25		CC45FCH1H220J	CERAMIC	
C26		CK45FF1H103Z	CERAMIC	
C27		CE04KW1H010M	ELECTRO	

L:Scandinavia

K:USA

P:Canada

T:England

E:Europe

X:Australia

M:Other Areas

Δ indicates safety critical components.

PARTS LIST

KC-X1

KC-X1

PARTS LIST

* 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 向標
A		N08-0128-35	BINDING POST	
B		N09-1445-05	SET SCREW (M3X8)	
C		N09-2720-05	TAPPIE SCREW	
D		N09-2779-05	HEXAGON HEAD BOLT (2.8X8)	
E		N89-3008-45	BINDING HEAD TAPPIE SCREW	
F		N89-3008-46	BINDING HEAD TAPPIE SCREW	
G		N89-4008-45	BINDING HEAD TAPPIE SCREW	
H		N30-3004-45	PAN HEAD MACHINE SCREW	
I		N09-2704-05	TAPPIE SCREW	
J		N09-0333-05	TAPPING SCREW (3X12)	
K		T90-0173-05	LOOP ANTENNA (AM)	
660	1A	T90-0176-05	T TYPE ANTENNA (FM)	
661	1A	T90-0185-05	ANTENNA ADAPTOR	
662				
665	1A	X94-1030-21	REMOTE CONTROL ASSY UNIT	
POWER SUPPLY UNIT (X00-2760-10)				
C1		C91-1439-05	FILM	
C2		CK45FF1H103Z	CERAMIC	
C3		CF92FV1H104J	MF	
C4		CE04KE1E102M	ELECTRO	
C5		CF92FV1H104J	MF	
C6		CE04KW1A101M	ELECTRO	
C7		CK45FF1H103Z	CERAMIC	
C8		CE04KW1V487M	ELECTRO	
C9 -10		CF92FV1H103J	MF	
C11 -12		CE04KW1C470M	ELECTRO	
C13 -14		CF92FV1H103J	MF	
C15 -16		CE04EM1C222M	ELECTRO	
C17 -18		CF92FV1H103J	MF	
C19 -20		CE04KW1C221M	ELECTRO	
C21 -22		CF92FV1H103J	MF	
C23 -24		CE04XN1C221M	ELECTRO	
C25		CK45FB1H102K	CERAMIC	
C26		CE04XN1C220M	ELECTRO	
C27 -28		CE04KW1C470M	ELECTRO	
C29		CE04KW1C220M	ELECTRO	
C30		CK45FR1H102K	CERAMIC	
C31 -32		CE04KW1C101M	ELECTRO	
C33		CE04KW1C101M	ELECTRO	
C34		C91-1439-05	FILM	
C35		CK45FF1H103Z	CERAMIC	
C37 -38		CE04KW1H010M	ELECTRO	
C39 -40		CE04KW1V487M	ELECTRO	
C41 -42		C91-0769-05	CERAMIC	
J1	1B	E50-0112-05	AC OUTLET (TOTAL 940W 7.8A MAX)	
J5	1D	E58-0003-05	RECTANGULAR RECEPTACLE (PREOUT)	
T1	1B	L01-7651-05	POWER TRANSFORMER	
R1		R92-0173-05	RC	
R34		RD14N2E100J	RD	
K1		S51-1036-05	MAGNETIC RELAY (AC OUTLET)	
K2		S76-0009-05	MAGNETIC RELAY (POWER)	
D1 -8		H55104	DIODE	

L:Scandinavia

K:USA

P:Canada

T:England

E:Europe

X:Australia

M:Other Areas

Δ indicates safety critical components.

* 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 向標
C28 -31		CC45FCH1H200J	CERAMIC	
C32		CC45FCH1H191J	CERAMIC	
C35		CC45FCH1H271J	CERAMIC	
C36 -37		CF92FV1H433J	MF	
C40		CE04KW1H383M	ELECTRO	
C41 -43		CE04KW1H282M	ELECTRO	
C44		CK45FB1H471K	CERAMIC	
C45		CF92FV1H473J	MF	
C46		CE04KW1HR47M	ELECTRO	
C48		CE04KW1V100M	ELECTRO	
C49		CE04KW1C470M	ELECTRO	
C52 -53		CC45FSL1H151J	CERAMIC	
TC1 -2		C05-0303-05	TRIMMER	
E2	2D	E20-0321-05	LOCK TERMINAL BOARD (ANTENNA)	
CF1 -2		L72-0531-05	CERAMIC FILTER	
CF3		L72-0099-05	CERAMIC FILTER	
CF4		L72-0099-05	CERAMIC FILTER	
L1		L40-1091-17	SMALL FIXED INDUCTOR (1UH)	
L2		L40-1021-14	SMALL FIXED INDUCTOR (1.0mH, K)	
L3		L40-1091-17	SMALL FIXED INDUCTOR (1UH)	
L4		L30-0484-05	FM IFT (DISCRIMINATOR)	
L5		L30-0485-05	FM IFT (DISTORTION, MONO)	
L6		L31-0509-05	MW-RF COIL (RF ALIGNMENT)	
L9		L32-0277-15	MW OSCILLATING COIL (BAND EDGE)	
L10		L30-0362-05	AM IFT (IF TRANSFORMER)	
X1		L77-1122-05	CRYSTAL RESONATOR (7.2MHZ)	
R14		RD14GB2E101J	FL-PR00F RD 100	
R22 -23		RD14GB2E101J	FL-PR00F RD 100	
R24		RD14GB2E221J	FL-PR00F RD 220	
R25		RD14GB2E330J	FL-PR00F RD 330	
R27		R12-3130-05	TRIMMING POT 33K (FM T-LEVEL)	
VR2		R12-3126-05	TRIMMING POT 10K (AM T-LEVEL)	
VR3		R12-1082-05	TRIMMING POT 1K (VOLUME)	
VR4		R12-8015-05	TRIMMING POT 1K (SEPARATION)	
D1 -2		1SS133	DIODE	
D3		1SS176	DIODE	
D3		HZ55.1N(B2)	ZENER DIODE	
D4 -6		1SS133	DIODE	
D4 -6		1SS176	DIODE	
D7		KV1236 (Z2)	VARIABLE CAPACITANCE DIODE	
IC1		LA1265	IC (FM/AM TUNER)	
IC2		LM7001	IC (PLL FREQUENCY SYNTHESIZER)	
IC				

PARTS LIST

× 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.

10

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
D26			HSS104	DIODE	
D26			1SS133	DIODE	
D27			HZ58-2N(B2)	ZENER DIODE	
D28			R08-2ES(B2)	ZENER DIODE	
D31			HSS104	DIODE	
D31			1SS133	DIODE	
D31			NU07312L	IC(ANALOG SWITCH)	
D31			TC9163N	IC(BILATERAL SWITCH X16)	
D31			NU07313L	IC(ANALOG SWITCH)	
D31			TC9164N	IC(16CH BILATERAL SELECTOR SW)	
D31			TC9164N	IC(AMP X2)	
D31			NJM4560L-D	IC(2CH ELECTRONIC VOLUME)	
D31			TC9213P	IC(AMP X2)	
D31			NJM4560L-D	IC(2CH ELECTRONIC VOLUME)	
D31			TC9213P	IC(AMP X2)	
D31			NJM4560L-D	IC(2CH ELECTRONIC VOLUME)	
D31			TC9213P	IC(AMP X2)	
D31			BA12003	IC(TRANSISTOR ARRAY)	
D31			NJM4560D-D	IC(AMP X2)	
D31			TC9184P	IC(ELECTRONIC TONE CONTROL)	
D31			NJM4560L-D	IC(AMP X2)	
D31			NJM4560D-D	IC(AMP X2)	
D31			UPD78043GF-020	IC(MICROPROCESSOR)	
D31			MC74HC08AF	IC(AND GATE)	
D31			TC74HC08AF	IC(AND GATE)	
D31			NJM4560L-D	IC(AMP X2)	
D31			2SC2878(B)	TRANSISTOR	
D31			2SA1048(Y,GR)	TRANSISTOR	
D31			2SA1309A(Q,R)	TRANSISTOR	
D31			2SC2458(Y,GR)	TRANSISTOR	
D31			2SC3311A(Q,R)	TRANSISTOR	
D31			2SB772	TRANSISTOR	
D31			2SC2458(Y,GR)	TRANSISTOR	
D31			2SC3311A(Q,R)	TRANSISTOR	
D31			B30-1290-05	LED	
D31			B30-0431-05	LED(LN21CPH)	
D31			CK45FF1H03Z	CERAMIC	0.010UF Z
D31			CE04KW1A470M	ELECTRO	470UF 10WV
D31			CK45FF1H03Z	CERAMIC	0.010UF Z
D31			CE04KW1H100M	ELECTRO	100UF 50WV
D31			CC45FSL1H470J	CERAMIC	47PF J
D31			CE04KW1H100M	ELECTRO	100UF 50WV
D31			CC45FSL1H470J	CERAMIC	47PF J
D31			CE04KW1A470M	ELECTRO	470UF 10WV
D31			CC45FSL1H180J	CERAMIC	18PF J

DISPLAY UNIT (X14-3700-10)

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
D60			B30-1290-05	LED	
D60			B30-0431-05	LED(LN21CPH)	
D60			CK45FF1H03Z	CERAMIC	0.010UF Z
D60			CE04KW1A470M	ELECTRO	470UF 10WV
D60			CK45FF1H03Z	CERAMIC	0.010UF Z
D60			CE04KW1H100M	ELECTRO	100UF 50WV
D60			CC45FSL1H470J	CERAMIC	47PF J
D60			CE04KW1H100M	ELECTRO	100UF 50WV
D60			CC45FSL1H470J	CERAMIC	47PF J
D60			CE04KW1A470M	ELECTRO	470UF 10WV
D60			CC45FSL1H180J	CERAMIC	18PF J

× 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.

9

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
C113			C91-0749-05	CERAMIC	220PF K
C113			CE04KW1VAR7M	ELECTRO	4.7UF 35WV
C122			C91-0769-05	CERAMIC	0.01UF K
C124			C91-0769-05	CERAMIC	0.01UF K
C150-157			CK45FF1H03Z	CERAMIC	0.010UF Z
C158-159			CE04EY1E222M	ELECTRO	2200UF 25WV
C160-161			CE04EY1C222M	ELECTRO	2200UF 14WV
C162			CE04KW1J103Z	ELECTRO	1000UF 5WV
C163			CK45FF1H03Z	CERAMIC	0.010UF Z
C164			CE04KW1A470M	ELECTRO	47UF 53WV
C165			CE04DW1J101M	ELECTRO	100UF 63WV
C166			CE04W0222M	ELECTRO	2200UF 6.3WV
C167			CK45FF1H03Z	CERAMIC	0.010UF Z
C168			CE04KW1A101M	ELECTRO	100UF 10WV
J1	2D	*	E63-0100-05	PHONE JACK(PHONE INPUT)	
J2	4	*	E63-0075-05	PHONE JACK(CD,TAPE,VIDEO)	
J3	2D	*	E63-0074-05	PHONE JACK(PREOUT)	
J6	2D		E06-0806-05	CYLINDRICAL RECEPTACLE(REMOTE)	
J8	2B		E11-0208-05	PHONE JACK(PHONES)	
F1	4		F04-1026-05	FUSE (UL)	(250V 1A)
F5	6		F06-1222-05	FUSE (UL)	(250V 1.25A)
F7			F04-1026-05	FUSE (UL)	(250V 1A)
ON7	20		J13-0075-05	FUSE CLIP	
X1			L78-0267-05	RESONATOR	(4.194MHZ)
CP1			R90-0878-05	MULTI-COMP	10KX3
CP2			R90-0855-05	MULTI-COMP	100KX5 J
CP3			R90-0803-05	MULTI-COMP	100KX7 J 1/4W
CP4			R90-0805-05	MULTI-COMP	100KX8 J 1/4W
CP5			R90-0895-05	MULTI-COMP	10KX9
CP6			R90-0802-05	MULTI-COMP	100KX10 J 1/4W
CP7			R90-0906-05	MULTI-COMP	1.0KX12 J
CP8			R90-0907-05	MULTI-COMP	1.0KX13 J
CP9	10		R90-0850-05	MULTI-COMP	100KX3 J 1/6W
R267,268			RD14NB2E220J	RD	22 J 1/4W
R336,339			RS14KB3A2R7J	FL-PR00F RS	2.7 J 1W
X1	5		S51-2089-05	MAGNETIC RELAY(PREOUT)	
S1	2D		S31-2094-05	SLIDE SWITCH(S.WOOFER ON/OFF)	
D1	10		HSS104	DIODE	
D1	10		1SS133	DIODE	
D11			HZ53-3N(B2)	ZENER DIODE	
D11			R03-3ES(B2)	ZENER DIODE	
D11			HZ53-3N(B2)	ZENER DIODE	
D13			R03-3ES(B2)	ZENER DIODE	
D15	16		HSS104	DIODE	
D15	16		1SS133	DIODE	
D17	20		KBR02ML-6127	DIODE	
D21			HZ520N(B)	ZENER DIODE	
D21			RD20ES(B)	ZENER DIODE	
D22			HZ52AN(B)	ZENER DIODE	
D22			RD24ES(B)	ZENER DIODE	
D23			HSS104	DIODE	
D23			1SS133	DIODE	

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

△ indicates safety critical components.

PARTS LIST

* 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.

12

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 備考
J5	1C	E06-0408-05	CYLINDRICAL RECEPTACLE(S-OUT)		
J6	1C	E11-0188-05	MINIATURE PHONE JACK(S-CONTRL)		
L1	,2	L40-2201-17	SMALL FIXED INDUCTOR(22UH,K)		
X1		L77-1182-05	CRYSTAL RESONATOR(14.31818M)		
X2		L78-0272-05	RESONATOR (504K)		
X3		L78-0267-05	RESONATOR (4.194MHZ)		
CP1	,2	R90-0832-05	MULTI-COMP 4.7KX3 J 1/6W		
CP3		R90-0811-05	MULTI-COMP 4.7KX6 J 1/6W		
CP5		R90-0832-05	MULTI-COMP 4.7KX3 J 1/6W		
CP6		R90-0824-05	MULTI-COMP 4.7KX4 J 1/6W		
CP7		R90-0832-05	MULTI-COMP 4.7KX3 J 1/6W		
CP8		R90-0877-05	MULTI-COMP 220PX4		
CP10		R90-0482-05	MULTI-COMP 100KX4 J 1/6W		
CP11		R90-0803-05	MULTI-COMP 100KX7 J 1/4W		
CP12-17		R90-0875-05	MULTI-COMP 100KX15 J 1W		
R95		RS14K3A3R9J	FL-PROOF RS 3.9		
R96		RS14K3A6R8J	FL-PROOF RS 6.8 J 1W		
S1	-37	S40-1064-05	TACT SWITCH(POWER, BASS etc.)		
S40	,41	S40-1064-05	TACT SWITCH(TAPE2, MUTE)		
S38		T99-0332-05	ROTARY ENCODER(BALANCE)		
S39		T99-0332-05	ROTARY ENCODER(CH. LEVEL)		
S42		T99-0326-05	ROTARY ENCODER(INPUT SELECTOR)		
S43		T99-0534-05	ROTARY ENCODER(VOLUME CONTROL)		
D1	-18	HSS104	DIODE		
D1	-18	HSS133	DIODE		
D20	,21	HZSS, IN(B2)	ZENER DIODE		
D20	,21	R95.1E5(B2)	ZENER DIODE		
D50	-56	HSS104	DIODE		
D50	-56	HSS133	DIODE		
D57		RZS10N(B)	ZENER DIODE		
D57		RZS10E(B)	ZENER DIODE		
D58	,59	HSS104	DIODE		
D58	,59	HSS133	DIODE		
E21		FIP30XM1AA	INDICATOR TUBE		
IC1	,2	TC74HC4052N	IC(4ch MULTIPLEXER X2)		
IC1	,2	TC74HC4052AP	IC(ANALOG MULTIPLEXER X3)		
IC3		MC14577BP	IC(DUAL VIDEO AMP)		
IC4	,5	MC14576BP	IC(OP AMP X2)		
IC6		UPD6450CX-514	IC(SUPER IMPOSE)		
IC7		MM1067XD	IC(SYNC SEPARATION)		
IC8	,9	MC74HC4053N	IC(2ch MULTIPLEXER X3)		
IC8	,9	TC74HC4053AP	IC(ANALOG MULTIPLEXER)		
IC10-12		MC14576BP	IC(OP AMP X2)		
IC13		PST529D	IC(SYSTEM RESET)		
IC14		UPD78044GF-024	IC(MICROPROCESSOR)		
IC15	,16	LC75711E	IC(DISPLAY DRIVER)		
Q1	-4	2SC2878(B)	TRANSISTOR		
Q5		2SA1048(Y, GR)	TRANSISTOR		
Q5		2SA1309A(Q, R)	TRANSISTOR		
Q6		2SC2456(Y, GP)	TRANSISTOR		
Q6		2SC3311A(Q, R)	TRANSISTOR		
Q7		2SC2003(L, K)	TRANSISTOR		
A1	3B	W02-1046-05	ELECTRIC CIRCUIT MODULE		

L:Scandinavia
Y:PX(Far East, Hawaii)
Y:AAFES(Europe)

K:USA
T:England
X:Australia
M:Other Areas

P:Canada
E:Europe
M:Other Areas

△ indicates safety critical components.

* 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.

11

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 備考
C17		CC45FSL1H220J	CERAMIC 22PF J		
C18		CK45FF1H103Z	CERAMIC 0.010UF Z		
C19		CE04KW1H100M	ELECTRO 10UF 50WV		
C20	-23	CC45FSL1H101J	CERAMIC 100PF J		
C24		CK45FF1H103Z	CERAMIC 0.010UF Z		
C25	,26	CC45FSL1H390J	CERAMIC 39PF J		
C27		CE04KW1H100M	ELECTRO 0.010UF Z		
C28		CK45FF1H103Z	CERAMIC 0.022UF Z		
C29		CC45FSL1H222M	ELECTRO 2.2UF 50WV		
C30		CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C31		CK45FB1H32K	CERAMIC 3300PF K		
C32		CC45FSL1H221J	CERAMIC 220PF J		
C33		CK45FB1H561K	CERAMIC 560PF K		
C34		CE04KW1H101M	ELECTRO 1.0UF 50WV		
C35		CK45FB1H471K	CERAMIC 470PF K		
C36		CE04KW1HR47M	ELECTRO 0.47UF 50WV		
C37		CE04KW1H100M	ELECTRO 10UF 50WV		
C38		CC45FSL1H470J	CERAMIC 47PF J		
C39		CE04KW1H100M	ELECTRO 10UF 50WV		
C40		CC45FSL1H470J	CERAMIC 47PF J		
C41		CE04KW1H100M	ELECTRO 10UF 50WV		
C42		CC45FSL1H470J	CERAMIC 47PF J		
C43		CE04KW1H100M	ELECTRO 10UF 50WV		
C44		CC45FSL1H470J	CERAMIC 47PF J		
C45		CE04KW1H100M	ELECTRO 10UF 50WV		
C46		CC45FSL1H470J	CERAMIC 47PF J		
C47		CE04KW1H100M	ELECTRO 10UF 50WV		
C48		CC45FSL1H470J	CERAMIC 47PF J		
C49		CE04KW1H100M	ELECTRO 10UF 50WV		
C50		CC45FSL1H470J	CERAMIC 47PF J		
C51		CE04KW1H100M	ELECTRO 10UF 50WV		
C52	,66	CC45FSL1H470J	CERAMIC 47PF J		
C53	,54	CC45FSL1H201J	CERAMIC 200PF J		
C55	-62	CE04K1A47M	ELECTRO 47UF 10WV		
C55	,64	CK45FF1H103Z	CERAMIC 0.010UF Z		
C65	,66	CE04KW1A470M	ELECTRO 47UF 10WV		
C67	,68	CK45FF1H103Z	CERAMIC 0.010UF Z		
C100		CE04KW1H100M	ELECTRO 1.00UF 50WV		
C101		C91-0085-05	CERAMIC 0.022UF N		
C102		CK45FF1H103Z	CERAMIC 0.010UF Z		
C103		C90-3213-05	ELECTRO 68UF 6.3WV		
C104		C90-1826-05	BACKUP 0.047F 5.5WV		
C105-108		C91-0769-05	CERAMIC 0.01UF K		
C112		CK45FF1H103Z	CERAMIC 0.010UF Z		
C113		CC45FSL1H330J	CERAMIC 33PF J		
C117		CK45FF1H103Z	CERAMIC 0.010UF Z		
C118		CC45FSL1H330J	CERAMIC 33PF J		
C119	,120	CE04KW1H100M	ELECTRO 10UF 50WV		
C121-124		C91-0769-05	CERAMIC 0.01UF K		
C126		C90-3248-05	ELECTRO 0.1UF 50WV		
C127		CK45FF1H103Z	CERAMIC 0.010UF Z		
C128		C90-3213-05	ELECTRO 68UF 6.3WV		
J1	-3	E13-0313-05	PHONE JACK(VIDEO1-4, MONITOR)		
J4	1C	E06-0409-05	CYLINDRICAL RECEPTACLE(S-OUT)		

L:Scandinavia
Y:PX(Far East, Hawaii)
Y:AAFES(Europe)

K:USA
T:England
X:Australia
M:Other Areas

P:Canada
E:Europe
M:Other Areas

△ indicates safety critical components.

SPECIFICATIONS

AUDIO section

Total harmonic distortion
 0.002 % (20 Hz- 20 kHz, 1.2 V)
 0.002 % (1 kHz, 1.2 V)

Frequency response
 LINE (CD, TAPE1, 2, VIDEO1)
 15 Hz- 100 kHz, + 0 dB,- 3 dB

PHONO "RIAA" response
 20 Hz - 20 kHz, \pm 0.5 dB

Signal to noise ratio
 (IHF'66)
 PHONO (MM) 78 dB
 LINE (CD, TAPE 1~2, VIDEO 1~4) 100 dB

Input sensitivity/impedance
 PHONO (MM) 2.5 mV/47 k Ω
 LINE (CD, TAPE 1~2, VIDEO 1~4) 200 mV/47 k Ω

Tone control
 BASS \pm 8 dB (at 100 Hz)
 TREBLE \pm 8 dB (at 10 kHz)

Output level/impedance
 Front channel preout 1.2 V/390 Ω
 Sub woofer, center
 channel preout 1.2 V/390 Ω
 Surround channel preout 1.2 V/390 Ω

VIDEO section

Television format NTSC

Input level/impedance
 VIDEO (Composite) 1 Vp-p/75 Ω
 Input (VIDEO 1, 2, 3, 4)
 S-VIDEO (Luminance signal) 1 Vp-p/75 Ω
 (Chrominance signal) 0.286 Vp-p/75 Ω
 Input (VIDEO 1, 2)

Output level/impedance
 VIDEO (Composite) 1 Vp-p/75 Ω
 output (VIDEO 1, 2, 3, MONITOR OUT 1, 2)
 S-VIDEO (Luminance signal) 1Vp-p/75 Ω
 (Chrominance signal) 0.286Vp-p/75 Ω
 output (VIDEO 1, 2, MONITOR OUT)

FM tuner section

Tuning frequency range 87.5 MHz-108 MHz
Usable sensitivity (MONO at 75 Ω) 0.95 μ V/10.8 dBf

Total harmonic distortion (at 1 kHz)
 MONO 0.1 % (65 dBf input)
 STEREO 0.2 % (65 dBf input)

Signal to noise ratio (at 1 kHz)
 MONO 80 dB (65 dBf input)
 STEREO 74 dB (65 dBf input)

Stereo separation (at 1 kHz)
 1 kHz 50 dB

Capture ratio (WIDE) 1.0 dB

Selectivity (\pm 400 kHz) 53 dB

AM tuner section

Tuning frequency range
 10 kHz step 530 kHz - 1,700 kHz

Usable sensitivity 10 μ V/ (400 μ V/m)
Signal to noise ratio (at 30% mod. 1mV input) 50 dB
Total harmonic distortion 0.4 %

GENERAL

Power consumption
 50 W

AC outlets
 SWITCHED 3 (940 W max.)

Dimensions W : 440 mm (17-5/16")
 H : 161.5 mm (6-3/8")
 D : 380 mm (14-15/16")

Weight (Net) 10.5 kg (23.1lb)

KC-X1

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice. DOLBY and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation. Noise reduction circuit made under license from Dolby Laboratories Licensing Corporation.

KENWOOD poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis. La marque DOLBY et le double "D" sont des marques déposées des Dolby Laboratories. Le système de réduction du bruit de fond est fabriqué sous licence des Dolby Laboratories.

KENWOOD strebt ständige Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten. DOLBY und Doppel-D-Symbol sind eingetragene Warenzeichen der Dolby Laboratories. Dolby-Rauschunterdrückung mit Lizenz der Dolby Laboratories gefertigt.

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.

KENWOOD CORPORATION

Alive Mitake, 2-5, 1-chome Shibuya, Shibuya-ku, Tokyo 150, Japan

KENWOOD U.S.A. CORPORATION

CONSUMER ELECTRONICS GROUP
P.O. BOX 22745, 2201 East Dominguez St., Long Beach, CA 90810 U.S.A.

KENWOOD ELECTRONICS CANADA INC.

6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8

KENWOOD ELECTRONICS LATIN AMERICA S.A.

P.O. BOX 55-2791, Piso 6 Plaza Chase, Cl. 47 y Aquilino de la Guardia, Panama, Republic de Panama

TRIO-KENWOOD U.K. LIMITED

KENWOOD House, Dwight Road, Watford, Herts, WD1 8EB United Kingdom

KENWOOD ELECTRONICS BENELUX N.V.

Mechelsesteenweg 418 B-1930 Zaventem, Belgium

KENWOOD ELECTRONICS DEUTSCHLAND GMBH

Rembrücker Str. 15, 6056 Heusenstamm, Germany

TRIO-KENWOOD FRANCE S.A.

13 Boulevard Ney, 75018 Paris, France

KENWOOD LINEAR S.p.A.

20125, Milano-Via Arbe, 50, Italy

KENWOOD ESPAÑA S.A.

Bolivia, 239-08020 Barcelona, Spain

KENWOOD ELECTRONICS AUSTRALIA PTY. LTD. (A.C.N. 001 499 074)

P.O. BOX 504, 8 Figtree Drive, Australia Centre, Homebush, N.S.W. 2140, Australia

KENWOOD & LEE ELECTRONICS, LTD.

Unit 3712-3724, Level 37 Tower 1, Metroplaza, 223 Hing Fong Road, Kwai Fong N.T. Hong Kong

KENWOOD ELECTRONICS SINGAPORE PTE LTD

No. 1 Genting Lane # 07-00, Singapore, 1334