

AUDIO VIDEO SURROUND RECEIVER

# KRF-V7771D/V7771DE

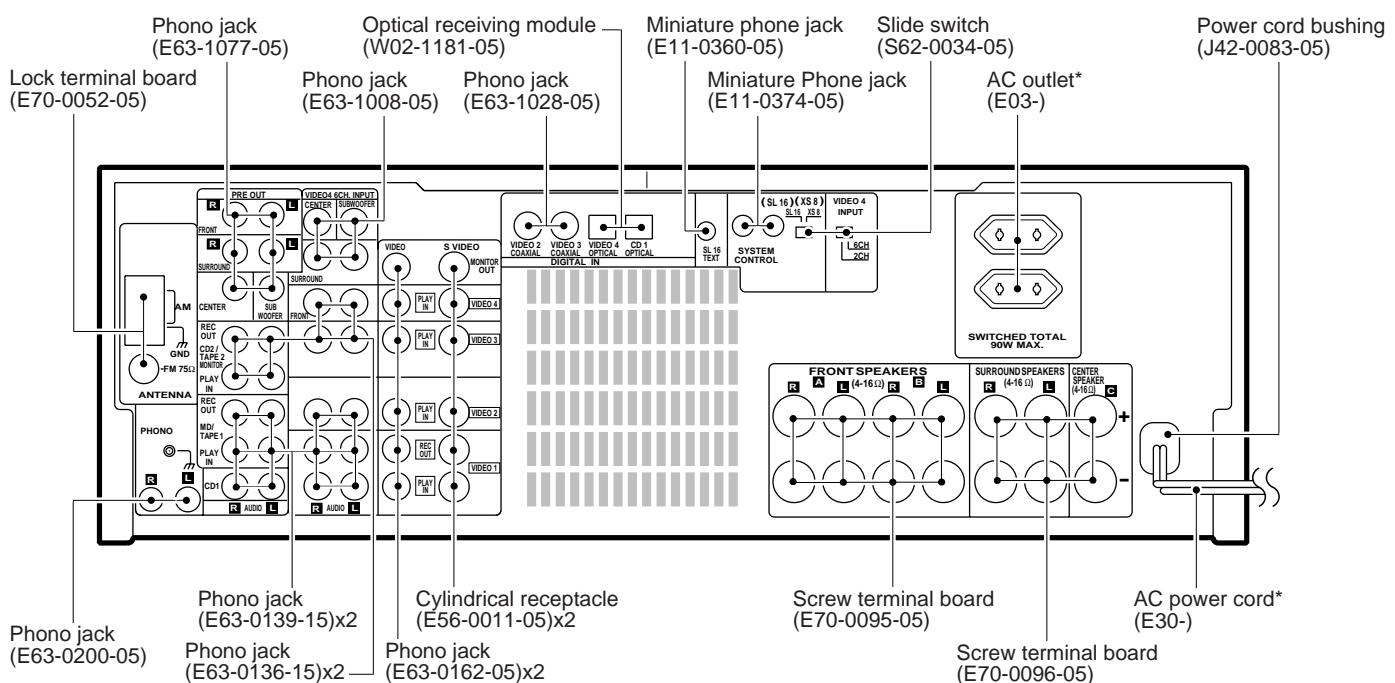
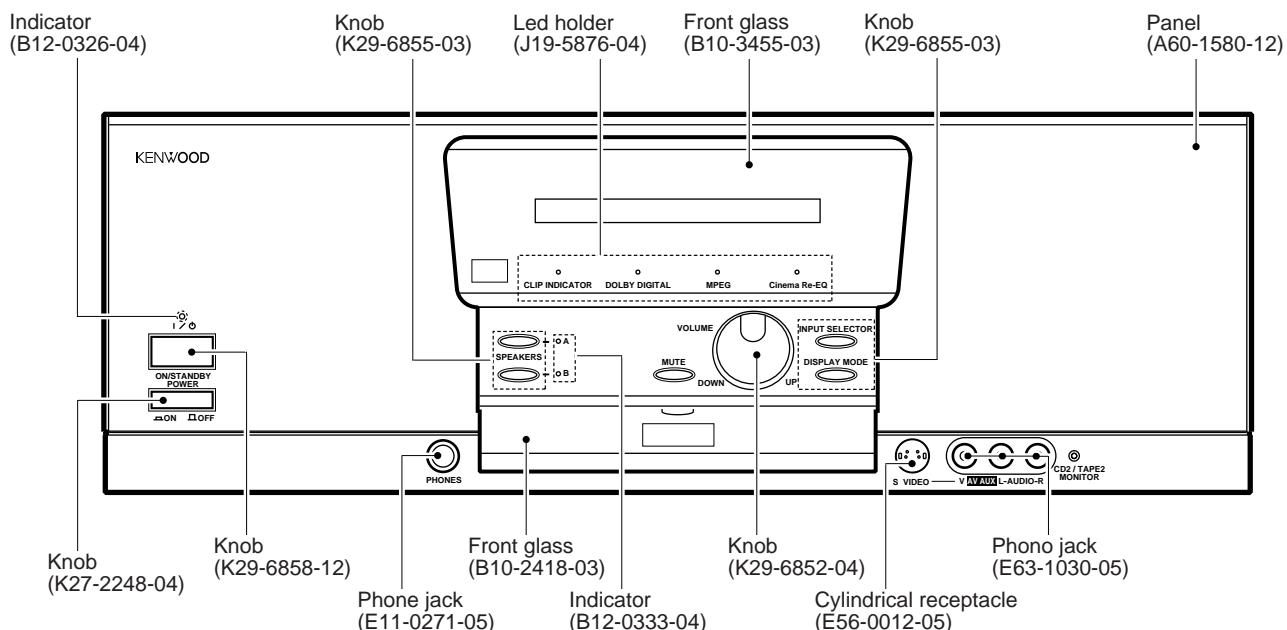
## SERVICE MANUAL (E,T type)

KENWOOD

© 1999-1/B51-5498-00 (K/K) 1612

This manual is available for repair in the Europe and England markets.

Please refer to the original manual (B51-5426-00) if need the information in the USA and Canada and other markets.



\*Refer to parts list on page52~.

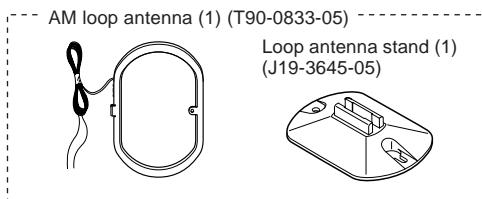
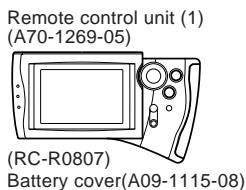
# KRF-V7771D/V7771DE

## CONTENTS / ACCESSORIES / CAUTIONS

### Contents

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### Accessories



### Cautions

#### How to reset the microcomputer

The microcomputer may malfunction (impossibility of operation, erroneous display, etc.) when the power cord is unplugged and plugged in again while the unit is in ON mode or due to other external causes. In this case, execute the procedure on the right to reset the microcomputer and return the unit to the normal condition.

- Resetting the microcomputer clears the memory you entered and returns it to the initial condition when the unit left the factory.

① With the power cord plugged in, turn the POWER key to OFF.

② While holding down the I/ (ON/STANDBY) key, press the POWER key.

#### Memory backup function

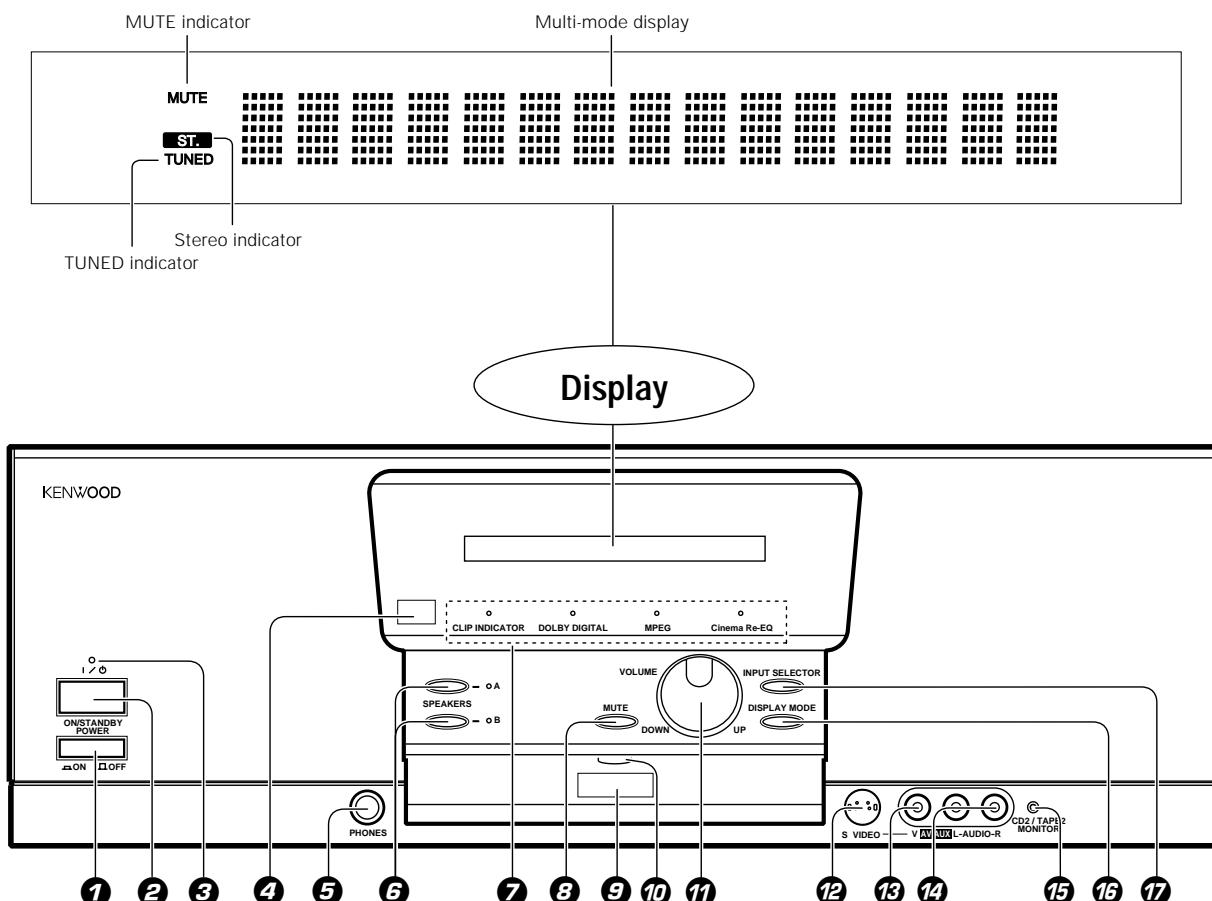
Please note that the following items will be deleted from this unit's memory if the power cord is disconnected from the AC outlet for approximately three days.

- The input selection is cleared and the "Tuner" input is selected.
- The volume setting is cleared and the volume is set to "-66 dB".
- The receiving band setting is cleared and the "FM" band is selected.

- The frequency setting is cleared and 87.5 MHz is selected.
- The preset station memory is cleared.
- The surround setting is cleared and reset to the initial condition.

# KRF-V7771D/V7771DE

## CONTROLS



### ① POWER key

Press to switch the main power ON and OFF.

### ② ON/STANDBY (I / O)key

Press to switch the power mode between STANDBY and ON.

### ③ Standby indicator

Lights in standby mode.

### ④ Remote sensor

Receives signals transmitted from the remote control unit.

### ⑤ PHONES jack

Use for listening to audio through headphones.

### ⑥ SPEAKERS keys

Press each key to switch the SPEAKERS A or SPEAKERS B ON and OFF.

### ⑦ Indicators

#### CLIP INDICATOR :

Lights when the input is clipped during analog to digital signal conversion.

#### DOLBY DIGITAL :

Lights when Dolby Digital is activated.

### MPEG :

Lights when the MPEG is activated.

### Cinema Re-EQ :

Lights when the Re-EQ is activated.

### ⑧ MUTE key

Press to mute the audio temporarily.

### ⑨ Remote transmitter

Sends signals to the remote control unit.

### ⑩ Communication indicator

Lights when signal is input from or output to the remote control unit.

### ⑪ VOLUME control knob

Rotate to adjust the volume.

### ⑫ S VIDEO input jack (AV AUX)

Connect the S VIDEO output jack of an AV component.

### ⑬ VIDEO input jack (AV AUX)

Connect the composite video output (RCA) jack of an AV component.

### ⑭ AUDIO (L, R) input jacks (AV AUX)

Connect the audio output (RCA) jacks of an AV component.

### ⑮ CD2/TAPE2 MONITOR indicator

Lights when the CD2/Tape2 (Monitor) input is used.

### ⑯ DISPLAY MODE key

Press to switch the display on the receiver.

Press for more than 2 seconds to switch the recording mode.

### ⑰ INPUT SELECTOR key

Press to switch the input as shown below.

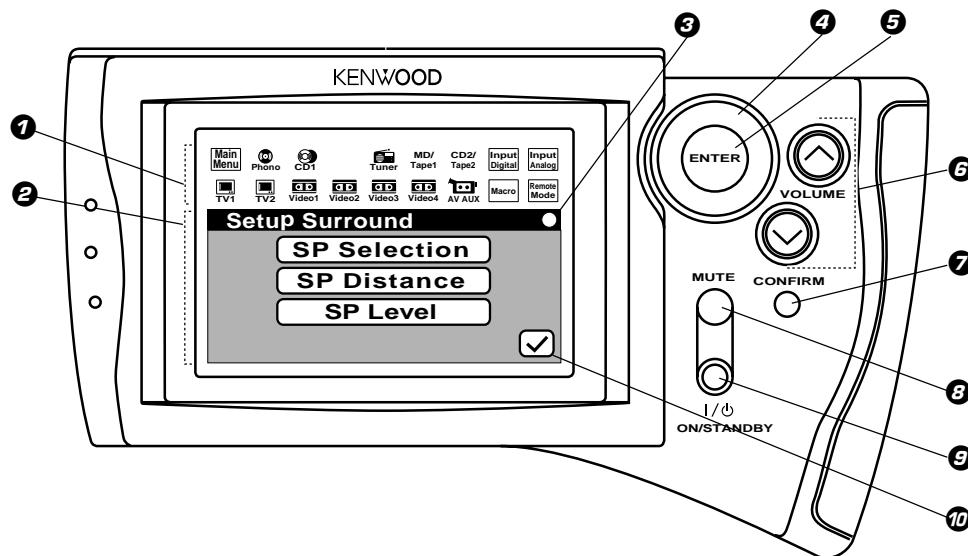
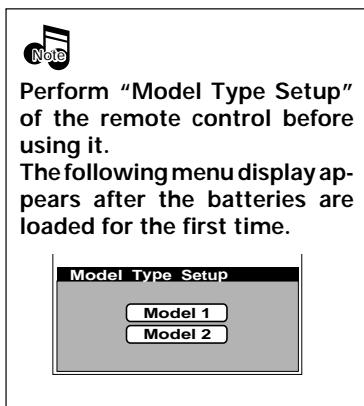
- TUNER
- CD1
- MD/Tape1
- VIDEO1
- VIDEO2
- VIDEO3
- VIDEO4
- AV AUX
- PHONO

## Standby mode

While the standby indicator of the unit is lit, a small amount of current is flowing into the unit's internal circuitry to back up the memory. This condition is referred to as the standby mode of the unit. While the unit is in the standby mode, it can be turned ON from the remote control unit.

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## CONTROLS



### ① Segment screen

The fixed icons are displayed in this area.

- **Main Menu icon** : Select to display the Main Menu screen.
  - **Phono icon**
  - **CD 1 icon**
  - **Tuner icon**
  - **MD/Tape 1 icon**
  - **CD 2/Tape 2 icon**
  - **Video 1 icon**
  - **Video 2 icon**
  - **Video 3 icon**
  - **Video 4 icon**
  - **AV AUX icon**
  - **TV 1 icon**
  - **TV 2 icon**
  - **Macro icon** : Select to control macro operation.
  - **Input Digital icon** : Select to play a digital input.
  - **Input Analog icon** : Select to play an analog input.
  - **Remote Mode icon** : Select to switch the remote control operation mode without changing the selected input.
- Select to switch input and control the selected input. ( Phono and AV AUX : Input selection only )
- Select to control TV.

### ② Menu screen

Control key icons and control levels are displayed in this area.

### ③ Communication status display

Shows the communication status.

### ④ Joy stick

This key is used to select an icon. This key can be controlled in 4 directions.

### ⑤ ENTER key

Press to enter the selection of an icon.

### ⑥ VOLUME (up, down) key

Press to control the volume.

### ⑦ CONFIRM key

Press to confirm the currently selected items.

### ⑧ MUTE key

Press to mute the audio temporarily.

### ⑨ I/O (ON/STANDBY) key

Press to turn the receiver and the components connected to it through system cords between ON and STANDBY modes.

### ⑩ Return (checkmark) icon

Select to return to the previous menu screen.

# KRF-V7771D/V7771DE

## DISASSEMBLY FOR REPAIR

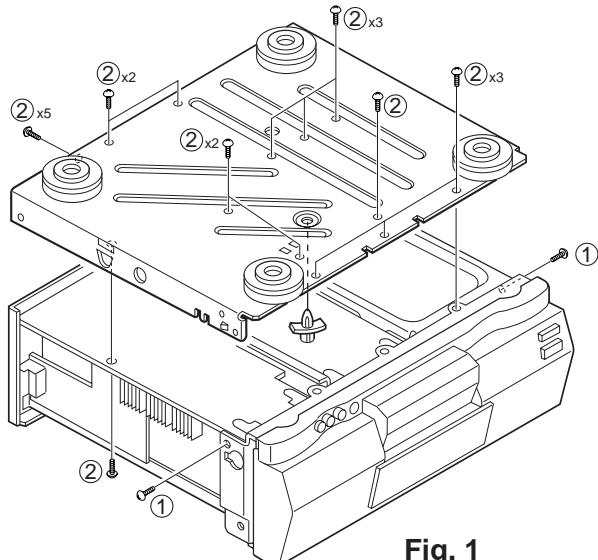


Fig. 1

### [Remove the bottom plate.]

Make use of the changing final transistor etc.

1. Remove the 19 screws (①, ②) and PCB support, then remove the bottom plate.

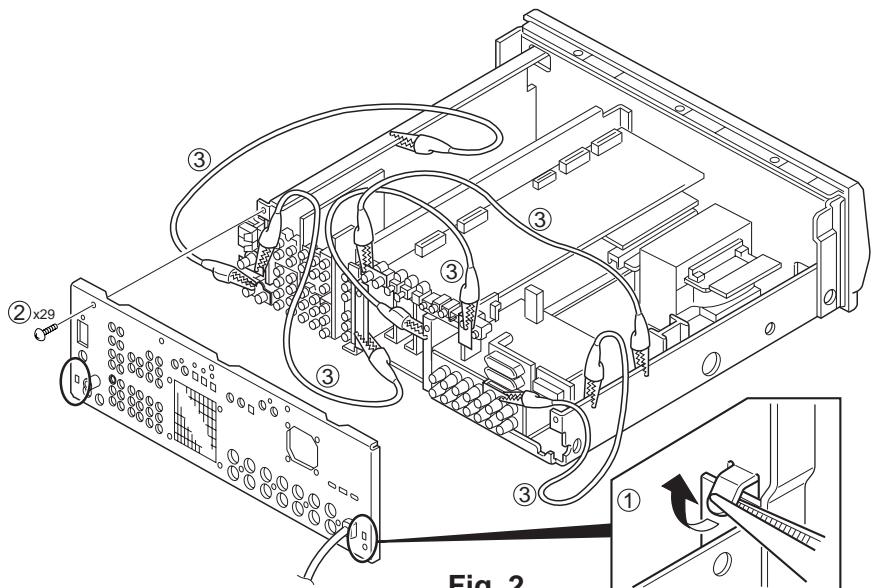


Fig. 2

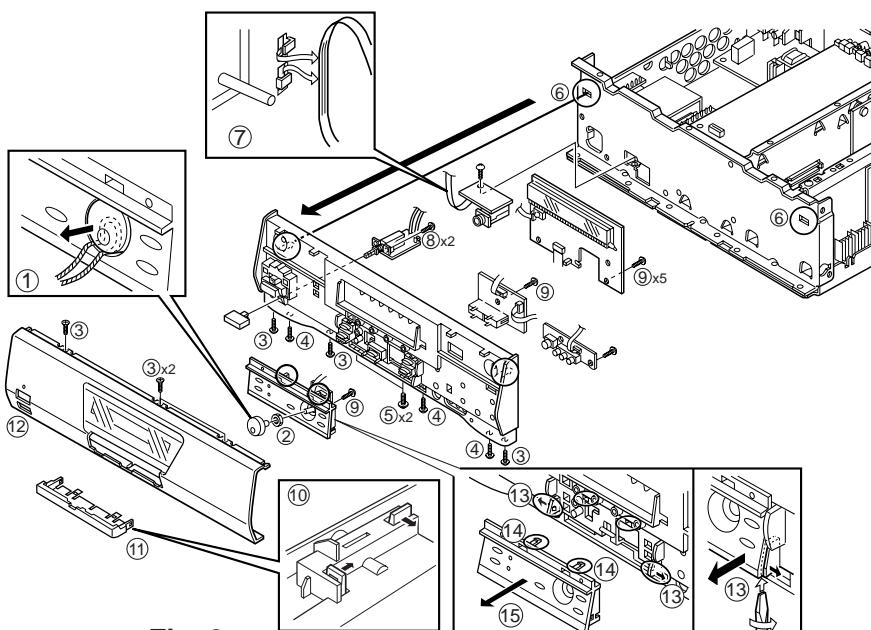


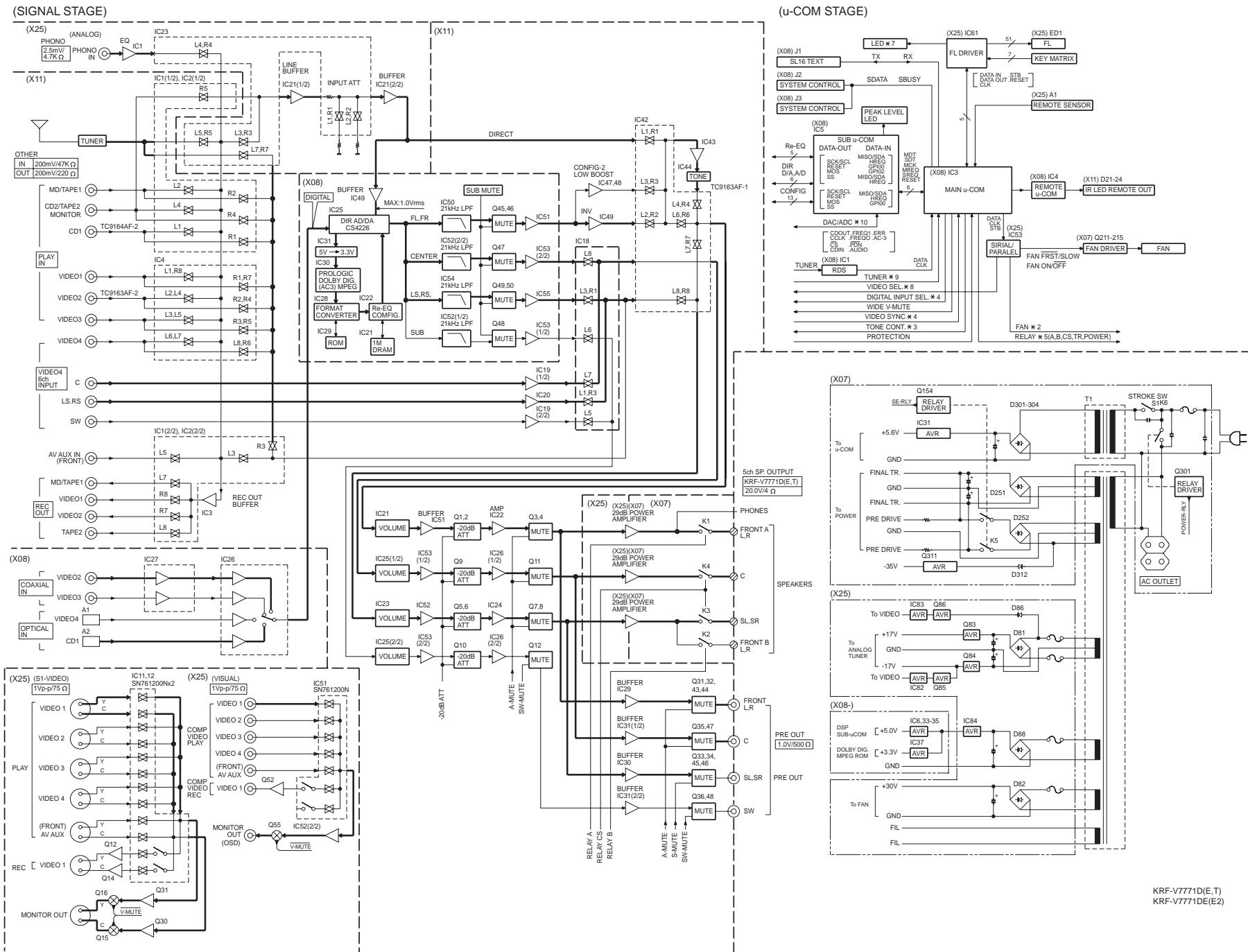
Fig. 3

### [Remove the escutcheon (operation panel)]

1. Remove the knob(①), the nut (②), the 11 screws(③, ④, ⑤) and 2 hooks (⑥), then remove the front panel ass'y.
2. Remove the lead wire(⑦), the 2 screws(⑧ : except K,P type) and 7 screws(⑨) then remove the PCB.
3. Remove the under front glass(⑩, ⑪), then remove the front panel(⑫) from the sub panel.
4. Remove the 2 under escutcheon sides(⑬) by  $\ominus$  screw driver and the 2 hooks(⑭) then remove the escutcheon(⑮).

# KRF-V7771D/V7771DE

## BLOCK DIAGRAM



# KRF-V7771D/V7771DE

## CIRCUIT DESCRIPTION

### 1. The back up item and initialization condition

#### 1-1 Back up

- POWER ON/OFF : OFF
- VOLUME LEVEL : -66dB
- AUDIO INPUT • SELECTOR : TUNER
- VIDEO INPUT • SELECTOR : VIDEO1
- SPEAKER A : ON
- SPEAKER B : OFF
- CD2/TAPE2 MONITOR : TAPE2 OFF
- TONE : OFF
- LOUDNESS : OFF
- DISPLAY MODE : DEVICE+DGTL/ANLG
- RDS DISPLAY MODE : FREQUENCY
- DIMMER : DIMMER 1 (LIGHTEST)
- SURROUND MODE : STEREO
- Re-EQ : OFF
- DSP MODE : ARENA
- WALL TYPE : Med
- EFFECT LEVEL : 3
- MIDNIGHT MODE : OFF
- DISTANCE : FL/FR : 10ft (3m)  
: C : 10ft (3m)  
: RS/LS : 5ft (1.5m)  
: SW : 10ft (3m)
- FRONT SP. : LARGE
- CENTER SP. : NORMAL

- SURROUND SP. : NORMAL/WIRED
- SUB WOOFER : ON
- SW Re-Mix : OFF
- INPUT LEVEL : 0dB
- CH. LEVEL : 0dB
- BASS PEAK LEVEL : OFF
- TONE BASS : 0dB
- TONE TREBLE : 0dB
- TUNING MODE : AUTO
- PRESET MEMORY : TEST MEMORY  
FREQUENCY (Same value with KR-V999D/1090VR)
- LAST BAND : FM
- FM LAST FREQUENCY : 87.5MHz
- AM LAST FREQUENCY : 531kHz (CH. SP 9kHz)  
: 530kHz (CH. SP 10kHz)
- LAST P. ch : [- -ch]
- PTY SELECT MODE : OFF
- PTY SEARCH MODE : OFF
- TP SEARCH MODE : OFF
- RDS DISPLAY MODE : FREQUENCY MODE

#### 1-2 The initial setting

While pressing POWER key, plug the AC power cord into an AC outlet (K,P type) or turn on the AC POWER switch.

### 2. Condition by the destination or model

(0 : Pull down, 1 : Pull up)

TYPE	BAND	Reception frequency	Channel space	IF	PLL standard frequency	Diode sw			
						⑦ DSW3	⑥ DSW2	⑤ DSW1	④ DSW0
K1 1700	FM	87.5MHz~108.0MHz	100kHz	+10.7MHz	25kHz	0	0	0	0
	AM	530kHz~1700kHz	10kHz	+450kHz	10kHz				
K2 1610	FM	87.5MHz~108.0MHz	100kHz	+10.7MHz	25kHz	0	0	0	1
	AM	530kHz~1610kHz	10kHz	+450kHz	10kHz				
K4 1700 RBDS	FM	87.5MHz~108.0MHz	100kHz	+10.7MHz	25kHz	1	0	1	0
	AM	530kHz~1700kHz	10kHz	+450kHz	10kHz				
E1	FM	87.5MHz~108.0MHz	50kHz	+10.7MHz	25kHz	0	0	1	1
	AM	531kHz~1602kHz	9kHz	+450kHz	9kHz				
E3 RDS	FM	87.5MHz~108.0MHz	50kHz	+10.7MHz	25kHz	0	1	0	1
	AM	531kHz~1602kHz	9kHz	+450kHz	9kHz				
Q1 RDS	FML	65.0MHz~74.0MHz	10kHz	+10.7MHz	5kHz	1	0	1	1
	FMH	87.5MHz~108.0MHz	50kHz	+10.7MHz	5kHz				
	AM	531kHz~1602kHz	9kHz	+450kHz	9kHz				
M	K2/E1 is switched with only the setting of DSW1 (X11 : S601). (DSW1 = 0 : K2 type, 1 : E1 type)					0	0	X	1

### 3. TEST MODE

#### [setting method]

While pressing INPUT SELECTOR key, plug the AC power cord into an AC outlet (K, P type) or turn on the AC POWER switch with condition VIDEO4 SW(2ch) on the rear panel. When a set is set up in test mode condition a set becomes the following condition.

Automatic POWER ON. All indicator tube (FL) and CLIP INDICATOR LED are lighted. The other LED are flashed. A backup at the thing except ON/OFF of POWER is initialized.

#### [cancel method]

The power supply is turned off.

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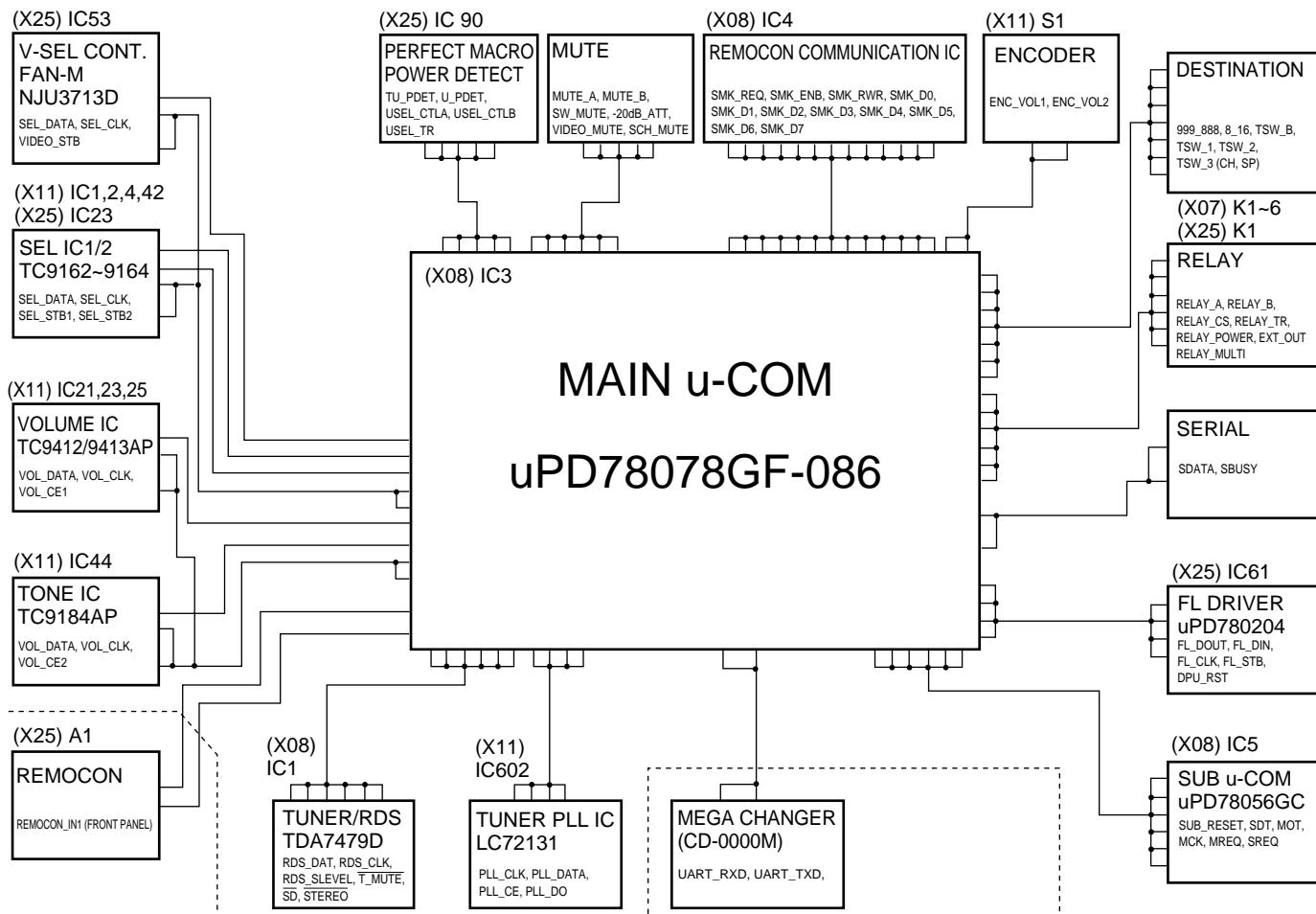
## CIRCUIT DESCRIPTION

PUSH KEY	INPUT SELECTOR	SP A	SP B	MUTE	DISPLAY MODE
FL DISPLAY	TUNER STEREO	P. CALL ↑ UP	P. CALL ↓ DOWN	ATT OFF → ON → FM	AUTO/STEREO ↔ MANUAL/MONO (DOLBY DIGITAL LED : OFF ↔ ON)
	CD1 STEREO				TONE (TUNED) +10 (light on) ↔ OFF (light off)
	MD/TAPE1 STEREO				
	VIDEO1 PRO LOGIC				
	VIDEO2 3 STEREO				
	VIDEO3 PRO LOGIC+Re-EQ				
	VIDEO4 DSP				ARENA → JAZZ CLUB THEATER
	AV AUX STEREO				TAPE2 OFF ↔ ON
	PHONO STEREO				INPUT LEVEL 0dB → -3dB → -6dB

SL16/XS8 SW (rear panel): SL16 → STANDBY LED (light off), XS8 → STANDBY LED (light on)

### 4. Main microprocessor uPD78078GF-086 (X08 : IC3)

#### 4-1 Microprocessor periphery block diagram



# KRF-V7771D/V7771DE

## CIRCUIT DESCRIPTION

### 4-2 Pin description

Pin	Name	I/O	Description
1	SEL_STB	O	VOLUME IC CE (TC9412AP/TC9413AP)
2	VOL_CLK	O	VOLUME IC CLOCK (TC9412AP/TC9413AP)
3	VOL_DATA	O	VOLUME IC DATA (TC9412AP/TC9413AP)
4	SEL_STB1	O	ANALOG SW. STROBE (TC9163/TC9164)
5	SEL_STB2	O	ANALOG SW. STROBE (TC9162/TC9163)
6	VIDEO_STB	O	VIDEO IC STROBE (NJU3713D)
7	SEL_CLK	O	ANALOG SW. CLOCK (TC9162-TC9164)
8	SEL_DATA	O	ANALOG SW. DATA (TC9162-TC9164)
9	IC(VPP)	-	NO USED
10	X2	-	MAIN CLOCK 4.19MHz (CERAMICS)
11	X1	I	MAIN CLOCK 4.19MHz (CERAMICS)
12	VDD	-	+5V
13, 14	XT2, 1	-	NO USED
15	RESET	I	uCOM RESET
16	REMOCON_IN1	I	REMOCON
17	6CH_2CH	I	VIDEO 4 ANALOG INPUT 6ch/2ch SELECT
			L : 2ch H : 6ch
18	RDS_DATA	I	RDS DATA (SAA6579)
19	RDS_CLK	I	RDS CLOCK (SAA6579)
20, 21	NC	I	NO USED
22	CE	I	BACK UP CE PORT
23	AVDD	-	+5V
24	AVREF0	I	A/D POWER SUPPLY
25	RDS_SLEVEL	I	RDS SLEVEL (SAA6579)
26	T_MUTE	O	TUNER MUTE
27	PLL_CLK	O	PLL IC CLOCK (LC72131)
28	PLL_DATA	O	PLL IC DATA (LC72131)
29	PLL_CE	O	PLL IC CE (LC72131)
30	SD	I	SD INPUT
31	STEREO	I	STEREO INPUT
32	PLL_DO	I	PLL IC DO (LC72131)
33	AVSS	-	GND
34	SUB_RESET	O	SUB uCOM RESET (uPD78056GC-A23)
35	V_PDET	I	PERFECT MACRO VIDEO POWER DETECT
		L : VIDEO POWER ON, H : VIDEO POWER OFF	
36	AVREF1	-	+5V
37	UART_RXD	I	MECHA • CHANGER CD UART DATA RECEIVE (CD TEXT)
38	UART_TXD	O	MECHA • CHANGER CD UART DATA TRANSMIT (CD TEXT)
39	VSEL_TR	O	PERFECT MACRO VIDEO SELECTOR POWER SASW. Tr. CONTROL
40	VSS	-	GND
41	SDT	I	uCOM-uCOM COMMUNICATION SLAVE DATA (uPD78056GC-A23)
42	MDT	O	uCOM-uCOM COMMUNICATION MASTER DATA (uPD78056GC-A23)
43	MCK	O	uCOM-uCOM COMMUNICATION MASTER CLOCK (uPD78056GC-A23)
44	MREQ	O	uCOM-uCOM COMMUNICATION MASTER REQUEST (uPD78056GC-A23)
45	SREQ	I	uCOM-uCOM COMMUNICATION SLAVE REQUEST (uPD78056GC-A23)
46	FL_DOUT	I	FL DRIVER DATA IN
47	FL_DIN	O	FL DRIVER DATA OUT
48	FL_CLK	O	FL DRIVER CLOCK
49	FL_STB	O	FL DRIVER STROBE
50, 51	VSEL_CTL_A, B	O	PERFECT MACRO VIDEO SELECTOR CONTROL A, B
52-54	FAN_1-3	I	FAN DETECT 1-3
55	SDATA	I/O	SERIAL DATA
56	SBUSY	I/O	SERIAL BUSY
57	RELAY_A	O	SPEAKER A RELAY
58	RELAY_B	O	SPEAKER B RELAY
59	RELAY_CS	O	CENTER/SURROUND SPEAKER RELAY
60	RELAY_TR	O	TR. RELAY

Pin	Name	I/O	Description
61	RELAY_POWER	O	POWER RELAY
62	EXT_OUT	O	EXTERNAL RELAY CONTROL
63	NC	O	NO USED
64	DRV_RST	O	FL DRIVER RESET
65	TV_PDET	I	PERFECT MACRO TV POWER DETECT
			L : TV POWER OFF, H : TV POWER ON
66	9991_7771	I	TYPE SELECT
			L : KRF-V7771D, H : KRF-X9991D
67	8_16	I	SERIAL SELECT
			L : SERIAL 16bit, H : SERIAL 8bit
68	ENC_VOL2	I	VOLUME ENCODER IN
69	ENC_VOL1	I	VOLUME ENCODER IN
70	PROTECTION1	I	PROTECT VOLTAGE DETECT
			L : OFF, H : ON
71	VSS	-	GND
72	PROTECTION2	I	PROTECT CURRENT DETECT
			L : OFF, H : ON
73	NC	I	NO USED
74-77	TSW_0	I	TUNER DESTINATION SW. 0-3
78-82	NC	-	NO USED
83	SMK_REQ	O	REMOCON DATA TRANSMIT IC REQ
84	SMK_ENB	I	REMOCON DATA TRANSMIT IC ENB
85	SMK_RWR	I	REMOCON DATA TRANSMIT IC RWR
86-93	SMK_D0-7	O	REMOCON DATA TRANSMIT IC D 0-7
94	MUTE_A	O	ROOM A MUTE
95	NC	O	NO USED
96	SW_MUTE	O	SWch MUTE
97	-20dB_ATT	O	-20dB ATTENUATER
98	VIDEO_MUTE	O	VIDEO MUTE
99	SCH_MUTE	O	Sch MUTE
100	TONE_STB	O	TONE IC CE (TC9184AP)

## CIRCUIT DESCRIPTION

KRF-V7771D/V7771DE

(1) TC9162/TC9163/TC9164 SW. CONTROL

## CD2/TAPE2 MONITOR:TAPE2

(O:ON

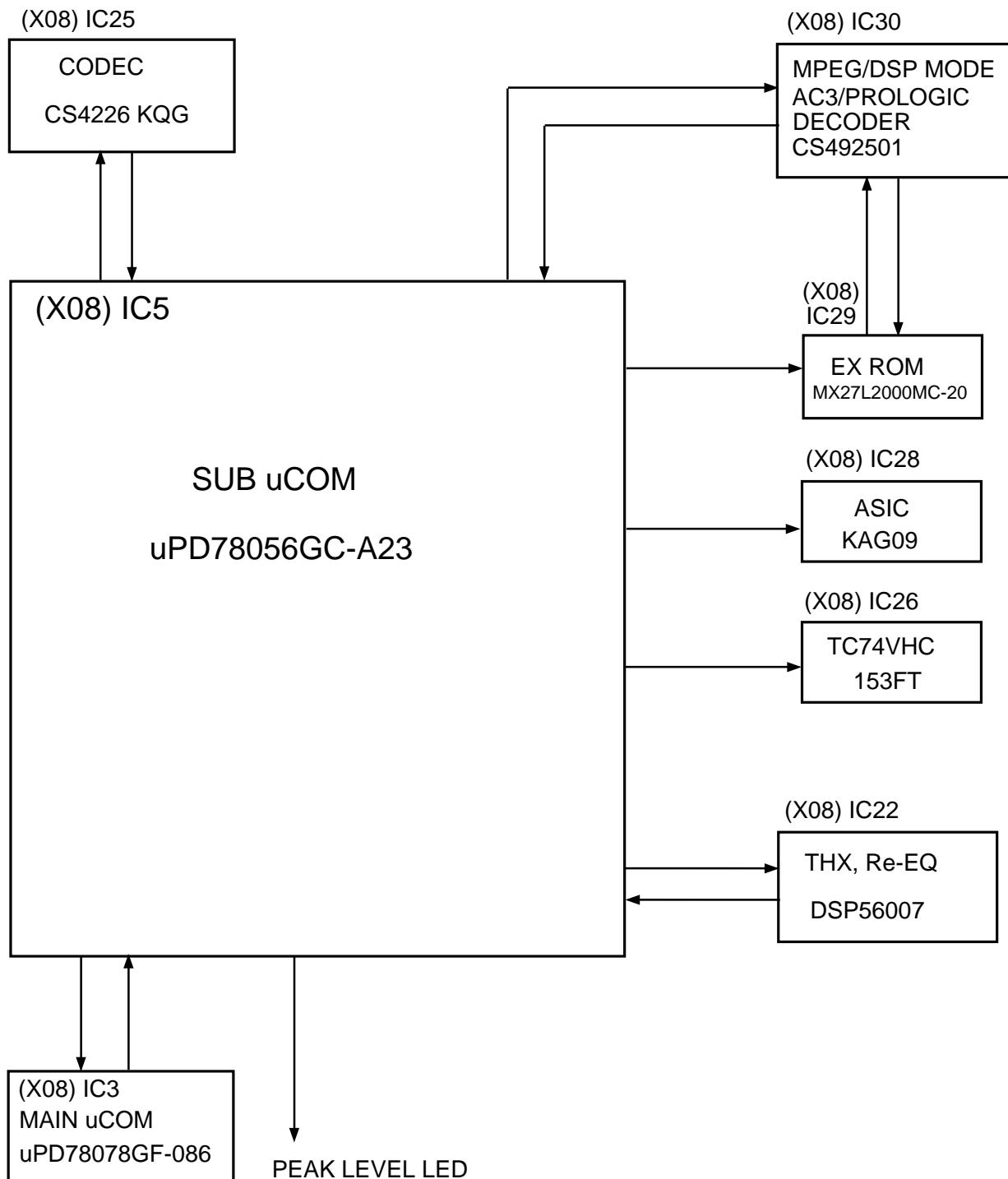
CD2 is set CD2/TAPE2:(x11)IC1,2 (11)pin OFF

# KRF-V7771D/V7771DE

## CIRCUIT DESCRIPTION

### 6. Sub microprocessor uPD78056GC-A23 (X08 : IC5)

#### 6-1 Microprocessor periphery block diagram



## CIRCUIT DESCRIPTION

## 6-2 Pin description

Pin No.	Name	I/O	Description
1	25/26	O	ASIC KAG09 CS4925/CS4226 SELECT L : Transmitting data to CS4925 H : Transmitting data to CS4226
2	N.C.	I	—
3	A15	O	EX ROM ADDRESS SET
4	AVSS	—	—
5	A16	O	EX ROM ADDRESS SET
6	A17	O	EX ROM ADDRESS SET
7	AVREF1	—	+5V
8	CS_SCIN	I	CS4226 & CS4925 SERIAL DATA IN
9	CS_SCDOUT	O	CS4226 & CS4925 SERIAL DATA OUT
10	CS_SCCLK	O	CS4226 & CS4925 SERIAL CLOCK
11	MDT	I	Microprocessor communication MASTER DATA
12	SDT	O	Microprocessor communication SLAVE DATA
13	MCK	I	Microprocessor communication MASTER CLOCK
14	MREQ	I	Microprocessor communication MASTER REQUEST
15	SREQ	O	Microprocessor communication SLAVE REQUEST
16	DSP_SO	I	DSP56007(THX,Re-EQ) MASTER IN SLAVE OUT
17	DSP_SI	O	DSP56007(THX,Re-EQ) MASTER OUT SLAVE IN
18	DSP_CK	O	DSP56007(THX,Re-EQ) CLOCK
19-26	N.C.	I	—
27	DSP_RST	O	DSP56007(THX,Re-EQ) RESET
28	DSP_SS	O	DSP56007(THX,Re-EQ) SLAVE SELECT
29	DSP_HR	I	DSP56007(THX,Re-EQ) HOST REQUEST
30	PEAK_LEVEL	O	PEAK LEVEL LED driver
31,32	N.C.	I	—
33	VSS		GND
34-38	N.C.	I	—
39	(9992/7771)	I	(9992/7771) model non use
40-46	N.C.	I	—
47	SUB_MUTE		SUB MUTE Control
48-52	N.C.	I	—
53	CS_PDN	O	CODEC CS4226 POWER DOWN
54	CS_FREQ1	I	CODEC CS4226 FS CHECK1
55	CS_FREQ0	I	CODEC CS4226 FS CHECK0
56	N.C.	I	—
57	CS_26	O	CODEC CS4226 CHIP SELECT
58,59	N.C.	I	—
60	RESET	I	RESET
61	CS_OVL/ERR	I	CODEC CS4226 OVER LEVEL/ERROR Detector
62	CS_AUDIO	I	CODEC CS4226 AUDIO/NO AUDIO Detector
63	CS_AC3	I	CODEC CS4226 AC-3/MPEG Detector
64	DATA_IN	I	CODEC CS4226 DATA output detector
65	ABOOT_I	I/O	DSP CS4925 AUTO BOOT/INTREQ
66	CS_RST	O	DSP CS4925 RESET
67	CS_25	O	DSP CS4925 CHIP SELECT
68	VDD	—	+5V
69,70	X2,1	—	CERAMICS CLOCK OSCILLATION
71	IC(VPP)	—	GND
72,73	XT2,1	—	N.C.
74	AVDD	—	+5V
75	AVREF0	—	GND
76	DSA	O	DIGITAL INPUT SELECTOR TC74HC153AF
77	DSB	O	DIGITAL INPUT SELECTOR TC74HC153AF
78	DSG	O	DIGITAL INPUT SELECTOR TC74HC153AF
79	DI/AI	O	INPUT SELECTOR DIGITAL/ANALOG SELECT TC74HC153AF
80	INT/BOOT	O	CS4925 INTRQ/AUTO BOOT SELECT

## 6-3 PORT CONTROL

6-3-1 Pin3,5,6 EX ROM CONTROL CS492501 (x08 : IC30 ) CONDITION : BOOT

	A15 (pin3)	A16 (pin5)	A17 (pin6)
AC-3 / PCM	L	L	L
MPEG	H	H	L
DSP MODE	H	L	L

6-3-2 Pin76-79 TC74HC153AF (X08 : IC26) CONTROL

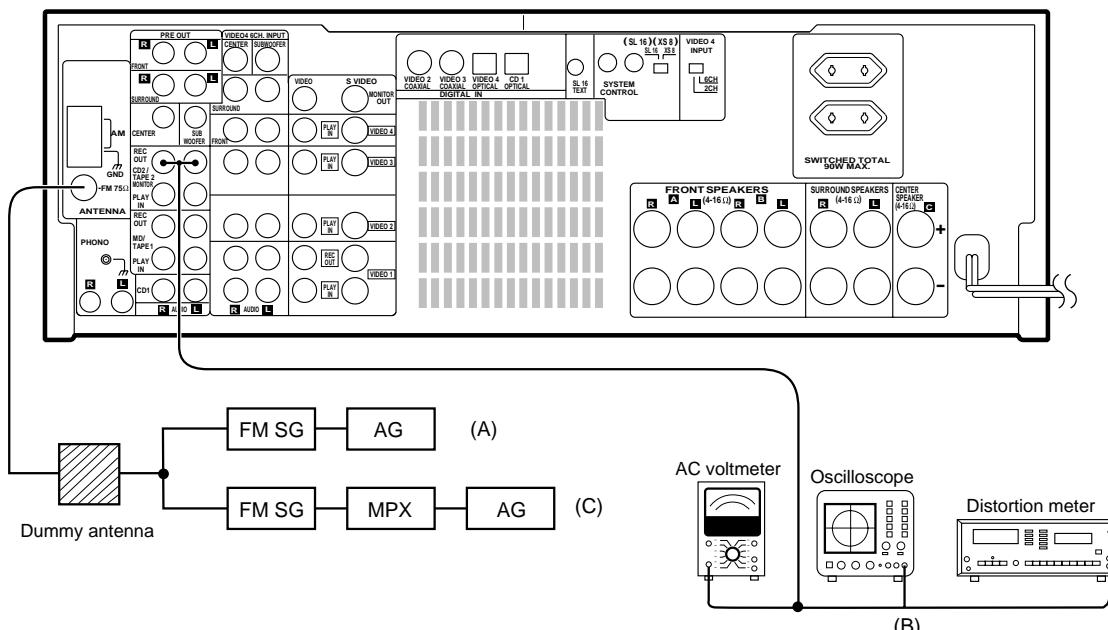
INPUT TYPE	SEL.OUTPUT	DI/AI(pin79)	DSG(pin78)	DSB(pin77)	DSA(pin76)
ANALOG ONLY	EXCEPT CD1 VIDEO2 VIDEO3 VIDEO4	H	H	OPTION	OPTION
ANALOG	CD1 VIDEO2 VIDEO3 VIDEO4	H	H	OPTION	OPTION
DIGITAL	CD1 VIDEO2 VIDEO3 VIDEO4	L	L	H	H

# KRF-V7771D/V7771DE

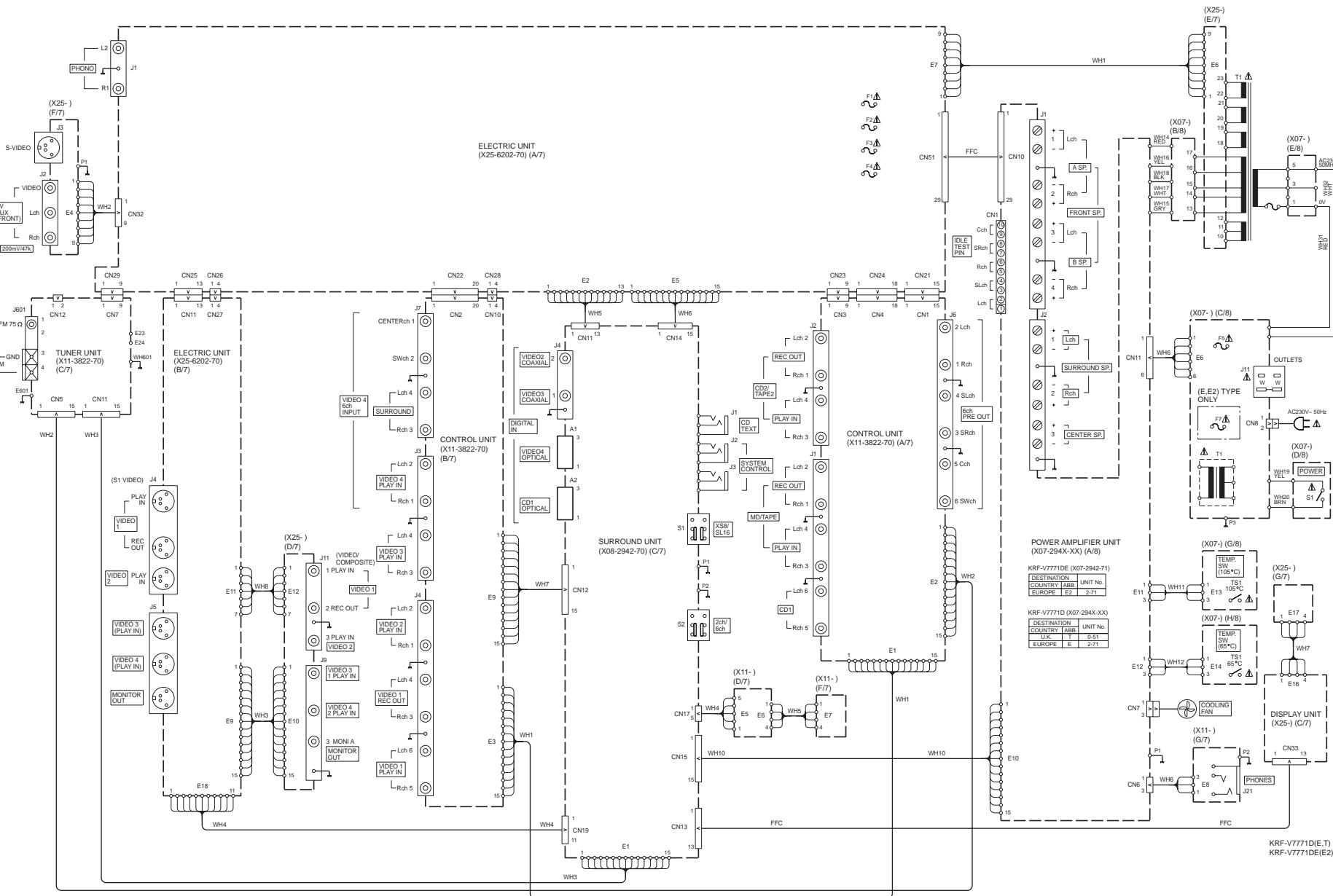
## ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	REceiver SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
FM SECTION :		SELECTOR : FM			*Adjust NO.1 and NO.2 repeat.		
1	DISCRIMINATOR	(A) 98.0MHz 1kHz, $\pm 40\text{kHz}$ dev. 70dBf (ANT. input)	Connect a DC voltmeter between CN12 ① and CN12 ② (X11)	MONO 98.0MHz	L604 (X11)	0V	(a)
2	DISTORTION (MONO)	(A) 98.0MHz 1kHz, $\pm 40\text{kHz}$ dev. MONO 70dBf (ANT. input)	(B)	MONO 98.0MHz	L605 (X11)	Minimum distortion	(a)
3	DISTORTION (STEREO)	(C) 98.0MHz 1kHz, $\pm 40\text{kHz}$ dev. Selector : L or R Pilot : $\pm 6\text{kHz}$ dev. 70dBf (ANT. input)	(B)	AUTO 98.0MHz	IFT(RF FRONTEND : A601)	Minimum distortion (L or R)	(a)
4	TUNING LEVEL	(A) 98.0MHz MONO 1kHz, $\pm 40\text{kHz}$ dev. 25dBf (ANT. input)	(B)	MONO 98.0MHz	VR601 (X11)	Adjust VR601 and stop at the point where ED1 (TUNED) goes on.	(a)
AUDIO SECTION		SPEAKER : A		PREOUT : OFF		PROLOGIC : ON	
<1>	IDLE CURRENT	—	Connect a DC voltmeter across CN1 (each port) 1, 2 pin : L 5, 6 pin : R 3, 4 pin : SL 7, 8 pin : SR 9, 10 pin : C	(FRONT 2ch MODE) Volume:0	VR1(L) VR2(R) VR3(SL) VR4(SR) VR5(CENTER) (X07-)	10mV	

### SYSTEM CONNECTIONS



## WIRING DIAGRAM



## **PC BOARD(Component side view)**

1

2

3

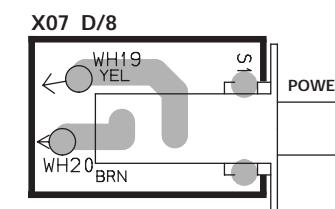
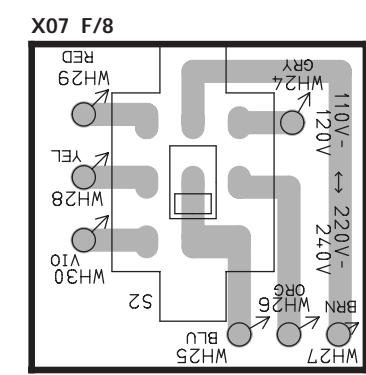
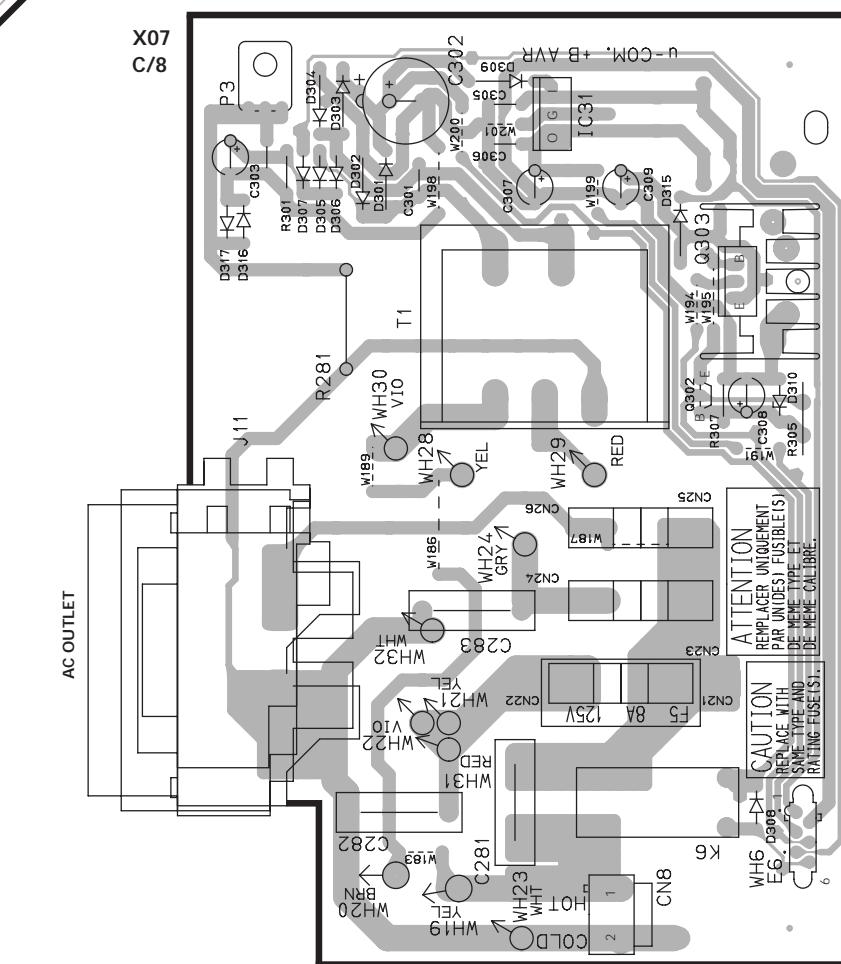
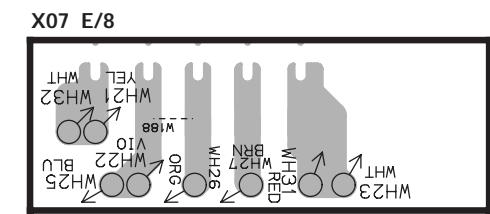
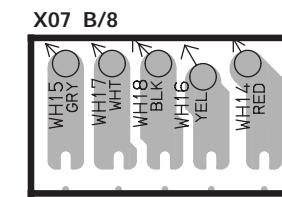
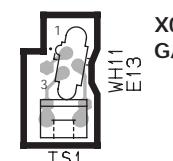
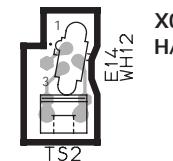
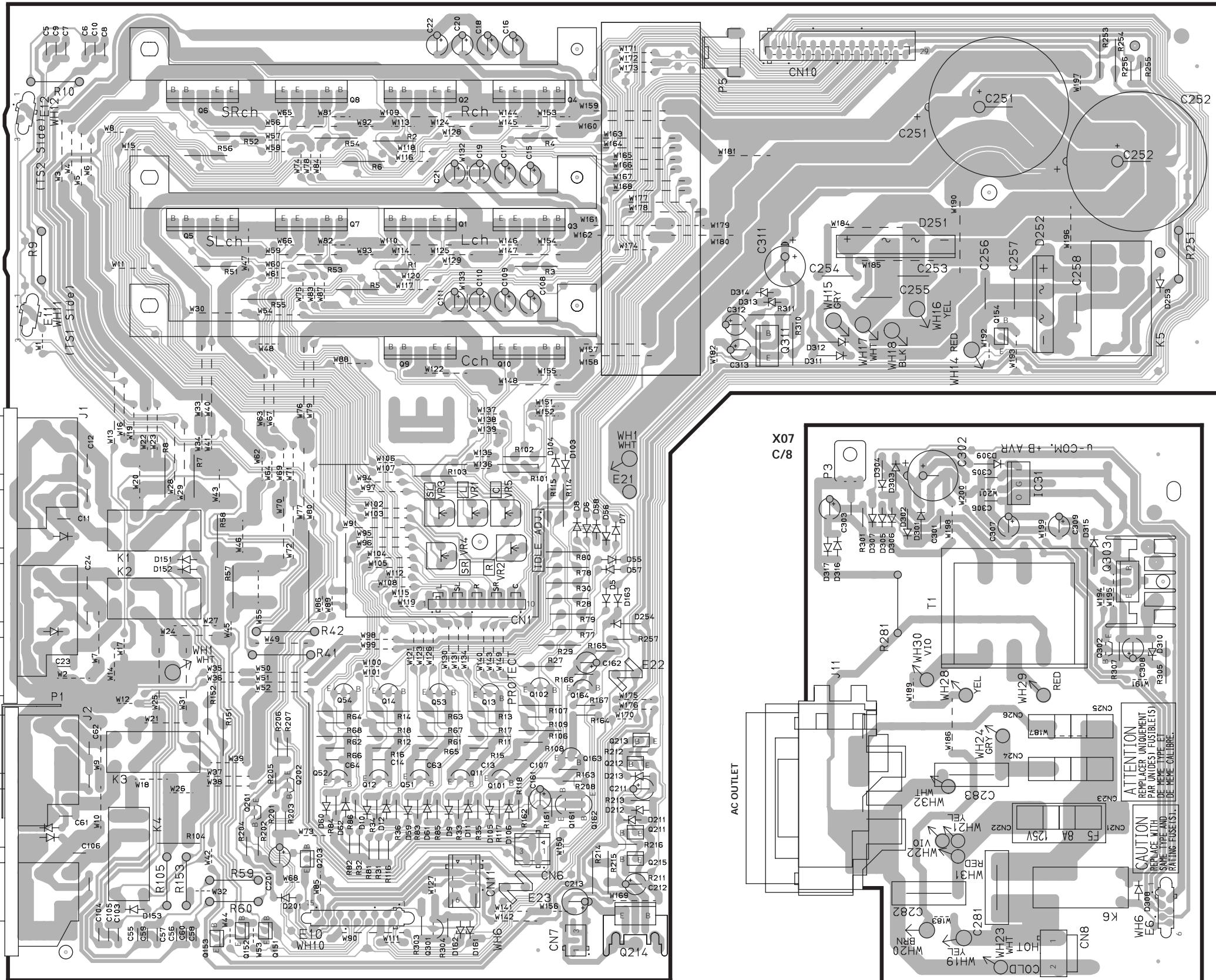
4

5

6

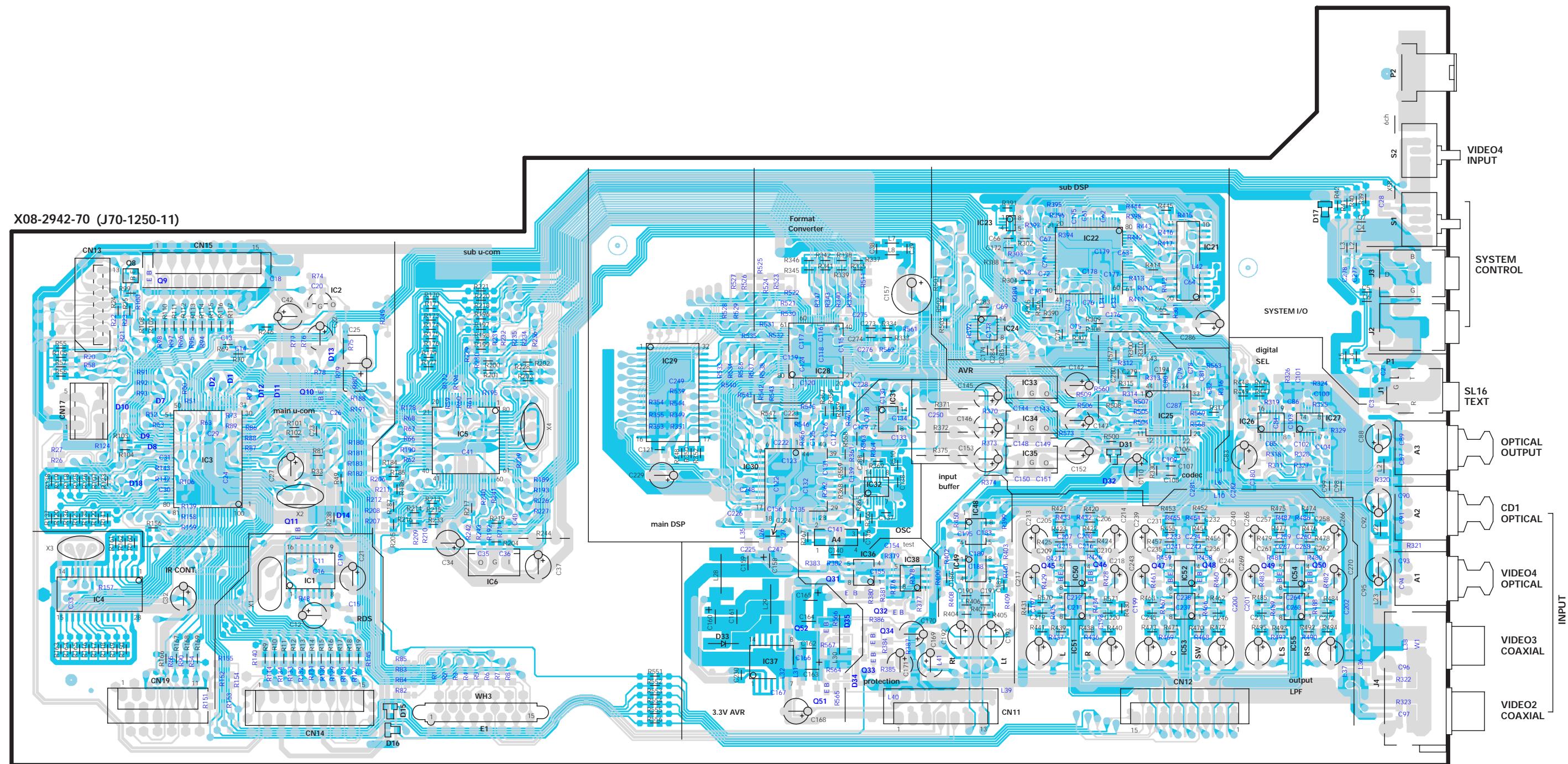
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X07-294X-XX A/8 (J70-1153-11)



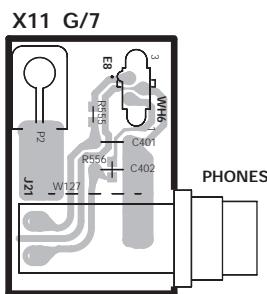
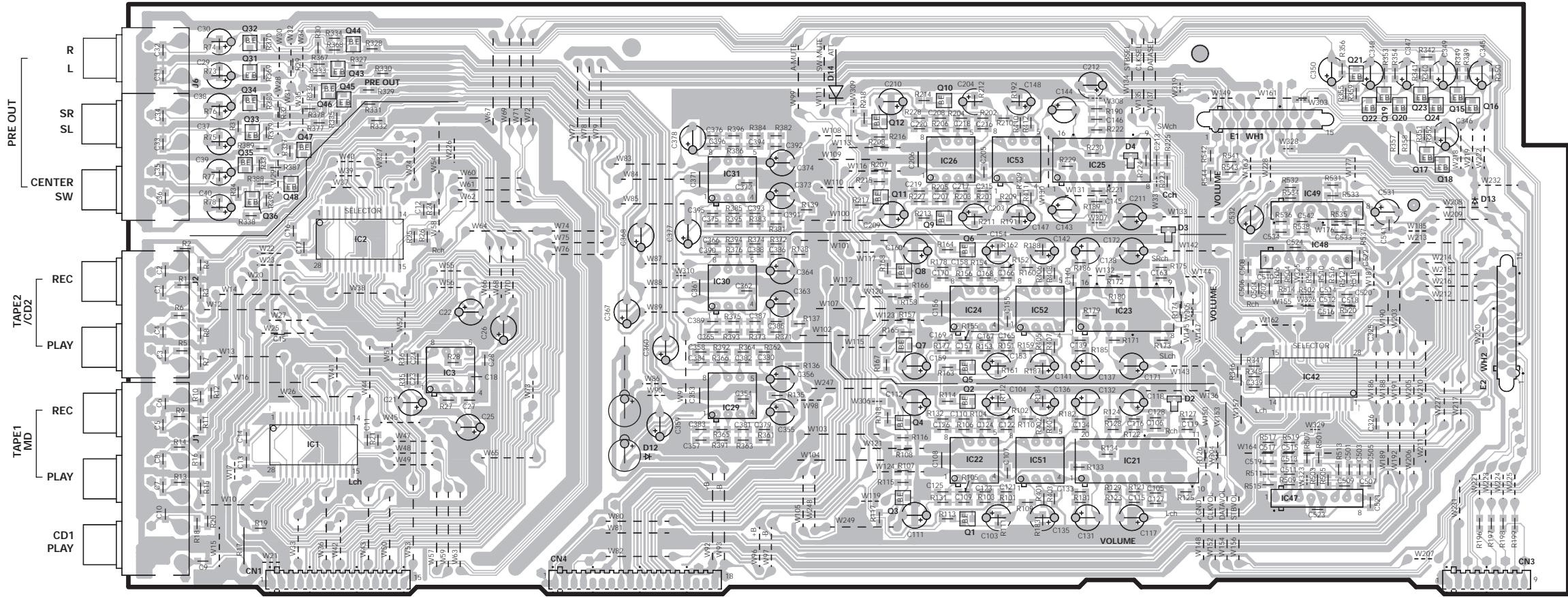
Refer to the schematic diagram for the value of resistors and capacitors.

## PC BOARD(Component side view)

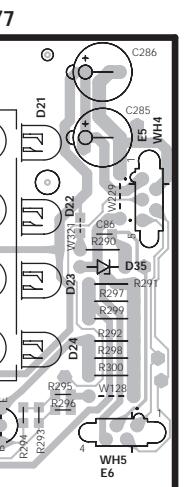
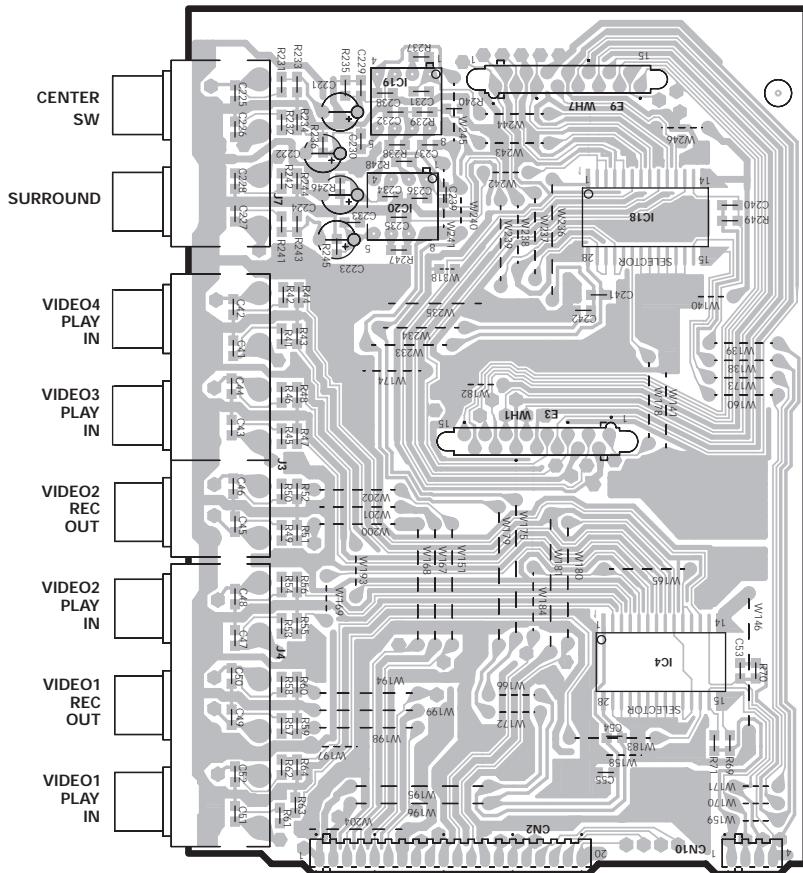


# PC BOARD(Component side view)

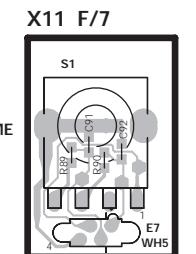
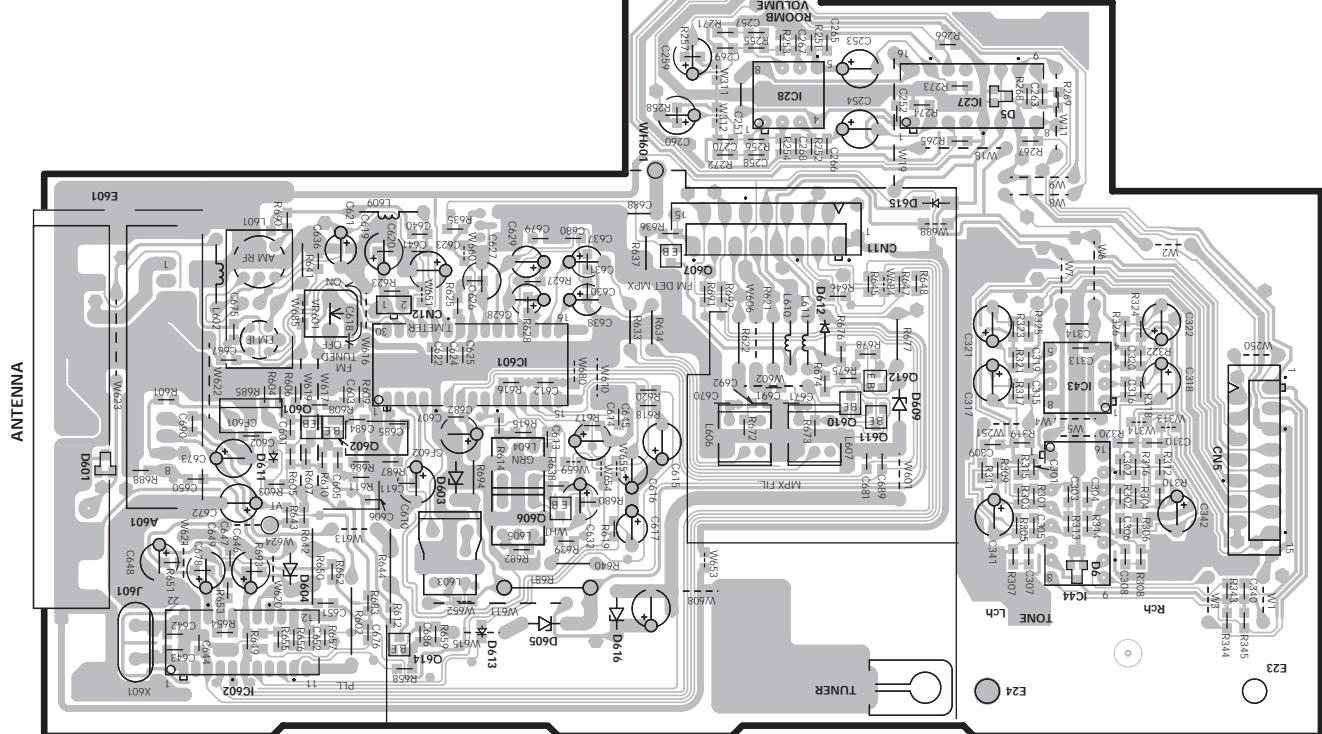
X11-3822-70 A/7 (J70-1251-11)



X11 B/7



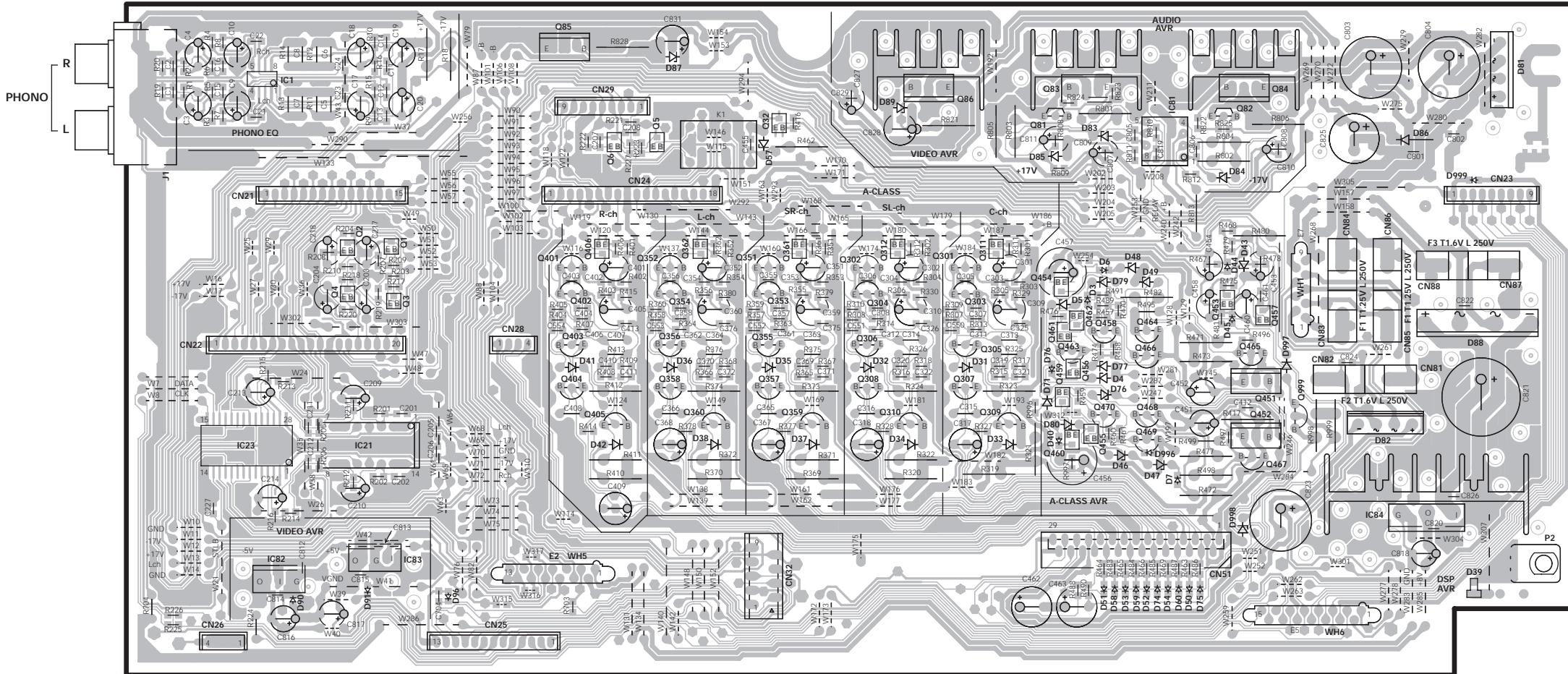
X11 C/7



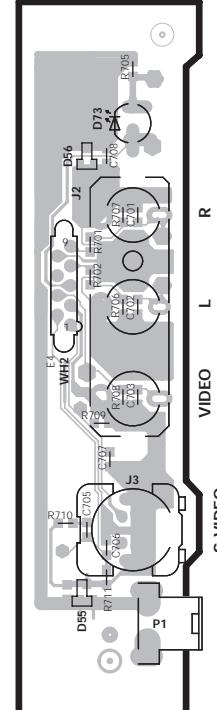
Refer to the schematic diagram for the value of resistors and capacitors.

# PC BOARD(Component side view)

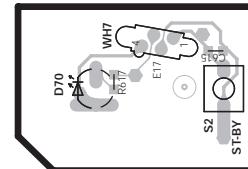
X25-6202-70 A/7 (J70-1292-11)



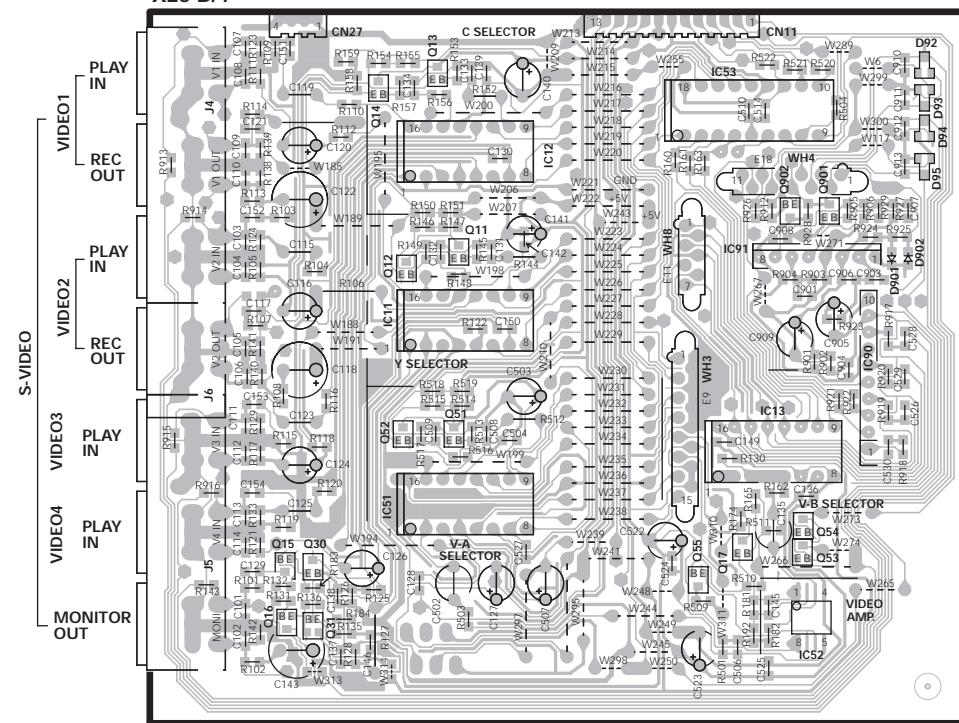
X25 F/7



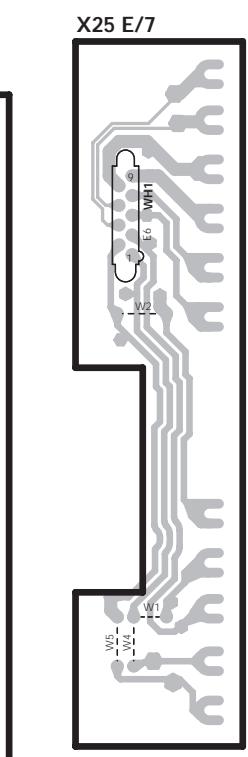
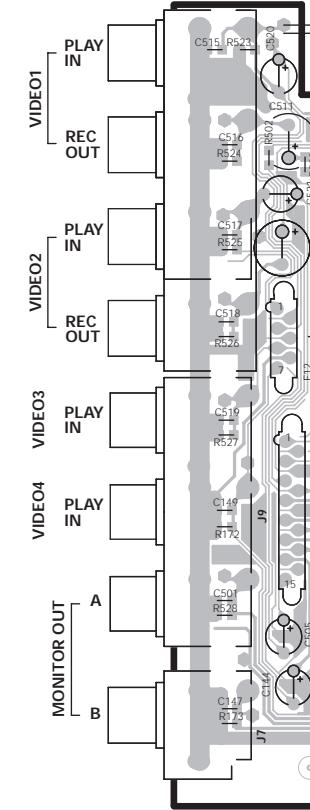
X25 G/7



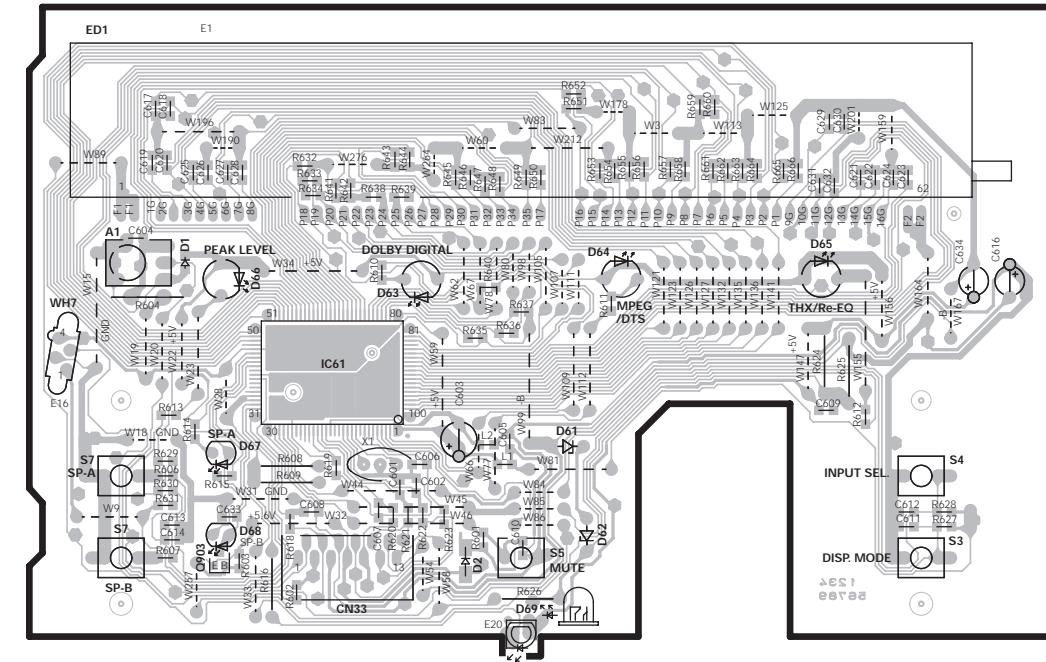
X25 B/7

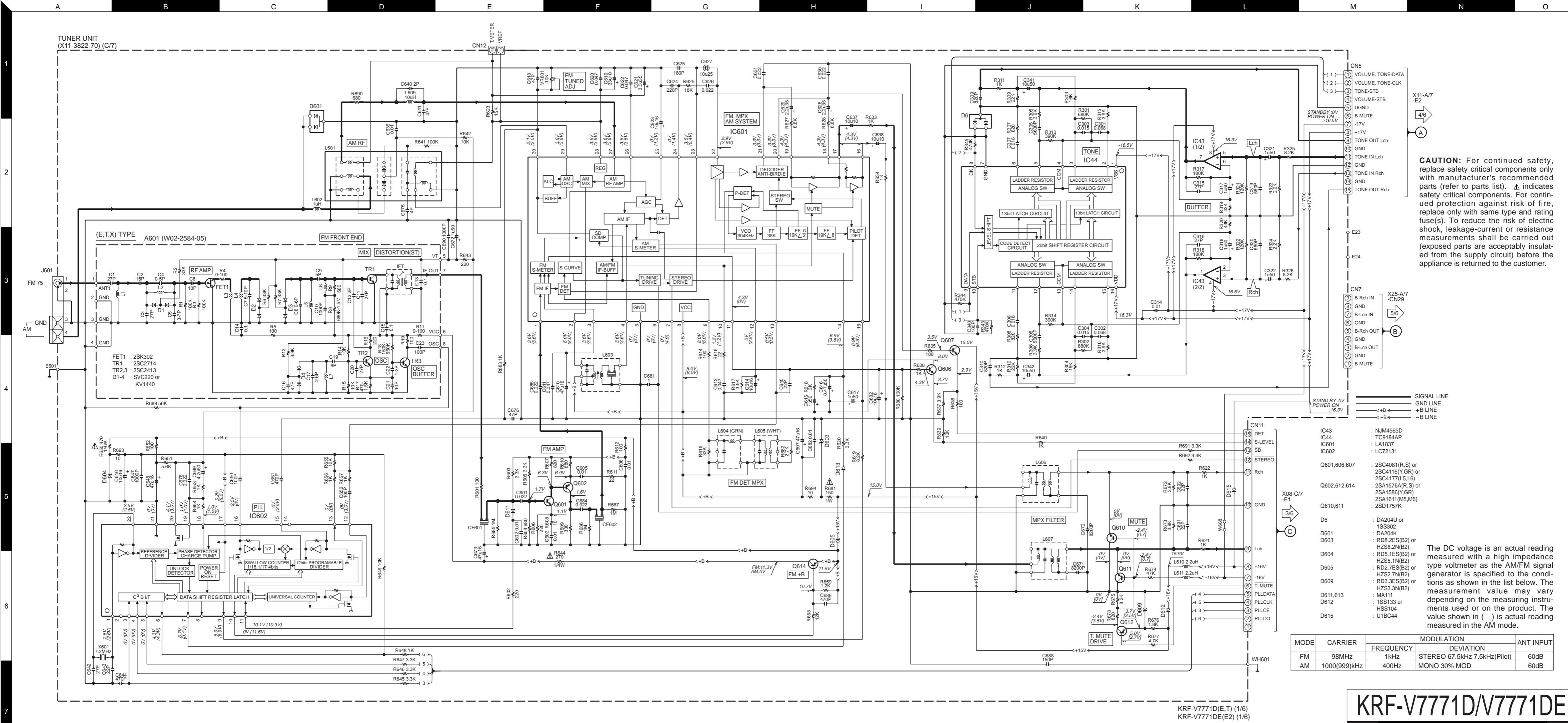


X25 D/7



X25 C/7





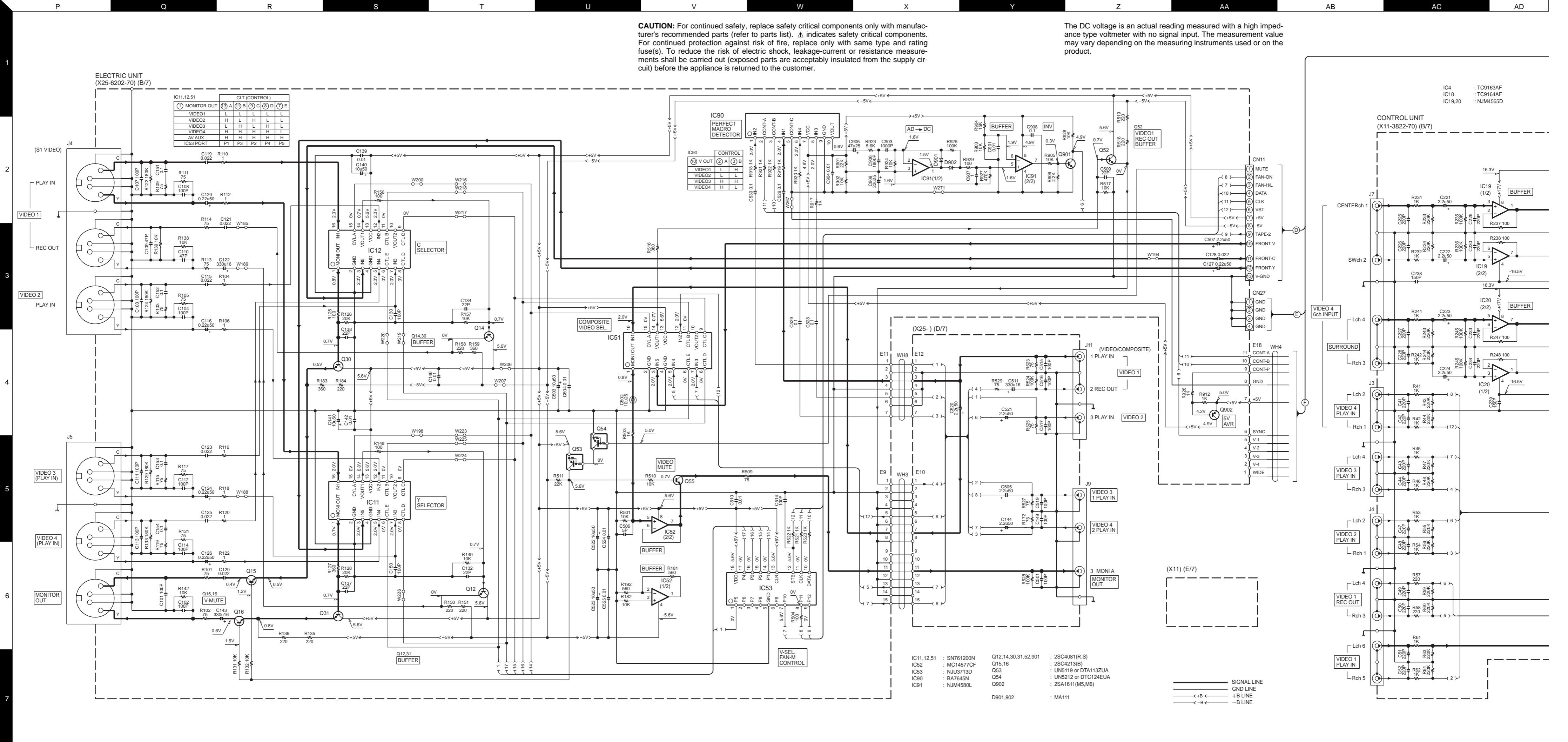
**ON:** For continued safety, safety critical components only manufacturer's recommended refer to parts list).  $\Delta$  indicates critical components. For continuation against risk of fire, only with same type and rating. To reduce the risk of electric leakage-current or resistance measurements shall be carried out until parts are acceptably insulated (the supply circuit) before the equipment is returned to the customer.

DC voltage is an actual reading measured with a high impedance voltmeter as the AM/FM signal generator is specified to the conditions shown in the list below. The measurement value may vary depending on the measuring instrument used or on the product. The value shown in ( ) is actual reading measured in the AM mode.

IER	MODULATION		ANT INPUT
	FREQUENCY	DEVIATION	
-Hz	1kHz	STEREO 67.5kHz 7.5kHz(Pilot)	60dB
9kHz	400Hz	MONO 30% MOD	60dB

RF-V7771D/N7771DE

ENWOOD



5/6

D

5/6

E

3/6

F

3/6

G

4/6

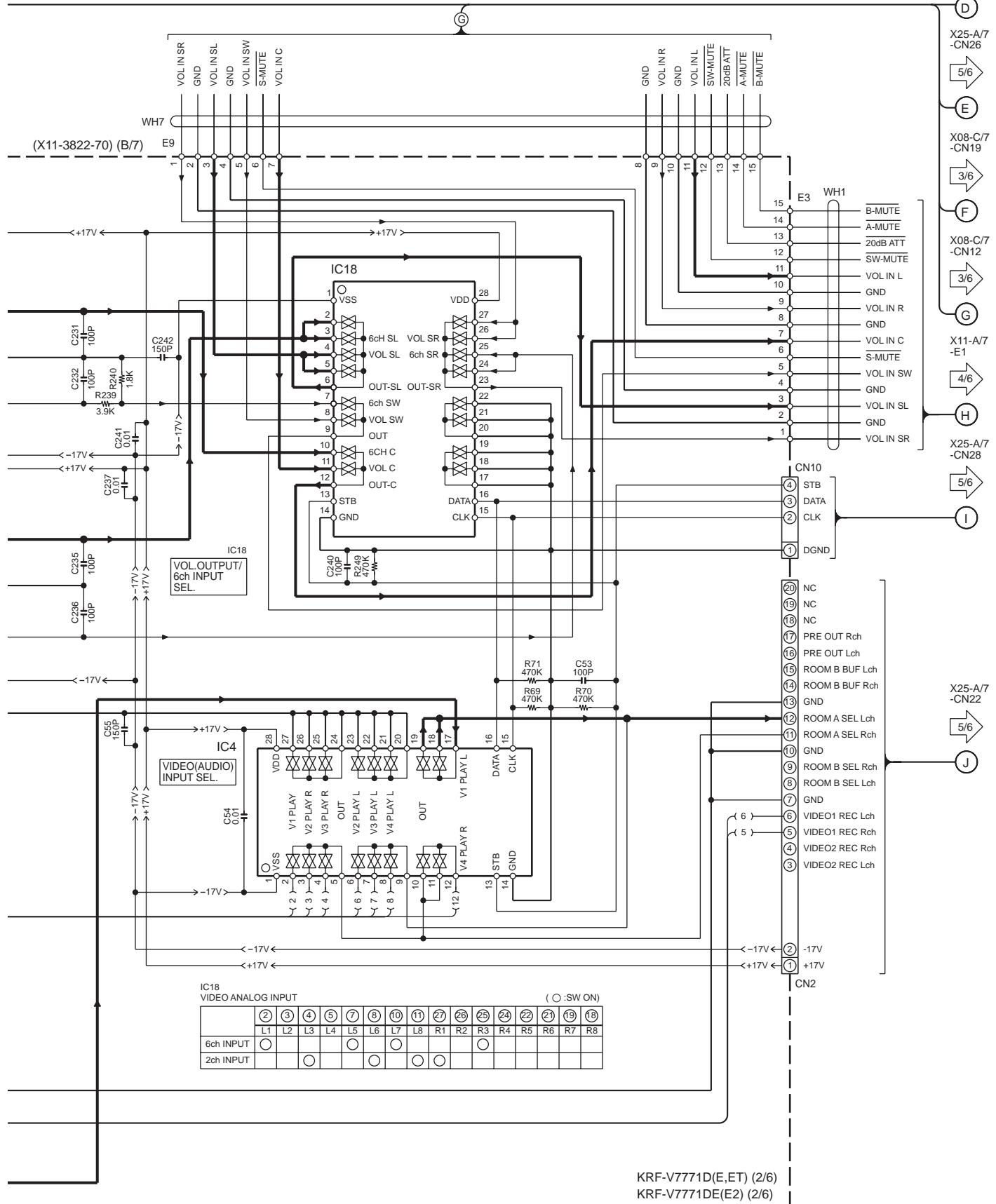
H

5/6

I

5/6

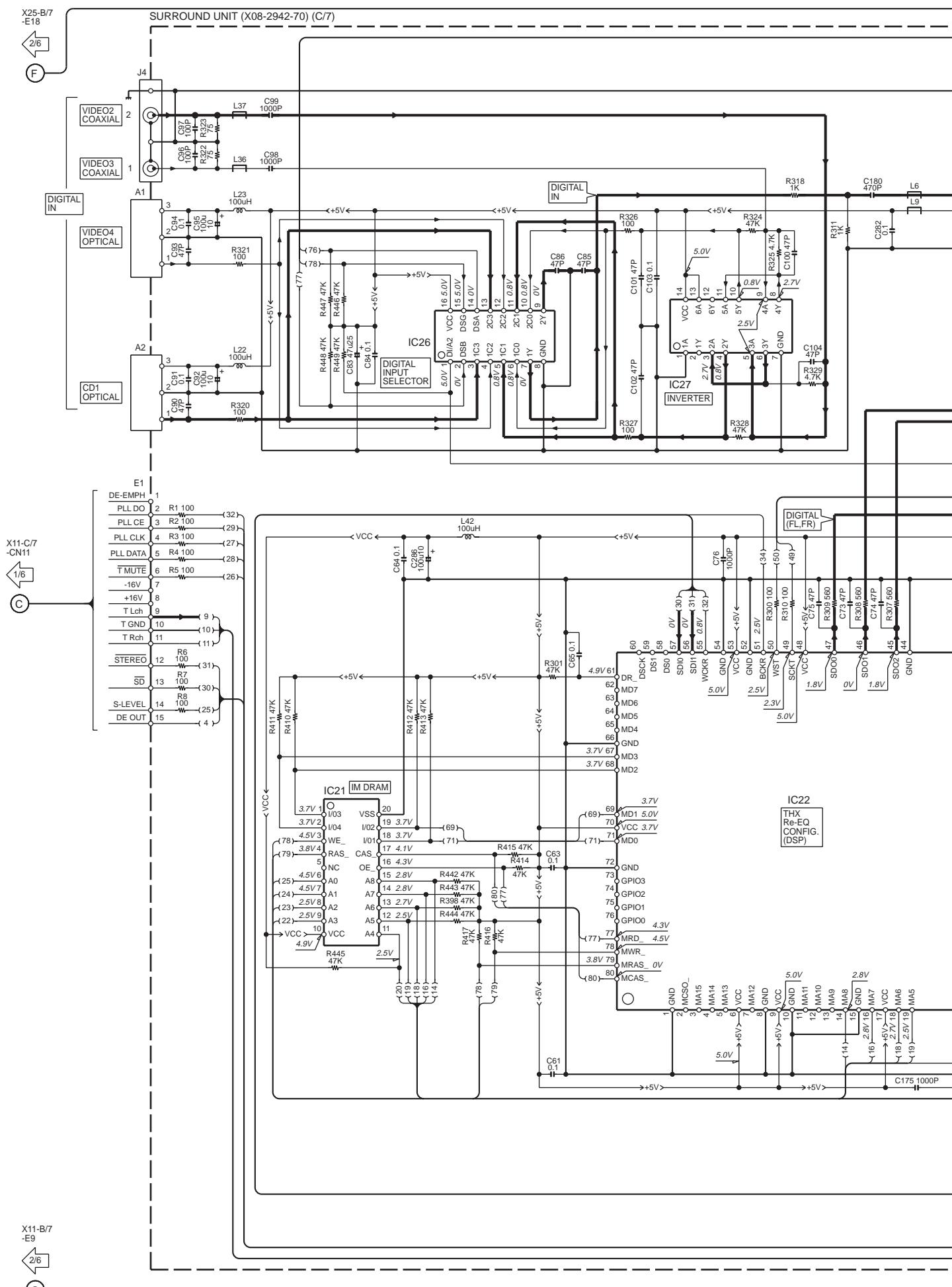
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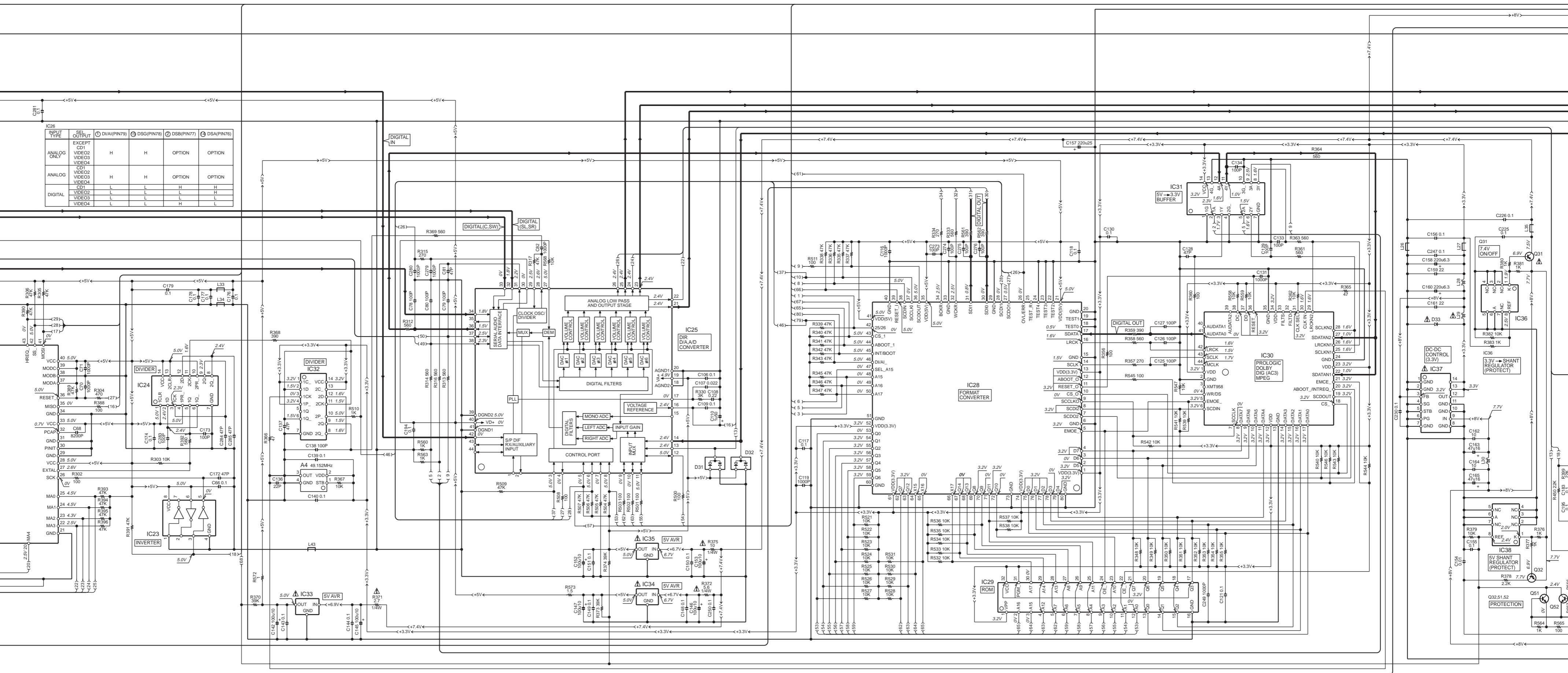


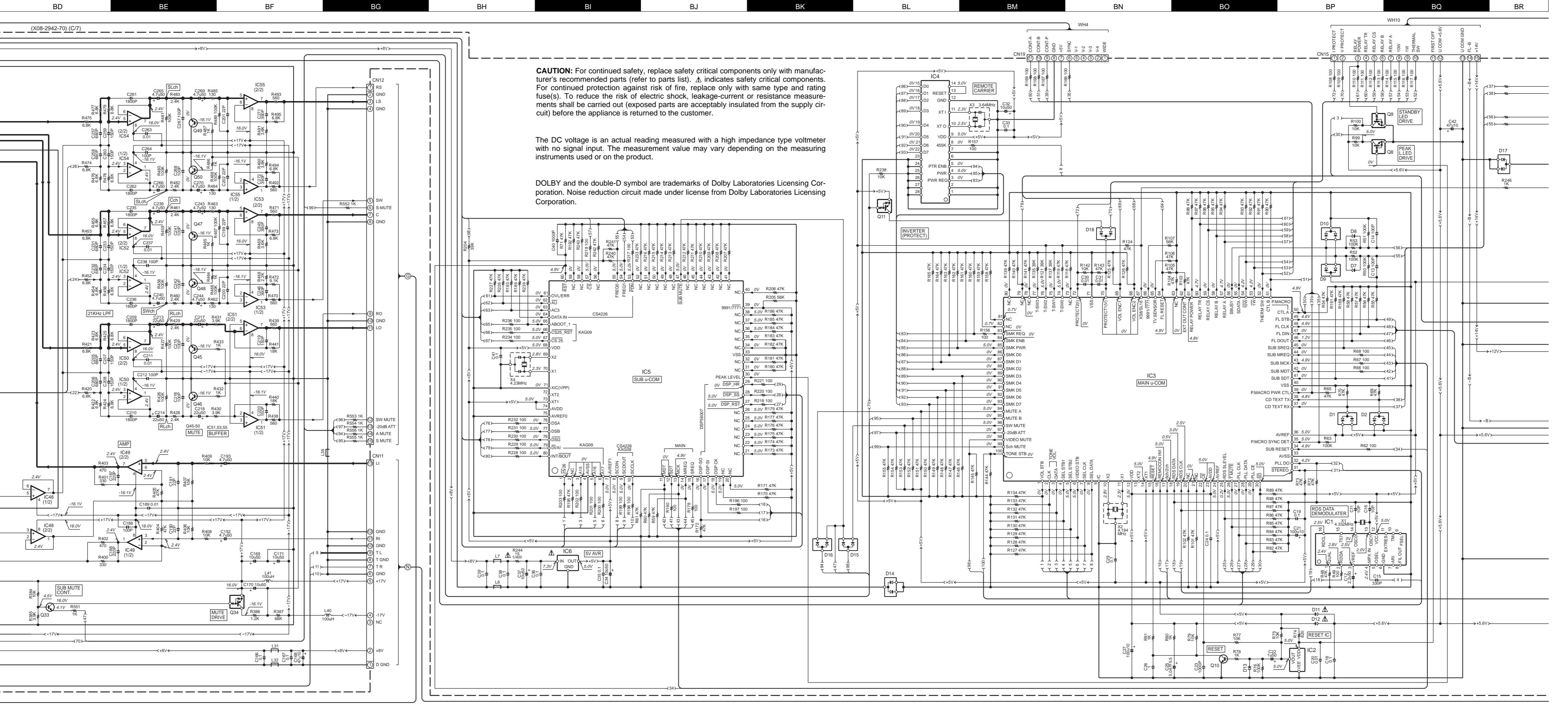
KRF-V7771D/V7771DE

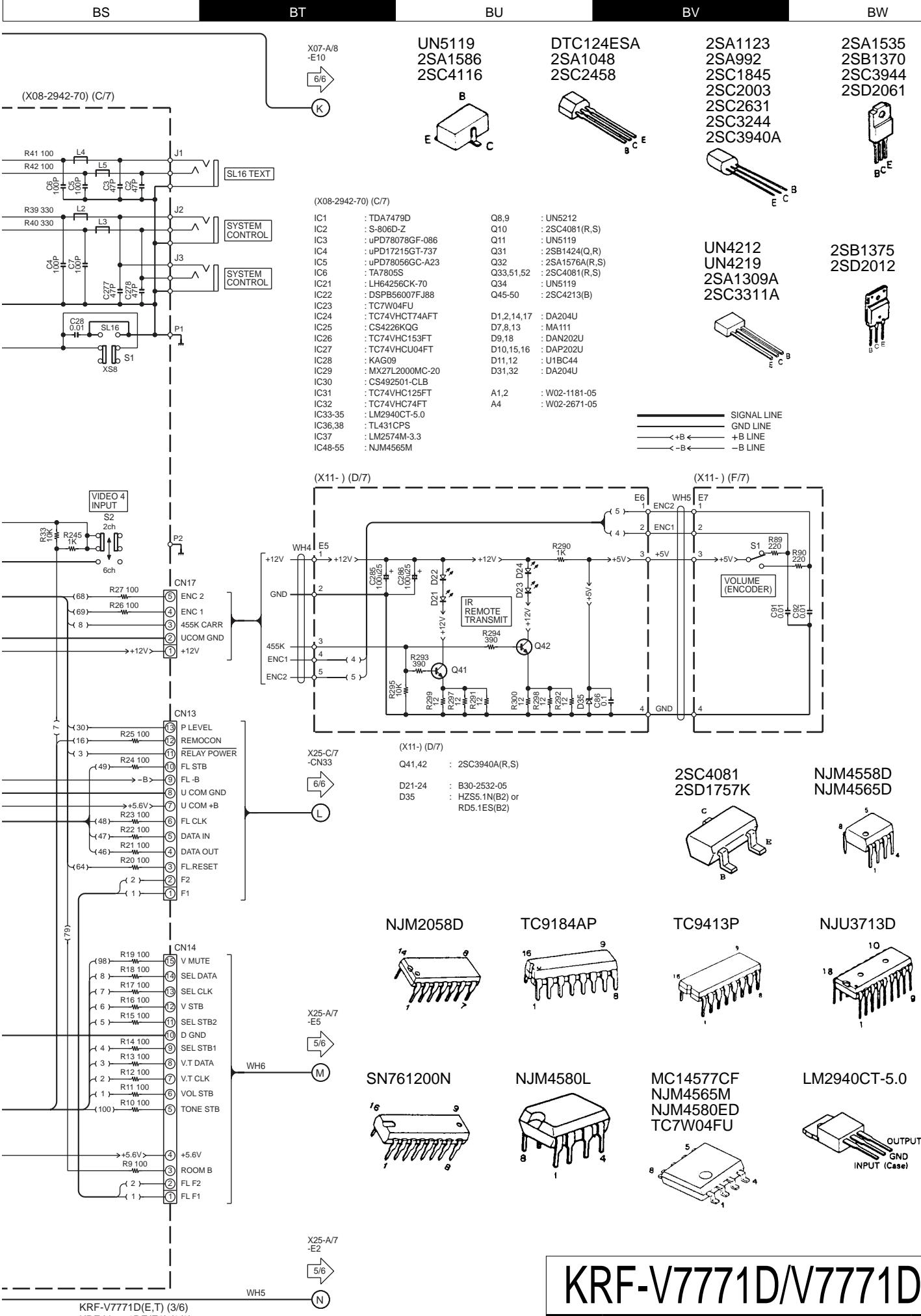
Y05-3862-70

KENWOOD









BX

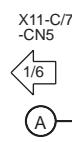
BY

BZ

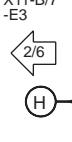
CA

CB

1



2



3



4



5



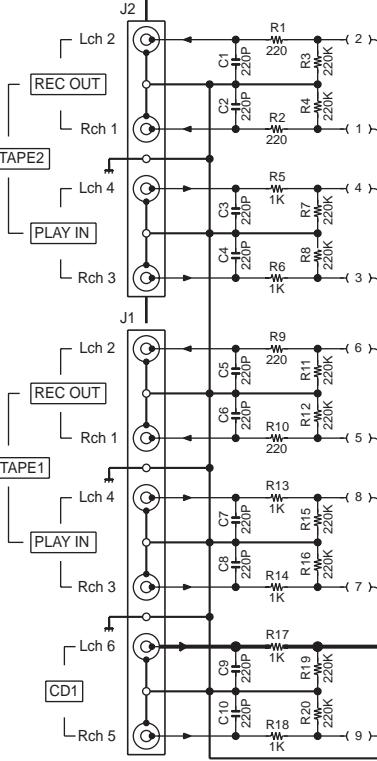
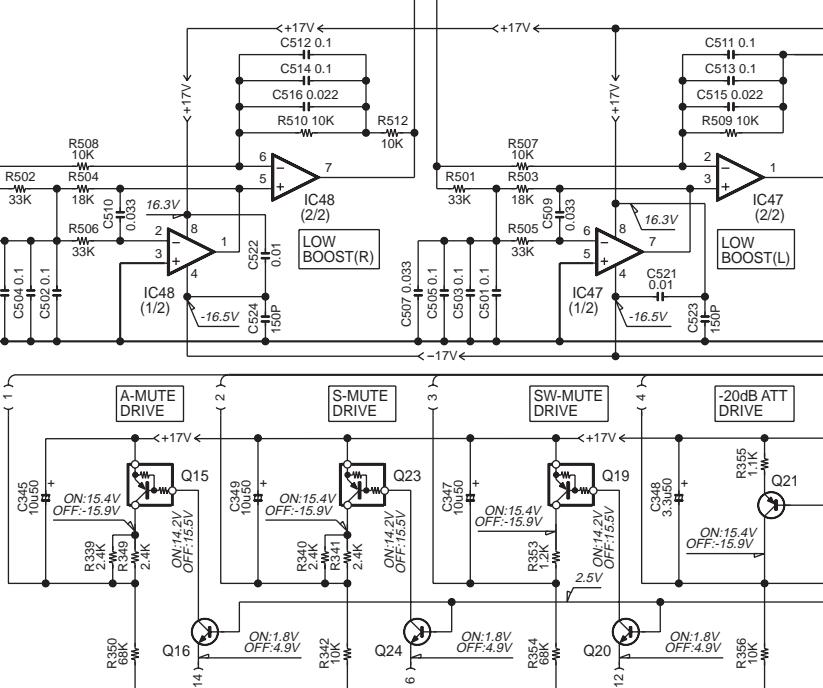
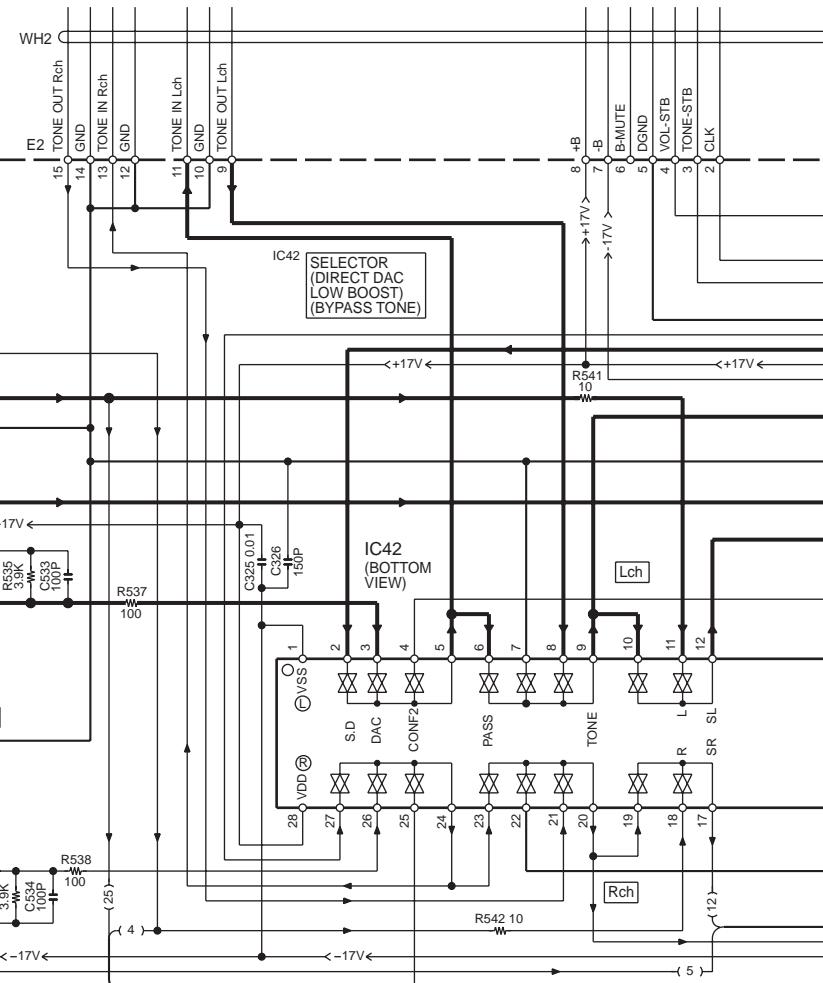
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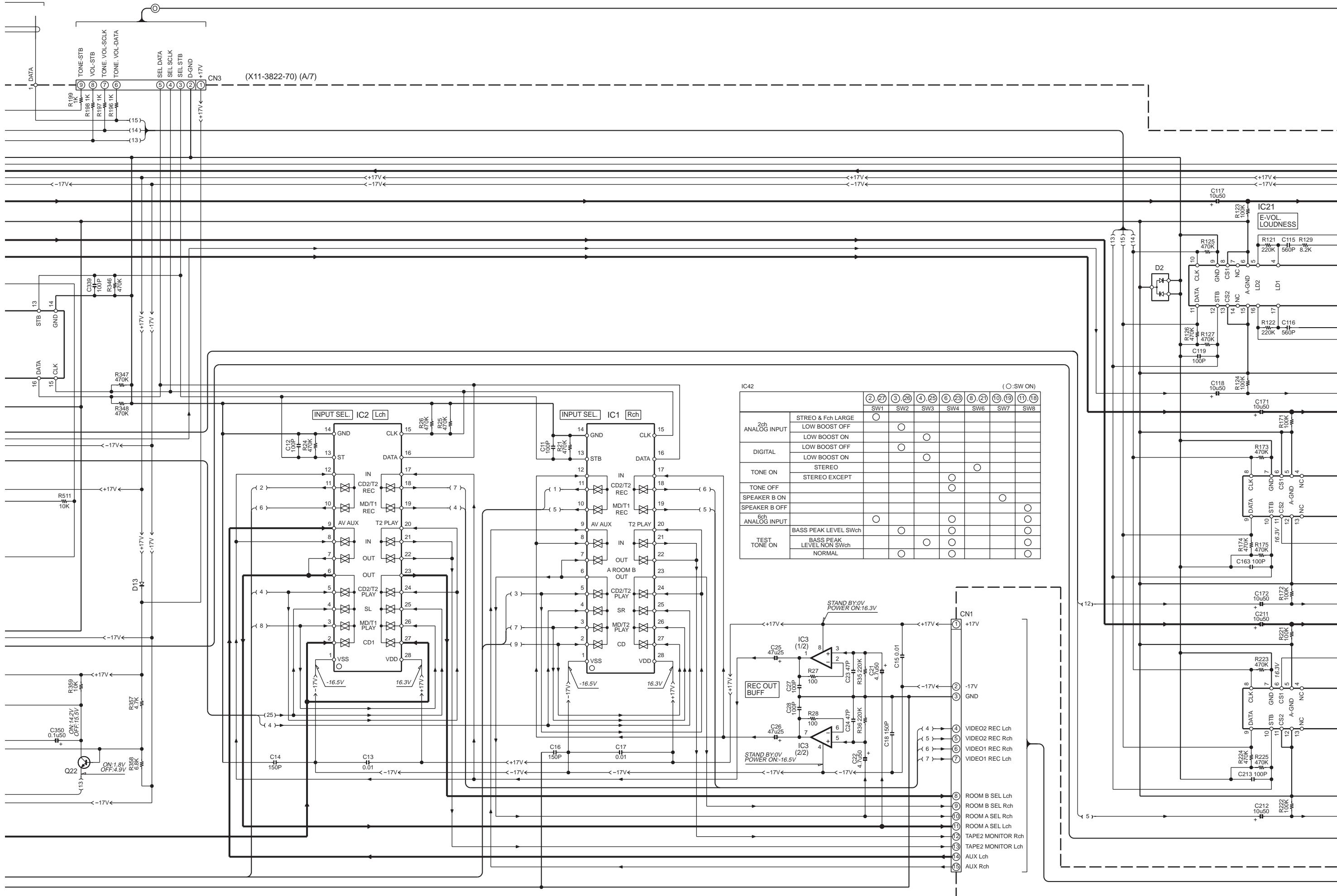


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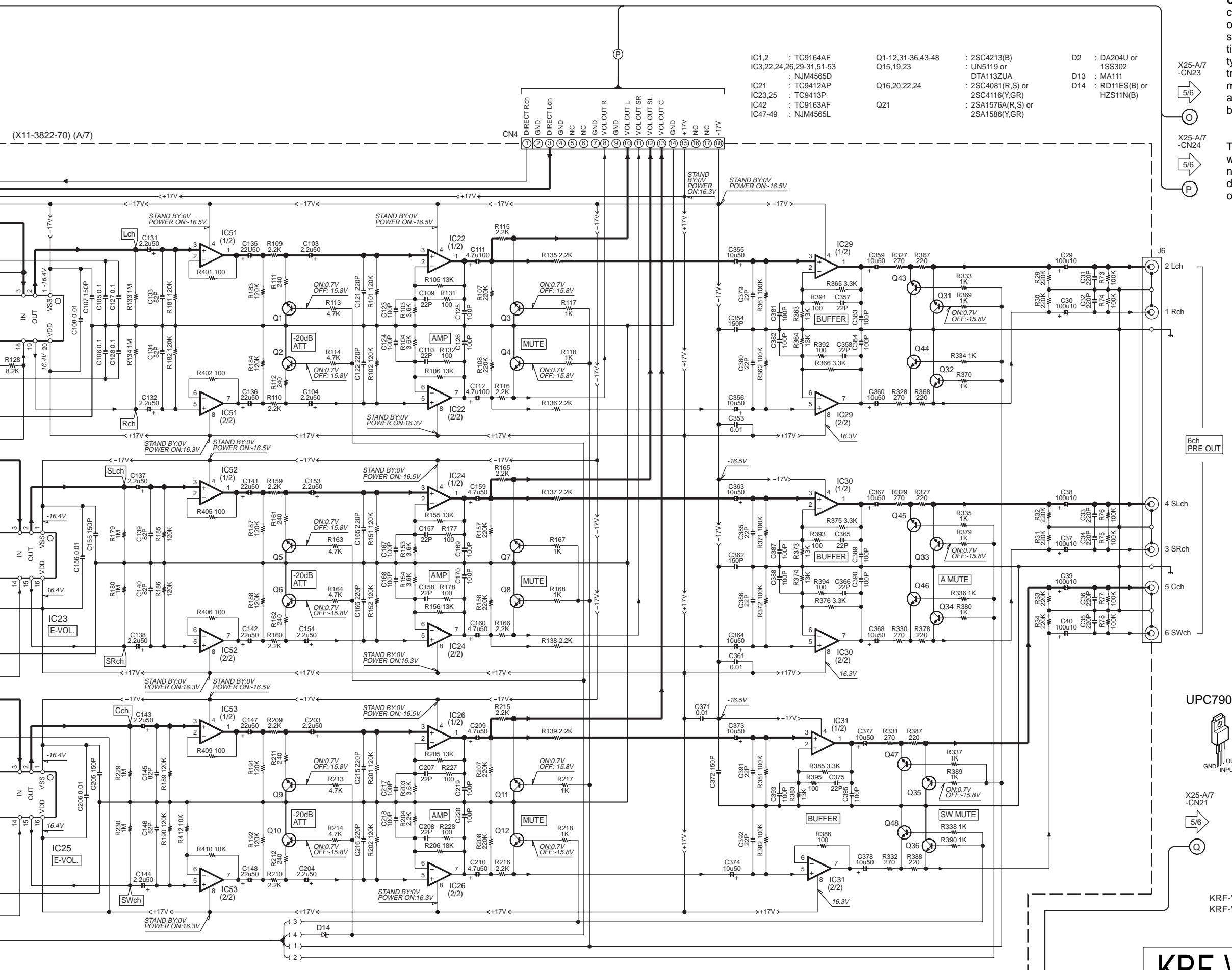
### CONTROL UNIT (X11-3822-70) (A/7)





**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

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



KRF-V7771D(E,T) (4/6)  
KRF-V7771DE(E2) (4/6)

UPC7905AHF TA7805

UPC7905AHF TA7805

TC9412A

TC9412A

SI-3082V

SI-3082V

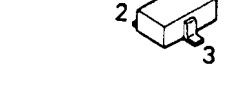
DAN2021  
A1

DAN2021  
A1

UPC7805AHF



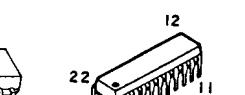
UN5212



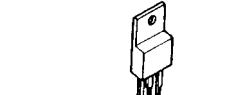
TC9162AF  
TC9163AF



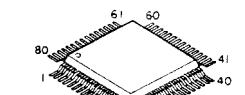
LC72131



TA79005S



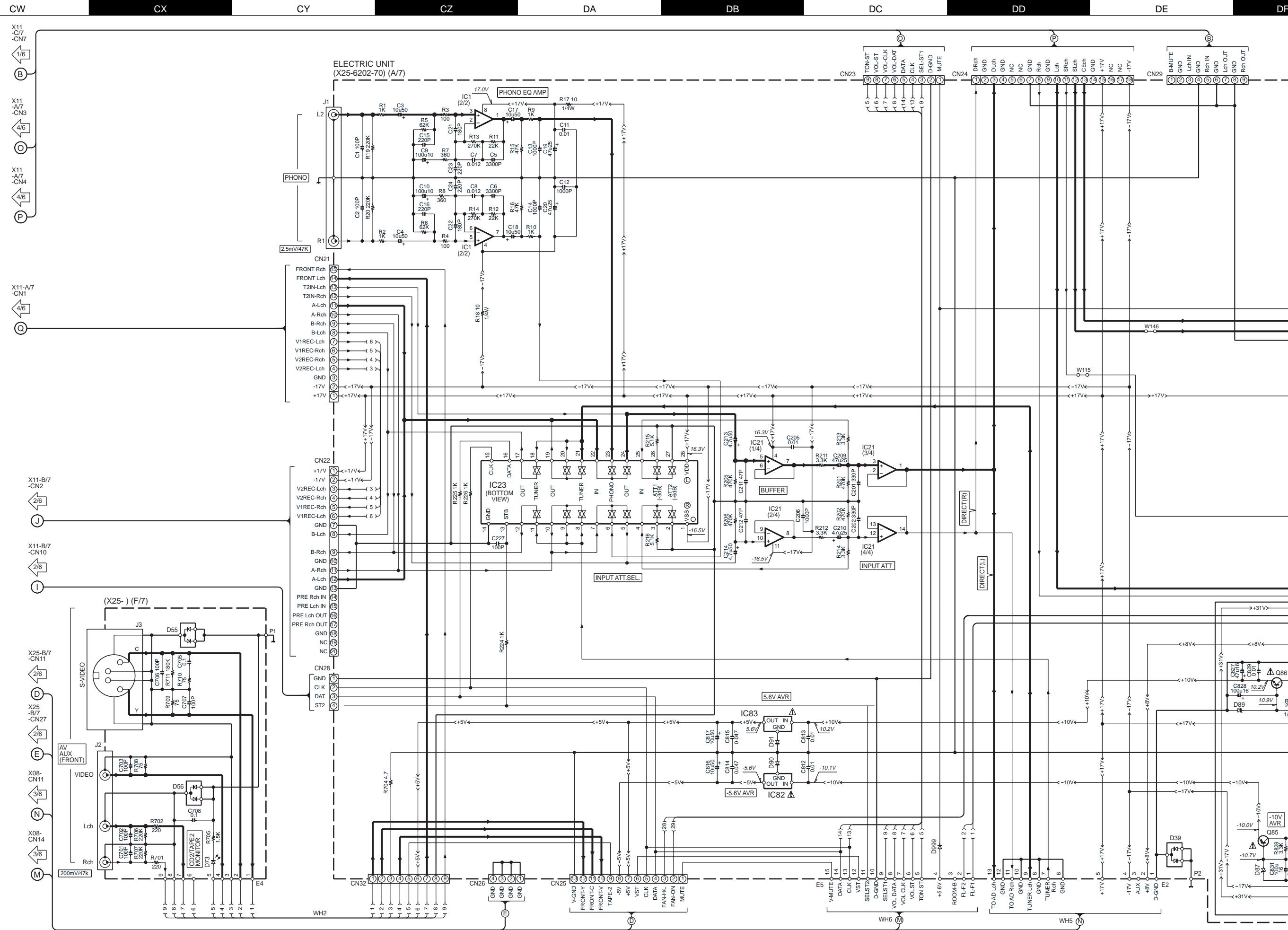
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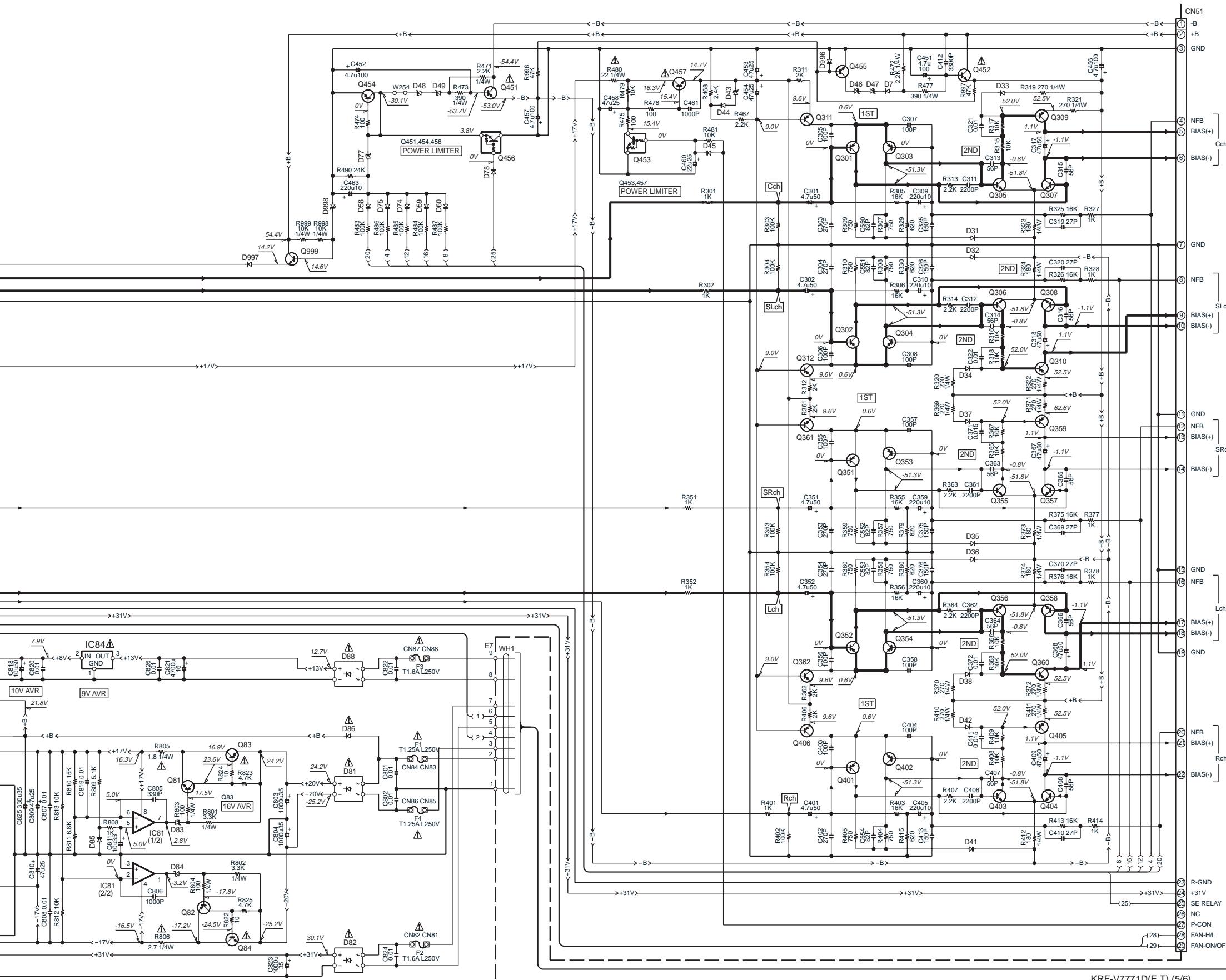
# KRF-V7771D/V7771DE

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## KENWOOD

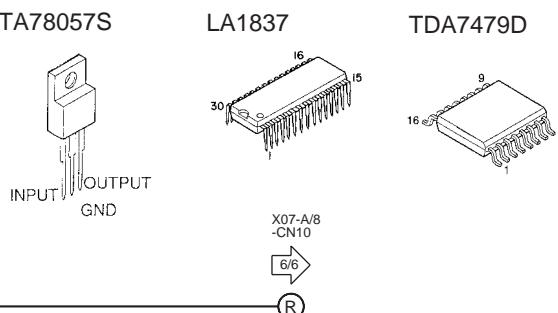


(X25-6202-70) (A/7)



**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

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



NJM4580ED  
: NJM2058D  
: TC9162AF  
: NJM4558D  
: TA79005S or UPC7905AHF  
: TA7805S or UPC7805AHF  
: SI-2020V

- : 2SC2458(Y,GR) or 2SC3311A(Q,R)
- : 2SA1048(Y,GR) or 2SA1309A(Q,R)
- : 2SB1370(E,F) or 2SB1375
- : 2SD2061(E,F) or 2SD2012
- : 2SA992(F,E)
- : 2SC2631(R,S)
- : 2SA1123(R,S)
- : 2SA1586(Y,GR)
- : 2SA1535(R,S)
- : 2SC3944(R,S)
- : UN5612 or DTC124EU A
- : 2SA1611(M5,M6)
- : 2SC4177(L5,L6)

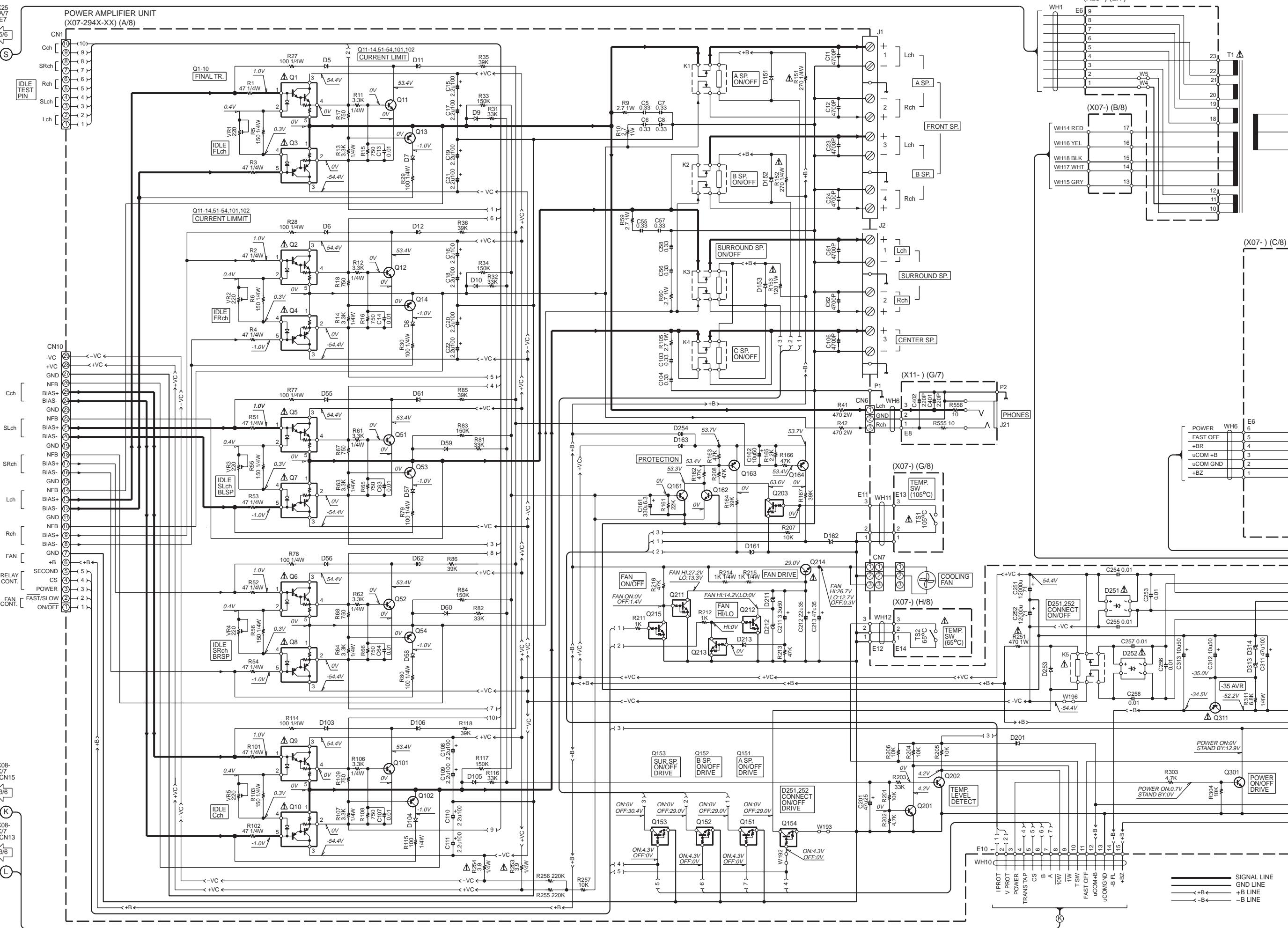
74,75,  
99  
97 : MA111  
: 1SS133 or HSS104  
: DA204K  
: RD5.1JS(B2) or HZS5.1S(B2)  
: RD16ES(B2) or HZS16N(B2)  
: RD18ES(B) or HZS18N(B)  
: RD13ES(B2) or HZS13N(B2)  
: RD11ES(B) or HZS11N(B)  
: B30-2493-05  
: 1B4B41  
: RD15ES(B) or HZS15N(B)  
: SS688B  
: RD11JS(B) or HZS11N(B)

KRF-V7771D(E,T) (5/6)  
KRF-V7771DE(E2) (5/6)

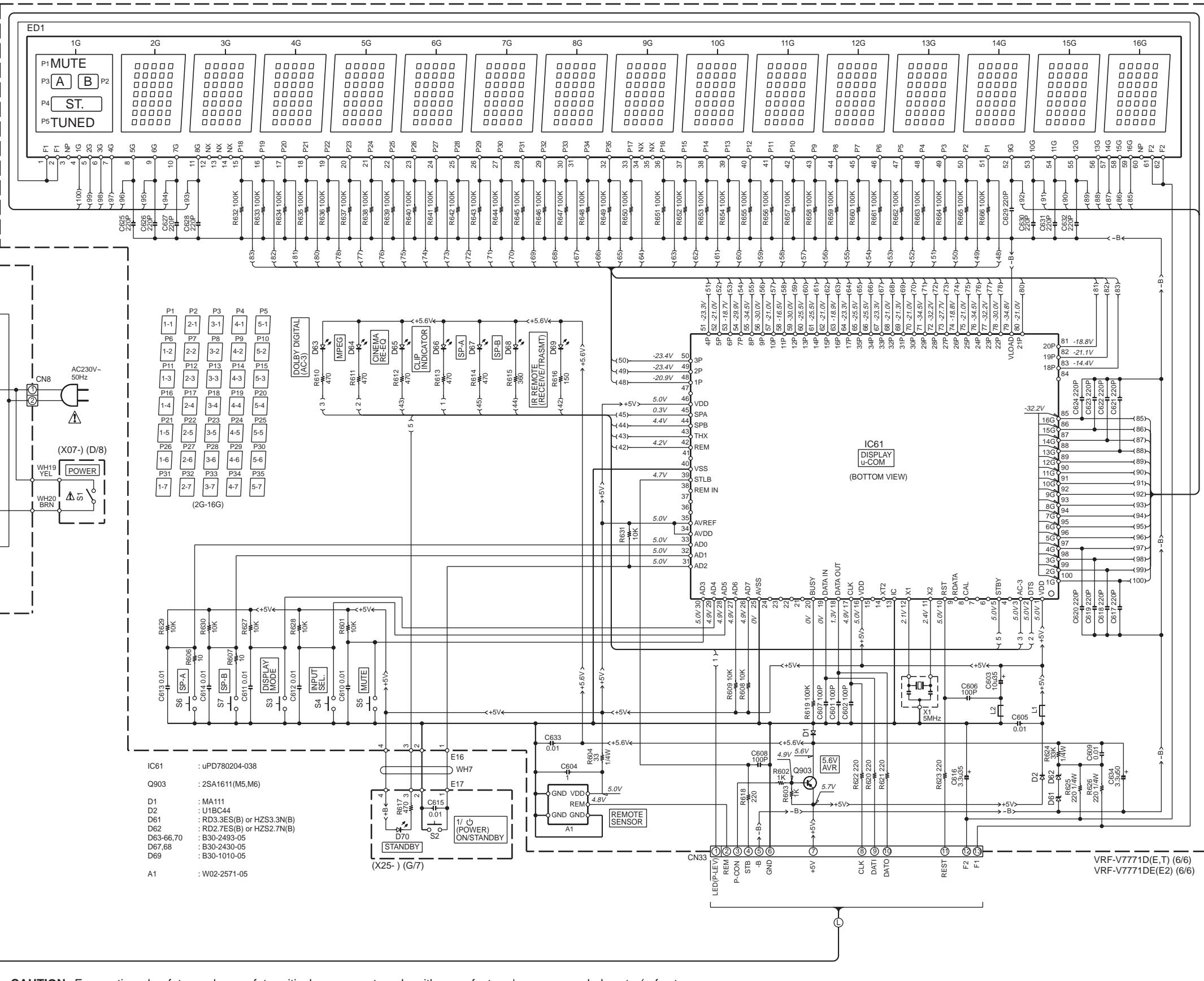
Y05-3862-70

# KRF-V7771D/V7771DE

KENWOOD



DISPLAY UNIT  
(X25-6202-70) (C/7)

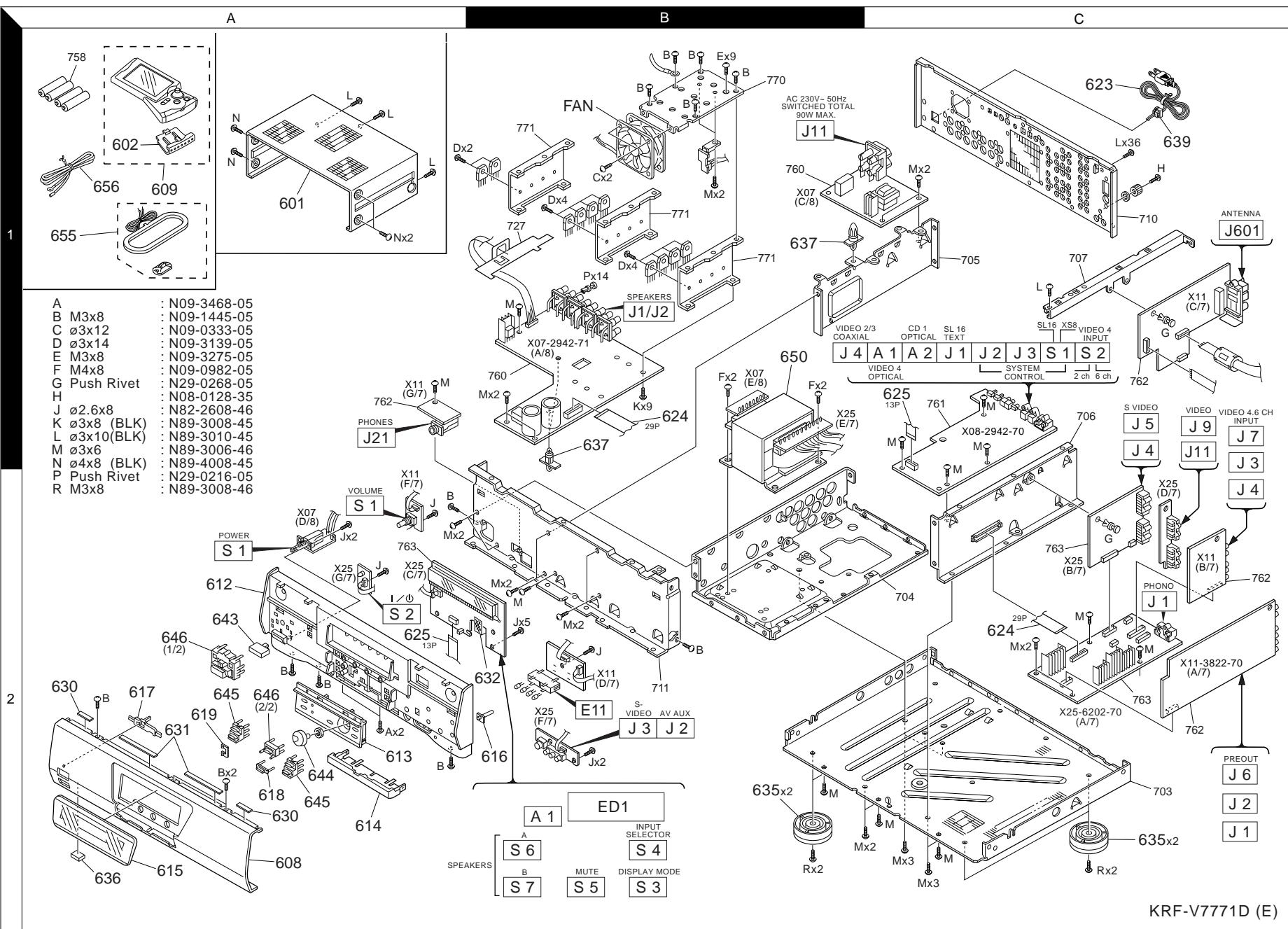


KRF-V7771D/N7771DE

KENWOOD

# KRF-V7771D/V7771DE

## EXPLODED VIEW (UNIT)





# KRF-V7771D/V7771DE

## PARTS LIST

Ref. No	Add- ress	New Parts	Parts No.	Description	Desti- nation	Re- marks
▲ T1			L07-2322-05	POWER TRANSFORMER		
R1~4			RD14NB2E470J	RD 47 J 1/4W		
R5, 6			RD14NB2E151J	RD 150 J 1/4W		
R9, 10			RS14KB3A2R7JFR	FL-PROOF RS 2.7 J 1W		
R11~14			RD14NB2E332J	RD 3.3K J 1/4W		
R27~30			RD14NB2E101J	RD 100 J 1/4W		
R41, 42			RS14KB3D471JFR	FL-PROOF RS 470 J 2W		
R51~54			RD14NB2E470J	RD 47 J 1/4W		
R55, 56			RD14NB2E151J	RD 150 J 1/4W		
R59, 60			RS14KB3A2R7JFR	FL-PROOF RS 2.7 J 1W		
R61~64			RD14NB2E332J	RD 3.3K J 1/4W		
R77~80			RD14NB2E101J	RD 100 J 1/4W		
R101, 102			RD14NB2E470J	RD 47 J 1/4W		
R103			RD14NB2E151J	RD 150 J 1/4W		
R105			RS14KB3A2R7JFR	FL-PROOF RS 2.7 J 1W		
R106, 107			RD14NB2E332J	RD 3.3K J 1/4W		
R114, 115			RD14NB2E101J	RD 100 J 1/4W		
▲ R151, 152		*	RD14NB2E271J	RD 270 J 1/4W		
▲ R153		*	RS14KB3A121JFR	FL-PROOF RS 120 J 1W		
R214, 215			RD14NB2E102J	RD 1.0K J 1/4W		
▲ R251		*	RS14KB3A471JFR	FL-PROOF RS 470 J 1W		
▲ R253, 254			RD14NB2E3R9J	RD 3.9 J 1/4W		
R305			RD14NB2E332J	RD 3.3K J 1/4W		
▲ R310			RD14NB2E1R0J	RD 1 J 1/4W		
R311			RD14NB2E682J	RD 6.8K J 1/4W		
VR1~5			R32-0030-05	SEMI FIXED VARIABLE RESISTOR		
K1~4			S76-0076-05	MAGNETIC RELAY		
▲ K5			S76-0063-05	MAGNETIC RELAY		
▲ K6		*	S76-0077-05	MAGNETIC RELAY		
▲ S1		*	S40-1153-05	PUSH SWITCH POWER		
▲ TS1			S79-0007-05	THERMAL SWITCH		
▲ TS2	2A	*	S79-0028-05	THERMAL SWITCH		
D5~12			HSS104A	DIODE		
D5~12			ISS131	DIODE		
D55~62			HSS104A	DIODE		
D55~62			ISS131	DIODE		
D103~106			HSS104A	DIODE		
D103~106			ISS131	DIODE		
D151~153			HSS104A	DIODE		
D151~153			ISS131	DIODE		
D161, 162			HZS4.7N(B)	ZENER DIODE		
D161, 162			RD4.7ES(B)	ZENER DIODE		
D163			HSS104A	DIODE		
D163			ISS131	DIODE		
D201			HSS104A	DIODE		
D201			ISS131	DIODE		
D211			HZS13N(B)	ZENER DIODE		
D211			RD13ES(B)	ZENER DIODE		
D212			HZS15N(B)	ZENER DIODE		
D212			RD15ES(B)	ZENER DIODE		
D213			HSS104A	DIODE		
D213			ISS131	DIODE		
▲ D251		*	RBV-1506LFA	DIODE		

L: Scandinavia K: USA P: Canada R: Mexico C: China I: Malaysia  
 Y: PX(Far East, Hawaii) T: Europe E: Europe G: Germany V: China(Shanghai)  
 Y: AAFFES(Europe) X: Australia Q: Russia H: Korea M: Other Areas ▲ indicates safety critical components.

Ref. No	Add- ress	New Parts	Parts No.	Description	Desti- nation	Re- marks
▲ D252		*	D10XB20F03	DIODE		
▲ D252		*	RBA-1002	DIODE		
▲ D253, 254		*	HSS104A	DIODE		
▲ D253, 254		*	ISS131	DIODE		
▲ D301~304			S5688B	DIODE		
▲ D301~304			1SR139-400	DIODE		
▲ D305~308			HSS104A	DIODE		
▲ D305~308			ISS131	DIODE		
▲ D309			S5688B	DIODE		
▲ D309			1SR139-400	DIODE		
D310			HZS16N(B2)	ZENER DIODE		
D310			RD16ES(B2)	ZENER DIODE		
▲ D312			S5688B	DIODE		
▲ D312			1SR139-400	DIODE		
D313, 314			HZS18N(B)	ZENER DIODE		
D313, 314			RD18ES(B)	ZENER DIODE		
D315			S5688B	DIODE		
D315			1SR139-400	DIODE		
D316, 317			HSS104A	DIODE		
D316, 317			ISS131	DIODE		
▲ IC31			TA78057S	ANALOGUE IC		
▲ Q1, 2		*	TRAIT5N*5	TRANSISTOR		
▲ Q3, 4		*	TRAIT5P*5	TRANSISTOR		
▲ Q5, 6		*	TRAIT5N*5	TRANSISTOR		
▲ Q7, 8		*	TRAIT5P*5	TRANSISTOR		
▲ Q9		*	TRAIT5N*5	TRANSISTOR		
▲ Q10		*	TRAIT5P*5	TRANSISTOR		
Q11, 12			2SC2631(R,S)	TRANSISTOR		
Q13, 14			2SA992(F,E)	TRANSISTOR		
Q51, 52			2SC2631(R,S)	TRANSISTOR		
Q53, 54			2SA992(F,E)	TRANSISTOR		
Q101			2SC2631(R,S)	TRANSISTOR		
Q102			2SA992(F,E)	TRANSISTOR		
Q151~154			DTC113ZSA	DIGITAL TRANSISTOR		
Q151~154			UN4219	DIGITAL TRANSISTOR		
Q161, 162			2SC1845(F,E)	TRANSISTOR		
Q163, 164			2SA992(F,E)	TRANSISTOR		
Q201, 202			2SC2458(Y,GR)	TRANSISTOR		
Q201, 202			2SC3311A(Q,R)	TRANSISTOR		
Q203			DTC124ESA	DIGITAL TRANSISTOR		
Q203			UN4212	DIGITAL TRANSISTOR		
Q211, 212			DTC113ZSA	DIGITAL TRANSISTOR		
Q211, 212			UN4219	DIGITAL TRANSISTOR		
Q213			DTC124ESA	DIGITAL TRANSISTOR		
Q213			UN4212	DIGITAL TRANSISTOR		
▲ Q214			2SD2012	TRANSISTOR		
▲ Q214			2SD2061	TRANSISTOR		
Q215			DTC124ESA	DIGITAL TRANSISTOR		
Q215			UN4212	DIGITAL TRANSISTOR		
Q301			2SC2003(L,K)	TRANSISTOR		
▲ Q302			2SC2458(Y,GR)	TRANSISTOR		
▲ Q302			2SC3311A(Q,R)	TRANSISTOR		
▲ Q303			2SD2012	TRANSISTOR		
▲ Q303			2SD2061	TRANSISTOR		
▲ Q311			2SB1370	TRANSISTOR		

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Q311			2SB1375	TRANSISTOR				
<b>SURROUND (X08-2942-70)</b>								
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C2, 3 C4~7 C11 C12 C13, 14			CC73FSL1H470J CC73FSL1H101J CC73FSL1H100D CE04KW1H2R2M CC73FSL1H101J	CHIP C CHIP C CHIP C ELECTRO CHIP C	47PF 100PF 10PF 2.2UF 100PF	J J D 50WV J		
C15 C16 C18, 19 C20 C21			CC73FSL1H331J CC73FSL1H100D CK73FB1E104K CK73FB1E103K CE04KW1A101M	CHIP C CHIP C CHIP C CHIP C ELECTRO	330PF 10PF 0.10UF 0.010UF 100UF	J D K K 10WV		
C22 C23 C24 C25 C26			CE04KW1H010M CK73FB1H102K CK73FB1E104K C90-1826-05 CK73F1C105Z	CHIP C ELECTRO CHIP C BACKUP-C CHIP C	1.0UF 1000PF 0.10UF 0.047F 1.0UF	50WV K K 5.5WV Z		
C27 C28 C29 C30, 31 C32			CE04KW1A101M CK73FB1H103K CK73FB1E104K CK73FB1H103K CE04KW1H100M	ELECTRO CHIP C CHIP C CHIP C ELECTRO	100UF 0.010UF 0.10UF 0.010UF 10UF	10WV K K K 50WV		
C33 C34 C35, 36 C37 C38, 39			CK73FB1E104K CE04KW1H100M CK73FB1E104K CE04KW1H100M CK73FB1E104K	CHIP C ELECTRO CHIP C ELECTRO CHIP C	0.10UF 10UF 0.10UF 10UF 0.10UF	K 50WV K 50WV K		
C40 C41 C42 C61 C63~66			CC73FSL1H102J CK73FB1E104K CE04KW1A470M CK73FB1E104K CK73FB1E104K	CHIP C CHIP C ELECTRO CHIP C CHIP C	1000PF 0.10UF 47UF 0.10UF 0.10UF	J K 10WV K K		
C68 C70, 71 C73~75 C76 C78~80			CK73FB1H822K CK73FB1H102K CC73FSL1H470J CK73FB1H102K CC73FSL1H101J	CHIP C CHIP C CHIP C CHIP C CHIP C	8200PF 1000PF 47PF 1000PF 100PF	K K J K J		
C81 C82 C83 C84 C85, 86			CC73FSL1H470J CC73FSL1H102J CE04KW1E470M CK73FB1E104K CC73FSL1H470J	CHIP C CHIP C ELECTRO CHIP C CHIP C	47PF 1000PF 47UF 0.10UF 47PF	J J 25WV K J		
C90 C91 C92 C93 C94			CC73FSL1H470J CK73FB1E104K CE04KW1A101M CC73FSL1H470J CK73FB1E104K	CHIP C CHIP C ELECTRO CHIP C CHIP C	47PF 0.10UF 100UF 47PF 0.10UF	J K 10WV J K		
C95 C96, 97 C98, 99 C100~102 C103			CE04KW1A101M CC73FSL1H101J CC73FSL1H102J CC73FSL1H470J CK73FB1E104K	ELECTRO CHIP C CHIP C CHIP C CHIP C	100UF 100PF 1000PF 47PF 0.10UF	10WV J J J K		
C104 C106			CC73FSL1H470J CK73FB1E104K	CHIP C CHIP C	47PF 0.10UF	J K		

Ref. No	Addres	New Parts	Parts No.	Description			Desti- nation	Re- marks
C107 C108 C109 C110 C116			CK73FB1H223K CK73FB1C224K CK73FB1E104K CE04KW1H010M CK73FB1H102K	CHIP C CHIP C CHIP C ELECTRO CHIP C	0.022UF 0.22UF 0.10UF 1.0UF 1000PF	K K K 50WV K		
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C117, 118 C119 C121 C125~127 C128			CK73FB1E104K CK73FB1H102K CK73FB1E104K CC73FSL1H101J CC73FSL1H470J	CHIP C CHIP C CHIP C CHIP C CHIP C	0.10UF 1000PF 0.10UF 100PF 47PF	K K K J		
C129 C130 C131 C133, 134 C136			CC73FSL1H101J CK73FB1E104K CC73FSL1H102J CC73FSL1H101J CC73FSL1H220J	CHIP C CHIP C CHIP C CHIP C CHIP C	100PF 0.10UF 1000PF 100PF 22PF	J K J		
C137 C138 C139, 140 C142 C143, 144			CC73FSL1H470J CC73FSL1H101J CK73FB1E104K CE04KW1A101M CK73FB1E104K	CHIP C CHIP C CHIP C ELECTRO CHIP C	47PF 100PF 0.10UF 100UF 0.10UF	J K K 10WV K		
C145~147 C148~151 C152, 153 C154 C155, 156			CE04KW1A101M CK73FB1E104K CE04KW1A101M CK73FB1H103K CK73FB1E104K	ELECTRO CHIP C CHIP C ELECTRO CHIP C	100UF 0.10UF 100UF 0.010UF 0.10UF	10WV K 10WV K K		
C157 C158 C159 C160 C161			CE04KW1E221M C92-0646-05 C93-0039-05 C92-0646-05 C93-0039-05	ELECTRO TANTAL CERAMIC TANTAL CERAMIC	220UF 220UF 22UF 220UF 22UF	25WV 6.3WV 10WV 6.3WV 10WV		
C162 C163 C164 C165 C166, 167			* C93-0038-05 C92-0654-05 C93-0038-05 C92-0654-05 CK73FB1E104K	CERAMIC TANTAL CERAMIC TANTAL CHIP C	10UF 47UF 10UF 47UF 0.10UF	16WV 16WV 16WV 16WV K		
C168 C169~171 C172 C173 C174			CE04KW1A470M CE04KW1H100M CC73FSL1H470J CC73FSL1H101J CK73FB1E104K	ELECTRO ELECTRO CHIP C CHIP C CHIP C	47UF 10UF 47PF 100PF 0.10UF	10WV 50WV J K K		
C175 C176~179 C180 C183 C186, 187			CK73FB1H102K CK73FB1E104K CC73FSL1H471J CK73FB1E104K CC73FSL1H221J	CHIP C CHIP C CHIP C CHIP C CHIP C	1000PF 0.10UF 470PF 0.10UF 220PF	K K J K J		
C188 C189 C190, 191 C192, 193 C194, 195			CC73FSL1H101J CK73FB1H103K CC73FSL1H220J CE04KW1H4R7M CK73FB1E104K	CHIP C CHIP C CHIP C ELECTRO CHIP C	100PF 0.010UF 22PF 4.7UF 0.10UF	J K J 50WV K		
C199~202 C205, 206 C207, 208 C209, 210 C211			CC73FSL1H220J CC73FSL1H681J CC73FSL1H151J CC73FSL1H182J CK73FB1H103K	CHIP C CHIP C CHIP C CHIP C CHIP C	22PF 680PF 150PF 1800PF 0.010UF	J J J K K		

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# KRF-V7771D/V7771DE

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Ref. No	Address	New Parts	Parts No.	Description			Desti-nation	Re-marks
R901			RK73FB2A223J	CHIP R	22K	J	1/10W	
R902, 903			RK73FB2A103J	CHIP R	10K	J	1/10W	
R904			RK73FB2A153J	CHIP R	15K	J	1/10W	
R905			RK73FB2A103J	CHIP R	10K	J	1/10W	
R906			RK73FB2A222J	CHIP R	2.2K	J	1/10W	
R912			RK73FB2A102J	CHIP R	1.0K	J	1/10W	
R917~922			RK73FB2A102J	CHIP R	1.0K	J	1/10W	
R923			RK73FB2A562J	CHIP R	5.6K	J	1/10W	
R924			RK73FB2A103J	CHIP R	10K	J	1/10W	
R925			RK73FB2A104J	CHIP R	100K	J	1/10W	
R926			RK73FB2A102J	CHIP R	1.0K	J	1/10W	
R927			RK73FB2A474J	CHIP R	470K	J	1/10W	
R928			RK73FB2A103J	CHIP R	10K	J	1/10W	
R929			RK73FB2A101J	CHIP R	100	J	1/10W	
R996, 997			RK73FB2A473J	CHIP R	47K	J	1/10W	
R998, 999			RD14NB2E103J	RD	10K	J	1/4W	
W254			R92-0670-05	CHIP R	0 OHM			
W312~314			R92-0670-05	CHIP R	0 OHM			
S2~7	2A, 2B		S70-0031-05	TACT SWITCH				
D1			MA111	DIODE				
D2			U1BC44	DIODE				
D7			MA111	DIODE				
D31~38			HSS104	DIODE				
D31~38			1SS133	DIODE				
D39			DA204K	DIODE				
D41, 42			HSS104	DIODE				
D41, 42			1SS133	DIODE				
D43			HZS5.1S(B2)	ZENER DIODE				
D43			RD5.1JS(B2)	ZENER DIODE				
D44, 45			MA111	DIODE				
D46			HZS16N(B2)	ZENER DIODE				
D46			RD16ES(B2)	ZENER DIODE				
D47			HZS18N(B)	ZENER DIODE				
D47			RD18ES(B)	ZENER DIODE				
D48			HZS13N(B2)	ZENER DIODE				
D48			RD13ES(B2)	ZENER DIODE				
D49			HZS11N(B)	ZENER DIODE				
D49			RD11ES(B)	ZENER DIODE				
D55, 56			DA204K	DIODE				
D58~60			MA111	DIODE				
D61			HZS3.3N(B)	ZENER DIODE				
D61			RD3.3ES(B)	ZENER DIODE				
D62			HZS2.7N(B)	ZENER DIODE				
D62			RD2.7ES(B)	ZENER DIODE				
D74, 75			MA111	DIODE				
D77			HZS5.1S(B2)	ZENER DIODE				
D78			RD5.1JS(B2)	ZENER DIODE				
D81, 82			MA111	DIODE				
D81, 82			1B4B41	DIODE				
D83, 84			HZS15N(B)	ZENER DIODE				
D83, 84			RD15ES(B)	ZENER DIODE				
D85			HZS5.1S(B2)	ZENER DIODE				
D85			RD5.1JS(B2)	ZENER DIODE				
D86			S5688B	DIODE				

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D87			HZS11N(B)	ZENER DIODE				
D87			RD11JS(B)	ZENER DIODE				
D88			D3SBA20F03	DIODE				
D89			HZS11N(B)	ZENER DIODE				
D89			RD11JS(B)	ZENER DIODE				
D90, 91			MA111	DIODE				
D901, 902			MA111	DIODE				
D996			MA111	DIODE				
D997			HSS104	DIODE				
D997			1SS133	DIODE				
D998			HZS15N(B)	ZENER DIODE				
D998		*	RD15ES(B)	ZENER DIODE				
D999			MA111	DIODE				
ED1	2B		16-MT-62GK	INDICATOR TUBE				
IC1			NJM4580ED	ANALOGUE IC				
IC11, 12			SN761200N	ANALOGUE IC				
IC21			NJM2058D	IC(OP AMP X4)				
IC23			TC9162AF	MOS-IC				
IC51			SN761200N	ANALOGUE IC				
IC52			MC14577CF	MOS-IC				
IC53			NJU3713D	MOS-IC				
IC61			UPD780204-038	MI-COM IC				
IC81			NJM4558D	ANALOGUE IC				
IC82			TA79005S	IC(VOLTAGE REGULATOR/-5V)				
IC82			UPC7905AHF	IC(VOLTAGE REGULATOR/-5V)				
IC83			TA7805S	ANALOGUE IC				
IC83			UPC7805AHF	ANALOGUE IC				
IC84			SI-3082V	ANALOGUE IC				
IC90			BA7645N	MOS-IC				
IC91			NJM4580L	IC(OP AMP X2)				
Q12			2SC4081(R,S)	TRANSISTOR				
Q14			2SC4081(R,S)	TRANSISTOR				
Q15, 16			2SC4213(B)	TRANSISTOR				
Q30, 31			2SC4081(R,S)	TRANSISTOR				
Q52			2SC4081(R,S)	TRANSISTOR				
Q53			DTA113ZUA	DIGITAL TRANSISTOR				
Q53			UN5119	DIGITAL TRANSISTOR				
Q54			DTC124EUA	DIGITAL TRANSISTOR				
Q54			UN5212	DIGITAL TRANSISTOR				
Q55			2SC4213(B)	TRANSISTOR				
Q81			2SC2458(Y,GR)	TRANSISTOR				
Q81			2SC3311A(Q,R)	TRANSISTOR				
Q82			2SA1048(Y,GR)	TRANSISTOR				
Q82			2SA1309A(Q,R)	TRANSISTOR				
Q83			2SB1370(E,F)	TRANSISTOR				
Q83			2SD2012	TRANSISTOR				
Q84			2SD2012	TRANSISTOR				
Q84			2SD2061(E,F)	TRANSISTOR				
Q84			2SB1370(E,F)	TRANSISTOR				
Q85			2SB1375	TRANSISTOR				
Q86			2SD2012	TRANSISTOR				
Q86			2SD2061(E,F)	TRANSISTOR				
Q301~304			2SA992(F,E)	TRANSISTOR				
Q305~308			2SC2631(R,S)	TRANSISTOR				
Q309, 310			2SA1123(R,S)	TRANSISTOR				

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Q311, 312 Q351~354 Q355~358 Q359, 360 Q361, 362			2SA1586(Y,GR) 2SA992(F,E) 2SC2631(R,S) 2SA1123(R,S) 2SA1586(Y,GR)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
Q401, 402 Q403, 404 Q405 Q406 Q451			2SA992(F,E) 2SC2631(R,S) 2SA1123(R,S) 2SA1586(Y,GR) 2SA1535(R,S)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
▲ Q452 Q453 Q453 Q454 Q455			2SC3944(R,S) DTC124EUA UN5212 2SA1611(M5,M6) 2SC4177(L5,L6)	TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR		
Q456 Q456 Q457 Q901 Q902, 903			DTC124EUA UN5212 2SC4177(L5,L6) 2SC4081(R,S) 2SA1611(M5,M6)	DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
Q999	A1	2B	2SC3244	TRANSISTOR		
			W02-2571-05	OPTIC RECEIVING MODULE		

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# KRF-V7771D/V7771DE

## SPECIFICATIONS

### AUDIO section

Rated power output during STEREO operation	
(DIN) 1 kHz, 0.7% at 4 Ω	120 W + 120 W
(IEC) 63 Hz ~ 12.5 kHz, 0.7% at 4 Ω	120 W + 120 W
Effective power output during SURROUND operation	
FRONT (1kHz, 0.7% T.H.D. at 4 Ω one channel driven)	100 W + 100 W
CENTER (1kHz, 0.7% T.H.D. at 4 Ω one channel driven)	100 W
SURROUND (1kHz, 0.7% T.H.D. at 4 Ω one channel driven)	100 W + 100 W
Total harmonic distortion	0.004 % (1kHz, 60 W, 4 Ω)
Frequency response( IHF '66 )	
CD	5 Hz ~ 80 kHz, +0.5 dB, -3 dB
Signal to noise ratio ( IHF '66 )	
PHONO (MM)	77 dB
CD	93 dB
Input sensitivity / impedance	
PHONO (MM)	2.5 mV / 47 kΩ
CD	200 mV / 47 kΩ
6CH INPUT	200 mV / 47 kΩ
Output level / impedance	
TAPE REC	200 mV / 220 Ω
PRE OUT (FRONT, CENTER, SURROUND, SUBWOOFER)	1 V / 500 Ω
Tone control	
BASS	±7 dB (at 100 Hz)
TREBLE	±7 dB (at 10 kHz)
LOUDNESS control	
VOLUME at -40dB level	+7 dB(100 Hz), +4 dB(10 kHz)
DIGITAL AUDIO section	
Sampling frequency	32 kHz, 44.1 kHz, 48 kHz
Input level / impedance / wave length	
Optical	-15 dBm ~ -21 dBm, 600 nm ±30nm
Coaxial	0.5 Vp-p / 75 Ω

### VIDEO section

VIDEO inputs / outputs	
VIDEO (composite)	1 Vp-p / 75 Ω
S-VIDEO (luminance signal)	1 Vp-p / 75 Ω
(chrominance signal)	0.286 Vp-p / 75 Ω

### FM tuner section

Tuning frequency range	87.5 MHz ~ 108 MHz
Usable sensitivity (DIN, 75 Ω)	
MONO	1.2μV / 13.2 dBf (40 kHz DEV., S/N 26 dB)
STEREO	45μV / 44.2 dBf (46 kHz DEV., S/N 46 dB)
Total harmonic distortion (DIN, 1 kHz)	
MONO	0.2 % (65.2 dBf input)
STEREO	0.8 % (65.2 dBf input)
Signal to noise ratio (DIN weighted, 1 kHz)	
MONO	65 dB (40 kHz DEV., 65.2 dBf input)
STEREO	60 dB (46 kHz DEV., 65.2 dBf input)
Stereo separation (DIN, 1 kHz)	36 dB
Selectivity (DIN, ±300 kHz)	64 dB
Frequency response (30 Hz ~ 15kHz)	+0.5 dB, -3.0 dB

### AM tuner section

Tuning frequency range	531 kHz ~ 1,602 kHz
Usable sensitivity (30% mod., S/N 20 dB)	
.....	16 μV / (600 μV/m)
Signal to noise ratio (30 % mod., 1 mV input)	50 dB

### GENERAL

Power consumption	330 W
△ AC outlet	
SWITCHED	2 (total 90 W max.)
Dimensions	W : 440 mm (17-5/16")
.....	H : 162 mm (6-3/8")
.....	D : 391 mm (15-3/8")
Weight (Net)	11.4 kg (25.1lb)



1. KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.
2. Full performance may not be exhibited in extremely cold locations (below 0 deg.C).

# KRF-V7771D/V7771DE

## Note:

Component and circuit are subject to modification to insure best operation under differing local conditions. This manual is based on General market(M) 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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