

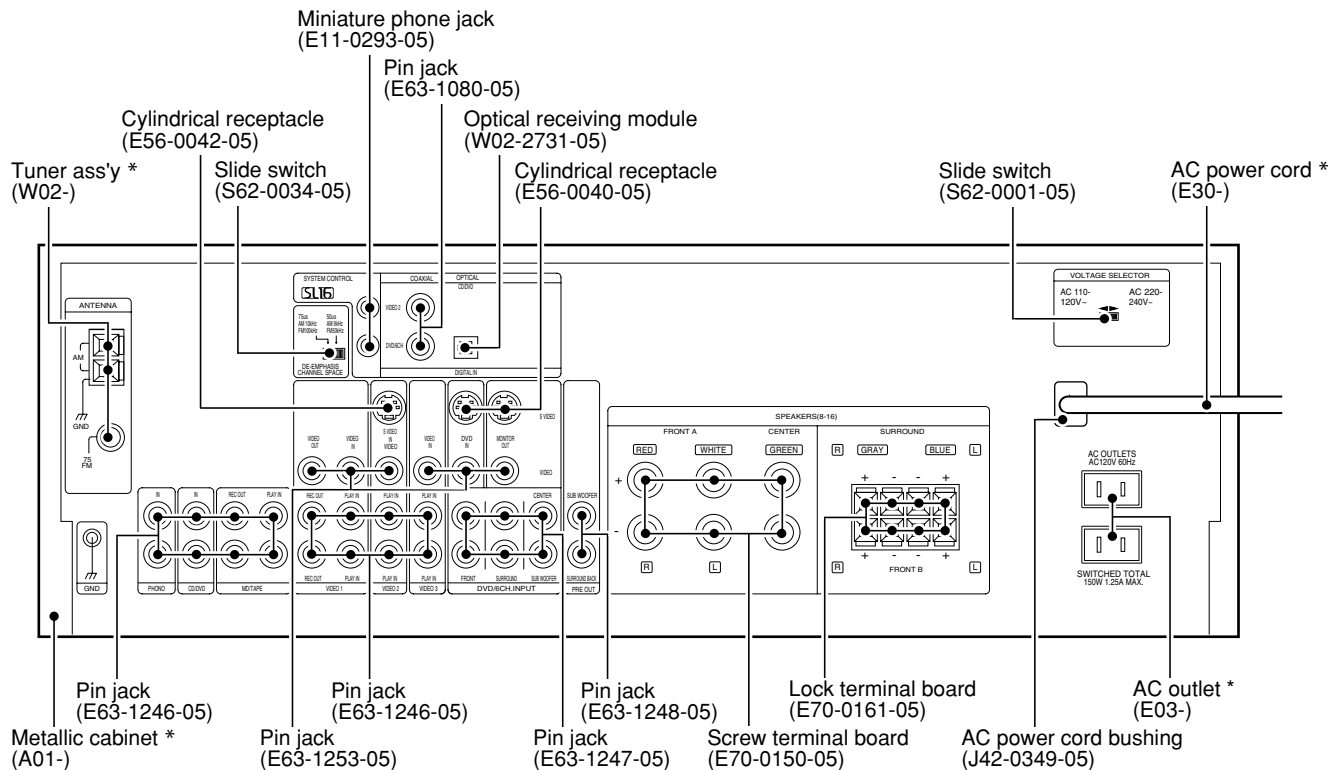
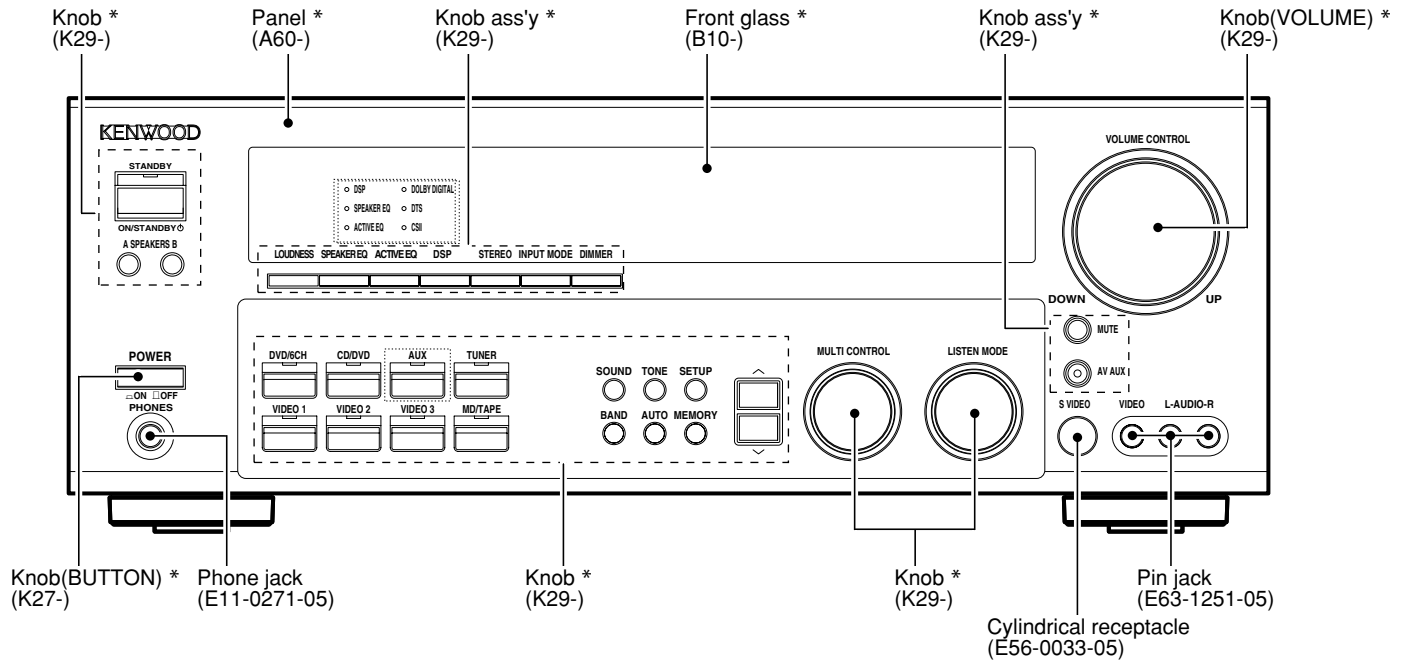
AUDIO-VIDEO SURROUND RECEIVER

KRF-V6060D/V6060D-S/V7060D/V7060D-S/V8060D  
 KRF-V8060D-S/V8060D-G/X9060D/X9060D-S/X9060D-G  
 VR-6050/6060/6070

SERVICE MANUAL

KENWOOD

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 B51-5791-00 (K/K) 3529



Illust. is VR-6050/KRF-V6060D.

\* Refer to parts list on page 35.

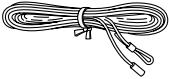
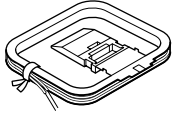
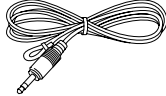
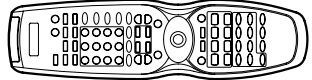
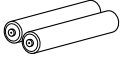








## CONTENTS / ACCESSORIES / CAUTIONS

### Contents

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### Accessories

<p>FM indoor antenna (1) (T90-0877-05)</p> 	<p>AM loop antenna (1) (T90-0852-05)</p> 	<p>RF remote antenna (1) (For VR-6060/6070 only) (T90-0899-05)</p> 	<p>Remote control unit (1) Refer to the table on this page below.</p> 					
<p>Batteries (R6/AA) (2)</p> 	<p style="text-align: center;">AC Plug Adaptor (1)</p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">(E03-0383-05)</td> <td style="text-align: center;">(E03-0382-05)</td> <td rowspan="2" style="vertical-align: middle;"> <p>Use to adapt the plug on the power cord to the shape of the wall outlet. (Accessory only for regions where use is necessary.)</p> </td> </tr> <tr> <td style="text-align: center;"></td> <td style="text-align: center;"></td> </tr> </table>			(E03-0383-05)	(E03-0382-05)	<p>Use to adapt the plug on the power cord to the shape of the wall outlet. (Accessory only for regions where use is necessary.)</p>		
(E03-0383-05)	(E03-0382-05)	<p>Use to adapt the plug on the power cord to the shape of the wall outlet. (Accessory only for regions where use is necessary.)</p>						
								

### Model name vs Remote controller

MODEL	Destinations	Remote controller		
		Parts number	Model name	Battery cover
VR-6050	KP	A70-1555-05	RC-R0727	A09-1258-08
KRF-V6060D	Y	A70-1555-05	RC-R0727	A09-1258-08
KRF-V6060D	E	A70-1554-05	RC-R0726	A09-1258-08
KRF-V6060D-S	TE	A70-1554-05	RC-R0726	A09-1258-08
KRF-V6060D-S	MIXH	A70-1555-05	RC-R0727	A09-1258-08
KRF-V7060D	E	A70-1554-05	RC-R0726	A09-1258-08
KRF-V7060D-S	E	A70-1554-05	RC-R0726	A09-1258-08
VR-6060	KP	A70-1552-05	RC-R0816	A09-1258-08
KRF-V8060D	E	A70-1554-05	RC-R0726	A09-1258-08
KRF-V8060D-S	E	A70-1554-05	RC-R0726	A09-1258-08
KRF-V8060D-S	X	A70-1553-05	RC-R0725	A09-1258-08
KRF-V8060D-G	M	A70-1553-05	RC-R0725	A09-1258-08
VR-6070	KP	A70-1549-05	RC-R0813	A09-1258-08
KRF-X9060D	E	A70-1551-05	RC-R0815	A09-1258-08
KRF-X9060D	Y	A70-1550-05	RC-R0814	A09-1258-08
KRF-X9060D-S	ET	A70-1551-05	RC-R0815	A09-1258-08
KRF-X9060D-S	X	A70-1550-05	RC-R0814	A09-1258-08
KRF-X9060D-G	MH	A70-1550-05	RC-R0814	A09-1258-08


### Cautions

#### Resetting the Microcomputer

The microcomputer may malfunction (unit cannot be operated, or shows an erroneous display) if the power cord is unplugged while the power is ON, or due to some other external factor. If this happens, execute the following procedure to reset the microcomputer and return the unit to its normal operating condition.

- Please note that resetting the microcomputer will clear the contents of the memory and returns the unit to the state it was in when it left the factory.

#### For the U.S.A. and Canada

Unplug the power cord from the wall outlet, then plug it back in while holding down the POWER ON/STANDBY  key.

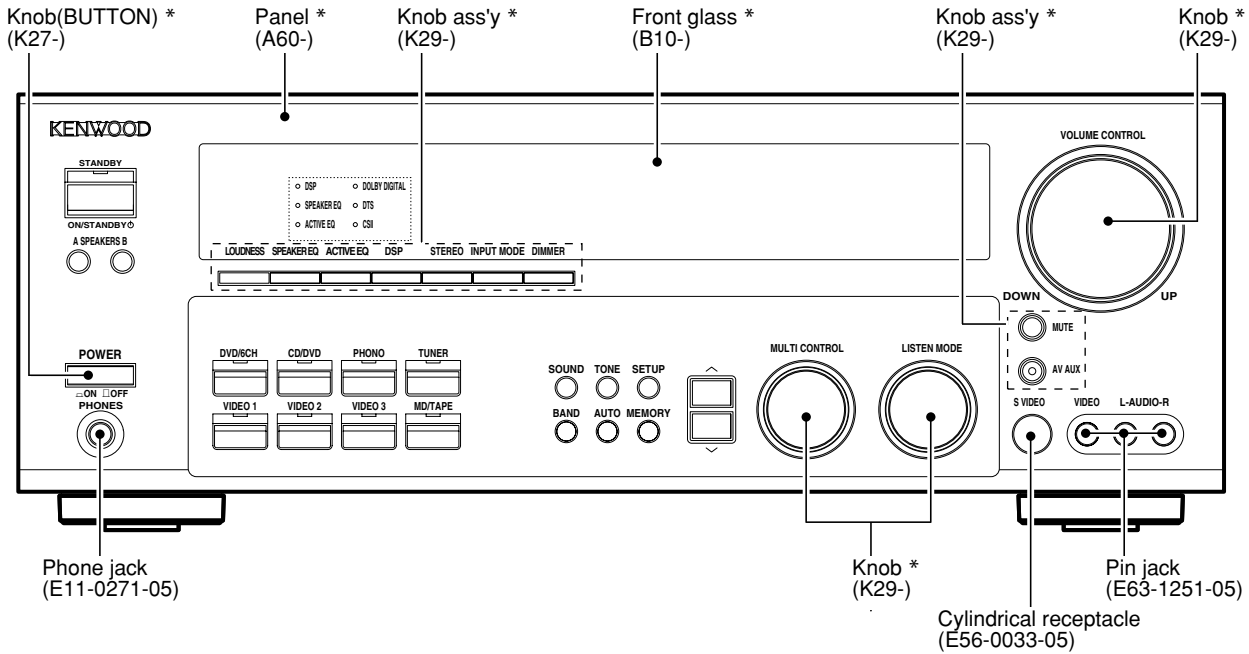
#### For other countries

With the power cord plugged in, turn the POWER ON/OFF key OFF. Then, while holding down the ON/STANDBY  key, press POWER ON/OFF.

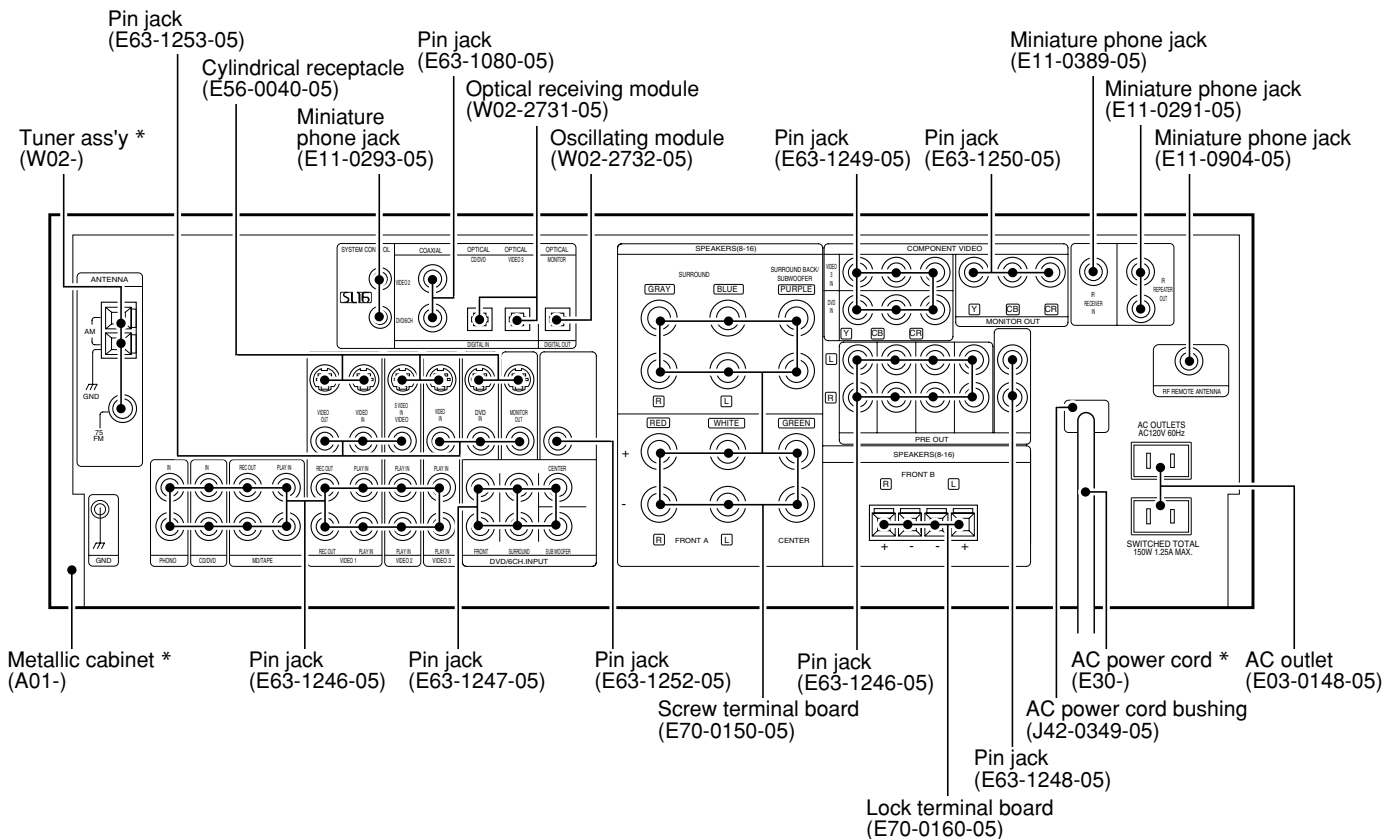
# KRF-V6060D/V7060D/V8060D/X9060D/VR-6050/6060/6070

## EXTERNAL VIEW

Illust. is VR-6070/KRF-X9060D.



Illust. is VR-6070.



\* Refer to parts list on page 35.

# CIRCUIT DESCRIPTION

## 1. Model Type & TUNER Destination

### 1-1 Model Type

Model Type	Model Type1 *(94Pin)	Model Type0 *(93Pin)
VR-6070/KRF-X9060D	0	0
VR-6060/KRF-V8060D	1	0
VR-6050/KRF-V6060D/KRF-V7060D	0	1

\* Pin Number of Microprocessor

### 1-2 TUNER Destination

Set Type	Type	Band	Receiving Frequency Range	Channel Space	IF	PLL
K/P	K1	FM	87.50MHz~108.0MHz	100kHz	+10.7MHz	25kHz
		AM	530kHz~1700kHz	10kHz	+450kHz	10kHz
Y/M/I	K2	FM	87.50MHz~108.0MHz	100kHz	+10.7MHz	25kHz
		AM	530kHz~1607kHz	10kHz	+450kHz	10kHz
Y/M/V/X H	E1	FM	87.50MHz~108.0MHz	50kHz	+10.7MHz	25kHz
		AM	531kHz~1602kHz	9kHz	+450kHz	9kHz
E/T	E3 RDS	FM	87.50MHz~108.0MHz	50kHz	+10.7MHz	25kHz
		AM	531kHz~1602kHz	9kHz	+450kHz	9kHz

Input Voltage(V)	Tuner Destination	R (kΩ)	Volt (V)
0	K/P	Open	0
1.6~2.0	E/T	27	1.79
2.1~2.5	-	-	-
2.6~3.0	Y/M/I(M2)	12	2.78
3.1~3.5	-	-	-
3.6~4.0	Y/M/V/X(E1)	4.7	3.81
4.1~4.5	-	-	-

For M type, K2/E1 are decided by CH SPACE  
 CH SPACE = 1 →K2 TYPE  
 CH SPACE = 0 →E1 TYPE

## 2. Tuner Preset Memory

P.ch	K1	K2	E1/E3	P.ch	K1	K2	E1/E3
1	FM 98.3M	FM 98.3M	FM 98.3M	21	AM 530K	AM 530K	AM 531K
2	FM 108.0M	FM 108.0M	FM 108.0M	22	FM 87.5M	FM 87.5M	FM 87.5M
3	FM 89.1M	FM 89.1M	FM 89.1M	23	FM 87.5M	FM 87.5M	FM 87.5M
4	FM 87.5M	FM 87.5M	FM 87.5M	24	FM 87.5M	FM 87.5M	FM 87.5M
5	FM 90.0M	FM 90.0M	FM 90.0M	25	FM 87.5M	FM 87.5M	FM 87.5M
6	FM 87.5M	FM 87.5M	FM 87.5M	26	FM 87.5M	FM 87.5M	FM 87.5M
7	FM 87.5M	FM 87.5M	FM 87.5M	27	FM 87.5M	FM 87.5M	FM 87.5M
8	AM 1610K	FM 87.5M	AM 1503K	28	FM 87.5M	FM 87.5M	FM 87.5M
9	AM 1700K	AM 1610K	AM 1584K	29	FM 87.5M	FM 87.5M	FM 87.5M
10	AM 1050K	AM 1050K	AM 999K	30	FM 106.0M	FM 106.0M	FM 106.0M
11	AM 630K	AM 630K	AM 621K	31	FM 87.5M	FM 87.5M	FM 87.5M
12	AM 1440K	AM 1440K	AM 1350K	32	FM 87.5M	FM 87.5M	FM 87.5M
13	FM 106.0M	FM 106.0M	FM 106.0M	33	FM 87.5M	FM 87.5M	FM 87.5M
14	AM 530K	AM 530K	AM 531K	34	FM 87.5M	FM 87.5M	FM 87.5M
15	FM 87.5M	FM 87.5M	FM 87.5M	35	FM 87.5M	FM 87.5M	FM 87.5M
16	FM 98.0M	FM 98.0M	FM 98.0M	36	FM 87.5M	FM 87.5M	FM 87.5M
17	FM 98.5M	FM 98.5M	FM 98.5M	37	FM 87.5M	FM 87.5M	FM 87.5M
18	FM 87.5M	FM 87.5M	FM 87.5M	38	FM 87.5M	FM 87.5M	FM 87.5M
19	AM 990K	AM 990K	AM 945K	39	FM 108.0M	FM 108.0M	FM 108.0M
20	FM 97.4M	FM 97.4M	FM 97.4M	40	AM 1000K	AM 1000K	AM 945K

## CIRCUIT DESCRIPTION

### 3. Test Mode

#### 3-1 Entering the Test Mode

- While holding down the "BAND" key, plugged in the power cord to AC power wall outlet.

#### 3-2 Cancelling the Test Mode

- Initialized and cancel the test mode if plugged out the power code.

### 3-3 Contents of the Test Mode

#### 3-3-1 TUNER mute on/off

- The key is functioning when selector is set to TUNER.

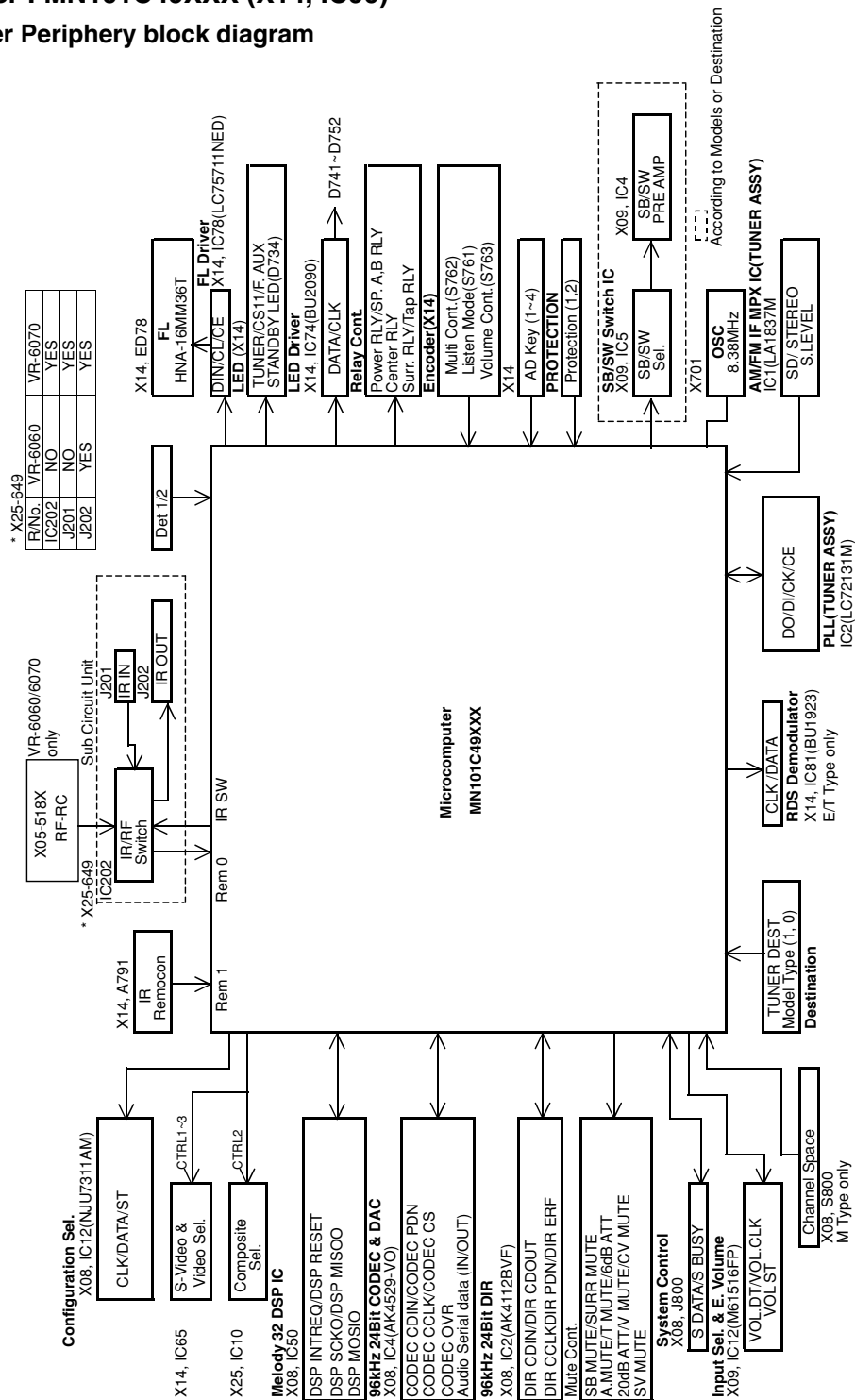
Key	Function
MUTE	TUNER mute on/off

#### 3-3-2 RF ON/RF OFF (VR-6060/6070 only)

Key	Display	Function
SPEAKER EQ.	RF ON	Set up RF ON.
	RF OFF	Set up RF OFF.

### 4. Microcomputer : MN101C49XXX (X14, IC90)

#### 4-1 Microcomputer Periphery block diagram



## CIRCUIT DESCRIPTION

### 4-2Pin Description for Microcomputer : MN101C49XXX (X14, IC90)

Pin No.	Pin Name	I/O	Pin Description
1	VREF-	-	Connected to ground.
2	T DEST	I	Discrimination pin for tuner destination.
3	DET1	I	Detection pin of output level for FL/FR.
4	DET2	I	Detection pin of output level for SL/SR and Center.
5	S LEVEL	I	Input pin of FM S meter level.
6~9	AD KEY GET(1~4)	I	A/D key (1~4) input.
10	VREF+	-	A/D reference voltage.
11	VDD	-	Power supply (+5V) for microcomputer.
12	OSC2	O	Main clock output (8.388MHz).
13	OSC1	I	Main clock input (8.388MHz).
14	VSS	-	Connected to be ground.
15	XI	-	Connected to be ground.
16	XO	-	Unused.
17	MMOD	-	Memory mode switch input pin (unused).
18	FL DIN	O	Transfer data output to FL driver.
19	FL CS	O	Chip enable output to FL driver.
20	FL CLK	O	Synchronism clock output to FL driver.
21	FL RESET	O	System reset signal output to FL driver.
22	IR SW	O	Switching pin for IR/RF.
23	RF CS	O	Chip select output to PLL of RF-RC demodulator.
24	RF DATA	O	Data output to PLL of RF-RC demodulator.
25	RF CLK	O	Clock output to PLL of RF-RC demodulator.
26	REM I	I	Remote control signal input 1(Front panel).
27	REM 0	I	Remote control signal input 1(Rear panel).
28	DIR ERF	I	Detection pin for DIR ERROR signal.
29	DSP INTREQ	I	Detection pin for DSP INTREQ.
30	CE2/RDS CLK	I	Clock input of RDS demodulator IC.
31	CE1	I	Detection pin for DSP INTREQ.
32	N.C.	-	Unused.
33	RESET	I	Reset signal input for microcomputer.
34	S BUSY	I/O	Serial busy signal input/output.
35	S DATA	I/O	Serial data signal input/output.
36	DSP RESET	O	Reset signal output to DSP.
37	CODEC OVR	I	Analog overflow detection pin.
38	CODEC PDN	O	Power down mode pin for CDDEC.
39	DIR PDN	O	Power down mode pin for DIR.
40	AK CS	O	Chip select output to DIR (X08, IC2).
41	N.C.	-	Unused.
42	AK CDTI	O	Control data output to DIR (X08, IC2).
43	DIR CDTO	I	Control data input from DAC (X08, IC4).
44	AK CLK	O	Clock output to DIR (X08, IC2).
45	DSP MOSIO	O	Data output pin to DSP (X08, IC50).
46	DSP MISOO	I	Data input pin from DSP (X08, IC50).
47	DSP SCKO	O	Clock output pin to DSP (X08, IC50).
48	SEL. ST	O	Strobe 1 output to selector IC (X08, IC12).
49	SEL. CLK	O	Clock output to selector IC (X08, IC12).
50	SEL. DATA	O	Data output to selector IC (X08, IC12).
51~53	V. CTL 1~3	O	Video switch control.
54	SV. MUTE	O	Mute control to S-video & video selector (X14, IC65).
55	CV. MUTE	O	Mute control to video selector IC (X25, IC102).
56	STEREO	I	Stereo signal input from IC1(TUNER ASSY).
57	SD	I	Synchronized signal detection input.
58	T MUTE	O	Mute signal output for TUNER.
59	PLL DO	I	Data input from PLL IC (TUNER ASSY).

## CIRCUIT DESCRIPTION

Pin No.	Pin Name	I/O	Pin Description
60	PLL CLK	O	Clock output to PLL IC (TUNER ASSY).
61	PLL DIN	O	Data output to PLL IC (TUNER ASSY).
62	PLL CE	O	Chip enable output to PLL IC (TUNER ASSY).
63	SURR.MUTE	I	Mute control for surround.
64	SB PREMUTE	O	Mute control for SB.
65	SP. A RLY	O	Relay control for A speaker.
66	C RLY	O	Relay control for center speaker.
67	SURR.RLY	O	Relay control for surround speaker.
68	SP. B RLY	O	Relay control for B speaker.
69	SB SW SELECT	O	Selection port for SB and SW.
70	VOL SEL. ST	O	Strobe output to E. volume IC (X09, IC2).
71	VOL. SEL DATA	O	Data output to E. volume IC (X09, IC2).
72	VOL. SEL CLK	O	Clock output to E. volume IC (X09, IC2).
73	TAP RLY	O	Switching port for transformer tap.
74	LIMITER	O	Power control for A class.
75	DSP CS	I	CS input port from DSP.
76	CH SPACE/RDS DIN	I	Data input of RDS demodulator IC.
77	A. MUTE	O	Audio mute control.
78	PROT2	I	Protection signal detection pin for over voltage.
79	PROT1	I	Detection pin of protection for shorted supply voltage.
80	POWER RLY	O	Control port of power relay.
81	LED DATA	O	Data output to led driver (X14, IC74).
82	LED CLK	O	Clock output to led driver (X14, IC74).
83	F AUX LED	O	LED (F.AUX) control port.
84	TUNER LED	O	LED (TUNER) control port.
85	STANDBY LED	O	LED (STANDBY) control port.
86	CS II LED	O	LED (CS II) control port.
87	MULTI ENC A	I	Encoder (Multi control) upward detection.
88	MULTI ENC B	I	Encoder (Multi control) downward detection.
89	LISTEN ENC A	I	Encoder (LISTEN MODE) upward detection.
90	LISTEN ENC B	I	Encoder (LISTEN MODE) downward detection.
91	VOL. ENC A	I	Encoder (Vol. Cont.) clockwise detection.
92	VOL. ENC B	I	Encoder (Vol. Cont.) counterclockwise detection.
93	MODEL TYPE 0	I	Discrimination port for model type.
94	MODEL TYPE 1	I	Discrimination port for model type.
95	DAVSS	-	Connected to be ground.
96,97	N.C.	-	Unused.
98	20dB ATT.	O	20dB attenuator control.
99	6dB ATT.	O	6dB attenuator control.
100	DAVDD	-	+5V power supply.

### 5. Key Matrix

Input Voltage (V)	AD Key Get 1 (Pin 6)	AD Key Get 2 (Pin 7)	AD Key Get 3 (Pin 8)	AD Key Get 4 (Pin9)	R (kΩ)	Volt (V)
0.0 to 1.0	Key Off					
1.1 to 1.5	DVD/6CH	LOUDNESS or THX	SOUND	-	43	1.29
1.6 to 2.0	CD/DVD	SP EQ	TONE	STANDBY	27	1.79
2.1 to 2.5	PHONO	ACTIVE EQ	SET UP	-	18	2.27
2.6 to 3.0	TUNER	DSP	BAND	SPA	12	2.78
3.1 to 3.5	VIDEO 1	STEREO	AUTO	SPB	7.5	3.33
3.6 to 4.0	VIDEO 2	INPUT MODE	MEMORY	-	4.7	3.81
4.1 to 4.5	VIDEO 3	DIMMER	UP	MUTE	2.4	4.31
4.6 to 5.0	MD/TAPE	-	DOWN	AV AUX	0.62	4.80

## CIRCUIT DESCRIPTION

### 6. Pin description of ICs

#### 6-1 PLL Frequency Synthesizer LSI : (X05, IC3) VR-6060/6070 (K/P) Type Only

Pin No.	Pin Name	I/O	Pin Description
1	XIN	I	Reference signal input pin (X'tal oscillation pin).
2	CL	I	Data input pin.
3	DI	I	Data input pin.
4	CE	I	Data input pin.
5	VCCR	-	ECL block power supply pin.
6	PI	I	Comparison signal input pin.
7	GND R	-	ECL block GND pin.
8	TEST	-	GND
9	CP	O	Built-in charge pump output pin.
10	PDP	O	Phase comparator output for an external charge pump. (Connected to GND)
11	PDN	O	Unused.
12	GND D	-	GND pin for circuits except the ECL block.
13	VCC D	-	Power supply pin for circuits except the ECL block.
14	PE	O	Phase error output pin for phase comparator (Unused).
15	OUT	O	Output port pin for switching external SW (GND).
16	XOUT	O	Output pin for X'tal oscillation.

#### 6-2 IF MIXER : TK14583V (X05, IC4) VR-6060/6070 (K/P) Type Only

Pin No.	Pin Name	I/O	Pin Description
1	OSCB	-	Colpitts oscillation circuit.
2	OSCE	-	Colpitts oscillation circuit. (Unused)
3	MVCC	-	Supply power for mixer section.
4	MOUT	O	Mixer output port.
5	DECPL1	-	Bypass capacitor connection for limiter amplifier.
6	IF IN	I	Input port of limiter amplifier.
7	DECPL2	-	Bypass capacitor connection for limiter amplifier.
8	CGND	-	Data comparator ground.
9	COUT	O	Data comparator output.
10	CIN-	I	Data comparator input.
11	CIN+	I	Data comparator input.
12	AOUT	O	Ope. Amplifier output.
13	AIN-	I	Ope. Amplifier input.
14	AIN+	I	Ope. Amplifier input.
15	DOUT	-	Detector output. (Unused)
16	DIN	I	Detector input.
17	IFOUT	-	IF limiter output. (Unused)
18	RSSI	O	RSSI output port.
19	IGND	-	IF section ground.
20	IVCC	-	Supply power for IF section.
21	PWSAVE	-	Connected to power supply.
22	MGND	-	Mixer section ground.
23	MIN1	I	Mixer input port.
24	MIN2	I	Mixer input port.



## CIRCUIT DESCRIPTION

### 6-3 96kHz 24Bit DIR : AK4112BVF (X08, IC2)

Pin No.	Pin Name	I/O	Pin Description
1	DVDD	-	Digital power supply pin. (3.3V)
2	DVSS	-	Digital ground pin.
3	TVDD	-	Input buffer power supply pin. (5.0V)
4	TX	O	Transmit channel (through data) output pin in serial mode.
5	XTI	I	X'tal input pin.
6	XTO	O	X'tal output pin. (Open)
7	PDN	I	Power down mode pin. When "L", the AK4112B is powered-down and reset.
8	R	-	External resistor pin.
9	AVDD	-	Analog power supply pin.
10	AVSS	-	Analog ground pin.
11	RX1	I	Receiver channel 1 This channel is selected in parallel mode or default of serial mode.
12	RX2	I	Receiver channel 2 in serial mode.
13	RX3	I	Receiver channel 3 in serial mode.
14	RX4	I	Receiver channel 4 in serial mode.
15	AUTO	O	Non PCM detect pin. "L" : No detect, "H" : Detect (Open)
16	P/S	I	Parallel/Serial select pin. "L" : Serial mode, "H" : Parallel mode (Analog ground)
17	FS96	O	96kHz sampling detect pin. (RX Mode) "H" : fs=88.2kHz or more, "L" fs=54kHz or less. (X'tal Mode) "H" : XFS96=1, "L" : XFS96=0.
18	ERF	O	Unlock & Parity Error output pin. "L" : No error, "H" : Error
19	LRCK	I/O	Output channel clock pin.
20	SDTO	O	Audio serial data output pin.
21	BICK	I/O	Audio serial data clock pin.
22	DAUX	I	Auxiliary audio data input pin. (Analog ground)
23	MCK02	O	Master clock #2 output pin. (Open)
24	MCK01	O	Master clock #1 output pin.
25	CSN	I	Chip select pin in serial mode.
26	CCLK	I	Control data clock pin in serial mode.
27	CDTI	I	Control data input pin in serial mode.
28	CDTO	O	Control data output pin in serial mode.

### 6-4 96kHz 24Bit CODEC & DAC : AK4529-VQ (X08, IC4)

Pin No.	Pin Name	I/O	Pin Description
1	SDOS	I	SDTO Source Select Pin (unused)
2	I2C	I	Control Mode Select Pin (unused)
3	SMUTE	I	Soft Mute Pin (Unused)
4	BICK	I	Audio Serial Data Clock Pin
5	LRCK	I	Input Channel Clock Pin
6~8	SDTI (1~3)	I	DAC(1~3) Audio Serial Data Input Pin
9	SDTO	O	Audio Serial Data Output Pin
10	DAUX	I	AUX Audio Serial Data Input Pin (GND)
11	DFS	I	Double Speed Sampling Mode Pin (GND)
12	SDTI4	I	DAC4 Audio Serial Data Input Pin (GND)
13	DZFE	I	Zero Input Detect Enable Pin (GND)
14	TVDD	-	Output Buffer Power Supply Pin (+3.3V)
15	DVDD	-	Digital Power Supply Pin (+5.0V)
16	DVSS	-	Digital Ground Pin
17	PDN	-	Power Down & Reset Pin
18	TST	-	Test Pin (GND)
19	CAD1	-	Chip Address 1 Pin (GND)
20	CAD0	-	Chip Address 0 Pin
21	LOUT4	O	DAC4 Center Channel Output Pin
22	ROUT4	O	DAC4 SW Channel Output Pin
23	LOUT3	O	DAC3 SBL Channel Output Pin
24	ROUT3	O	DAC3 SBR Channel Output Pin

## CIRCUIT DESCRIPTION

Pin No.	Pin Name	I/O	Pin Description
25	LOUT2	O	DAC2 SL Channel Output Pin
26	ROUT2	O	DAC2 SR Channel Output Pin
27	LOUT1	O	DAC1 FL Channel Output Pin
28	ROUT1	O	DAC1 FR Channel Output Pin
29	NC1	-	Unused
30	NC2	-	Unused
31	LIN	I	Lch Analog Input Pin
32	RIN	I	Rch Analog Input Pin
33	OVR	O	Analog Input Overflow Detect Pin
34	VCOM	O	Common Voltage Output Pin
35	VREFH	I	Positive Voltage Reference Input Pin
36	AVDD	-	Analog Power Supply Pin (+5.0V)
37	AVSS	-	Analog Ground Pin
38	DZF1	-	Zero Input Detect 1 Pin (unused)
39	MCLK	I	Master Clock Input Pin
40	P/S	I	Parallel/Serial Select Pin (GND)
41	CSN	I	Chip Select Pin in 3-wire Serial Control Mode
42	CCLK	I	Control Data Clock Pin in Serial Control Mode
43	CDTI	I	Control Data Input Pin in Serial Control Mode
44	TDM	I	TDM I/F Format Mode Pin (GND)

### 6-5 Input Selector & E. Volume : M61516FP (X09, IC2)

Pin No.	Pin Name	I/O	Pin Description
1	L V3	I	Input pin of L channel VIDEO 3.
2	L 6CH	I	Input pin of FL channel DVD/6 channel.
3	L REC	I	Input pin of L channel REC.
4	L MD REC	O	Output pin of L channel MD REC.
5	L V1 REC	O	Output pin of L channel VIDEO1 REC.
6	N.C.	-	Unused.
7	N.C.	-	Unused.
8,22,52,53	VOL GND(1~4)	-	Analog ground for 8channel volume.
9	FL IN	I	Input pin of FL channel.
10	SL IN	I	Input pin of SL channel.
11	SBL IN	I	Input pin of SBL channel.
12	C IN	I	Input pin of C channel.
13	SW IN	I	Input pin of SW channel.
14	SBR IN	I	Input pin of SBR channel.
15	SR IN	I	Input pin of SR channel.
16	FR IN	I	Input pin of FR channel.
17,18,42,43	BASS( L1,L2,R1,R2)	-	Frequency characteristic setting pin of the tone control (Bass).
19,41	TRE(L,R)	-	Frequency characteristic setting pin of the tone control (Treble).
20,40	L T/RT OUT	O	Output pin of tone.
21	FL VIN	I	Input pin of FL channel volume.
23	TIM1	-	Timer setting pin for Zero-Cross detector.
24	DVDD	-	Power supply to internal logic circuit.
25	LATCH	I	Latch input from CPU.
26	DATA	I	Data input from CPU.
27	CLOCK	I	Clock input from CPU.
28	DGND	-	Ground of internal logic circuit.
29	AVCC	-	Positive power supply to internal analog circuit.
30	OUT GND	-	Ground for output block.
31	FL OUT	O	Output pin of FL channel.
32	SL OUT	O	Output pin of SL channel.
30	OUT GND	-	Ground for output block.
31	FL OUT	O	Output pin of FL channel.

**CIRCUIT DESCRIPTION**

Pin No.	Pin Name	I/O	Pin Description
32	SL OUT	O	Output pin of SL channel.
33	SBL OUT	O	Output pin of SBL channel.
34	C OUT	O	Output pin of C channel.
35	SW OUT	O	Output pin of SW channel.
36	SBR OUT	O	Output pin of SBR channel.
37	SR OUT	O	Output pin of SR channel.
38	FR OUT	O	Output pin of FR channel.
39	FR VIN	I	Input pin of FR channel volume.
44	DVD/6CH FR	I	Input pin of FR channel DVD/6 channel.
45	DVD/6CH SR	I	Input pin of SR channel DVD/6 channel.
46	N.C.	-	Unused.
47	DVD/6CH SW	I	Input pin of SW channel DVD/6 channel.
48	DVD/6CH C	I	Input pin of C channel DVD/6 channel.
49	N.C.	-	Unused.
50	DVD/6CH SL	I	Input pin of SL channel DVD/6 channel.
51	DVD/6CH FL	I	Input pin of FL channel DVD/6 channel.
54	LCH	O	Output pin of L channel balance (+).
55	L LOUDNESS	-	Frequency characteristic setting pin of the loudness part and output pin of L channel balance (-).
56	IN GND	-	Ground for input block.
57	R LOUDNESS	-	Frequency characteristic setting pin of the loudness part and output pin of R channel balance (-).
58	RCH	O	Output pin of R channel balance (+).
59	N.C.	-	Unused.
60	N.C.	-	Unused.
61	R V1 REC	O	Output pin of R channel VIDEO1 REC.
62	R MD REC	O	Output pin of R channel MD REC.
63	R REC	I	Input pin of R channel REC.
64	R 6CH	I	Input pin of FR channel DVD/6 channel.
65	R V3	I	Input pin of R channel VIDEO 3.
66	R V2	I	Input pin of R channel VIDEO 2.
67	R V1	I	Input pin of R channel VIDEO 1.
68	R MD/TAPE	I	Input pin of R channel MD/TAPE.
69	R AUX	I	Input pin of R channel AUX.
70	R TUNER	I	Input pin of R channel TUNER.
71	R PHONO	I	Input pin of R channel PHONO.
72	R CD/DVD	I	Input pin of R ch CD/DVD.
73	AVEE	-	Negative power supply to internal analog circuit.
74	L CD/DVD	I	Input pin of L channel CD/DVD.
75	L PHONO	I	Input pin of L channel PHONO.
76	L TUNER	I	Input pin of L channel TUNER.
77	L AUX	I	Input pin of L channel AUX .
78	L MD/TAPE	I	Input pin of L ch MD/TAPE.
79	L V1	I	Input pin of L channel VIDEO 1.
80	L V2	I	Input pin of L channel VIDEO 2.

## CIRCUIT DESCRIPTION

### 6-6 S-Video & Video Selector : LA79510M (X14, IC65)

Pin No.	Pin Name	I/O	Pin Description
2	VC1IN	I	Input of C signal for S-video terminal.
4	NFBCG	-	Negative feed-back pin of amplifier (unused).
6	VC2IN	I	Input of C signal for DVD.
8	VC3IN	I	Input of C signal for video 3.
10	VC4IN	I	Input of C signal for video 2.
12	VC5IN	I	Input of C signal for video 1.
14	VC6IN	I	Unused.
15	GND	-	GND
16	MUTE	-	Mute time constant changing pin.
17~19	MUTE(3~1)	-	Changeover pin of mute.
20	CTL 3	I	Video switch control 3 input.
21	CTL 2	I	Video switch control 2 input.
22	CTL 1	I	Video switch control 1 input.
23	VCOUT 2	O	Output of C signal for DVD.
24	VC OUT1	O	Output of C signal for video 1.
25	VCC-	-	Negative power supply.
26	VBOUT 2	O	Output of Y signal for DVD.
27	VBOUT 1	O	Output of Y signal for video 1.
28	VCCDR-	-	Negative power supply.
29	VAOUT 2	O	Monitor output of ROOM B.
30	VAOUT 1	O	REC output of video 1.
33	VCCDR+	-	Positive power supply.
35	VA6IN	I	Unused.
37	NFBAG	-	Negative feed-back pin of amplifier (unused).
39	VA5 IN	I	Input of video signal for video 1.
41	VA4 IN	I	Input of video signal for video 2.
43	VA3 IN	I	Input of video signal for video 3.
45	VA2 IN	I	Input of DVD signal.
47	VAIN	I	Input of video signal for composite.
50	VB1IN	I	Input of Y signal for S-video terminal.
52	NFBBG	-	Negative feed-back pin of amplifier (unused).
54	VB2 IN	I	Input of Y signal for DVD.
56	VB3 IN	I	Input of Y signal for video 3.
58	VB4 IN	I	Input of Y signal for video 2.
60	VB5 IN	I	Input of Y signal for video 1.
62	VB6 IN	I	Unused.
63	VCC+	-	Positive power supply.

### 6-7 Serial in / Parallel out Driver : BU2090F (X14, IC74)

Pin No.	Pin Name	I/O	Pin Description						
1	VSS	-	GND						
2	DATA	I	Serial data input.						
3	CLOCK	I	Shift clock of data.						
4~15	OUT1~OUT12	O	Parallel data output ( N ch Open Drain FET). <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Latch Data</td> <td>L</td> <td>H</td> </tr> <tr> <td>Output FET</td> <td>ON</td> <td>OFF</td> </tr> </table>	Latch Data	L	H	Output FET	ON	OFF
Latch Data	L	H							
Output FET	ON	OFF							
16	VDD	-	Power supply.						

## CIRCUIT DESCRIPTION

### 6-8 VFD Display Controller Driver : LC75711NED (X14, IC78)

Pin No.	Pin Name	I/O	Pin Description
1~35 36~38	AM1~AM35 AA1~AA3	O	Output pin of Anode.
39~43	AA4~AA8/ G16~G12	O	Output pin of Anode and Grid.
44~54	G11~G1	O	Output pin of Grid.
55	VFL	-	Power supply for driver section.
56	TEST	-	Connected to be ground.
57	VSS	-	GND
58	OSCO	O	Crystal oscillation circuit output.
59	OSCI	I	Crystal oscillation circuit input.
60	VDD	-	Power supply for logic section (+5.0V).
61	RES	I	Input pin of system reset.
			Serial data transfer pin.
62	CE	I	Chip enable input.
63	CL	I	Synchronism clock input.
64	DI	I	Transfer data input.

### 6-9 RDS Demodulator IC : BU1923 (X14, IC81) E/T Type Only

Pin No.	Pin Name	I/O	Pin Description
1	QUAL	O	Output signal of demodulation quality.
2	RDATA	O	RDS Demodulation data output.
3	VREF	-	Reference voltage connection pin.
4	MUX	I	Composite signal input.
5	VDD1	-	Analog power supply (+5.0V).
6	VSS1	-	Analog ground.
7	VSS3	I	Comparator input.
8	CMP	O	Comparator output.
9	T2	I	Connected to ground.
10	T1	I	Connected to ground.
11	VSS2	-	Connected to ground.
12	VDD2	-	Digital power supply (+5.0V).
13	XI	I	Crystal oscillator (4.332MHz) output.
14	X0	O	Crystal oscillator (4.332MHz) input.
15	NC	-	Unused.
16	RCLK	O	Demodulation clock (1.1875MHz) output.

### 6-10 Composite Selector : NJM2284D (X25, IC101)

Pin No.	Pin Name	I/O	Pin Description
1	IN1B	I	Composite Cr signal input.
2,7,12	CTL(1~3)	I	Video switch control input.
3	OUT1	O	Composite Cr signal output.
4,10,15	GND(1~3)	-	GND
5	OUT2	O	Composite Cb signal output.
6	OUT3	O	Composite Y signal output.
8	IN3A	I	Composite Y signal input.
9	IN3B	I	Composite Y signal input.
11	IN2A	I	Composite Cb signal input.
13	V	-	Power supply
14	IN2B	I	Composite Cb signal input.
16	IN1A	I	Composite Cr signal input.

## CIRCUIT DESCRIPTION

### 6-11 3 Channel 75ΩDriver : BA7666FS (X25, IC102)

Pin No.	Pin Name	I/O	Pin Description
1	MUTE	I	Mute control pin.
2	INA	I	Composite Y signal input.
3,5,8	GND	-	Ground pin.
4	INB	I	Composite Cb signal input.
6,11	N.C.	-	Unused.
7	INC	I	Composite Cr signal input.
9	OUTC2	O	Output of the composite Cr signal.
10	OUTC1	O	Output of the composite Cr signal.
12	OUTB2	O	Output of the composite Cb signal.
13	OUTB1	O	Output of the composite Cb signal.
14	OUTA2	O	Output of the composite Y signal.
15	OUTA1	O	Output of the composite Y signal.
16	VCC	-	Power supply pin.

### 6-12 PLL Frequency Synthesizer LSI : LC72131M (Tuner Assy IC2)

Pin No.	Pin Name	I/O	Pin Description
1	X IN	I	Crystal resonator connection.
2	CE	I	Chip enable.
3	DI	I	Input serial data.
4	CL	I	Used as the synchronization clock when serial data is input to the DI(pin 3), or when serial data is output DO(pin 5).
5	DO	O	Outputs serial data.
6	B01	O	<ul style="list-style-type: none"> <li>• Dedicated output pins.</li> <li>• The output states are determined by B01 to B04 in the serial data.</li> <li>"Data" =0 : Open "Data" =1 : Low</li> <li>• These pins go to the open state after the power-on reset.</li> </ul>
7	B02		
8	B03		
9	B04		
10,12	I01, I02	I/O	Pins used for both input and output. The input or output state is determined by bits I0C1 and I0C2 in the serial data. "Data" = 0 : Open, "Data" = 1: Low
11	IF IN	I	IF count input.
13	AM IN	I	Local oscillator signal input.
14	FM IN	I	Local oscillator signal input.
15	VDD	-	Power supply.
16	PD	O	PLL charge pump output.
17, 18	AIN AOUT	I O	The MOS transistor used for the PLL active low-pass filter.
19	VSS	-	Ground.
20	X OUT	O	Crystal resonator connection.

## ADJUSTMENT

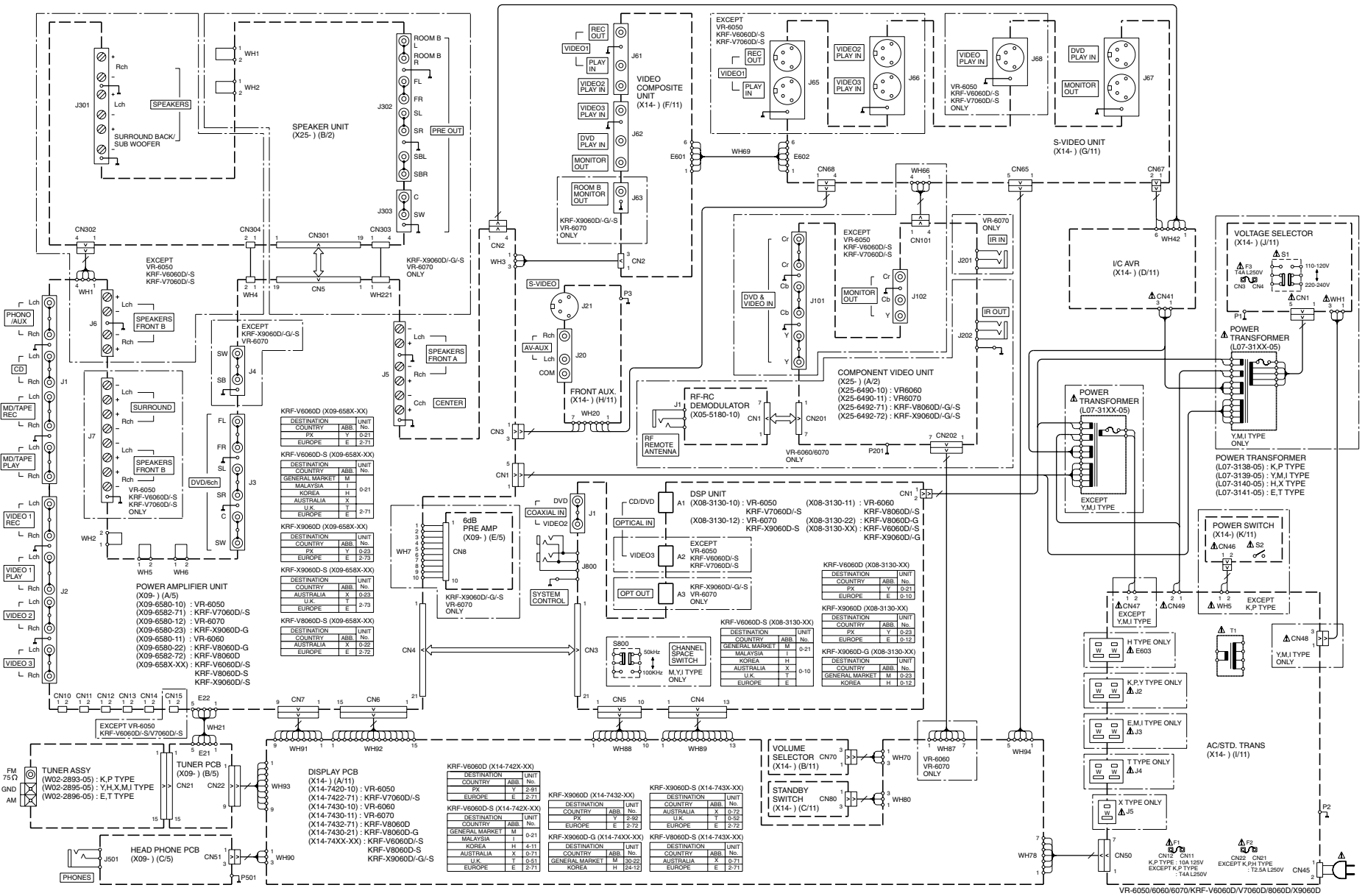
No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	RECEIVER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
<b>AUDIO SECTION</b>		<b>SPEAKER : A</b>					
<1>	IDLE CURRENT	-	CN11, FL ch. CN10, FR ch. CN14, SL ch. CN13, SR ch. CN12, C ch. CN15, SW ch. X09(A/4)	(FRONT 2ch MODE) Volume: Minimum	VR1(FL) VR2(FR) VR3(SL) VR4(SR) VR5(CENTER) VR6(SUB WOOFER) X09(A/4)	Adjust every potentiometer 10 minutes later after turned the power on.	

**Idling Current Adjustment**

All power amplifier stage need idling current adjustment after the installation of TRAIT transistor.

1. Connect a voltmeter to CN11 with the correct polarity as indicated by the PCB silk print.
2. Adjust the preset, VR1 to get 8.8mV (Idling current = 20mA ) at the voltmeter reading.
3. Repeat step 1 and 2 for all other channels.

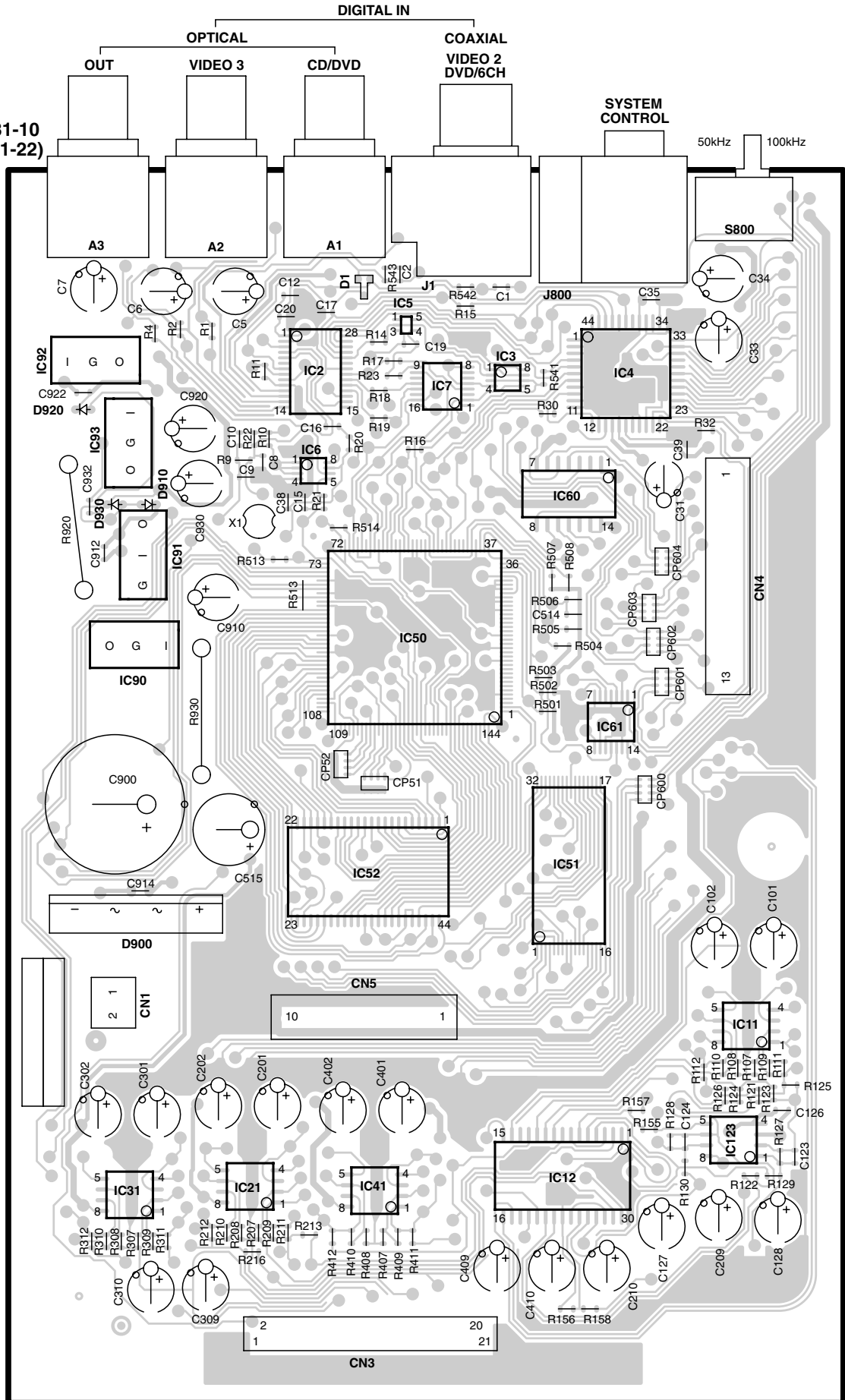
WIRING DIAGRAM





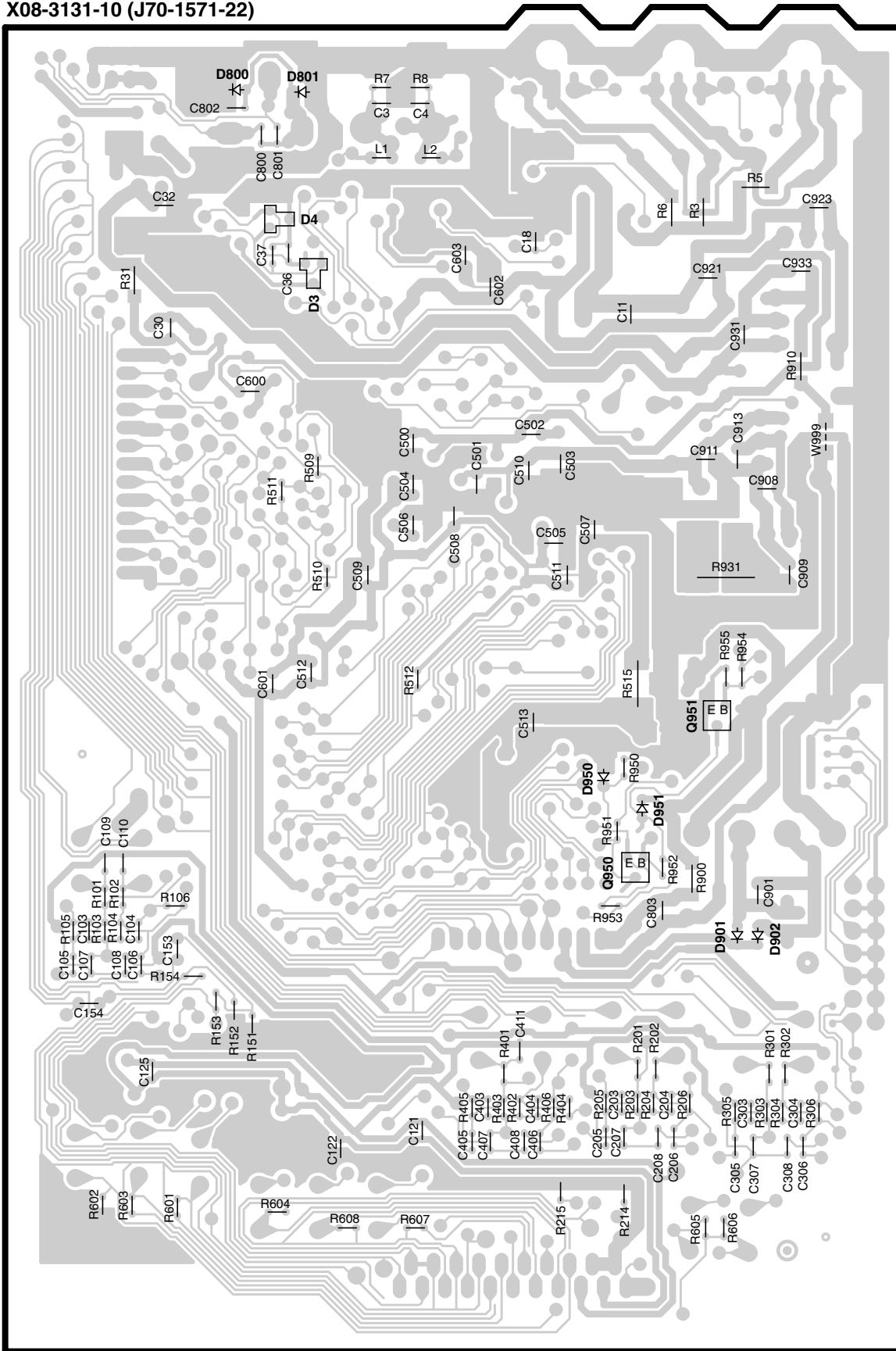
# PC BOARD (Component side view)

X08-3131-10  
(J70-1571-22)

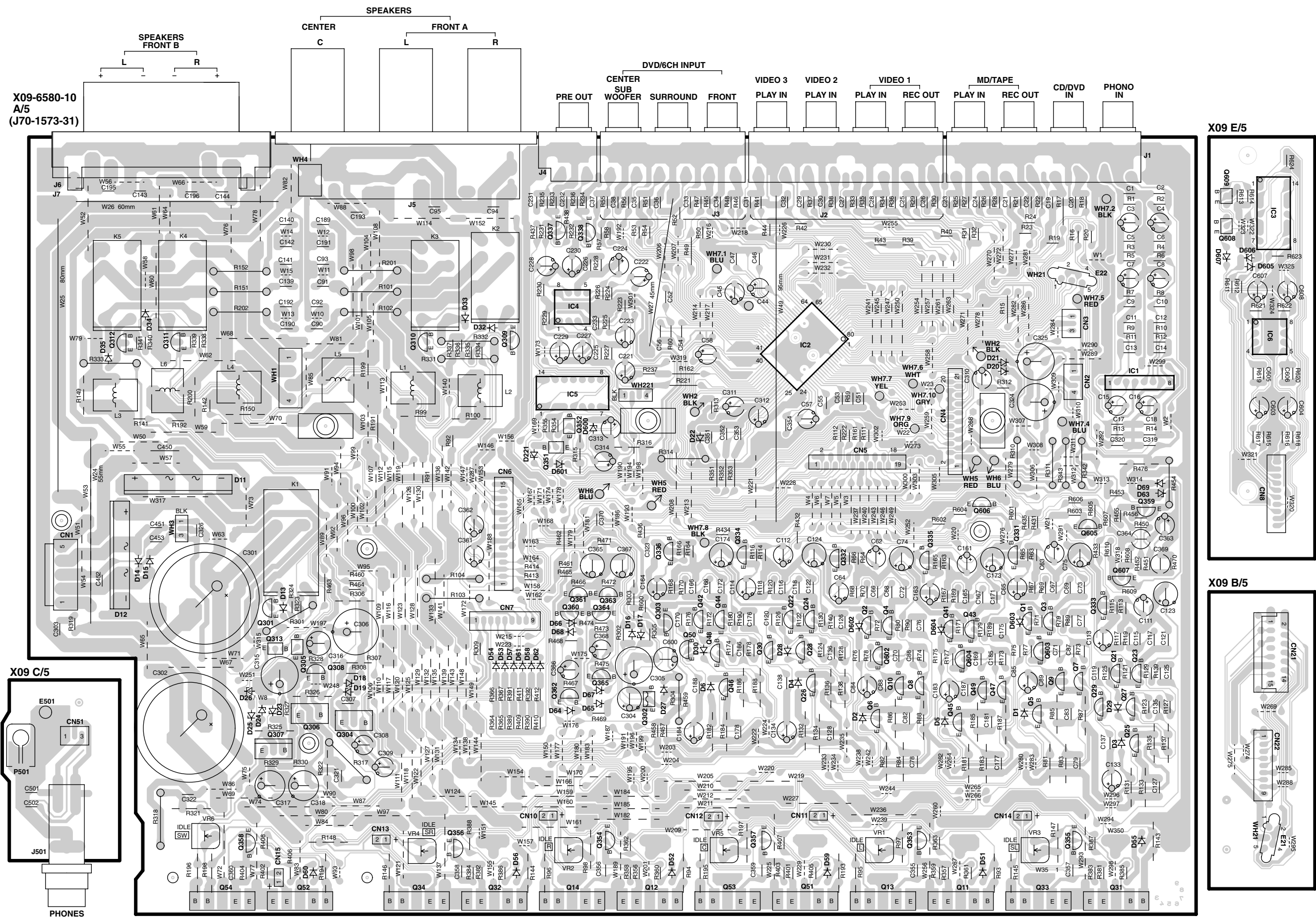


# PC BOARD (Component side view)

X08-3131-10 (J70-1571-22)



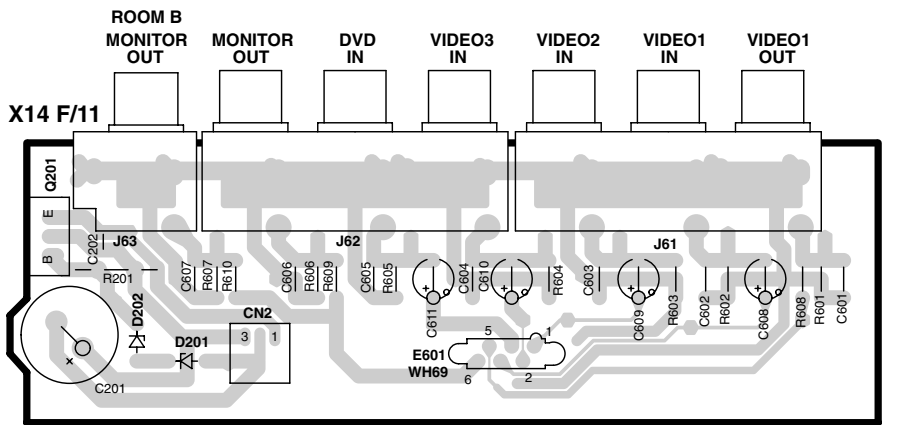
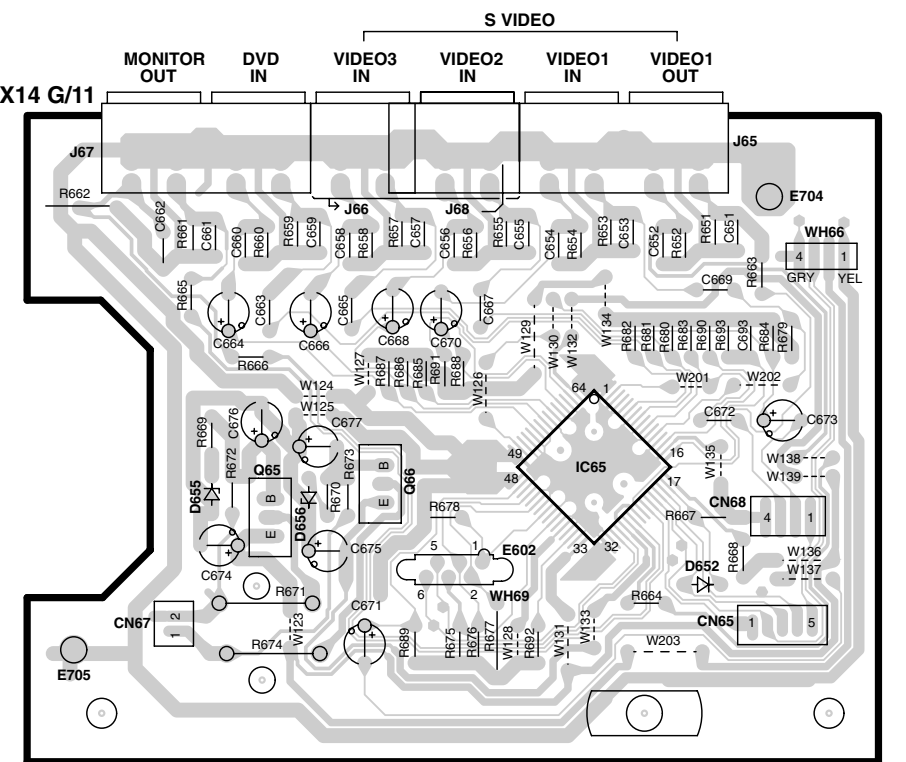
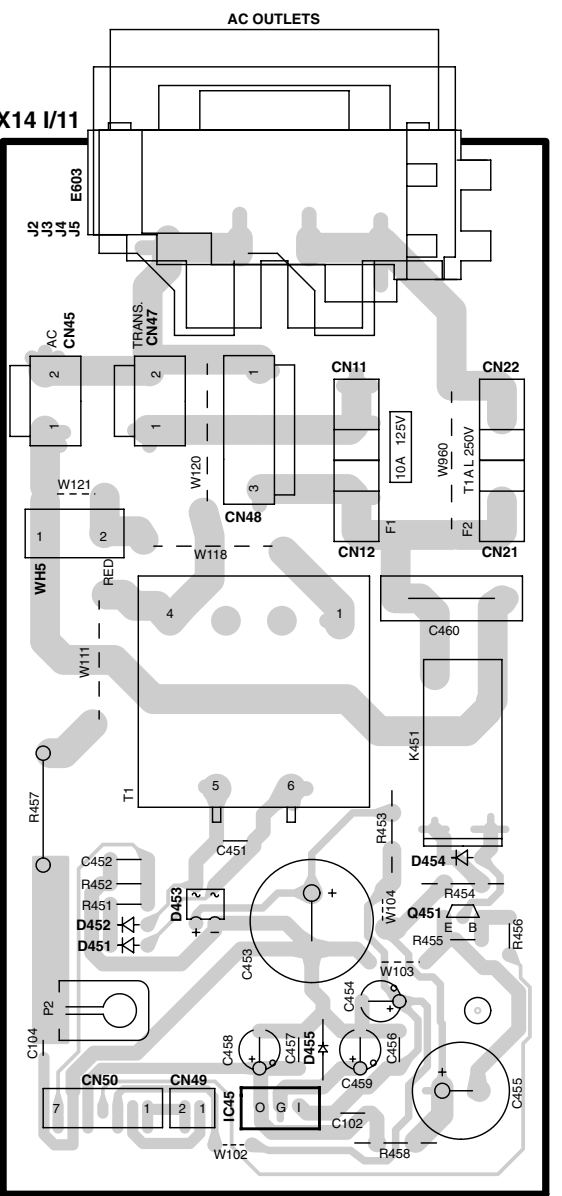
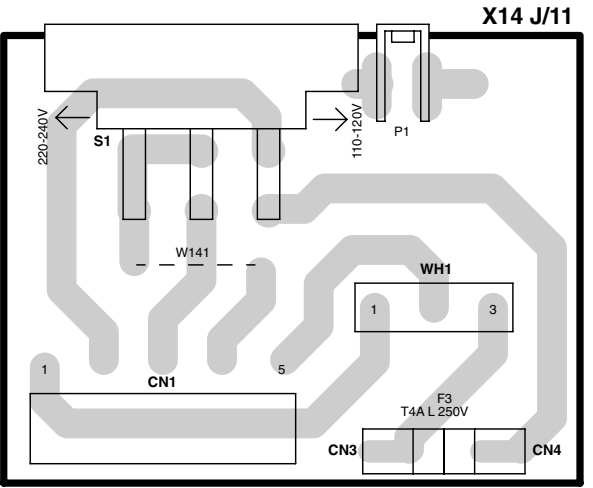
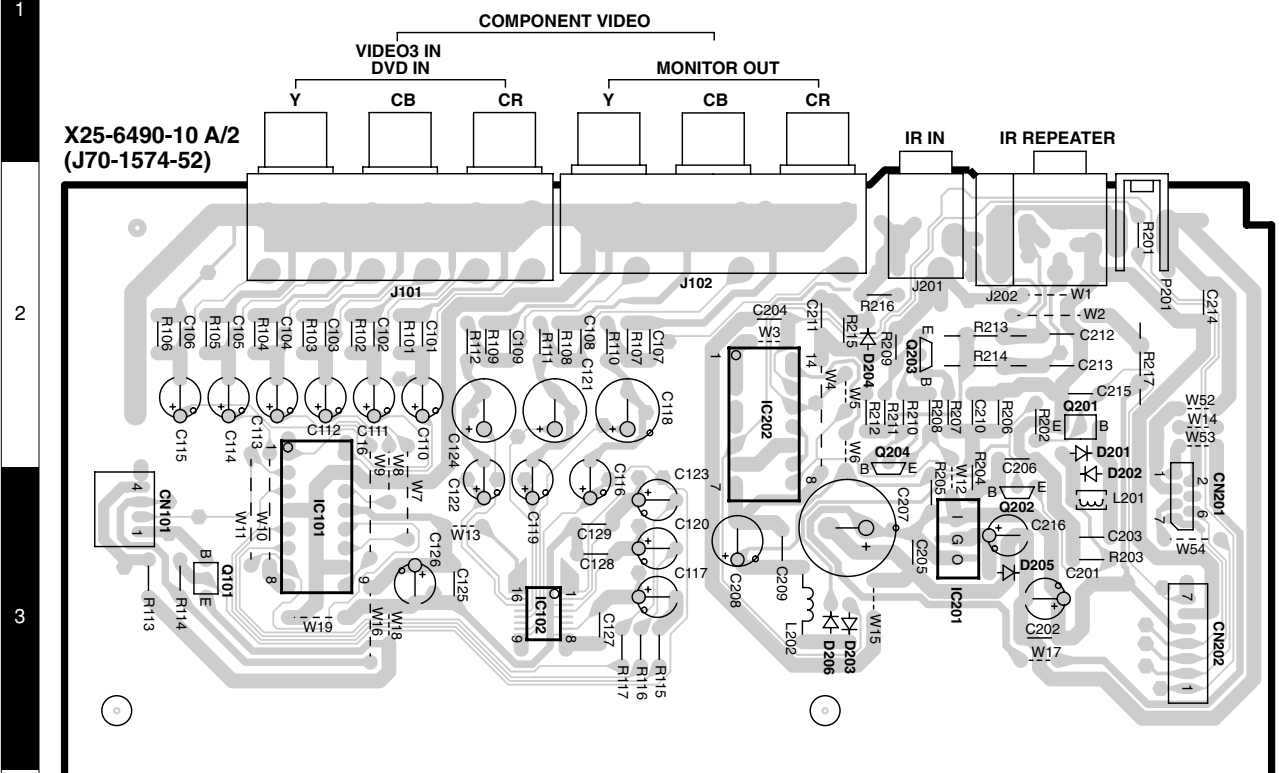
# PC BOARD (Component side view)



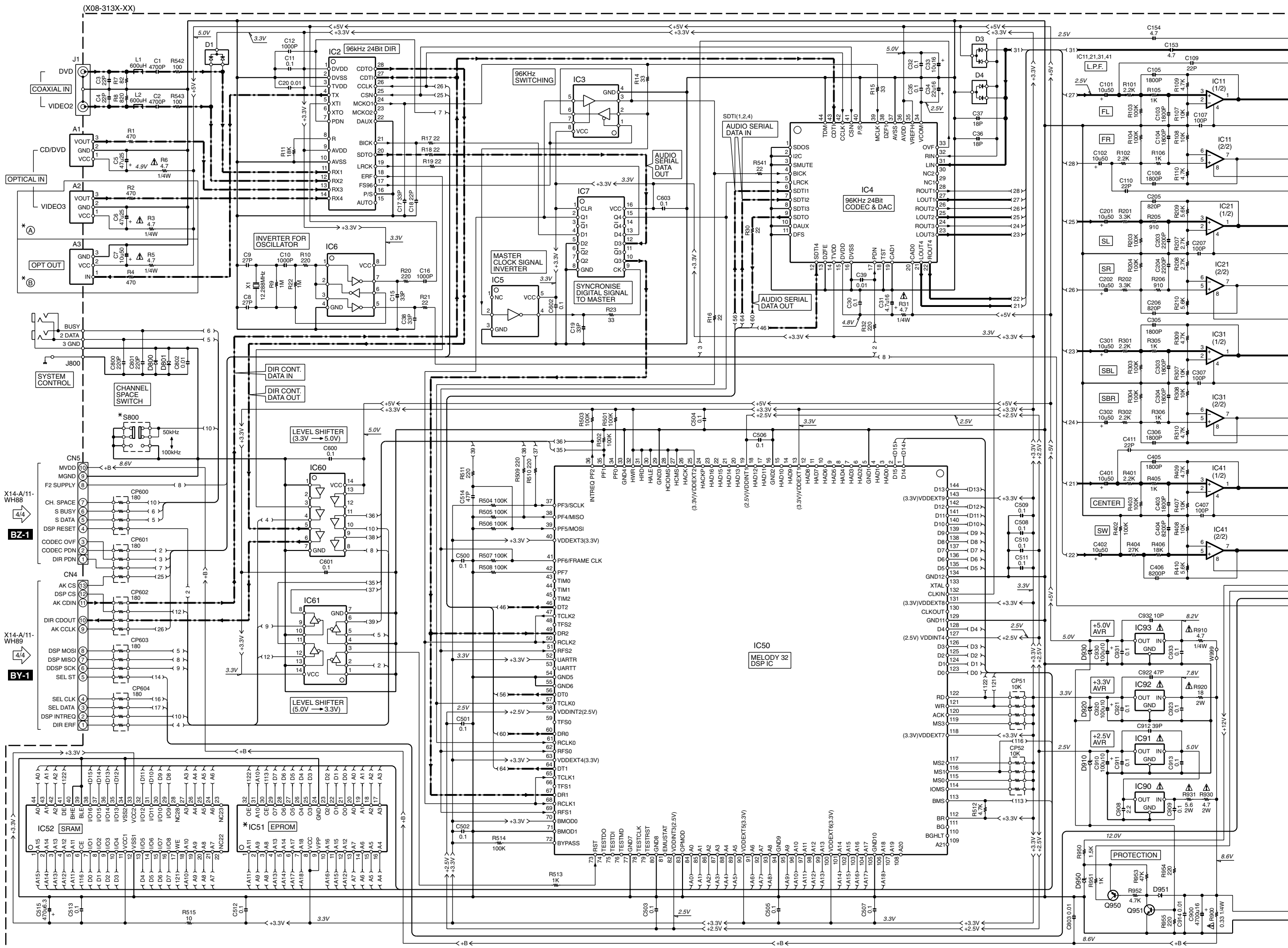
Refer to the schematic diagram for the value of resistors and capacitors.

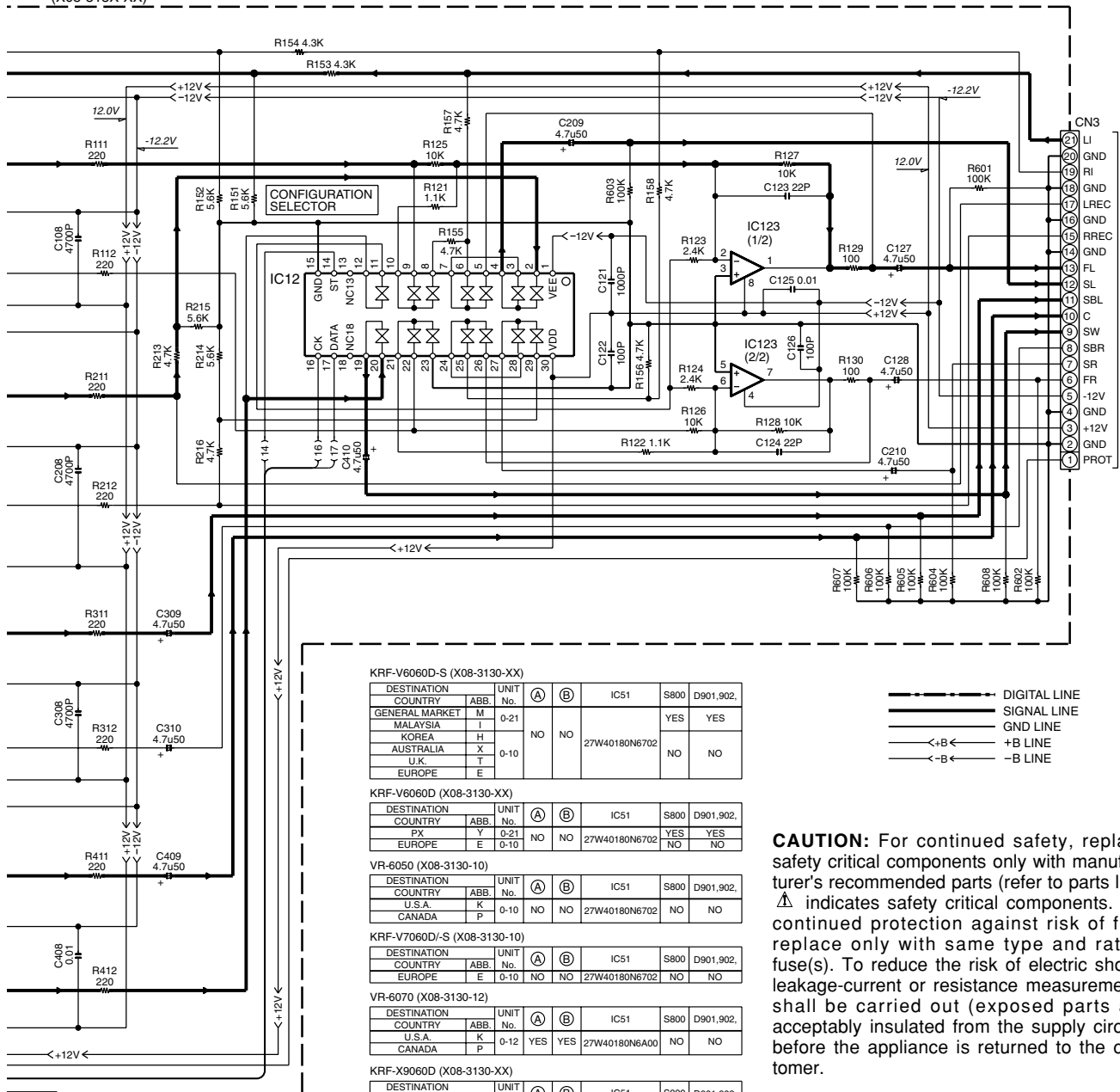


# PC BOARD (Component side view)



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





X09-A/5-  
CN4  
2/4  
AF-7

KRF-V6060D-S (X08-3130-XX)

DESTINATION	COUNTRY	ABB.	UNIT No.	(A)	(B)	IC51	S800	D901,902.
GENERAL MARKET	MALAYSIA	I	0-21	NO	NO	27W40180N6702	YES	YES
	KOREA	H						
	AUSTRALIA	X	0-10				NO	NO
	U.K.	T						
	EUROPE	E						

KRF-V6060D (X08-3130-XX)

DESTINATION	COUNTRY	ABB.	UNIT No.	(A)	(B)	IC51	S800	D901,902.
PX	Y	0-21	NO	NO	27W40180N6702	YES	YES	NO
EUROPE	E	0-10						

VR-6050 (X08-3130-10)

DESTINATION	COUNTRY	ABB.	UNIT No.	(A)	(B)	IC51	S800	D901,902.
U.S.A.	K	0-10	NO	NO	27W40180N6702	NO	NO	NO
CANADA	P							

KRF-V7060D-S (X08-3130-10)

DESTINATION	COUNTRY	ABB.	UNIT No.	(A)	(B)	IC51	S800	D901,902.
EUROPE	E	0-10	NO	NO	27W40180N6702	NO	NO	NO

VR-6070 (X08-3130-12)

DESTINATION	COUNTRY	ABB.	UNIT No.	(A)	(B)	IC51	S800	D901,902.
U.S.A.	K	0-12	YES	YES	27W40180N6A00	NO	NO	NO
CANADA	P							

KRF-X9060D (X08-3130-XX)

DESTINATION	COUNTRY	ABB.	UNIT No.	(A)	(B)	IC51	S800	D901,902.
PX	Y	0-23	YES	YES	27W40180N6A00	YES	YES	NO
EUROPE	E	0-12						

KRF-X9060D-G (X08-3130-XX)

DESTINATION	COUNTRY	ABB.	UNIT No.	(A)	(B)	IC51	S800	D901,902.
GENERAL MARKET	M	0-23	YES	YES	27W40180N6A00	YES	YES	NO
KOREA	H	0-12						

KRF-X9060D-S (X08-3130-12)

DESTINATION	COUNTRY	ABB.	UNIT No.	(A)	(B)	IC51	S800	D901,902.
AUSTRALIA	X							
U.K.	T	0-12	YES	YES	27W40180N6A00	NO	NO	NO
EUROPE	E							

VR-6060 (X08-3130-11)

DESTINATION	COUNTRY	ABB.	UNIT No.	(A)	(B)	IC51	S800	D901,902.
U.S.A.	K	0-11	YES	NO	27W40180N6902	NO	NO	NO
CANADA	P							

KRF-V8060D-G (X08-3130-22)

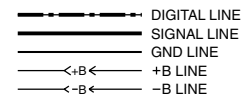
DESTINATION	COUNTRY	ABB.	UNIT No.	(A)	(B)	IC51	S800	D901,902.
GENERAL MARKET	M	0-22	YES	NO	27W40180N6902	YES	YES	YES

KRF-V8060D-S (X08-3130-11)

DESTINATION	COUNTRY	ABB.	UNIT No.	(A)	(B)	IC51	S800	D901,902.
AUSTRALIA	X							
EUROPE	E	0-11	YES	NO	27W40180N6902	NO	NO	NO

KRF-V8060D (X08-3130-11)

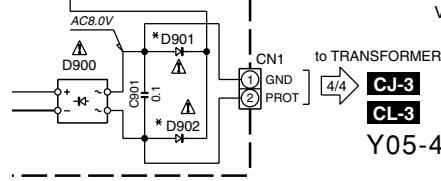
DESTINATION	COUNTRY	ABB.	UNIT No.	(A)	(B)	IC51	S800	D901,902.
EUROPE	E	0-11	YES	NO	27W40180N6902	NO	NO	NO



**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.

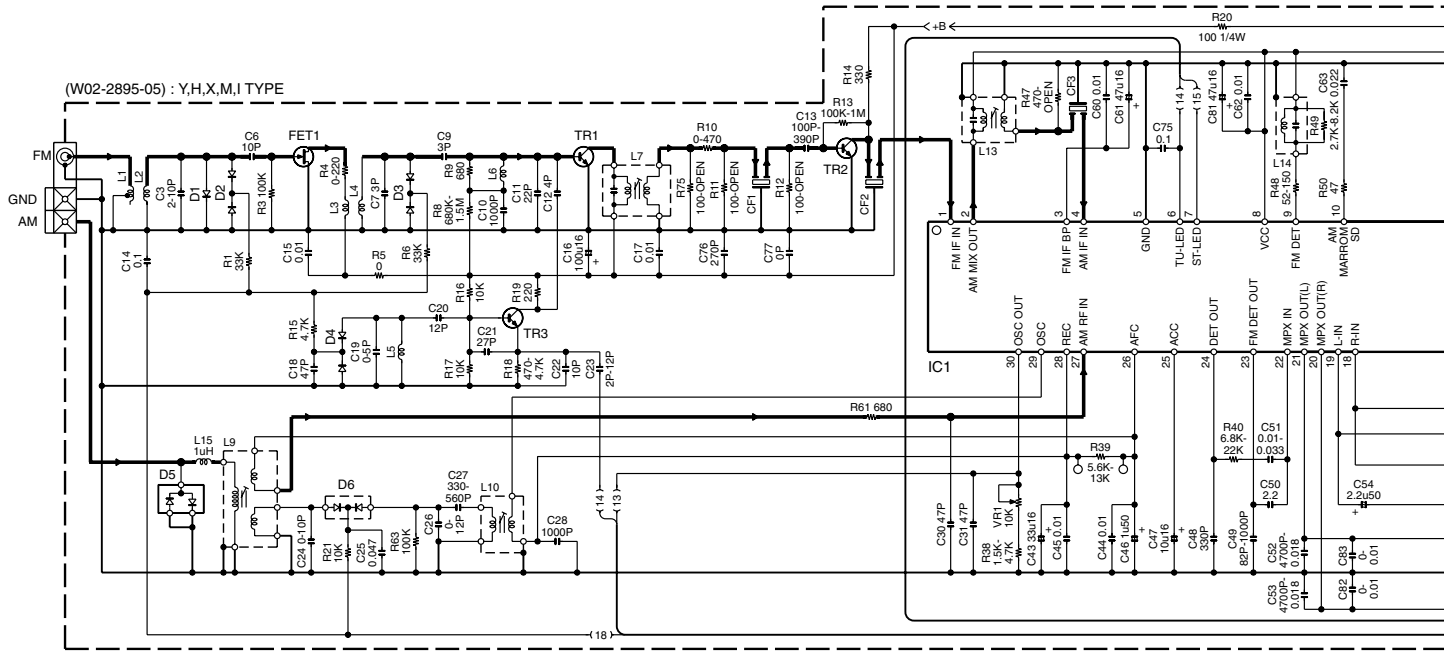
- IC2 : AK4112BVF
- IC3 : TC7WH241FU
- IC4 : AK4529-VQ
- IC5 : TC7SHU04FU
- IC6 : TC7WU04FU
- IC7 : TC74VHC175FT
- IC11,21,31,41,123 : NJM4565M or NJM4565MD
- IC12 : NJU7311AM
- IC50 : ADSST-MEL322
- IC51 : \*
- IC52 : A61L6316-12V
- IC60 : TC74HCT7007AF
- IC61 : TC74VHC125FT
- IC91 : NJU7223F25
- IC92 : BA033T
- IC90,93 : BA05T
- Q950 : 2SB1218A(Q,R) or 2SA1576A(R,S)
- Q951 : 2SD1819A(Q,R) or 2SC4081(R,S)
- D1,3 : DAN202U or 1SS301 or MA142WK
- D4 : DAP202U or 1SS300 or MA142WA
- D800,801,901,902,951 : MA111
- D900 : D2SBA20F03
- D910,920 : HZU3.9(B2) or UDZ3.9B
- D930 : HZU5.6(B2) or UDZ5.6B
- D950 : HZU5.1(B2) or UDZ5.1B



VR-6050/6060/6070/KRF-V6060D/V7060D/V8060D/X9060D (1/4)

CJ-3  
CL-3  
Y05-4660-10

KRF-V6060D/V7060D/V8060D/X9060D/VR-6050/6060/6070



VR-6050 (X09-6580-10)

DESTINATION		UNIT No.	A B D F				C	E	C64.65, 163	C74.75, 173	C82.83, 181	C84.85, 183	C90.93, 139-140, 189	C92.93, 141-142, 190-192, 227, 228, 326	C143, 144	C301, 302	C307	C322	C363	C369	CN5, 15	D23	D24	D25	D26	J4, 7	J6		
COUNTRY	ABB.																												
U.S.A.	K	0-10	NO				YES							0.1		YES													
CANADA	P																												

KRF-V6060D (X09-658X-XX)

DESTINATION		UNIT No.	A B D F				C	E	C64.65, 163	C74.75, 173	C82.83, 181	C84.85, 183	C90.93, 139-142, 189, 191	C143, 144	C190, 192, 227, 228, 326	C301, 302	C307	C322	C363	C369	CN5, 15	D23	D24	D25	D26	J4, 7	J6	
COUNTRY	ABB.																											
PX	Y	0-21	NO				YES								NO													
EUROPE	E																											

KRF-V6060D-S (X09-658X-XX)

DESTINATION		UNIT No.	A B D F				C	E	C64.65, 163	C74.75, 173	C82.83, 181	C84.85, 183	C90.93, 139-142, 189, 191	C143, 144	C190, 192, 227, 228, 326	C301, 302	C307	C322	C363	C369	CN5, 15	D23	D24	D25	D26	J4, 7	J6	
COUNTRY	ABB.																											
GENERAL MARKET	M	0-21	NO				YES								NO													
MALAYSIA	I																											
KOREA	H																											
AUSTRALIA	X																											
U.K.	T	2-71	YES				NO								YES													
EUROPE	E																											

KRF-V7060D/-S (X09-6582-71)

DESTINATION		UNIT No.	A C E				B D F				C	E	C64.65, 163	C74.75, 173	C82.83, 181	C84.85, 183	C90.93, 139-142, 189, 191	C143, 144	C190, 192, 227, 228, 326	C301, 302	C307	C322	C363	C369	CN5, 15	D23, 24	D25	D26	J4, 7	J6	K2-5	L6	Q313
COUNTRY	ABB.																																
EUROPE	E	2-71	YES				NO				YES								NO														

VR-6070 (X09-6580-12)

DESTINATION		UNIT No.	A B D F				C	E	C64.65, 163	C74.75, 173	C84.85, 183, 363	C82.83, 143, 144, 181	C84.85, 183, 363	C90.93, 139-142, 189, 191, 192	C92.93, 141-142, 189, 190	C227, 228	C301, 302	C307	C322	C326	C307	C369	CN5, 15	D23	D24	D25	D26	J4, 7	J6	K2-5	L6	
COUNTRY	ABB.																															
U.S.A.	K	0-12	YES				NO							NO		YES																
CANADA	P																															

KRF-X9060D (X09-658X-XX)

DESTINATION		UNIT No.	A B D F				C	E	C64.65, 163	C74.75, 173	C82.83, 143, 144, 181	C84.85, 183, 363	C90.93, 139-142, 189, 192	C227, 228	C301, 302	C307	C322	C326	C369	CN5, 15	D23	D24	D25	D26	J4, 7	J6	K2-5	L6			
COUNTRY	ABB.																														
PX	Y	0-23	YES				NO							YES																	
EUROPE	E																														

KRF-X9060D-G (X09-6580-23)

DESTINATION		UNIT No.	A B D F				C	E	C64.65, 163	C74.75, 173	C82.83, 143, 144, 181	C84.85, 183, 363	C90.93, 139-142, 189, 192	C227, 228	C301, 302	C307	C322	C326	C369	CN5, 15	D23	D24	D25	D26	J4, 7	J6	K2-5	L6		
COUNTRY	ABB.																													
GENERAL MARKET	M	0-23	YES				NO							YES																
KOREA	H																													

KRF-X9060D-S (X09-658X-XX)

DESTINATION		UNIT No.	A B D F				C	E	C64.65, 163	C74.75, 173	C82.83, 143, 144, 181	C84.85, 183, 363	C90.93, 139-142, 189, 192	C227, 228	C301, 302	C307	C322	C326	C369	CN5, 15	D23	D24	D25	D26	J4, 7	J6	K2-5	L6		
COUNTRY	ABB.																													
AUSTRALIA	X	0-23	YES				NO							YES																
EUROPE	E																													

VR-6060 (X09-6580-11)

DESTINATION		UNIT No.	A B C D E				F	C64.65, 163	C74.75, 173	C82.83, 181	C84.85, 183	C90.93, 139-140, 189, 190	C92.93, 141-142, 191, 192, 326	C227, 228	C301, 302	C307	C322	C363	C369	CN5	CN15	D23	D24	D25	D26	J4, 6	J7	
COUNTRY	ABB.																											
U.S.A.	K	0-11	YES				NO						NO	YES														
CANADA	P																											

KRF-V8060D-G (X09-6580-22)

DESTINATION		UNIT No.	A B C D E				F	C64.65, 163	C74.75, 173	C82.83, 181	C84.85, 183	C90.93, 139-142, 189, 192	C143, 144, 326	C227, 228	C301, 302	C307	C322	C363	C369	CN5	CN15	D23	D24	D25	D26	J4, 6	J7	K2-5
COUNTRY	ABB.																											
GENERAL MARKET	M	0-22	YES				NO						NO	YES														

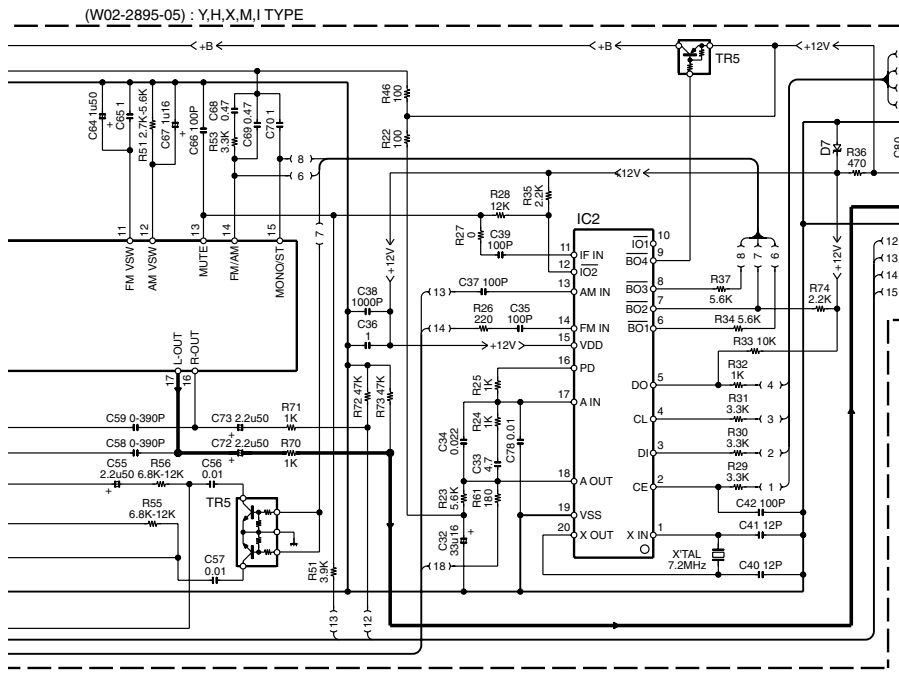
KRF-V8060D-S (X09-658X-XX)

DESTINATION		UNIT No.	A B C D E				F	C64.65, 163	C74.75, 173	C82.83, 181	C84.85, 183	C90.93, 139-142, 189, 192	C143, 144, 326	C227, 228	C301, 302	C307	C322	C363	C369	CN5	CN15	D23	D24	D25	D26	J4, 6	J7	
COUNTRY	ABB.																											
AUSTRALIA	X	0-22	YES				NO								YES													
EUROPE	E																											

KRF-V8060D (X09-6582-72)

DESTINATION		UNIT No.	A B C D E				F	C64.65, 163	C74.75, 173	C82.83, 181	C84.85, 183	C90.93, 139-142, 189, 192	C143, 144, 326	C227, 228	C301, 302	C307	C322	C363	C369	CN5	CN15	D23, 24	D25	D26	J4, 6	J7	K2-5	L6
COUNTRY	ABB.																											
EUROPE	E	2-72	YES				NO							YES														





K2-5	L6	Q313	R13, 14	R65,66,63,18,603,604	R79,80,129,130,179	R180,200,202	R303	R304,358,359,383,384,403,404	R317	R318	R413,414	W1,2,14,15,20-23	W3,4,13	WH1,4,221
S76-0045-15	NO	NO	220K	1.5K	390	NO	1	10K	2.2K	2.2K	1.2K	YES	NO	NO

K2-5	L6	Q313	R13, 14	R65,66,63,18,603,604	R79,80,129,130,179	R180,200,202	R303	R304,358,359,383,384,403,404	R317	R318	R413,414	W1,2,14,15,20-23	W3,4,13	WH1,4,221
S76-0045-15	NO	NO	220K	1.5K	390	NO	1	10K	2.2K	2.2K	1.2K	YES	NO	NO

R13, 14	R65,66,63,18,413,414,603,604	R79,80,129,130,179	R200,202	R303	R304	R358,359,383,384,403,404	R413,414	R603,604	W1,2,5-7,10-15,20-23	W3,4	W8	WH1,4,221
47K	1.5K	430	NO	1	10K	1.2K	1.5K	NO	YES	NO	NO	

L6	Q313	R13, 14	R65,66,63,18,413,414,603,604	R79,80,129,130,179,180	R200,202	R303	R304	R358,359,383,384,403,404	R413,414	R603,604	W1,2,5-7,10-15,20-23	W3,4	W8	WH1,4,221
YES	NO	47K	2.2K	1.6K	YES	560	8.2K	2.2K	2.2K	9.1K	1.2K	NO	YES	YES

Q313	R13, 14	R65,66,63,18,413,414,603,604	R79,80,129,130,179,180	R200,202	R303	R304	R358,359,383,384,403,404	R413,414	R603,604	W1,2,5-7,10-15,20-23	W3,4	W8	WH1,4,221
NO	47K	2.2K	1.6K	YES	560	8.2K	2.2K	2.2K	9.1K	1.2K	NO	YES	YES

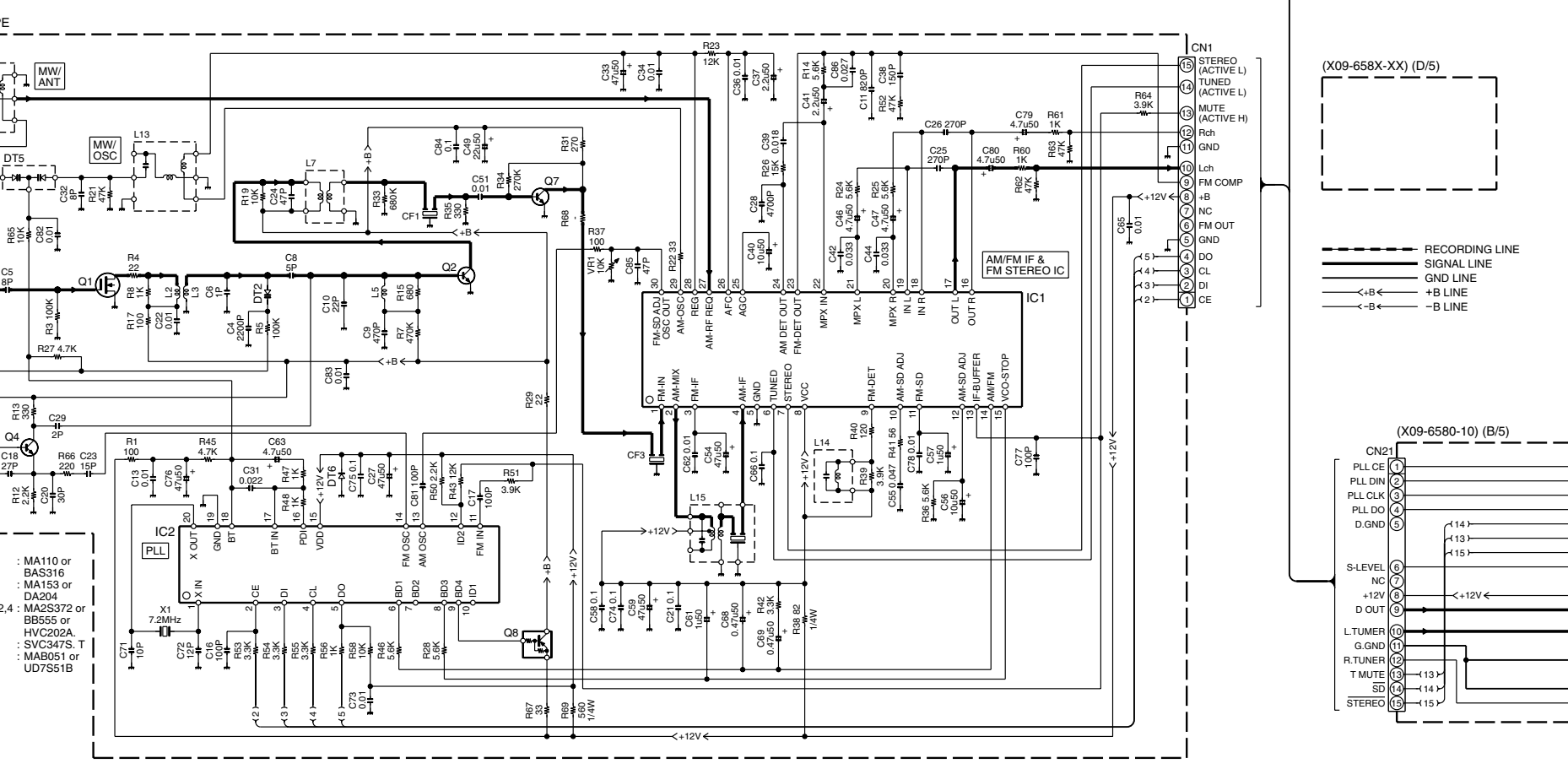
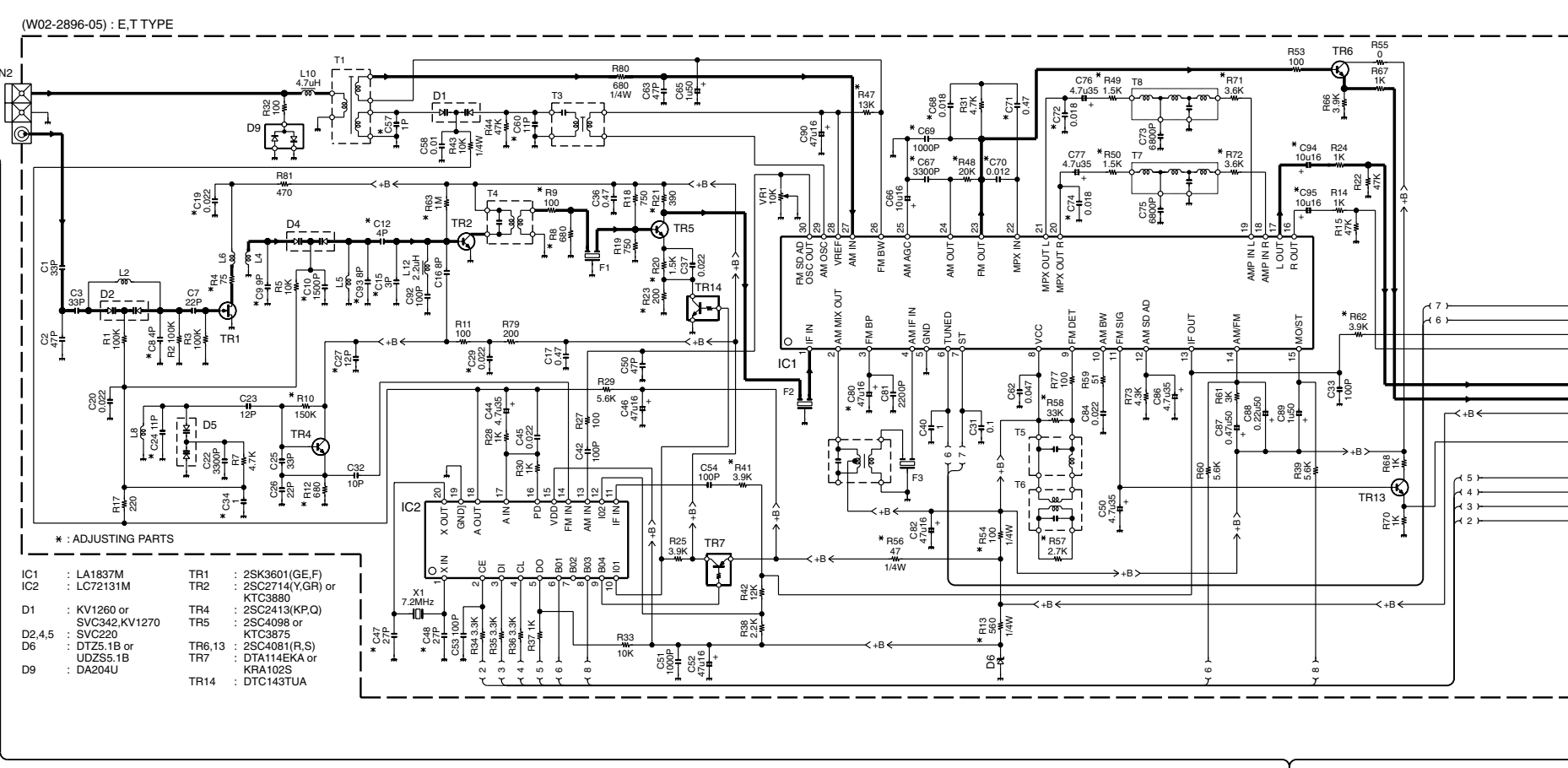
Q313	R13, 14	R65,66,63,18,413,414,603,604	R79,80,129,130,179,180	R200,202	R303	R304	R358,359,383,384,403,404	R413,414	R603,604	W1,2,5-7,10-15,20-23	W3,4	W8	WH1,4,221
NO	47K	2.2K	1.6K	YES	560	8.2K	2.2K	2.2K	9.1K	1.2K	NO	YES	YES

K2-5	L6	Q313	R13, 14	R65,66,63,18,603,604	R79,80,129,130,179	R180,200,202	R303	R304,358,359,383,384,403,404	R317	R318	R413,414	W1-4,10-15	W5-8,20-23	WH1,4	WH221
S76-0045-15	YES	NO	47K	1.5K	390	4.7K	YES	1	10K	2.2K	1.2K	NO	YES	YES	NO

K2-5	L6	Q313	R13, 14	R65,66,63,18,603,604	R79,80,129,130,179	R180,200,202	R303	R304,358,359,383,384,403,404	R317	R318	R413,414	W1-4,10-15	W5-8,20-23	WH1,4	WH221
S76-0045-15	YES	NO	47K	1.5K	390	4.7K	YES	1	10K	2.2K	1.2K	NO	YES	YES	NO

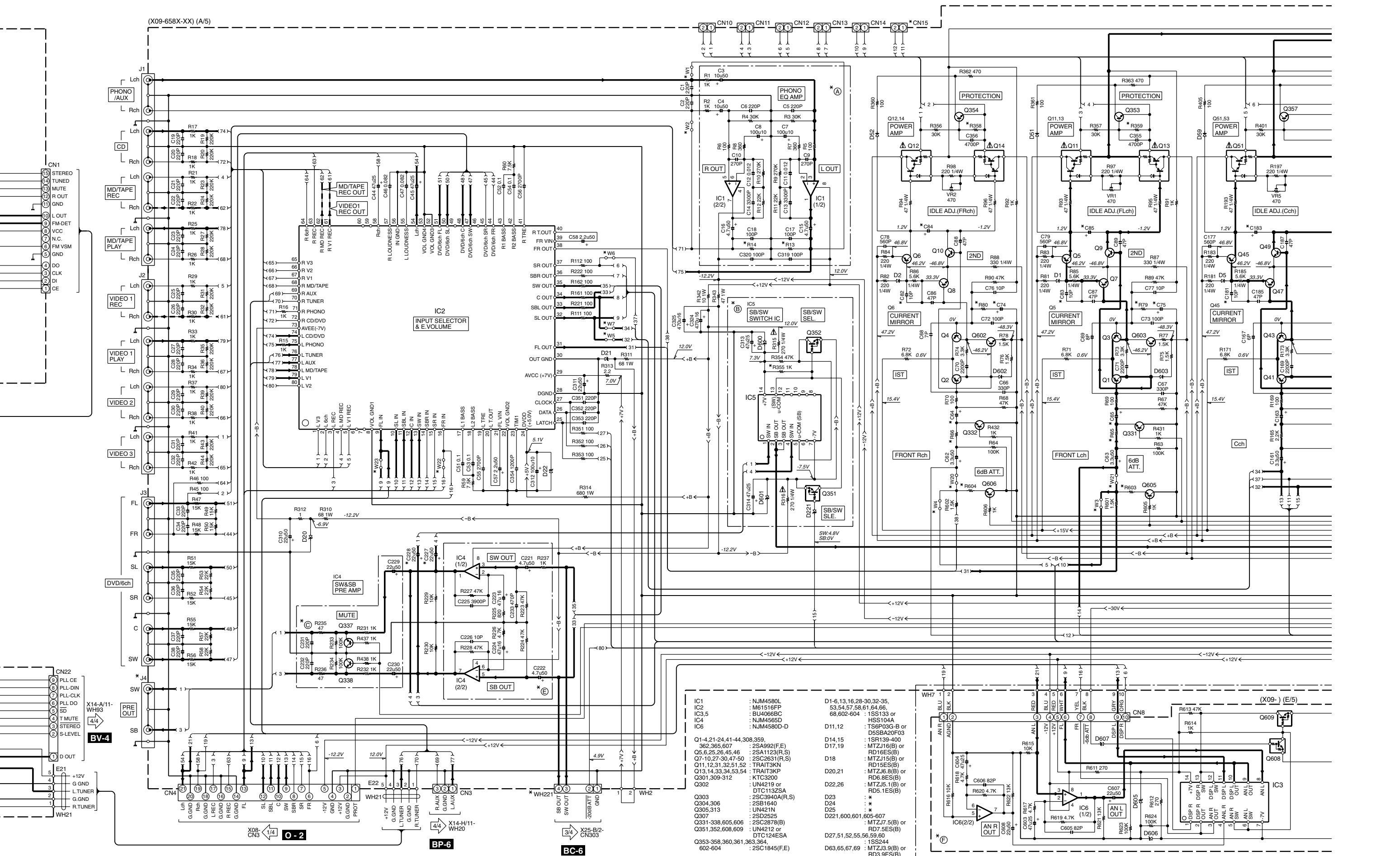
K2-5	L6	Q313	R13, 14	R65,66,63,18,603,604	R79,80,129,130,179	R180,200,202	R303	R304,358,359,383,384,403,404	R317	R318	R413,414	W1-4,10-15	W5-8,20-23	WH1,4	WH221
S76-0045-15	YES	NO	47K	1.5K	390	4.7K	YES	1	10K	2.2K	1.2K	NO	YES	YES	NO

Q313	R13, 14	R65,66,63,18,413,414,603,604	R79,80,129,130,179	R180,200,202	R303	R304,358,359,383,384,403,404	R317	W1-4,10-15	W5-8,20-23	WH1,4	WH221
NO	47K	1.5K	430	5.1K	YES	1	10K	1.2K	NO	YES	NO



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

MODE	CARRIER	MODULATION			ANT INPUT
		FREQUENCY	DEVIATION		
FM	98MHz	1kHz	STEREO 67.5kHz 7.5kHz(Pilot)		60dB
AM	1000(999)kHz	400Hz	MONO 30% MOD		60dB



(X09-658X-XX) (A/5)

IC1 : NJM4580L  
 IC2 : M61516FP  
 IC3,5 : BU4066BC  
 IC4 : NJM4555D  
 IC6 : NJM4580D-D

D1-6,13,16,28-30,32-35, 53,54,57,58,61,64,66, 68,602-604 : 1SS133 or HSS104A

D11,12 : TS6P03-B or DSSBA20F03

D14,15 : 1SR139-400

D17,19 : MTZJ16(B) or RD16ES(B)

D18 : MTZJ15(B) or RD15ES(B)

D20,21 : MTZJ6.8(B) or RD6.8ES(B)

D22,26 : MTZJ5.1(B) or RD5.1ES(B)

Q303 : 2SC3940A(R,S)

Q304,306 : 2SB1640

Q305,313 : UN421N

Q307 : 2SD2525

Q331-338,605,606 : 2SC2878(B)

Q351,352,608,609 : UN4212 or DTC124ESA

Q353-358,360,361,363,364, 602-604 : 1SS244

D27,51,52,55,56,59,60 : 1SS244

D63,65,67,69 : MTZJ3.9(B) or RD3.9ES(B)

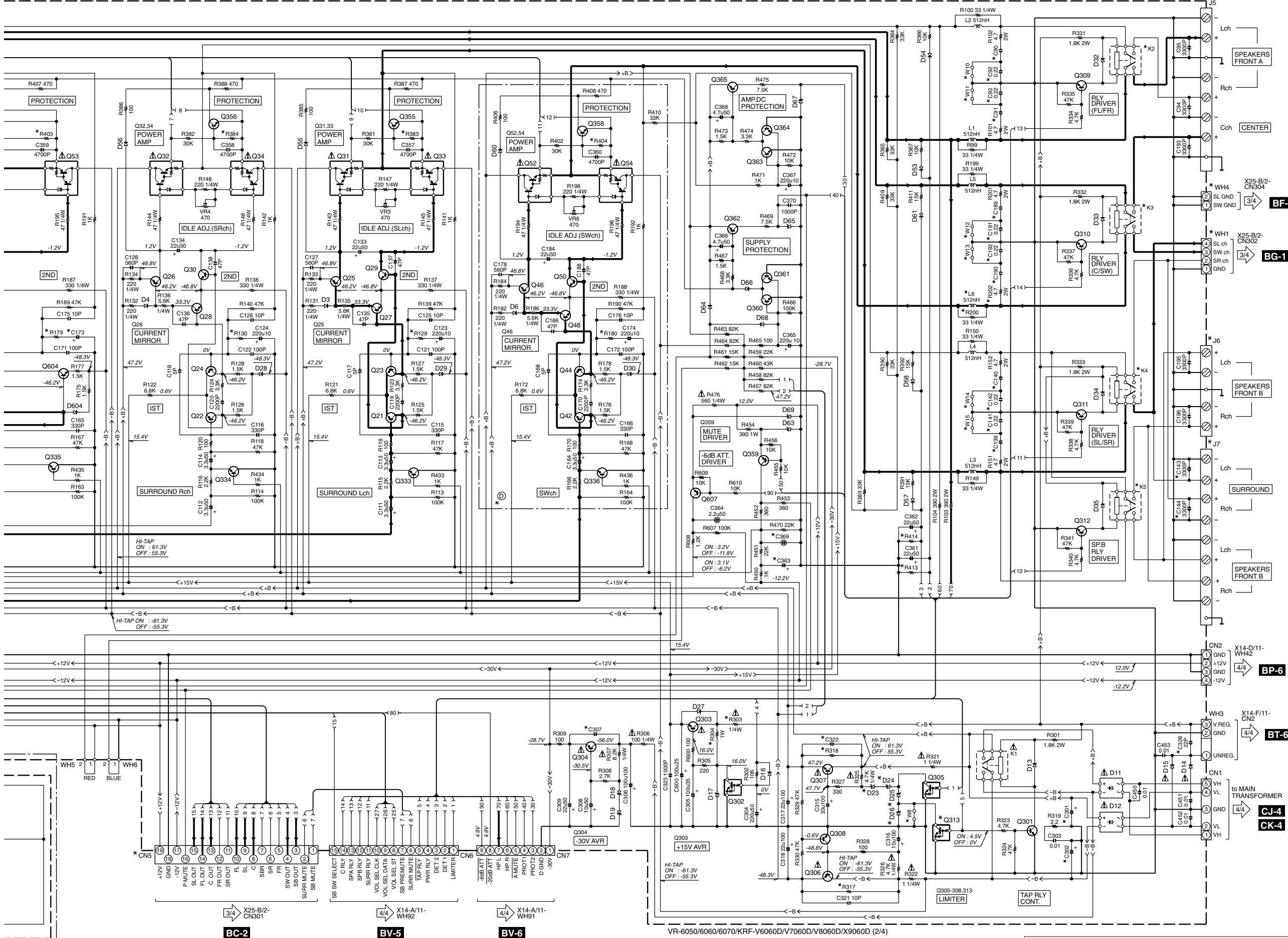
X09-658X-XX (A/5)

X14-A/11-WH93

X14-H/11-WH20

X25-B/2-CN303

X09- (E/5)



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

BF-1

BG-1

BP-6

BT-6

CJ-4

CK-4

BC-2

BV-5

BV-6

VR-6050/6060/6070/KRF-V6060D/V7060D/V8060D/X9060D (2/4)

KRF-V6060D/V7060D/V8060D/X9060D/VR-6050/6060/6070

VR-6060 (X25-6490-10)

DESTINATION	UNIT	(A)	(C)	(D)	W5
COUNTRY	ABB.	No.			
U.S.A.	K	0-10	NO	YES	YES
CANADA	P				

VR-6070 (X25-6490-11)

DESTINATION	UNIT	(A)	(C)	(D)	W5
COUNTRY	ABB.	No.			
U.S.A.	K	0-11	YES	NO	
CANADA	P				

KRF-V8060D (X25-6492-71)

DESTINATION	UNIT	(A)	(C)	(D)	W5
COUNTRY	ABB.	No.			
U.S.A.	K	0-10	NO	NO	
CANADA	P				

KRF-V8060D-G (X25-6492-71)

DESTINATION	UNIT	(A)	(C)	(D)	W5
COUNTRY	ABB.	No.			
U.S.A.	K	0-11	NO	NO	
CANADA	P				

KRF-V8060D-S (X25-6492-71)

DESTINATION	UNIT	(A)	(C)	(D)	W5
COUNTRY	ABB.	No.			
U.S.A.	K	0-11	NO	NO	
CANADA	P				

KRF-X9060D (X25-6492-72)

DESTINATION	UNIT	(A)	(C)	(D)	W5
COUNTRY	ABB.	No.			
U.S.A.	K	0-10	NO	NO	
CANADA	P				

KRF-X9060D-G (X25-6492-72)

DESTINATION	UNIT	(A)	(C)	(D)	W5
COUNTRY	ABB.	No.			
U.S.A.	K	0-11	NO	NO	
CANADA	P				

KRF-X9060D-S (X25-6492-72)

DESTINATION	UNIT	(A)	(C)	(D)	W5
COUNTRY	ABB.	No.			
U.S.A.	K	0-11	NO	NO	
CANADA	P				

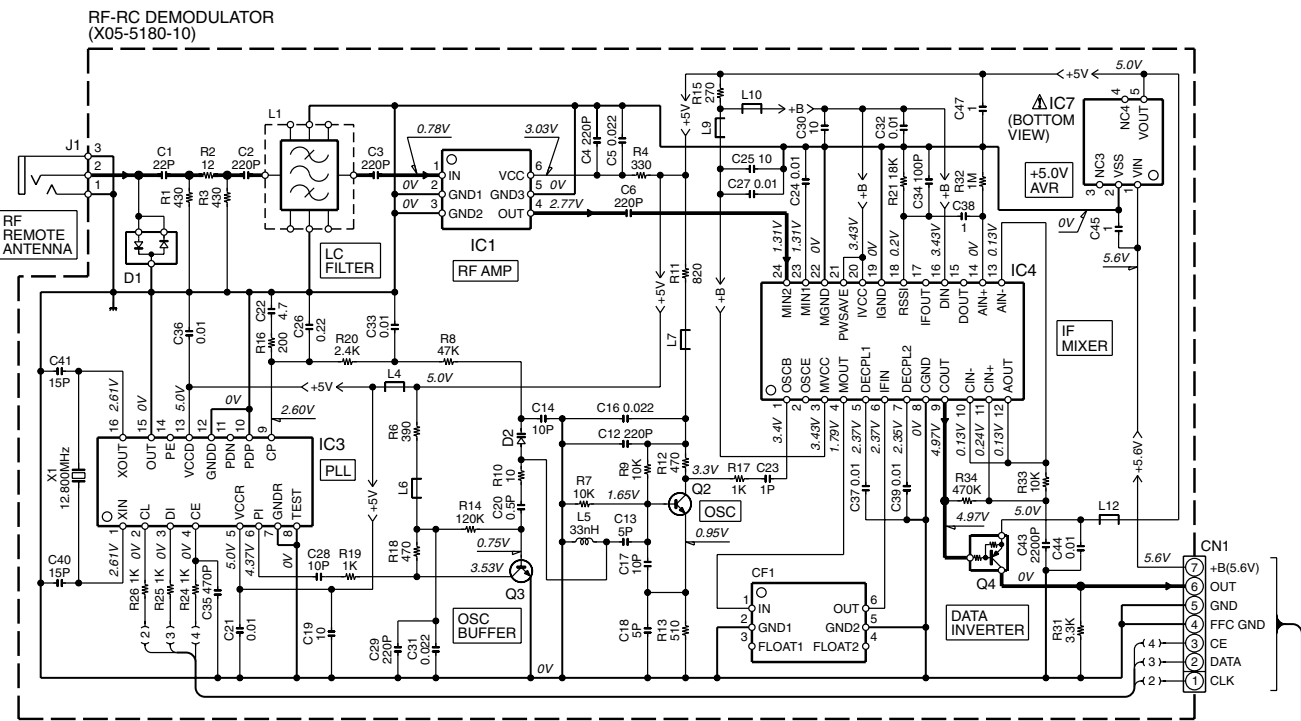
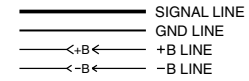
IC101 : NJM2284D  
 IC102 : BA7666FS  
 IC201 : BA05T  
 IC202 : TC74HC00AP  
 IC401,403 : NJM4580D-D  
 IC402,404 : NJM4565D-D

Q101,201 : UN4212 or DTC124ESA  
 Q202,203 : KTC3199(Y,GR) or 2SC2785(F,E) or 2SC1740S(Q,R)

Q204 : KTA1267(Y,GR) or 2SA1175(F,E) or 2SA933A(S,Q,R)

Q301-320,403-408,411,412 : 2SC2878(B)  
 Q401,402,409 : DTA124ESA or UN4112

D201-206 : 1SS133 or HSS104A  
 D401 : MTZJ3.9(B) or RD3.9ES(B)  
 D402 : MTZJ5.1(B) or RD5.1ES(B)



RECEIVING FREQUENCY(MHz)/ VCO OSCILLATING FREQUENCY(MHz)/ TUNING VOLTAGE(V) TABLE

RECEIVING FREQUENCY	VCO OSCILLATING FREQUENCY	TUNING VOLTAGE
309.5	298.8	2.38 ± 0.5
315.0	304.3	2.56 ± 0.5

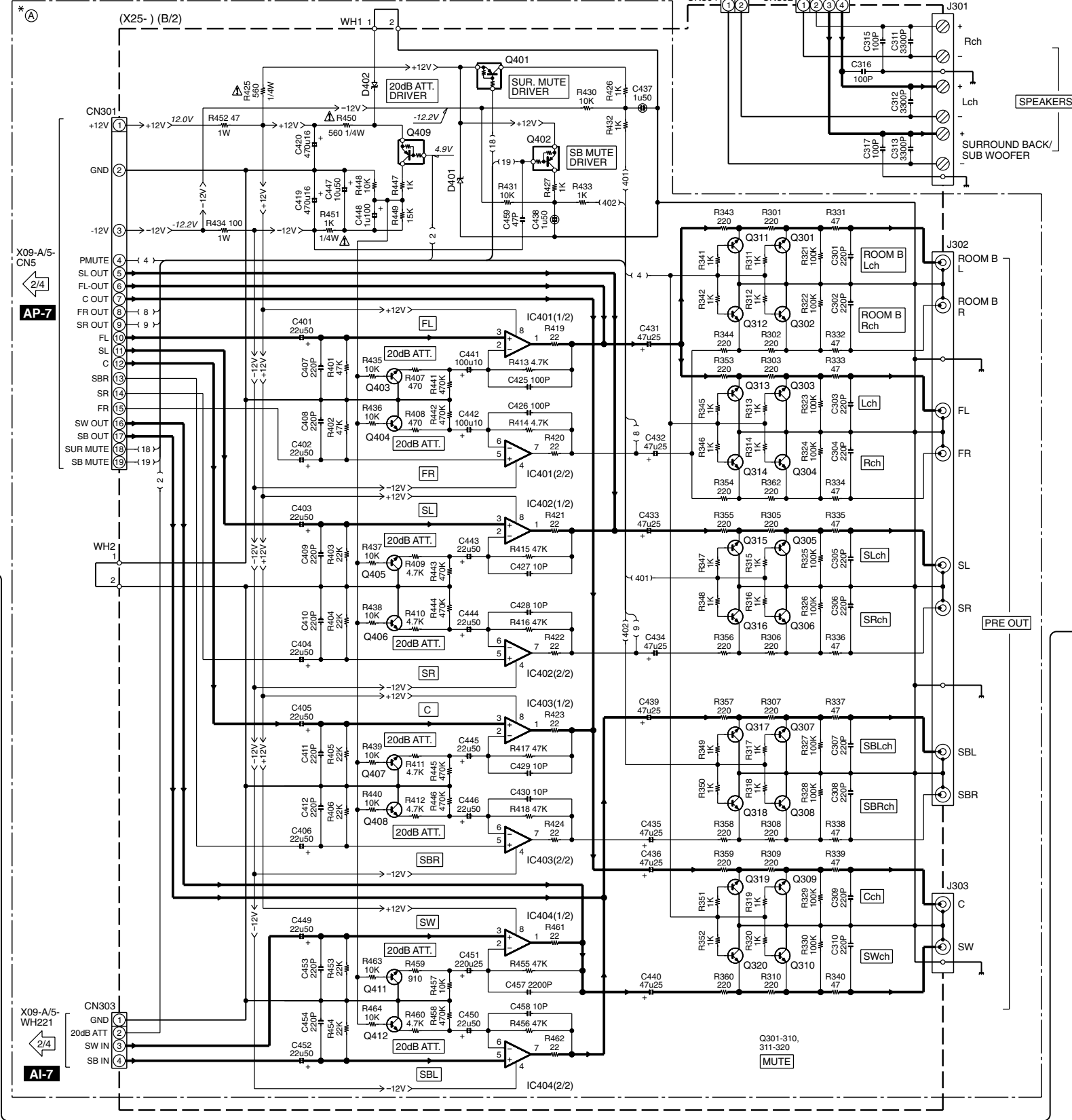
IC1 : UPC2748T-E3  
 IC3 : LV2105V  
 IC4 : TK14583V  
 IC7 : XC6201P502MR

Q2,3 : 2SC5065(O, Y)  
 Q4 : DTA124EUA  
 D1 : 1SS302  
 D2 : KV1832E

**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.

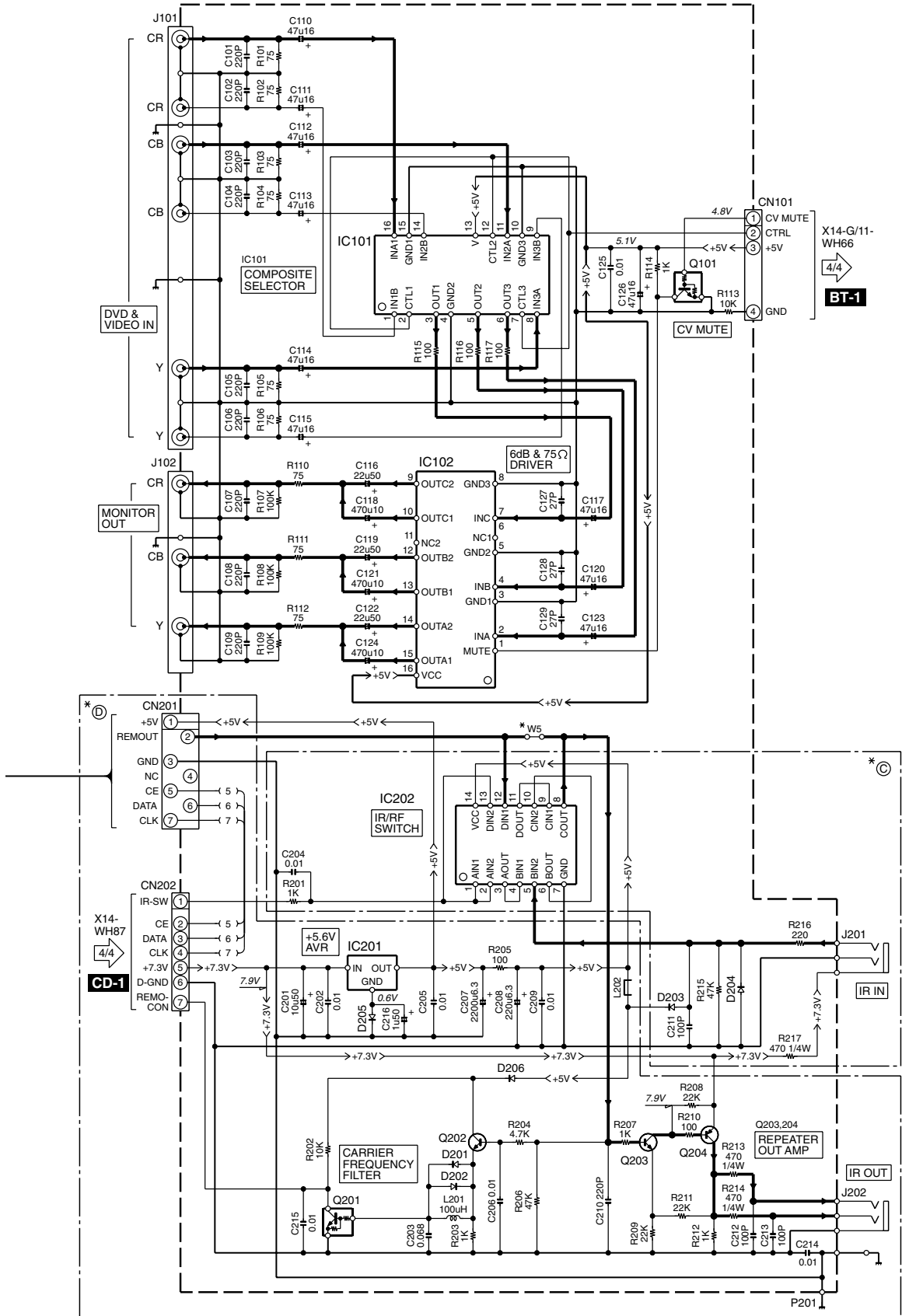
The DC voltage is an actual reading measured with a high impedance type voltmeter as the AM/FM signal generator is specified to the conditions as shown in the list below. The measurement value may vary depending on the measuring instruments used or on the product. The value shown in ( ) is actual reading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

MODE	CARRIER	MODULATION		ANT INPUT
		FREQUENCY	DEVIATION	
FM	98MHz	1kHz	STEREO 67.5kHz 7.5kHz(Pilot)	60dB
AM	1000(999)kHz	400Hz	MONO 30% MOD	60dB



Q301-310, 311-320 MUTE

(X25-649X-XX) (A/2)



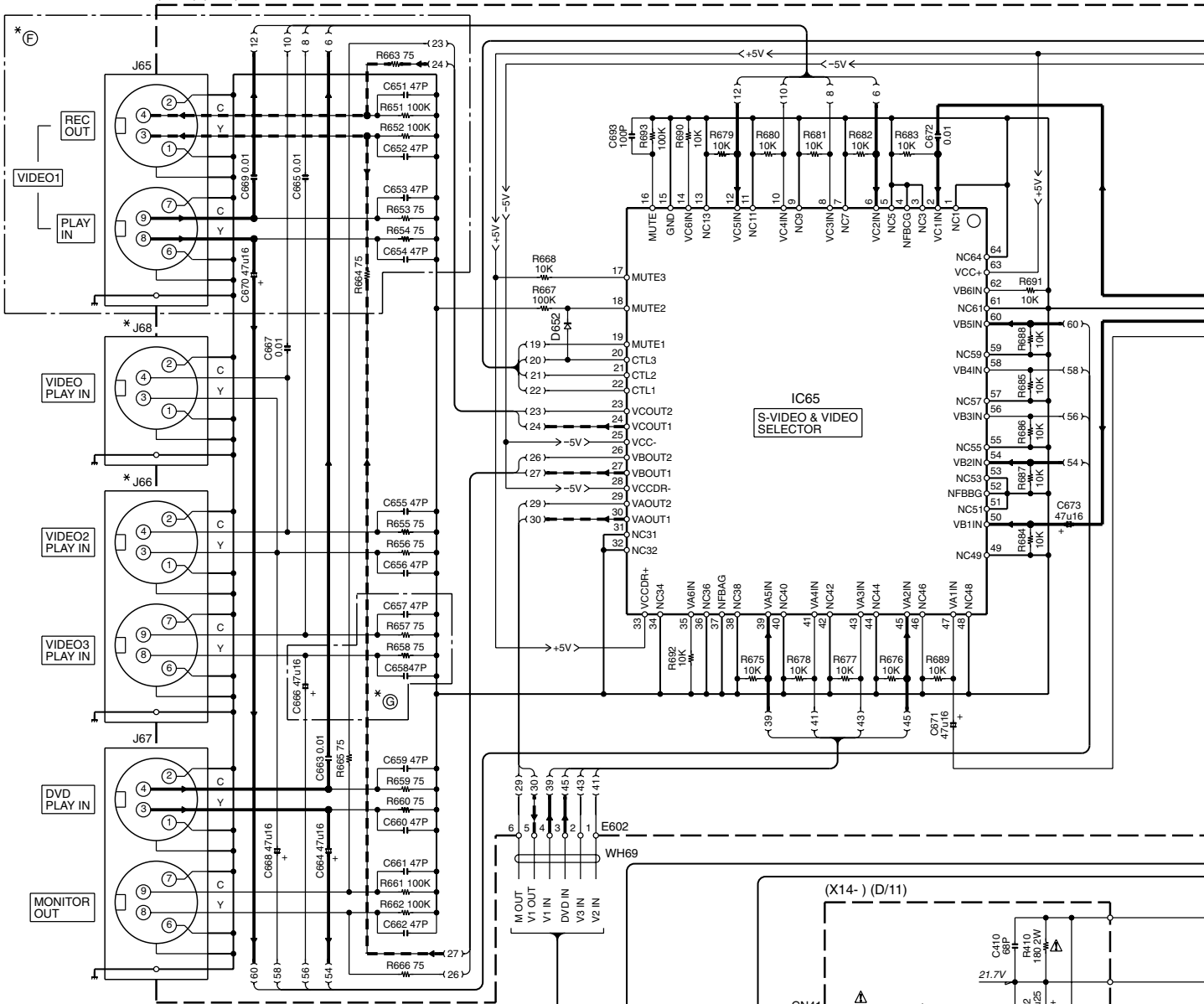
VR-6050/6060/6070/KRF-V6060D/V7060D/V8060D/X9060D (3/4)

KRF-V6060D/V7060D/V8060D/X9060D/VR-6050/6060/6070

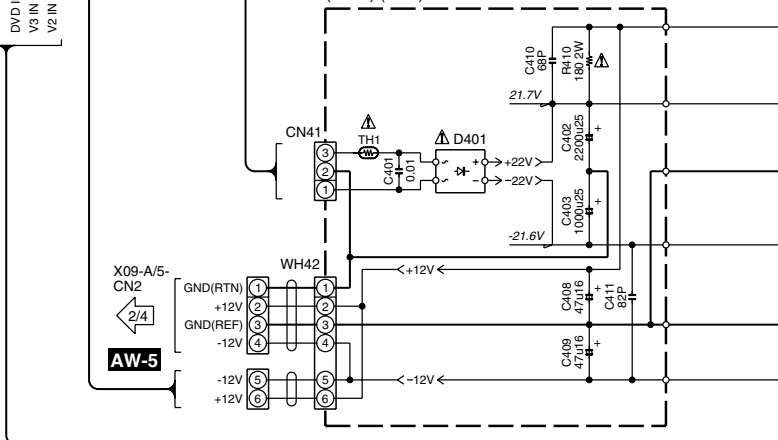
Y05-4660-10

KENWOOD

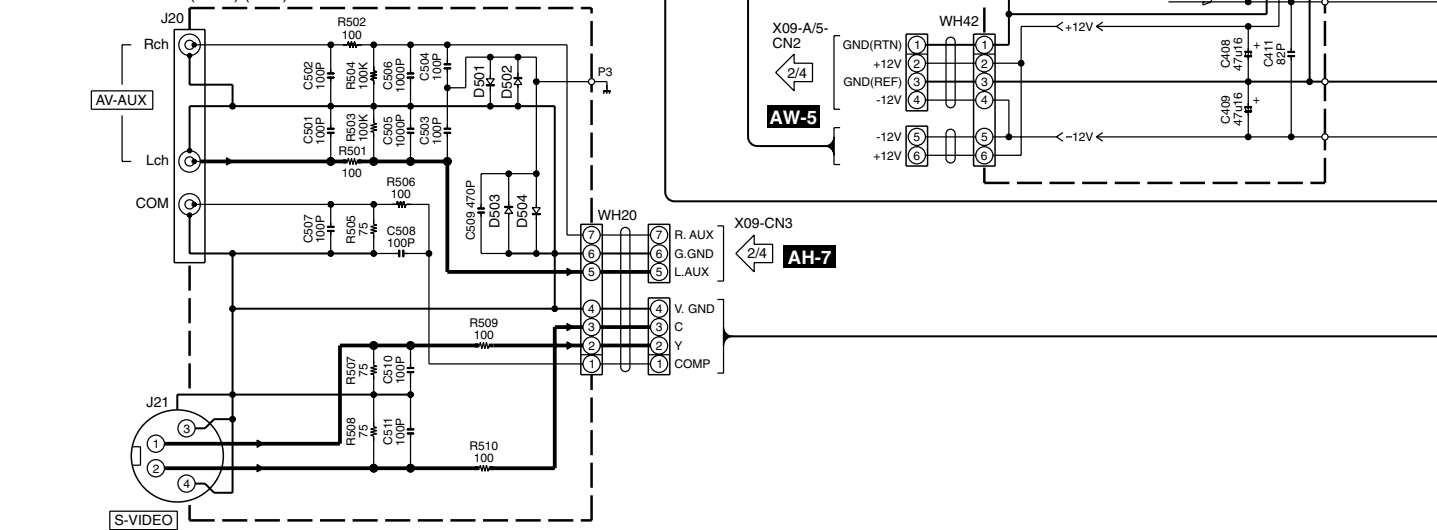
(X14-) (G/11)

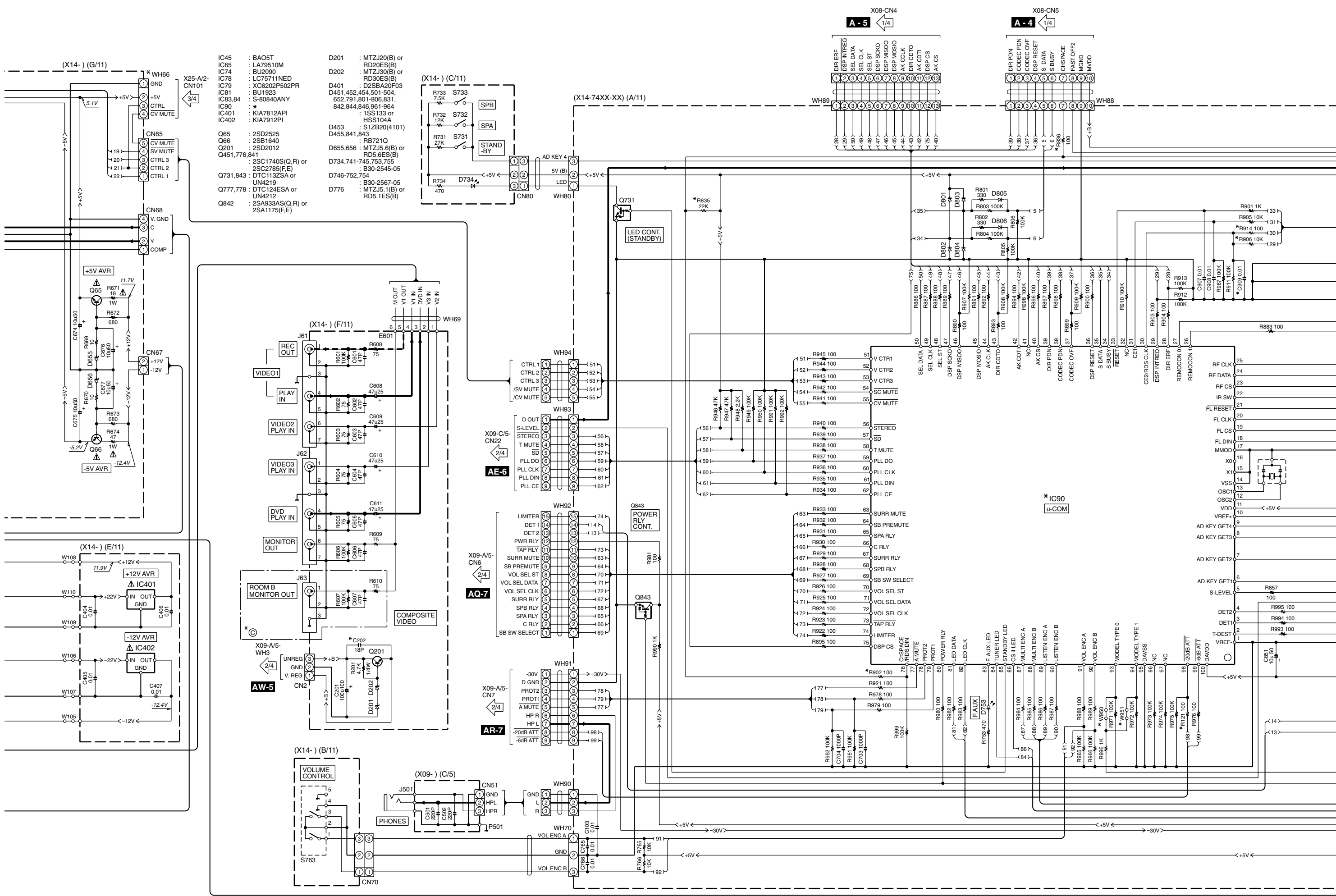


(X14-) (D/11)



(X14-) (H/11)

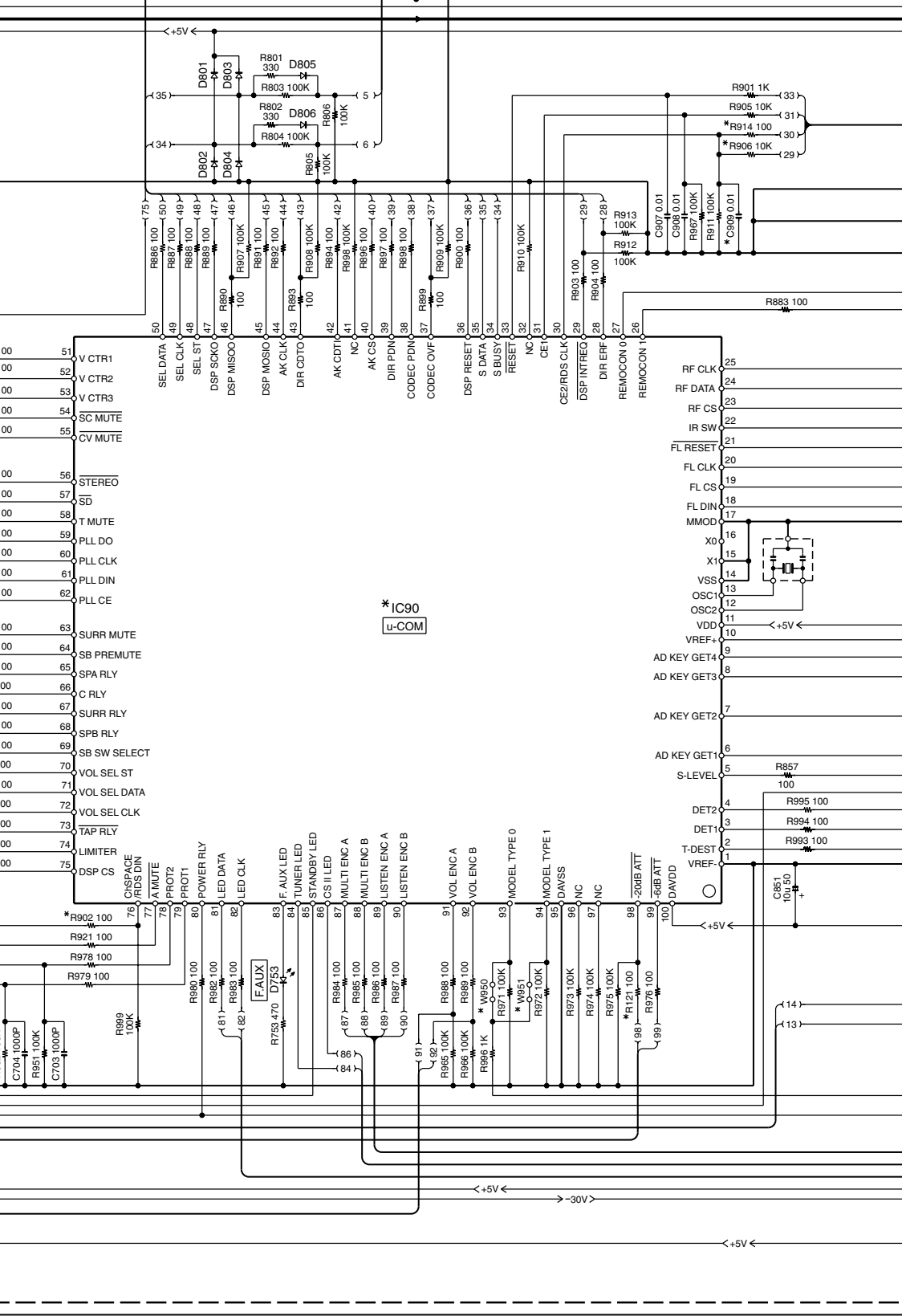
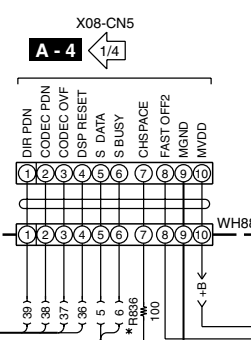
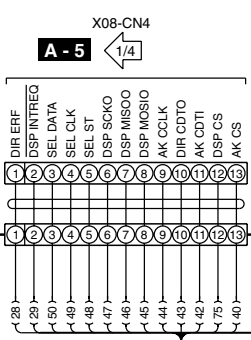
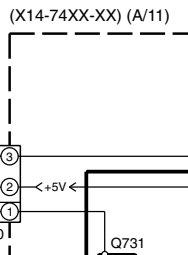
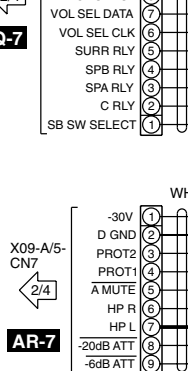
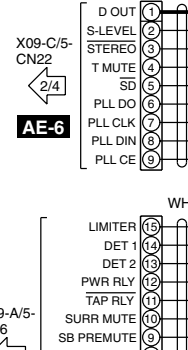
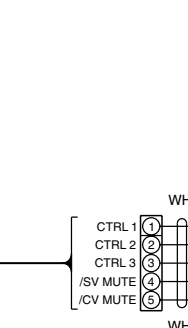
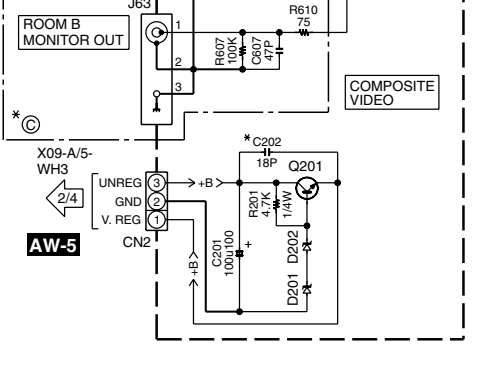
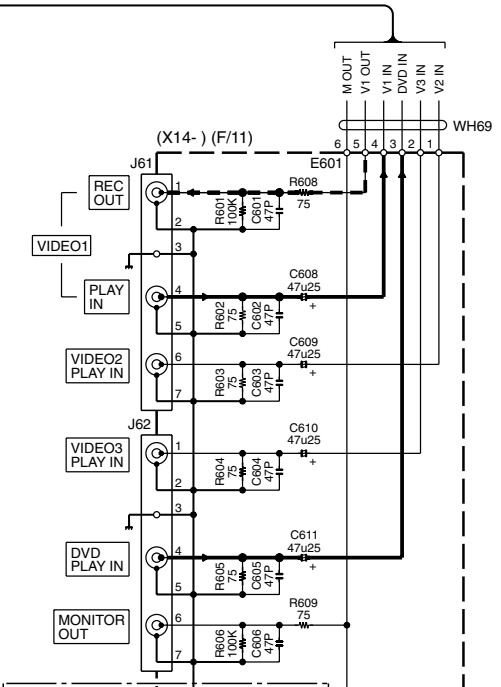
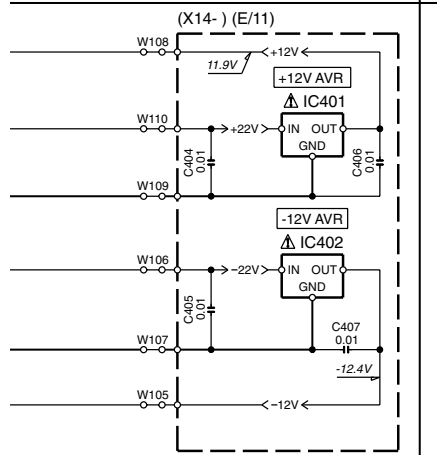
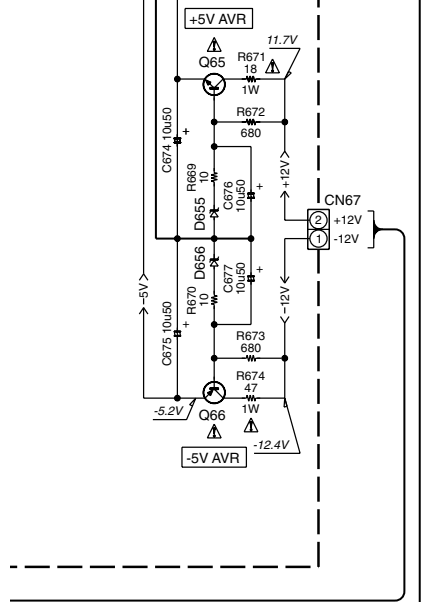
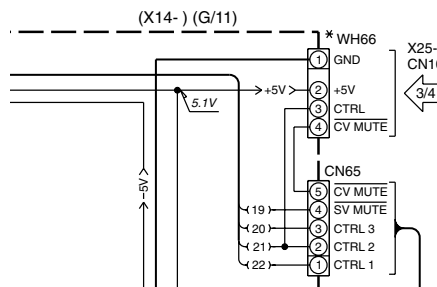
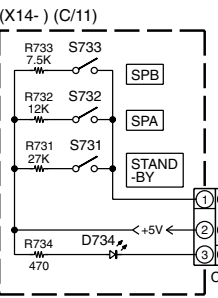




- IC45 : BAO5T
- IC65 : LA79510M
- IC74 : BU2090
- IC78 : LC75711NED
- IC79 : XC6202P502PR
- IC81 : BU1923
- IC83,84 : S-80840ANY
- IC90 : \* KIA7812API
- IC401 : KIA7812API
- IC402 : KIA7912PI

- D201 : MTZJ20(B) or RD20ES(B)
- D202 : MTZJ30(B) or RD30ES(B)
- D401 : D2SBA20F03
- D451,452,454,501-504, 652,791,801-806,831, 842,844,846,961-964
- D453 : S1ZB20(4101)
- D455,841,843
- D731 : RB721Q
- D734,741-745,753,755
- D746-752,754
- D766 : MTZJ5.1(B) or RD5.1ES(B)

- Q65 : 2SD2525
- Q66 : 2SB1640
- Q201 : 2SD2012
- Q451,776,841
- Q731,843 : DTC113ZSA or UN4219
- Q777,778 : DTC124ESA or UN4212
- Q842 : 2SA933AS(Q,R) or 2SA1175(F,E)

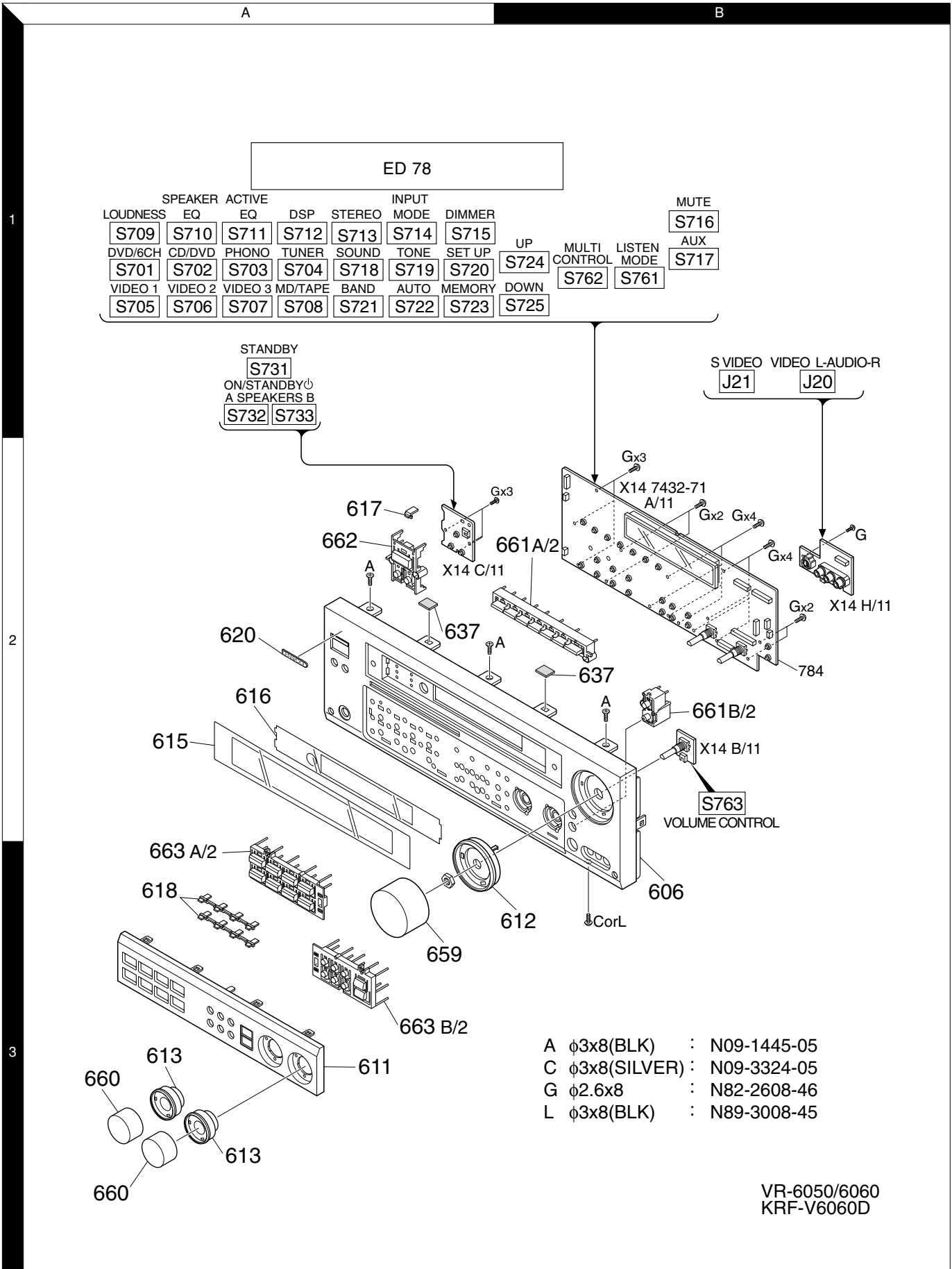








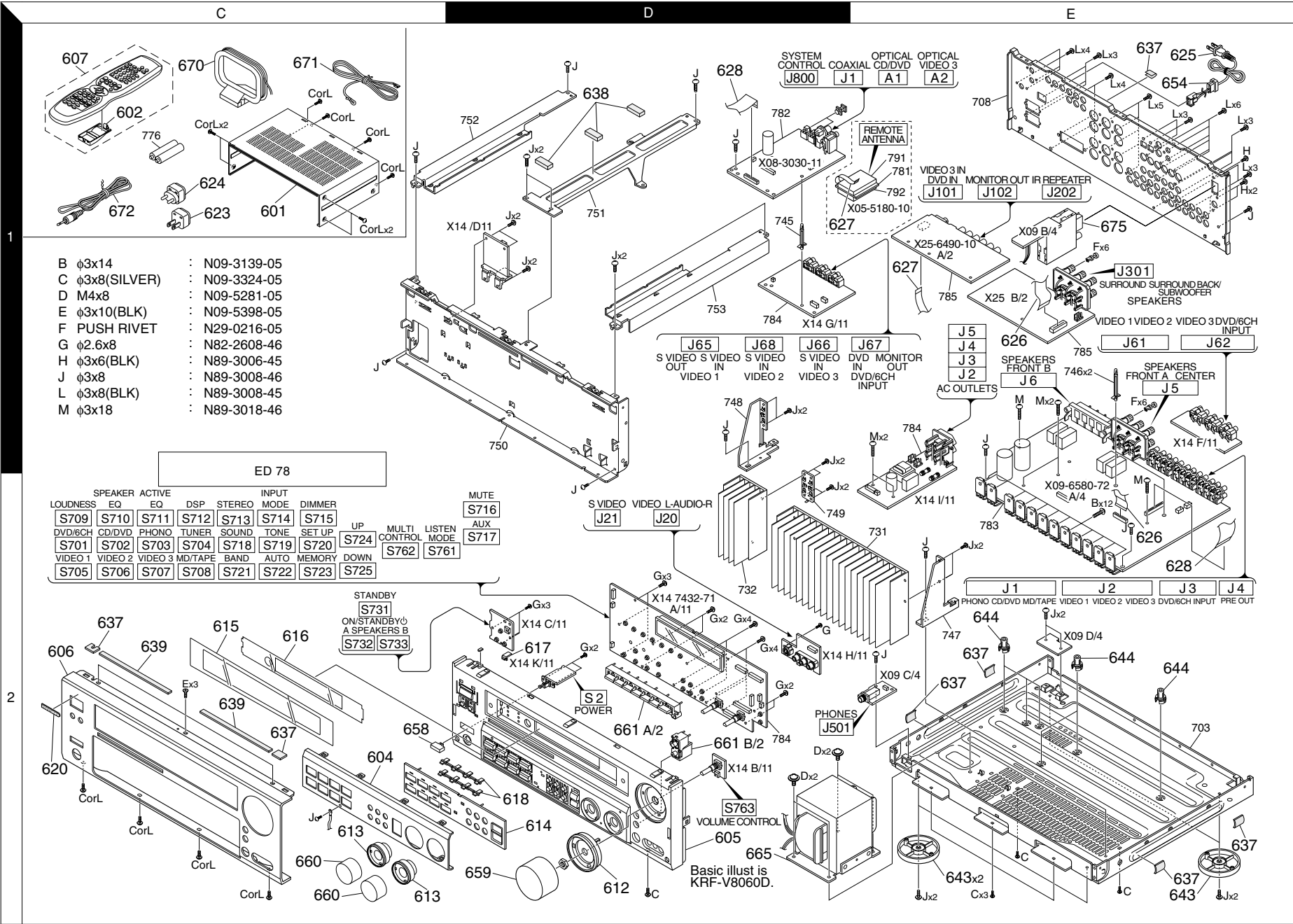
## EXPLODED VIEW



Parts with exploded numbers larger than 700 are not supplied.

EXPLODED VIEW

Parts with exploded numbers larger than 700 are not supplied.



## \* 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.

①

## \* New Parts

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②

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
<b>VR-6050, KRF-V6060D/KRF-V6060D-S</b>						
601	1C	*	A01-3840-01	METALLIC CABINET	KPYE	
601	1C	*	A01-3841-01	METALLIC CABINET	MIH	
601	1C	*	A01-3841-01	METALLIC CABINET	XTES	
602	1C	*	A09-1258-08	BATTERY COVER		
606	3B	*	A60-2169-01	PANEL	KP	
606	3B	*	A60-2170-01	PANEL	YE	
606	3B	*	A60-2171-01	PANEL	MIH	
606	3B	*	A60-2171-01	PANEL	XTES	
607	1C	*	A70-1554-05	REMOTE CONTROLLER ASSY	TEES	
607	1C	*	A70-1555-05	REMOTE CONTROLLER ASSY	KPY	
607	1C	*	A70-1555-05	REMOTE CONTROLLER ASSY	MIHX	
611	3A	*	B07-2596-12	ESCUTCHEON	E	
611	3A	*	B07-2597-12	ESCUTCHEON	TES	
611	3A	*	B07-2598-12	ESCUTCHEON	KPY	
611	3A	*	B07-2599-12	ESCUTCHEON	MIHX	
612	3B	*	B07-2606-03	ESCUTCHEON	KPYE	
612	3B	*	B07-2607-03	ESCUTCHEON	MIH	
612	3B	*	B07-2607-03	ESCUTCHEON	XTES	
613	3A	*	B07-2608-03	ESCUTCHEON	KPYE	
613	3A	*	B07-2609-03	ESCUTCHEON	MIH	
613	3A	*	B07-2609-03	ESCUTCHEON	XTES	
615	2A	*	B10-3792-02	FRONT GLASS	KP	
615	2A	*	B10-3793-02	FRONT GLASS	YMIHX	
615	2A	*	B10-3794-02	FRONT GLASS	TEES	
616	2A	*	B11-1544-03	COLOR FILTER		
617	2A	*	B12-0441-04	INDICATOR		
618	3A	*	B12-0442-04	INDICATOR		
620	2A	*	B43-0314-04	KENWOOD BADGE		
-	-	-	B46-0096-53	WARRANTY CARD	X	
-	-	-	B46-0310-03	WARRANTY CARD	TEES	
-	-	-	B46-0328-03	WARRANTY CARD	Y	
-	-	-	B46-0330-03	WARRANTY CARD	K	
-	-	-	B46-0347-03	WARRANTY CARD	P	
-	-	*	B46-0365-04	QUESTIONNAIRE CARD	K	
-	-	-	B58-0513-04	CAUTION CARD (PRESET220-240)	Y	
-	-	-	B58-0945-03	CAUTION CARD	T	
-	-	-	B58-0964-13	CAUTION CARD (UL)	KY	
-	-	-	B58-0965-13	CAUTION CARD (T,XtypePL)	XT	
-	-	-	B58-0966-13	CAUTION CARD (ELMtypePL)	ES	
-	-	-	B58-0966-13	CAUTION CARD (ELMtypePL)	MIE	
-	-	-	B58-0967-03	CAUTION CARD (PtypePL)	P	
-	-	-	B59-1104-00	SERVICE DIRECTORY	Y	
-	-	*	B60-5192-10	INST MANUAL (EN)	KPYMIX	
-	-	*	B60-5192-10	INST MANUAL (EN)	T	
-	-	*	B60-5193-00	INST MANUAL (FR)	P	
-	-	*	B60-5194-00	INST MANUAL (ES/FR/GE/NE/IT)	EES	
-	-	*	B60-5195-00	INST MANUAL (ES/TC)	MI	
△ 623	1C		E03-0382-05	AC PLUG ADAPTER(WA-6)	M	
△ 624	1C		E03-0383-05	AC PLUG ADAPTER(WA-9C)	M	
△ 625	1E		E30-2605-05	AC POWER CORD	Y	
△ 625	1E		E30-2717-05	AC POWER CORD	X	
△ 625	1E		E30-2721-05	AC POWER CORD	MIT	

L : Scandinavia K : USA P : Canada R : Mexico C : China I : Malaysia  
 Y : PX(Far East,Hawaii) T : England E : Europe G : Germany V : China(Shanghai) ES : KRF-V6060D-S(Etype)  
 Y : AAFES(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
△ 625	1E		E30-2941-05	AC POWER CORD	KP	
△ 625	1E		E30-2942-05	AC POWER CORD	EES	
△ 625	1E		E30-2950-05	AC POWER CORD	H	
△ 625	1D,2E	*	E35-3216-05	FLAT CABLE		
637	2C,2E	*	G11-2885-04	CUSHION		
638	1D	*	G11-2886-04	CUSHION		
-	-	*	H10-7800-02	POLYSTYRENE FOAMED FIXTURE R		
-	-	*	H10-7801-02	POLYSTYRENE FOAMED FIXTURE L		
-	-	*	H25-0232-04	PROTECTION BAG (235X350X0.03)		
-	-	*	H25-0391-04	PROTECTION BAG		
-	-	*	H50-4369-04	ITEM CARTON CASE	KP	
-	-	*	H50-4370-04	ITEM CARTON CASE	Y	
-	-	*	H50-4371-04	ITEM CARTON CASE	MIH	
-	-	*	H50-4372-04	ITEM CARTON CASE	X	
-	-	*	H50-4373-04	ITEM CARTON CASE	T	
-	-	*	H50-4374-04	ITEM CARTON CASE	E	
-	-	*	H50-4375-04	ITEM CARTON CASE	ES	
643	2E	*	J02-1532-03	FOOT		
644	2E	*	J19-3751-04	UNIT HOLDER		
△ 654	1E		J42-0349-05	POWER CORD BUSHING		
-	-		J61-0307-05	WIRE BAND		
658	2C	*	K27-2384-04	KNOB (BUTTON) POWER	YE	
658	2C	*	K27-2481-04	KNOB (BUTTON) POWER	MIH	
658	2C	*	K27-2481-04	KNOB (BUTTON) POWER	XTES	
659	3A	*	K29-8103-04	KNOB VOLUME	KPYE	
659	3A	*	K29-8104-04	KNOB VOLUME	MIH	
659	3A	*	K29-8104-04	KNOB VOLUME	XTES	
660	3A	*	K29-8105-04	KNOB MULTI/LISTEN	KPYE	
660	3A	*	K29-8106-04	KNOB MULTI/LISTEN	MIH	
660	3A	*	K29-8106-04	KNOB MULTI/LISTEN	XTES	
661	2B	*	K29-8136-03	KNOB ASSY	KPYE	
661	2B	*	K29-8137-03	KNOB ASSY	MIH	
661	2B	*	K29-8137-03	KNOB ASSY	XTES	
662	2A	*	K29-8107-02	KNOB ON/STANDBY	KPYE	
662	2A	*	K29-8108-02	KNOB ON/STANDBY	MIH	
662	2A	*	K29-8108-02	KNOB ON/STANDBY	XTES	
663	3A	*	K29-8111-02	KNOB VIDEO1-SETUP-2	KPYE	
663	3A	*	K29-8112-02	KNOB VIDEO1-SETUP-2	MIH	
663	3A	*	K29-8112-02	KNOB VIDEO1-SETUP-2	XTES	
△ 665	2D	*	L07-3138-05	POWER TRANSFORMER	KP	
△ 665	2D	*	L07-3139-05	POWER TRANSFORMER	YMI	
△ 665	2D	*	L07-3140-05	POWER TRANSFORMER	HX	
△ 665	2D	*	L07-3141-05	POWER TRANSFORMER	TEES	
670	1C		T90-0852-05	LOOP ANTENNA		
671	1C		T90-0877-05	LEAD WIRE ANTENNA		
675	1E	*	W02-2893-05	TUNER ASSY	KP	
675	1E	*	W02-2894-05	TUNER ASSY	KP	
675	1E	*	W02-2895-05	TUNER ASSY	YMIHX	
675	1E	*	W02-2896-05	TUNER ASSY	TEES	
675	1E	*	W02-2897-05	TUNER ASSY	TEES	
675	1E	*	W02-2906-05	TUNER ASSY	KP	

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 Y : AAFES(Europe) X : Australia Q : Russia H : Korea M : Other Areas △ indicates safety critical components.

PARTS LIST

KRF-V6060D/V7060D/V8060D/V9060D/VR-6050/6060/6070

\* 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.

③

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
<b>KRF-V7060D/V7060D-S</b>						
601	1C	*	A01-3842-01	METALLIC CABINET	E	
601	1C	*	A01-3843-01	METALLIC CABINET	ES	
602	1C	*	A09-1258-08	BATTERY COVER		
604	2C	*	A21-3982-12	DRESSING PANEL	E	
604	2C	*	A21-3983-12	DRESSING PANEL	ES	
605	2D	*	A22-1873-01	SUB PANEL ASSY	E	
605	2D	*	A22-1874-01	SUB PANEL ASSY	ES	
606	2C	*	A60-2181-02	PANEL	E	
606	2C	*	A60-2182-12	PANEL	ES	
607	1C	*	A70-1554-05	REMOTE CONTROLLER ASSY	E	
612	2D	*	B07-2606-03	ESCUTCHEON	E	
612	2D	*	B07-2607-03	ESCUTCHEON	ES	
613	2C	*	B07-2608-03	ESCUTCHEON	E	
613	2C	*	B07-2609-03	ESCUTCHEON	ES	
614	2D	*	B07-2619-13	ESCUTCHEON	E	
614	2D	*	B07-2620-13	ESCUTCHEON	ES	
615	2C	*	B10-3791-02	FRONT GLASS		
616	2C	*	B11-1544-03	COLOR FILTER		
617	2D	*	B12-0440-04	INDICATOR		
618	2D	*	B12-0442-04	INDICATOR		
620	2C	*	B43-0314-04	KENWOOD BADGE		
-	-	*	B46-0310-03	WARRANTY CARD		
-	-	*	B58-0966-13	CAUTION CARD (ELMtypePL)		
-	-	*	B60-5194-00	INST MANUAL (ES/FR/GE/NE/IT)		
△ 625	1E	*	E30-2942-05	AC POWER CORD		
628	1D,1E	*	E35-3216-05	FLAT CABLE		
637	2C,2E	*	G11-2885-04	CUSHION		
638	1D	*	G11-2886-04	CUSHION		
639	2C	*	G11-2887-04	CUSHION		
-	-	*	H10-7800-02	POLYSTYRENE FOAMED FIXTURE R		
-	-	*	H10-7801-02	POLYSTYRENE FOAMED FIXTURE L		
-	-	*	H25-0232-04	PROTECTION BAG (235X350X0.03)		
-	-	*	H25-0391-04	PROTECTION BAG		
-	-	*	H50-4367-04	ITEM CARTON CASE	E	
-	-	*	H50-4368-04	ITEM CARTON CASE	ES	
643	2E	*	J02-1532-03	FOOT		
644	2E	*	J19-3751-04	UNIT HOLDER		
△ 654	1E	*	J42-0349-05	POWER CORD BUSHING		
-	-	*	J61-0307-05	WIRE BAND		
658	2C	*	K27-2384-04	KNOB (BUTTON) POWER	E	
658	2C	*	K27-2481-04	KNOB (BUTTON) POWER	ES	
659	2D	*	K29-8099-04	KNOB VOLUME	E	
659	2D	*	K29-8100-04	KNOB VOLUME	ES	
660	2C	*	K29-8101-04	KNOB MULTI/LISTEN	E	
660	2C	*	K29-8102-04	KNOB MULTI/LISTEN	ES	
661	2D	*	K29-8136-03	KNOB ASSY	E	
661	2D	*	K29-8137-03	KNOB ASSY	ES	
△ 665	2D	*	L07-3141-05	POWER TRANSFORMER		
670	1C	*	T90-0852-05	LOOP ANTENNA		
671	1C	*	T90-0877-05	LEAD WIRE ANTENNA		

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Y : PX(Far East,Hawaii)    T : England    E : Europe    G : Germany    V : China(Shanghai)    ES : KRF-V7060D-S(Etype)  
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\* New Parts

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④

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
675	1E	*	W02-2896-05	TUNER ASSY		
675	1E	*	W02-2897-05	TUNER ASSY		
<b>VR-6060, KRF-V8060D/V8060D-S/V8060D-G</b>						
601	1C	*	A01-3840-01	METALLIC CABINET	KP	
601	1C	*	A01-3842-01	METALLIC CABINET	E	
601	1C	*	A01-3843-01	METALLIC CABINET	XES	
601	1C	*	A01-3851-01	METALLIC CABINET	M	
602	1C	*	A09-1258-08	BATTERY COVER		
604	2C	*	A21-3982-12	DRESSING PANEL	E	
604	2C	*	A21-3983-12	DRESSING PANEL	XES	
604	2C	*	A21-3984-12	DRESSING PANEL	M	
605	2D	*	A22-1873-01	SUB PANEL ASSY	E	
605	2D	*	A22-1874-01	SUB PANEL ASSY	XES	
605	2D	*	A22-1875-01	SUB PANEL ASSY	M	
606	3B	*	A60-2168-01	PANEL	KP	
606	2C	*	A60-2181-02	PANEL	E	
606	2C	*	A60-2182-12	PANEL	XES	
606	2C	*	A60-2196-12	PANEL	M	
607	1C	*	A70-1552-05	REMOTE CONTROLLER ASSY	KP	
607	1C	*	A70-1553-05	REMOTE CONTROLLER ASSY	MX	
607	1C	*	A70-1554-05	REMOTE CONTROLLER ASSY	EES	
611	3A	*	B07-2596-12	ESCUTCHEON	KP	
612	3B,2D	*	B07-2606-03	ESCUTCHEON	KPE	
612	2D	*	B07-2607-03	ESCUTCHEON	XES	
612	2D	*	B07-2614-03	ESCUTCHEON	M	
613	3A,2C	*	B07-2608-03	ESCUTCHEON	KPE	
613	2C	*	B07-2609-03	ESCUTCHEON	XES	
613	2C	*	B07-2615-03	ESCUTCHEON	M	
614	2D	*	B07-2619-13	ESCUTCHEON	E	
614	2D	*	B07-2620-13	ESCUTCHEON	XES	
614	2D	*	B07-2621-13	ESCUTCHEON	M	
615	2A	*	B10-3786-02	FRONT GLASS	KP	
615	2C	*	B10-3787-02	FRONT GLASS	MX	
615	2C	*	B10-3788-02	FRONT GLASS	EES	
616	2A,2C	*	B11-1544-03	COLOR FILTER		
617	2D	*	B12-0440-04	INDICATOR	ES	
617	2D	*	B12-0440-04	INDICATOR	MXE	
617	2A	*	B12-0441-04	INDICATOR	KP	
618	3A,2D	*	B12-0442-04	INDICATOR		
620	2A,2C	*	B43-0314-04	KENWOOD BADGE		
-	-	*	B46-0096-53	WARRANTY CARD	X	
-	-	*	B46-0310-03	WARRANTY CARD	EES	
-	-	*	B46-0330-03	WARRANTY CARD	K	
-	-	*	B46-0347-03	WARRANTY CARD	P	
-	-	*	B46-0365-04	QUESTIONNAIRE CARD	K	
-	-	*	B58-0964-13	CAUTION CARD (UL)	K	
-	-	*	B58-0965-13	CAUTION CARD (T.XtypePL)	X	
-	-	*	B58-0966-13	CAUTION CARD (ELMtypePL)	MEES	
-	-	*	B58-0967-03	CAUTION CARD (PtypePL)	P	
-	-	*	B60-5188-20	INST MANUAL (EN)	KPMX	
-	-	*	B60-5189-10	INST MANUAL (FR)	P	
-	-	*	B60-5190-00	INST MANUAL (ES/FR/GE/NE/IT)	EES	
-	-	*	B60-5191-00	INST MANUAL (ES/TC)	M	

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Y : AAFES(Europe)    X : Australia    Q : Russia    H : Korea    M : Other Areas    △ indicates safety critical components.

KRF-V6060D/V7060D/V8060D/V9060D/VR-6050/6060/6070  
PARTS LIST

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

5

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6

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
△ 623	1C		E03-0382-05	AC PLUG ADAPTER(WA-6)	M	
△ 624	1C		E03-0383-05	AC PLUG ADAPTER(WA-9C)	M	
△ 625	1E		E30-2717-05	AC POWER CORD	X	
△ 625	1E		E30-2721-05	AC POWER CORD	M	
△ 625	1E		E30-2941-05	AC POWER CORD	KP	
△ 625	1E		E30-2942-05	AC POWER CORD	EES	
△ 627	1D,1E		E35-2873-15	FLAT CABLE	KP	
628	1D,2E	*	E35-3216-05	FLAT CABLE		
637	2B,2C	*	G11-2885-04	CUSHION		
638	1D	*	G11-2886-04	CUSHION		
639	2C	*	G11-2887-04	CUSHION	ES	
639	2C	*	G11-2887-04	CUSHION	MXE	
-		*	H10-7800-02	POLYSTYRENE FOAMED FIXTURE R		
-		*	H10-7801-02	POLYSTYRENE FOAMED FIXTURE L		
-		*	H25-0232-04	PROTECTION BAG (235X350X0.03)		
-		*	H25-0391-04	PROTECTION BAG		
-		*	H50-4360-04	ITEM CARTON CASE	KP	
-		*	H50-4361-04	ITEM CARTON CASE	M	
-		*	H50-4362-04	ITEM CARTON CASE	X	
-		*	H50-4363-04	ITEM CARTON CASE	E	
-		*	H50-4364-04	ITEM CARTON CASE	ES	
643	2E	*	J02-1532-03	FOOT		
644	2E	*	J19-3751-04	UNIT HOLDER		
△ 654	1E	*	J42-0349-05	POWER CORD BUSHING		
-		*	J61-0307-05	WIRE BAND		
658	2C	*	K27-2384-04	KNOB (BUTTON) POWER	E	
658	2C	*	K27-2481-04	KNOB (BUTTON) POWER	XES	
658	2C	*	K27-2482-04	KNOB (BUTTON) POWER	M	
659	3A,2D	*	K29-8099-04	KNOB VOLUME	E	
659	3A,2D	*	K29-8100-04	KNOB VOLUME	XES	
659	3A,2D	*	K29-8103-04	KNOB VOLUME	KP	
659	3A,2D	*	K29-8127-04	KNOB VOLUME	M	
660	3A,2C	*	K29-8101-04	KNOB MULTI/LISTEN	E	
660	3A,2C	*	K29-8102-04	KNOB MULTI/LISTEN	XES	
660	3A,2C	*	K29-8105-04	KNOB MULTI/LISTEN	KP	
660	3A,2C	*	K29-8128-04	KNOB MULTI/LISTEN	M	
661	2B,2D	*	K29-8136-03	KNOB ASSY	KPE	
661	2B,2D	*	K29-8137-03	KNOB ASSY	XES	
661	2B,2D	*	K29-8138-03	KNOB ASSY	M	
662	2A	*	K29-8107-02	KNOB ON/STANDBY	KP	
663	3A	*	K29-8111-02	KNOB VIDEO1-SETUP-2	KP	
△ 665	2D	*	L07-3138-05	POWER TRANSFORMER	KP	
△ 665	2D	*	L07-3139-05	POWER TRANSFORMER	M	
△ 665	2D	*	L07-3140-05	POWER TRANSFORMER	X	
△ 665	2D	*	L07-3141-05	POWER TRANSFORMER	EES	
670	1C	*	T90-0852-05	LOOP ANTENNA		
671	1C	*	T90-0877-05	LEAD WIRE ANTENNA		
672	1C	*	T90-0899-05	ANTENNA ASSY	KP	
675	1E	*	W02-2893-05	TUNER ASSY	KP	
675	1E	*	W02-2894-05	TUNER ASSY	KP	
675	1E	*	W02-2895-05	TUNER ASSY	MX	
675	1E	*	W02-2896-05	TUNER ASSY	EES	
675	1E	*	W02-2897-05	TUNER ASSY	EES	

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675	1E	*	W02-2906-05	TUNER ASSY	KP	
<b>VR-6070, KRF-X9060D/X9060D-S/X9060D-G</b>						
601	1C	*	A01-3842-01	METALLIC CABINET	KPYE	
601	1C	*	A01-3843-01	METALLIC CABINET	XTES	
601	1C	*	A01-3851-01	METALLIC CABINET	MH	
602	1C	*	A09-1258-08	BATTERY COVER		
604	2C	*	A21-3982-12	DRESSING PANEL	KPYE	
604	2C	*	A21-3983-12	DRESSING PANEL	XTES	
604	2C	*	A21-3984-12	DRESSING PANEL	MH	
605	2D	*	A22-1873-01	SUB PANEL ASSY	KPYE	
605	2D	*	A22-1874-01	SUB PANEL ASSY	XTES	
605	2D	*	A22-1875-01	SUB PANEL ASSY	MH	
606	2C	*	A60-2178-12	PANEL	KP	
606	2C	*	A60-2179-02	PANEL	YE	
606	2C	*	A60-2180-12	PANEL	XTES	
606	2C	*	A60-2195-12	PANEL	MH	
607	1C	*	A70-1549-05	REMOTE CONTROLLER ASSY	KP	
607	1C	*	A70-1550-05	REMOTE CONTROLLER ASSY	YMHX	
607	1C	*	A70-1551-05	REMOTE CONTROLLER ASSY	TEES	
612	2D	*	B07-2606-03	ESCUTCHEON	KPYE	
612	2D	*	B07-2607-03	ESCUTCHEON	XTES	
612	2D	*	B07-2614-03	ESCUTCHEON	MH	
613	2C	*	B07-2608-03	ESCUTCHEON	KPYE	
613	2C	*	B07-2609-03	ESCUTCHEON	XTES	
613	2C	*	B07-2615-03	ESCUTCHEON	MH	
614	2D	*	B07-2619-13	ESCUTCHEON	KPYE	
614	2D	*	B07-2620-13	ESCUTCHEON	XTES	
614	2D	*	B07-2621-13	ESCUTCHEON	MH	
615	2C	*	B10-3783-02	FRONT GLASS	KP	
615	2C	*	B10-3784-02	FRONT GLASS	YMHX	
615	2C	*	B10-3785-02	FRONT GLASS	TEES	
616	2C	*	B11-1543-03	COLOR FILTER		
617	2D	*	B12-0440-04	INDICATOR		
618	2D	*	B12-0442-04	INDICATOR		
620	2C	*	B43-0314-04	KENWOOD BADGE		
-		*	B46-0096-53	WARRANTY CARD	X	
-		*	B46-0310-03	WARRANTY CARD	TEES	
-		*	B46-0328-03	WARRANTY CARD	Y	
-		*	B46-0330-03	WARRANTY CARD	K	
-		*	B46-0347-03	WARRANTY CARD	P	
-		*	B46-0365-04	QUESTIONNAIRE CARD	K	
-		*	B58-0513-04	CAUTION CARD (PRESET220-240)	Y	
-		*	B58-0945-03	CAUTION CARD	T	
-		*	B58-0964-13	CAUTION CARD (UL)	KY	
-		*	B58-0965-13	CAUTION CARD (T,XtypePL)	XT	
-		*	B58-0966-13	CAUTION CARD (ELMtypePL)	MEEES	
-		*	B58-0967-03	CAUTION CARD (PtypePL)	P	
-		*	B59-1104-00	SERVICE DIRECTORY	Y	
-		*	B60-5183-00	INST MANUAL (EN)	KPYMXT	
-		*	B60-5184-00	INST MANUAL (FR)	P	
-		*	B60-5185-00	INST MANUAL (ES/FR/GE/NE/IT)	EES	
-		*	B60-5186-00	INST MANUAL (ES/TC)	M	
△ 623	1C	*	E03-0382-05	AC PLUG ADAPTER(WA-6)	M	

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## PARTS LIST

KRF-V6060D/V7060D/V8060D/X9060D/VR-6050/6060/6070

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
△ 624	1C		E03-0383-05	AC PLUG ADAPTER(WA-9C)	M	
△ 625	1E		E30-2605-05	AC POWER CORD	Y	
△ 625	1E		E30-2717-05	AC POWER CORD	X	
△ 625	1E		E30-2721-05	AC POWER CORD	MT	
△ 625	1E		E30-2941-05	AC POWER CORD	KP	
△ 625	1E		E30-2942-05	AC POWER CORD	EES	
△ 625	1E		E30-2950-05	AC POWER CORD	H	
626	1E,2E		E35-2841-05	FLAT CABLE		
627	1D,1E		E35-2873-15	FLAT CABLE	KP	
628	1D,2E	*	E35-3216-05	FLAT CABLE		
637	2C,2E	*	G11-2885-04	CUSHION		
638	1D	*	G11-2886-04	CUSHION		
639	2C	*	G11-2887-04	CUSHION		
-		*	H10-7800-02	POLYSTYRENE FOAMED FIXTURE R		
-		*	H10-7801-02	POLYSTYRENE FOAMED FIXTURE L		
-		*	H25-0232-04	PROTECTION BAG (235X350X0.03)		
-		*	H25-0391-04	PROTECTION BAG		
-		*	H50-4353-04	ITEM CARTON CASE	KP	
-		*	H50-4354-04	ITEM CARTON CASE	Y	
-		*	H50-4355-04	ITEM CARTON CASE	MH	
-		*	H50-4356-04	ITEM CARTON CASE	X	
-		*	H50-4357-04	ITEM CARTON CASE	T	
-		*	H50-4358-04	ITEM CARTON CASE	E	
-		*	H50-4359-04	ITEM CARTON CASE	ES	
643	2E	*	J02-1532-03	FOOT		
△ 644	2E	*	J19-3751-04	UNIT HOLDER		
654	1E	*	J42-0349-05	POWER CORD BUSHING		
-		*	J61-0307-05	WIRE BAND		
658	2C	*	K27-2384-04	KNOB (BUTTON) POWER	YE	
658	2C	*	K27-2481-04	KNOB (BUTTON) POWER	XTES	
658	2C	*	K27-2482-04	KNOB (BUTTON) POWER	MH	
659	2D	*	K29-8099-04	KNOB VOLUME	KPYE	
659	2D	*	K29-8100-04	KNOB VOLUME	XTES	
659	2D	*	K29-8127-04	KNOB VOLUME	MH	
660	2C	*	K29-8101-04	KNOB MULTI/LISTEN	KPYE	
660	2C	*	K29-8102-04	KNOB VOLUME	XTES	
660	2C	*	K29-8128-04	KNOB VOLUME	MH	
661	2D	*	K29-8136-03	KNOB ASSY	KPYE	
661	2D	*	K29-8137-03	KNOB ASSY	XTES	
661	2D	*	K29-8138-03	KNOB ASSY	MH	
△ 665	2D	*	L07-3138-05	POWER TRANSFORMER	KP	
△ 665	2D	*	L07-3139-05	POWER TRANSFORMER	YM	
△ 665	2D	*	L07-3140-05	POWER TRANSFORMER	HX	
△ 665	2D	*	L07-3141-05	POWER TRANSFORMER	TEES	
670	1C		T90-0852-05	LOOP ANTENNA		
671	1C		T90-0877-05	LEAD WIRE ANTENNA		
672	1C	*	T90-0899-05	ANTENNA ASSY	KP	
675	1E	*	W02-2893-05	TUNER ASSY	KP	
675	1E	*	W02-2894-05	TUNER ASSY	KP	
675	1E	*	W02-2895-05	TUNER ASSY	YMHX	
675	1E	*	W02-2896-05	TUNER ASSY	TEES	
675	1E	*	W02-2897-05	TUNER ASSY	TEES	

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675	1E	*	W02-2906-05	TUNER ASSY	KP	
<b>RF-RC DEMODULATOR UNIT (X05-5180-10) VR-6060/6070 only</b>						
C1			CC73GCH1H220J	CHIP C	22PF	J
C2 -4			CC73GCH1H221J	CHIP C	220PF	J
C5			CK73GB1E223K	CHIP C	0.022UF	K
C6			CC73GCH1H221J	CHIP C	220PF	J
C12			CC73GCH1H221J	CHIP C	220PF	J
C13			CC73GCH1H050C	CHIP C	5.0PF	C
C14			CC73GCH1H100D	CHIP C	10PF	D
C16			CK73GB1E223K	CHIP C	0.022UF	K
C17			CC73GCH1H100D	CHIP C	10PF	D
C18			CC73GCH1H050C	CHIP C	5.0PF	C
C19			CK73EB0J106K	CHIP C	10UF	K
C20			CC73GCH1H0R5C	CHIP C	0.5PF	C
C21			CK73GB1H103K	CHIP C	0.010UF	K
C22			CK73FB0J475K	CHIP C	4.7UF	K
C23			CC73GCH1H010C	CHIP C	1.0PF	C
C24			CK73GB1H103K	CHIP C	0.010UF	K
C25			CK73EB0J106K	CHIP C	10UF	K
C26			CK73GF1C224Z	CHIP C	0.22UF	Z
C27			CK73GB1H103K	CHIP C	0.010UF	K
C28			CC73GCH1H100D	CHIP C	10PF	D
C29			CC73GCH1H221J	CHIP C	220PF	J
C30			CK73EB0J106K	CHIP C	10UF	K
C31			CK73GB1E223K	CHIP C	0.022UF	K
C32 ,33			CK73GB1H103K	CHIP C	0.010UF	K
C34			CC73GCH1H101J	CHIP C	100PF	J
C35			CC73GCH1H471J	CHIP C	470PF	J
C36 ,37			CK73GB1H103K	CHIP C	0.010UF	K
C38			CK73GF1A105Z	CHIP C	1.0UF	Z
C39			CK73GB1H103K	CHIP C	0.010UF	K
C40 ,41			CC73GCH1H150J	CHIP C	15PF	J
C43			CK73GB1H222K	CHIP C	2200PF	K
C44			CK73GB1H103K	CHIP C	0.010UF	K
C45			CK73GF1A105Z	CHIP C	1.0UF	Z
C47			CK73GF1A105Z	CHIP C	1.0UF	Z
CN1			E40-8530-05	FLAT CABLE CONNECTOR		
J1			E11-0904-05	MINIATURE PHONE JACK(STEREO MI)		
CF1			L72-0643-05	CERAMIC FILTER		
L1			L79-1294-05	LC FILTER		
L4			L92-0140-05	CHIP FERRITE		
L5		*	L32-1058-05	FM OSCILLATING COIL		
L6 ,7			L92-0140-05	CHIP FERRITE		
L9 ,10			L92-0140-05	CHIP FERRITE		
L12			L92-0140-05	CHIP FERRITE		
X1			L77-2382-05	CRYSTAL RESONATOR(12.8MHZ,50PP)		
R1			RK73GB1J431J	CHIP R	430	J 1/16W
R2			RK73GB1J120J	CHIP R	12	J 1/16W
R3			RK73GB1J431J	CHIP R	430	J 1/16W
R4			RK73GB1J331J	CHIP R	330	J 1/16W
R6			RK73GB1J391J	CHIP R	390	J 1/16W
R7			RK73GB1J103J	CHIP R	10K	J 1/16W
R8			RK73GB1J473J	CHIP R	47K	J 1/16W

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KRF-V6060D/V7060D/V8060D/X9060D/VR-6050/6060/6070  
**PARTS LIST**

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
R9			RK73GB1J103J	CHIP R 10K J 1/16W		
R10			RK73GB1J100J	CHIP R 10 J 1/16W		
R11			RK73GB1J821J	CHIP R 820 J 1/16W		
R12			RK73GB1J471J	CHIP R 470 J 1/16W		
R13			RK73GB1J511J	CHIP R 510 J 1/16W		
R14			RK73GB1J124J	CHIP R 120K J 1/16W		
R15			RK73GB1J271J	CHIP R 270 J 1/16W		
R16			RK73GB1J201J	CHIP R 200 J 1/16W		
R17			RK73GB1J102J	CHIP R 1.0K J 1/16W		
R18			RK73GB1J471J	CHIP R 470 J 1/16W		
R19			RK73GB1J102J	CHIP R 1.0K J 1/16W		
R20			RK73GB1J242J	CHIP R 2.4K J 1/16W		
R21			RK73GB1J183J	CHIP R 18K J 1/16W		
R24 -26			RK73GB1J102J	CHIP R 1.0K J 1/16W		
R31			RK73GB1J332J	CHIP R 3.3K J 1/16W		
R32			RK73GB1J105J	CHIP R 1.0M J 1/16W		
R33			RK73GB1J103J	CHIP R 10K J 1/16W		
R34			RK73GB1J474J	CHIP R 470K J 1/16W		
D1			1SS302	DIODE		
D2			KV1832E	VARIABLE CAPACITANCE DIODE		
IC1			UPC2748T-E3	ANALOGUE IC		
IC3			LV2105V	MOS-IC		
IC4			TK14583V	ANALOGUE IC		
IC7		*	XC6201P502MR	ANALOGUE IC		
Q2 ,3			2SC5065(O,Y)	TRANSISTOR		
Q4			DTA124EUA	DIGITAL TRANSISTOR		
<b>SURROUND UNIT (X08-3130-XX)</b>						
C1 ,2			CK73GB1H472K	CHIP C 4700PF K		
C3 ,4			CC73GCH1H220J	CHIP C 22PF J		
C5			CE04LW1E470M	ELECTRO 47UF 25WV		
C6			CE04LW1E470M	ELECTRO 47UF 25WV		
C7			CE04LW1H100M	ELECTRO 10UF 50WV		
C8 ,9			CC73GCH1H270J	CHIP C 27PF J		
C10			CK73GB1H102K	CHIP C 1000PF K		
C11			CK73FB1E104K	CHIP C 0.10UF K		
C12			CK73GB1H102K	CHIP C 1000PF K		
C15			CC73GCH1H330J	CHIP C 33PF J		
C16			CK73GB1H102K	CHIP C 1000PF K		
C17			CC73GCH1H330J	CHIP C 33PF J		
C18			CC73GCH1H220J	CHIP C 22PF J		
C19			CC73GCH1H330J	CHIP C 33PF J		
C20			CK73GB1H103K	CHIP C 0.010UF K		
C30			CK73FB1E104K	CHIP C 0.10UF K		
C31			CE04RW1C4R7M	ELECTRO 4.7UF 16WV		
C32			CK73FB1E104K	CHIP C 0.10UF K		
C33			CE04KW1C100M	ELECTRO 10UF 16WV		
C34			CE04KW1C220M	ELECTRO 22UF 16WV		
C35			CK73FB1E104K	CHIP C 0.10UF K		
C36 ,37			CC73GCH1H180J	CHIP C 18PF J		
C38			CC73GCH1H330J	CHIP C 33PF J		
C39			CK73GB1H103K	CHIP C 0.010UF K		
C101,102			CE04KW1H100M	ELECTRO 10UF 50WV		
C103-106			CK73GB1H182K	CHIP C 1800PF K		
C107			CC73GCH1H101J	CHIP C 100PF J		

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C108			CK73GB1H472K	CHIP C 4700PF K		
C109,110			CC73GCH1H220J	CHIP C 22PF J		
C121			CC73GCH1H102J	CHIP C 1000PF J		
C122			CC73GCH1H101J	CHIP C 100PF J		
C123,124			CC73GCH1H220J	CHIP C 22PF J		
C125			CK73GB1H103K	CHIP C 0.010UF K		
C126			CC73GCH1H101J	CHIP C 100PF J		
C127,128			CE04LW1H4R7M	ELECTRO 4.7UF 50WV		
C153,154			C91-1597-05	CERAMIC 4.7UF Z		
C201,202			CE04KW1H100M	ELECTRO 10UF 50WV		
C203,204			CK73GB1H222K	CHIP C 2200PF K		
C205,206			CK73GB1H821K	CHIP C 820PF K		
C207			CC73GCH1H101J	CHIP C 100PF J		
C208			CK73GB1H472K	CHIP C 4700PF K		
C209,210			CE04LW1H4R7M	ELECTRO 4.7UF 50WV		
C301,302			CE04KW1H100M	ELECTRO 10UF 50WV		
C303-306			CK73GB1H182K	CHIP C 1800PF K		
C307			CC73GCH1H101J	CHIP C 100PF J		
C308			CK73GB1H472K	CHIP C 4700PF K		
C309,310			CE04LW1H4R7M	ELECTRO 4.7UF 50WV		
C401,402			CE04KW1H100M	ELECTRO 10UF 50WV		
C403			CK73GB1H182K	CHIP C 1800PF K		
C404			CK73GB1H822K	CHIP C 8200PF K		
C405			CK73GB1H182K	CHIP C 1800PF K		
C406			CK73GB1H822K	CHIP C 8200PF K		
C407			CC73GCH1H101J	CHIP C 100PF J		
C408			CK73GB1H103K	CHIP C 0.010UF K		
C409,410			CE04LW1H4R7M	ELECTRO 4.7UF 50WV		
C411			CC73GCH1H220J	CHIP C 22PF J		
C500-513			CK73FB1E104K	CHIP C 0.10UF K		
C514			CC73GCH1H470J	CHIP C 47PF J		
C515			CE04LW0J471M	ELECTRO 470UF 6.3WV		
C600-603			CK73FB1E104K	CHIP C 0.10UF K		
C800,801			CC73GCH1H221J	CHIP C 220PF J		
C802			CK73GB1H103K	CHIP C 0.010UF K		
C803			CK73FB1H103K	CHIP C 0.010UF K		
C900			CE04KW1C472M	ELECTRO 4700UF 16WV		
C901			CK73FB1E104K	CHIP C 0.10UF K		
C908			CK73FF1C225Z	CHIP C 2.2UF Z		
C909			CK73FB1E104K	CHIP C 0.10UF K		
C910			CE04KW1A101M	ELECTRO 100UF 10WV		
C911			CK73FB1E104K	CHIP C 0.10UF K		
C912			CC73GCH1H390J	CHIP C 39PF J		
C913			CK73FB1E104K	CHIP C 0.10UF K		
C914			CK73FB1H103K	CHIP C 0.010UF K		
C920			CE04KW1A101M	ELECTRO 100UF 10WV		
C921			CK73FB1E104K	CHIP C 0.10UF K		
C922			CC73GCH1H470J	CHIP C 47PF J		
C923			CK73FB1E104K	CHIP C 0.10UF K		
C930			CE04KW1A101M	ELECTRO 100UF 10WV		
C931			CK73FB1E104K	CHIP C 0.10UF K		
C932			CC73GCH1H100D	CHIP C 10PF D		
C933			CK73FB1E104K	CHIP C 0.10UF K		
CN1			E40-3246-05	PIN ASSY		

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
CN3			E40-8484-05	FLAT CABLE CONNECTOR		
CN4			E40-3257-05	PIN ASSY		
CN5			E40-3254-05	PIN ASSY		
J1			E63-1080-05	PIN JACK		
J800			E11-0293-05	MINIATURE PHONE JACK(2P)		
L1 ,2			L92-0510-05	CHIP FERRITE		
X1			L77-2296-05	CRYSTAL RESONATOR(12.288MHZ)		
CP51,52			R90-0714-05	MULTI-COMP 10K X4		
CP600-604			R90-0728-05	MULTI-COMP 180 X4		
R1			RK73GB1J471J	CHIP R 470 J 1/16W		
R2			RK73GB1J471J	CHIP R 470 J 1/16W		59
R3			R92-1946-05	METAL GLAZE 4.7 J 1/4W		59
R4			RK73GB1J471J	CHIP R 470 J 1/16W		5
R5			R92-1946-05	METAL GLAZE 4.7 J 1/4W		5
R6			R92-1946-05	METAL GLAZE 4.7 J 1/4W		
R7			RK73GB1J820J	CHIP R 82 J 1/16W		
R8			RK73GB1J821J	CHIP R 820 J 1/16W		
R9			RK73GB1J105J	CHIP R 1.0M J 1/16W		
R10			RK73GB1J221J	CHIP R 220 J 1/16W		
R11			RK73GB1J183J	CHIP R 18K J 1/16W		
R14 ,15			RK73GB1J330J	CHIP R 33 J 1/16W		
R16 -19			RK73GB1J220J	CHIP R 22 J 1/16W		
R20			RK73GB1J221J	CHIP R 220 J 1/16W		
R21			RK73GB1J220J	CHIP R 22 J 1/16W		
R22			RK73GB1J105J	CHIP R 1.0M J 1/16W		
R23			RK73GB1J330J	CHIP R 33 J 1/16W		
R30			RK73GB1J220J	CHIP R 22 J 1/16W		
R31			R92-1946-05	METAL GLAZE 4.7 J 1/4W		
R32			RK73GB1J221J	CHIP R 220 J 1/16W		
R101,102			RK73GB1J222J	CHIP R 2.2K J 1/16W		
R103,104			RK73GB1J104J	CHIP R 100K J 1/16W		
R105,106			RK73GB1J102J	CHIP R 1.0K J 1/16W		
R107,108			RK73GB1J103J	CHIP R 10K J 1/16W		
R109,110			RK73GB1J472J	CHIP R 4.7K J 1/16W		
R111,112			RK73GB1J221J	CHIP R 220 J 1/16W		
R121,122			RK73GB1J112J	CHIP R 1.1K J 1/16W		
R123,124			RK73GB1J242J	CHIP R 2.4K J 1/16W		
R125-128			RK73GB1J103J	CHIP R 10K J 1/16W		
R129,130			RK73GB1J101J	CHIP R 100 J 1/16W		
R151,152			RK73GB1J562J	CHIP R 5.6K J 1/16W		
R153,154			RK73GB1J432J	CHIP R 4.3K J 1/16W		
R155-158			RK73GB1J472J	CHIP R 4.7K J 1/16W		
R201,202			RK73GB1J332J	CHIP R 3.3K J 1/16W		
R203,204			RK73GB1J104J	CHIP R 100K J 1/16W		
R205,206			RK73GB1J911J	CHIP R 910 J 1/16W		
R207,208			RK73GB1J272J	CHIP R 2.7K J 1/16W		
R209,210			RK73GB1J562J	CHIP R 5.6K J 1/16W		
R211,212			RK73GB1J221J	CHIP R 220 J 1/16W		
R213			RK73GB1J472J	CHIP R 4.7K J 1/16W		
R214,215			RK73GB1J562J	CHIP R 5.6K J 1/16W		
R216			RK73GB1J472J	CHIP R 4.7K J 1/16W		
R301,302			RK73GB1J222J	CHIP R 2.2K J 1/16W		
R303,304			RK73GB1J104J	CHIP R 100K J 1/16W		
R305,306			RK73GB1J102J	CHIP R 1.0K J 1/16W		

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
R307,308			RK73GB1J103J	CHIP R 10K J 1/16W		
R309,310			RK73GB1J472J	CHIP R 4.7K J 1/16W		
R311,312			RK73GB1J221J	CHIP R 220 J 1/16W		
R401			RK73GB1J222J	CHIP R 2.2K J 1/16W		
R402,403			RK73GB1J104J	CHIP R 100K J 1/16W		
R404			RK73GB1J273J	CHIP R 27K J 1/16W		
R405			RK73GB1J102J	CHIP R 1.0K J 1/16W		
R406			RK73GB1J183J	CHIP R 18K J 1/16W		
R407,408			RK73GB1J103J	CHIP R 10K J 1/16W		
R409			RK73GB1J472J	CHIP R 4.7K J 1/16W		
R410			RK73GB1J562J	CHIP R 5.6K J 1/16W		
R411,412			RK73GB1J221J	CHIP R 220 J 1/16W		
R501-508			RK73GB1J104J	CHIP R 100K J 1/16W		
R509-511			RK73GB1J221J	CHIP R 220 J 1/16W		
R512			RK73GB1J104J	CHIP R 100K J 1/16W		
R513			RK73GB1J102J	CHIP R 1.0K J 1/16W		
R514			RK73GB1J472J	CHIP R 4.7K J 1/16W		
R515		*	R92-4583-05	METAL GLAZE RESISTOR		
R541			RK73GB1J220J	CHIP R 22 J 1/16W		
R542,543			RK73GB1J101J	CHIP R 100 J 1/16W		
R601-608			RK73GB1J104J	CHIP R 100K J 1/16W		
R900			R92-1918-05	CHIP R 0.33 J 1/4W		
R910			R92-1946-05	METAL GLAZE 4.7 J 1/4W		
R920			RS14KB3D180J	FL-PROOF RS 18 J 2W		
R930			RS14KB3D4R7J	FL-PROOF RS 4.7 J 2W		
R931			RS14KB3D5R6J	FL-PROOF RS 5.6 J 2W		
R950			RK73GB1J152J	CHIP R 1.5K J 1/16W		
R951			RK73GB1J102J	CHIP R 1.0K J 1/16W		
R952			RK73GB1J472J	CHIP R 4.7K J 1/16W		
R953			RK73GB1J473J	CHIP R 47K J 1/16W		
R954,955			RK73GB1J221J	CHIP R 220 J 1/16W		
W999			R92-0679-05	CHIP R 0 OHM		
S800			S62-0034-05	SLIDE SWITCH		YMI
D1			DAN202U	DIODE		
D1			MA142WK	DIODE		
D1			1SS301	DIODE		
D3			DAN202U	DIODE		
D3			MA142WK	DIODE		
D3			1SS301	DIODE		
D4			DAP202U	DIODE		
D4			MA142WA	DIODE		
D4			1SS300	DIODE		
D800,801			MA111	DIODE		
D900			D2SBA20F03	DIODE		
D901,902			MA111	DIODE		
D910			HZU3.9(B2)	ZENER DIODE		YM
D910			UDZ3.9B	ZENER DIODE		
D920			HZU3.9(B2)	ZENER DIODE		
D920			UDZ3.9B	ZENER DIODE		
D930			HZU5.6(B2)	ZENER DIODE		
D930			UDZ5.6B	ZENER DIODE		
D950			HZU5.1(B2)	ZENER DIODE		
D950			UDZ5.1B	ZENER DIODE		

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PARTS LIST

KRF-V6060D/V7060D/V8060D/V9060D/VR-6050/6060/6070

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
D951			MA111	DIODE		
IC2			AK4112BVF	MOS-IC		
IC3			TC7WH241FU	MOS-IC		
IC4			AK4529-VQ	MOS-IC		
IC5			TC7SHU04FU	MOS-IC		
IC6			TC7WU04FU	MOS-IC		
IC7			TC74VHC175FT	MOS-IC		
IC11			NJM4565M	ANALOGUE IC		
IC11			NJM4565MD	IC(OP AMP X2)		
IC12			NJU7311AM	MOS-IC		
IC21			NJM4565M	ANALOGUE IC		
IC21			NJM4565MD	IC(OP AMP X2)		
IC31			NJM4565M	ANALOGUE IC		
IC31			NJM4565MD	IC(OP AMP X2)		
IC41			NJM4565M	ANALOGUE IC		
IC41			NJM4565MD	IC(OP AMP X2)		
IC50		*	ADSST-MEL322	MOS-IC		
IC51		*	27W40180N6A00	ROM IC		5
IC51		*	27W40180N6702	ROM IC		67
IC51		*	27W40180N6902	ROM IC		9
IC52		*	A61L6316-12V	SRAM IC		
IC60			TC74HCT7007AF	MOS-IC		
IC61			TC74VHC125FT	MOS-IC		
IC90			BA05T	ANALOGUE IC		
IC91		*	NJU7223F25	ANALOGUE IC		
IC92			BA033T	ANALOGUE IC		
IC93			BA05T	ANALOGUE IC		
IC123			NJM4565M	ANALOGUE IC		
IC123			NJM4565MD	IC(OP AMP X2)		
Q950			2SA1576A(R,S)	TRANSISTOR		
Q950			2SB1218A(Q,R)	TRANSISTOR		
Q951			2SC4081(R,S)	TRANSISTOR		
Q951			2SD1819A(Q,R)	TRANSISTOR		
A1			W02-2731-05	OPTIC RECEIVING MODULE		
A2			W02-2731-05	OPTIC RECEIVING MODULE		59
A3			W02-2732-05	OSCILLATING MODULE		5
<b>AUDIO UNIT (X09-658X-XX)</b>						
C1 ,2			CC45FSL1H221J	CERAMIC	220PF	J
C3 ,4			CE04LW1H100M	ELECTRO	10UF	50WV
C3 ,4			CE04LW1H100M	ELECTRO	10UF	50WV
C5 ,6			CC45FSL1H221J	CERAMIC	220PF	J
C5 ,6			CC45FSL1H221J	CERAMIC	220PF	J
C7 ,8			CE04LW1A101M	ELECTRO	100UF	10WV
C7 ,8			CE04LW1A101M	ELECTRO	100UF	10WV
C9 ,10			CC45FSL1H271J	CERAMIC	270PF	J
C9 ,10			CC45FSL1H271J	CERAMIC	270PF	J
C11 ,12			CQ93FMG1H123J	MYLAR	0.012UF	J
C11 ,12			CQ93FMG1H123J	MYLAR	0.012UF	J
C13 ,14			CK45FB1H332K	CERAMIC	3300PF	K
C13 ,14			CK45FB1H332K	CERAMIC	3300PF	K
C15 ,16			CE04LW1H4R7M	ELECTRO	4.7UF	50WV
C15 ,16			CE04LW1H4R7M	ELECTRO	4.7UF	50WV
C17 ,18			CC45FCH1H101J	CERAMIC	100PF	J
C17 ,18			CC45FCH1H101J	CERAMIC	100PF	J

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
C19 -38			CC45FSL1H221J	CERAMIC	220PF	J
C44 ,45			CE04LW1E470M	ELECTRO	47UF	25WV
C46 ,47			CQ93FMG1H823J	MYLAR	0.082UF	J
C51 -54			C91-1573-05	MP-C	0.10UF	J
C55 ,56			CQ93FMG1H272J	MYLAR	2700PF	J
C57 ,58			CE04LW1H2R2M	ELECTRO	2.2UF	50WV
C62 ,63			CE04KW1H3R3M	ELECTRO	3.3UF	50WV
C64 ,65			CE04KW1H3R3M	ELECTRO	3.3UF	50WV
C64 ,65			CE04KW2A3R3M	ELECTRO	3.3UF	100WV
C66 ,67			CC45FSL1H331J	CERAMIC	330PF	J
C68			CC45FCH1H070D	CERAMIC	7.0PF	D
C69			CC45FCH1H080D	CERAMIC	8.0PF	D
C70 ,71			CK45FB1H222K	CERAMIC	2200PF	K
C72 ,73			CC45FCH1H101J	CERAMIC	100PF	J
C74 ,75			CE04KW1A221M	ELECTRO	220UF	10WV
C74 ,75			CE04KW1E101M	ELECTRO	100UF	25WV
C76 ,77			CC45FCH1H100D	CERAMIC	10PF	D
C78 ,79			CK45FB1H561K	CERAMIC	560PF	K
C82 ,83			CC45FCH1H100D	CERAMIC	10PF	D
C84 ,85			CE04KW1E470M	ELECTRO	47UF	25WV
C84 ,85			CE04KW1H220M	ELECTRO	22UF	50WV
C86 ,87			CC45FSL1H470J	CERAMIC	47PF	J
C88 ,89			CC45FSL2H470J	CERAMIC	47PF	J
C90 ,91			C91-1573-05	MP-C	0.10UF	J
C90 ,91			C91-1577-05	MP-C	0.22UF	J
C92 ,93			C91-1577-05	MP-C	0.22UF	J
C94 ,95			CK45FB1H332K	CERAMIC	3300PF	K
C111 ,112			CE04KW1H3R3M	ELECTRO	3.3UF	50WV
C113 ,114			CE04LW1H3R3M	ELECTRO	3.3UF	50WV
C115 ,116			CC45FSL1H331J	CERAMIC	330PF	J
C117 ,118			CC45FCH1H050C	CERAMIC	5.0PF	C
C119 ,120			CK45FB1H222K	CERAMIC	2200PF	K
C121 ,122			CC45FCH1H101J	CERAMIC	100PF	J
C123 ,124			CE04KW1A221M	ELECTRO	220UF	10WV
C125 ,126			CC45FCH1H100D	CERAMIC	10PF	D
C127 ,128			CK45FB1H561K	CERAMIC	560PF	K
C133 ,134			CE04LW1H220M	ELECTRO	22UF	50WV
C135 ,136			CC45FSL1H470J	CERAMIC	47PF	J
C137 ,138			CC45FSL2H470J	CERAMIC	47PF	J
C139 ,140			C91-1573-05	MP-C	0.10UF	J
C139 ,140			C91-1577-05	MP-C	0.22UF	J
C141 ,142			C91-1577-05	MP-C	0.22UF	J
C143 ,144			CK45FB1H332K	CERAMIC	3300PF	K
C161			CE04KW1H3R3M	ELECTRO	3.3UF	50WV
C163			CE04KW1H3R3M	ELECTRO	3.3UF	50WV
C163			CE04KW2A3R3M	ELECTRO	3.3UF	100WV
C164			CE04LW1H3R3M	ELECTRO	3.3UF	50WV
C165			CC45FSL1H331J	CERAMIC	330PF	J
C166			CC45FSL1H331J	CERAMIC	330PF	J
C167			CC45FCH1H060D	CERAMIC	6.0PF	D
C168			CC45FCH1H050C	CERAMIC	5.0PF	C
C169			CK45FB1H222K	CERAMIC	2200PF	K
C170			CK45FB1H222K	CERAMIC	2200PF	K
C171			CC45FCH1H101J	CERAMIC	100PF	J
C172			CC45FCH1H101J	CERAMIC	100PF	J

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C173			CE04KW1A221M	ELECTRO 220UF 10WV		5
C173			CE04KW1E101M	ELECTRO 100UF 25WV		679
C174			CE04KW1A221M	ELECTRO 220UF 10WV		5
C175			CC45FCH1H100D	CERAMIC 10PF D		59
C176			CC45FCH1H100D	CERAMIC 10PF D		59
C177			CK45FB1H561K	CERAMIC 560PF K		59
C178			CK45FB1H561K	CERAMIC 560PF K		59
C181			CC45FCH1H100D	CERAMIC 10PF D		679
C183			CE04KW1E470M	ELECTRO 47UF 25WV		5
C183			CE04KW1H220M	ELECTRO 22UF 50WV		679
C184			CE04LW1H220M	ELECTRO 22UF 50WV		59
C185			CC45FSL1H470J	CERAMIC 47PF J		59
C186			CC45FSL1H470J	CERAMIC 47PF J		59
C187			CC45FSL2H470J	CERAMIC 47PF J		59
C188			CC45FSL2H470J	CERAMIC 47PF J		59
C189			C91-1573-05	MP-C 0.10UF J	KP	
C189			C91-1577-05	MP-C 0.22UF J	YMHXTE	
C190			C91-1573-05	MP-C 0.10UF J	KP	59
C190			C91-1577-05	MP-C 0.22UF J	YMHXTE	59
C191			C91-1577-05	MP-C 0.22UF J	YMHXTE	59
C192			C91-1577-05	MP-C 0.22UF J	YMHXTE	59
C193			CK45FB1H332K	CERAMIC 3300PF K		
C195,196			CK45FB1H332K	CERAMIC 3300PF K		
C221,222			CE04LW1H4R7M	ELECTRO 4.7UF 50WV		679
C223,224			CE04LW1C470M	ELECTRO 47UF 16WV		679
C225			CQ93FMG1H392J	MYLAR 3900PF J		679
C226			CC45FCH1H100D	CERAMIC 10PF D		679
C227,228			CE04LW1H220M	ELECTRO 22UF 50WV		59
C229,230			CE04LW1H220M	ELECTRO 22UF 50WV		679
C231,232			CC45FSL1H221J	CERAMIC 220PF J		679
C233			CK45FB1H471K	CERAMIC 470PF K		679
C301,302			C90-3984-05	ELECTRO 4700UF 75WV		679
C301,302			C90-5749-05	ELECTRO 1000UF 74WV		5
C303			CQ93FMG1H103J	MYLAR 0.010UF J		5
C304			CE04LW0J221M	ELECTRO 220UF 6.3WV		5
C305			CE04KW1V101M	ELECTRO 100UF 35WV		
C306			CE04LW2A101M	ELECTRO 100UF 100WV		
C307			CC45FSL1H181J	CERAMIC 180PF J		
C307			CC45FSL1H221J	CERAMIC 220PF J		679
C308			CE04LW1H100M	ELECTRO 10UF 50WV		
C309			CE04LW1H220M	ELECTRO 22UF 50WV		
C310,311			CE04KW1H220M	ELECTRO 22UF 50WV		
C312			CE04LW1A101M	ELECTRO 100UF 10WV		
C313,314			CE04LW1E470M	ELECTRO 47UF 25WV		59
C315			CE04DW2A330M	ELECTRO 33UF 100WV		
C316			CE04LW2A100M	ELECTRO 10UF 100WV		
C317,318			CE04KW2A220M	ELECTRO 22UF 100WV		
C319,320			CC45FCH1H101J	CERAMIC 100PF J		
C321			CC45FCH1H100D	CERAMIC 10PF D		
C322			CC45FCH1H120J	CERAMIC 12PF J		5
C322			CC45FCH1H150J	CERAMIC 15PF J		679
C323			CK45FB1H102K	CERAMIC 1000PF K		
C324,325			CE04DW1C471M	ELECTRO 470UF 16WV		
C326			CC45FCH1H220J	CERAMIC 22PF J		5
C351-353			CC45FSL1H221J	CERAMIC 220PF J		

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
C354			CQ93FMG1H122J	MYLAR 1200PF J		
C355-359			CK45FF1H472Z	CERAMIC 4700PF Z		59
C360			CK45FF1H472Z	CERAMIC 4700PF Z		
C361			CE04KW1H220M	ELECTRO 22UF 50WV		
C362			CE04LW1H220M	ELECTRO 22UF 50WV		
C363			CE04KW1C220M	ELECTRO 22UF 16WV		679
C363			CE04KW1E470M	ELECTRO 47UF 25WV		5
C364			CE04HW1H2R2M	NP-ELEC 2.2UF 50WV		
C365			CE04LW1A221M	ELECTRO 220UF 10WV		
C366			CE04LW1H4R7M	ELECTRO 4.7UF 50WV		
C367			CE04LW1A221M	ELECTRO 220UF 10WV		
C368			CE04LW1H4R7M	ELECTRO 4.7UF 50WV		
C369			CE04HW1C330M	NP-ELEC 33UF 16WV		679
C369			CE04HW1E220M	NP-ELEC 22UF 25WV		5
C370			CK45FB1H102K	CERAMIC 1000PF K		
C450			CK45FE2H103P	CERAMIC 0.010UF P		
C451-453			CK45FB2H102K	CERAMIC 1000PF K		
C501,502			CC45FSL1H221J	CERAMIC 220PF J		
C600			CE04KW1E101M	ELECTRO 100UF 25WV		
C603,604			CE04KW1E470M	ELECTRO 47UF 25WV		5
C605,606			CC45FCH1H820J	CERAMIC 82PF J		5
C607,608			CE04KW1H220M	ELECTRO 22UF 50WV		5
CN1			E40-8361-05	PIN ASSY		
CN2			E40-3248-05	PIN ASSY		
CN3			E40-3247-05	PIN ASSY		
CN4			E40-8484-05	FLAT CABLE CONNECTOR		
CN5			E40-8483-05	FLAT CABLE CONNECTOR		5
CN6			E40-3259-05	PIN ASSY		
CN7			E40-3253-05	PIN ASSY		
CN8			E40-3254-05	PIN ASSY		5
CN10-14			E40-4871-05	PIN ASSY		
CN15			E40-4871-05	PIN ASSY		59
CN21			E40-8429-05	SOCKET FOR PIN ASSY		
CN22			E40-3253-05	PIN ASSY		
CN51			E40-3247-05	PIN ASSY		
J1 ,2		*	E63-1246-05	PIN JACK		
J3		*	E63-1247-05	PIN JACK		
J4		*	E63-1248-05	PIN JACK		679
J5		*	E70-0150-05	SCREW TERMINAL BOARD		
J6		*	E70-0160-05	LOCK TERMINAL BOARD		59
J7		*	E70-0161-05	LOCK TERMINAL BOARD		67
J501			E11-0190-05	PHONE JACK (3P)		
J501			E11-0271-05	PHONE JACK (METAL SLEEVE)		
W1 ,2			E31-0002-00	JUMPER WIRE	KPYMIH	6
W1 ,2			E31-0002-00	JUMPER WIRE	X	6
W3 ,4			E31-0002-00	JUMPER WIRE		5
W5 -7			E31-0002-00	JUMPER WIRE		679
W8			E31-0002-00	JUMPER WIRE		679
W8			E31-0002-00	JUMPER WIRE	KPYMHX	5
W13			E31-0002-00	JUMPER WIRE		59
W20 -23			E31-0002-00	JUMPER WIRE	KP	679
W24		*	E29-1680-05	LEAD PLATE		
W25		*	E29-1685-05	LEAD PLATE		
W26		*	E29-1681-05	LEAD PLATE		

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**KRF-V6060D/V7060D/V8060D/X9060D/VR-6050/6060/6070**  
**PARTS LIST**

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
W27		*	E29-1678-05	LEAD PLATE		
W49		*	E29-1688-05	LEAD PLATE		
W350,351		*	E29-1677-14	LEAD PLATE		
E501			J11-0808-05	WIRE CLAMPER	YMHXTE	
L1 -5			L39-0085-05	PHASE COMPENSATION COIL		
L6			L39-0085-05	PHASE COMPENSATION COIL		59
R1 ,2			RD14BB2C102J	RD 1.0K J 1/6W		579
R1 ,2			RD14BB2C102J	RD 1.0K J 1/6W	TE	6
R3 ,4			RD14BB2C303J	RD 30K J 1/6W		579
R3 ,4			RD14BB2C303J	RD 30K J 1/6W	TE	6
R5 ,6			RD14BB2C101J	RD 100 J 1/6W		579
R5 ,6			RD14BB2C101J	RD 100 J 1/6W	TE	6
R7 ,8			RD14BB2C361J	RD 360 J 1/6W		579
R7 ,8			RD14BB2C361J	RD 360 J 1/6W	TE	6
R9 ,10			RD14BB2C274J	RD 270K J 1/6W		579
R9 ,10			RD14BB2C274J	RD 270K J 1/6W	TE	6
R11 ,12			RD14BB2C223J	RD 22K J 1/6W		579
R11 ,12			RD14BB2C223J	RD 22K J 1/6W	TE	6
R13 ,14			RD14BB2C224J	RD 220K J 1/6W	KPYMIH	6
R13 ,14			RD14BB2C224J	RD 220K J 1/6W	X	6
R13 ,14			RD14BB2C473J	RD 47K J 1/6W		579
R13 ,14			RD14BB2C473J	RD 47K J 1/6W	TE	6
R65 ,66			RD14BB2C152J	RD 1.5K J 1/6W		679
R65 ,66			RD14BB2C222J	RD 2.2K J 1/6W		5
R79 ,80			RD14BB2C162J	RD 1.6K J 1/6W		5
R79 ,80			RD14BB2C391J	RD 390 J 1/6W	KPYIHM	69
R79 ,80			RD14BB2C391J	RD 390 J 1/6W	X	69
R79 ,80			RD14BB2C431J	RD 430 J 1/6W	TE	679
R81 -84			RD14NB2E221J	RD 220 J 1/4W		
R85 ,86			RD14NB2E562J	RD 5.6K J 1/4W		
R87 ,88			RD14NB2E331J	RD 330 J 1/4W		
R93 -96			RD14NB2E470J	RD 47 J 1/4W		
R97 ,98			RD14NB2E221J	RD 220 J 1/4W		
R99 ,100			RD14NB2E330J	RD 33 J 1/4W		
R101 ,102			RS14KB3D4R7J	FL-PROOF RS 4.7 J 2W		
R103 ,104			RS14KB3D391J	FL-PROOF RS 390 J 2W		
R129 ,130			RD14BB2C162J	RD 1.6K J 1/6W		5
R129 ,130			RD14BB2C391J	RD 390 J 1/6W	KPYIHM	69
R129 ,130			RD14BB2C391J	RD 390 J 1/6W	X	69
R129 ,130			RD14BB2C431J	RD 430 J 1/6W	TE	679
R131-134			RD14NB2E221J	RD 220 J 1/4W		
R135,136			RD14NB2E562J	RD 5.6K J 1/4W		
R137,138			RD14NB2E331J	RD 330 J 1/4W		
R143-146			RD14NB2E470J	RD 47 J 1/4W		
R147,148			RD14NB2E221J	RD 220 J 1/4W		
R149,150			RD14NB2E330J	RD 33 J 1/4W		
R151,152			RS14KB3D4R7J	FL-PROOF RS 4.7 J 2W		
R164			RD14BB2C104J	RD 100K J 1/6W		59
R166			RD14BB2C222J	RD 2.2K J 1/6W		59
R168			RD14BB2C473J	RD 47K J 1/6W		59
R170			RD14BB2C101J	RD 100 J 1/6W		59
R172			RD14BB2C682J	RD 6.8K J 1/6W		59
R174			RD14BB2C332J	RD 3.3K J 1/6W		59

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
R176			RD14BB2C152J	RD 1.5K J 1/6W		59
R178			RD14BB2C152J	RD 1.5K J 1/6W		59
R179			RD14BB2C162J	RD 1.6K J 1/6W		5
R179			RD14BB2C391J	RD 390 J 1/6W	KPYIHM	69
R179			RD14BB2C391J	RD 390 J 1/6W	X	69
R179			RD14BB2C431J	RD 430 J 1/6W	TE	679
R180			RD14BB2C162J	RD 1.6K J 1/6W		5
R180			RD14BB2C472J	RD 4.7K J 1/6W	KPMX	9
R180			RD14BB2C512J	RD 5.1K J 1/6W	E	9
R181			RD14NB2E221J	RD 220 J 1/4W		
R182			RD14NB2E221J	RD 220 J 1/4W		59
R183			RD14NB2E221J	RD 220 J 1/4W		
R184			RD14NB2E221J	RD 220 J 1/4W		59
R185			RD14NB2E562J	RD 5.6K J 1/4W		
R186			RD14NB2E562J	RD 5.6K J 1/4W		59
R187			RD14NB2E331J	RD 330 J 1/4W		
R188			RD14NB2E331J	RD 330 J 1/4W		59
R190			RD14BB2C473J	RD 47K J 1/6W		59
R192			RD14BB2C102J	RD 1.0K J 1/6W		59
R193			RD14NB2E470J	RD 47 J 1/4W		
R194			RD14NB2E470J	RD 47 J 1/4W		59
R195			RD14NB2E470J	RD 47 J 1/4W		
R196			RD14NB2E470J	RD 47 J 1/4W		59
R197			RD14NB2E221J	RD 220 J 1/4W		
R198			RD14NB2E221J	RD 220 J 1/4W		59
R199			RD14NB2E330J	RD 33 J 1/4W		
R200			RD14NB2E330J	RD 33 J 1/4W		59
R201			RS14KB3D4R7J	FL-PROOF RS 4.7 J 2W		
R202			RS14KB3D4R7J	FL-PROOF RS 4.7 J 2W		59
R223,224			RD14BB2C473J	RD 47K J 1/6W		679
R225			RD14BB2C821J	RD 820 J 1/6W		679
R226			RD14BB2C472J	RD 4.7K J 1/6W		679
R227,228			RD14BB2C473J	RD 47K J 1/6W		679
R231,232			RD14BB2C102J	RD 1.0K J 1/6W		679
R233,234			RD14BB2C104J	RD 100K J 1/6W		679
R235,236			RD14BB2C470J	RD 47 J 1/6W		679
R237			RD14BB2C102J	RD 1.0K J 1/6W		679
R301			RS14KB3D182J	FL-PROOF RS 1.8K J 2W		
R303			RD14NB2E1R0J	RD 1 J 1/4W		679
R303			RD14NB2E1R0J	RD 1 J 1/4W	TE	5
R303			RD14NB2E561J	RD 560 J 1/4W	KPYMHX	5
R304			RS14KB3A103J	FL-PROOF RS 10K J 1W		679
R304			RS14KB3A103J	FL-PROOF RS 10K J 1W	TE	5
R304			RS14KB3A822J	FL-PROOF RS 8.2K J 1W	KPYMHX	5
R306			RD14NB2E101J	RD 100 J 1/4W		
R307			RD14NB2E822J	RD 8.2K J 1/4W		
R310,311			RS14KB3A680J	FL-PROOF RS 68 J 1W		
R314			RS14KB3A681J	FL-PROOF RS 680 J 1W		
R315,316			RD14NB2E271J	RD 270 J 1/4W		59
R317			RS14KB3D122J	FL-PROOF RS 1.2K J 2W	KPTE	
R317			RS14KB3D222J	FL-PROOF RS 2.2K J 2W	YMIHX	
R318			RS14KB3D152J	FL-PROOF RS 1.5K J 2W	KPTE	
R318			RS14KB3D222J	FL-PROOF RS 2.2K J 2W	YMIHX	
R321,322			RD14NB2E1R0J	RD 1 J 1/4W		
R325,326			RD14NB2E472J	RD 4.7K J 1/4W		

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
R331-333			RS14KB3D182J	FL-PROOF RS 1.8K J 2W		
R342			RS14KB3A100J	FL-PROOF RS 10 J 1W		
R343			RS14KB3A470J	FL-PROOF RS 47 J 1W		
R354			RD14BB2C473J	RD 47K J 1/6W		59
R355			RD14BB2C102J	RD 1.0K J 1/6W		59
R358,359			RD14BB2C103J	RD 10K J 1/6W		679
R358,359			RD14BB2C912J	RD 9.1K J 1/6W		5
R383,384			RD14BB2C103J	RD 10K J 1/6W		679
R383,384			RD14BB2C912J	RD 9.1K J 1/6W		5
R402			RD14BB2C303J	RD 30K J 1/6W		59
R403			RD14BB2C103J	RD 10K J 1/6W		679
R403			RD14BB2C912J	RD 9.1K J 1/6W		5
R404			RD14BB2C103J	RD 10K J 1/6W		79
R404			RD14BB2C912J	RD 9.1K J 1/6W		5
R406			RD14BB2C101J	RD 100 J 1/6W		59
R408			RD14BB2C471J	RD 470 J 1/6W		59
R410			RD14BB2C333J	RD 33K J 1/6W		59
R436			RD14BB2C102J	RD 1.0K J 1/6W		59
R437,438			RD14BB2C102J	RD 1.0K J 1/6W		679
R454			RS14KB3A391J	FL-PROOF RS 390 J 1W		
△ R476			RD14NB2E561J	RD 560 J 1/4W		
R603,604			RD14BB2C152J	RD 1.5K J 1/6W		679
R603,604			RD14BB2C471J	RD 470 J 1/6W		5
R611,612			RD14BB2C271J	RD 270 J 1/6W		5
R613			RD14BB2C473J	RD 47K J 1/6W		5
R614			RD14BB2C102J	RD 1.0K J 1/6W		5
R615,616			RD14BB2C103J	RD 10K J 1/6W		5
R617-620			RD14BB2C472J	RD 4.7K J 1/6W		5
R621,622			RD14BB2C133J	RD 13K J 1/6W		5
R623,624			RD14BB2C104J	RD 100K J 1/6W		5
VR1 -5			R32-0032-05	SEMI FIXED VARIABLE RESISTOR		
VR6			R32-0032-05	SEMI FIXED VARIABLE RESISTOR		59
△ K1		*	S76-0134-05	MAGNETIC RELAY	KPYIMH	
K2 -5			S76-0045-15	MAGNETIC RELAY	X	
K2 -5			S76-0045-15	MAGNETIC RELAY	TE	
K2 -5			S76-0098-05	MAGNETIC RELAY		
D1 -5			HSS104A	DIODE		
D1 -5			1SS133	DIODE		
D6			HSS104A	DIODE		59
D6			1SS133	DIODE		59
△ D11 ,12			D5SBA20F03	DIODE		
△ D11 ,12			TS6P03G-B	DIODE		
D13			HSS104A	DIODE		
D13			1SS133	DIODE		
△ D14 ,15			1SR139-400	DIODE		
D16			HSS104A	DIODE		
D16			1SS133	DIODE		
D17			MTZJ16(B)	ZENER DIODE		
D17			RD16ES(B)	ZENER DIODE		
D18			MTZJ15(B)	ZENER DIODE		
D18			RD15ES(B)	ZENER DIODE		
D19			MTZJ16(B)	ZENER DIODE		
D19			RD16ES(B)	ZENER DIODE		
D20 ,21			MTZJ6.8(B)	ZENER DIODE		

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D20 ,21			RD6.8ES(B)	ZENER DIODE		
D22			MTZJ5.1(B)	ZENER DIODE		
D22			RD5.1ES(B)	ZENER DIODE		
D23			MTZJ10(B)	ZENER DIODE	KPTE	
D23			MTZJ11(B)	ZENER DIODE	YMIHX	
D23			RD10ES(B)	ZENER DIODE	KPTE	
D23			RD11ES(B)	ZENER DIODE	YMIHX	
D24			MTZJ10(B)	ZENER DIODE	TE	
D24			MTZJ15(B)	ZENER DIODE	KP	
D24			MTZJ7.5(B)	ZENER DIODE	YMIHX	
D24			RD10ES(B)	ZENER DIODE	TE	
D24			RD15ES(B)	ZENER DIODE	KP	
D24			RD7.5ES(B)	ZENER DIODE	YMIHX	
D25			MTZJ24(B)	ZENER DIODE	KPTE	
D25			MTZJ30(B)	ZENER DIODE	YMIHX	
D25			RD24ES(B)	ZENER DIODE	KPTE	
D25			RD30ES(B)	ZENER DIODE	YMHX	
D26			MTZJ5.1(B)	ZENER DIODE	TE	5
D26			RD5.1ES(B)	ZENER DIODE	TE	5
D27			1SS244	DIODE		
D28 ,29			HSS104A	DIODE		
D28 ,29			1SS133	DIODE		
D30			HSS104A	DIODE		59
D30			1SS133	DIODE		59
D32 -35			HSS104A	DIODE		
D32 -35			1SS133	DIODE		
D51 ,52			1SS244	DIODE		
D53 ,54			HSS104A	DIODE		
D53 ,54			1SS133	DIODE		
D55 ,56			1SS244	DIODE		
D57 ,58			HSS104A	DIODE		
D57 ,58			1SS133	DIODE		
D59			1SS244	DIODE		
D60			1SS244	DIODE		59
D61			HSS104A	DIODE		
D61			1SS133	DIODE		
D63			MTZJ3.9(B)	ZENER DIODE		
D63			RD3.9ES(B)	ZENER DIODE		
D64			HSS104A	DIODE		
D64			1SS133	DIODE		
D65			MTZJ3.9(B)	ZENER DIODE		
D65			RD3.9ES(B)	ZENER DIODE		
D66			HSS104A	DIODE		
D66			1SS133	DIODE		
D67			MTZJ3.9(B)	ZENER DIODE		
D67			RD3.9ES(B)	ZENER DIODE		
D68			HSS104A	DIODE		
D68			1SS133	DIODE		
D69			MTZJ3.9(B)	ZENER DIODE		
D69			RD3.9ES(B)	ZENER DIODE		
D221			MTZJ7.5(B)	ZENER DIODE		59
D221			RD7.5ES(B)	ZENER DIODE		59
D600,601			MTZJ7.5(B)	ZENER DIODE		59
D600,601			RD7.5ES(B)	ZENER DIODE		59
D602-604			HSS104A	DIODE		

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KRF-V6060D/V7060D/V8060D/X9060D/VR-6050/6060/6070

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
D602-604			1SS133	DIODE	TE	5
D605-607			MTZJ7.5(B)	ZENER DIODE		
D605-607			RD7.5ES(B)	ZENER DIODE		
IC1			NJM4580L	ANALOGUE IC		
IC1			NJM4580L	ANALOGUE IC		
IC2			M61516FP	ANALOGUE IC		
IC3			BU4066BC	ANALOGUE IC		
IC4			NJM4565D	ANALOGUE IC		
IC5			BU4066BC	ANALOGUE IC		
IC6			NJM4580D-D	IC(OP AMP X2)		
Q1 -4			2SA992(F,E)	TRANSISTOR		
Q5 ,6			2SA1123(R,S)	TRANSISTOR		
Q7 -10			2SC2631(R,S)	TRANSISTOR		
Q11 ,12			TRAIT3KN	TRANSISTOR		
Q13 ,14			TRAIT3KP	TRANSISTOR		
Q21 -24			2SA992(F,E)	TRANSISTOR		
Q25 ,26			2SA1123(R,S)	TRANSISTOR		
Q27 -30			2SC2631(R,S)	TRANSISTOR		
Q31 ,32			TRAIT3KN	TRANSISTOR		
Q33 ,34			TRAIT3KP	TRANSISTOR		
Q41			2SA992(F,E)	TRANSISTOR		
Q42			2SA992(F,E)	TRANSISTOR		
Q43			2SA992(F,E)	TRANSISTOR		
Q44			2SA992(F,E)	TRANSISTOR		
Q45			2SA1123(R,S)	TRANSISTOR		
Q46			2SA1123(R,S)	TRANSISTOR		
Q47			2SC2631(R,S)	TRANSISTOR		
Q48			2SC2631(R,S)	TRANSISTOR		
Q49			2SC2631(R,S)	TRANSISTOR		
Q50			2SC2631(R,S)	TRANSISTOR		
Q51			TRAIT3KN	TRANSISTOR		
Q52			TRAIT3KN	TRANSISTOR		
Q53			TRAIT3KP	TRANSISTOR		
Q54			TRAIT3KP	TRANSISTOR		
Q301			KTC3200	TRANSISTOR		
Q302			DTC113ZSA	DIGITAL TRANSISTOR		
Q302			UN4219	DIGITAL TRANSISTOR		
Q303			2SC3940A(R,S)	TRANSISTOR		
Q304			2SB1640	TRANSISTOR		
Q305		*	UN421N	DIGITAL TRANSISTOR		
Q306			2SB1640	TRANSISTOR		
Q307			2SD2525	TRANSISTOR		
Q308			2SA992(F,E)	TRANSISTOR		
Q309-312			KTC3200	TRANSISTOR		
Q313		*	UN421N	DIGITAL TRANSISTOR		
Q331-335			2SC2878(B)	TRANSISTOR		
Q336			2SC2878(B)	TRANSISTOR		
Q337,338			2SC2878(B)	TRANSISTOR		
Q351,352			DTC124ESA	DIGITAL TRANSISTOR		
Q351,352			UN4212	DIGITAL TRANSISTOR		
Q353-357			2SC1845(F,E)	TRANSISTOR		
Q358			2SC1845(F,E)	TRANSISTOR		
Q359			2SA992(F,E)	TRANSISTOR		
Q360,361			2SC1845(F,E)	TRANSISTOR		
Q362			2SA992(F,E)	TRANSISTOR		

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks		
Q363,364			2SC1845(F,E)	TRANSISTOR	TE	5		
Q365			2SA992(F,E)	TRANSISTOR				
Q602-604			2SC1845(F,E)	TRANSISTOR				
Q605,606			2SC2878(B)	TRANSISTOR				
Q607			2SA992(F,E)	TRANSISTOR				
Q608,609			DTC124ESA	DIGITAL TRANSISTOR				
Q608,609			UN4212	DIGITAL TRANSISTOR				
<b>DISPLAY UNIT (X14-742X-XX)</b>								
<b>VR-6050, KRF-V6060D/-S/V7060D/-S/X9060D-G(Htype)</b>								
D734			B30-2545-05	LED(RED3(160))			TE	67
D741-745			B30-2545-05	LED(RED3(160))				
D746-752			B30-2567-05	LED(RED(80) HI-BR)				
D753			B30-2545-05	LED(RED3(160))				
D754			B30-2567-05	LED(RED(80) HI-BR)				
D755			B30-2545-05	LED(RED3(160))				
C101			CC45FSL1H101J	CERAMIC 100PF				
C103			CK73GB1H103K	CHIP C 0.010UF				
C104			CC73GCH1H101J	CHIP C 100PF				
C201			CE04KW2A101M	ELECTRO 100UF				
C202			CC73GCH1H180J	CHIP C 18PF				
C401			CK45FE2H103P	CERAMIC 0.010UF				
C402			CE04KW1E222M	ELECTRO 2200UF				
C403			CE04KW1E102M	ELECTRO 1000UF				
C404-407			CK73GB1H103K	CHIP C 0.010UF				
C408,409			CE04KW1C470M	ELECTRO 47UF				
C410			CC73GCH1H680J	CHIP C 68PF				
C411			CC73GCH1H820J	CHIP C 82PF				
C451			CK45FF1H103Z	CERAMIC 0.010UF				
C452			CQ93FMG1H104J	MYLAR 0.10UF				
C452			CQ93FMG1H393J	MYLAR 0.039UF				
C452			CQ93FMG1H473J	MYLAR 0.047UF				
C452			CQ93FMG1H683J	MYLAR 0.068UF				
C453			CE04LW1C332M	ELECTRO 3300UF				
C453			CE04LW1E332M	ELECTRO 3300UF				
C453			CE04LW1E332M	ELECTRO 3300UF				
C454			CE04LW1H100M	ELECTRO 10UF				
C455			CE04LW0J222M	ELECTRO 2200UF				
C456,457			CK45FF1H103Z	CERAMIC 0.010UF				
C458			CE04LW1H100M	ELECTRO 10UF				
C459			CE04LW1H010M	ELECTRO 1.0UF				
C501-504			CC45FCH1H101J	CERAMIC 100PF				
C505,506			CK45FB1H102K	CERAMIC 1000PF				
C507,508			CC45FCH1H101J	CERAMIC 100PF				
C509			CK45FB1H471K	CERAMIC 470PF				
C510			CC73GCH1H101J	CHIP C 100PF				
C511			CC45FCH1H101J	CERAMIC 100PF				
C601-606			CC45FSL1H470J	CERAMIC 47PF				
C607			CC45FSL1H470J	CERAMIC 47PF				
C608-611			CE04LW1E470M	ELECTRO 47UF				
C651-654			CC45FSL1H470J	CERAMIC 47PF				
C655,656			CC45FSL1H470J	CERAMIC 47PF				
C657,658			CC45FSL1H470J	CERAMIC 47PF				
C659-662			CC45FSL1H470J	CERAMIC 47PF				
C663			CK45FF1H103Z	CERAMIC 0.010UF				
C664			CE04LW1C470M	ELECTRO 47UF				

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Ref. No	Address	New Parts	Parts No.	Description	Destination	Re-remarks
C665			CK45FF1H103Z	CERAMIC 0.010UF Z	H	5
C666			CE04LW1C470M	ELECTRO 47UF 16WV	H	5
C667			CK45FF1H103Z	CERAMIC 0.010UF Z	H	5
C668			CE04LW1C470M	ELECTRO 47UF 16WV	H	5
C669			CK45FF1H103Z	CERAMIC 0.010UF Z	H	5
C670			CE04LW1C470M	ELECTRO 47UF 16WV	H	5
C671			CE04LW1C470M	ELECTRO 47UF 16WV	H	5
C672			CK45FF1H103Z	CERAMIC 0.010UF Z	H	5
C673			CE04LW1C470M	ELECTRO 47UF 16WV	H	5
C674-677			CE04LW1H100M	ELECTRO 10UF 50WV	H	5
C693			CC45FSL1H101J	CERAMIC 100PF J		
C701			CC73GCH1H221J	CHIP C 220PF J		
C702			CE04LW1H101M	ELECTRO 100UF 50WV		
C703,704			CC73GCH1H102J	CHIP C 1000PF J		
C705			CC73GCH1H181J	CHIP C 180PF J		
C741			CK73EF1E105Z	CHIP C 1.0UF Z		
C761,762			CK73GB1H103K	CHIP C 0.010UF K		
C763,764			CK45FF1H103Z	CERAMIC 0.010UF Z		
C765,766			CK73GB1H103K	CHIP C 0.010UF K		
C777			CK45FB1H102K	CERAMIC 1000PF K		
C778			CC45FCH1H101J	CERAMIC 100PF J		
C779			CE04LW1A101M	ELECTRO 100UF 10WV		
C780			CC73GCH1H270J	CHIP C 27PF J		
C791			CE04RW0J470M	ELECTRO 47UF 6.3WV		
C792			CE04LW1C220M	ELECTRO 22UF 16WV		
C793,794			CK45FF1H103Z	CERAMIC 0.010UF Z		
C811			CK45FF1H103Z	CERAMIC 0.010UF Z	TE	67
C812,813			CC45FCH1H270J	CERAMIC 27PF J	TE	67
C814			CC45FCH1H101J	CERAMIC 100PF J	TE	67
C815			CE04LW1A470M	ELECTRO 47UF 10WV	TE	67
C816			CK45FB1H561K	CERAMIC 560PF K	TE	67
C817			CK45FF1H103Z	CERAMIC 0.010UF Z	TE	67
C818			CC45FSL1H271J	CERAMIC 270PF J	TE	67
C819			CE04LW1H2R2M	ELECTRO 2.2UF 50WV	TE	67
C831			CK45FF1H103Z	CERAMIC 0.010UF Z	YMI	6
C832			CE04LW1H2R2M	ELECTRO 2.2UF 50WV	YMI	6
C833			CK45FF1H103Z	CERAMIC 0.010UF Z	YMI	6
C841			CE04EW0J102M	ELECTRO 1000UF 6.3WV	KP	6
C842			C90-1826-05	BACKUP-C 0.047F 5.5WV	TE	67
C842			C90-1826-05	BACKUP-C 0.047F 5.5WV	YMIHX	67
C843			CE04PW1H010M	ELECTRO 1UF 50WV		
C844			CK45FF1H103Z	CERAMIC 0.010UF Z		
C845			CK73GB1H103K	CHIP C 0.010UF K		
C851			CE04LW1H100M	ELECTRO 10UF 50WV		
C852-855			CC45FSL1H221J	CERAMIC 220PF J		
C856,857			CK45FF1H103Z	CERAMIC 0.010UF Z		
C858			CE04PW1A101M	ELECTRO 100UF 10WV		
C907			CK73GB1H103K	CHIP C 0.010UF K		
C908			CK45FF1H103Z	CERAMIC 0.010UF Z		
C909			CK45FF1H103Z	CERAMIC 0.010UF Z	YMI	6
CN1			E40-8386-05	PIN ASSY	YMI	6
CN2			E40-3261-05	PIN ASSY		
CN41			E40-3261-05	PIN ASSY		
CN45			E40-4245-05	PIN ASSY		
CN46			E40-4632-05	PIN ASSY	TE	67

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Ref. No	Address	New Parts	Parts No.	Description	Destination	Re-remarks
CN46			E40-4632-05	PIN ASSY	YMIHX	
CN47			E40-4245-05	PIN ASSY	KPHX	
CN47			E40-4245-05	PIN ASSY	TE	67
CN48			E40-4428-05	PIN ASSY	YMI	6
CN49			E40-3246-05	PIN ASSY		
CN50			E40-3251-05	PIN ASSY		
CN65			E40-3249-05	PIN ASSY		
CN67			E40-3246-05	PIN ASSY		
CN68			E40-3248-05	PIN ASSY		
CN70			E40-3261-05	PIN ASSY		
CN80			E40-3261-05	PIN ASSY		
J2			E03-0148-05	AC OUTLET	KPY	6
J3			E03-0149-05	AC OUTLET	E	7
J3			E03-0149-05	AC OUTLET	MIE	6
J4			E03-0310-05	AC OUTLET	T	6
J5			E03-0325-05	AC OUTLET	X	6
J20		*	E63-1251-05	PIN JACK		
J21		*	E56-0033-05	CYLINDRICAL RECEPTACLE		
J61,62		*	E63-1253-05	PIN JACK		
J63		*	E63-1252-05	PIN JACK	H	5
J65,66		*	E56-0040-05	CYLINDRICAL RECEPTACLE	H	5
J67		*	E56-0040-05	CYLINDRICAL RECEPTACLE		
J68		*	E56-0042-05	CYLINDRICAL RECEPTACLE		
P1			E23-1785-05	TERMINAL	YMI	6
W104			E31-0002-00	JUMPER WIRE	TE	6
W111			E31-0002-00	JUMPER WIRE	KP	6
W121			E31-0002-00	JUMPER WIRE	KP	6
W141			E31-0002-00	JUMPER WIRE	YMI	6
W202			E31-0002-00	JUMPER WIRE	H	5
W302,303			E31-0002-00	JUMPER WIRE	TE	67
W719			E31-0002-00	JUMPER WIRE	YMI	6
W723			E31-0002-00	JUMPER WIRE	YMI	6
W726			E31-0002-00	JUMPER WIRE	YMI	6
W730			E31-0002-00	JUMPER WIRE	YMI	6
W950			E31-0002-00	JUMPER WIRE	YMI	67
W960			E31-0002-00	JUMPER WIRE	KP	6
$\Delta$ F1			F05-4025-05	FUSE (SEMKO) (250V T4A L)	TE	67
$\Delta$ F1			F05-4025-05	FUSE (SEMKO) (250V T4A L)	YMIHX	67
$\Delta$ F1			F50-0078-05	FUSE (5X20)	KP	6
$\Delta$ F2			F06-1022-05	FUSE (SEMKO) (250V T1AL)	TE	67
$\Delta$ F2			F06-1022-05	FUSE (SEMKO) (250V T1AL)	YMIX	6
$\Delta$ F3			F05-4025-05	FUSE (SEMKO) (250V T4A L)	TYMI	6
-		*	J19-6287-03	HOLDER		
CN3,4			J13-0075-05	FUSE CLIP	YMI	6
CN11,12			J13-0075-05	FUSE CLIP		
CN21,22			J13-0075-05	FUSE CLIP	TE	67
CN21,22			J13-0075-05	FUSE CLIP	YMIX	6
$\Delta$ E603			J19-6288-03	HOLDER	H	5
E701			J11-0809-05	WIRE CLAMPER		
E702,703			J11-0808-05	WIRE CLAMPER		
E705			J11-0808-05	WIRE CLAMPER		
$\Delta$ T1			L07-2758-05	POWER TRANSFORMER	H	5
$\Delta$ T1			L07-2758-05	POWER TRANSFORMER	HX	6

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KRF-V6060D/V7060D/V8060D/V9060D/VR-6050/6060/6070  
**PARTS LIST**

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△ T1			L07-2761-05	POWER TRANSFORMER	TE	67
△ T1			L07-2805-05	POWER TRANSFORMER	YMI	6
△ T1			L07-2809-05	POWER TRANSFORMER	KP	6
X701			L78-0725-05	RESONATOR (8.38MHZ)		
X811			L77-2002-05	CRYSTAL RESONATOR (4.332MHZ)	TE	67
R120			RK73GB1J102J	CHIP R 1.0K J 1/16W		
R121			RD14BB2C101J	RD 100 J 1/6W	H	5
R201			RD14NB2E472J	RD 4.7K J 1/4W		
△ R410			RS14KB3D181J	FL-PROOF RS 180 J 2W		
R451			RD14BB2C134J	RD 130K J 1/6W	TE	67
R451			RD14BB2C183J	RD 18K J 1/6W	YMI	6
△ R451			RD14BB2C393J	RD 39K J 1/6W	KP	6
R453			RD14NB2E1R0J	RD 1 J 1/4W		
R454			RD14NB2E150J	RD 15 J 1/4W	YMI	6
△ R454			RD14NB2E270J	RD 27 J 1/4W	KPHX	
R454			RD14NB2E270J	RD 27 J 1/4W	TE	67
R457			R92-1844-05	CARBON 3.3M J 1/2W	KP	6
R458			RD14BB2E120J	RD 12 J 1/4W	YMI	6
R607			RD14BB2C104J	RD 100K J 1/6W	H	5
R610			RD14BB2C750J	RD 75 J 1/6W	H	5
R651,652			RD14BB2C104J	RD 100K J 1/6W	H	5
R653,654			RD14BB2C750J	RD 75 J 1/6W	H	5
R657,658			RD14BB2C750J	RD 75 J 1/6W	H	5
R663,664			RD14BB2C750J	RD 75 J 1/6W	H	5
△ R671			RS14KB3A180J	FL-PROOF RS 18 J 1W		
△ R674			RS14KB3A470J	FL-PROOF RS 47 J 1W		
R776			RD14NB2E100J	RD 10 J 1/4W		
R779			RK73GB1J333J	CHIP R 33K J 1/16W		
R780			RD14NB2E100J	RD 10 J 1/4W		
R782			RK73GB1J303J	CHIP R 30K J 1/16W		
R801,802			RK73GB1J331J	CHIP R 330 J 1/16W		
R803			RK73GB1J104J	CHIP R 100K J 1/16W		
R805			RK73GB1J104J	CHIP R 100K J 1/16W		
R813			RD14BB2C473J	RD 47K J 1/6W	TE	67
R814			RD14BB2C1R0J	RD 1 J 1/6W	TE	67
R832			RD14BB2C102J	RD 1.0K J 1/6W	YMI	6
R833			RD14BB2C332J	RD 3.3K J 1/6W	YMI	6
R834			RD14BB2E102J	RD 1.0K J 1/4W	YMI	6
R836			RD14BB2C101J	RD 100 J 1/6W	YMI	6
R894			RK73GB1J101J	CHIP R 100 J 1/16W		
R896-898			RK73GB1J101J	CHIP R 100 J 1/16W		
R902			RD14BB2C101J	RD 100 J 1/6W	TE	67
R910,911			RK73GB1J104J	CHIP R 100K J 1/16W		
R914			RD14BB2C104J	RD 100K J 1/6W	TE	67
R922-924			RK73GB1J101J	CHIP R 100 J 1/16W		
R926			RK73GB1J101J	CHIP R 100 J 1/16W		
R935			RK73GB1J101J	CHIP R 100 J 1/16W		
R938,939			RK73GB1J101J	CHIP R 100 J 1/16W		
R951,952			RK73GB1J104J	CHIP R 100K J 1/16W		
R967-969			RK73GB1J104J	CHIP R 100K J 1/16W		
R970			RK73GB1J153J	CHIP R 15K J 1/16W		
R971,972			RK73GB1J104J	CHIP R 100K J 1/16W		
R977			RK73GB1J123J	CHIP R 12K J 1/16W	YMI	6
R977			RK73GB1J273J	CHIP R 27K J 1/16W	TE	67
R977			RK73GB1J472J	CHIP R 4.7K J 1/16W	HX	

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R993			RK73GB1J101J	CHIP R 100 J 1/16W		
△ R997			RD14NB2E1R0J	RD 1 J 1/4W		
△ K451			S76-0107-05	MAGNETIC RELAY	KP	
△ K451			S76-0110-05	MAGNETIC RELAY	TE	
△ K451			S76-0110-05	MAGNETIC RELAY	YMIHX	
△ S1			S62-0001-05	SLIDE SWITCH	YMI	6
△ S2			S68-0142-05	PUSH SWITCH	TE	
△ S2			S68-0142-05	PUSH SWITCH	YMIHX	
S701-725			S70-0086-05	TACT SWITCH		
S731-733			S70-0086-05	TACT SWITCH		
S761,762		*	T99-0663-05	ROTARY ENCODER		
S763			T99-0664-05	ROTARY ENCODER		
D201			MTZJ20(B)	ZENER DIODE		
D201			RD20ES(B)	ZENER DIODE		
D202			MTZJ30(B)	ZENER DIODE		
△ D202			RD30ES(B)	ZENER DIODE		
D401			D2SBA20F03	DIODE		
D451,452			HSS104A	DIODE		
D451,452			1SS133	DIODE		
D453			S1ZB20(4101)	DIODE		
D454			HSS104A	DIODE		
D454			1SS133	DIODE		
D455			RB721Q	DIODE		
D501-504			HSS104A	DIODE		
D501-504			1SS133	DIODE		
D652			HSS104A	DIODE		
D652			1SS133	DIODE		
D655,656			MTZJ5.6(B)	ZENER DIODE		
D655,656			RD5.6ES(B)	ZENER DIODE		
D776			MTZJ5.1(B)	ZENER DIODE		
D776			RD5.1ES(B)	ZENER DIODE		
△ D791			HSS104A	DIODE		
△ D791			1SS133	DIODE		
D801-806			HSS104A	DIODE		
D801-806			1SS133	DIODE		
D831			HSS104A	DIODE	YMI	6
D831			1SS133	DIODE	YMI	6
△ D841			RB721Q	DIODE		
D842			HSS104A	DIODE		
D842			1SS133	DIODE		
△ D843			RB721Q	DIODE		
D844			HSS104A	DIODE		
D844			1SS133	DIODE		
D846			HSS104A	DIODE		
D846			1SS133	DIODE		
D961-964			HSS104A	DIODE		
D961-964			1SS133	DIODE		
△ ED78		*	HNA-16MM36T	FLUORESCENT INDICATOR TUBE		
△ IC45			BA05T	ANALOGUE IC		
△ IC65		*	LA79510M	ANALOGUE IC		
△ IC74			BU2090	ANALOGUE IC		
△ IC78			LC75711NED	MOS-IC		
△ IC79		*	XC6202P502PR	ANALOGUE IC		

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## PARTS LIST

KRF-V6060D/V7060D/V8060D/V9060D/VR-6050/6060/6070



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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
IC81			BU1923	ANALOGUE IC	TE	67
IC83			S-80840ANY	ANALOGUE IC	YMI	6
IC84			S-80840ANY	ANALOGUE IC		
IC90		*	MN101C49GGH	MI-COM IC		67
IC90		*	MN101C49GGK	MI-COM IC		5
△ IC401			KIA7812API	ANALOGUE IC		
△ IC402			KIA7912PI	ANALOGUE IC		
△ Q65			2SD2525	TRANSISTOR		
△ Q66			2SB1640	TRANSISTOR		
△ Q201			2SD2012	TRANSISTOR		
Q451			2SC1740S(Q,R)	TRANSISTOR		
Q451			2SC2785(F,E)	TRANSISTOR		
Q731			DTC113ZSA	DIGITAL TRANSISTOR		
Q731			UN4219	DIGITAL TRANSISTOR		
Q776			2SC1740S(Q,R)	TRANSISTOR		
Q776			2SC2785(F,E)	TRANSISTOR		
Q777,778			DTC124ESA	DIGITAL TRANSISTOR		
Q777,778			UN4212	DIGITAL TRANSISTOR		
Q841			2SC1740S(Q,R)	TRANSISTOR		
Q841			2SC2785(F,E)	TRANSISTOR		
Q842			2SA1175(F,E)	TRANSISTOR		
Q842			2SA933AS(Q,R)	TRANSISTOR		
Q843			DTC113ZSA	DIGITAL TRANSISTOR		
Q843			UN4219	DIGITAL TRANSISTOR		
△ TH1		*	MF-R090	THERMISTOR		
A791			W02-2769-05	ELECTRIC CIRCUIT MODULE		
<b>DISPLAY UNIT (X14-743X-XX)</b>						
<b>VR-6060/6070, KRF-V8060D/-S/-G/X9060D/-S/-G</b>						
D734			B30-2545-05	LED(RED3(160))		
D741-745			B30-2545-05	LED(RED3(160))		
D746-752			B30-2567-05	LED(RED(80) HI-BR)		
D753			B30-2545-05	LED(RED3(160))		
D754			B30-2567-05	LED(RED(80) HI-BR)		
D755			B30-2545-05	LED(RED3(160))		
C101			CC45FSL1H101J	CERAMIC	100PF	J
C103			CK73GB1H103K	CHIP C	0.010UF	K
C104			CC73GCH1H101J	CHIP C	100PF	J
C201			CE04KW2A101M	ELECTRO	100UF	100WV
C202			CC73GCH1H180J	CHIP C	18PF	J
C401			CK45FE2H103P	CERAMIC	0.010UF	P
C402			CE04KW1E222M	ELECTRO	2200UF	25WV
C403			CE04KW1E102M	ELECTRO	1000UF	25WV
C404-407			CK73GB1H103K	CHIP C	0.010UF	K
C408,409			CE04KW1C470M	ELECTRO	47UF	16WV
C410			CC73GCH1H680J	CHIP C	68PF	J
C411			CC73GCH1H820J	CHIP C	82PF	J
C451			CK45FF1H103Z	CERAMIC	0.010UF	Z
C452			CQ93FMG1H104J	MYLAR	0.10UF	J
C452			CQ93FMG1H393J	MYLAR	0.039UF	J
C452			CQ93FMG1H473J	MYLAR	0.047UF	J
C452			CQ93FMG1H683J	MYLAR	0.068UF	J
C453			CE04LW1C332M	ELECTRO	3300UF	16WV
C453			CE04LW1E332M	ELECTRO	3300UF	25WV
C454			CE04LW1H100M	ELECTRO	10UF	50WV

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
C455			CE04LW0J222M	ELECTRO	2200UF	6.3WV
C456,457			CK45FF1H103Z	CERAMIC	0.010UF	Z
C458			CE04LW1H100M	ELECTRO	10UF	50WV
C459			CE04LW1H010M	ELECTRO	1.0UF	50WV
C501-504			CC45FCH1H101J	CERAMIC	100PF	J
C505,506			CK45FB1H102K	CERAMIC	1000PF	K
C507,508			CC45FCH1H101J	CERAMIC	100PF	J
C509			CK45FB1H471K	CERAMIC	470PF	K
C510			CC73GCH1H101J	CHIP C	100PF	J
C511			CC45FCH1H101J	CERAMIC	100PF	J
C601-606			CC45FSL1H470J	CERAMIC	47PF	J
C607			CC45FSL1H470J	CERAMIC	47PF	J
C608-611			CE04LW1E470M	ELECTRO	47UF	25WV
C651-662			CC45FSL1H470J	CERAMIC	47PF	J
C663			CK45FF1H103Z	CERAMIC	0.010UF	Z
C664			CE04LW1C470M	ELECTRO	47UF	16WV
C665			CK45FF1H103Z	CERAMIC	0.010UF	Z
C666			CE04LW1C470M	ELECTRO	47UF	16WV
C667			CK45FF1H103Z	CERAMIC	0.010UF	Z
C668			CE04LW1C470M	ELECTRO	47UF	16WV
C669			CK45FF1H103Z	CERAMIC	0.010UF	Z
C670,671			CE04LW1C470M	ELECTRO	47UF	16WV
C672			CK45FF1H103Z	CERAMIC	0.010UF	Z
C673			CE04LW1C470M	ELECTRO	47UF	16WV
C674-677			CE04LW1H100M	ELECTRO	10UF	50WV
C693			CC45FSL1H101J	CERAMIC	100PF	J
C701			CC73GCH1H221J	CHIP C	220PF	J
C702			CE04LW1H101M	ELECTRO	100UF	50WV
C703,704			CC73GCH1H102J	CHIP C	1000PF	J
C705			CC73GCH1H181J	CHIP C	180PF	J
C741			CK73EF1E105Z	CHIP C	1.0UF	Z
C761,762			CK73GB1H103K	CHIP C	0.010UF	K
C763,764			CK45FF1H103Z	CERAMIC	0.010UF	Z
C765,766			CK73GB1H103K	CHIP C	0.010UF	K
C777			CK45FB1H102K	CERAMIC	1000PF	K
C778			CC45FCH1H101J	CERAMIC	100PF	J
C779			CE04LW1A101M	ELECTRO	100UF	10WV
C780			CC73GCH1H270J	CHIP C	27PF	J
C791			CE04RW0J470M	ELECTRO	47UF	6.3WV
C792			CE04LW1C220M	ELECTRO	22UF	16WV
C793,794			CK45FF1H103Z	CERAMIC	0.010UF	Z
C811			CK45FF1H103Z	CERAMIC	0.010UF	Z
C812,813			CC45FCH1H270J	CERAMIC	27PF	J
C814			CC45FCH1H101J	CERAMIC	100PF	J
C815			CE04LW1A470M	ELECTRO	47UF	10WV
C816			CK45FB1H561K	CERAMIC	560PF	K
C817			CK45FF1H103Z	CERAMIC	0.010UF	Z
C818			CC45FSL1H271J	CERAMIC	270PF	J
C819			CE04LW1H2R2M	ELECTRO	2.2UF	50WV
C831			CK45FF1H103Z	CERAMIC	0.010UF	Z
C832			CE04LW1H2R2M	ELECTRO	2.2UF	50WV
C833			CK45FF1H103Z	CERAMIC	0.010UF	Z
C841			CE04EW0J102M	ELECTRO	1000UF	6.3WV
C842			C90-1826-05	BACKUP-C	0.047F	5.5WV
C843			CE04PW1H010M	ELECTRO	1UF	50WV

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PARTS LIST

KRF-V6060D/V7060D/V8060D/X9060D/VR-6050/6060/6070

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
C844			CK45FF1H103Z	CERAMIC 0.010UF Z		
C845			CK73GB1H103K	CHIP C 0.010UF K		
C851			CE04LW1H100M	ELECTRO 10UF 50WV		
C852-855			CC45FSL1H221J	CERAMIC 220PF J		
C856,857			CK45FF1H103Z	CERAMIC 0.010UF Z		
C858			CE04PW1A101M	ELECTRO 100UF 10WV		
C907			CK73GB1H103K	CHIP C 0.010UF K		
C908			CK45FF1H103Z	CERAMIC 0.010UF Z		
C909			CK73GB1H103K	CHIP C 0.010UF K	YM	
CN1			E40-8386-05	PIN ASSY	YM	
CN2			E40-3261-05	PIN ASSY		
CN41			E40-3261-05	PIN ASSY		
CN45			E40-4245-05	PIN ASSY		
CN46			E40-4632-05	PIN ASSY	YMXTE	
CN47			E40-4245-05	PIN ASSY	KPXTE	
CN48			E40-4428-05	PIN ASSY	YM	
CN49			E40-3246-05	PIN ASSY		
CN50			E40-3251-05	PIN ASSY		
CN65			E40-3249-05	PIN ASSY		
CN67			E40-3246-05	PIN ASSY		
CN68			E40-3248-05	PIN ASSY		
CN70			E40-3261-05	PIN ASSY		
CN80			E40-3261-05	PIN ASSY		
J2			E03-0148-05	AC OUTLET	KPY	
J3			E03-0149-05	AC OUTLET	ME	
J4			E03-0310-05	AC OUTLET	T	
J5			E03-0325-05	AC OUTLET	X	
J20		*	E63-1251-05	PIN JACK		
J21			E56-0033-05	CYLINDRICAL RECEPTACLE		
J61 ,62		*	E63-1253-05	PIN JACK		5
J63		*	E63-1252-05	PIN JACK		
J65 -67		*	E56-0040-05	CYLINDRICAL RECEPTACLE		
W961			E31-0002-00	JUMPER WIRE		9
F1			F05-4025-05	FUSE (SEMKO) (250V T4A L)	YMXTE	
F1			F50-0078-05	FUSE(5X20)	KP	
F2			F06-1022-05	FUSE (SEMKO) (250V T1AL)	YMXTE	
F3			F05-4025-05	FUSE (SEMKO) (250V T4A L)	YM	
-		*	J19-6287-03	HOLDER		
CN3 ,4			J13-0075-05	FUSE CLIP	YM	
CN11 ,12			J13-0075-05	FUSE CLIP		
CN21 ,22			J13-0075-05	FUSE CLIP	YMXTE	
E701			J11-0809-05	WIRE CLAMPER		
E702,703			J11-0808-05	WIRE CLAMPER		
E705			J11-0808-05	WIRE CLAMPER		
T1			L07-2758-05	POWER TRANSFORMER	X	
T1			L07-2761-05	POWER TRANSFORMER	TE	
T1			L07-2805-05	POWER TRANSFORMER	YM	
T1			L07-2809-05	POWER TRANSFORMER	KP1	
X701			L78-0725-05	RESONATOR (8.38MHZ)		
X811			L77-2002-05	CRYSTAL RESONATOR (4.332MHZ)	TE	
R120			RK73GB1J102J	CHIP R 1.0K J 1/16W		
R121			RD14BB2C101J	RD 100 J 1/6W		
R201			RD14NB2E472J	RD 4.7K J 1/4W		5

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$\Delta$ R410			RS14KB3D181J	FL-PROOF RS 180 J 2W		
$\Delta$ R453			RD14NB2E1R0J	RD 1 J 1/4W		
R454			RD14NB2E150J	RD 15 J 1/4W	YM	
R454			RD14NB2E270J	RD 27 J 1/4W	KPXTE	
$\Delta$ R457			R92-1844-05	CARBON 3.3M J 1/2W	KP	
$\Delta$ R458			RD14NB2E120J	RD 12 J 1/4W	YM	
R607			RD14BB2C104J	RD 100K J 1/6W		5
R610			RD14BB2C104J	RD 100K J 1/6W		
$\Delta$ R671			RS14KB3A180J	FL-PROOF RS 18 J 1W		
$\Delta$ R674			RS14KB3A470J	FL-PROOF RS 47 J 1W		
R776			RD14NB2E100J	RD 10 J 1/4W		
R779			RK73GB1J333J	CHIP R 33K J 1/16W		
R780			RD14NB2E100J	RD 10 J 1/4W		
R782			RK73GB1J303J	CHIP R 30K J 1/16W		
R801 ,802			RK73GB1J331J	CHIP R 330 J 1/16W		
R803			RK73GB1J104J	CHIP R 100K J 1/16W		
R805			RK73GB1J104J	CHIP R 100K J 1/16W		
R834			RD14NB2E102J	RD 1.0K J 1/4W	YM	
R894			RK73GB1J101J	CHIP R 100 J 1/16W		
R896-898			RK73GB1J101J	CHIP R 100 J 1/16W		
R910,911			RK73GB1J104J	CHIP R 100K J 1/16W		
R922-924			RK73GB1J101J	CHIP R 100 J 1/16W		
R926			RK73GB1J101J	CHIP R 100 J 1/16W		
R935			RK73GB1J101J	CHIP R 100 J 1/16W		
R938,939			RK73GB1J101J	CHIP R 100 J 1/16W		
R951,952			RK73GB1J104J	CHIP R 100K J 1/16W		
R967-969			RK73GB1J104J	CHIP R 100K J 1/16W		
R970			RK73GB1J153J	CHIP R 15K J 1/16W		
R971 ,972			RK73GB1J104J	CHIP R 100K J 1/16W		
R977			RK73GB1J123J	CHIP R 12K J 1/16W	YM	
R977			RK73GB1J273J	CHIP R 27K J 1/16W	TE	
R977			RK73GB1J472J	CHIP R 4.7K J 1/16W	X	
R993			RK73GB1J101J	CHIP R 100 J 1/16W		
R997			RD14NB2E1R0J	RD 1 J 1/4W		
$\Delta$ W724,725			E31-0001-00	JUMPER WIRE		
$\Delta$ K451			S76-0107-05	MAGNETIC RELAY	KP	
$\Delta$ K451			S76-0110-05	MAGNETIC RELAY	YMXTE	
$\Delta$ S1			S62-0001-05	SLIDE SWITCH	YM	
$\Delta$ S2			S68-0142-05	PUSH SWITCH	YMXTE	
S701-725			S70-0086-05	TACT SWITCH		
S731-733			S70-0086-05	TACT SWITCH		
S761,762		*	T99-0663-05	ROTARY ENCODER		
S763			T99-0664-05	ROTARY ENCODER		
D201			MTZJ20(B)	ZENER DIODE		
D201			RD20ES(B)	ZENER DIODE		
D202			MTZJ30(B)	ZENER DIODE		
D202			RD30ES(B)	ZENER DIODE		
$\Delta$ D401			D2SBA20F03	DIODE		
D451,452			HSS104A	DIODE		
D451,452			1SS133	DIODE		
$\Delta$ D453			S1ZB20(4101)	DIODE		
D454			HSS104A	DIODE		
D454			1SS133	DIODE		

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D455			RB721Q	DIODE		
D501-504			HSS104A	DIODE		
D501-504			1SS133	DIODE		
D652			HSS104A	DIODE		
D652			1SS133	DIODE		
D655,656			MTZJ5.6(B)	ZENER DIODE		
D655,656			RD5.6ES(B)	ZENER DIODE		
D776			MTZJ5.1(B)	ZENER DIODE		
D776			RD5.1ES(B)	ZENER DIODE		
△ D791			HSS104A	DIODE		
△ D791			1SS133	DIODE		
D801-806			HSS104A	DIODE		
D801-806			1SS133	DIODE		
D831			HSS104A	DIODE	YM	
D831			1SS133	DIODE	YM	
△ D841			RB721Q	DIODE		
D842			HSS104A	DIODE		
D842			1SS133	DIODE		
D843			RB721Q	DIODE		
D844			HSS104A	DIODE		
D844			1SS133	DIODE		
D846			HSS104A	DIODE		
D846			1SS133	DIODE		
D961-964			HSS104A	DIODE		
D961-964			1SS133	DIODE		
△ ED78		*	HNA-16MM36T	FLUORESCENT INDICATOR TUBE		
△ IC45		*	BA05T	ANALOGUE IC		
△ IC65		*	LA79510M	ANALOGUE IC		
△ IC74			BU2090	ANALOGUE IC		
△ IC78			LC75711NED	MOS-IC		
△ IC79		*	XC6202P502PR	ANALOGUE IC		
△ IC81			BU1923	ANALOGUE IC		
△ IC83			S-80840ANY	ANALOGUE IC		
△ IC84			S-80840ANY	ANALOGUE IC		
△ IC90		*	MN101C49GGH	MI-COM IC		9
△ IC90		*	MN101C49GGK	MI-COM IC		5
△ IC401			KIA7812API	ANALOGUE IC		
△ IC402			KIA7912PI	ANALOGUE IC		
△ Q65			2SD2525	TRANSISTOR		
△ Q66			2SB1640	TRANSISTOR		
Q201			2SD2012	TRANSISTOR		
Q451			2SC1740S(Q,R)	TRANSISTOR		
Q451			2SC2785(F,E)	TRANSISTOR		
Q731			DTC113ZSA	DIGITAL TRANSISTOR		
Q731			UN4219	DIGITAL TRANSISTOR		
Q776			2SC1740S(Q,R)	TRANSISTOR		
Q776			2SC2785(F,E)	TRANSISTOR		
Q777,778			DTC124ESA	DIGITAL TRANSISTOR		
Q777,778			UN4212	DIGITAL TRANSISTOR		
Q841			2SC1740S(Q,R)	TRANSISTOR		
Q841			2SC2785(F,E)	TRANSISTOR		
Q842			2SA1175(F,E)	TRANSISTOR		
Q842			2SA933AS(Q,R)	TRANSISTOR		
Q843			DTC113ZSA	DIGITAL TRANSISTOR		
Q843			UN4219	DIGITAL TRANSISTOR		

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△ TH1		*	MF-R090	THERMISTOR		
A791			W02-2769-05	ELECTRIC CIRCUIT MODULE		
<b>SUB CIRCUIT UNIT (X25-649X-XX)</b>						
C101-109			CC45FSL1H221J	CERAMIC		220PF J
C110-115			CE04LW1C470M	ELECTRO		47UF 16WV
C116			CE04LW1H220M	ELECTRO		22UF 50WV
C117			CE04LW1C470M	ELECTRO		47UF 16WV
C118			CE04LW1A471M	ELECTRO		470UF 10WV
C119			CE04LW1H220M	ELECTRO		22UF 50WV
C120			CE04LW1C470M	ELECTRO		47UF 16WV
C121			CE04LW1A471M	ELECTRO		470UF 10WV
C122			CE04LW1H220M	ELECTRO		22UF 50WV
C123			CE04LW1C470M	ELECTRO		47UF 16WV
C124			CE04LW1A471M	ELECTRO		470UF 10WV
C125			CK45FF1H103Z	CERAMIC		0.010UF Z
C126			CE04LW1C470M	ELECTRO		47UF 16WV
C127-129			CC45FCH1H270J	CERAMIC		27PF J
C201			CE04LW1H100M	ELECTRO		10UF 50WV KP
C202			CK45FF1H103Z	CERAMIC		0.010UF Z KP
C203			CQ93FMG1H683J	MYLAR		0.068UF J KP
C204			CK45FF1H103Z	CERAMIC		0.010UF Z KP
C205,206			CK45FF1H103Z	CERAMIC		0.010UF Z KP
C207			CE04LW0J222M	ELECTRO		2200UF 6.3WV KP
C208			CE04LW0J221M	ELECTRO		220UF 6.3WV KP
C209			CK45FF1H103Z	CERAMIC		0.010UF Z KP
C210			CC45FSL1H221J	CERAMIC		220PF J KP
C211			CC45FSL1H101J	CERAMIC		100PF J KP
C212,213			CC45FSL1H101J	CERAMIC		100PF J KP
C214,215			CK45FF1H103Z	CERAMIC		0.010UF Z KP
C216			CE04LW1H010M	ELECTRO		1.0UF 50WV KP
C301-310			CC45FSL1H221J	CERAMIC		220PF J 5
C311-313			CK45FB1H332K	CERAMIC		3300PF K 5
C315-317			CC45FSL1H101J	CERAMIC		100PF J 5
C401-406			CE04KW1H220M	ELECTRO		22UF 50WV 5
C407-412			CC45FSL1H221J	CERAMIC		220PF J 5
C419			CE04DW1C471M	ELECTRO		470UF 16WV 5
C420			CE04KW1C101M	ELECTRO		100UF 16WV 5
C425,426			CC45FCH1H101J	CERAMIC		100PF J 5
C427-430			CC45FCH1H100D	CERAMIC		10PF D 5
C431-436			CE04KW1E470M	ELECTRO		47UF 25WV 5
C437,438			CE04HW1H010M	NP-ELEC		1.0UF 50WV 5
C439,440			CE04KW1E470M	ELECTRO		47UF 25WV 5
C441,442			CE04KW1A101M	ELECTRO		100UF 10WV 5
C443-446			CE04KW1H220M	ELECTRO		22UF 50WV 5
C447			CE04LW1H100M	ELECTRO		10UF 50WV 5
C448			CE04KW2A010M	ELECTRO		1.0UF 100WV 5
C449,450			CE04KW1H220M	ELECTRO		22UF 50WV 5
C451			CE04KW1E221M	ELECTRO		220UF 25WV 5
C452			CE04KW1H220M	ELECTRO		22UF 50WV 5
C453,454			CC45FSL1H221J	CERAMIC		220PF J 5
C457			CQ93FMG1H222J	MYLAR		2200PF J 5
C458			CC45FCH1H100D	CERAMIC		10PF D 5
C459			CC45FSL1H470J	CERAMIC		47PF J 5

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KRF-V6060D/V7060D/V8060D/X9060D/VR-6050/6060/6070  
PARTS LIST

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CN101			E40-3262-05	PIN ASSY		
CN201			E40-8531-05	FLAT CABLE CONNECTOR	KP	
CN202			E40-3251-05	PIN ASSY		
CN301			E40-8483-05	FLAT CABLE CONNECTOR		5
CN302			E40-4101-05	PIN ASSY		
CN303			E40-3248-05	PIN ASSY		5
CN304			E40-4248-05	PIN ASSY		
J101		*	E63-1249-05	PIN JACK		
J102		*	E63-1250-05	PIN JACK		
J201		*	E11-0389-05	MINIATURE PHONE JACK(3.5 STERE)	KP	5
J202			E11-0291-05	MINIATURE PHONE JACK(2P)	KP	
J301		*	E70-0150-05	SCREW TERMINAL BOARD		
J302		*	E63-1246-05	PIN JACK		5
J303		*	E63-1248-05	PIN JACK		5
W2 ,3			E31-0002-00	JUMPER WIRE		5
W5			E31-0002-00	JUMPER WIRE	KP	9
W15			E31-0002-00	JUMPER WIRE		5
W17			E31-0002-00	JUMPER WIRE		5
W26 -31			E31-0002-00	JUMPER WIRE		5
W43			E31-0002-00	JUMPER WIRE		5
W55 -64			E31-0002-00	JUMPER WIRE	YMHXTE	5
W66			E31-0002-00	JUMPER WIRE		5
L201			L40-1011-58	SMALL FIXED INDUCTOR(100UH,K)	KP	
L202			L92-0017-05	FERRITE CORE	KP	
R201			RD14BB2C102J	RD 1.0K J 1/6W	KP	5
R213,214			RD14NB2E471J	RD 470 J 1/4W	KP	
R215			RD14BB2C473J	RD 47K J 1/6W	KP	5
R216			RD14BB2C221J	RD 220 J 1/6W	KP	5
R217			RD14NB2E471J	RD 470 J 1/4W	KP	5
R301-303			RD14BB2C221J	RD 220 J 1/6W		5
R305-310			RD14BB2C221J	RD 220 J 1/6W		5
R311-320			RD14BB2C102J	RD 1.0K J 1/6W		5
R321-330			RD14BB2C104J	RD 100K J 1/6W		5
R331-340			RD14BB2C470J	RD 47 J 1/6W		5
R341,342			RD14BB2C102J	RD 1.0K J 1/6W		5
R343,344			RD14BB2C221J	RD 220 J 1/6W		5
R345-352			RD14BB2C102J	RD 1.0K J 1/6W		5
R353-360			RD14BB2C221J	RD 220 J 1/6W		5
R362			RD14BB2C221J	RD 220 J 1/6W		5
R401,402			RD14BB2C103J	RD 10K J 1/6W		5
R403-406			RD14BB2C223J	RD 22K J 1/6W		5
R407,408			RD14BB2C471J	RD 470 J 1/6W		5
R409-414			RD14BB2C472J	RD 4.7K J 1/6W		5
R415-418			RD14BB2C473J	RD 47K J 1/6W		5
R419-424			RD14BB2C220J	RD 22 J 1/6W		5
R425			RD14NB2E561J	RD 560 J 1/4W		5
R426,427			RD14BB2C102J	RD 1.0K J 1/6W		5
R430,431			RD14BB2C103J	RD 10K J 1/6W		5
R432,433			RD14BB2C102J	RD 1.0K J 1/6W		5
R434			RS14KB3A101J	FL-PROOF RS 100 J 1W		5
R435-440			RD14BB2C103J	RD 10K J 1/6W		5
R441-446			RD14BB2C474J	RD 470K J 1/6W		5
R447			RD14BB2C102J	RD 1.0K J 1/6W		5
R448			RD14BB2C103J	RD 10K J 1/6W		5

L : Scandinavia

K : USA

P : Canada

R : Mexico

C : China

I : Malaysia

Y : PX(Far East,Hawaii)

T : England

E : Europe

G : Germany

V : China(Shanghai)

Y : AAFES(Europe)

X : Australia

Q : Russia

H : Korea

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.

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
R449			RD14BB2C153J	RD 15K J 1/6W		5
R450			RD14NB2E561J	RD 560 J 1/4W		5
R451			RD14NB2E102J	RD 1.0K J 1/4W		5
R452			RS14KB3A470J	FL-PROOF RS 47 J 1W		5
R453,454			RD14BB2C223J	RD 22K J 1/6W		5
R455,456			RD14BB2C473J	RD 47K J 1/6W		5
R457			RD14BB2C103J	RD 10K J 1/6W		5
R458			RD14BB2C474J	RD 470K J 1/6W		5
R459			RD14BB2C911J	RD 910 J 1/6W		5
R460			RD14BB2C472J	RD 4.7K J 1/6W		5
R461,462			RD14BB2C220J	RD 22 J 1/6W		5
R463,464			RD14BB2C103J	RD 10K J 1/6W		5
D201,202			HSS104A	DIODE	KP	
D201,202			1SS133	DIODE	KP	
D203,204			HSS104A	DIODE	KP	
D203,204			1SS133	DIODE	KP	
D205,206			HSS104A	DIODE	KP	
D205,206			1SS133	DIODE	KP	
D401			MTZJ3.9(B)	ZENER DIODE		5
D401			RD3.9ES(B)	ZENER DIODE		5
D402			MTZJ5.1(B)	ZENER DIODE		5
D402			RD5.1ES(B)	ZENER DIODE		5
IC101		*	NJM2284D	ANALOGUE IC		
IC102		*	BA7666FS	ANALOGUE IC		
IC201			BA05T	ANALOGUE IC	KP	
IC202			TC74HC00AP	IC(2INPUT NAND GATE)	KP	
IC401			NJM4580D-D	IC(OP AMP X2)		5
IC402			NJM4565D-D	IC(OP AMP X2)		5
IC403			NJM4580D-D	IC(OP AMP X2)		5
IC404			NJM4565D-D	IC(OP AMP X2)		5
Q101			DTC124ESA	DIGITAL TRANSISTOR		
Q101			UN4212	DIGITAL TRANSISTOR		
Q201			DTC124ESA	DIGITAL TRANSISTOR	KP	
Q201			UN4212	DIGITAL TRANSISTOR	KP	
Q202,203			KTC3199(Y,GR)	TRANSISTOR	KP	
Q202,203			2SC1740S(Q,R)	TRANSISTOR	KP	
Q202,203			2SC2785(F,E)	TRANSISTOR	KP	
Q204			KTA1267(Y,GR)	TRANSISTOR	KP	
Q204			2SA1175(F,E)	TRANSISTOR	KP	
Q204			2SA933AS(Q,R)	TRANSISTOR	KP	
Q301-320			2SC2878(B)	TRANSISTOR		5
Q401,402			DTA124ESA	DIGITAL TRANSISTOR		5
Q401,402			UN4112	DIGITAL TRANSISTOR		5
Q403-408			2SC2878(B)	TRANSISTOR		5
Q409			DTA124ESA	DIGITAL TRANSISTOR		5
Q409			UN4112	DIGITAL TRANSISTOR		5
Q411,412			2SC2878(B)	TRANSISTOR		5

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## PARTS LIST

**HOW TO READ THE PARTS LIST**

**ABBREVIATION OF MODEL AND MASS PRODUCTION'S DESTINATIONS**

MODEL	CNT ABB.	Australia	Canada	China	England	Europe	Germany	Korea	Malaysia
		X	P	C	T	E	G	H	I
VR-6050	6	-	P	-	-	-	-	-	-
KRF-V6060D		-	-	-	-	E	-	-	-
KRF-V6060D-S		X	-	-	T	E	-	H	I
KRF-V7060D	7	-	-	-	-	E	-	-	-
KRF-V7060D-S		-	-	-	-	E	-	-	-
VR-6060	9	-	P	-	-	-	-	-	-
KRF-V8060D		-	-	-	-	E	-	-	-
KRF-V8060D-S		X	-	-	-	E	-	-	-
KRF-V8060D-G		-	-	-	-	-	-	-	-
VR-6070	5	-	P	-	-	-	-	-	-
KRF-X9060D		-	-	-	-	E	-	-	-
KRF-X9060D-S		X	-	-	T	E	-	-	-
KRF-X9060D-G		-	-	-	-	-	-	H	-
MODEL	CNT ABB.	Mexico	PX/AAFES	Russia	Scandinavia	Shanghai	USA	Other area	
		R	Y	Q	L	V	K	M	
VR-6050	6	-	-	-	-	-	K	-	-
KRF-V6060D		-	Y	-	-	-	-	-	-
KRF-V6060D-S		-	-	-	-	-	-	M	-
KRF-V7060D	7	-	-	-	-	-	-	-	-
KRF-V7060D-S		-	-	-	-	-	-	-	-
VR-6060	9	-	-	-	-	-	K	-	-
KRF-V8060D		-	-	-	-	-	-	-	-
KRF-V8060D-S		-	-	-	-	-	-	-	-
KRF-V8060D-G		-	-	-	-	-	-	M	-
VR-6070	5	-	-	-	-	-	K	-	-
KRF-X9060D		-	Y	-	-	-	-	-	-
KRF-X9060D-S		-	-	-	-	-	-	-	-
KRF-X9060D-G		-	-	-	-	-	-	M	-

## SPECIFICATIONS

### For the U.S.A and Canada

#### AUDIO section (VR-6050)

Rated power output during STEREO operation

100 watts per channel minimum RMS, both channels driven, at 8  $\Omega$  from 20 Hz to 20 kHz with no more than 0.09% total harmonic distortion. (FTC)

Effective power output during SURROUND operation

FRONT (20 ~ 20 kHz, 0.09 % T.H.D. at 8 $\Omega$ one channel driven)	100 W + 100 W
CENTER (20 ~ 20 kHz, 0.09 % T.H.D. at 8 $\Omega$ one channel driven)	100 W
SURROUND (20 ~ 20 kHz, 0.7 % T.H.D. at 8 $\Omega$ one channel driven)	100 W + 100 W
Total harmonic distortion	0.009 % (1 kHz, 50 W, 8 $\Omega$ )
Frequency response	Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) 10 Hz ~ 100 kHz, +0 dB ~ -3.0 dB
Signal to noise ratio (IHF'66)	Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) 95 dB
Loudness control	VOLUME at -30 dB level ..... +6 dB (100 Hz)
Input sensitivity / impedance	Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) 500 mV / 47 k $\Omega$
Output level / impedance	TAPE REC ..... 500 mV / 1 k $\Omega$ PRE OUT (SURROUND BACK CHANNEL) ..... 2.5 V / 1 k $\Omega$ PRE OUT (SUBWOOFER) ..... 2.5 V / 1 k $\Omega$
Tone control	BASS ..... $\pm 10$ dB (at 100 Hz) TREBLE ..... $\pm 10$ dB (at 10 kHz)

### For other countries (except for the U.K.)

#### AUDIO section (KRF-V7060D/V6060D)

Effective power output during STEREO operation

1 kHz, 10 %, 8  $\Omega$  ..... 110 W + 110 W

Rated power output during STEREO operation

100 watts per channel minimum RMS, both channels driven, at 8  $\Omega$  from 20 Hz to 20 kHz with no more than 0.09% total harmonic distortion. (FTC)

Effective power output during SURROUND operation

FRONT (1 kHz, 10 % T.H.D. at 8 $\Omega$ one channel driven)	110 W + 110 W
CENTER (1kHz, 10 % T.H.D. at 8 $\Omega$ one channel driven)	110 W
SURROUND (1 kHz, 10 % T.H.D. at 8 $\Omega$ one channel driven)	110 W + 110 W
Total harmonic distortion	0.009% (1 kHz, 50 W, 8 $\Omega$ )
Frequency response	Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) 10 Hz ~ 100 kHz, +0 dB ~ -3.0 dB
PHONO 'RIAA' response (KRF-V7060D)	40 Hz ~ 20 kHz, 1.5 dB ~ -3.0 dB
Maximum input level	PHONO (MM) (KRF-V7060D) ..... 45 mV, 1 % T.H.D. at 1 kHz
Signal to noise ratio (IHF'66)	PHONO (MM) (KRF-V7060D) ..... 75 dB Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) 95 dB
Loudness control	VOLUME at -30 dB level ..... +6 dB (100 Hz)
Input sensitivity / impedance	PHONO (MM) (KRF-V7060D) ..... 6.0 mV / 47 k $\Omega$ Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) 500 mV / 47 k $\Omega$
Output level / impedance	TAPE REC ..... 500 mV / 1 k $\Omega$ PRE OUT (SURROUND BACK CHANNEL) ..... 2.5 V / 1 k $\Omega$ PRE OUT (SUBWOOFER) ..... 2.5 V / 1 k $\Omega$

Tone control

BASS	$\pm 10$ dB (at 100 Hz)
TREBLE	$\pm 10$ dB (at 10 kHz)

#### DIGITAL AUDIO section

Sampling frequency	32 kHz, 44.1 kHz, 48 kHz, 96 kHz
Input level / impedance / wave length	Optical ..... (-15 dBm ~ -24 dBm), 660 nm $\pm 30$ nm Coaxial ..... 0.5 Vp-p / 75 $\Omega$

#### VIDEO section

VIDEO inputs / outputs	VIDEO (composite) ..... 1 Vp-p / 75 $\Omega$
S VIDEO inputs / outputs	S VIDEO (luminance signal) ..... 1 Vp-p / 75 $\Omega$ S VIDEO (chrominance signal) ..... 0.286 Vp-p / 75 $\Omega$

#### FM tuner section

Tuning frequency range	87.5 MHz ~ 108.0 MHz
Usable sensitivity (MONO)	VR-6050 ..... 1.3 $\mu$ V (75 $\Omega$ ) / 13.2 dBf (75 kHz dev, SINAD 30 dB) KRF-V7060D/V6060D ..... 1.6 $\mu$ V (75 $\Omega$ ) / 15.2 dBf (75 kHz dev, SINAD 30 dB)
50 dB quieting sensitivity	STEREO ..... 28 $\mu$ V (75 $\Omega$ ) / 40.2 dBf
Total harmonic distortion	MONO (1 kHz, 75 kHz dev) ..... 0.5% (65 dBf input) STEREO (1 kHz, 67.5 + 6.75 kHz dev) ..... 0.7% (65 dBf input)
Signal to noise ratio	MONO (1 kHz, 75 kHz dev) ..... 75 dB (65 dBf input) STEREO (1 kHz, 67.5 + 6.75 kHz dev) ..... 68 dB (65 dBf input)
Stereo separation (1 kHz)	40 dB
Selectivity ( $\pm 400$ kHz) (VR-6050)	70 dB
(KRF-V7060D/V6060D)	50 dB
Frequency response (30 Hz ~ 15kHz)	+0.5 dB, -3.0 dB

#### AM tuner section

Tuning frequency range	10 kHz step ..... 530 kHz ~ 1,700 kHz (VR-6050) 10 kHz step ..... 530 kHz ~ 1,610 kHz (KRF-V7060D/V6060D) 9 kHz step ..... 531 kHz ~ 1,602 kHz (KRF-V7060D/V6060D)
Usable sensitivity (30% mod, S/N 20 dB)	16 $\mu$ V / (600 $\mu$ V/m)
Signal to noise ratio (30% mod, 400 Hz)	50 dB (60 dB $\mu$ VEMF input)

#### GENERAL

Power consumption	VR-6050 ..... 3 A KRF-V7060D/V6060D ..... 300 W
AC outlet	SWITCHED VR-6050 ..... (total 150 W, 1.25 A max.) KRF-V7060D/V6060D ..... (total 90 W max.)
Dimensions	W : 440 mm (17-5/16") H : 159 mm (6-1/4") D : 392 mm (15-7/16")
Weight (Net)	VR-6050 ..... 9.4 kg (20.7 lb) KRF-V7060D/V6060D ..... 10.0 kg (22.0 lb)

## SPECIFICATIONS

### For the U.K. only

#### AUDIO section (KRF-V6060D)

Rated power output during STEREO operation DIN/IEC (63 Hz ~ 12.5 kHz, 0.09 % T.H.D. at 6 Ω)	100 W + 100 W
Effective power output during SURROUND operation	
FRONT (63 Hz ~ 12.5 kHz, 0.09 % T.H.D. at 6 Ω one channel driven)	100 W + 100 W
CENTER (63 Hz ~ 12.5 kHz, 0.09 % T.H.D. at 6 Ω one channel driven)	100 W
SURROUND (63 Hz ~ 12.5 kHz, 0.7 % T.H.D. at 6 Ω one channel driven)	100 W + 100 W
Total harmonic distortion	0.009 % (1 kHz, 50 W, 6 Ω)
Frequency response	
Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH)	10 Hz ~ 100 kHz, +0 dB ~ -3.0 dB
PHONO 'RIAA' response	40 Hz ~ 20 kHz, +1.5 dB ~ -3.0 dB
Maximum input level	
PHONO (MM)	45 mV, 1 % T.H.D. at 1 kHz
Signal to noise ratio (IHF'66)	
PHONO (MM)	75 dB
Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH)	95 dB
Loudness control	
VOLUME at -30 dB level	+6 dB (100 Hz)
Input sensitivity / impedance	
PHONO (MM)	6.0 mV / 47 kΩ
Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH)	500 mV / 47 kΩ
Output level / impedance	
TAPE REC	500 mV / 1 kΩ
PRE OUT (SURROUND BACK CHANNEL)	2.5 V / 1 kΩ
PRE OUT (SUBWOOFER)	2.5 V / 1 kΩ
Tone control	
BASS	±10 dB (at 100 Hz)
TREBLE	±10 dB (at 10 kHz)

#### DIGITAL AUDIO section

Sampling frequency	32 kHz, 44.1 kHz, 48 kHz, 96 kHz
Input level / impedance / wave length	
Optical	(-15 dBm ~ -24 dBm), 660 nm ±30 nm
Coaxial	0.5 Vp-p / 75 Ω

#### VIDEO section

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

#### FM tuner section

Tuning frequency range	87.5 MHz ~ 108 MHz
Usable sensitivity	
MONO	1.3 μV (75 Ω) / 13.2 dBf (40 kHz dev, S/N 26 dB)
STEREO	45 μV (75 Ω) / 42.1 dBf (40 + 6 kHz dev, S/N 46 dB)
Total harmonic distortion	
MONO (1 kHz, 40 kHz dev)	0.2% (65.2 dBf input)
STEREO (1 kHz, 40 + 6 kHz dev)	0.8% (65.2 dBf input)
Signal to noise ratio (DIN weighted at 1 kHz)	
MONO	65 dB (65.2 dBf input)
STEREO	60 dB (65.2 dBf input)
Stereo separation (1 kHz)	36 dB
Selectivity (±300 kHz)	64 dB
Frequency response (30 Hz ~ 15kHz)	+0.5 dB, -3.0 dB

#### MW 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 (400 Hz, 30% mod)	
	50 dB (60 dBμ VEMF input)

#### GENERAL

Power consumption	330 W
AC outlet	
SWITCHED	(total 90 W max.)
Dimensions	
	W : 440 mm (17-5/16")
	H : 159 mm (6-1/4")
	D : 392 mm (15-7/16")
Weight (Net)	9.8 kg (21.6 lb)

#### Notes

1. KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.
2. The full performance may not be exhibited in an extremely cold location (under a water-freezing temperature).

## SPECIFICATIONS

### For the U.S.A and Canada

#### AUDIO section (VR-6060)

Rated power output during STEREO operation

100 watts per channel minimum RMS, both channels driven, at 8 Ω from 20 Hz to 20 kHz with no more than 0.09% total harmonic distortion. (FTC)

Effective power output during SURROUND operation

FRONT (20 ~ 20 kHz, 0.09 % T.H.D. at 8 Ω one channel driven)	100 W + 100 W
CENTER (20 ~ 20 kHz, 0.09 % T.H.D. at 8 Ω one channel driven)	100 W
SURROUND (20 ~ 20 kHz, 0.7 % T.H.D. at 8 Ω one channel driven)	100 W + 100 W
SURROUND BACK/SUBWOOFER (20 ~ 20 kHz, 0.09 % T.H.D. at 8 Ω one channel driven)	100 W
Total harmonic distortion	0.009 % (1 kHz, 50 W, 8 Ω)
Frequency response	Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) 10 Hz ~ 100 kHz, +0 dB ~ -3.0 dB
PHONO 'RIAA' response	40 Hz ~ 20 kHz, +1.5 dB ~ -3.0 dB
Maximum input level	PHONO (MM) 45 mV, 1 % T.H.D. at 1 kHz
Signal to noise ratio (IHF'66)	PHONO (MM) 75 dB
	Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) 95 dB
Loudness control	VOLUME at -30 dB level +6 dB (100 Hz)
Input sensitivity / impedance	PHONO (MM) 6.0 mV / 47 kΩ
	Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) 500 mV / 47 kΩ
Output level / impedance	TAPE REC 500 mV / 1 kΩ
	PRE OUT (SURROUND BACK CHANNEL) 2.5 V / 1 kΩ
	PRE OUT (SUBWOOFER) 2.5 V / 1 kΩ
Tone control	BASS ±10 dB (at 100 Hz)
	TREBLE ±10 dB (at 10 kHz)

### For other countries

#### AUDIO section (KRF-V8060D)

Effective power output during STEREO operation

1 kHz, 10 %, 8 Ω	110 W + 110 W
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Rated power output during STEREO operation

100 watts per channel minimum RMS, both channels driven, at 8 Ω from 20 Hz to 20 kHz with no more than 0.09% total harmonic distortion. (FTC)

Effective power output during SURROUND operation

FRONT (1 kHz, 10% T.H.D. at 8 Ω one channel driven)	110 W + 110 W
CENTER (1 kHz, 10% T.H.D. at 8 Ω one channel driven)	110 W
SURROUND (1 kHz, 10% T.H.D. at 8 Ω one channel driven)	110 W + 110 W
SURROUND BACK/SUBWOOFER (1 kHz, 10% T.H.D. at 8 Ω one channel driven)	110 W
Total harmonic distortion	0.009% (1 kHz, 50 W, 8 Ω)
Frequency response	Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) 10 Hz ~ 100 kHz, +0 dB ~ -3.0 dB
PHONO 'RIAA' response	40 Hz ~ 20 kHz, 1.5 dB ~ -3.0 dB
Maximum input level	PHONO (MM) 45 mV, 1 % T.H.D. at 1 kHz
Signal to noise ratio (IHF'66)	PHONO (MM) 75 dB
	Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) 95 dB
Loudness control	VOLUME at -30 dB level +6 dB (100 Hz)
Input sensitivity / impedance	PHONO (MM) 6.0 mV / 47 kΩ
	Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) 500 mV / 47 kΩ
Output level / impedance	TAPE REC 500 mV / 1 kΩ
	PRE OUT (SURROUND BACK CHANNEL) 2.5 V / 1 kΩ
	PRE OUT (SUBWOOFER) 2.5 V / 1 kΩ
Tone control	BASS ±10 dB (at 100 Hz)
	TREBLE ±10 dB (at 10 kHz)

### DIGITAL AUDIO section

Sampling frequency	32 kHz, 44.1 kHz, 48 kHz, 96 kHz
Input level / impedance / wave length	Optical (-15 dBm ~ -24 dBm), 660 nm ±30 nm
	Coaxial 0.5 Vp-p / 75 Ω

### VIDEO section

VIDEO inputs / outputs	VIDEO (composite) 1 Vp-p / 75 Ω
S VIDEO inputs / outputs	S VIDEO (luminance signal) 1 Vp-p / 75 Ω
	S VIDEO (chrominance signal) 0.286 Vp-p / 75 Ω
COMPONENT VIDEO inputs / outputs	COMPONENT VIDEO (luminance signal) 1 Vp-p / 75 Ω
	COMPONENT VIDEO (CB/CR-signal) ±0.32 Vp-p / 75 Ω

### FM tuner section

Tuning frequency range	87.5 MHz ~ 108.0 MHz
Usable sensitivity (MONO)	VR-6060 1.3 μV (75 Ω) / 13.2 dBf (75 kHz dev, SINAD 30 dB)
	KRF-V8060D 1.6 μV (75 Ω) / 15.2 dBf (75 kHz dev, SINAD 30 dB)
50 dB quieting sensitivity	STEREO 28 μV (75 Ω) / 40.2 dBf
Total harmonic distortion	MONO (1 kHz, 75 kHz dev) 0.5% (65 dBf input)
	STEREO (1 kHz, 67.5 + 6.75 kHz dev) 0.7% (65 dBf input)
Signal to noise ratio	MONO (1 kHz, 75 kHz dev) 75 dB (65 dBf input)
	STEREO (1 kHz, 67.5 + 6.75 kHz dev) 68 dB (65 dBf input)
Stereo separation (1 kHz)	40 dB
Selectivity (±400 kHz) (VR-6060)	70 dB
	(KRF-V8060D) 50 dB
Frequency response (30 Hz ~ 15 kHz)	+0.5 dB, -3.0 dB

### AM tuner section

Tuning frequency range	10 kHz step 530 kHz ~ 1,700 kHz (VR-6060)
	10 kHz step 530 kHz ~ 1,610 kHz (KRF-V8060D)
	9 kHz step 531 kHz ~ 1,602 kHz (KRF-V8060D)
Usable sensitivity (30% mod, S/N 20 dB)	16 μV / (600 μV/m)
Signal to noise ratio (30% mod, 400 Hz)	50 dB (60 dBμ VEMF input)

### GENERAL

Power consumption	VR-6060 3 A
	KRF-V8060D 300 W
AC outlet	SWITCHED VR-6060 (total 150 W, 1.25 A max.)
	KRF-V8060D (total 90 W max.)
Dimensions	W : 440 mm (17-5/16")
	H : 159 mm (6-1/4")
	D : 392 mm (15-7/16")
Weight (Net)	VR-6060 9.4 kg (20.7 lb)
	KRF-V8060D 10.0 kg (22.0 lb)

### Notes

1. KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.
2. The full performance may not be exhibited in an extremely cold location (under a water-freezing temperature).



## SPECIFICATIONS

### For the U.S.A and Canada

#### AUDIO section (VR-6070)

Rated power output during STEREO operation

100 watts per channel minimum RMS, both channels driven, at 8 Ω from 20 Hz to 20 kHz with no more than 0.09% total harmonic distortion. (FTC)

Effective power output during SURROUND operation

FRONT (20 Hz ~ 20 kHz, 0.09% T.H.D. at 8 Ω one channel driven) ..... 100 W + 100 W

CENTER (20 Hz ~ 20 kHz, 0.09% T.H.D. at 8 Ω one channel driven) ..... 100 W

SURROUND (20 Hz ~ 20 kHz, 0.7% T.H.D. at 8 Ω one channel driven) ..... 100 W + 100 W

SURROUND BACK/SUBWOOFER (20 Hz ~ 20 kHz, 0.09% T.H.D. at 8 Ω one channel driven) ..... 100 W

Total harmonic distortion ..... 0.009% (1 kHz, 50 W, 8 Ω)

Frequency response  
Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) ..... 10 Hz ~ 100 kHz, +0 dB ~ -3.0 dB

PHONO 'RIAA' response ..... 40 Hz ~ 20 kHz, +1.5 dB ~ -3.0 dB

Maximum input level  
PHONO (MM) ..... 45 mV, 1% T.H.D. at 1 kHz

Signal to noise ratio (IHF'66)  
PHONO (MM) ..... 75 dB  
Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) ..... 95 dB

Loudness control  
VOLUME at -30 dB level ..... +6 dB (100 Hz)

Input sensitivity / impedance  
PHONO (MM) ..... 4.0 mV / 47 kΩ  
Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) ..... 320 mV / 47 kΩ

Output level / impedance  
TAPE REC ..... 320 mV / 1 kΩ  
PRE OUT (FRONT,CENTER,SURROUND) ..... 1 V / 500 Ω  
PRE OUT (SURROUND BACK) ..... 1 V / 500 Ω  
PRE OUT (SUBWOOFER) ..... 1 V / 500 Ω

Tone control  
BASS ..... ±10 dB (at 100 Hz)  
TREBLE ..... ±10 dB (at 10 kHz)

### For other countries (except for the U.K.)

#### AUDIO section (KRF-X9060D)

Effective power output during STEREO operation

1 kHz, 10 %, 8 Ω ..... 130 W + 130 W

Rated power output during STEREO operation

100 watts per channel minimum RMS, both channels driven, at 8 Ω from 20 Hz to 20 kHz with no more than 0.09% total harmonic distortion. (FTC)

Effective power output during SURROUND operation

FRONT (1 kHz, 10 % T.H.D. at 8 Ω one channel driven) ..... 130 W + 130 W

CENTER (1 kHz, 10 % T.H.D. at 8 Ω one channel driven) ..... 130 W

SURROUND (1 kHz, 10 % T.H.D. at 8 Ω one channel driven) ..... 130 W + 130 W

SURROUND BACK/SUBWOOFER (1 kHz, 10 % T.H.D. at 8 Ω one channel driven) ..... 130 W

Total harmonic distortion ..... 0.009% (1 kHz, 50 W, 8 Ω)

Frequency response  
Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) ..... 10 Hz ~ 100 kHz, +0 dB ~ -3.0 dB

PHONO 'RIAA' response ..... 40 Hz ~ 20 kHz, 1.5 dB ~ -3.0 dB

Maximum input level  
PHONO (MM) ..... 45 mV, 1% T.H.D. at 1 kHz

Signal to noise ratio (IHF'66)  
PHONO (MM) ..... 75 dB  
Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) ..... 95 dB

Loudness control  
VOLUME at -30 dB level ..... +6 dB (100 Hz)

Input sensitivity / impedance  
PHONO (MM) ..... 4.0 mV / 47 kΩ  
Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH) ..... 320 mV / 47 kΩ

Output level / impedance

TAPE REC ..... 320 mV / 1 kΩ

PRE OUT (FRONT,CENTER,SURROUND) ..... 1 V / 500 Ω

PRE OUT (SURROUND BACK) ..... 1 V / 500 Ω

PRE OUT (SUBWOOFER) ..... 1 V / 500 Ω

Tone control

BASS ..... ±10 dB (at 100 Hz)

TREBLE ..... ±10 dB (at 10 kHz)

#### DIGITAL AUDIO section

Sampling frequency ..... 32 kHz, 44.1 kHz, 48 kHz, 96 kHz

Input level / impedance / wave length

Optical ..... (-15 dBm ~ -24 dBm), 660 nm ±30 nm

Coaxial ..... 0.5 Vp-p / 75 Ω

Output level / impedance / wave length

Optical ..... (-21 dBm ~ -15 dBm), 660 nm ±30 nm

#### VIDEO section

VIDEO inputs / outputs

VIDEO (composite) ..... 1 Vp-p / 75 Ω

S VIDEO inputs / outputs

S VIDEO (luminance signal) ..... 1 Vp-p / 75 Ω

S VIDEO (chrominance signal) ..... 0.286 Vp-p / 75 Ω

COMPONENT VIDEO inputs / outputs

COMPONENT VIDEO (luminance signal) ..... 1 Vp-p / 75 Ω

COMPONENT VIDEO (CB/CR-signal) ..... ±0.32 Vp-p / 75 Ω

#### FM tuner section

Tuning frequency range ..... 87.5 MHz ~ 108 MHz

Usable sensitivity (MONO)

VR-6070

..... 1.3 μV (75 Ω) / 13.2 dBf (75 kHz dev, SINAD 30 dB)

KRF-X9060D

..... 1.6 μV (75 Ω) / 15.2 dBf (75 kHz dev, SINAD 30 dB)

50 dB quieting sensitivity

STEREO ..... 28 μV (75 Ω) / 40.2 dBf

Total harmonic distortion

MONO (1 kHz, 75 kHz dev) ..... 0.5% (65 dBf input)

STEREO (1 kHz, 67.5 + 6.75 kHz dev) ..... 0.7% (65 dBf input)

Signal to noise ratio

MONO (1 kHz, 75 kHz dev) ..... 75 dB (65 dBf input)

STEREO (1 kHz, 67.5 + 6.75 kHz dev) ..... 68 dB (65 dBf input)

Stereo separation (1 kHz) ..... 40 dB

Selectivity (±400 kHz) (VR-6070) ..... 70 dB  
(KRF-X9060D) ..... 50 dB

Frequency response (30 Hz ~ 15kHz) ..... +0.5 dB, -3.0 dB

#### AM tuner section

Tuning frequency range

10 kHz step ..... 530 kHz ~ 1,700 kHz (VR-6070)

10 kHz step ..... 530 kHz ~ 1,610 kHz (KRF-X9060D)

9 kHz step ..... 531 kHz ~ 1,602 kHz (KRF-X9060D)

Usable sensitivity (30% mod, S/N 20 dB) ..... 16 μV / (600 μV/m)

Signal to noise ratio (30% mod, 400 Hz) ..... 50 dB (60 dBμ VEMF input)

#### GENERAL

Power consumption VR-6070 ..... 3 A  
KRF-X9060D ..... 300 W

AC outlet

SWITCHED VR-6070 ..... (total 150 W, 1.25 A max.)  
KRF-X9060D ..... (total 90 W max.)

Dimensions ..... W : 440 mm (17-5/16")

H : 159 mm (6-1/4")

D : 392 mm (15-7/16")

Weight (Net)

VR-6070 ..... 9.4 kg (20.7 lb)

KRF-X9060D ..... 10.0 kg (22.0 lb)

# KRF-V6060D/V7060D/V8060D/X9060D/VR-6050/6060/6070

## SPECIFICATIONS

### For the U.K. only

#### AUDIO section (KRF-X9060D)

Rated power output during STEREO operation  
DIN/IEC (20 Hz ~ 20 kHz, 0.09% T.H.D. at 6 Ω)  
..... 100 W + 100 W

Effective power output during SURROUND operation  
FRONT (20 Hz ~ 20 kHz, 0.09% T.H.D. at 6 Ω one channel driven)  
..... 100 W + 100 W

CENTER (20 Hz ~ 20 kHz, 0.09% T.H.D. at 6 Ω one channel driven)  
..... 100 W

SURROUND (20 Hz ~ 20 kHz, 0.7% T.H.D. at 6 Ω one channel driven)  
100 W + 100 W

SURROUND BACK/SUBWOOFER (20 Hz ~ 20 kHz, 0.09% T.H.D. at 6 Ω one channel driven) ..... 100 W

Total harmonic distortion ..... 0.009% (1 kHz, 50 W, 6 Ω)

Frequency response  
Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH)  
..... 10 Hz ~ 100 kHz, +0 dB ~ -3.0 dB

PHONO 'RIAA' response ..... 40 Hz ~ 20 kHz, +1.5 dB ~ -3.0 dB

Maximum input level  
PHONO (MM) ..... 45 mV, 1% T.H.D. at 1 kHz

Signal to noise ratio (IHF'66)  
PHONO (MM) ..... 75 dB

Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH)  
..... 95 dB

Loudness control  
VOLUME at -30 dB level ..... +6 dB (100 Hz)

Input sensitivity / impedance  
PHONO (MM) ..... 4.0 mV / 47 kΩ

Line (CD/DVD, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH)  
..... 320 mV / 47 kΩ

Output level / impedance  
TAPE REC ..... 320 mV / 1 kΩ

PRE OUT (FRONT,CENTER,SURROUND) ..... 1 V / 500 Ω

PRE OUT (SURROUND BACK) ..... 1 V / 500 Ω

PRE OUT (SUBWOOFER) ..... 1 V / 500 Ω

Tone control  
BASS ..... ±10 dB (at 100 Hz)

TREBLE ..... ±10 dB (at 10 kHz)

#### DIGITAL AUDIO section

Sampling frequency ..... 32 kHz, 44.1 kHz, 48 kHz, 96 kHz

Input level / impedance / wave length  
Optical ..... (-15 dBm ~ -24 dBm), 660 nm ±30 nm

Coaxial ..... 0.5 Vp-p / 75 Ω

Output level / impedance / wave length  
Optical ..... (-21 dBm ~ -15 dBm), 660 nm ±30 nm

#### Notes

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2. The full performance may not be exhibited in an extremely cold location (under a water-freezing temperature).

#### VIDEO section

VIDEO inputs / outputs  
VIDEO (composite) ..... 1 Vp-p / 75 Ω

S VIDEO inputs / outputs  
S VIDEO (luminance signal) ..... 1 Vp-p / 75 Ω

S VIDEO (chrominance signal) ..... 0.286 Vp-p / 75 Ω

COMPONENT VIDEO inputs / outputs  
COMPONENT VIDEO (luminance signal) ..... 1 Vp-p / 75 Ω

COMPONENT VIDEO (CB/CR-signal) ..... ±0.32 Vp-p / 75 Ω

#### FM tuner section

Tuning frequency range ..... 87.5 MHz ~ 108 MHz

Usable sensitivity  
MONO ..... 1.3 μV (75 Ω) / 13.2 dBf (40 kHz dev, S/N 26 dB)

STEREO ..... 45 μV (75 Ω) / 42.1 dBf (40 + 6 kHz dev, S/N 46 dB)

Total harmonic distortion  
MONO (1 kHz, 40 kHz dev) ..... 0.2% (65.2 dBf input)

STEREO (1 kHz, 40 + 6 kHz dev) ..... 0.8% (65.2 dBf input)

Signal to noise ratio (DIN weighted at 1 kHz)  
MONO ..... 65 dB (65.2 dBf input)

STEREO ..... 60 dB (65.2 dBf input)

Stereo separation (1 kHz) ..... 36 dB

Selectivity (±300 kHz) ..... 64 dB

Frequency response (30 Hz ~ 15 kHz) ..... +0.5 dB, -3.0 dB

#### MW 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 (400 Hz, 30% mod)  
..... 50 dB (60 dBμ VEMF input)

#### GENERAL

Power consumption ..... 330 W

AC outlet  
SWITCHED ..... (total 90 W max.)

Dimensions ..... W : 440 mm (17-5/16")  
H : 159 mm (6-1/4")  
D : 392 mm (15-7/16")

Weight (Net) ..... 9.8 kg (21.6 lb)

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