

# KR-V7040

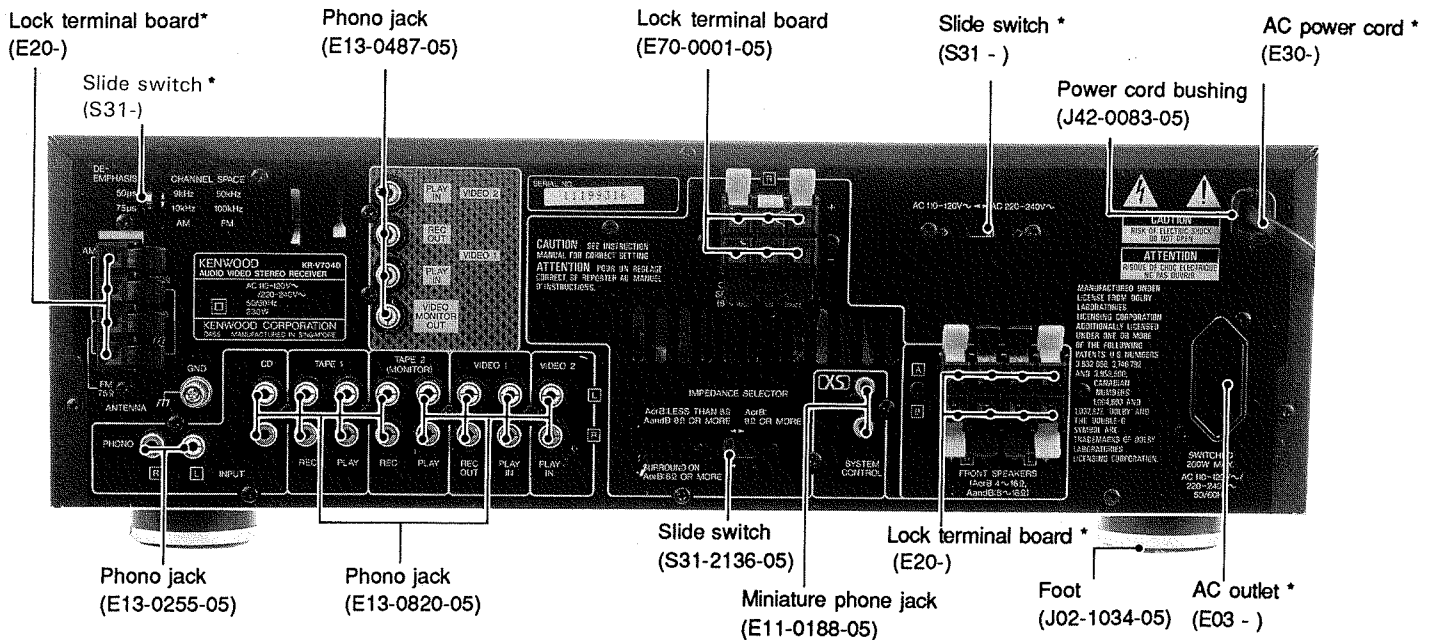
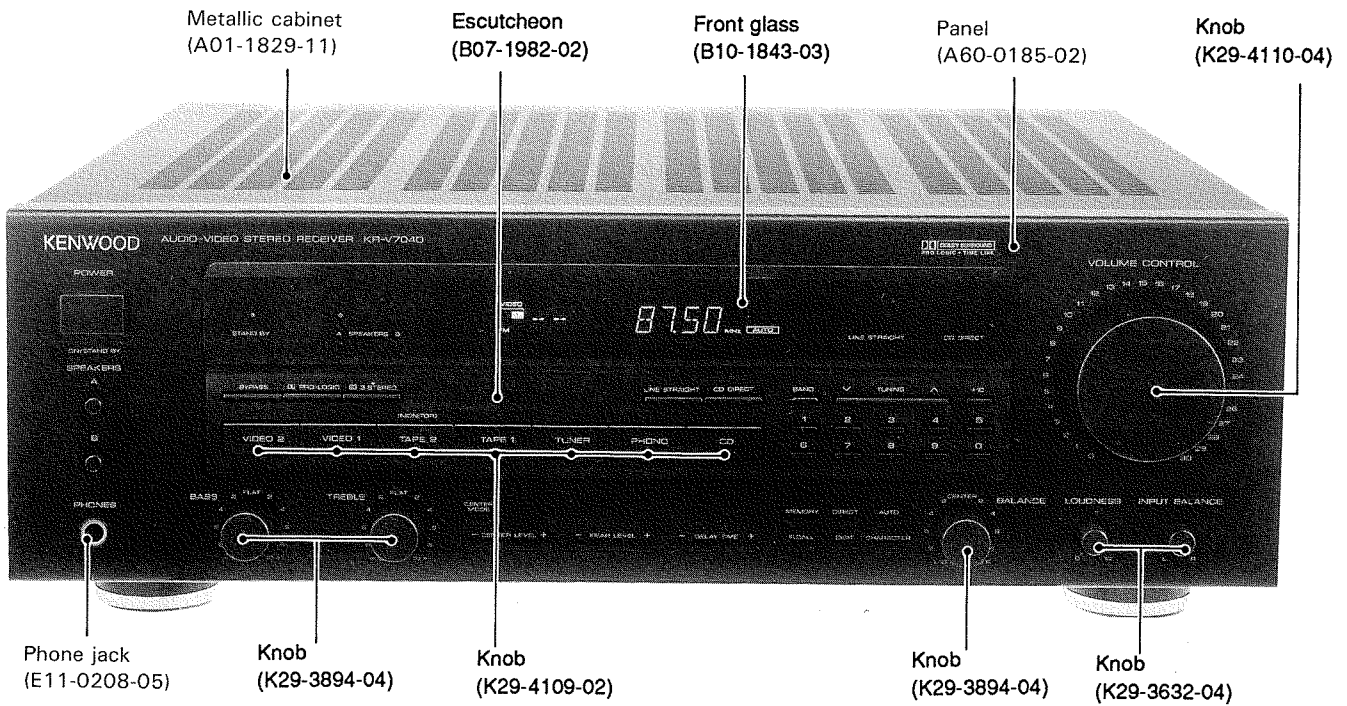
## SERVICE MANUAL

# KENWOOD

25 K18

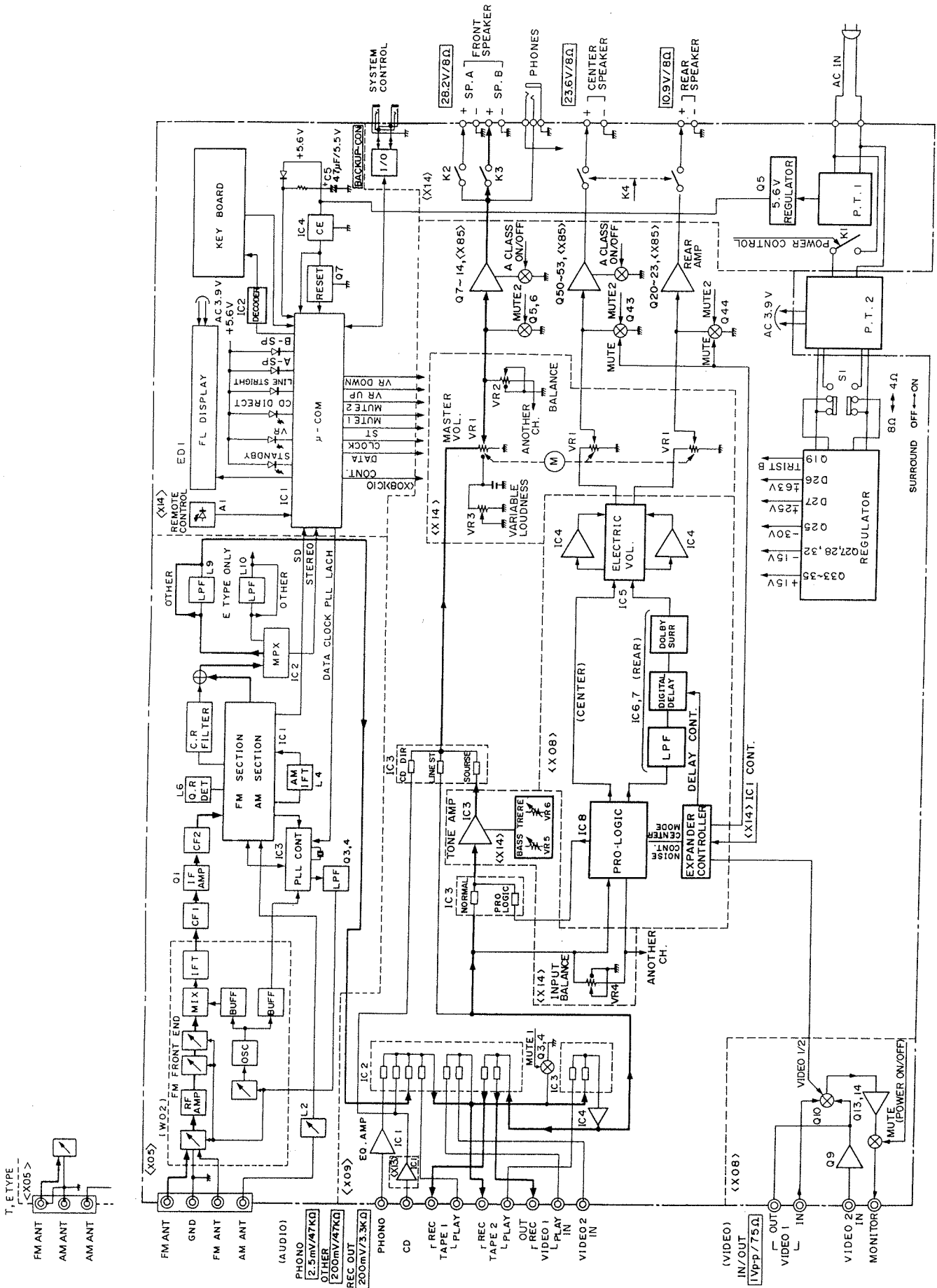
65083

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B51-4494-00(S) 3969



\* Refer to parts list on page 45.

## BLOCK DIAGRAM



## CIRCUIT DESCRIPTION

### 1-1. Initial Setting

#### 1) Function initial setting

POWER	OFF
SELECTOR (AUDIO)	TUNER
SELECTOR (VIDEO)	VIDEO 1
TAPE 2	OFF
CD DIRECT	OFF
LINE STRAIGHT	OFF
SPEAKERS A	ON
SPEAKERS B	OFF
BAND	FM
FREQUENCY	87.5 MHz
AUTO/MONO	AUTO
FL DISPLAY OF PRESET CHANNEL	"-"
SURROUND	BYPASS
CENTER LEVEL	-20dB
REAR LEVEL	-20dB
DELAY TIME	20ms

#### 2) Frequency memorized for each PRESET channel when the memory is cleared (Test frequency)

DESTINATION CH	K		E	
	BAND	FREQUENCY	BAND	FREQUENCY
1	FM	98.00	FM	98.00
2	FM	108.00	FM	108.00
3	AM	630	AM	630
4	AM	990	AM	990
5	AM	1440	AM	1440
6	AM	1610	AM	1602
7	FM	87.50 (1700)	FM	87.50
8	FM	87.50	FM	87.50
9	FM	87.50	FM	87.50
10	FM	89.10	FM	89.10
11 ~ 20	FM	87.50	FM	87.50

\* 1700kHz is set for WIDE only. FM: MHz  
AM: kHz

#### 3) The initial setting is performed in a following event:

1. When backup memory data is destroyed when reset is applied to the microprocessor.
2. When the power cord is plugged in to the AC wall outlet while pressing the TUNER key.

### 1-2. Test Mode Setting

#### 1) Method of entering the test mode (1)

While pressing the CD key, plug the power cord to the AC wall outlet. When the test mode is entered, the FL tube display all lights.

#### 2) Method of entering the test mode (2)

Set the test mode (1), then, when the following keys is pressed, test mode (2) is entered.

- (TUNING) UP/DOWN
- +10
- BAND
- CD DIRECT
- 3-STEREO
- PRO LOGIC

#### 3) Contents of test mode (2)

- (TUNING) UP : Electrically driven volume up.
- (TUNING) DOWN : Electrically driven volume down.
- +10 : Electrically driven volume stop. After press PRO-LOGIC key or 3 stereo key (dolby on)
- BAND : Test tone ON/OFF
- CD DIRECT : Test tone mode (test L/C/R/S)
- CENTER LEVEL :  
-20dB → ∞dB → -40dB → 0dB
- REAR LEVEL :  
-20dB → ∞dB → -40dB → 0dB
- DELAY TIME : 16 ~ 30 ms (Continue action 200ms ISTEP)

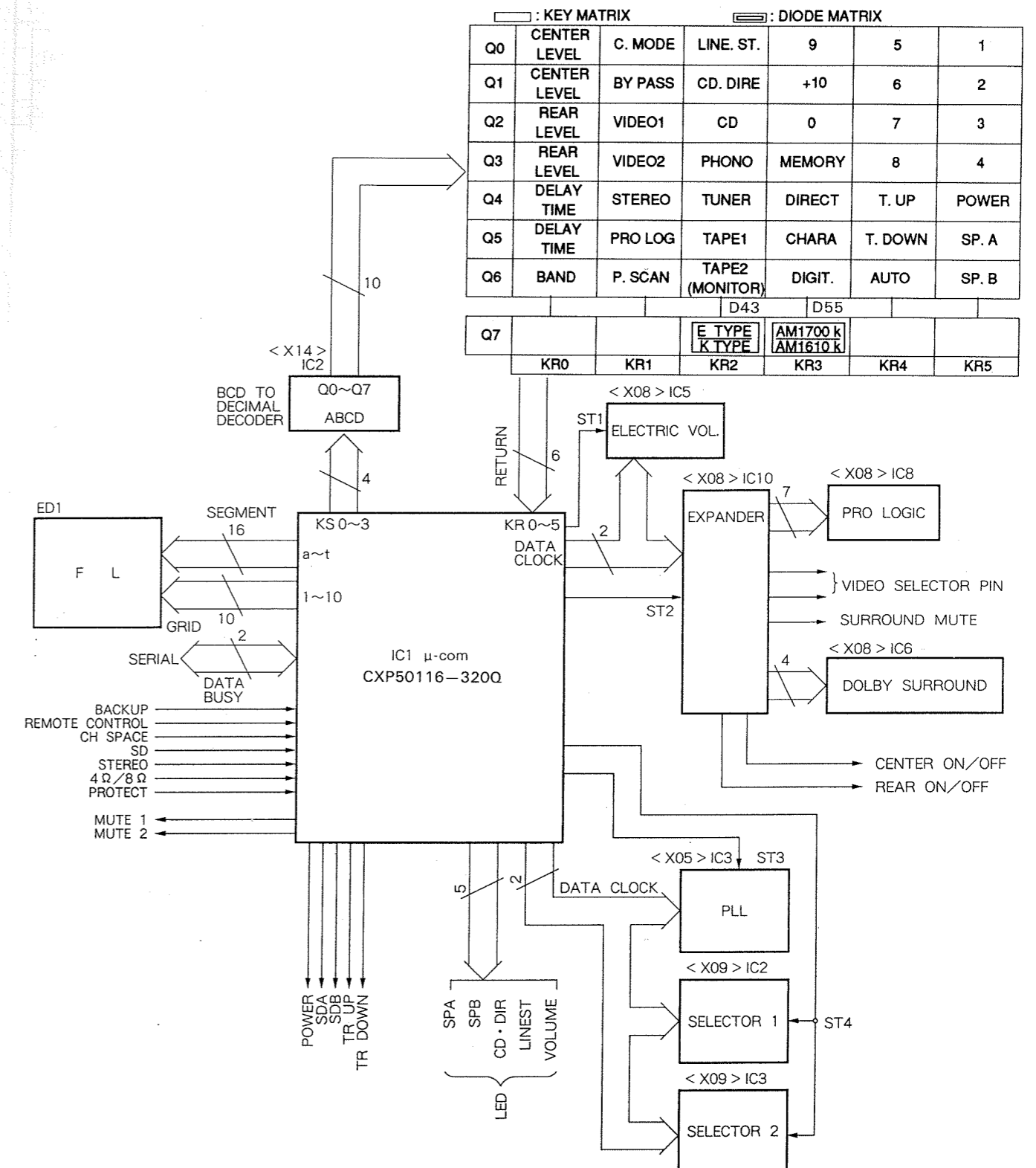
#### 4) Method of canceling the test mode

Unplug the power cord from the AC wall outlet once.

## CIRCUIT DESCRIPTION

### 2. CXP50116-320Q (X14: IC1) Microprocessor

#### 2.1 Terminal connection diagram



## CIRCUIT DESCRIPTION

### 1) Destination set SW: E type/K type

Destination set SW	Destination	BAND	Reception frequency band	Channel space	Reference frequency
0	K	FM	87.5~108.0 MHz	100 kHz	50 kHz
		AM	530~1610 kHz 530~1700 kHz	10 kHz	10 kHz
1	E	FM	87.5~108.0 MHz	50 kHz	50 kHz
		AM	531~1602 kHz	9 kHz	9 kHz

0: Without diode (D43 or Q8 OFF state )  
1: With diode (D43 or Q8 ON state)

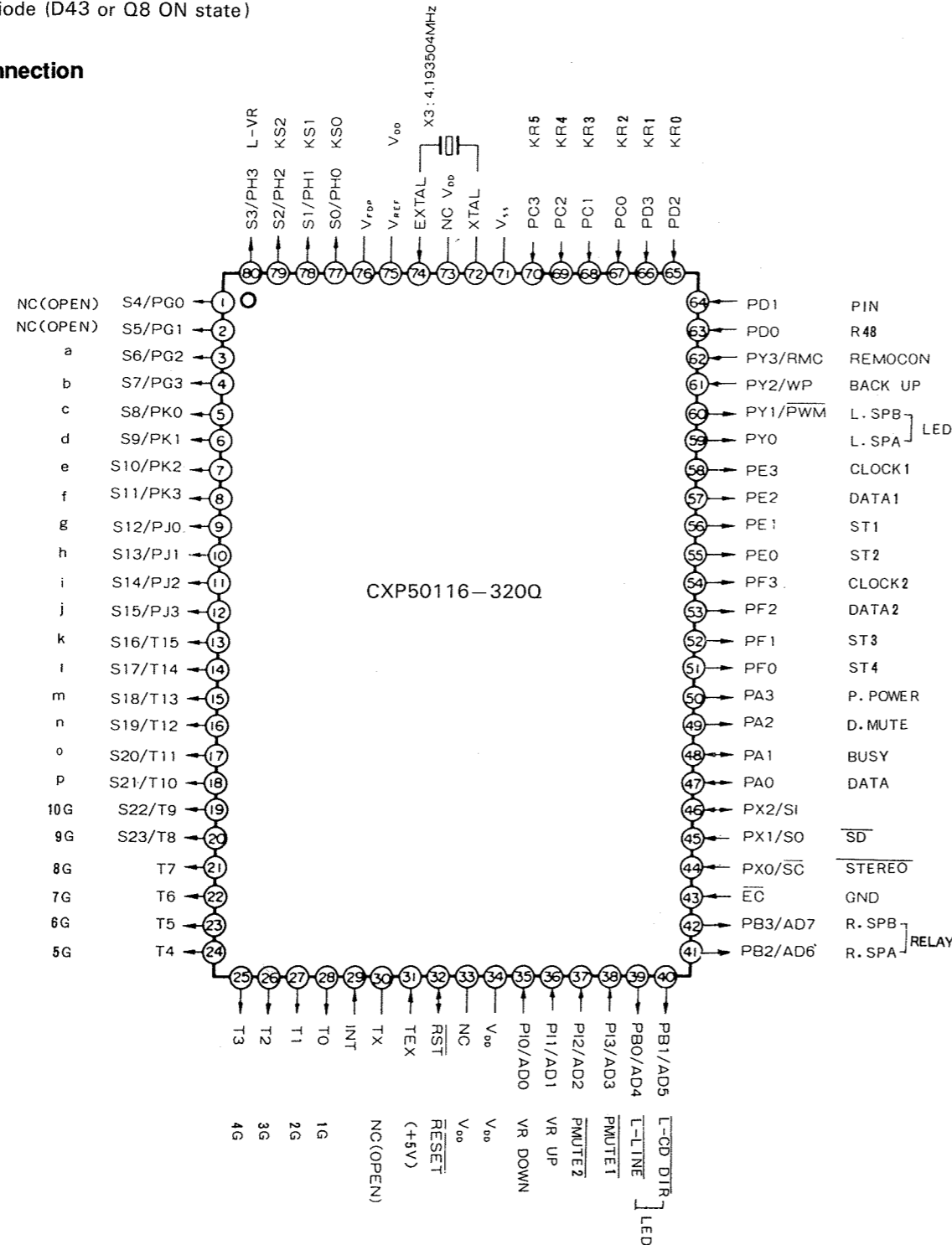
### 2) Specification set SW: AM1700k/AM1610k

With destination set SW at "0": Effective only for K type

Specification set SW	AM reception frequency band
0	530-1610 kHz
1	530-1700 kHz

0: Without diode (D55)  
1: With diode (D55)

### 2.2 Pin connection



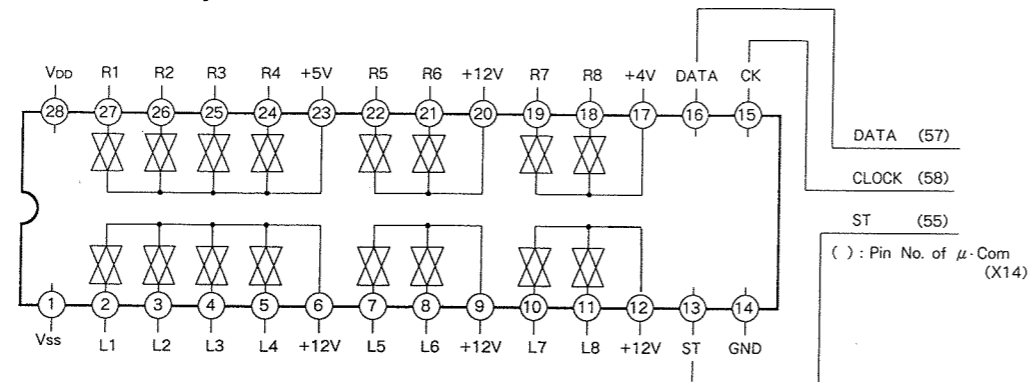
## CIRCUIT DESCRIPTION

### 2.3 Pin description

Pin No.	I/O	Name	Function
1, 2	-	No use	(OPEN)
3 ~ 18	O	SEGMENT 1~16	FL segment (a~p)
19 ~ 28	O	GRID 1~10	FL grid 10~1
29 ~ 31	I	INT, TX, TEX	No use.
32	I/O	RESET	Reset pin
33	-	No use	(+5V)
34	-	VDD	Power supply pin
35	I	VRDOWN	Electrically driven volume control H: VOL down L: Normal state
36	I	VRUP	Electrically driven volume control H: VOL up L: Normal state
37	I	P MUTE2	Line out mute control H: MUTE OFF L: MUTE ON
38	I	P MUTE1	TAPE 2 REC OUT mute control H: MUTE OFF L: MUTE ON
39	O	L LINE	LED LINE STRAIGHT H: OFF L: ON
40	O	L CDDIR	LED CD DIRECT H: OFF L: ON
41	O	R SPA	Speaker A relay H: ON L: OFF
42	O	R SPB	Speaker B relay H: ON L: OFF
43	-	EC	(GND)
44	I	STEREO	Stereo signal input H: MONO L: STEREO
45	I	SD	Tuning signal input H: NO SIGNAL L: TUNED
46	-	No use	(GND)
47	I/O	DATA	Serial "DATA"
48	I/O	BUSY	Serial "BUSY"
49	O	D MUTE	Data mute (for IC control)
50	O	P POWER	Power H: ON L: OFF
51	O	ST4	Strobe 4 (selector)
52	O	ST3	Strobe 3 (PLL)
53	O	DATA2	Data 2 (PLL, selector)
54	O	CLOCK2	Clock 2 (PLL, selector)
55	O	ST2	Strobe 2 (expansion)
56	O	ST1	Strobe 1 (electric volume)
57	O	DATA1	Data 1 (electric volume, expansion)
58	O	CLOCK1	Clock 1 (electric volume, expansion)
59	O	L SPA	LED speaker A H: OFF L: ON
60	O	L SPB	LED speaker B H: OFF L: ON
61	I	BACKUP	Backup input pin
62	I	REMOCON	Remote control input pin
63	I	R48	Speaker impedance (4Ω/8Ω) selection input H: 4Ω L: 8Ω
64	I	PIN	Protection input pin
65 ~ 70	I	KRO~5	Key return 0~5 H: There is input. L: There is no input.
71	-	Vss	GND
72	-	XTAL	System clock oscillation pin
73	-	No use	(GND)
74	I	EXTAL	System clock oscillation pin
75	-	VREF	No use
76	-	VFD	Power supply for flourescent display drive pin
77 ~ 79	O	KSO~2	Key scan 0~2
80	O	LVR	LED volume H: ON L: OFF

## CIRCUIT DESCRIPTION

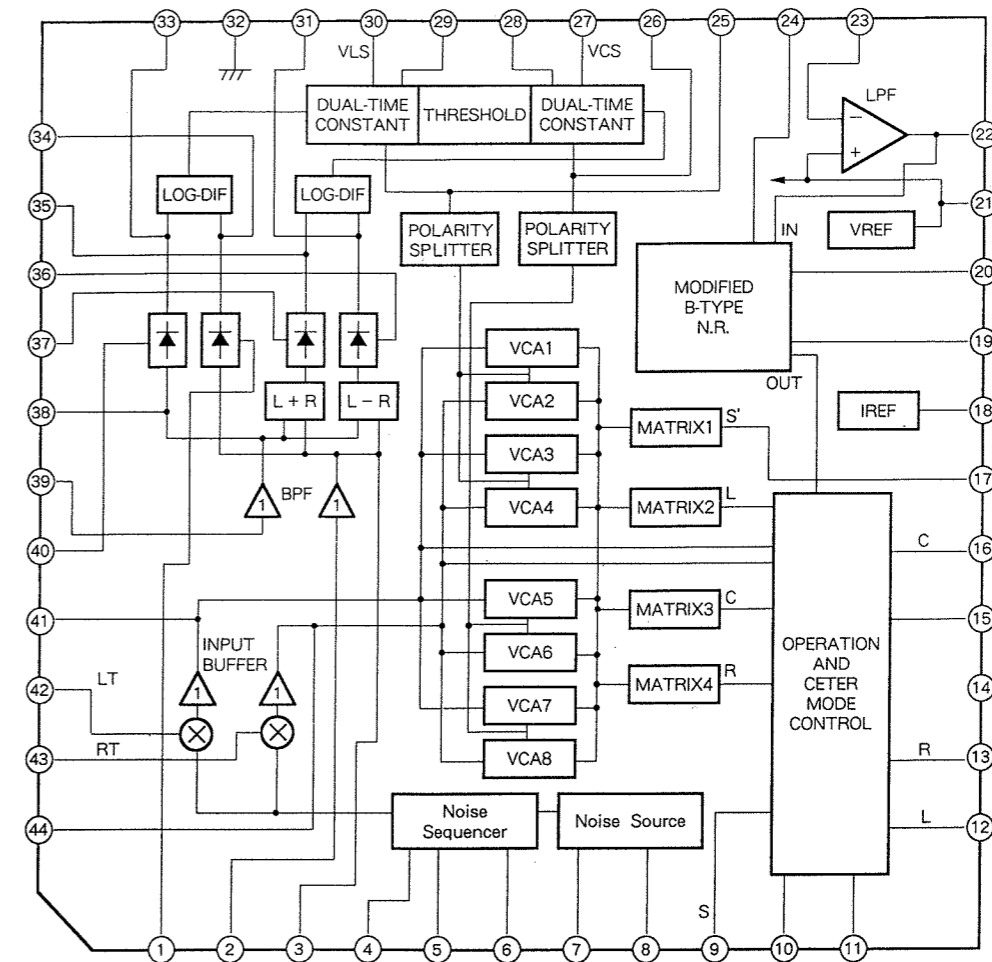
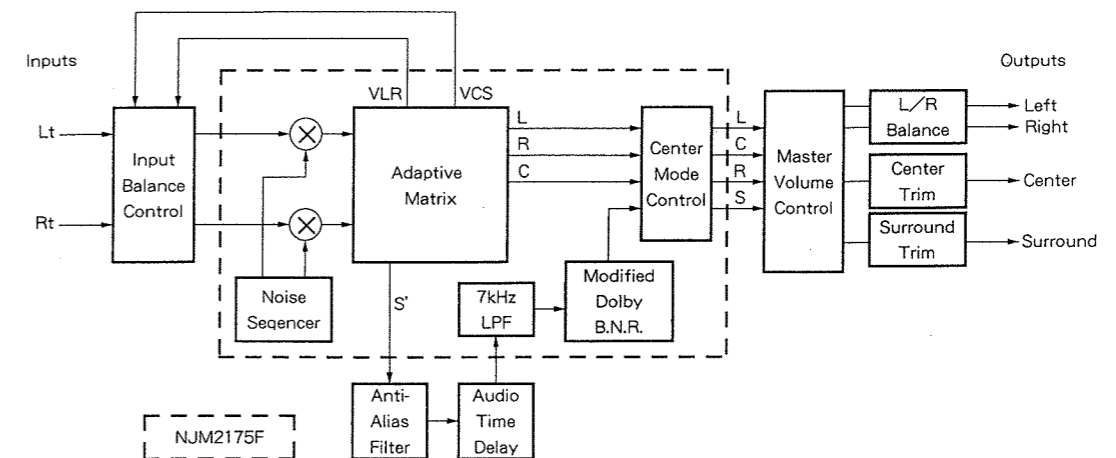
### 3. TC9164N(X08: IC10) Expander control



Pin No	SW	Contents	
2	1	S1	Switch ON .....1 ex. When all switches turn OFF, perform the delay of 20.4ms.
3	2	S2	
4	3	S3	
5	4	S4	
7	5	VIDEO2	VIDEO input 1, 2 selection
8	6	VIDEO1	
10	7	CENTER AMP ON/OFF	Switch OFF .....MUTE ON
11	8	REAR AMP ON/OFF	Switch OFF .....MUTE ON
27	1	MUTE	When change the data of digital delay, perform mute ON/OFF.
26	2	NOISE CONTROLL	E Normal signal output : ON Noise signal output : OFF
25	3		A Switch ON ..... "H"
24	4		B Switch OFF ..... "L"
22	5	CENTER OUTPUT ON/OFF	Switch ON.....CENTER OUTPUT Switch OFF.....NO OUTPUT
21	6	OPERATION MODE CONTROLL	Switch ON .....4ch Switch OFF .....3ch
19	7	CENTER MODE CONTROLL	Switch ON .....NORMAL mode Switch OFF.....PHANTOM mode
18	8		Switch ON .....WIDE BAND mode Switch OFF.....PHANTOM mode

## CIRCUIT DESCRIPTION

### 4. NJM2175F (X08 : IC8) Dolby prologic surround decoder



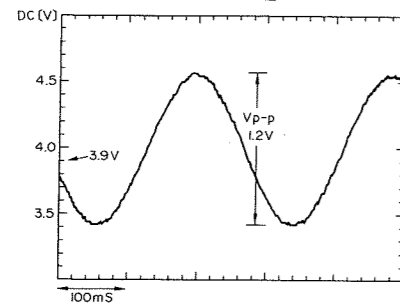
## CIRCUIT DESCRIPTION

Pin name

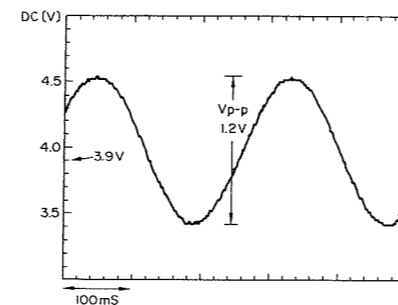
Pin NO.	Pin name	Pin NO.	Pin name	Pin NO.	Pin name
1	R-RECT-TC	*16	C-OUT	31	S-RECT-OUT
2	R-BPF-IN	*17	S'-OUT	32	GND
3	R-BPF-OUT	18	IREF	33	L-RECT-OUT
4	NOISE-CNT-E	19	NR-VCF	34	R-RECT-OUT
5	NOISE-CNT-A	20	NR-WT	35	C-RECT-OUT
6	NOISE-CNT-B	21	VREF	36	S-RECT-TC
7	NOISE-HPF	22	LPF-OUT	37	C-RECT-TC
8	NOISE-LPF	23	LPF-IN	38	L-BPF-OUT
9	S-OUT	24	NR-TC	39	L-BPF-IN
10	CENTER-CNT	25	VLR-TC3	40	L-RECT-TC
11	MODE-CNT	26	VCS-TC3	41	L-INBUF-OUT
*12	L-OUT	27	VCS-TC2	*42	L-IN
*13	R-OUT	28	VCS-TC1	*43	R-IN
14	Vcc	29	VLR-TC1	44	R-INBUF-OUT
15	CENTER-MODE	30	VLR-TC2		

\* : Refer INPUT/OUTPUT waves.

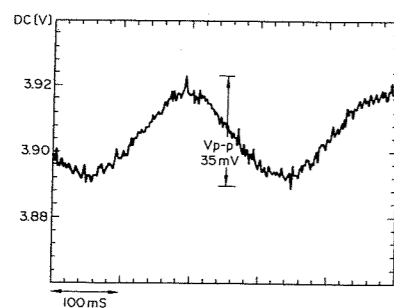
Pin No. 42 (L-IN)



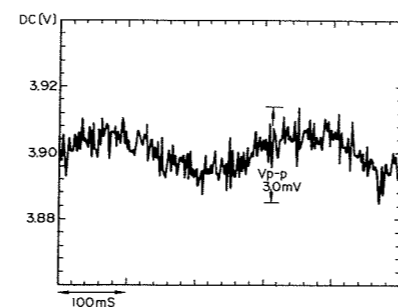
Pin No. 43 (R-IN)



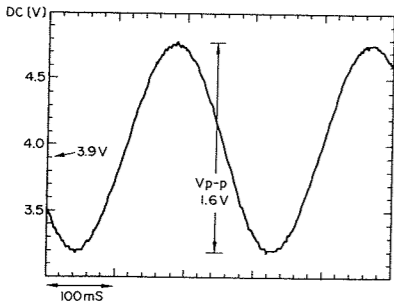
Pin No. 12 (L-OUT)



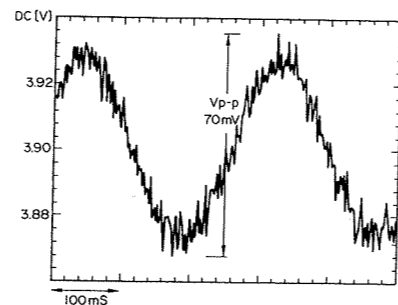
Pin No. 13 (R-OUT)



Pin No. 16 (C-OUT)

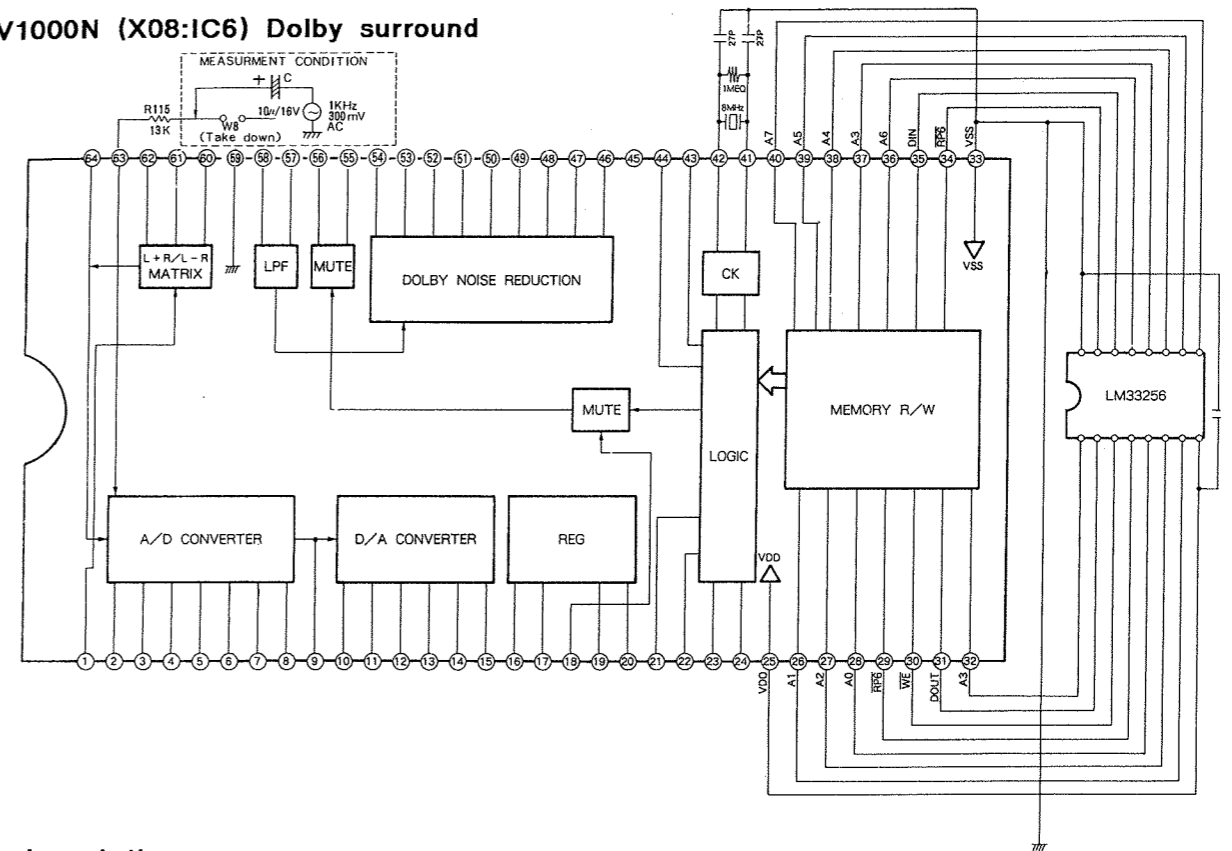


Pin No. 17 (S-OUT)



## CIRCUIT DESCRIPTION

5.LV1000N (X08:IC6) Dolby surround



Pin description

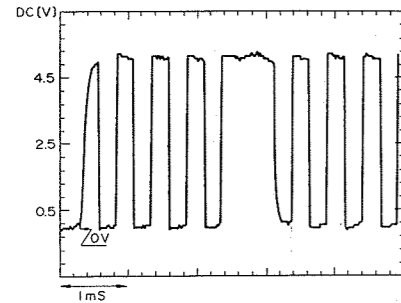
Pin No	Description	Pin No	Description
1	No used	42	Crystal oscillator for oscillation circuit
2	Comparator power supply filter	43	No used
3, 15	Detection input filter	44	No used
4, 14	Detection input filter	45	No used
5, 13	Pre-emphasis capacitor	46	NR smoothing capacitor
6, 12	Sliding band filter capacitor	47	NR smoothing capacitor
7	Sliding band filter capacitor and local decoder output	48	Capacitor for control amplifier frequency characteristics
8, 10	Capacitor for smoothing detection output	49	Variable resistor input
9	Capacitor for de-coupling operating threshold voltage	50	NR input
11	Sliding band filter capacitor and delay output	51	7-kHz low-pass filter output
16	Reference voltage (1/2 Vcc), primary	52	NR input
17	Reference voltage (1/2 Vcc), secondary	53	De-coupling capacitor
18	No used	54	No used
19	Vcc	55	No used
20	No used	*56	Delay output and NR output
21	Clock for serial input, data input for parallel input	57	7-kHz filter output
22	Data for serial input, data input for parallel input	58	7-kHz filter input
23	Column address selection for serial input, data input for parallel input	59	GND
24	Row address selection for serial input, data input for parallel input	60	No used
25	VDD	61	No used
*26-40	Connection with memory IC	62	Matrix output de-coupling capacitor
33	Vss	63	Noise shaping and delay input
41	Crystal oscillator for oscillation circuit	*64	Noise shaping output

\* : Refer to INPUT/OUTPUT waves.

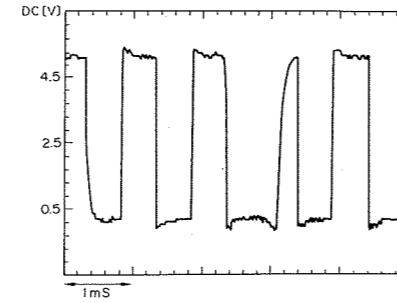
## CIRCUIT DESCRIPTION

Measurement Condition	Mode	Normal
		Input

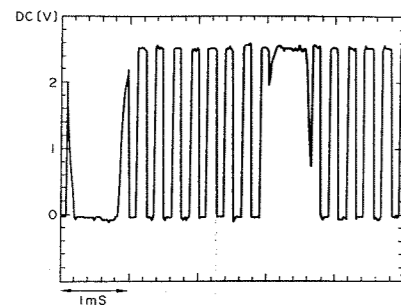
Pin No. 26



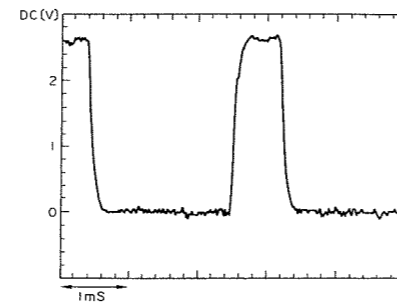
Pin No. 27



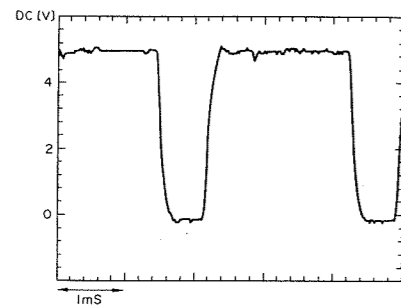
Pin No. 28



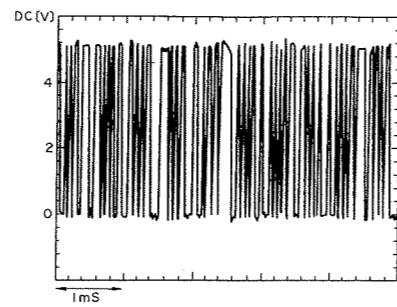
Pin No. 29



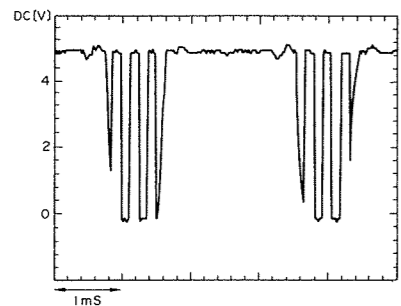
Pin No. 30



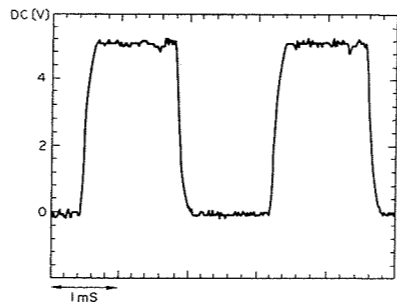
Pin NO. 31



Pin No. 32

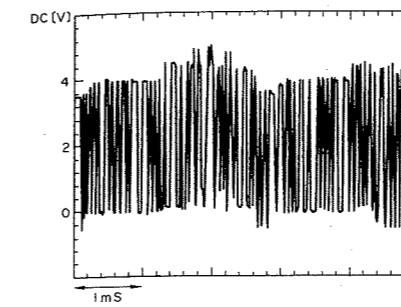


Pin No. 34

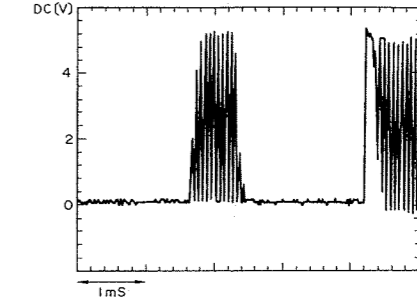


## CIRCUIT DESCRIPTION

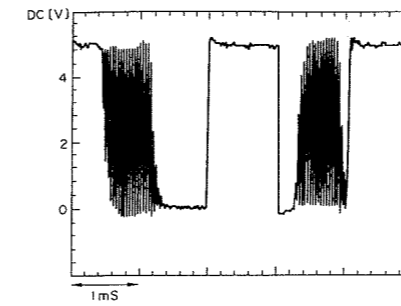
Pin No. 35



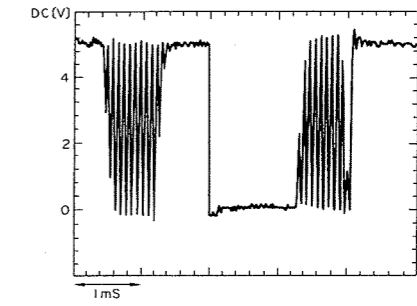
Pin No. 36



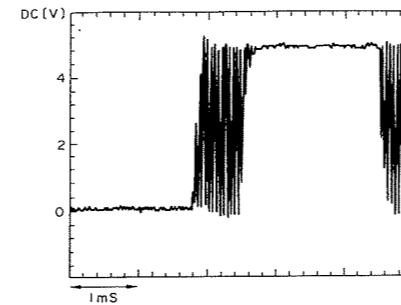
Pin No. 37



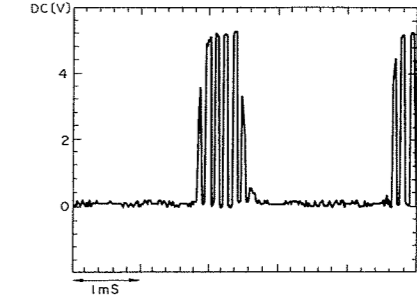
Pin No. 38



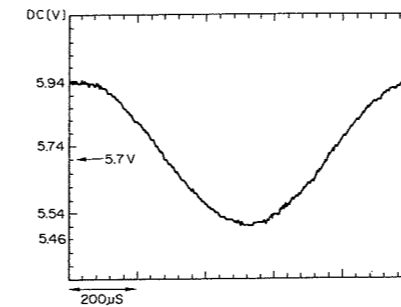
Pin No. 39



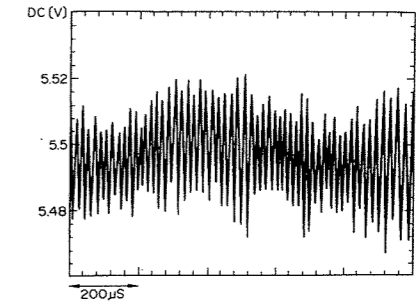
Pin NO. 40



Pin No. 56



Pin No. 64





# KR-V7040

## ADJUSTMENT

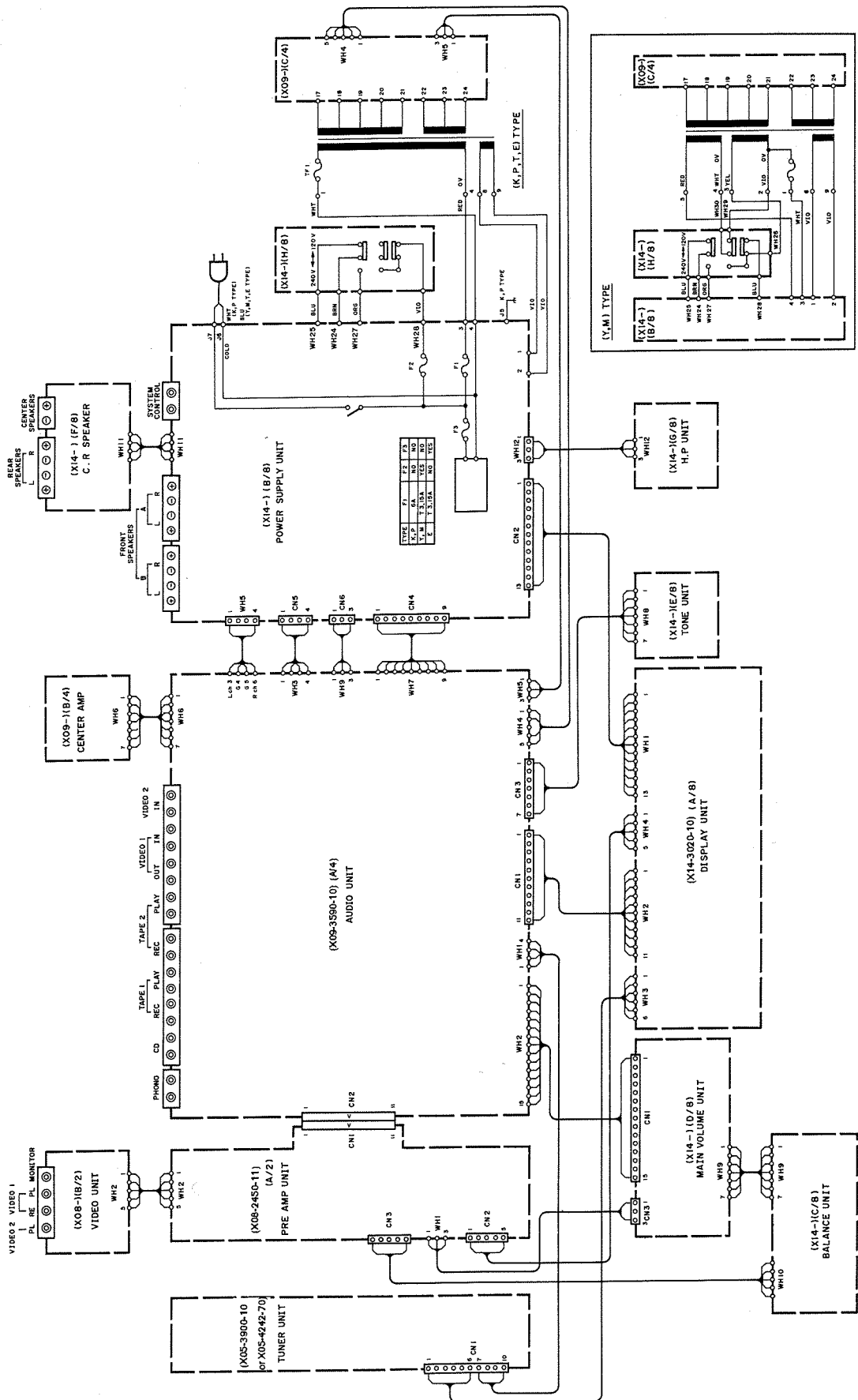
AM Section: If alignment point is "-", Confirm the value.  
If not, replace the front end pack.

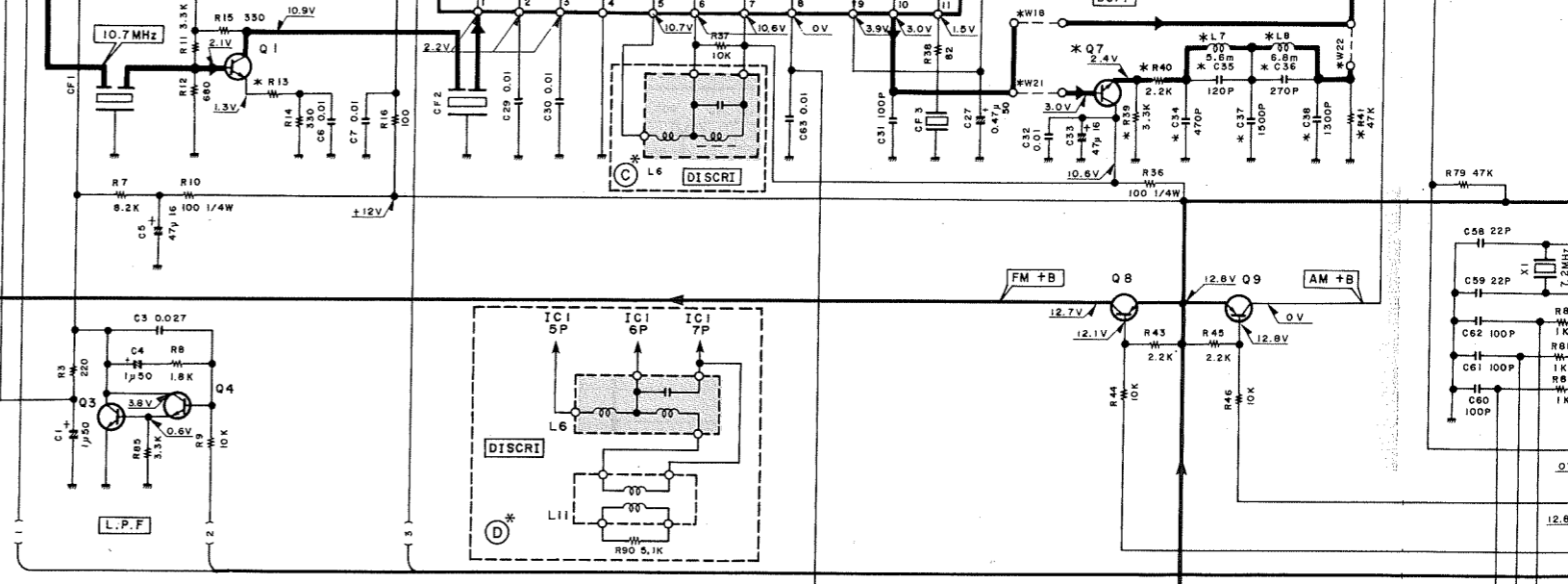
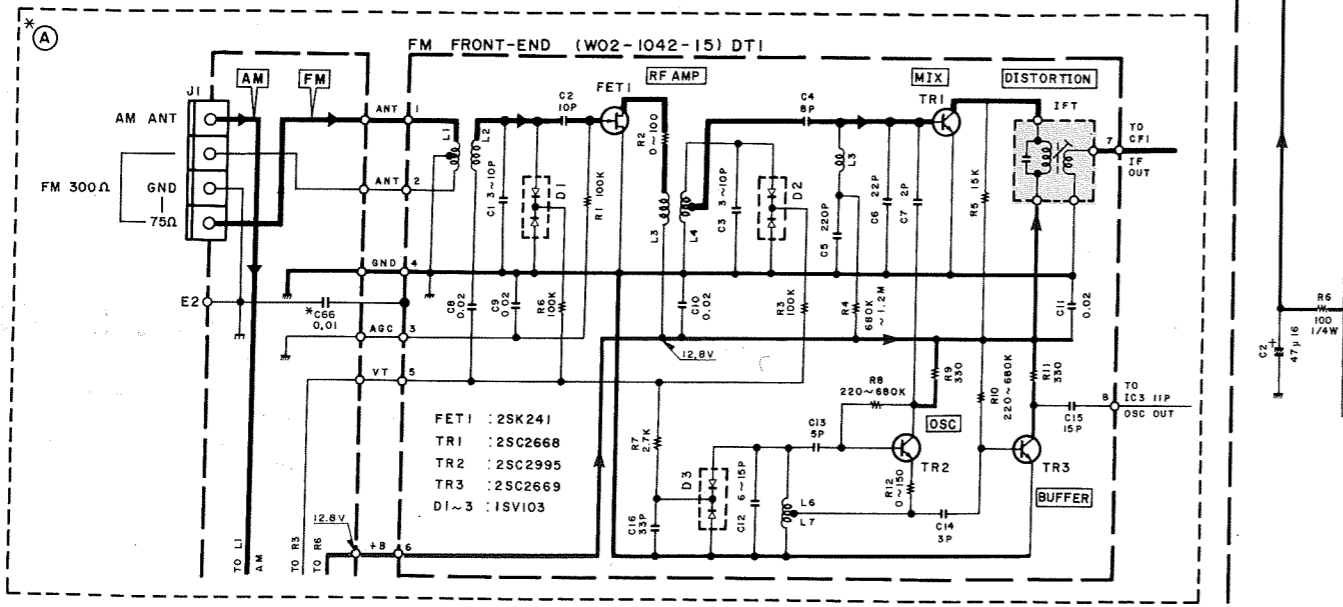
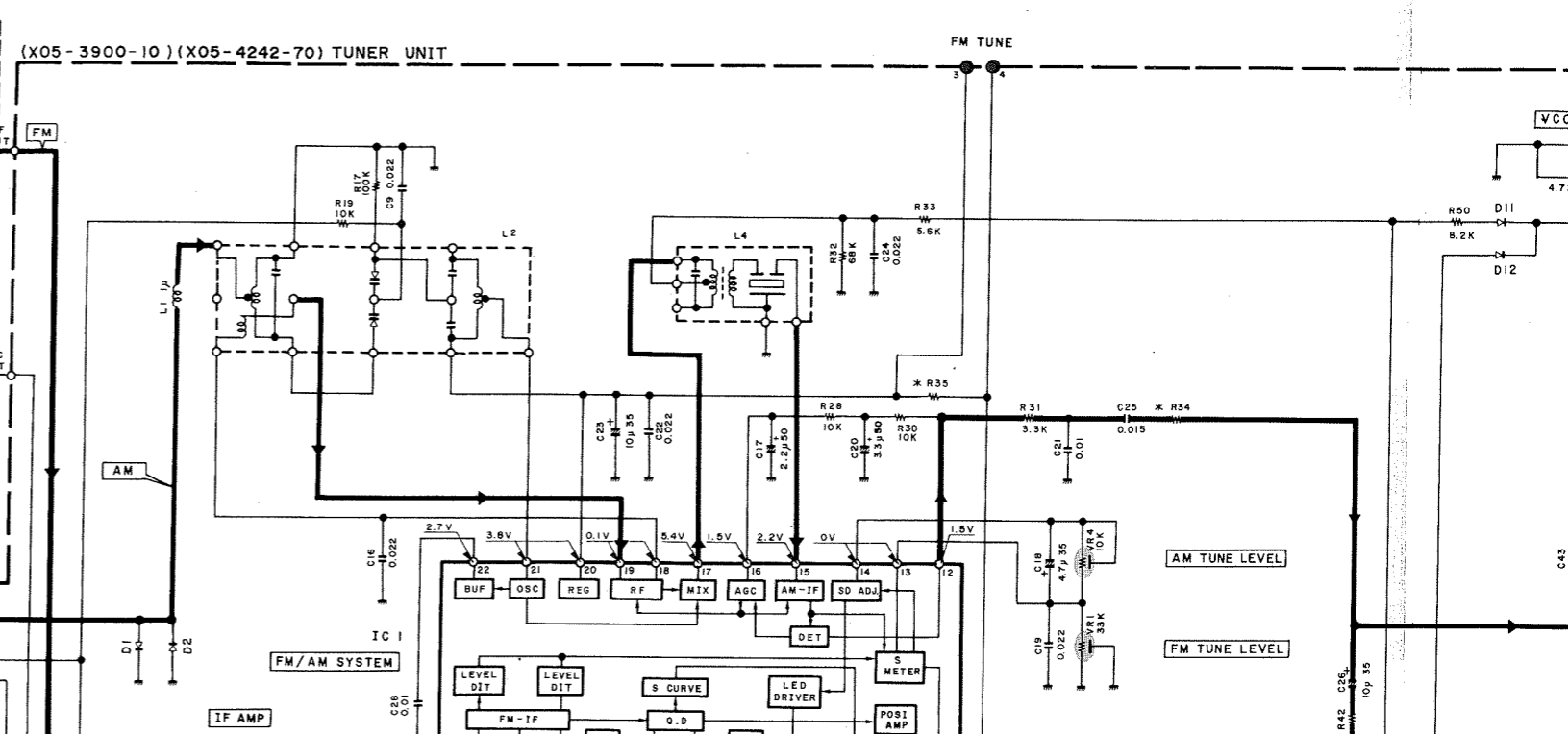
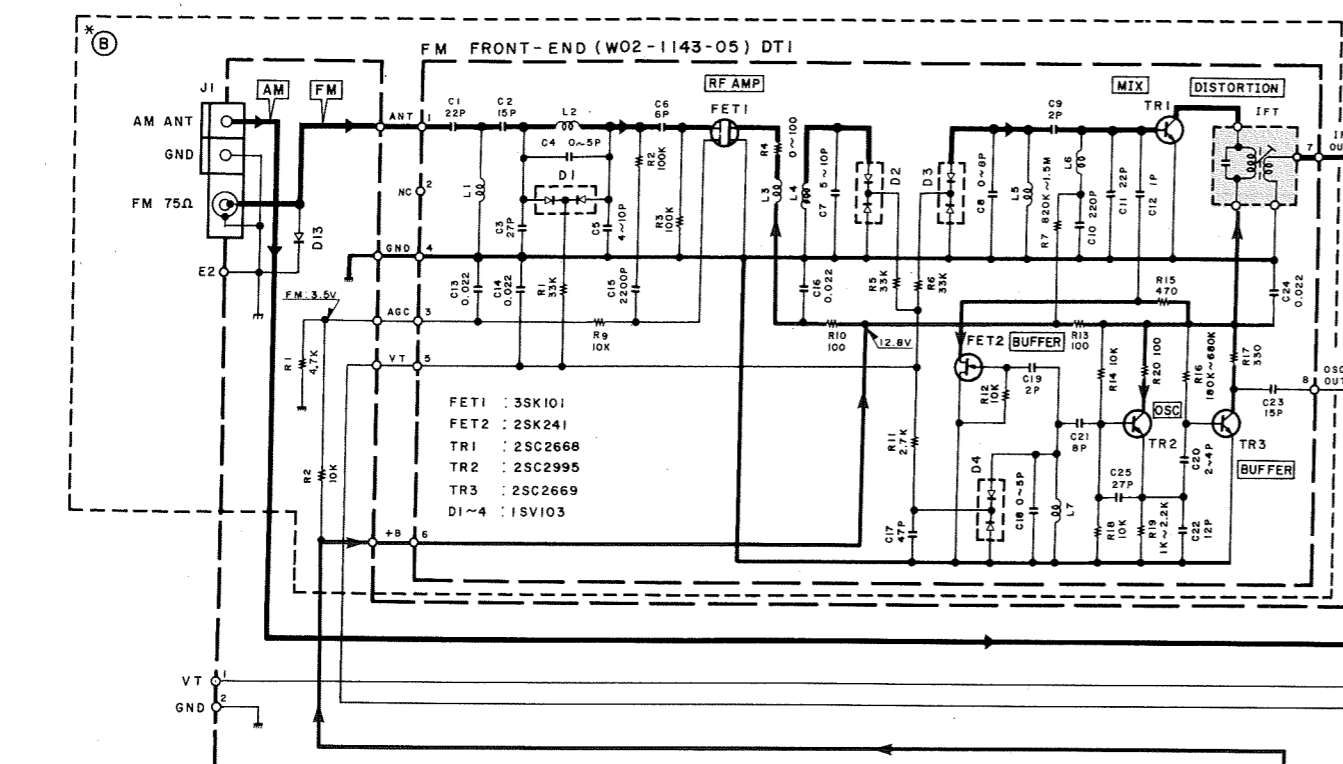
No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
FM SECTION (X05-) SELECTOR: FM							
1	DISCRIMINATOR	(A) 98.0MHz 1kHz, ±75kHz dev 60dBμ(ANT input)	Connect a DC voltmeter between TP3 and TP4. (X05-)	AUTO or MONO 98.0MHz	L6 (X05-)	0V	(a)
2	VCO	(A) 98.0MHz 0 dev 60dBμ(ANT input)	Connect a frequency counter between TP6 and TP5. (X05-)	AUTO 98.0MHz	VR2 (X05-)	19.00kHz	(b)
3	DISTORTION (STEREO)	(C) 98.0MHz 1kHz, ±68.25kHz dev Selector:L or R Pilot:±6.75kHz dev 60dBμ(ANT input)	(B)	98.0MHz	IFT (Front end)	Minimum distortion.(L or R)	
4	SEPARATION (T,E TYPE)	(C) 98.0MHz Stereo signal 60dB(ANT input)	(B)	AUTO 98.0MHz	VR3 (X05-)	Minimum crosstalk	
5	TUNING LEVEL	(A) 98.0MHz 0dev 18dBμ(ANT input)	(B)	AUTO or MONO 98.0MHz	VR1 (X05-)	Adjust VR1 and stop at the point where ED1(TUNED) goes on.	
AM SECTION (X05-) SELECTOR: AM							
(1)	TUNING LEVEL	(D) 1000(999)kHz 26dBμ(ANT input)	(B)	-	VR4 (X05-)	Adjust VR4 and stop at the point where ED1(TUNED) goes on.	
AUDIO SECTION							
<1>	IDLE CURRENT	-	(E) Connect a DC voltmeter across CP1(L) CP2(R) CP4(CENTER) (X09-)	Volume:0	VR1(L) VR2(R) VR4(C) (X09-)	10mV	(c)
<2>	DOLBY LEVEL	Prologic:Normal Connect the AG to CD terminal AG output:1kHz.	Connect a DC voltmeter between 4pin in CN4(X08) and GND.		VR3 (X08-)	300mV	(d)



# KR-V7040

## WIRING DIAGRAM

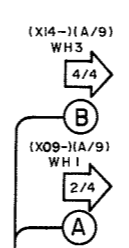
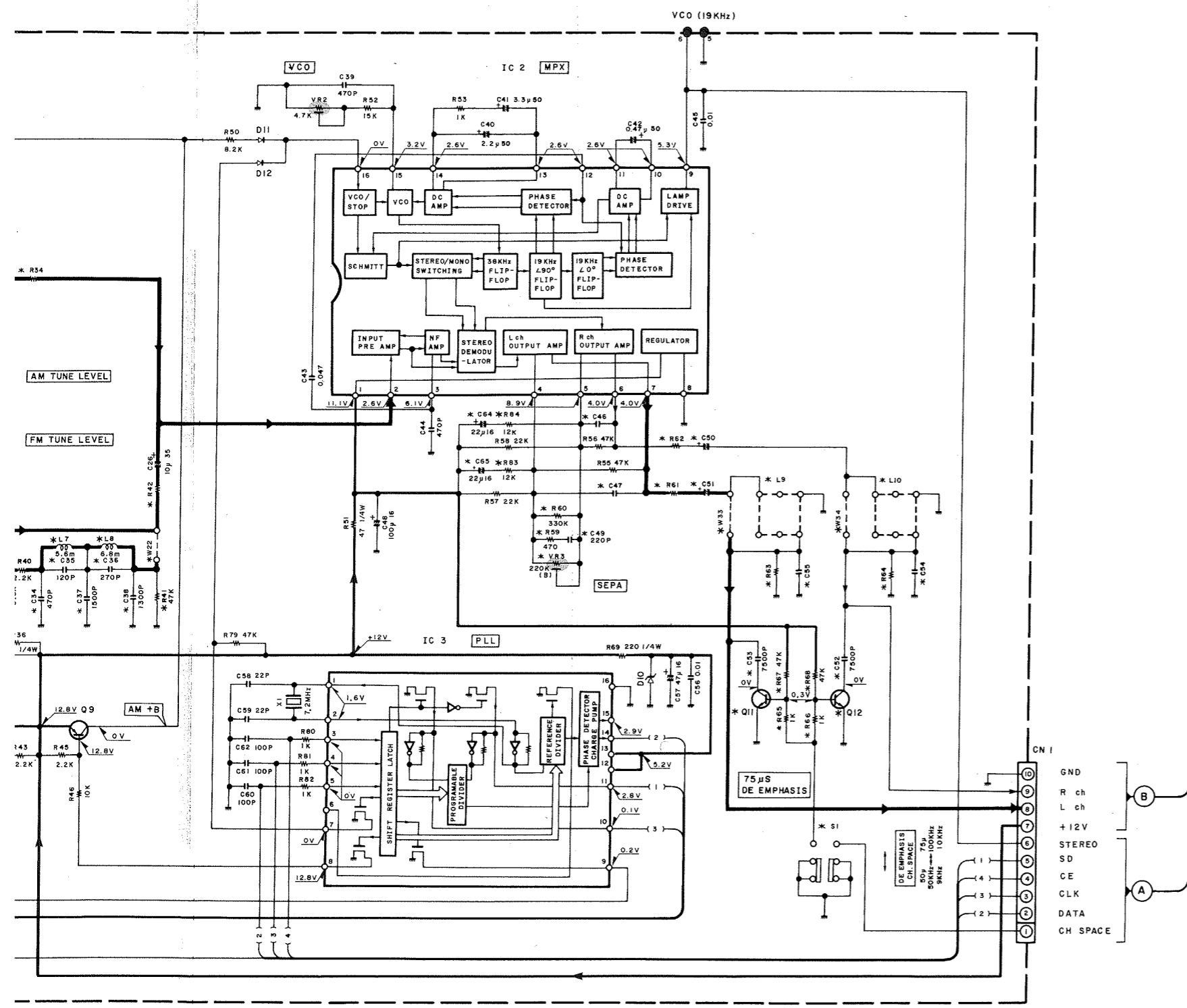




- IC1 : LA1265  
 IC2 : AN7470  
 IC3 : LM7001
- Q1 : 2SC1923(R,O)  
 Q3,7,11,12 : 2SC945(A)(O,P) or 2SC1740S(Q,R)  
 Q4 : 2SC1845(F,E)  
 Q8,9 : 2SA733(A)(Q,P) or 2SA933S(Q,R)
- DI,2,11~13 : 1SS133 or HSS104  
 D10 : RD5.1ES(B2) or HZ95.1N(B2)

Part No.	(A)	(B)	(C)	(D)	C34-38, 49	C46, 47	C50, 51	C52	C54, 55	S1	VR3	W18, 33	W21, 22	L7-10	Q7	Q11, 12	R39-41	R13	R34	R35	R42	R60	R61, 62	R63, 64	R65-68
K, P	0-10	YES	NO	NO	NO	150p	1μ50	NO	0.022	NO	NO	YES	NO	NO	NO	NO	NO	56	36K	15K	39K	YES	3.6K	39K	NO
M, Y	0-21	YES	NO	NO	NO	150p	1μ50	YES	0.015	YES	NO	YES	NO	NO	NO	YES	NO	56	36K	39K	39K	YES	3.6K	39K	YES
T, E	2-70	NO	YES	YES	YES	1000p	2.2μ50	NO	4700p	NO	YES	NO	YES	YES	YES	NO	YES	22	47K	36K	47K	NO	3.3K	3.3K	NO

SI  
 GN  
 +1



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

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

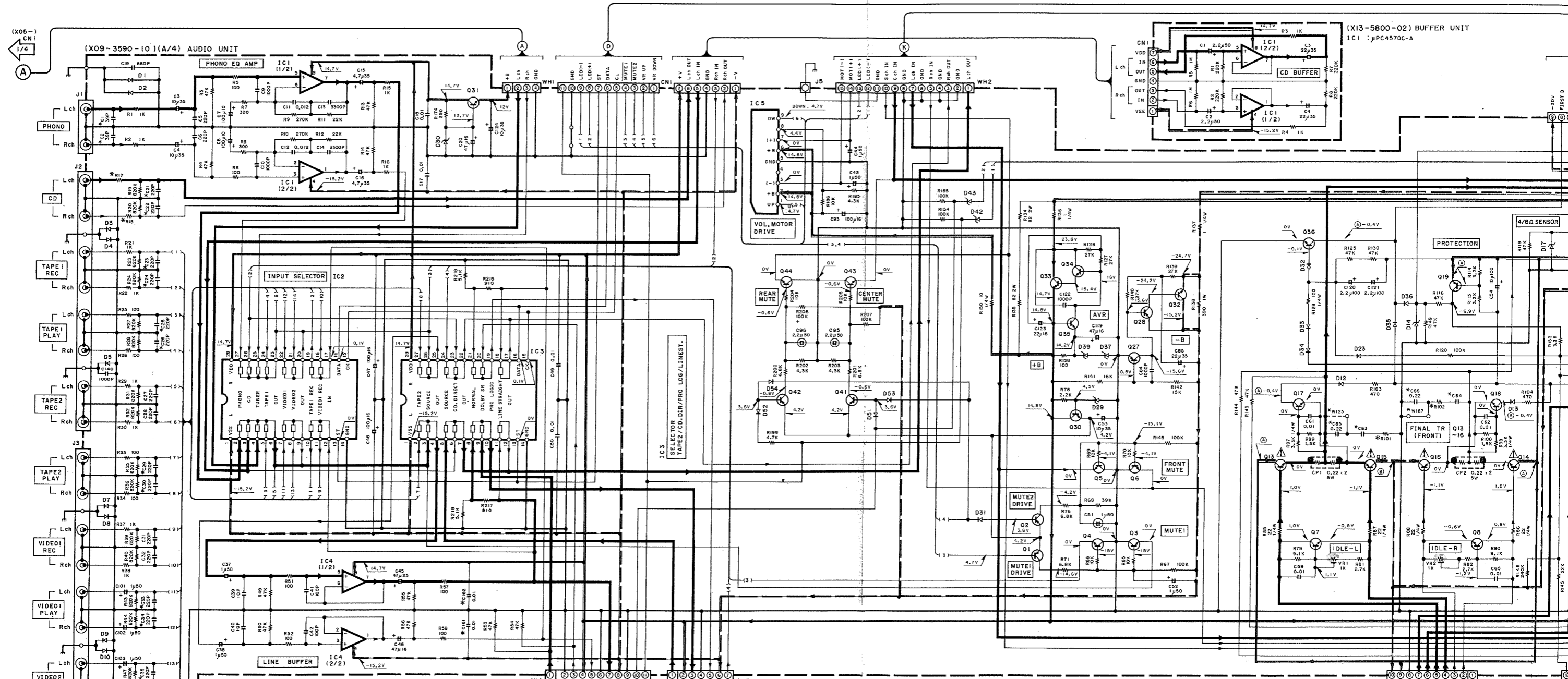
Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

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

- 2SA 1123
- 2SA 733(A)
- 2SA 992
- 2SA 999
- 2SC 1845
- 2SC 1923
- 2SC 2003
- 2SC 2320
- 2SC 2631
- 2SC 2878
- 2SC 394 A
- 2SC 945(A)
- 2SD 1320
- UN 4212
- 2SD 1893\*5
- 2SB 772
- NJM4565D
- NJM4565D-D
- 2SD 1266
- LM7001
- 2SB 1253\*5
- AN7470
- TD9213P
- DTA24 ES
- DTC24 ES
- UN112
- 2SA 1048
- 2SA 933S
- 2SC 1740S
- 2SC 2458
- TA 8409 S
- 2SC 4137
- RC 4565 D
- RC 4565 D-D
- UPC 4570 C-A
- 2SB 1470\*5
- 2SD 2222\*5
- AN7812 F
- UPC 7812 HF
- 2SA 1535 A
- 2SC 3944 A
- UPC 78 L 05 J
- UPC 78 L 12 J

.62	R63, 64	R65-68
3K	39K	NO
3K	39K	YES
3K	3.3K	NO





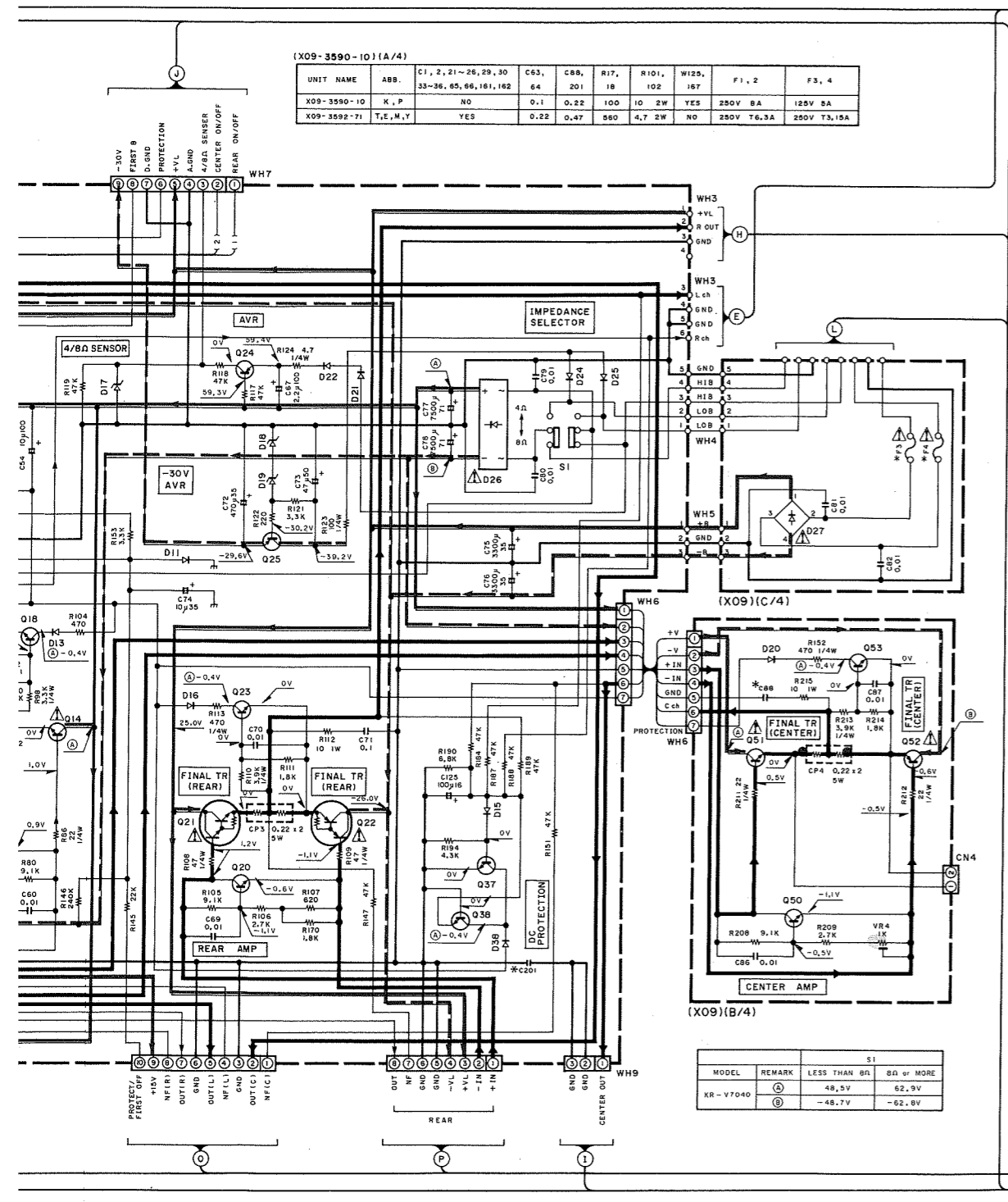
- (X09-3590-10) (A/4)
- Q1, 2, 27, 28, 41, 42 : 2SA933S(I, R)
  - or 2SA1048(Y, GR)
  - Q3~6, 43, 44 : 2SC2878(B)
  - Q7, 8, 20, 50 : 2SC4137(V, W)
  - Q13, 14 : 2SD2222\*5
  - Q15, 16 : 2SB1470\*5
  - Q17, 18 : 2SC2631(R, S)
  - Q19, 24 : 2SA992(F, E)
  - Q21 : 2SD1893\*5
  - Q22 : 2SB1253\*5
  - Q23, 36~38, 53 : 2SC1845(F, E)

- Q25 : 2SB772
- Q30~32 : 2SC2003(L, K1)
- Q33 : 2SD1266
- Q34, 35 : 2SC1740S(I, R)
- Q51 : 2SD2255\*5
- Q52 : 2SB1493\*5
- D1~5, 7~10, 15, 38, 50~54 : HSS104 or ISS133
- D11~13, 16, 20~23, 31~36 : HSS104A or ISS131
- D14, 17 : HZS5.1N(B2) or RD5.1ES(B2)
- D18 : HZS16N(B2) or RD16ES(B2)
- D19 : HZS15N(B2) or RD15ES(B2)
- D24, 25 : S8566B
- D26 : D5FB20\*1
- D27 : RBV-402LFA or D3SBA20F03
- D29 : HZS4.7N(B) or RD4.7ES(B)
- D30 : HZS10N(B2) or RD10ES(B2)
- D37 : HZS6.2N(B2) or RD6.2ES(B2)
- D39 : HZS6.2N(B2) or RD6.2ES(B2)
- D42, 43 : HZS5.1S(B2) or RD5.1US(B2)

- IC1, 4 : RC4565D-D
- or NJM4565D-D
- IC2 : TC9164N
- IC3 : TC9162N
- IC5 : TA8409S

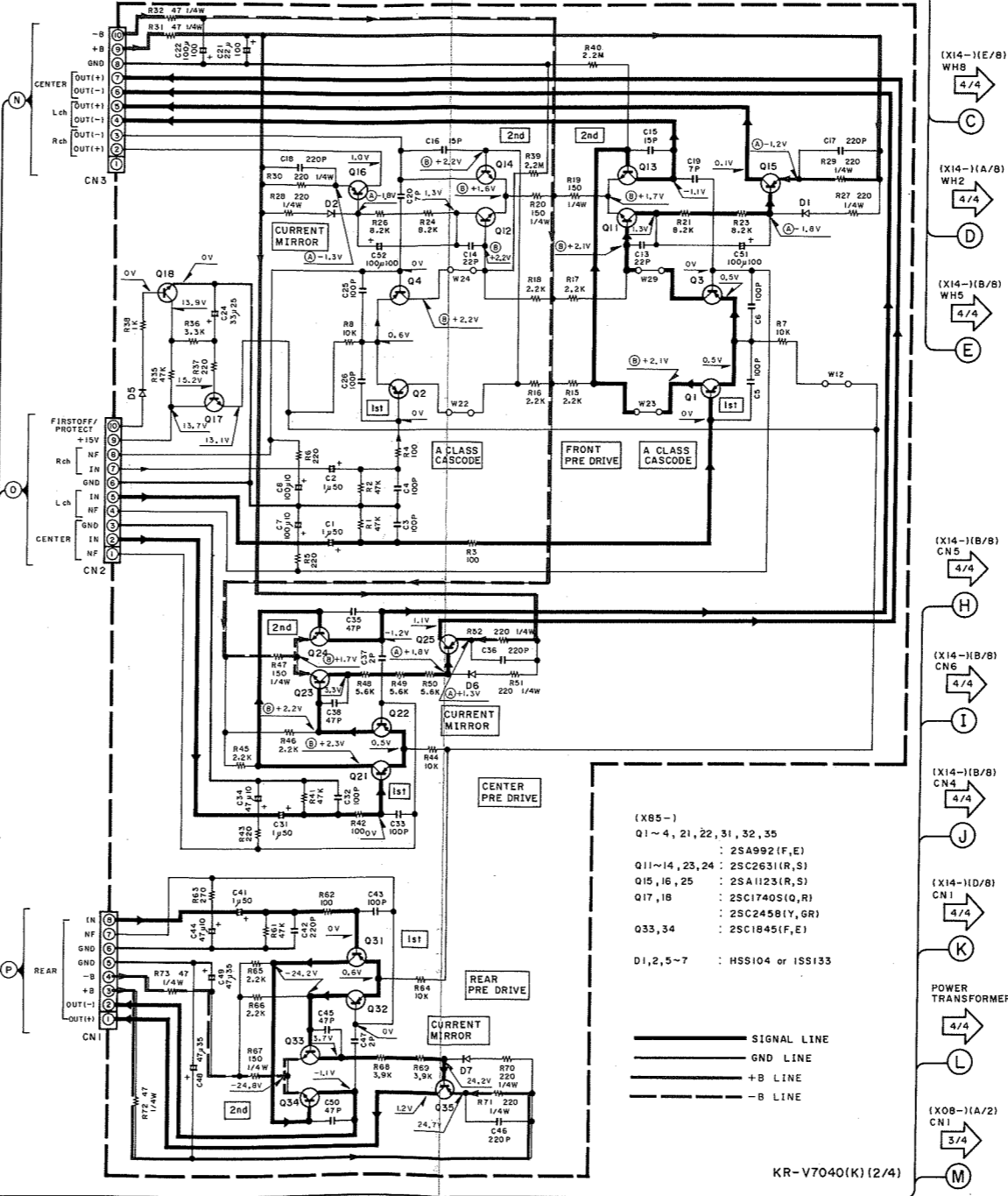
(X09-3590-10) (A/4)

UNIT NAME	ABB.	C1, 2, 21-26, 29, 30	C63, 64	C88, 201	R17, 102	R101, 102	W125, 167	F1, 2	F3, 4
X09-3590-10	K, P	NO	0.1	0.22	100	10 2W	YES	250V 8A	125V 8A
X09-3592-71	T, E, M, Y	YES	0.22	0.47	500	4.7 2W	NO	250V 7.6.3A	250V 7.3.15A



MODEL	REMARK	LESS THAN OR	SD OF MORE
KR-V7040	(A)	48.5V	62.9V
	(B)	48.7V	62.8V

(X85-1190-02) POWER AMPLIFIER UNIT



- (X85-)
- Q1 ~ 4, 21, 22, 31, 32, 35 : 2SA992 (F, E)
  - Q11 ~ 14, 23, 24 : 2SC2631 (R, S)
  - Q15, 16, 25 : 2SA1123 (R, S)
  - Q17, 18 : 2SC1740S (Q, R)
  - Q33, 34 : 2SC245B (Y, GR)
  - D1, 2, 5 ~ 7 : HSS104 or ISS133

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

KR-V7040(K) (2/4)

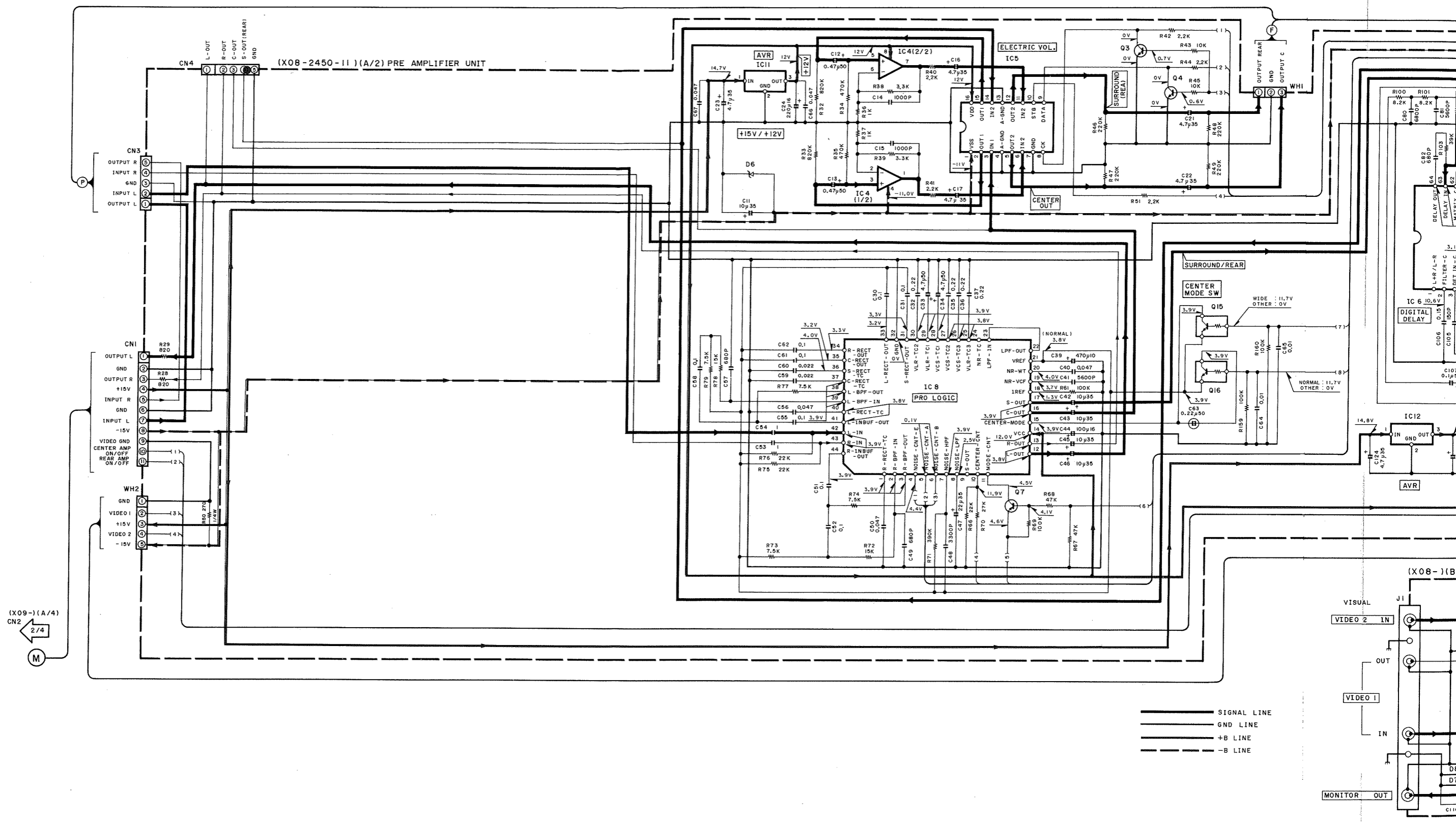
DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

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

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

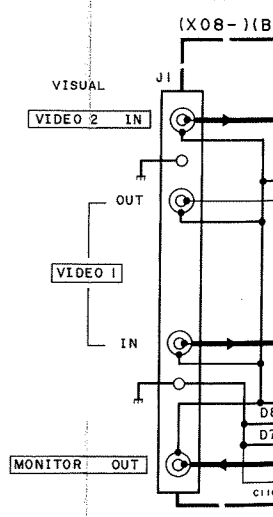
**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer parts list). **⚠** Indicates safety critical components. To reduce risk of electric shock, leakage-current or resistance measurement shall be carried out (exposed parts are acceptably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

**KR-V7040**  
**KENWOOD**

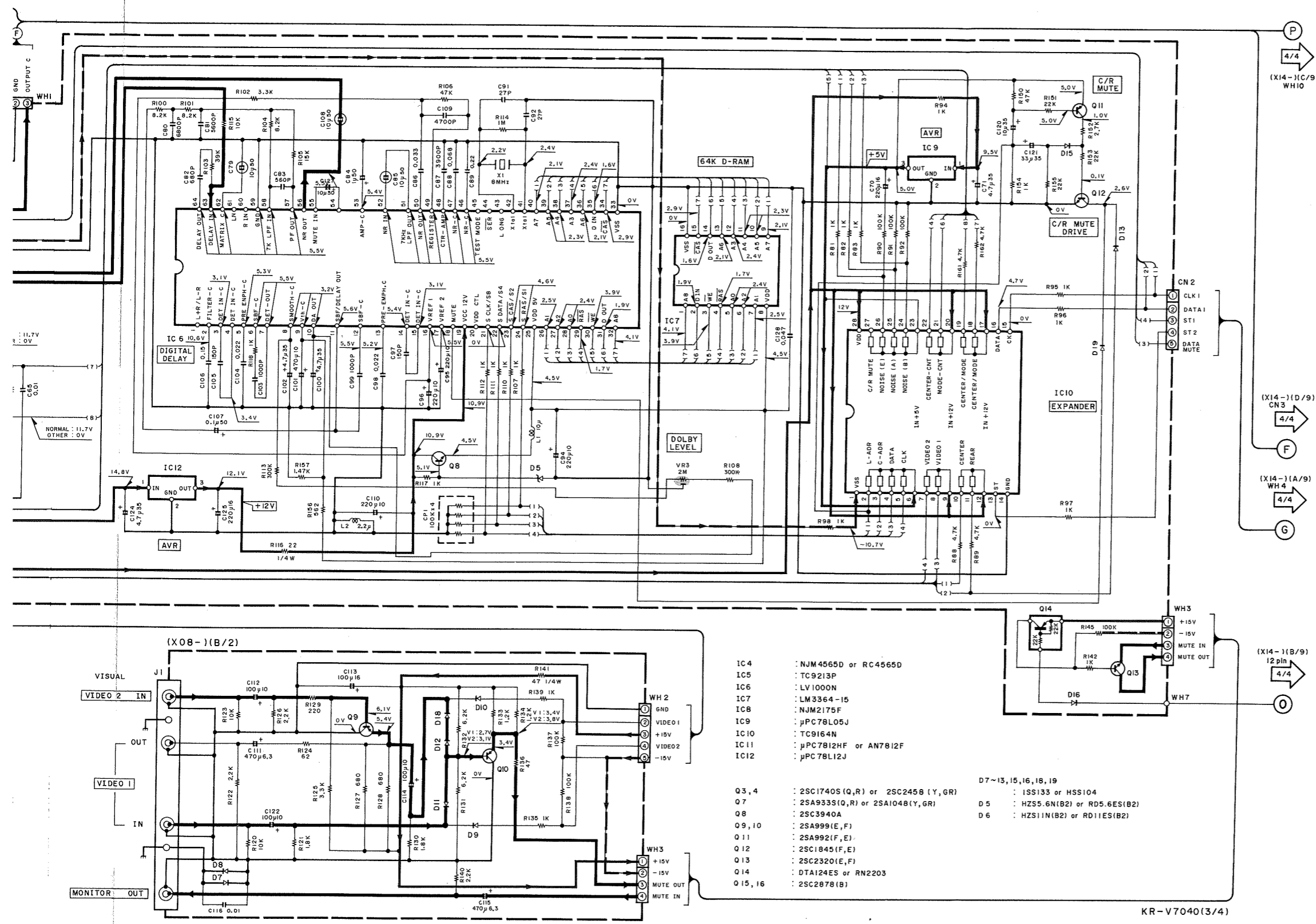


(X09-)(A/4)  
CN2 2/4  
M

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



1  
2  
3  
4  
5  
6  
7



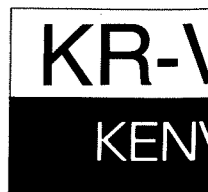
KR-V7040(3/4)

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

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

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

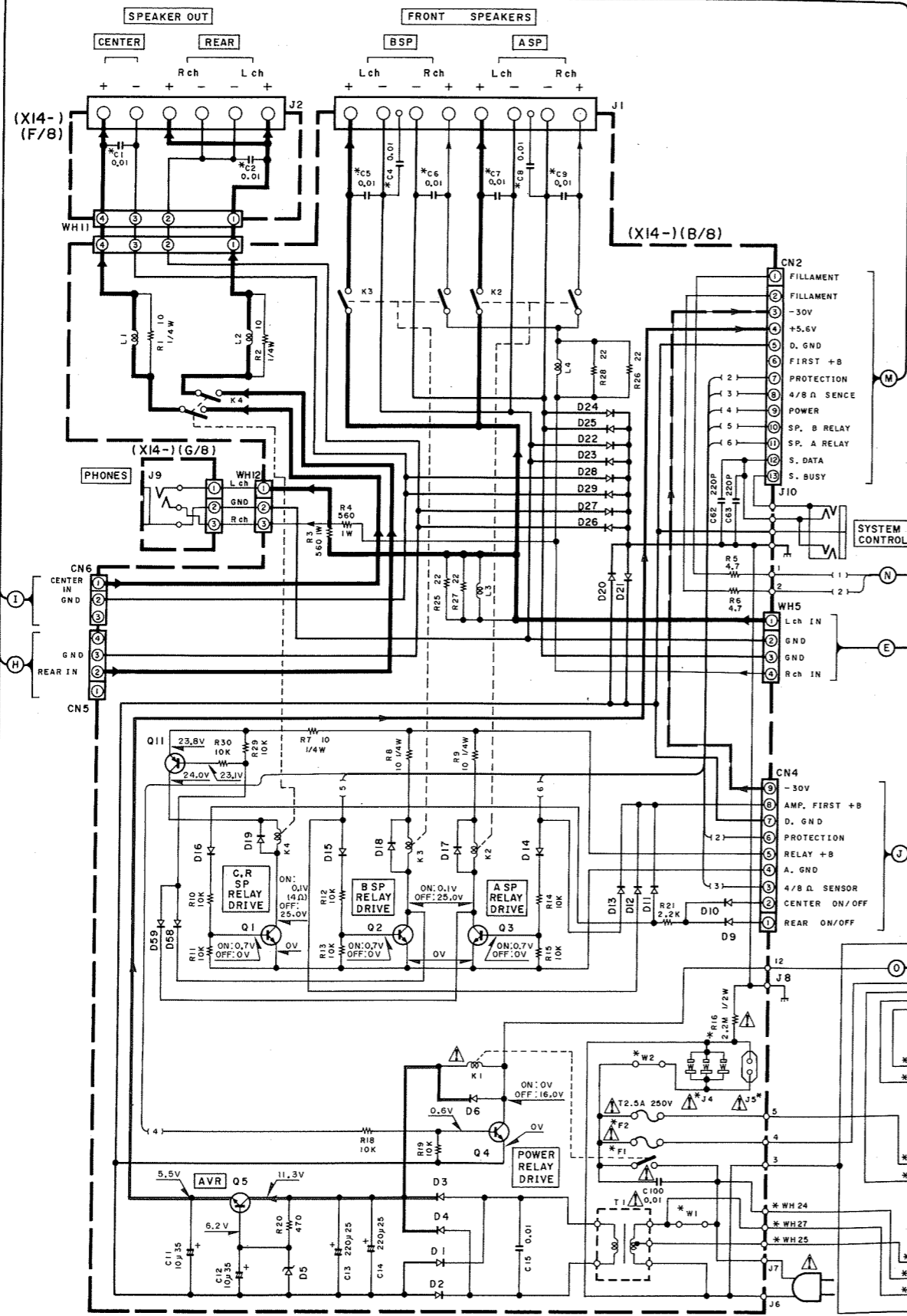
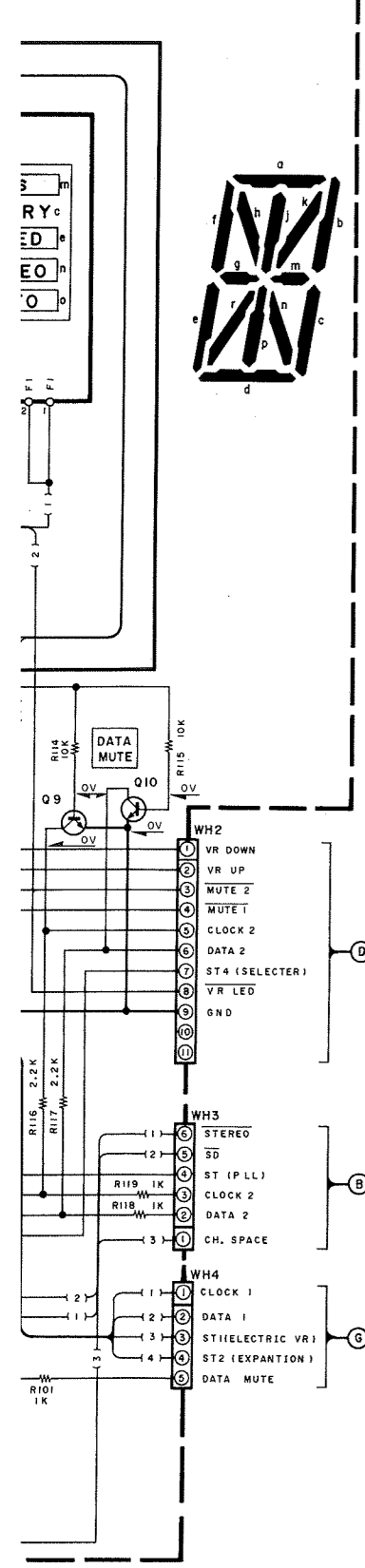
**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer parts list). **⚠** Indicates safety critical components. To reduce risk of electric shock, leakage-current or resistance measurement shall be carried out (exposed parts are acceptably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







RAY UNIT (X14-3020-10) (A/8)

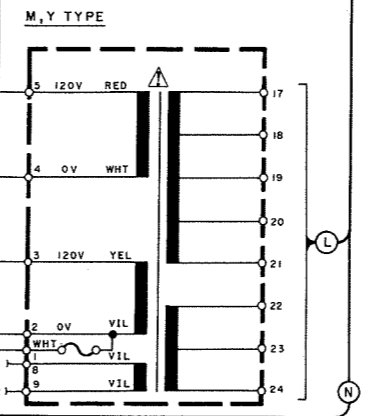
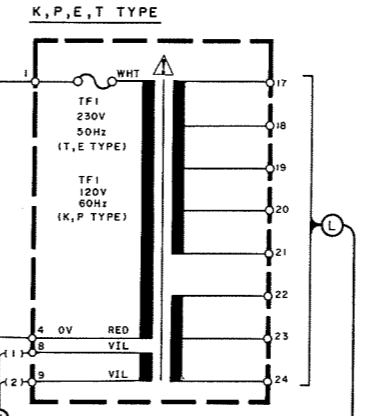
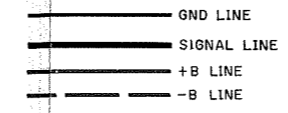


- D1~4 : S5688B or ISRI39-100
- D5 : RD6.2ES(B2) or HZS6.2N(B2)
- D6,9~32,36~50,55~59 : ISS133 or HSS104
- D33,51~54 : B30-1291-05
- D34,35 : RD3.3ES(B2) or HZS3.3N(B2)
- D61 : RD2.7ES(B2) or HZS2.7N(B2)

- Q1~3 : 2SC2320(E,F)
- Q4 : 2SD1302(S,T)
- Q5 : 2SC2003(L,K)
- Q7,9,10 : 2SC1740S(Q,R) or 2SC2458(Y,GR)
- Q8 : 2SA1048(Y,GR) or 2SA933S(Q,R)
- Q11 : 2SA999(E,F)

- IC1 : CXP50116-320Q
- IC2 : TC4028BP or XRU4028B
- IC3 : NJM4565D-D or RC4565D-D
- IC4 : PST529C

- ED1 : 11-MT-656K
- A1 : W02-0975-05 or W02-1046-05



(K, P) 120V 60Hz  
(Y, M) 110~120V/220~240V 50/60Hz  
(E, T) AC220V 50Hz

KR-V7040(K) (4/4)

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

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

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

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

**KR-V7040**  
**KENWOOD**

\* 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.

Table No. 1: KR-V7040. Columns: Ref. No., Address, New Parts, Parts No., Description, Destination, Remarks. Rows include components like METALLIC CABINET, BATTERY COVER, REMOTE CONTROLLER ASSY, ESCUTCHEON, FRONT GLASS, KENWOOD BADGE, WARRANTY CARD, MARRANTY CARD, INSTRUCTION MANUAL, AC PLUG ADAPTER, POLYSTYRENE FOAMED FIXTURE, PROTECTION BAG, etc.

L:Scandinavia K:USA P:Canada  
Y:FX(Far East, Hawaii) T:England E:Europe  
Y:AF(Europe) X:Australia M:Other Areas  
S: SINGAPORE MADE  
Δ indicates safety critical components.

# KR-V7040

## PARTS LIST

Table No. 2: TUNER UNIT (X05-3900-10)(X05-4242-70). Columns: Ref. No., Address, New Parts, Parts No., Description, Destination, Remarks. Rows include BINDING POST, BINDING HEAD, PUSH RIVET, LOOP ANTENNA, TYPED ANTENNA, etc.

L:Scandinavia K:USA P:Canada  
Y:FX(Far East, Hawaii) T:England E:Europe  
Y:AF(Europe) X:Australia M:Other Areas  
S: SINGAPORE MADE  
Δ indicates safety critical components.

\* New Parts  
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Table No. 3: PRE AMPLIFIER UNIT (X08-2450-11). Columns: Ref. No., Address, New Parts, Parts No., Description, Destination, Remarks. Rows include TRANSISTOR, FM FRONT-END ASSY, FM FRONT-END ASSY, etc.

L:Scandinavia K:USA P:Canada  
Y:FX(Far East, Hawaii) T:England E:Europe  
Y:AF(Europe) X:Australia M:Other Areas  
S: SINGAPORE MADE  
Δ indicates safety critical components.

# KR-V7040

## PARTS LIST

Table No. 4: PRE AMPLIFIER UNIT (X08-2450-11). Columns: Ref. No., Address, New Parts, Parts No., Description, Destination, Remarks. Rows include TRANSISTOR, FM FRONT-END ASSY, FM FRONT-END ASSY, etc.

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Y:FX(Far East, Hawaii) T:England E:Europe  
Y:AF(Europe) X:Australia M:Other Areas  
S: SINGAPORE MADE  
Δ indicates safety critical components.

## PARTS LIST

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

No. 6

Ref. No. 参照番号	Address 位 置	New Parts 新 部品	Parts No. 部 品 番 号	Description 部 品 名 / 規 格	Desti- nation 向 備 考
IC7			LM3364-15	IC(DIGITAL DELAY)	
IC8			NJM2175F	IC(DOUBLE PROLOGIC SURR. DECODE)	
IC9			UCF78L05J	IC(VOLTAGE REGULATOR(+5V))	
IC10			TC9164N	IC(16CH BITALERAL SELECTOR SW)	
IC11			AN7812F	IC(VOLTAGE REGULATOR(+12V))	
IC11			UCF7812HF	IC(VOLTAGE REGULATOR(+12V))	
IC12			UCF7812HF	IC(VOLTAGE REGULATOR(+12V))	
Q3 , 4			25C17405(Q,R)	TRANSISTOR	
Q3 , 4			25C2458(Y,G)	TRANSISTOR	
Q7			25A1048(Y,G)	TRANSISTOR	
Q7			25A933S(Q,R)	TRANSISTOR	
Q8			25C3940A	TRANSISTOR	
Q9 , 10			25A999(E,F)	TRANSISTOR	
Q11			25A992(E,F)	TRANSISTOR	
Q12			25C1845(F,B)	TRANSISTOR	
Q13			25C2520(C,F)	TRANSISTOR	
Q14			DI121424S	DIGITAL TRANSISTOR	
Q15 , 16			RA22D3	TRANSISTOR	
			25C2878(B)	TRANSISTOR	
<b>AUDIO UNIT (X09-3590-10)</b>					
C1 , 2			CC45FSL1H390J	CERAMIC	YMTE
C3 , 4			CE04LW1V100M	ELECTRØ	
C5 , 6			CC45FSL1H221J	CERAMIC	
C7 , 8			CE04LW1A101M	ELECTRØ	
C9 , 10			CK45FB1H102K	CERAMIC	
C11 , 12			CF92FV1H123J	MF	
C13 , 14			CK45FB1H332K	CERAMIC	
C15 , 16			CE04LW1V4R7M	ELECTRØ	
C17 , 18			CK45FF1H103Z	CERAMIC	
C19			CK45FB1H681K	CERAMIC	
C20			CE04LW1C470M	ELECTRØ	
C21			CC45FSL1H221J	CERAMIC	
C22 -24			CC45FSL1H221J	CERAMIC	
C25 , 26			CC45FSL1H221J	CERAMIC	
C27 , 28			CC45FSL1H221J	CERAMIC	
C29 , 30			C91-0749-05	CERAMIC	
C31 , 32			C91-0749-05	CERAMIC	
C33 -36			C91-0749-05	CERAMIC	
C37			CE04LW1H010M	ELECTRØ	
C38			CE04JW1H010M	ELECTRØ	
C39 , 40			CC45FSL1H100D	CERAMIC	
C41 , 42			CC45FSL1H101J	CERAMIC	
C43 , 44			CE04LW1H010M	ELECTRØ	
C45			CE04LW1E470M	ELECTRØ	
C46			CE04JW1C470M	ELECTRØ	
C47 , 48			CE04LW1C101M	ELECTRØ	
C49 , 50			CK45FF1H103Z	CERAMIC	
C51			C90-1349-05	NP-ELEC	
C52			CE04LW1H010M	ELECTRØ	
C53			CE04LW1V100M	ELECTRØ	
C54			CE04LW2A100M	ELECTRØ	
C59 -62			CK45FF1H103Z	CERAMIC	
C63 , 64			CF92FV1H104J	MF	
C65 , 66			CF92FV1H224J	MF	
C65 , 66			CF92FV1H224J	MF	

L:Scandinavia  
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M:Other Areas

**S-SINGAPORE MADE**

△ indicates safety critical components.

x New Parts  
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No. 5

Ref. No. 参照番号	Address 位 置	New Parts 新 部品	Parts No. 部 品 番 号	Description 部 品 名 / 規 格	Desti- nation 向 備 考
C94 -96			CE04LW1A221M	ELECTRØ	S
C97			C992FM1H151K	MYLAR	
C98			C992FM1H223J	MYLAR	
C99			C992FM1H102J	MYLAR	
C100			CE04LW1V4R7M	ELECTRØ	
C101			CE04LW1A471M	ELECTRØ	
C102			CE04LW1V4R7M	ELECTRØ	
C103			C992FM1H102J	MYLAR	
C104			C992FM1H223J	MYLAR	
C105			C992FM1H151K	MYLAR	
C106			CF992V1H154J	MF	
C107			CE04LW1H081M	ELECTRØ	
C108			C90-1342-05	NP-ELEC	
C109			C992FM1H472J	MYLAR	
C110			CE04LW1A221M	ELECTRØ	
C111			CE04LW0J471M	ELECTRØ	
C112			CE04LW1A101M	ELECTRØ	
C113			CE04LW1C101M	ELECTRØ	
C114			CE04LW1A101M	ELECTRØ	
C115			CE04LW0J471M	ELECTRØ	
C116			CK45FF1H103Z	CERAMIC	
C120			CE04LW1V100M	ELECTRØ	
C121			CE04LW1V330M	ELECTRØ	
C122			CE04LW1A101M	ELECTRØ	
C124			CE04LW1V4R7M	ELECTRØ	
C125			CE04LW1C221M	ELECTRØ	
C127			C90-1332-05	NP-ELEC	
C128			CK45FF1H473Z	CERAMIC	
J1	1D		E13-0487-05	PHONE-JACK(VIDEØ, MONITOR)	
L1			L40-1001-17	SMALL FIXED INDUCTOR(100H,K)	
L2			L40-2291-17	SMALL FIXED INDUCTOR(2.20H)	
X1			L77-1184-05	CRYSTAL RESONATOR(ØHHZ)	
CP1			R90-0482-05	MULTI-COMP	
R50			R01ANB2E271J	RD	
R116			R01ANB2E207	RD	
R141			R01ANB2E470J	RD	
R156			RN148K2C3620F	RN	
R157			RN148K2C1471F	RN	
VR3			R12-6017-05	TRIMMING POT(2M)(DOLBY LEVEL)	
D5			HZ55.6K(Ø2)	ZENER DIØDE	
D6			HZ5.65S(Ø2)	ZENER DIØDE	
D6			HZ5.11N(Ø2)	ZENER DIØDE	
D6			HZ11ES(Ø2)	ZENER DIØDE	
D7 -13			HSS104	DIØDE	
D7 -13			HSS133	DIØDE	
D15 , 16			HSS104	DIØDE	
D18 , 19			HSS133	DIØDE	
D18 , 19			HSS104	DIØDE	
D18 , 19			HSS133	DIØDE	
IC4			NJM4565D	IC(ØP AMP X2)	
IC4			RC4565D	IC(ØP AMP X2)	
IC5			TC9213P	IC(2CH ELECTRONIC VØLUME)	
IC6			LV1000N	IC(64K D-RAM)	

L:Scandinavia  
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T:England  
E:Europe  
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M:Other Areas

**S-SINGAPORE MADE**

△ indicates safety critical components.

PARTS LIST

No. 8

\* 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.

Table with 6 columns: Ref. No., Address, Parts No., Description, Destination. Lists various electronic components like diodes, resistors, and capacitors.

S: SINGAPORE MADE
L: Scandinavia
K: USA
P: Canada
Y: Far East, Hawaii
E: Europe
M: Other Areas

△ indicates safety critical components.

No. 7

\* 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.

Table with 6 columns: Ref. No., Address, Parts No., Description, Destination. Lists various electronic components like capacitors, resistors, and diodes.

S: SINGAPORE MADE
L: Scandinavia
K: USA
P: Canada
Y: Far East, Hawaii
E: Europe
M: Other Areas

△ indicates safety critical components.

PARTS LIST

No. 10

\* New Parts
Parts without Parts No. are not supplied.
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Teile ohne Parts No. werden nicht geliefert.

Table with 6 columns: Ref. No., Address, Parts No., Description, Destination. Lists various electronic components like capacitors, resistors, and diodes.

S: SINGAPORE MADE
L: Scandinavia
K: USA
P: Canada
Y: Far East, Hawaii
E: Europe
M: Other Areas

△ indicates safety critical components.

No. 9

\* New Parts
Parts without Parts No. are not supplied.
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Teile ohne Parts No. werden nicht geliefert.

Table with 6 columns: Ref. No., Address, Parts No., Description, Destination. Lists various electronic components like capacitors, resistors, and diodes.

S: SINGAPORE MADE
L: Scandinavia
K: USA
P: Canada
Y: Far East, Hawaii
E: Europe
M: Other Areas

△ indicates safety critical components.



## PARTS LIST

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

No. 12

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 備考
C34		CE04LW1A470M	ELECTRØ		
C35		CC45FSL1H470J	CERAMIC		
C36		CC45FSL1H221J	CERAMIC		
C37		CC45FSL1H20C	CERAMIC		
C38		CC45FSL1H470J	CERAMIC		
C41		CE04LW1H010M	ELECTRØ		S
C42		CC45FSL1H221J	CERAMIC		
C43		CC45FSL1H01J	CERAMIC		
C44		CE04LW1A470M	ELECTRØ		
C45		CC45FSL1H470J	CERAMIC		
C46		CC45FSL1H221J	CERAMIC		
C47		CC45FSL1H020C	CERAMIC		
C48 , 49		CE04LW1V470M	ELECTRØ		
C50		CC45FSL1H470J	CERAMIC		
C51 , 52		CE04LW2A010M	ELECTRØ		
R19 , 20		RD14NB2E151J	RD		J 1/4W
R27 - 30		RD14NB2E221J	RD		J 1/4W
R31 , 32		RD14NB2E470J	RD		J 1/4W
R47		RD14NB2E151J	RD		J 1/4W
R51 , 52		RD14NB2E221J	RD		J 1/4W
R67		RD14NB2E151J	RD		J 1/4W
R70 , 71		RD14NB2E221J	RD		J 1/4W
R72 , 73		RD14NB2E470J	RD		J 1/4W
D1 , 2		HSS104	DIØDE		
D1 , 2		HSS133	DIØDE		
D5 , 7		HSS104	DIØDE		
D5 , 7		HSS133	DIØDE		
Q1 - 4		2SA992(F, E)	TRANSISTØR		
Q11 - 14		2SC2631(R, S)	TRANSISTØR		
Q15 , 16		2SA1123(R, S)	TRANSISTØR		
Q17 , 18		2SC1740S(Q, R)	TRANSISTØR		
Q17 , 18		2SC2458(Y, GR)	TRANSISTØR		
Q21 , 22		2SA992(F, E)	TRANSISTØR		
Q23 , 24		2SC2631(R, S)	TRANSISTØR		
Q25		2SA1123(R, S)	TRANSISTØR		
Q31 , 32		2SA992(F, E)	TRANSISTØR		
Q33 , 34		2SC1845(F, E)	TRANSISTØR		
Q35		2SA992(F, E)	TRANSISTØR		

S: SINGAPORE MADE  
 L: Scandinavia  
 Y: PX (Far East, Hawaii)  
 Y: AFES (Europe)  
 K: USA  
 T: England  
 X: Australia  
 P: Canada  
 E: Europe  
 M: Other Areas  
 Δ indicates safety critical components.

\* New Parts  
 Parts without Parts No. are not supplied.  
 Les articles non mentionnés dans le Parts No. ne sont pas fournis.  
 Teile ohne Parts No. werden nicht geliefert.

No. 11

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 備考
D6		HSS104	DIØDE		
D6		HSS133	DIØDE		
D9 - 32		HSS104	DIØDE		
D9 - 32		HSS133	DIØDE		
D34 , 35		HZS3.5N(B2)	ZENER DIØDE		
D34 , 35		RD3.3ES(B2)	ZENER DIØDE		
D36 - 42		HSS104	DIØDE		
D36 - 42		HSS133	DIØDE		
D43		HSS104	DIØDE		TE
D43		HSS133	DIØDE		TE
D44		HSS104	DIØDE		YM
D44		HSS133	DIØDE		YM
D45 - 50		HSS104	DIØDE		
D45 - 50		HSS133	DIØDE		
D55		HSS104	DIØDE		KP
D55		HSS133	DIØDE		KP
D56 - 59		HSS104	DIØDE		
D56 - 59		HSS133	DIØDE		
D61		HZS2.7N(B2)	ZENER DIØDE		
D61		RD2.7ES(B2)	ZENER DIØDE		
E01	1A	11-MT-656K	FLUORESCENT INDICATOR TUBE		
IC1		CAP50116-320Q	IC (MICROPROCESSØR)		
IC2		IC40288P	IC (DECODER)		
IC2		XRU40288	IC (DECODER)		
IC3		NJM4565D-D	IC (ØP AMP X2)		
IC3		RC4565D-D	IC (ØP AMP X2)		
IC4		PST529C	IC (SYSTEM RESET)		
Q1 - 3		2SC2320(E, F)	TRANSISTØR		
Q4		2SD1302(S, T)	TRANSISTØR		
Q5		2SC2003(L, K)	TRANSISTØR		
Q7		2SC1740S(Q, R)	TRANSISTØR		
Q7		2SC2458(Y, GR)	TRANSISTØR		
Q8		2SA1048(Y, GR)	TRANSISTØR		
Q8		2SA933S(Q, R)	TRANSISTØR		
Q9 , 10		2SC1740S(Q, R)	TRANSISTØR		YM
Q9 , 10		2SC2458(Y, GR)	TRANSISTØR		YM
Q11		2SA999(E, F)	TRANSISTØR		
A1	1A	W02-0975-05	ELECTRIC CIRCUIT MODULE		
A1	1A	W02-1046-05	ELECTRIC CIRCUIT MODULE		
A1	1A	W02-1129-05	ELECTRIC CIRCUIT MODULE		
<b>POWER AMPLIFIER UNIT (X85-1190-02)</b>					
C1 , 2		CE04LW1H010M	ELECTRØ		S
C3 - 6		CC45FSL1H101J	CERAMIC		
C7 , 8		CE04LW1A101H	ELECTRØ		
C13 , 14		CC45FSL1H220J	CERAMIC		
C15 , 16		CC45FSL1H150J	CERAMIC		
C17 , 18		CC45FSL1H221J	CERAMIC		
C19 , 20		CC45FSL1H070D	CERAMIC		
C21		CE04LW2A220M	ELECTRØ		
C22		CE04LW2A101M	ELECTRØ		
C24		CE04LW1E330M	ELECTRØ		
C25 , 26		CC45FSL1H101J	CERAMIC		
C31		CE04LW1H010M	ELECTRØ		
C32 , 33		CC45FSL1H101J	CERAMIC		

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