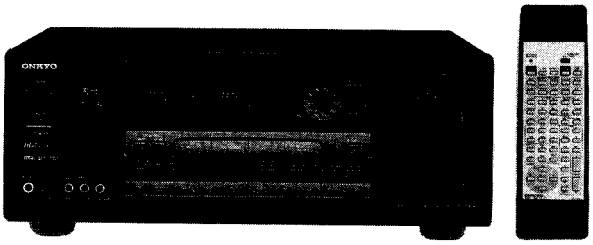
Ref. No. 3601

ONKYO® SERVICE MANUAL

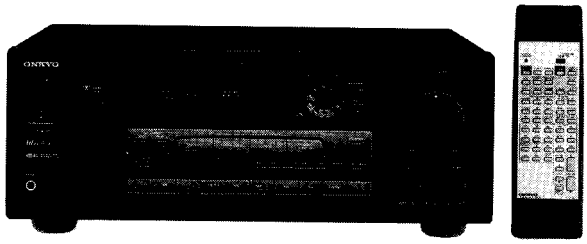
AV DIGITAL AMPLIFIER MODEL TX-DS656



Black and Golden models

BMD	120V AC, 60Hz
BMP, BMPT, BMPA, GMPT	230-240V AC 50Hz
BMWT, BMWR, GMWT, GMWR	120/220V AC, 50/60Hz

AV DIGITAL AMPLIFIER MODEL TX-DS555



Black, Silver, and Golden models

BMD	120V AC, 60Hz
BMP, BMPT, BMPA, SMP, GMPT	230-240V AC 50Hz
BMWT, BMWR, GMWT, GMWR	120/220V AC, 50/60Hz

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PARTS NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

ONKYO®
AUDIO COMPONENTS

SPECIFICATIONS

SPECIFICATIONS

AMPLIFIER SECTION

Continuous Average Power output (FTC)

Front Main L/R channels:

85 watts per channel min. RMS at 8 ohms, both channels driven from 20Hz to 20kHz with no more than 0.08% total harmonic distortion.

Center channel:

85 watts min. RMS at 8 ohms, driven from 20Hz to 20kHz with no more than 0.08% total harmonic distortion.

Surround L/R channels:

85 watts per channel min. RMS at 8 ohms, both channels driven from 20Hz to 20kHz with no more than 0.08% total harmonic distortion.

Front Remote L/R channels:

85 watts per channel min. RMS at 8 ohms, both channels driven from 20Hz to 20kHz with no more than 0.08% total harmonic distortion.

Continuous Power output (DIN)

Front Main L/R channels:	115W × 2 at 6 ohms
Center channel:	115W at 6 ohms
Surround L/R channels:	115W × 2 at 6 ohms
Front Remote L/R channels:	115W × 2 at 6 ohms

Maximum Power output (EIAJ)

Front Main L/R channels:	145W × 2 at 6 ohms
Center channel:	145W at 6 ohms
Surround L/R channels:	145W × 2 at 6 ohms
Front Remote L/R channels:	145W × 2 at 6 ohms

IM Distortion:	0.08% at rated power (FRONT)
Damping Factor:	60 at 8 ohms (FRONT)

Input Sensitivity/Impedance

PHONO	: 2.5mV, 50 kohms
LINE (CD, TAPE-1, 2, DVD,VIDEO-1, 2, 3)	: 200mV, 50 kohms
DIGITAL-2, 3 (COAXIAL)	: 0.5 Vp-p, 75 ohms

Output Level and Impedance

Rec out (TAPE-1, 2,VIDEO-1, 2)	: 200mV, 2.2 kohms
Pre out (FRONT L/R,CENTER,SURROUND L/R)	: 1 V, 560 ohms
(SUBWOOOFER)	: 1 V, 2.2 kohms

Phono Overload:	120 μV RMS at 1,000 Hz, 0.5% THD.	
Frequency Response:	20 to 30,000 Hz, +/-1 dB (STEREO)	
RIAA Deviation:	20 to 20,000 Hz, +/-0.8 dB	
Tone Control:	BASS:	+/-10 dB at 50 Hz
	TREBLE:	+/-10 dB at 10,000 Hz
Signal to Noise Ratio:	PHONO:	80 dB (IHF A, 5 μV input)
	CD/TAPE:	100 dB (IHF A)

VIDEO SECTION

Television Format:	NTSC (U.S. and Canadian models)
	NTSC/PAL (Other models)

Input Sensitivity/Impedance

DVD, VIDEO-1,2,3 (Composite):
1 Vp-p/75 ohms

S-VIDEO (Y signal):
1 Vp-p/75 ohms

S-VIDEO (C signal):
0.28 Vp-p/75 ohms

Output Level/Impedance

VIDEO (VIDEO-1,2,MONI) (Composite):
1 Vp-p/75 ohms

S-VIDEO (Y signal):
1 Vp-p/75 ohms

S-VIDEO (C signal):
0.28 Vp-p/75 ohms

TUNER SECTION

FM:

Tuning Range:	87.5 MHz to 108.0 MHz (50 kHz steps)	
Usable Sensitivity:	Mono:	11.2 dBf, 1.0 μV (75 ohms)
		0.9 μV / 75 ohm DIN
	Stereo:	17.2 dBf, 2.0 μV (75 ohms)
		23 μV / 75 ohm DIN
50dB Quieting Sensitivity:	Mono:	17.2 dBf, 2.0 μV (75 ohms)
	Stereo:	37.2 dBf, 20 μV (75 ohms)
Capture Ratio:	1.5 dB	
Image Rejection Ratio:	U.S. & Canadian models:	40 dB
	Other area models:	85 dB
IF Rejection Ratio:	90 dB	
Signal-to-Noise Ratio:	Mono:	76 dB
	Stereo:	70 dB
Alternate Channel Attenuation:	55 dB, 50 dB (DIN)	
AM Suppression Ratio:	50 dB	
Total Harmonic Distortion:	Mono:	0.15%
	Stereo:	0.25%
Frequency Response:	30 – 15,000 Hz +/-1.0 dB	
Stereo Separation:	45 dB at 1 kHz/30 dB at 100 – 10,000 Hz	
Muting Level:	17.2 dBf, 2.0 μV (75 ohms)	

AM:

Tuning Range:	European models
	522 kHz – 1611 kHz (9 kHz steps)
	U.S. & Canadian models
	530 kHz – 1710 kHz (10 kHz steps)
	Worldwide model
	531 kHz – 1602 kHz (9 kHz steps)
	530 kHz – 1710 kHz (10 kHz steps)
Usable Sensitivity:	30 μV
Image Rejection Ratio:	40 dB
IF Rejection Ratio:	40 dB
Signal-to-Noise Ratio:	40 dB
Total Harmonic Distortion:	0.7%

GENERAL

Power Supply:	AC 120 V, 60 Hz
	AC 230 V, 50 Hz
	AC 120 and 220-230 V switchable, 50/60 Hz
Power Consumption:	US and Canadian models: 4.8 A
	Other area models: 460 W
Dimensions (W × H × D):	435 × 175 × 390 mm
	17-1/8" × 6-7/8" × 15-3/8"
Weight:	12.0 kg (26.5 lbs) (AC 120 V, 60 Hz model)
	12.9 kg (28.4 lbs) (Other models)

Specifications and features are subject to change without notice.

SPECIFICATIONS

AMPLIFIER SECTION

Power Outputs

Continuous Average Power output (FTC)

Front Main L/R channels:

70 watts per channel min. RMS at 8 ohms, both channels driven from 20Hz to 20kHz with no more than 0.08% total harmonic distortion.

Center channel:

70 watts min. RMS at 8 ohms, driven from 20Hz to 20kHz with no more than 0.08% total harmonic distortion.

Surround L/R channels:

70 watts per channel min. RMS at 8 ohms, both channels driven from 20Hz to 20kHz with no more than 0.08% total harmonic distortion.

Continuous Power output (DIN)	
Front Main L/R channels:	100W×2 at 6 ohms
Center channel:	100W at 6 ohms
Surround L/R channels:	100W×2 at 6 ohms
Front Remote L/R channels:	100W×2 at 6 ohms
Maximum Power output (EIAJ)	
Front Main L/R channels:	130W×2 at 6 ohms
Center channel:	130W at 6 ohms
Surround L/R channels:	130W×2 at 6 ohms
Front Remote L/R channels:	130W×2 at 6 ohms
IM Distortion:	0.08% at rated power (Front)
Damping Factor:	60 at 8 ohms
Input Sensitivity/Impedance	
PHONO:	2.5 mV/20 kohms
CD/TAPE1,2/VIDEO1,2,DVD:	200 mV/50 kohms
MULTICHANNEL INPUT (FRONT L/R, SURROUND L/R, CENTER):	200 mV/50 kohms
MULTICHANNEL INPUT (SUBWOOFER):	36mV/50 kohms
Output Level/Impedance	
REC OUT:	200mV/2.2 kohms
PRE OUT:	1V/2.2 kohms
Phono Overload:	120mV RMS at 1 kHz, 0.5% T.H.D
Frequency Response:	20Hz to 30kHz,±1dB (Surround OFF)
RIAA Deviation:	20Hz to 20kHz,±0.8 dB
Tone control	
Bass:	±10 dB at 50 Hz
Treble:	±10 dB at 10 kHz
Signal-to-Noise Ratio (Surround OFF)	
Phono:	80dB (IHF A, 5mV input)
CD/Tape:	100dB (IHF A)
Muting:	-∞ dB

VIDEO SECTION

Input Sensitivity and Impedance	
Video Composite):	1Vp-p/75 ohms
Output Level and Impedance	
Video (Composite):	1Vp-p/75 ohms

DIGITAL SECTION

Digital input sampling Frequency:	32, 44.1, 48 kHz
Input sensitivity/Impedance Coaxial:	0.5 Vp-p/75 ohms

TUNER SECTION

FM

Tuning Range:	87.50-108.00 MHz (50 kHz steps)
Usable sensitivity	
Mono:	11.2dBf, 1.0 μ V (75 ohms)
Stereo:	17.2dBf, 2.0 μ V (75 ohms)
50 dB Quieting Sensitivity	
Mono:	17.2dBf, 2.0 μ V (75 ohms)
Stereo:	37.2dBf, 20 μ V (75 ohms)
Capture Ratio:	1.5 dB
Image Rejection Ratio	
U.S. & Canadian models:	40dB
Other area models:	85 dB
IF Rejection Ratio:	90 dB
Signal-to- Noise Ratio	
Mono:	76 dB
Stereo:	70 dB
Alternate Channel Attenuation:	55 dB
Selectivity:	50 dB (DIN)
AM Suppression Ratio:	50 dB
Total Harmonic Distortion	
Mono:	0.15%
Stereo:	0.25%
Frequency Response:	30-15kHz,±1.0dB
Stereo Separation:	45 dB at 1 kHz 30 dB at 100 Hz to 10 kHz
Muting Level:	17.2 dBf

AM

Tuning Range	
U.S. & Canadian models:	530-1,710 kHz (10 kHz steps)
European & Australian models:	522-1,611 kHz (9 Hz steps)
Worldwide models:	531-1,602 kHz (9kHz steps) 530-1,710 kHz (10 kHz steps)
Usable sensitivity:	30 μ V
Image Rejection Ratio:	40 dB
IF Rejection Ratio:	40 dB
Signal-to- Noise Ratio:	40 dB
Total Harmonic Distortion:	0.70%

GENERAL

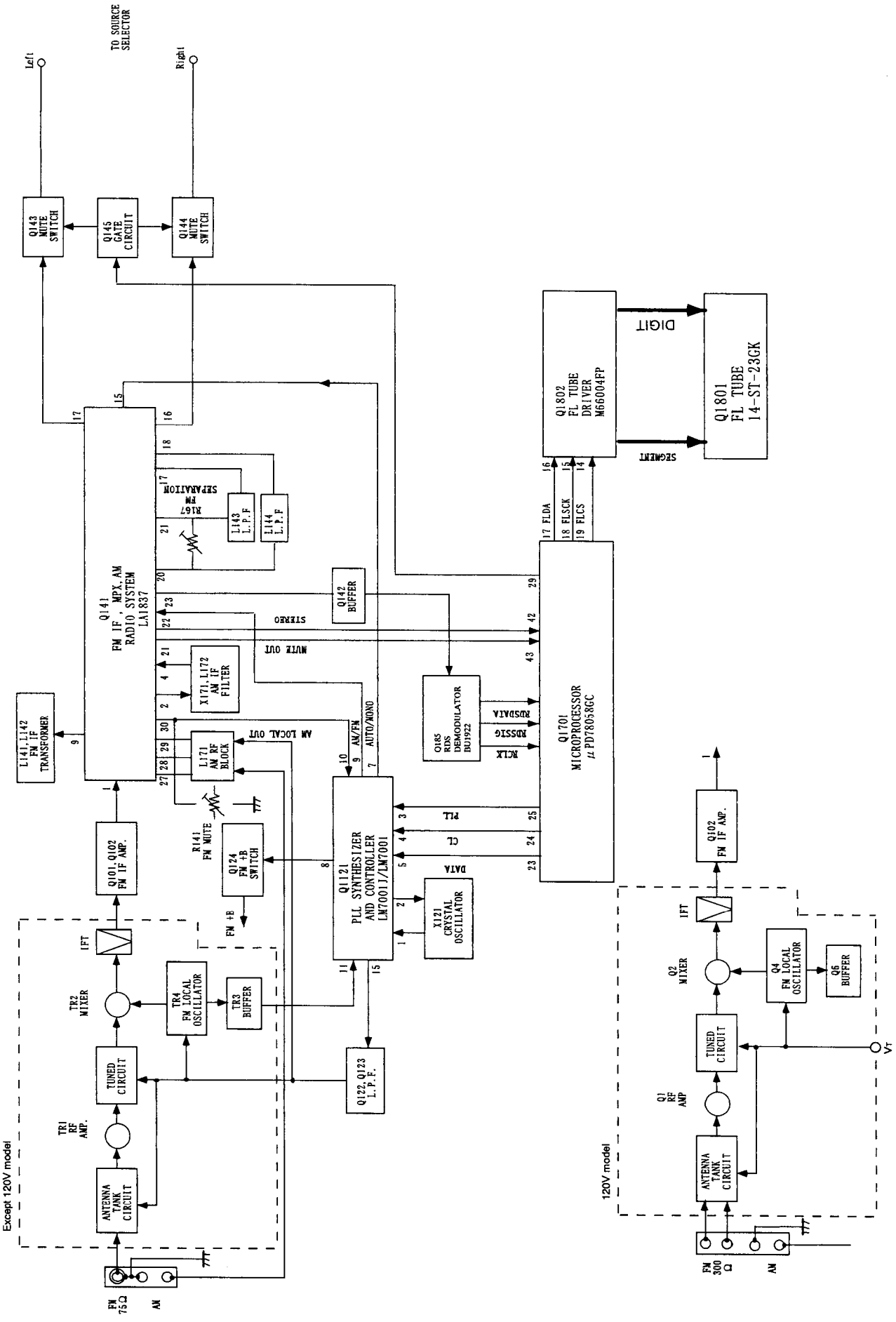
Power supply	AC120V, 60 Hz AC230V, 50 Hz AC 220-230V and 120 V switchable, 50/60 Hz
Power Consumption	
U.S. & Canadian models:	4.1A
Other area models:	410 W
Dimensions (W X H X D):	435 X 175 X 390 mm 17-1/8" X 6-7/8" X 15-3/8"
Weight:	
U.S. & Canadian models:	11.7 kg, 25.8 lbs.
Other area models:	12.0 kg, 26.5 lbs.

REMOTE CONTROL(RC-374M)

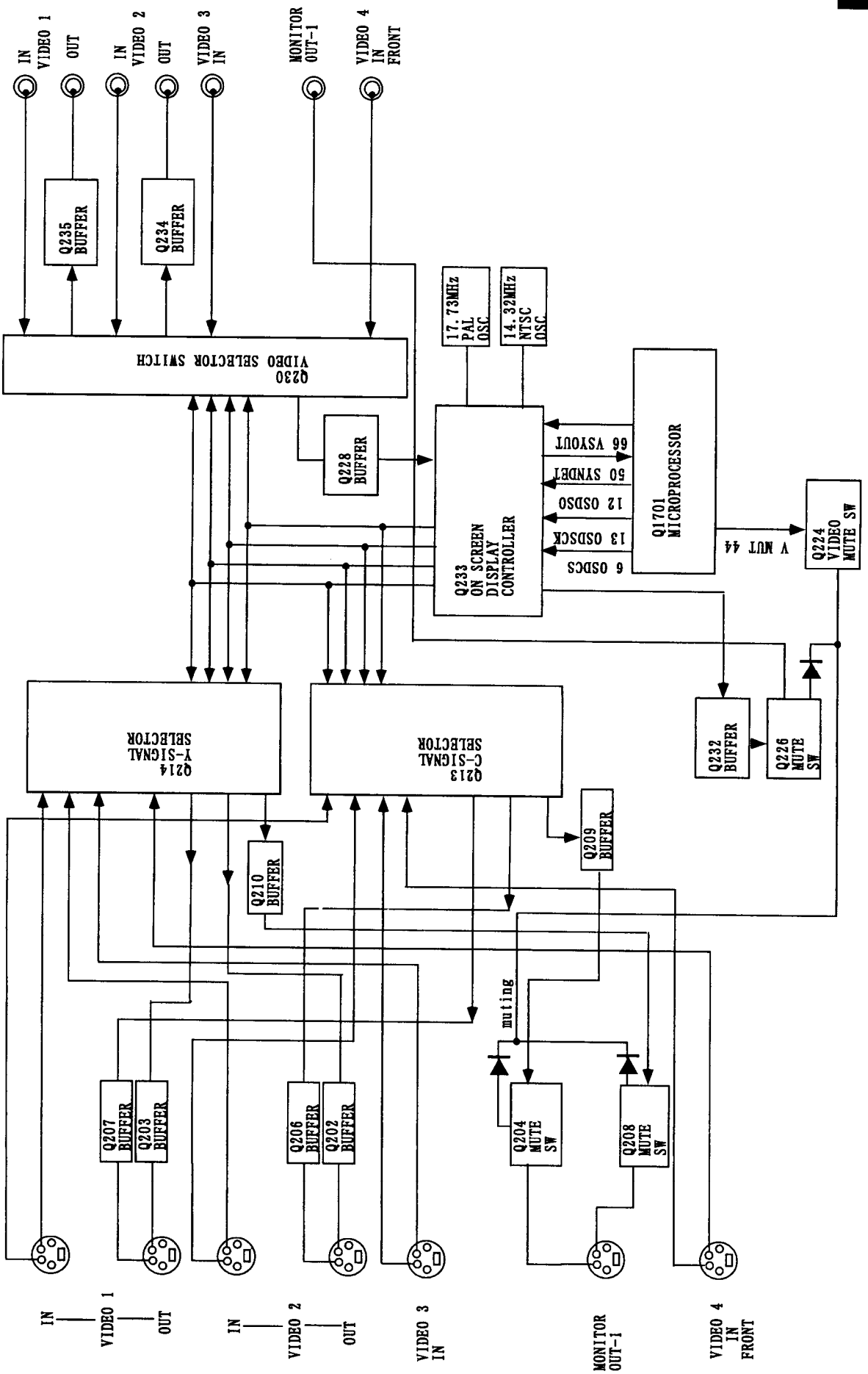
Transmitter:	Infrared
Signal range:	Approx. 5 meters, 16 ft.
Power supply:	Two "AA" batteries (1.5V X 2)

Specifications and features are subject to change without notice.

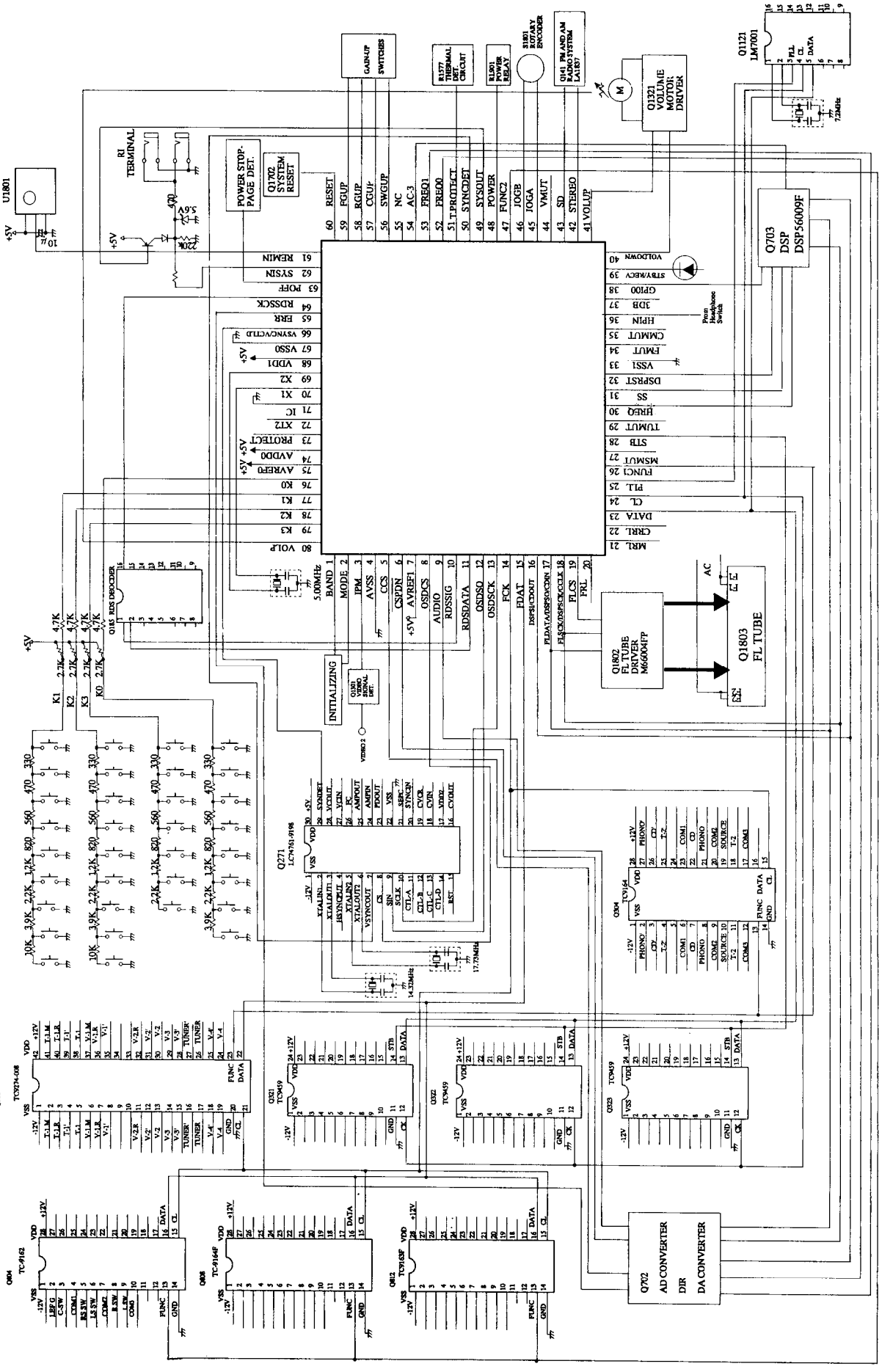
BLOCK DIAGRAM
TUNER SECTION



VIDEO SECTION



MICROPROCESSOR CONNECTION DIAGRAM



TERMINAL DESCRIPTION

Pin No.	Function	Description
1	BAND	Initializing input pin for switching of RDS function and FM/AM band
2	MODE	Initializing input pin for switching of operation mode
3	IPM	Detection input pin for operation of Intelligent Power Management
4	AVSS	Ground pin for AD converter
5	CCS	Chip select pin of DIR IC (CS4226)
6	CSPDN	Power Down pin of DIR IC
7	AVREF1	Reference voltage pin of DA converter
8	OSDCS	Output pin to connect the terminal CS of OSD controller (LC74761)
9	AUDIO	Audio signal input pin of DIR IC
10	RDSSIG	RDS broadcast detection input pin
11	RDSDATA	Data input pin to connect the terminal DATA OUT of RDS demodulator IC (BU1922)
12	OSDSO	Output pin to connect the terminal SIN of OSD controller (LC74761)
13	OSDSCK	Output pin to connect the terminal SCLK of OSD controller (LC74761)
14	FCK	Clock output pin to connect the terminals CK of Function switches (TC9162AN, TC9163AN, TC9164AN, TC9274N-008)
15	FDAT	Data output pin to connect the terminals DATA of Function switches (TC9162AN, TC9163AN, TC9164AN, TC9274N-008)
16	DSPSI/CDOUT	Serial data input pin to connect the terminals CDOUT of DIR IC and MISO of DSP56009
17	FLDATA/DSPSO/CDIN	Serial data output pin to connect the terminals SDATA of FL tube driver IC (M66004FP), MOSI of DSP56009, and CDIN of DIR IC.
18	FLSCK/DSPSCK/CCLK	Serial clock output pin to connect the terminals SCK of FL tube driver IC (M66004FP), SCK of DSP56009, and CCLK of DIR IC.
19	FLCS	Output pin to connect the terminal CS of FL tube driver
20	FRL	Front speaker relay control output pin
21	MRL	Multi speaker relay control output pin
22	CRRL	Center and surround speaker relays control output pin
23	DATA	Data output pin to connect the terminals DATA of electric volume (TC9459P) and PLL IC (LM7001)
24	CL	Clock output pin to connect the terminals CK of electric volume (TC9459P) and PLL IC (LM7001)
25	PLL	Output pin to connect the terminal PLL of PLL IC (LM7001)
26	FUNC1	Output pin to connect the terminals STB of function switches (TC9162AN, TC9274N-008)
27	MSMUT	Muting output pin for surround multi amplifier
28	STB	Strobe output pin to connect the terminal STB of electric volume
29	TUMUT	Muting output pin for tuner section
30	HREQ	Request input pin to connect the terminal HREQ of DSP56009
31	SS	Output pin to connect the terminal SS of DSP56009
32	DSPRST	Reset input pin to connect the terminal RESET of DSP56009
33	VSS1	Ground pin for AD converter
34	FMUT	Muting output pin for front channel section
35	CMMUT	Muting output pin for center and subwoofer channels
36	HPIN	Input terminal to detect the insertion of headphone. When the headphone is inserted, the Surround mode turns OFF.
37	3DB	3-D BASS switching output pin
38	GPI00	Input terminal to connect the terminal GPI00 of DSP56009.
39	STBY/RECV	Indicator output pin of Standby and Received

Pin No.	Function	Description
40	VOLDOWN	Volume control output pins
41	VOLUP	
42	STEREO	Stereo broadcast detection input pin
43	SD	Detection input pin of broadcast more than muting level.
44	VMUT	Muting output pin for video section
45	JOGA	Jog A input pin
46	JOGB	Jog B input pin
47	FUNC2	Strobe output pin to connect the terminals ST of function switch Ics (TC9162F, TC9163F, TC9164F)
48	POWER	Power control output pin
49	SYSOUT	System code output pin
50	SYNCDET	External synchronizing judge input pin of OSD IC.
51	T.PROTECT	Thermal detection input pin. When this pin is low level more than 10 seconds, the power source becomes off.
52	FREQ0	Frequency check input pin of CS4226.
53	FREQ1	Frequency check input pin of CS4226.
54	AC-3	Data signal input pin of DIR IC
55	NC	Not used
56	SWGUP	Volume gain up signal output pin of subwoofer channel.
57	CGUP	Volume gain up signal output pin of center channel.
58	RGUP	Volume gain up signal output pin of surround channel.
59	FGUP	Volume gain up signal output pin of front channel.
60	RESET	System reset input pin
61	REMIN	Signal input pin from the remote controller
62	SYSIN	System code input pin
63	POFF	Stoppage detection input pin
64	RDSSCK	Clock input pin to connect the terminal CLK OUT of RDS demodulator IC
65	ERR	Over level and error signal input pin of DIR IC
66	VCTLD	Vertical synchronizing signal input pin. This signal is used to the switching of NTSC/PAL.
67	VSS0	Ground pin of port section
68	VDD1	Positive power supply (+5V)
69	X2	Ceramic oscillator connection pins of main system.
70	X1	Connect the 5MHz ceramic oscillator to these terminals.
71	IC	Internal connection terminal
72	XT2	Not used.
73	PROTECT	Detection input pin of protection circuit
74	VDD0	Positive power supply pin of port section
75	AVREF0	Reference voltage input pin of AD converter
76	K0	Operation key connection pins
77	K1	
78	K2	
79	K3	
80	VOLP	Position detection pin of master volume

PRINTED CIRCUIT BOARD-PARTS LIST

FRONT AND CENTER CHANNEL POWER AMPLIFIER PC BOARD(NAAF-6301-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.		DESCRIPTION
	Transistors		
Q1501,Q1502	2211732,	*	2SC1845-F,
Q501-Q504	2211733,	*	2SC1845-E,
	2215115 or	*	2SC1775-E or
	2215116	*	2SC1775-F
Q1503	2211732,		2SC1845-F,
Q505,Q506	2211733,		2SC1845-E,
	2215115 or		2SC1775-E or
	2215116		2SC1775-F
Q1504,Q1572	2212115 or		2SC2458-GR or
	2213284		2SC1740S-R
Q1505-Q1507	2211353 or		2SA949-O or
	2211354		2SA949-Y
Q1508,Q1509	2211633 or		2SC2229-O or
	2211634		2SC2229-Y
Q1511	2203010		2SC5171
Q1512	2203000		2SA1930
Q1513	2201653,	*	2SC3856-O,
Q525,Q526	2201654,	*	2SC3856-Y,
	2201655,	*	2SC3856-P,
	2202842 or	*	2SC5242-R or
	2202843	*	2SC5242-O
Q1514	2201663	*	2SA1492-O,
Q527,Q528	2201664	*	2SA1492-Y,
	2201665	*	2SA1492-P,
	2202832	*	2SA1962-R or
	2202833	*	2SA1962-O
Q1515	2214984 or		2SC2631-R or
	2214985		2SC2631-S
Q1551	2211793 or		2SA992-E or
	2211792		2SA992-F
Q1552,Q1553	2214984 or		2SC2631-R or
	2214985		2SC2631-S
Q1571	2212445		2SK365-GR
Q1573	2212644 or		2SA1358-Y or
	2212643		2SA1358-O
Q1574,Q1591	2212115 or		2SC2458-GR or
	2213284		2SC1740S-R
Q507,Q508	2212115 or		2SC2458-GR or
	2213284		2SC1740S-R
Q509-Q514	2211353 or		2SA949-O or
	2211354		2SA949-Y
Q515-Q518	2211633 or		2SC2229-O or
	2211634		2SC2229-Y
Q521,Q522	2203010		2SC5171
Q523,Q524	2203000		2SA1930
Q529,Q530	2214984 or		2SC2631-R or
	2214985		2SC2631-S
Q592	2213284 or		2SC1740S-R or
	2212115		2SC2458-GR
	Diodes		
D1571,D1572	223163 or		1SS133 or
D1574,D1576	223205		1SS270A
D1591,D592	223163 or		1SS133 or
	223205		1SS270A

CIRCUIT NO.	PART NO.	DESCRIPTION
	Diodes	
D581,D582	22380032,	1SR139-100,
	22380035 or	GP104003E or
	22380260	RL1N4003
D1573	224470512	MTZJ5.1B
	Coils	
L1501	231176S	S-1.3C <P/T/W/R/A>
L501,L502	231176S	S-1.3C <P/T/W/R/A>
	Capacitors	
C1501	354744709	47 μF,16V,Elect.
C1504,C1552	354722219	220 μF,6.3V,Elect.
C1509,C1571	354781009	10 μF,50V,Elect.
C1512	374721044	0.1 μF±5%,50V,Plastic
C1514,C1515	354771019	100 μF,63V,Elect.
C1516,C1517	354774709	47 μF,63V,Elect.
C1518	354742219	220 μF,16V,Elect.
C1572	354764709	47 μF,35V,Elect.
C1574	354780109	1 μF,50V,Elect.
C501,C502	354744709	47 μF,16V,Elect.
C507,C508	354722219	220 μF,6.3V,Elect.
C517,C518	354781009	10 μF,50V,Elect.
C523,C524	374721044	0.1 μF±5%,50V,Plastic
C527,C528	354742219	220 μF,16V,Elect.
C581-C584	354771019	100 μF,63V,Elect.
C585-C588	354774709	47 μF,63V,Elect.
C589	374721044	0.1 μF±5%,50V,Plastic
	Resistors	
R1512,R1514	443528204	82Ω ±5%,1/2W,Metal oxide
R1513,R1515	443526804	68Ω ±5%,1/2W,Metal oxide
R1516	443528204	82Ω ±5%,1/2W,Metal oxide
R1519	5210288	N06HR2.2KBE,Trimming
R1522	443521514	150Ω ±5%,1/2W,Metal oxide
R1523,R1524	453530224	2.2Ω ±5%,1/2W,Metal
R1525	4000132	RGC55 0.22,Metal plate
R1531	453630824	8.2Ω ±5%,1W,Metal
R1537,R1538	4500159	0.22Ω ±5%,1/4W,Metal
R523-R526	443528204	82Ω ±5%,1/2W,Metal oxide
R527-R530	443526804	68Ω ±5%,1/2W,Metal oxide
R531,R532	443528204	82Ω ±5%,1/2W,Metal oxide
R537,R538	5210288	N06HR2.2KBE,Trimming
R543,R544	443521514	150Ω ±5%,1/2W,Metal oxide
R545-R548	453530224	2.2Ω ±5%,1/2W,Metal
R549,R550	4000132	RGC55 0.22,Metal plate
R561,R562	453630824	8.2Ω ±5%,1W,Metal
R581-R586	4500159	0.22Ω ±5%,1/4W,Metal
R593,R594	443623914	390Ω ±5%,1W,Metal oxide
	Relays	
RL1591	25065510,	NRL-2P5A-DC24-095,
RL592	25065517 or	NRL-2P5A-DC24-098 or
	25065563	NRL-2P5A-DC24-129
	Sockets	
JL501a,JL507a	25051110	NSCT-6P897
JL502a	25051111	NSCT-7P898
JL506a	25051095	NSCT-11P882
JL509a	25051087	NSCT-3P874

NOTE: THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

CAUTION: Replacement of the transistor of mark *, if necessary, must be made from the same beta group (HFE) as the original type.

CIRCUIT NO.	PART NO.		DESCRIPTION
	Plugs		
JL503b	25055630		NPLG-9P592
JL508b	25055631		NPLG-10P593
P1501	25055038		NPLG-2P29
P401a	25055139		NPLG-9P123
P501,P502	25055038		NPLG-2P29
P503	25055099		NPLG-2P83

SURROUND AMPLIFIER PC BOARD(NAAF-6302-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.		DESCRIPTION
	Transistors		
Q601-Q604	2211732,	*	2SC1845-F,
	2211733,	*	2SC1845-E,
	2215115 or	*	2SC1775-E or
	2215116	*	2SC1775-F
Q605,Q606	2211732,		2SC1845-F,
	2211733,		2SC1845-E,
	2215115 or		2SC1775-E or
	2215116		2SC1775-F
Q607,Q608	2212115 or		2SC2458-GR or
	2213284		2SC1740S-R
Q609-Q614	2211353 or		2SA949-O or
	2211354		2SA949-Y
Q615-Q618	2211633 or		2SC2229-O or
	2211634		2SC2229-Y
Q625,Q626	2201653,	*	2SC3856-O,
	2201654,	*	2SC3856-Y,
	2201655,	*	2SC3856-P,
	2202842 or	*	2SC5242-R or
	2202843	*	2SC5242-O
Q627,Q628	2201663,	*	2SA1492-O,
	2201664,	*	2SA1492-Y,
	2201665,	*	2SA1492-P,
	2202832 or	*	2SA1962-R or
	2202833	*	2SA1962-O
Q621,Q622	2203010		2SC5171
Q623,Q624	2203000		2SA1930
Q629,Q630	2214985 or		2SC2631-S or
	2214984		2SC2631-R
Q691,Q692	2212115 or		2SC2458-GR or
	2213284		2SC1740S-R
	Diodes		
D681,D682	22380032,		1SR139-100,
	22380035 or		GP104003E or
	22380260		RL1N4003
D691,D692	223163 or		1SS133 or
	223205		1SS270A
	Coils		
L601,L602	231176S		S-1.3C <P/T/W/R/A>
	Capacitors		
C601,C602	354744709		47 μF,16V,Elect.
C607,C608	354722219		220 μF,6.3V,Elect.
C617,C618	354781009		10 μF,50V,Elect.
C623,C624	374721044		0.1 μF±5%,50V,Plastic
C635,C636	354742219		220 μF,16V,Elect.
C662	374731044		0.1 μF±5%,100V,Plastic
C663,C664	3504341		15000 μF,63V,Elect.
C681-C684	354771019		100 μF,63V,Elect.
C685-C688	354774709		47 μF,63V,Elect.
C689	354741009		10 μF,16V,Elect.
	Resistors		
R623-R626	443528204		82Ω ±5%,1/2W,Metal oxide
R627-R630	443526804		68Ω ±5%,1/2W,Metal oxide
R631,R632	443528204		82Ω ±5%,1/2W,Metal oxide
R637,R638	5210288		N06HR2.2KBE,Trimming
R643,R644	443521514		150Ω ±5%,1/2W,Metal oxide
R645-R648	453530224		2.2Ω ±5%,1/2W,Metal
R649,R650	4000132		RGC55 0.22
R673,R674	453630824		8.2Ω ±5%,1W,Metal
R681-R686	4500159		0.22Ω ±5%,1/4W,Metal
	Relays		
RL691,RL692	25065510,		NRL-2P5A-DC24-095,
	25065517 or		NRL-2P5A-DC24-098 or
	25065563		NRL-2P5A-DC24-129
	Sockets		
JL502b	25050284		NSCT-7P112
JL507b	25050283		NSCT-6P111
JL603a,JL942a	25051110		NSCT-6P897
	Plugs		
JL506b	25055632		NPLG-11P594
P601,P602	25055038		NPLG-2P29

POWER SUPPLY CIRCUIT PC BOARD (NAPS-6303-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.		DESCRIPTION
	Transistor		
Q921	2212115 or		2SC2458-GR or
	2213284		2SC1740S-R
	Diodes		
D925	223163 or		1SS133 or
	223205		1SS270A
D921-D924	22380032,		1SR139-100,
	22380035 or		GP104003E or
	22380260		RL1N4003
	Power transformer		
T902	2300670A	⚠	NPT-1111D <D>
	2300671A	⚠	NPT-1111P <P/T/A>
	2300672A	⚠	NPT-1111DG <W/R>
	Capacitors		
C901	3500191	⚠	DE7150F-103M, IS
C922	354742219		220 μF,16V,Elect.
	Resistor		
R901	431533355	⚠	RC1/2GFKUL-3.3M,Solid <D>
R921	453530824		8.2Ω ±5%,1/2W,Metal
	Fuses		
F901	252199	⚠	10A-UL, Fuse <D/W/R>
F902	252078	⚠	5A-SE-EAK,Fuse <P/T/W/A/R>
F903	252075	⚠	2.5A-SE-EAK,Fuse <P/T>
	Fuseholders		
F901a	25050065	⚠	YSH403T <D/W/R>
F902a	25050065	⚠	YSH403T <P/T/A/W/R>
F903a	25050065	⚠	YSH403T <P/T>
	Socket		
JL1701b	25050267		NSCT-3P95

NOTE: THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

CIRCUIT NO.	PART NO.		DESCRIPTION
	AC outlet		
P902	25051125	⚠	NSCT-4P912 <P/T/W/R>
	25051126	⚠	NSCT-4P913 <D>
	25052115	⚠	NSCT-2P2013 <A>
	Plug		
P901a	25055675	⚠	NPLG-2P631
	Relay		
RL901	25065516 or	⚠	NRL-1P10A-DC12-097 or
	25065248	⚠	NRL-1P15A-DC12-29 <D>
RL901	25065508,	⚠	NRL-1P10A-DC12-093,
	25065526,	⚠	NRL-1P5A-DC12-102,
	25065561 or	⚠	NRL-1P5A-DC12-127 or
	25065515	⚠	NRL-1P5A-DC12-096 <P/T/W/R/A>
	Switch		
S901	25065437	⚠	NSS-22157P <W/R>
	Fuse labels		
F902b	29361938		T5AL250V <P/T/W/R/A>
F901b	29362241		10A/125V <D/W/R>

PRIMARY CIRCUIT PC BOARD (NAETC-6305-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
C665	374731044	0.1 μF±5%,100V,Plastic capacitor
R941,R942	453532294	0.22Ω ±5%,1/2W,Metal resistor
R944,R945	453530104	1Ω ±5%,1/2W,Metal resistor
R946	453532294	0.22Ω ±5%,1/2W,Metal resistor
JL941b	25050284	NSCT-7P112,Socket
JL942b	25051110	NSCT-6P897,Socket

THERMAL DETECTOR PC BOARDS (NAETC-6306/6307/6308/6309/6310-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Transistors	
Q519,Q520	2212653 or	2SC3421-O or
Q1510	2212654	2SC3421-Y
Q619,Q620	2212653 or	2SC3421-O or
	2212654	2SC3421-Y

POWER SWITCH PC BOARD (NASW-6311-1B/1C/1D)

CIRCUIT NO.	PART NO.		DESCRIPTION
C906	3500191	⚠	DE7150F-103M,IS capacitor <P/T/W/R/A>
C906a	27301216	⚠	SB1925A,Cover, capacitor <P/T/W/R/A>
S906	25035550	⚠	NPS-111-L512P,Power switch <P/T/W/R/A>

THERMAL DET. PC BOARD(NAETC-6314-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
JL509b	25051087	NSCT-3P874,Socket
R1577	4000150	PTH9M04BC222TS2F333,Thermistor

MAIN CIRCUIT PC BOARD (NADG-6316-1A/1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q471-Q473	22240581R1	NJM4565M
Q701	222740046R1TO	TC74HCU04F
Q702	22241218R3	CS4226-KQ
Q703	22241219R3 or	DSPF56009FJ88 or
	22241235R3	XCF56009FJ88
Q704	22241101R2	LC32464M-80

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q761-Q764	22240581R1	NJM4565M
Q791,Q792	222780055	78M05HF
Q801-Q803	22240581R1	NJM4565M
Q804	22240981R2	TC9162AF
Q805-Q807	22240581R1	NJM4565M
Q808	22241221R2	TC9164AF
Q809,Q810	22240581R1	NJM4565M
Q812	22240943R2	TC9163AF
Q813	22240581R1	NJM4565M
	Photo couplers	
U701	24120037	TORX178A
Q983	24120043	ON3131 <D>
	Transistors	
Q981,Q982	221282 or	DTC144ES or
	2213560	RN1204
Q984	2213510 or	DTA114ES or
	2214350	RN2202 <D>
Q985	2212115 or	2SC2458-GR or
	2213284	2SC1740S-R <D>
	Diodes	
D761-D764	223234R2	1SS352
D983,D984	223234R2	1SS352 <D>
D981-D983	223234R2	1SS352 <P/T/W/R/A>
	Coils	
L708,L709	231237K100R2	NCH-1475
L710	233454K022	NCH-1272
	Crystal	
X701	3010279	XTL-18.432M
	Capacitors	
C471-C473	354744709	47 μF,16V,Elect.
C474-C479	374721224	1200pF±5%,50V,Plastic
C480-C482	374722224	2200pF±5%,50V,Plastic
C701	355721019	100 μF,6.3V,Elect.
C711	354742209	22 μF,16V,Elect.
C713,C736	374721044	0.1 μF±5%,50V,Plastic
C714	374728224	8200pF±5%,50V,Plastic
C721-C724	354741009	10 μF,16V,Elect.
C740,C742	354721019	100 μF,6.3V,Elect.
C783-C786	354744709	47 μF,16V,Elect.
C793,C794	354741009	10 μF,16V,Elect.
C801-C806	354781009	10 μF,50V,Elect.
C813-C818	374723324	3300pF±5%,50V,Plastic
C819-C824	374721524	1500pF±5%,50V,Plastic
C825-C830	374721024	1000pF±5%,50V,Plastic
C851-C860	374722244	0.22 μF±5%,50V,Plastic
C861-C866	354780229	2.2 μF,50V,Elect.
C881	374721034	0.01 μF±5%,50V,Plastic
C882,C886	374722244	0.22 μF±5%,50V,Plastic
C883	374724734	0.047 μF±5%,50V,Plastic
C884	374721244	0.12 μF±5%,50V,Plastic
C885	374722234	0.022 μF±5%,50V,Plastic
C982	354741009	10 μF,16V,Elect.
C983	354741009	10 μF,16V,Elect. <D>

CIRCUIT NO.	PART NO.	DESCRIPTION
	Terminals	
P703	25045303 or	NPJ-4PDBL162 or
	25045537	NPJ-4PDWR361
P701,P702	25045473	NPJ-1PDBL291
P981	25045504	NPJ-1PDBL319
P704	25045549	NPJ-2PDBL370
P982	25045293	HSJ1003-01-012 <P/T/W/R/A>
	25045433	HSJ1003-01-013 <D>
	Sockets	
P711,P712	25051241	NSCT-20P1031

PREAMPLIFIER CIRCUIT PC BOARD (NAAF-6317-1A/1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q1301,Q1371	22240581R1	NJM4565M
Q304	22241221R2	TC9164AF
Q305	22240829	TC9274N-008
Q306,Q307	22240581R1	NJM4565M
Q321-Q323	22241220R2	TC9459F
Q371,Q372	22240581R1	NJM4565M
Q401,Q421	22240581R1	NJM4565M
Q441	22240581R1	NJM4565M
	Transistors	
Q1372	2211945	2SK246-GR
Q308,Q375	2213510 or	DTA114ES or
	2214350	RN2202
Q309	2213816,	2SD1450-T,
	2212355,	2SD1302-S,
	2212356 or	2SD1302-T or
	2213815	2SD1450-S
Q373,Q374	2211945	2SK246-GR
Q402,Q403	2213631 or	RN1241-A or
Q412,Q413	2213632	RN1241-B
Q404,Q405	2213510 or	DTA114ES or
Q424,Q425	2214350	RN2202
Q422,Q423	2213631 or	RN1241-A or
Q432,Q433	2213632	RN1241-B
Q434,Q435	2213510 or	DTA114ES or
Q454	2214350	RN2202
Q442,Q443	2213631 or	RN1241-A or
Q452,Q453	2213632	RN1241-B
	Diodes	
D1301,D1302	223234R2	1SS352
D1371	223234R2	1SS352
D371,D372	223234R2	1SS352
D401	223234R2	1SS352
D421,D431	223234R2	1SS352
	Capacitors	
C1301-C1304	354741009	10 μF,16V,Elect.
C1306	374721034	0.01 μF±5%,50V,Plastic
C1307	354741009	10 μF,16V,Elect.
C1371	354780229	2.2 μF,50V,Elect.
C1375,C1376	374721044	0.1 μF±5%,50V,Plastic
C345,C346	354741009	10 μF,16V,Elect.
C351,C352	354744709	47 μF,16V,Elect.
C355,C356	354744709	47 μF,16V,Elect.
C359,C360	354744709	47 μF,16V,Elect.

CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C361,C362	354742209	22 μF,16V,Elect.
C365,C366	354742209	22 μF,16V,Elect.
C371,C372	354780229	2.2 μF,50V,Elect.
C379-C382	374721044	0.1 μF±5%,50V,Plastic
C383,C384	374721534	0.015 μF±5%,50V,Plastic
C385,C386	354744709	47 μF,16V,Elect.
C397,C398	354744709	47 μF,16V,Elect.
C406,C416	354744709	47 μF,16V,Elect.
C410,C430	354741009	10 μF,16V,Elect.
C426,C436	354744709	47 μF,16V,Elect.
C431,C441	354780229	2.2 μF,50V,Elect.
C440	354741009	10 μF,16V,Elect.
C446,C456	354744709	47 μF,16V,Elect.
C451	354780229	2.2 μF,50V,Elect.
	Socket	
JL307b	25050271	NSCT-7P99
P311	25051240	NSCT-15P1030
P312	25051527	NSCT-16P1314
P313	25051528	NSCT-17P1315
P401	2009990505UL	NSAS-18P0667
	Terminals	
P304-P306	25045552 or	NPJ-6PDRW371 or
	25045553	NPJ-6PDRW372

FRONT/CENTER SPEAKER TERMINAL PC BOARD (NAETC-6318-1A/1B)

CIRCUIT NO.	PAR NO.	DESCRIPTION
C1581-C1583	374721034	0.01 μF±5%,50V,Plastic capacitor <P/T/W/R/A>
JL501b,JL603b	25050270	NSCT-6P98,Socket
P1581	25060284	NTM-6PDMN215,Terminal

REAR/REMOTE SPEAKER TERMINAL PC BOARD (NAETC-6319-1A/1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
C627-C630	374721034	0.01 μF±5%,50V,Plastic capacitor <P/T/W/R/A>
JL603b	25050270	NSCT-6P98,Socket
P611	25060274	NTM-8PDMN205,Terminal

MICROPROCESSOR CIRCUIT PC BOARD (NAAR-6322-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q1701	22241285	MPD78058GC-B09-8BT
Q951	222780125	78M12HF
Q952	222790125	79M12HF
Q953,Q954	222780055	78M05HF
Q955	222780565JRC	78M56(NJM78M56FA)
	Transistors	
Q1702	221282 or	DTC144ES or
	2213560	RN1204
Q1703	2213510 or	DTA114ES or
	2214350	RN2202
Q956	2211455	2SA1015-GR
Q957	2211255	2SC1815-GR

CIRCUIT NO.	PART NO.	DESCRIPTION
	Diodes	
D1701-D1703	223163 or	1SS133 or
D1705,D1706	223205	1SS270A
D1704	224470623	MTZJ6.2C
D1707	224470562	MTZJ5.6B
D1708	224470512	MTZJ5.1B
D952-D955	22380003F	1N5402F
D956	223163 or	1SS133 or
D961-D963	223205	1SS270A
D957-D959	22380032,	1SR139-100,
D965-D968	22380035 or	GP104003E or
	22380260	RL1N4003
D960	224473604	MTZJ36D
	Coil	
L1701	233454K220	NCH-1452 220K
	Crystal	
X1701	3010242	CST5.00MGW
	Capacitors	
C1701,C1704	354721019	100 μF,6.3V,Elect.
C1702	3000076 or	EECS5R5T104 or
C1702 or	3000078	DX-5R5L104
C1703	375524744	0.47 μF±5%,50V,Plastic
C1705	354780109	1 μF,50V,Elect.
C1707	354741009	10 μF,16V,Elect.
C953	3504213	4700 μF,35V,Elect.
C954	354761029	1000 μF,35V,Elect.
C956,C958	354741009	10 μF,16V,Elect.
C961	354744729	4700 μF,16V,Elect.
C963,C965	354741009	10 μF,16V,Elect.
C966	354751029	1000 μF,25V,Elect.
C968	354741009	10 μF,16V,Elect.
C969	354762219	220 μF,35V,Elect.
C970	354772219	220 μF,63V,Elect.
C973	354754719	470 μF,25V,Elect.
	Resistors	
R951,R952	452630334	3.3Ω ±5%,1W,Metal
R953	452530684	6.8Ω ±5%,1/2W,Metal
R954	452630564	5.6Ω ±5%,1W,Metal
R955	452630334	3.3Ω ±5%,1W,Metal
R957,R958	442523304	33Ω ±5%,1/2W,Metal oxide
R959	452530224	2.2Ω ±5%,1/2W,Metal
R960	442522204	22Ω ±5%,1/2W,Metal oxide
R963	453530104	1Ω ±5%,1/2W,Metal
R964	443522204	22Ω ±5%,1/2W,Metal oxide
R965	443523314	330Ω ±5%,1/2W,Metal oxide
	Sockets	
JL1701a	25051107	NSCT-3P894
JL508a	25051094	NSCT-10P881
JL941a	25051111	NSCT-7P898
P1701a	25052036,	NSCT-27P1823,
	25050967,	NSCT-27P754,
	25051293 or	NSCT-27P1082 or
	25051834	NSCT-27P1621

CIRCUIT NO.	PART NO.	DESCRIPTION
	Plugs	
P101a	25055650	NPLG-10P606 <D/T/W/R/A>
	25055651	NPLG-12P607 <P>
P1321a,P201a	25055706	NPLG-10P662
P311a,P711a	25055711	NPLG-15P667
P712a	25055712	NPLG-20P668
P102a,P312a	25055805	NPLG-16P761
P313a	25055806	NPLG-17P762

COMPOSITE VIDEO SIGNAL PC BOARD (NAVD-6323-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q230	22240373	BA7625
Q233	22241037	LC74761-9189
	Transistors	
Q224	2213640 or	DTC123JS or
	2214660	RN1205
Q226,Q236	2212285 or	2SC2878-A or
	2212286	2SC2878-B
Q228,Q232	2212125 or	2SA1048-GR or
Q234,Q235	2213354	2SA933S-R
	Diodes	
D211	223163 or	1SS133 or
D213-D215	223205	1SS270A
	Crystal	
X201	3010167	XTL-14.32M
X202	3010238	XTL-17.73M <P/T/W/R/A>
	Coils	
L203	233454J056	NCH-1452 056J
L201	233454K220	NCH-1452 220K
	Capacitors	
C228	354780229	2.2 μF,50V,Elect.
C236,C253	354780109	1 μF,50V,Elect.
C237,C242	354721019	100 μF,6.3V,Elect.
C239	354724719	470 μF,6.3V,Elect.
C240	354744709	47 μF,16V,Elect.
C244,C248	375524744	0.47 μF±5%,50V,Plastic
C245,C265	354721019	100 μF,6.3V,Elect.
C246,C262	354784799	0.47 μF,50V,Elect.
C251	374721224	1200pF±5%,50V,Plastic
C257	374726824	6800pF±5%,50V,Plastic
C259-C261	354780229	2.2 μF,50V,Elect.
C263	374722234	0.022 μF±5%,50V,Plastic
C266-C268	354724719	470 μF,6.3V,Elect.
	Terminals	
P210,P211	25045299	NPJ-3PDYE158
P212	25045469 or	NPJ-4PDBL287 or
	25045554	NPJ-4PDRW373
P213	25045549	NPJ-2PDBL370
	Sockets	
JL503a	25051093	NSCT-9P880
P201b	25051235	NSCT-10P1025

S VIDEO CIRCUIT PC BOARD (NAVD-6324-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	IC	
Q213,Q214	22240373	BA7625
	Transistors	
Q202,Q203	2212125 or	2SA1048-GR or
Q206,Q207	2213354	2SA933S-R
Q204,Q208	2212285 or	2SC2878-A or
	2212286	2SC2878-B
Q209,Q210	2212125 or	2SA1048-GR or
	2213354	2SA933S-R
	Diodes	
D201-D203	223163 or	1SS133 or
D207	223205	1SS270A
	Capacitors	
C202,C204	354780229	2.2 μ F,50V,Elect.
C203,C205	354724719	470 μ F,6.3V,Elect.
C206	354780229	2.2 μ F,50V,Elect.
C207,C224	354724719	470 μ F,6.3V,Elect.
C208-C213	354780229	2.2 μ F,50V,Elect.
C219,C220	354780229	2.2 μ F,50V,Elect.
C223	354721019	100 μ F,6.3V,Elect.
	Sockets	
P203,P206	25051568	NSCT-12P1355

CONNECTOR PC BOARD(NAETC-6325-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
P1201a	25055135	NPLG-5P119,Plug

DISPLAY CIRCUIT PC BOARD(NADIS-6326-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	FL tube	
Q1801	212190	14-ST-23GK
	IC	
Q1802	22240685R9	M66004FP
	Remote sensor	
U1801	241305	GP1U281X
	Diodes	
D1801,D1802	223163 or	1SS133 or
D1804	223205	1SS270A
D1803	224471803	MTZJ18C
D1805	225290	SEL4110R
	Capacitors	
C1802	375524744	0.47 μ F±5%,50V,Plastic
C1803	354721019	100 μ F,6.3V,Elect.
C1808	354781009	10 μ F,50V,Elect.
C1811	354741009	10 μ F,16V,Elect.
	Resistor	
R1851	49163103414	RM1/10IJ-10K*14
	Sockets	
JL1301b	25051108	NSCT-4P895
P1201	2009990309A	NSAS-10P0443
P1701b	25052073,	NSCT-27P1860,
	25050933,	NSCT-27P720,
	25051331 or	NSCT-27P1120 or
	25051871	NSCT-27P1658
	Rotary encoder	
S1801	25065528	REB161PVB
	Push switches	
S1811-S1840	25035652	NPS-111-S604
S1841	25035652	NPS-111-S604 <P>
S1842,S1843	25035652	NPS-111-S604
	Holders	
Q1801a	27191001	
U1801a	27191042	

TUNER CIRCUIT PC BOARD (NARF-63271A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Front end	
TU001	240131	ENV172D4G1 <D>
TU001	240132	ENV172D3G1 <P/T/W/R/A>
	ICs	
Q121	22240090 or	LM7001 or
	22241076	LM7001J
Q141	22241151	LA1837
Q185	22241124	BU1922 <P>
	Transistors	
Q101	2210746	2SC945A-P <P/T/W/R/A>
Q102	2211723	2SC1923-O
Q122	2212445	2SK365-GR
Q123	2212115 or	2SC2458-GR or
	2213284	2SC1740S-R
Q142	2212115 or	2SC2458-GR or
	2213284	2SC1740S-R <P>
Q124,Q145	2213510 or	DTA114ES or
	2214350	RN2202
Q143,Q144	2212794 or	2SD1468-R or
	2215024	2SD1468S-R
	Diodes	
D101	224470512	MTZJ5.1B
D102	224470913	MTZJ9.1C
	Coils	
L141	233457	NFIF-4081
L142	233458	NFIF-4082
L143,L144	233484	NMC-4085 <P/T/W/R/A>
L145,L146	231092	NCH-2140 <D>
L171	232174	NMRF-5077
L172	232139	NMIF-4062
L185	233454M022	NCH-1452 022M <P>
	Ceramic filters	
X101	3010071	SFE-10.7MA5 RED
X102	3010071	SFE-10.7MA5 RED <P/T/W/R/A>
X103	3010071	SFE-10.7MA5 RED <D>
X103	3010130	SFE10.7MZ2K <P/T/W/R/A>
X171	3010123	SFZ450JL
	Crystals	
X121	3010141	XTL-7.2M
X185	3010203	AF6146CG <P>
	Capacitors	
C002	354741009	10 μ F,16V,Elect.
C126	374723334	0.033 μ F±5%,50V,Plastic
C127	354780229	2.2 μ F,50V,Elect.
C128,C193	354741009	10 μ F,16V,Elect.
C129	354782299	0.22 μ F,50V,Elect.
C131	354721019	100 μ F,6.3V,Elect.

CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C142	354741019	100 μF,16V,Elect.
C143,C151	354780229	2.2 μF,50V,Elect.
C144	354780479	4.7 μF,50V,Elect.
C146,C148	354780109	1 μF,50V,Elect.
C147,C167	354784799	0.47 μF,50V,Elect.
C153,C154	374722724	2700pF±5%,50V,Plastic <P/T/W/R/A>
C157,C158	374721024	1000pF±5%,50V,Plastic <D>
C159,C160	354742209	22 μF,16V,Elect.
C161,C162	374721224	1200pF±5%,50V,Plastic <P>
	374721524	1500pF±5%,50V,Plastic <T/W/R/A>
	374723324	3300pF±5%,50V,Plastic <D>
C163,C164	354742209	22 μF,16V,Elect.
C169	354744709	47 μF,16V,Elect.
C170	374722234	0.022 μF±5%,50V,Plastic
C173	374724734	0.047 μF±5%,50V,Plastic
C177	354780339	3.3 μF,50V,Elect.
C179	354742209	22 μF,16V,Elect.
C185	374725615	560pF±10%,50V,Plastic <P>
C186,C190	354721019	100 μF,6.3V,Elect. <P>
	Resistors	
R1325	5210296	N06HR47KBE,Semi-fixed
R141	5210263	N06HR20KBC,Semi-fixed
R167	5210265	N06HR50KBC,Semi-fixed
	Switch	
S101	25065414	NSS-22155 <W/R>
	Sockets	
P101b	25050984	NSCT-10P771 <D/T/W/R/A>
	25050985	NSCT-12P772 <P>
	Plug	
TP141	25055038	NPLG-2P29
	Terminal	
P103	25060117 or	NTM-2PDML051 or
	25060270	NTM-2PDML201 <P/T/W/R/A>
	25060195 or	NTM-4PDML117 or
	25060272	NTM-4PDML203 <D>
	Shield plate	
TU001a	27150432	<P/T/W/R/A>

MASTER VOLUME PC BOARD (NAETC-6328-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
Q1321	22240239	TA7291S,IC
C1321	354721019	100 μF,6.3V,Elect. Capacitor
R1321	5141441	N16RGL20K25F,Variable resistor
P1321b	25051235	NSCT-10P1025,Socket

TONE CONTROL PC BOARD (NAETC-6329-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
C399	374721534	0.015 μF±5%,50V,Plastic capacitor
R391,R392	5104230 or	N14RLC100KWT22Z or
	5104377	N14RLC100KWT22Z,Variable resistor
JL307a	25051111	NSCT-7P898,Socket

FRONT VIDEO TERMINAL PC BOARD (NAETC-6330-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
P1202	25045405	NPJ-3PDBL230,Video terminal
P1203	25051961	NSCT-4P1748,Socket

HEADPHONE TERMINAL PC BOARD (NAETC-6331-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
JL1301a	25051108	NSCT-4P895,Socket
P1301	25045514	YKB26-5005,Headphone terminal

INPUT TERMINAL PC BOARD (NAAF-6332-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	IC	
Q301	22240191	NJM4565D-D
	Capacitors	
C303,C304	354741009	10 μF,16V,Elect.
C305,C306	354741019	100 μF,16V,Elect.
C307,C308	374726824	6800pF±5%,50V,Plastic
C309,C310	374721824	1800pF±5%,50V,Plastic
C311,C312	354741009	10 μF,16V,Elect.
C341,C342	354741009	10 μF,16V,Elect.
	Socket	
P102b	25051527	NSCT-16P1314
	Terminals	
P301	25045469 or	NPJ-4PDBL287 or
	25045554	NPJ-4PDRW373

NOTE: <D>:120V model only
<P>:European model only
<T>:Asian model only
<W>:Worldwide model only
<R>:Chinease model only
<A>:Australian model only

PRINTED CIRCUIT BOARD-PARTS LIST

FRONT AND CENTER CHANNEL POWER AMPLIFIER PC BOARD(NAAF-6301-2A/2B/2C/2D)

CIRCUIT NO.	PART NO.		DESCRIPTION
	Transistors		
Q1501,Q1502	2211732,	*	2SC1845-F,
Q501-Q504	2211733,	*	2SC1845-E,
	2215115 or	*	2SC1775-E or
	2215116	*	2SC1775-F
Q1503	2211732,		2SC1845-F,
Q505,Q506	2211733,		2SC1845-E,
	2215115 or		2SC1775-E or
	2215116		2SC1775-F
Q1504,Q1572	2212115 or		2SC2458-GR or
	2213284		2SC1740S-R
Q1505-Q1507	2211353 or		2SA949-O or
	2211354		2SA949-Y
Q1508,Q1509	2211633 or		2SC2229-O or
	2211634		2SC2229-Y
Q1511	2203010		2SC5171
Q1512	2203000		2SA1930
Q1513	2203063.	*	2SC5198-O,
Q525,Q526	2203062,	*	2SC5198-R,
	2202523,	*	2SC4468-O,
	2202526 or	*	2SC4468-P or
	2202524	*	2SC4468-Y
Q1514	2203053,	*	2SA1941-O,
Q527,Q528	2203052,	*	2SA1491-R,
	2202513,	*	2SA1695-O,
	2202516 or	*	2SA1695-P,
	2202514	*	2SA1695-Y
Q1515	2211733 or		2SC1845-E or
	2211732		2SC1845-F
Q1551	2211793 or		2SA992-E or
	2211792		2SA992-F
Q1552,Q1553	2211733 or		2SC1845-E or
	2211732		2SC1845-F
Q1571	2212445		2SK365-GR
Q1573	2212644 or		2SA1358-Y or
	2212643		2SA1358-O
Q1574,Q1591	2212115 or		2SC2458-GR or
	2213284		2SC1740S-R
Q507,Q508	2212115 or		2SC2458-GR or
	2213284		2SC1740S-R
Q509-Q514	2211353 or		2SA949-O or
	2211354		2SA949-Y
Q515-Q518	2211633 or		2SC2229-O or
	2211634		2SC2229-Y
Q521,Q522	2203010		2SC5171
Q523,Q524	2203000		2SA1930
Q529,Q530	2211733 or		2SC1845-E or
	2211732		2SC1845-F
Q592	2213284 or		2SC1740S-R or
	2212115		2SC2458-GR
	Diodes		
D1571,D1572	223163 or		1SS133 or
D1574,D1576	223205		1SS270A
D1591,D592	223163 or		1SS133 or
	223205		1SS270A

CIRCUIT NO.	PART NO.	DESCRIPTION
	Diodes	
D581,D582	22380032,	1SR139-100,
	22380035 or	GP104003E or
	22380260	RL1N4003
D1573	224470512	MTZJ5.1B
	Coils	
L1501	231176S	S-1.3C <P/T/W/R/A>
L501,L502	231176S	S-1.3C <P/T/W/R/A>
	Capacitors	
C1501	354744709	47μF,16V,Elect.
C1504,C1552	354722219	220μF,6.3V,Elect.
C1509,C1571	354781009	10μF,50V,Elect.
C1512	374721044	0.1μF±5%,50V,Plastic
C1513	374724734	0.047μF±5%,50V,Plastic
C1514,C1515	354771019	100μF,63V,Elect.
C1516,C1517	354774709	47μF,63V,Elect.
C1518	354742219	220μF,16V,Elect.
C1572	354764709	47μF,35V,Elect.
C1574	354780109	1μF,50V,Elect.
C501,C502	354744709	47μF,16V,Elect.
C507,C508	354722219	220μF,6.3V,Elect.
C517,C518	354781009	10μF,50V,Elect.
C523,C524	374721044	0.1μF±5%,50V,Plastic
C525,C526	374724734	0.047μF±5%,50V,Plastic
C527,C528	354742219	220μF,16V,Elect.
C581-C584	354771019	100μF,63V,Elect.
C585-C588	354774709	47μF,63V,Elect.
C589	374721044	0.1μF±5%,50V,Plastic
	Resistors	
R1512,R1514	443528204	82Ω±5%,1/2W,Metal oxide
R1513,R1515	443526804	68Ω±5%,1/2W,Metal oxide
R1516	443528204	82Ω±5%,1/2W,Metal oxide
R1519	5210288	N06HR2.2KBE,Trimming
R1522	443521514	150Ω±5%,1/2W,Metal oxide
R1523,R1524	453530224	2.2Ω±5%,1/2W,Metal
R1525	4000132	RGC55 0.22,Metal plate
R1531	453630824	8.2Ω±5%,1W,Metal
R1537,R1538	4500159	0.22Ω±5%,1/4W,Metal
R523-R526	443528204	82Ω±5%,1/2W,Metal oxide
R527-R530	443526804	68Ω±5%,1/2W,Metal oxide
R531,R532	443528204	82Ω±5%,1/2W,Metal oxide
R537,R538	5210288	N06HR2.2KBE,Trimming
R543,R544	443521514	150Ω±5%,1/2W,Metal oxide
R545-R548	453530224	2.2Ω±5%,1/2W,Metal
R549,R550	4000132	RGC55 0.22,Metal plate
R561,R562	453630824	8.2Ω±5%,1W,Metal
R581-R586	4500159	0.22Ω±5%,1/4W,Metal
R593,R594	443623914	390Ω±5%,1W,Metal oxide
	Relays	
RL1591	25065510,	NRL-2P5A-DC24-095,
RL592	25065517 or	NRL-2P5A-DC24-098 or
	25065563	NRL-2P5A-DC24-129
	Sockets	
JL501a,JL507a	25051110	NSCT-6P897
JL506a	25051095	NSCT-11P882
JL509a	25051087	NSCT-3P874
JL510a	25051108	NSCT-4P895

NOTE: THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

CAUTION: Replacement of the transistor of mark *, if necessary, must be made from the same beta group (HFE) as the original type.

CIRCUIT NO.	PART NO.		DESCRIPTION
	Plugs		
JL508b	25055631		NPLG-10P593
P1501	25055038		NPLG-2P29
P401a	25055139		NPLG-9P123
P501,P502	25055038		NPLG-2P29
P503	25055099		NPLG-2P83

SURROUND AMPLIFIER PC BOARD(NAAF-6302-2A/2B/2C/2D)

CIRCUIT NO.	PART NO.		DESCRIPTION
	Transistors		
Q601-Q604	2211732,	*	2SC1845-F,
	2211733,	*	2SC1845-E,
	2215115 or	*	2SC1775-E or
	2215116	*	2SC1775-F
Q605,Q606	2211732,		2SC1845-F,
	2211733,		2SC1845-E,
	2215115 or		2SC1775-E or
	2215116		2SC1775-F
Q607,Q608	2212115 or		2SC2458-GR or
	2213284		2SC1740S-R
Q609-Q614	2211353 or		2SA949-O or
	2211354		2SA949-Y
Q615-Q618	2211633 or		2SC2229-O or
	2211634		2SC2229-Y
Q621,Q622	2203010		2SC5171
Q623,Q624	2203000		2SA1930
Q625,Q626	2203063,	*	2SC5198-O,
	2203062,	*	2SC5198-R,
	2202523,	*	2SC4468-O,
	2202526 or	*	2SC4468-P or
	2202524	*	2SC4468-Y
Q627,Q628	2203053,	*	2SA1941-O,
	2203052,	*	2SA1491-R,
	2202513,	*	2SA1695-O,
	2202516 or	*	2SA1695-P,
	2202514	*	2SA1695-Y
Q629,Q630	2211733 or		2SC1845-E or
	2211732		2SC1845-F
Q691,Q692	2212115 or		2SC2458-GR or
	2213284		2SC1740S-R
	Diodes		
D681,D682	22380032,		1SR139-100,
	22380035 or		GP104003E or
	22380260		RL1N4003
D691,D692	223163 or		1SS133 or
	223205		1SS270A
	Coils		
L601,L602	231176S		S-1.3C <P/T/W/R/A>
	Capacitors		
C601,C602	354744709		47μF,16V,Elect.
C607,C608	354722219		220μF,6.3V,Elect.
C617,C618	354781009		10μF,50V,Elect.
C623,C624	374721044		0.1μF±5%,50V,Plastic
C635,C636	354742219		220μF,16V,Elect.
C662	374731044		0.1μF±5%,100V,Plastic
C663,C664	3504342		15000μF,56V,Elect.
C681-C684	354771019		100μF,63V,Elect.

CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C685-C688	354774709	47μF,63V,Elect.
C689	354741009	10μF,16V,Elect.
	Resistors	
R623-R626	443528204	82Ω±5%,1/2W,Metal oxide
R627-R630	443526804	68Ω±5%,1/2W,Metal oxide
R631,R632	443528204	82Ω±5%,1/2W,Metal oxide
R637,R638	5210288	N06HR2.2KBE,Trimming
R643,R644	443521514	150Ω±5%,1/2W,Metal oxide
R645-R648	453530224	2.2Ω±5%,1/2W,Metal
R649,R650	4000132	RGC55 0.22
R673,R674	453630824	8.2Ω±5%,1W,Metal
R681-R686	4500159	0.22Ω±5%,1/4W,Metal
	Relays	
RL691,RL692	25065510,	NRL-2P5A-DC24-095,
	25065517 or	NRL-2P5A-DC24-098 or
	25065563	NRL-2P5A-DC24-129
	Sockets	
JL507b	25050283	NSCT-6P111
JL510b	25050281	NSCT-4P105
JL603a,JL942a	25051110	NSCT-6P897
	Plugs	
JL506b	25055632	NPLG-11P594
P601,P602	25055038	NPLG-2P29

POWER SUPPLY CIRCUIT PC BOARD (NAPS-6303-2A/2B/2C/2D)

CIRCUIT NO.	PART NO.		DESCRIPTION
	Transistor		
Q921	2212115 or		2SC2458-GR or
	2213284		2SC1740S-R
	Diodes		
D925	223163 or		1SS133 or
	223205		1SS270A
D921-D924	22380032,		1SR139-100,
	22380035 or		GP104003E or
	22380260		RL1N4003
	Power transformer		
T902	2300670A	⚠	NPT-1111D <D>
	2300671A	⚠	NPT-1111P <P/T/A>
	2300672A		NPT-1111DG <W/R>
	Capacitors		
C901	3500191	⚠	DE7150F-103M, IS
C922	354742219		220μF,16V,Elect.
	Resistor		
R901	431533355	⚠	RC1/2GFKUL-3.3M,Solid <D>
R921	453530824		8.2Ω±5%,1/2W,Metal
	Fuses		
F901	252198	⚠	8A-UL, Fuse <D/W/R>
F902	252077	⚠	4A-SE-EAK,Fuse <P/T/W/A/R>
F903	252075	⚠	2.5A-SE-EAK,Fuse <P/T>
	Fuseholders		
F901a	25050065	⚠	YSH403T <D/W/R>
F902a	25050065	⚠	YSH403T <P/T/A/W/R>
F903a	25050065	⚠	YSH403T <P/T>
	Socket		
JL1701b	25050267		NSCT-3P95

CIRCUIT NO.	PART NO.		DESCRIPTION
	AC outlet		
P902	25051125	⚠	NSCT-4P912 <P/T/W/R>
	25051126	⚠	NSCT-4P913 <D>
	25052115	⚠	NSCT-2P2013 <A>
	Plug		
P901a	25055675	⚠	NPLG-2P631
	Relay		
RL901	25065508,	⚠	NRL-1P10A-DC12-093,
	25065526,	⚠	NRL-1P5A-DC12-102,
	25065561 or	⚠	NRL-1P5A-DC12-127 or
	25065515	⚠	NRL-1P5A-DC12-096
	Switch		
S901	25065437	⚠	NSS-22157P <W/R>

PRIMARY CIRCUIT PC BOARD (NAETC-6305-2A/2B/2C/2D)

CIRCUIT NO.	PART NO.	DESCRIPTION
C665	374731044	0.1 μF±5%,100V,Plastic capacitor
R941,R942	453532294	0.22Ω±5%,1/2W,Metal resistor
R944,R945	453530104	1Ω±5%,1/2W,Metal resistor
R946	453532294	0.22Ω±5%,1/2W,Metal resistor
JL941b	25050284	NSCT-7P112,Socket
JL942b	25051110	NSCT-6P897,Socket

THERMAL DETECTOR PC BOARDS (NAETC-6306/6307/6308/6309/6310-2A/2B/2C/2D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Transistors	
Q519,Q520	2212653 or	2SC3421-O or
Q1510	2212654	2SC3421-Y
Q619,Q620	2212653 or	2SC3421-O or
	2212654	2SC3421-Y

POWER SWITCH PC BOARD (NASW-6311-2B/2C/2D)

CIRCUIT NO.	PART NO.		DESCRIPTION
C906	3500191	⚠	DE7150F-103M,IS capacitor <P/T/W/R/A>
C906a	27301216	⚠	SB1925A,Cover, capacitor <P/T/W/R/A>
S906	25035550	⚠	NPS-111-L512P,Power switch <P/T/W/R/A>

THERMAL DET. PC BOARD(NAETC-6314-2A/2B/2C/2D)

CIRCUIT NO.	PART NO.	DESCRIPTION
JL509b	25051087	NSCT-3P874,Socket
R1577	4000150	PTH9M04BC222TS2F333, Thermistor

MAIN CIRCUIT PC BOARD (NADG-6316-2A/2B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q471-Q473	22240581R1	NJM4565M
Q701	222740046R1TO	74HCU04(TC74HCU04F)
Q702	22241218R3	CS4226-KQ
Q703	22241219R3 or	DSPF56009FJ88 or
	22241235R3	XCF56009FJ88
Q704	22241101R2	LC32464M-80
Q761-Q764	22240581R1	NJM4565M
Q791,Q792	222780055	78M05HF

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q801-Q803	22240581R1	NJM4565M
Q804	22240981R2	TC9162AF
Q805-Q807	22240581R1	NJM4565M
Q808	22241221R2	TC9164AF
Q809,Q810	22240581R1	NJM4565M
Q812	22240943R2	TC9163AF
Q813	22240581R1	NJM4565M
	Photo couplers	
U701	24120037	TORX178A
Q983	24120043	ON3131 <D>
	Transistors	
Q981,Q982	221282 or	DTC144ES or
	2213560	RN1204
Q984	2213510 or	DTA114ES or
	2214350	RN2202 <D>
Q985	2212115 or	2SC2458-GR or
	2213284	2SC1740S-R <D>
	Diodes	
D761-D764	223234R2	1SS352
D983,D984	223234R2	1SS352 <D>
D981-D983	223234R2	1SS352 <P/T/W/R/A>
	Coils	
L708,L709	231237K100R2	NCH-1475
L710	231237M022R2	NCH-1471
	Crystal	
X701	3010279	XTL-18.432M
	Capacitors	
C471-C473	354744709	47μF,16V,Elect.
C474-C479	374721224	1200pF±5%,50V,Plastic
C480-C482	374722224	2200pF±5%,50V,Plastic
C701	355721019	100μF,6.3V,Elect.
C711	354742209	22μF,16V,Elect.
C713,C736	374721044	0.1μF±5%,50V,Plastic
C714	374728224	8200pF±5%,50V,Plastic
C721-C724	354741009	10μF,16V,Elect.
C740,C742	354721019	100μF,6.3V,Elect.
C783-C786	354744709	47μF,16V,Elect.
C793,C794	354741009	10μF,16V,Elect.
C801-C806	354781009	10μF,50V,Elect.
C813-C818	374723324	3300pF±5%,50V,Plastic
C819-C824	374721524	1500pF±5%,50V,Plastic
C825-C830	374721024	1000pF±5%,50V,Plastic
C851-C860	374722244	0.22μF±5%,50V,Plastic
C861-C866	354780229	2.2μF,50V,Elect.
C881	374721034	0.01μF±5%,50V,Plastic
C882,C886	374722244	0.22μF±5%,50V,Plastic
C883	374724734	0.047μF±5%,50V,Plastic
C884	374721244	0.12μF±5%,50V,Plastic
C885	374722234	0.022μF±5%,50V,Plastic
C982	354741009	10μF,16V,Elect.
C983	354741009	10μF,16V,Elect. <D>

CIRCUIT NO.	PART NO.	DESCRIPTION
	Terminals	
P703	25045303 or	NPJ-4PDBL162 or
	25045537	NPJ-4PDWR361
P701,P702	25045473	NPJ-1PDBL291
P981	25045504	NPJ-1PDBL319
P704	25045549	NPJ-2PDBL370
P982	25045293	HSJ1003-01-012 <P/T/W/R/A>
	25045433	HSJ1003-01-013 <D>
P711,P712	25051241	NSCT-20P1031

PREAMPLIFIER CIRCUIT PC BOARD (NAAF-6317-2A/2B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q1301,Q1371	22240581R1	NJM4565M
Q304	22241221R2	TC9164AF
Q305	22240829	TC9274N-008
Q306,Q307	22240581R1	NJM4565M
Q321-Q323	22241220R2	TC9459F
Q371,Q372	22240581R1	NJM4565M
Q401,Q421	22240581R1	NJM4565M
Q441	22240581R1	NJM4565M
	Transistors	
Q1372	2211945	2SK246-GR
Q308,Q375	2213510 or	DTA114ES or
	2214350	RN2202
Q309	2213816,	2SD1450-T,
	2212355,	2SD1302-S,
	2212356 or	2SD1302-T or
	2213815	2SD1450-S
Q373,Q374	2211945	2SK246-GR
Q402,Q403	2213631 or	RN1241-A or
Q412,Q413	2213632	RN1241-B
Q404,Q405	2213510 or	DTA114ES or
Q424,Q425	2214350	RN2202
Q422,Q423	2213631 or	RN1241-A or
Q432,Q433	2213632	RN1241-B
Q434,Q435	2213510 or	DTA114ES or
Q454	2214350	RN2202
Q442,Q443	2213631 or	RN1241-A or
Q452,Q453	2213632	RN1241-B
	Diodes	
D1301,D1302	223234R2	1SS352
D1371	223234R2	1SS352
D371,D372	223234R2	1SS352
D401	223234R2	1SS352
D421,D431	223234R2	1SS352
	Capacitors	
C1301-C1304	354741009	10 μF,16V,Elect.
C1306	374721034	0.01 μF±5%,50V,Plastic
C1307	354741009	10 μF,16V,Elect.
C1371	354780229	2.2 μF,50V,Elect.
C1375,C1376	374721044	0.1 μF±5%,50V,Plastic
C345,C346	354741009	10 μF,16V,Elect.
C351,C352	354744709	47 μF,16V,Elect.
C355,C356	354744709	47 μF,16V,Elect.
C359,C360	354744709	47 μF,16V,Elect.
C361,C362	354742209	22 μF,16V,Elect.

CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C365,C366	354742209	22 μF,16V,Elect.
C371,C372	354780229	2.2 μF,50V,Elect.
C379-C382	374721044	0.1 μF±5%,50V,Plastic
C383,C384	374721534	0.015 μF±5%,50V,Plastic
C385,C386	354744709	47 μF,16V,Elect.
C397,C398	354744709	47 μF,16V,Elect.
C406,C416	354744709	47 μF,16V,Elect.
C410,C430	354741009	10 μF,16V,Elect.
C426,C436	354744709	47 μF,16V,Elect.
C431,C441	354780229	2.2 μF,50V,Elect.
C440	354741009	10 μF,16V,Elect.
C446,C456	354744709	47 μF,16V,Elect.
C451	354780229	2.2 μF,50V,Elect.
	Socket	
JL307b	25050271	NSCT-7P99
P311	25051240	NSCT-15P1030
P312	25051527	NSCT-16P1314
P313	25051528	NSCT-17P1315
P401	2009990505UL	NSAS-18P0667
	Terminals	
P304-P306	25045552 or	NPJ-6PDRW371 or
	25045553	NPJ-6PDRW372

FRONT/CENTER SPEAKER TERMINAL PC BOARD (NAETC-6318-2A/2B)

CIRCUIT NO.	PART NO.	DESCRIPTION
C1581-C1583	374721034	0.01 μF±5%,50V,Plastic capacitor <P/T/W/R/A>
JL501b,JL603c	25050270	NSCT-6P98,Socket
P1581	25060284	NTM-6PDMN215,Terminal

REAR/REMOTE SPEAKER TERMINAL PC BOARD (NAETC-6320-2A/2B)

CIRCUIT NO.	PART NO.	DESCRIPTION
C631-C634	374721034	0.01 μF±5%,50V,Plastic capacitor <P/T/W/R/A>
P612	25060158 or	NTM-8PDML084 or
	25060224	NTM-8PDML146,Terminal

MICROPROCESSOR CIRCUIT PC BOARD (NAAR-6322-2A/2B/2C/2D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q1701	22241285	MPD78058GC-B09-8BT
Q951	222780125	78M12HF
Q952	222790125	79M12HF
Q954	222780055	78M05HF
Q955	222780565JRC	78M56(NJM78M56FA)
	Transistors	
Q1702	221282 or	DTC144ES or
	2213560	RN1204
Q1703	2213510 or	DTA114ES or
	2214350	RN2202
Q956	2211455	2SA1015-GR
Q957	2211255	2SC1815-GR

CIRCUIT NO.	PART NO.	DESCRIPTION
	Diodes	
D1701-D1703	223163 or	1SS133 or
D1705,D1706	223205	1SS270A
D1704	224470623	MTZJ6.2C
D1707	224470562	MTZJ5.6B
D1708	224470512	MTZJ5.1B
D952-D955	22380003	1N5402F
D956	223163 or	1SS133 or
D961-D963	223205	1SS270A
D957-D959	22380032,	1SR139-100,
D965-D968	22380035 or	GP104003E or
	22380260	RL1N4003
D960	224473604	MTZJ36D
	Coil	
L1701	233454K220	NCH-1452 220K
	Crystal	
X1701	3010242	CST5.00MGW
	Capacitors	
C1701,C1704	354721019	100 μF,6.3V,Elect.
C1702	3000076 or	EECS5R5T104 or
	3000078	DX-5R5L104
C1703	375524744	0.47 μF±5%,50V,Plastic
C1705	354780109	1 μF,50V,Elect.
C1707	354741009	10 μF,16V,Elect.
C953	3504213S	4700 μF,35V,Elect.
C954	354761029	1000 μF,35V,Elect.
C956,C958	354741009	10 μF,16V,Elect.
C961	354744729	4700 μF,16V,Elect.
C965	354741009	10 μF,16V,Elect.
C966	354741029	1000 μF,16V,Elect.
C968	354741009	10 μF,16V,Elect.
C969	354762219	220 μF,35V,Elect.
C970	354772219	220 μF,63V,Elect.
C973	354754719	470 μF,25V,Elect.
	Resistors	
R951,R952	452630334	3.3 Ω±5%,1W,Metal
R953	452530684	6.8 Ω±5%,1/2W,Metal
R955	452630334	3.3 Ω±5%,1W,Metal
R957,R958	442523304	33 Ω±5%,1/2W,Metal oxide
R959	452530224	2.2 Ω±5%,1/2W,Metal
R960	442522204	22 Ω±5%,1/2W,Metal oxide
R963	453530104	1 Ω±5%,1/2W,Metal
R964	443522204	22 Ω±5%,1/2W,Metal oxide
R965	443523314	330 Ω±5%,1/2W,Metal oxide
	Sockets	
JL1701a	25051107	NSCT-3P894
JL508a	25051094	NSCT-10P881
JL941a	25051111	NSCT-7P898
P1701a	25052036,	NSCT-27P1823,
	25050967,	NSCT-27P754,
	25051293 or	NSCT-27P1082 or
	25051834	NSCT-27P1621
	Plugs	
P101a	25055650	NPLG-10P606 <D/T/W/R/A>
	25055651	NPLG-12P607 <P>
P1321a,P201a	25055706	NPLG-10P662
P102a	25055805	NPLG-16P761

COMPOSITE VIDEO SIGNAL PC BOARD
(NAVD-6323-2A/2B/2C/2D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	IC	
Q230	22240373	BA7625
	Transistors	
Q224	2213640 or	DTC123JS or
	2214660	RN1205
Q226	2212285 or	2SC2878-A or
	2212286	2SC2878-B
Q227	2213830	DTB113ZS
Q228,Q234	2212125 or	2SA1048-GR or
Q235	2213354	2SA933S-R
Q229	2213640	DTC123JS
	Diodes	
D212	224471203	MTZJ12C
D214,D215	223163 or	1SS133 or
	223205	1SS270A
	Capacitors	
C259-C261	354780229	2.2 μF,50V,Elect.
C266-C268	354724719	470 μF,6.3V,Elect.
C271	354721029	1000 μF,6.3V,Elect.
	Terminals	
P210,P211	25045299	NPJ-3PDYE158
P213	25045567	NPJ-1PDBL382
	Socket	
P201b	25051235	NSCT-10P1025

DISPLAY CIRCUIT PC BOARD(NADIS-6326-2A/2B/2C/2D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	FL tube	
Q1801	212190	14-ST-23GK
	IC	
Q1802	22240685R9	M66004FP
	Remote sensor	
U1801	241305	GP1U281X
	Diodes	
D1801,D1802	223163 or	1SS133 or
D1804	223205	1SS270A
D1803	224471803	MTZJ18C
D1805	225290	SEL4110R
	Capacitors	
C1802	375524744	0.47 μF±5%,50V,Plastic
C1803	354721019	100 μF,6.3V,Elect.
C1808	354781009	10 μF,50V,Elect.
C1811	354741009	10 μF,16V,Elect.
	Resistor	
R1851	49163103414	RM1/10IJ-10K*14
	Sockets	
JL1301b	25051108	NSCT-4P895
P1201	2009990309A	NSAS-10P0443
P1701b	25052073,	NSCT-27P1860,
	25050933,	NSCT-27P720,
	25051331 or	NSCT-27P1120 or
	25051871	NSCT-27P1658
	Rotary encoder	
S1801	25065528	REB161PVB

CIRCUIT NO.	PART NO.	DESCRIPTION
	Push switches	
S1811-S1840	25035652	NPS-111-S604
S1841	25035652	NPS-111-S604 <P>
S1842	25035652	NPS-111-S604
	Holders	
Q1801a	27191001	
U1801a	27191042	

TUNER CIRCUIT PC BOARD (NARF-6327-1A/1B/2C/2D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Front end	
TU001	240131	ENV172D4G1 <D>
TU001	240132	ENV172D3G1 <P/T/W/R/A>
	ICs	
Q121	22240090 or	LM7001 or
	22241076	LM7001J
Q141	22241151	LA1837
Q185	22241124	BU1922 <P>
	Transistors	
Q101	2210746	2SC945A-P <P/T/W/R/A>
Q102	2211723	2SC1923-O
Q122	2212445	2SK365-GR
Q123	2212115 or	2SC2458-GR or
	2213284	2SC1740S-R
Q142	2212115 or	2SC2458-GR or
	2213284	2SC1740S-R <P>
Q124,Q145	2213510 or	DTA114ES or
	2214350	RN2202
Q143,Q144	2212794 or	2SD1468-R or
	2215024	2SD1468S-R
	Diodes	
D101	224470512	MTZJ5.1B
D102	224470913	MTZJ9.1C
	Coils	
L141	233457	NFIF-4081
L142	233458	NFIF-4082
L143,L144	233484	NMC-4085 <P/T/W/R/A>
L145,L146	231092	NCH-2140 <D>
L171	232174	NMRF-5077
L172	232139	NMIF-4062
L185	233454M022	NCH-1452 022M <P>
	Ceramic filters	
X101	3010071	SFE-10.7MA5 RED
X102	3010071	SFE-10.7MA5 RED <P/T/W/R/A>
X103	3010071	SFE-10.7MA5 RED <D>
X103	3010130	SFE10.7MZ2K <P/T/W/R/A>
X171	3010123	SFZ450JL
	Crystals	
X121	3010141	XTL-7.2M
X185	3010203	AF6146CG <P>
	Capacitors	
C002	354741009	10 μ F,16V,Elect.
C126	374723334	0.033 μ F±5%,50V,Plastic
C127	354780229	2.2 μ F,50V,Elect.
C128,C193	354741009	10 μ F,16V,Elect.
C129	354782299	0.22 μ F,50V,Elect.
C131	354721019	100 μ F,6.3V,Elect.

CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C142	354741019	100 μ F,16V,Elect.
C143,C151	354780229	2.2 μ F,50V,Elect.
C144	354780479	4.7 μ F,50V,Elect.
C146,C148	354780109	1 μ F,50V,Elect.
C147,C167	354784799	0.47 μ F,50V,Elect.
C153,C154	374722724	2700pF±5%,50V,Plastic <P/T/W/R/A>
C157,C158	374721024	1000pF±5%,50V,Plastic <D>
C159,C160	354742209	22 μ F,16V,Elect.
C161,C162	374721224	1200pF±5%,50V,Plastic <P/A>
	374721524	1500pF±5%,50V,Plastic <T/W/R>
	374723324	3300pF±5%,50V,Plastic <D>
C163,C164	354742209	22 μ F,16V,Elect.
C169	354744709	47 μ F,16V,Elect.
C170	374722234	0.022 μ F±5%,50V,Plastic
C173	374724734	0.047 μ F±5%,50V,Plastic
C177	354780339	3.3 μ F,50V,Elect.
C179	354742209	22 μ F,16V,Elect.
C185	374725615	560pF±10%,50V,Plastic <P>
C186,C190	354721019	100 μ F,6.3V,Elect. <P>
	Resistors	
R1325	5210296	N06HR47KBE,Semi-fixed
R141	5210263	N06HR20KBC,Semi-fixed
R167	5210265	N06HR50KBC,Semi-fixed
	Switch	
S101	25065414	NSS-22155 <W/R>
	Sockets	
P101b	25050984	NSCT-10P771 <D/T/W/R/A>
	25050985	NSCT-12P772 <P>
	Plug	
TP141	25055038	NPLG-2P29
	Terminal	
P103	25060117 or	NTM-2PDML051 or
	25060270	NTM-2PDML201 <P/T/W/R/A>
	25060195 or	NTM-4PDML117 or
	25060272	NTM-4PDML203 <D>
	Shield plate	
TU001a	27150432	<P/T/W/R/A>

MASTER VOLUME PC BOARD (NAETC-6328-2A/2B/2C/2D)

CIRCUIT NO.	PART NO.	DESCRIPTION
Q1321	22240239	TA7291S,IC
C1321	354721019	100 μ F,6.3V,Elect. Capacitor
R1321	5141449	N16RGL20K25F,Variable resistor
P1321b	25051235	NSCT-10P1025,Socket

TONE CONTROL PC BOARD (NAETC-6329-2A/2B/2C/2D)

CIRCUIT NO.	PART NO.	DESCRIPTION
C399,C400	374721534	0.015 μ F±5%,50V Plastic capacitor
R391,R392	5104356	N14RLC100KWT20Z, Variable resistor
JL307a	25051111	NSCT-7P898,Socket

HEADPHONE TERMINAL PC BOARD (NAETC-6331-2A/2B/2C/2D)

CIRCUIT NO.	PART NO.	DESCRIPTION
JL1301a	25051108	NSCT-4P895,Socket
P1301	25045514	YKB26-5005,Headphone terminal

INPUT TERMINAL PC BOARD (NAAF-6332-2A/2B/2C/2D)

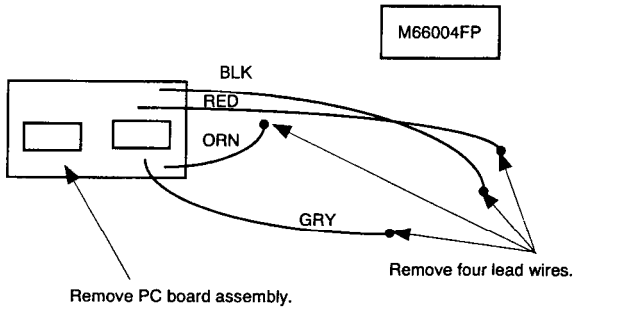
CIRCUIT NO.	PART NO.	DESCRIPTION
	IC	
Q301	22240191	NJM4565D-D
	Capacitors	
C303,C304	354741009	10μF,16V,Elect.
C305,C306	354741019	100μF,16V,Elect.
C307,C308	374726824	6800pF±5%,50V,Plastic
C309,C310	374721824	1800pF±5%,50V,Plastic
C311,C312	354741009	10μF,16V,Elect.
C341,C342	354741009	10μF,16V,Elect.
	Socket	
P102b	25051527	NSCT-16P1314
	Terminals	
P301	25045469 or	NPJ-4PDBL287
	25045554	NPJ-4PDRW373

NOTE: <D>:120V model only
<P>:European model only
<T>:Asian model only
<W>:Worldwide model only
<R>:Chinease model only
<A>:Australian model only

Replacing the microprocessor

These units are used the microprocessor of two types. (MPD78058GC-B01 or MPD78058GC-B09)
When you replace the microprocessor MPD78058GC-B01, use the microprocessor MPD78058GC-B09 instead of it. At tha same time you are necessary to remove PC board assembly as shown below.

DISPLAY PC BOARD



ADJUSTMENT PROCEDURES

Preparation

1. Input

FM mono: 1kHz,75kHz devi.,60dB/ μ V

FM stereo: 1kHz, 75kHz devi., 60dB/ μ V

Pilot signal 19kHz 7.5kHz devi.

AM: 400Hz, 30% mod.

2. Outputs

Connect the non-inductive type resistor of 8 ohms to the all speaker terminals unless otherwise noted.

Idling Current Adjustment

Connect the DC voltmeter to the terminals P501, P502, and P1501 (V_{CT} and I_{ID}) on Front/Center power amp. pc board. After turn POWER on, adjust the trim resistors R537, R538, and R1519 so that the indicator of voltmeter becomes 1.0mV.

Connect the DC voltmeter to the terminals P601 and P602 (V_{CT} and I_{ID}) on Surround power amp. pc board. After turn POWER on, adjust the trim resistors R637, and R638 so that the indicator of voltmeter becomes 1.0mV.

Allow the unit to warm up for about 5 minutes and check the voltage of these terminals.

When the voltage is less than 6.0mV, adjust trim resistors so that the indicator of voltmeter becomes 6.0mV.

When the voltage is 6.0mV to 7.5mV, you are not neccesssary to adjust.

When the voltage is more than 7.5mV, adjust trim resistors so that the indicator of voltmeter becomes 7.5mV.

Note: No load, No signal

Master Volume Adjustment

Set the unit to the test mode "TEST-2-10" and set MASTER VOLUME to the center position.

Adjust R1325 so that the indicator of volume on FL tube becomes 0dB.

Test Mode(TEST-2-10)

Press and hold down the CD button, then press the SPEAKERS MAIN and REMOTE buttons at the same time.

During "TEST-" is displayed on FL tube, press the VIDEO 2 button.

Then press the MULTI-CH INPUT button 10 times.

FM ADJUSTMENT

Item	Step	Connection of instrument	FM SG output	Stereo modulator output	Tuning frequency	Output indicator	Adjustment point	Adjust for	Remarks
FM IF/RF	1	Fig.1	99.0MHz 1kHz 75kHz devi. 65dBf(60dB)	——	99.0MHz	DC voltmeter	L141	0±20mV	FM MUTE/MODE switch:ON/STEREO Repeat the steps 1 and 2 until no further adjustment is necessary.
	2					Distortion analyzer	L142	Minimum	
Stereo Distortion		Fig.2	99.0MHz Ext. mod.65dBf(60dB)	Channel L or R 1kHz	99.0MHz	Distortion analyzer	IFT on the front end	Minimum	Don't turn more than ±180° .
Stereo Separation	1	Fig.2	99.0MHz Ext. mod. 65dBf(60dB)	Channel L 1kHz	99.0MHz	Channel R AC voltmeter	R167	Minimum	Maximum and same separation
	2			Channel R 1kHz		Channel L AC voltmeter		Minimum	
Muting Level		Fig.3	99.0MHz 19.2dBf(14dB)	——	99.0MHz	Oscilloscope	R141	Signal output	

AM ADJUSTMENT

120V model

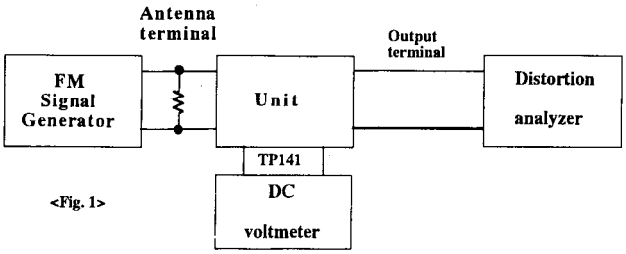
Step	AM SG output	Tuning Frequency	Output Indicator	Adjustment point	Adjust for
1		530kHz	Digital DC voltmeter	OSC coil on RF block L171	1.4±0.2V
2	600kHz 400Hz 30% mod. 60dB/m	600kHz	AC voltmeter	RF coil on RF block L171	Maximum
3	990kHz 400Hz 30% mod. 60dB/m	990kHz	AC voltmeter	L172	Maximum

Reference Specification
FM tuned voltage:87.50MHz～108.00MHz
More than 1.3V～Less than 9V
AM tuned voltage:530kHz～1710kHz
1.4±0.4～Less than 9.0V

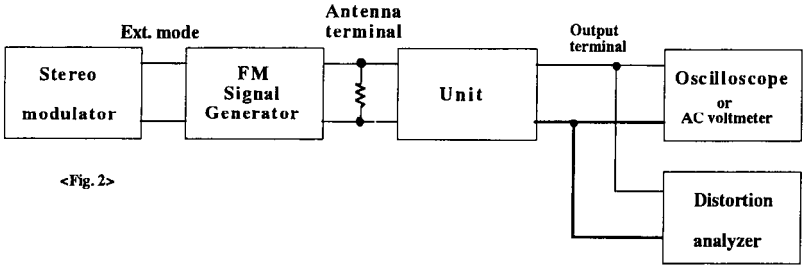
230V and Wolrdwide models

Step	AM SG output	Tuning Frequency	Output Indicator	Adjustment point	Adjust for
1		522kHz or 531kHz	Digital DC voltmeter	OSC coil on RF block L171	1.4±0.2V
2	603kHz 400Hz 30% mod. 60dB/m	603kHz	AC voltmeter	RF coil on RF block L171	Maximum
3	999kHz 400Hz 30% mod. 60dB/m	999kHz	AC voltmeter	L172	Maximum

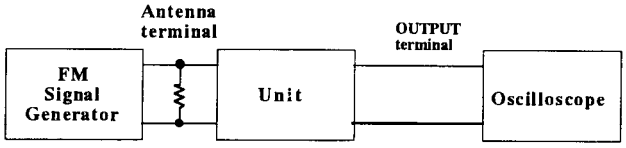
Reference Specification
FM tuned voltage:87.50MHz～108.00MHz
More than 1.3V～Less than 9V
AM tuned voltage:522kHz～1611kHz
1.4±0.4～Less than 9.0V
(230V model)
AM tuned voltage:531kHz～1602kHz
1.4±0.4～Less than 9.0V
(Worldwide model)



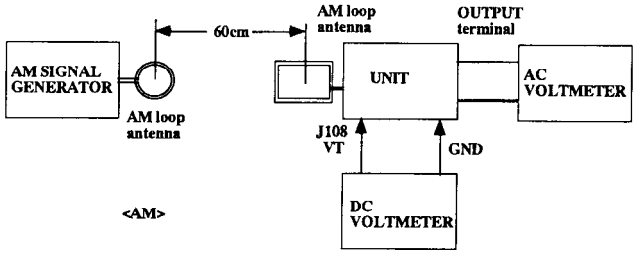
<Fig. 1>



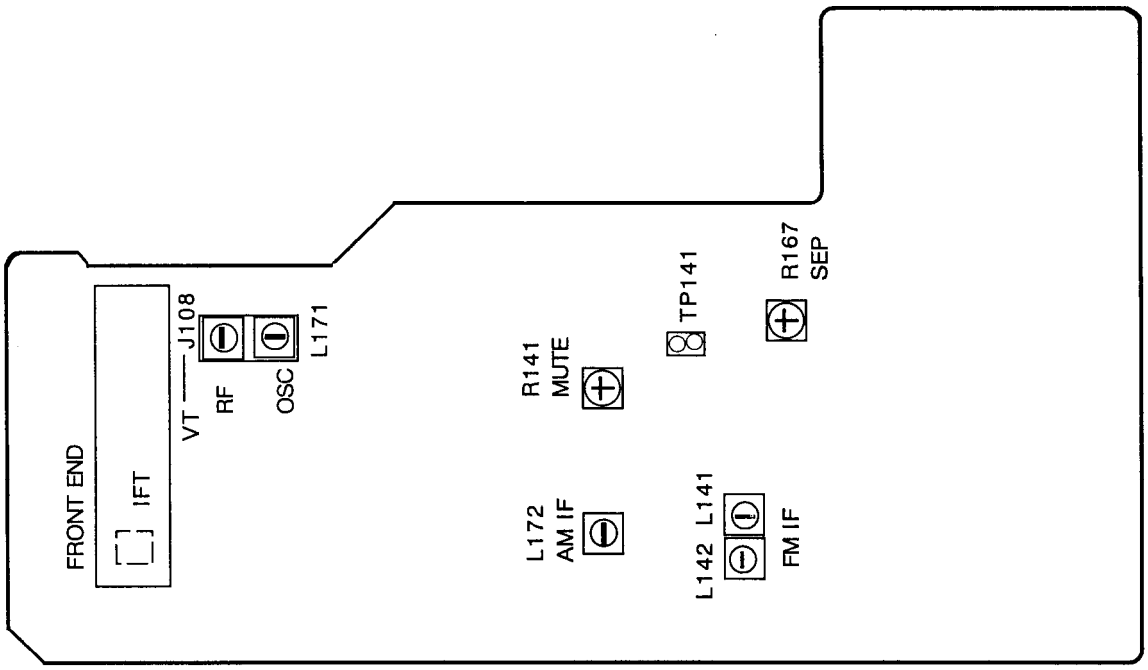
<Fig. 2>



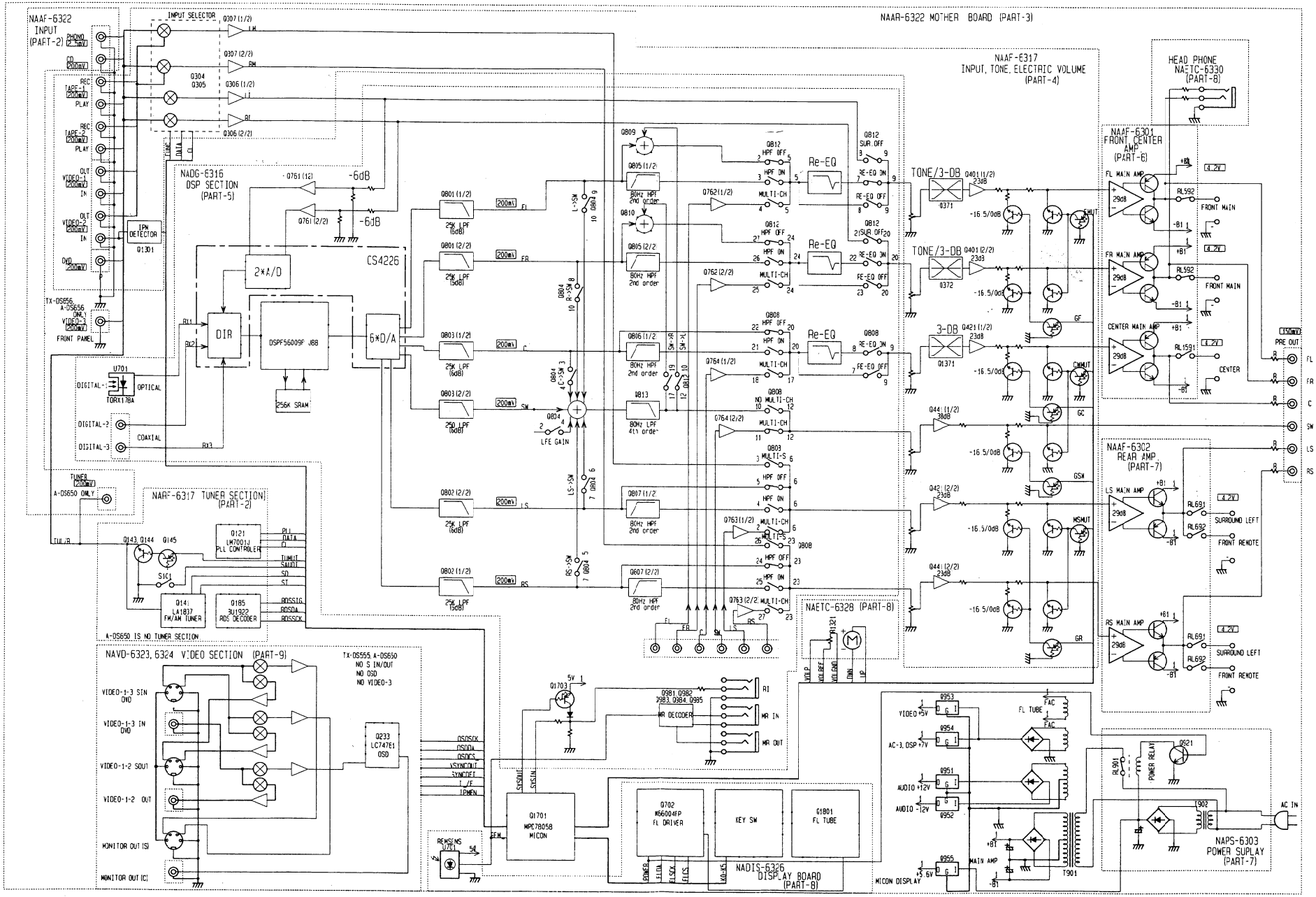
<Fig. 3>



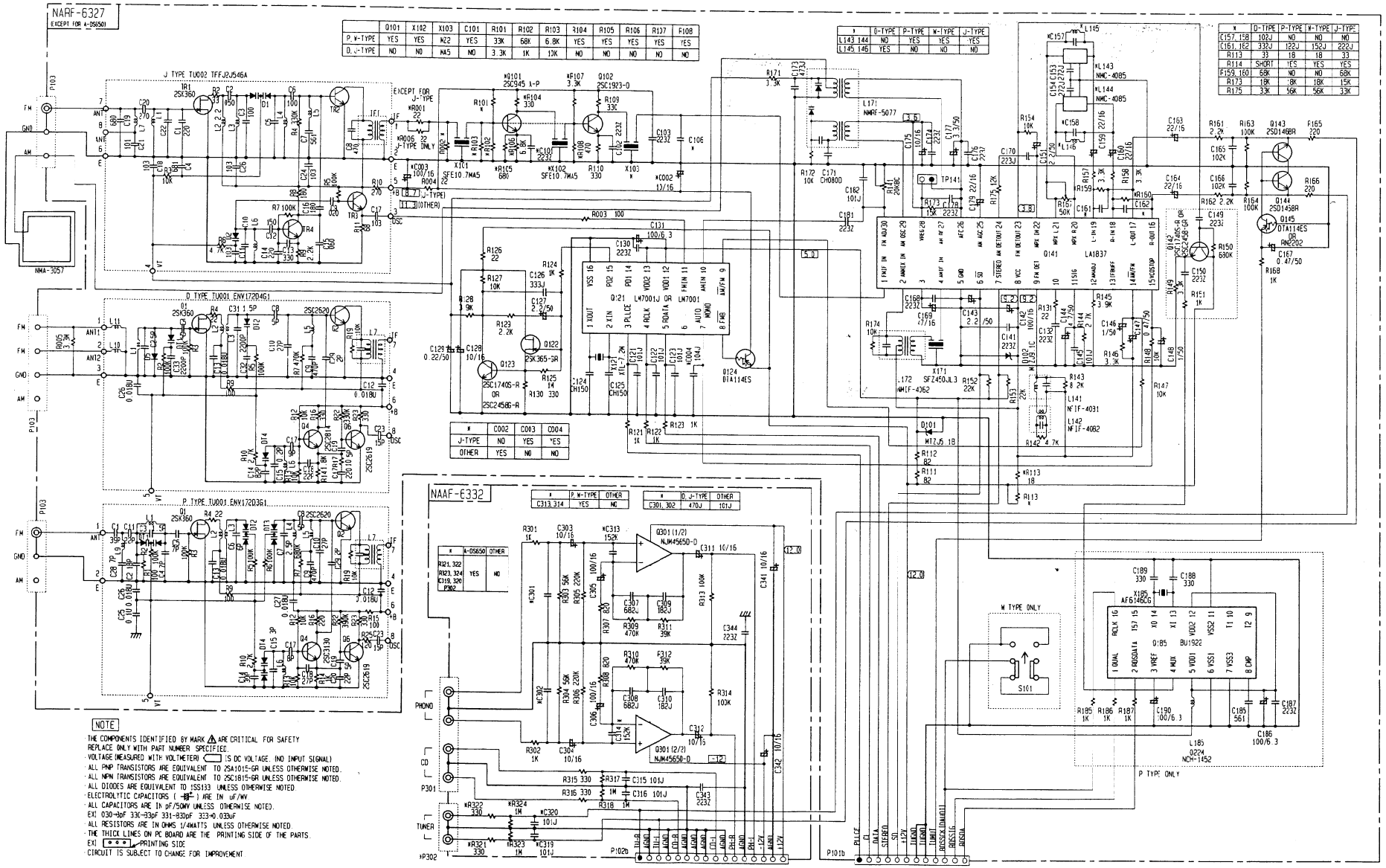
<AM>



SCHEMATIC DIAGRAM



SCHEMATIC DIAGRAM



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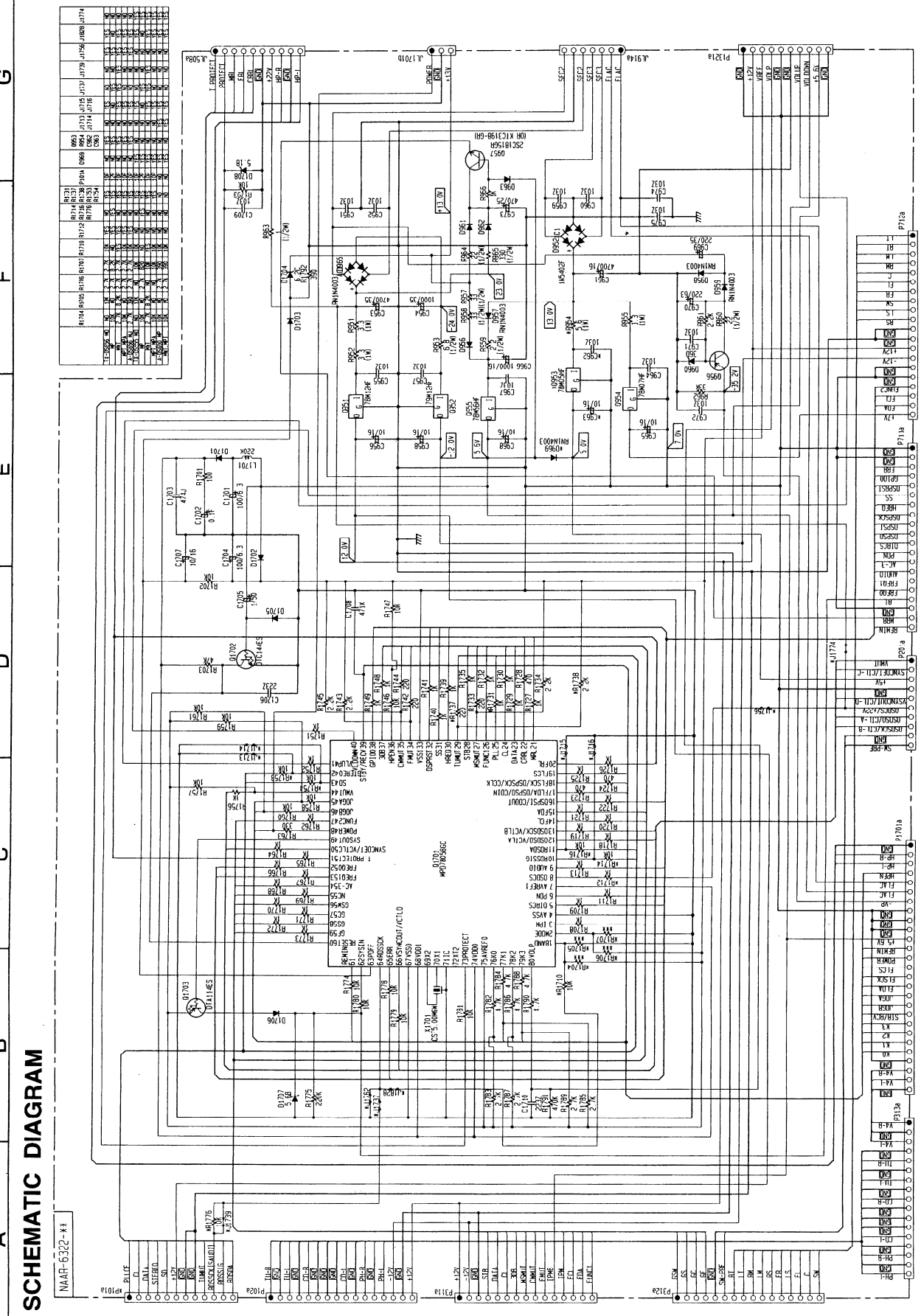

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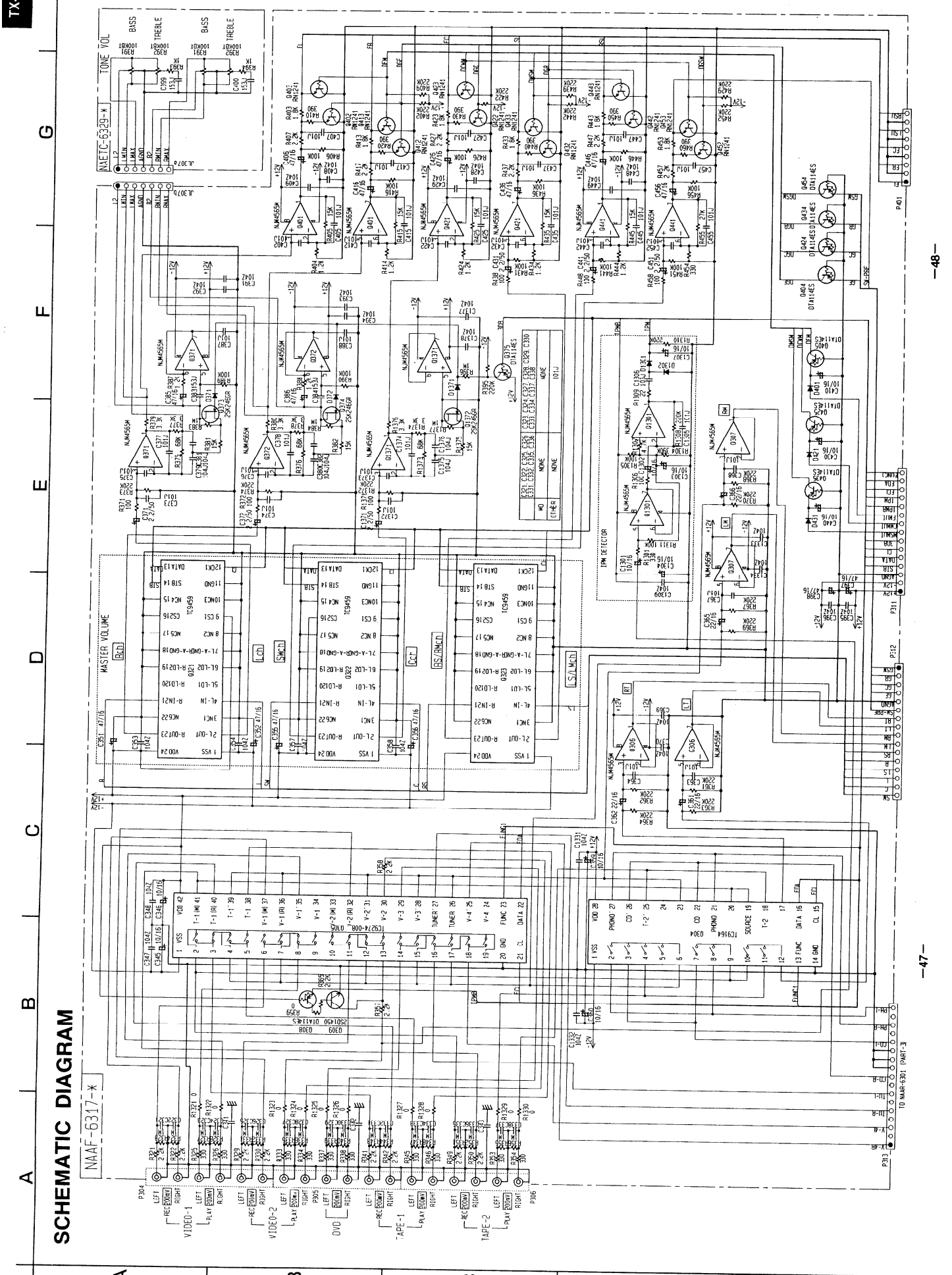
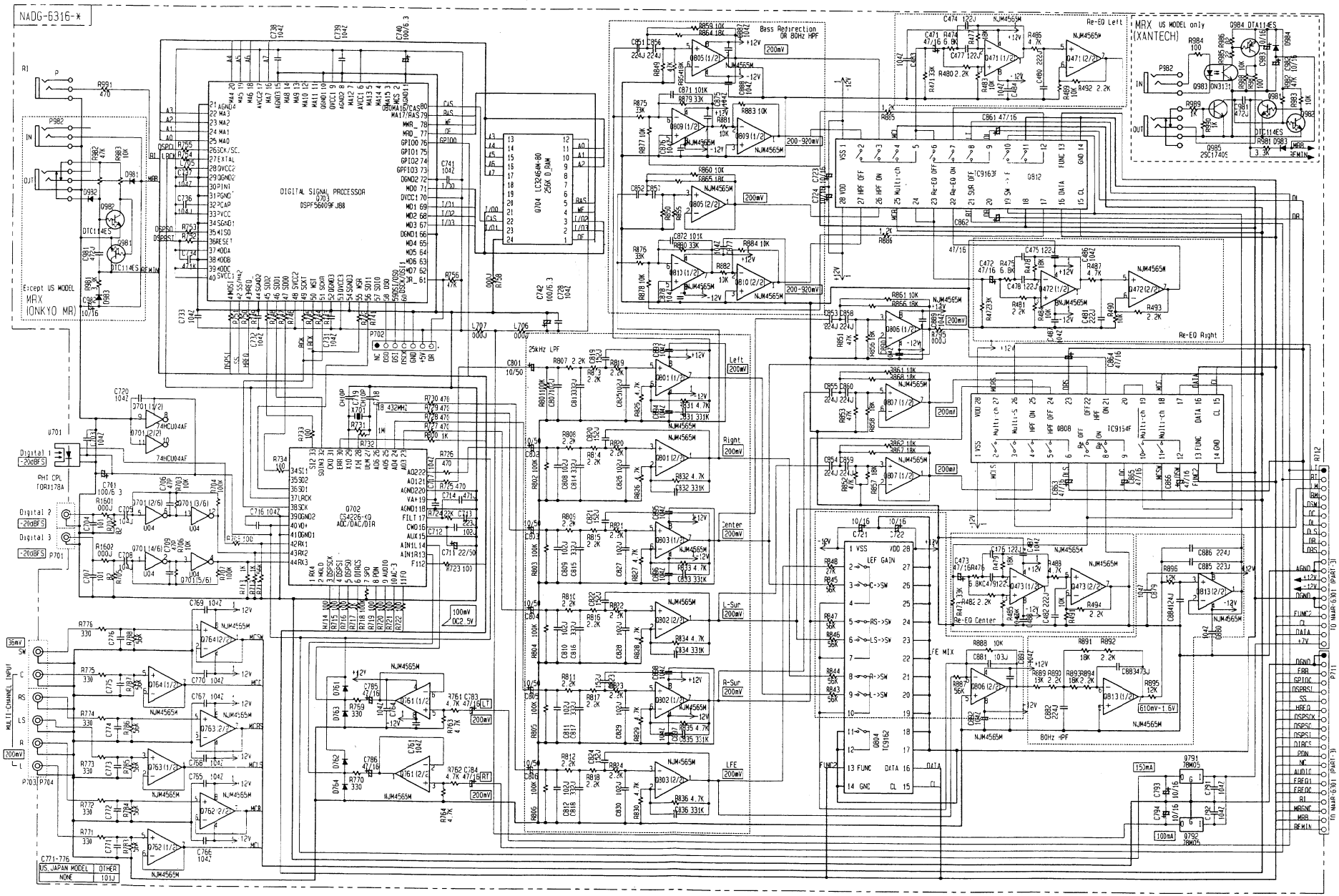


SCHEMATIC DIAGRAM



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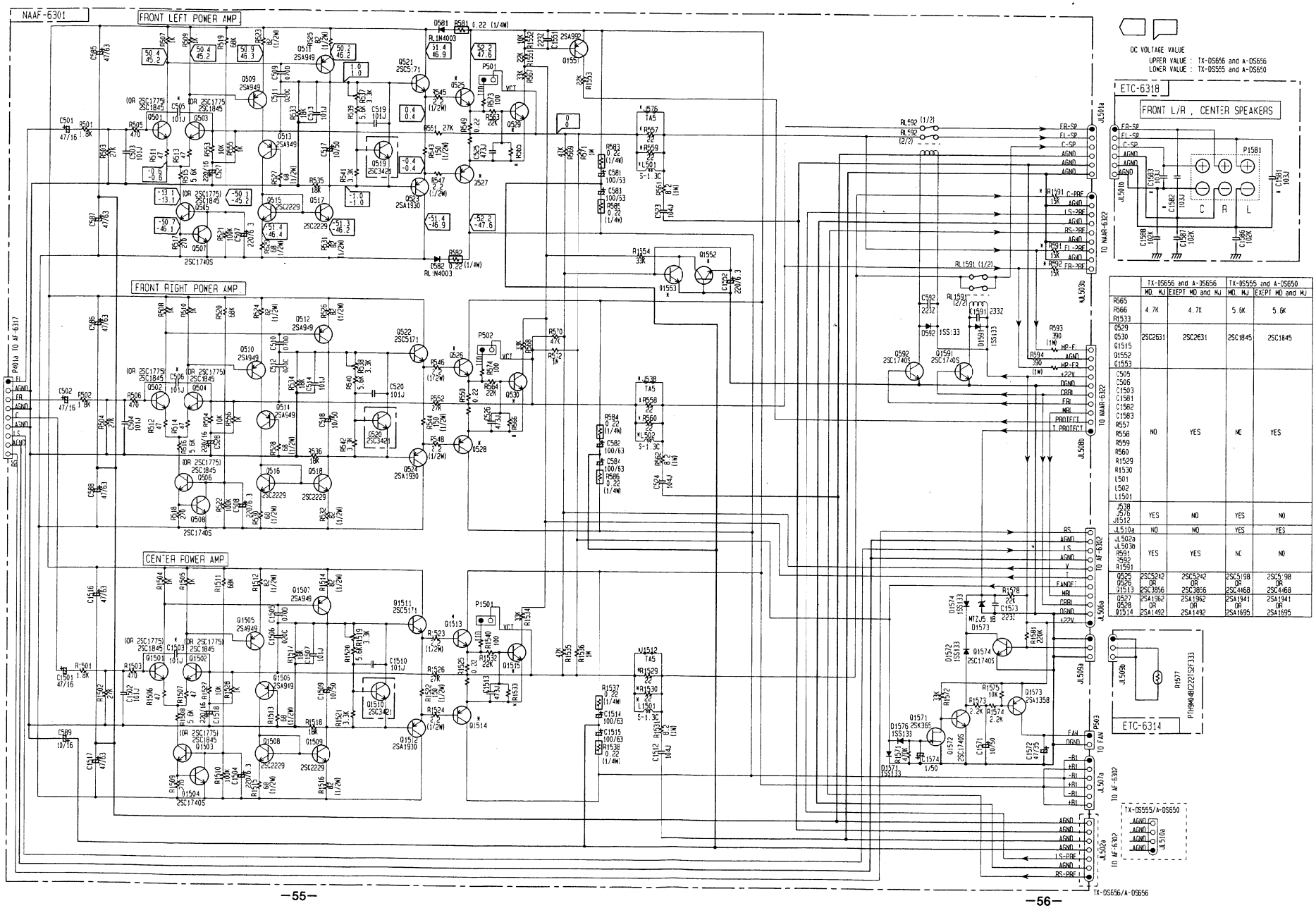
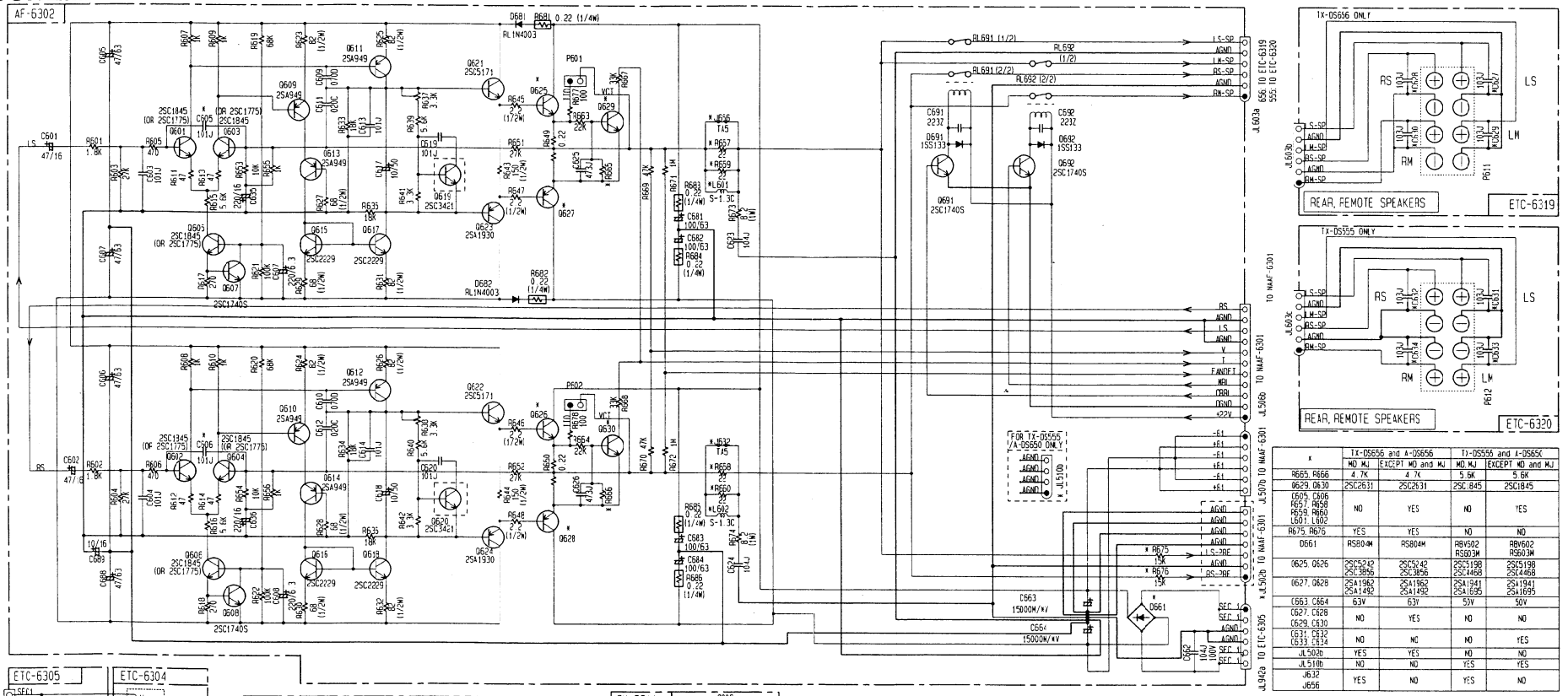
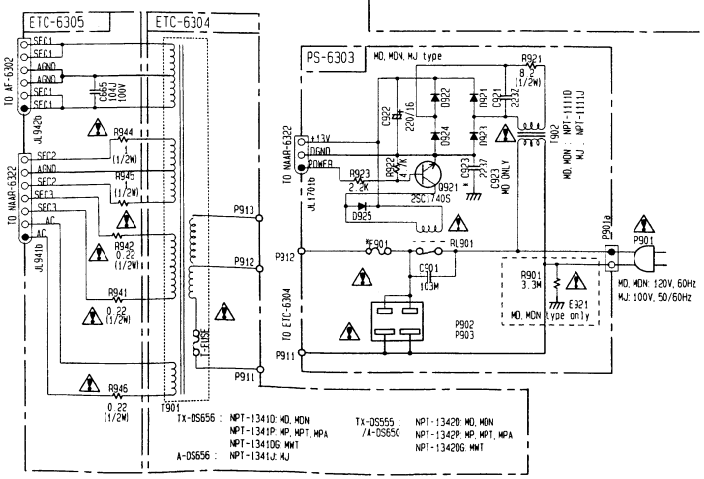


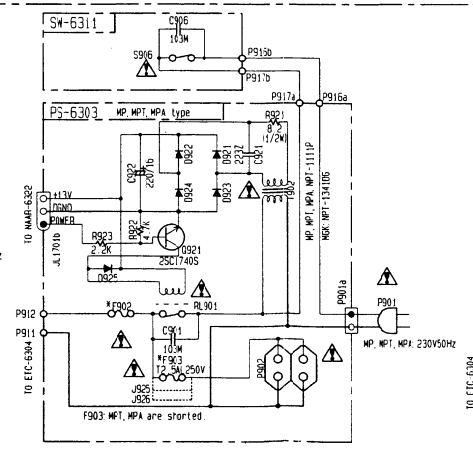
	TX-DS656 and A-DS656		TX-DS555 and A-DS650	
	MD, MJ	EXEPT MD and MJ	MD, MJ	EXEPT MD and MJ
R565 R566 R1533	4.7K	4.7K	5.6K	5.6K
Q529 Q530 Q1515 Q1552 Q1553	2SC2631	2SC2631	2SC1845	2SC1845
C505 C506 C1503 C1581 C1582 C1583 R557 R558 R559 R560 R1529 R1530 L501 L502 L1501	NO	YES	NO	YES
J538 J576 J1512	YES	NO	YES	NO
JL510a	NO	NO	YES	YES
JL502a JL503a R591 R592 R1591	YES	YES	NC	NO
Q525 Q526 J1513	2SC5242 OR 2SC3856	2SC5242 OR 2SC3856	2SC5198 OR 2SC4468	2SC5198 OR 2SC4468
Q527 Q528 J1514	2SA1962 OR 2SA1492	2SA1962 OR 2SA1492	2SA1941 OR 2SA1695	2SA1941 OR 2SA1695

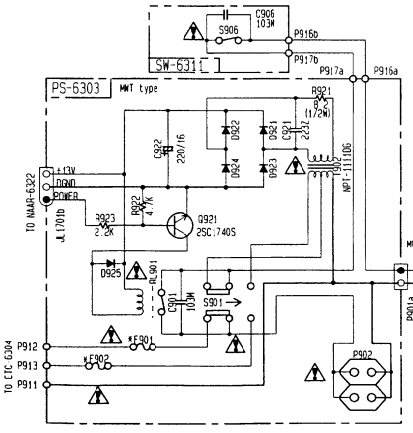
SCHEMATIC DIAGRAM



x	TX-DS656 and A-DS656		TX-DS555 and A-DS65C	
	MD, MJ	EXCEPT MD and MJ	MD, MJ	EXCEPT MD and MJ
R665, R666	4.7K	4.7K	5.6K	5.6K
Q629, Q630	2SC2631	2SC2631	2SC1845	2SC1845
C605, C606 R657, R658 R659, R660 L601, L602	NO	YES	NO	YES
R675, R676	YES	YES	NO	NO
D661	RS804M	RS804M	RBV502 RS603M	RBV602 RS603M
Q625, Q626	2SC5242 2SC3856	2SC5242 2SC3856	2SC5198 2SC4468	2SC5198 2SC4468
Q627, Q628	2SA1962 2SA1492	2SA1962 2SA1492	2SA1941 2SA1695	2SA1941 2SA1695
C663, C664	63V	63V	50V	50V
C627, C628 C629, C630	NO	YES	NO	NO
C631, C632 C633, C634	NO	NO	NO	YES
JL502b	YES	YES	NO	NO
JL510b	NO	NO	YES	YES
J632 J656	YES	NO	YES	NO







		TX-DS656	A-DS656	TX-DS555/A-DS650
MD MDN	F901	10A/125V		8A/125V
MJ	F901		12A/125V	
MP MPT MPA	F902	5AL250V		4AL250V
MWT	F902	5AL250V		4AL250V
	F901	10A/125V		8A/125V
MP	F903	5AL250V		5AL250V

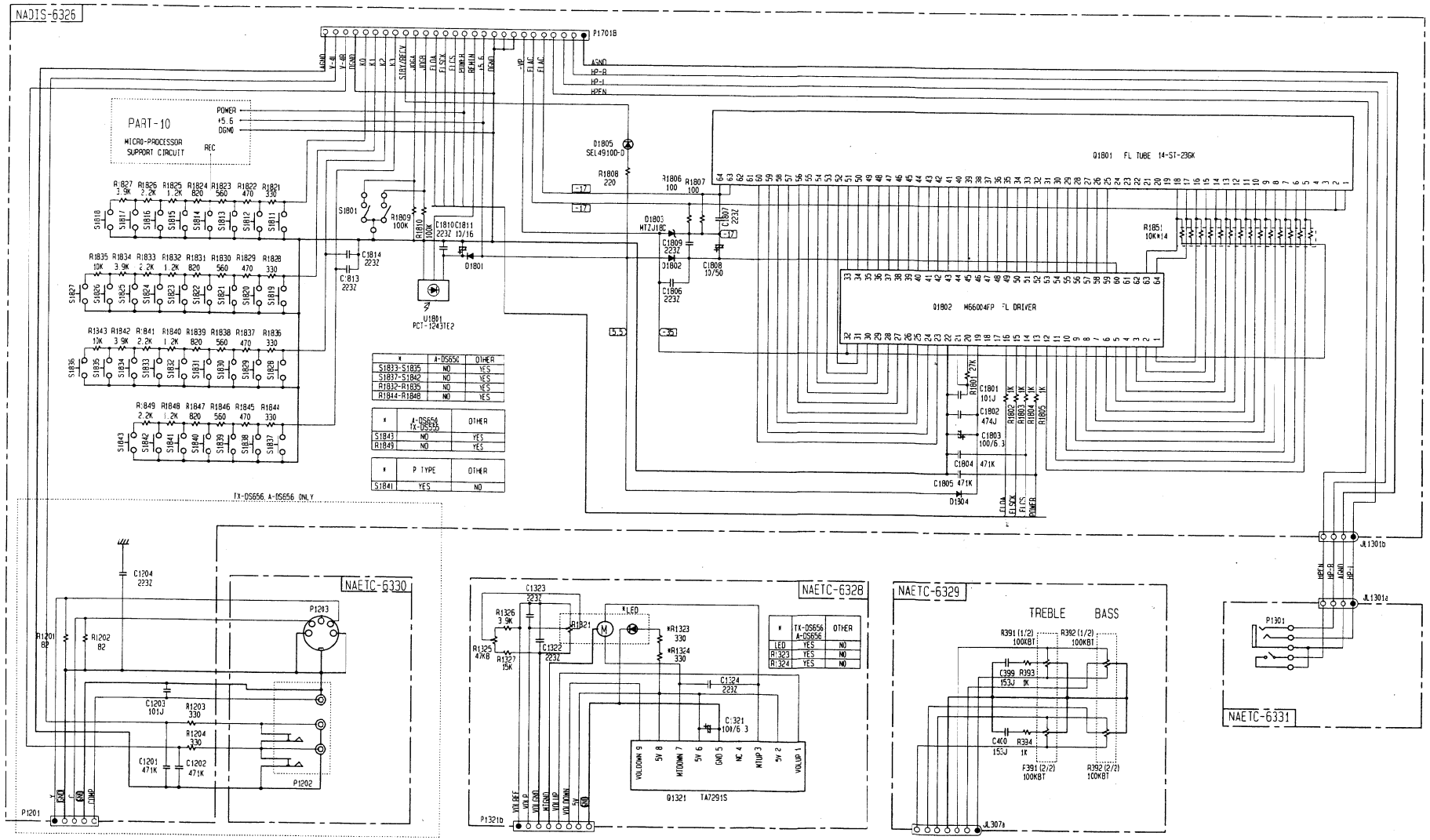
CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH FUSE OF SAME TYPE AND RATING INDICATED.

ATTENTION
AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE, REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MEME TYPE ET CALIBRATION COMME INDIQUE.

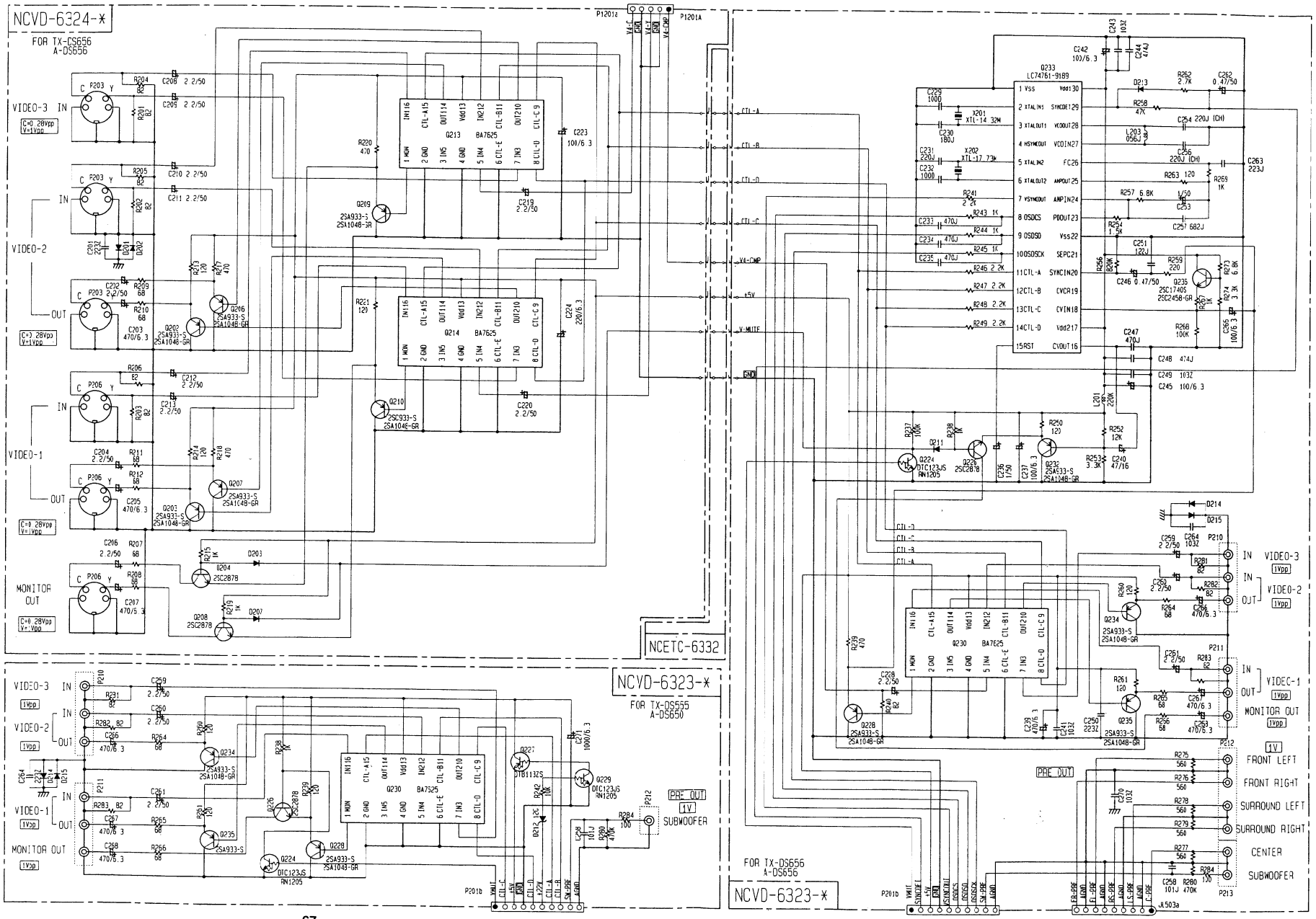
THIS SYMBOL LOCATED NEAR THE FUSE INDICATES THAT THE FUSE USED IS SLOW OPERATING TYPE FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE WITH SAME TYPE FUSE. FOR FUSE RATING REFER TO THE MAKING ADJACENT TO THE SYMBOL.

CE SYMBOLE INDIQUE QUE LE FUSIBLE UTILISE EST A LENT. E POUR UNE PROTECTION PERMANENTE, N'UTILISER QUE DES FUSIBLES DE MEME TYPE. CE DARNIER EST INDIQUE LA OU LE PRESENT SYMBOL EST APPOSE.

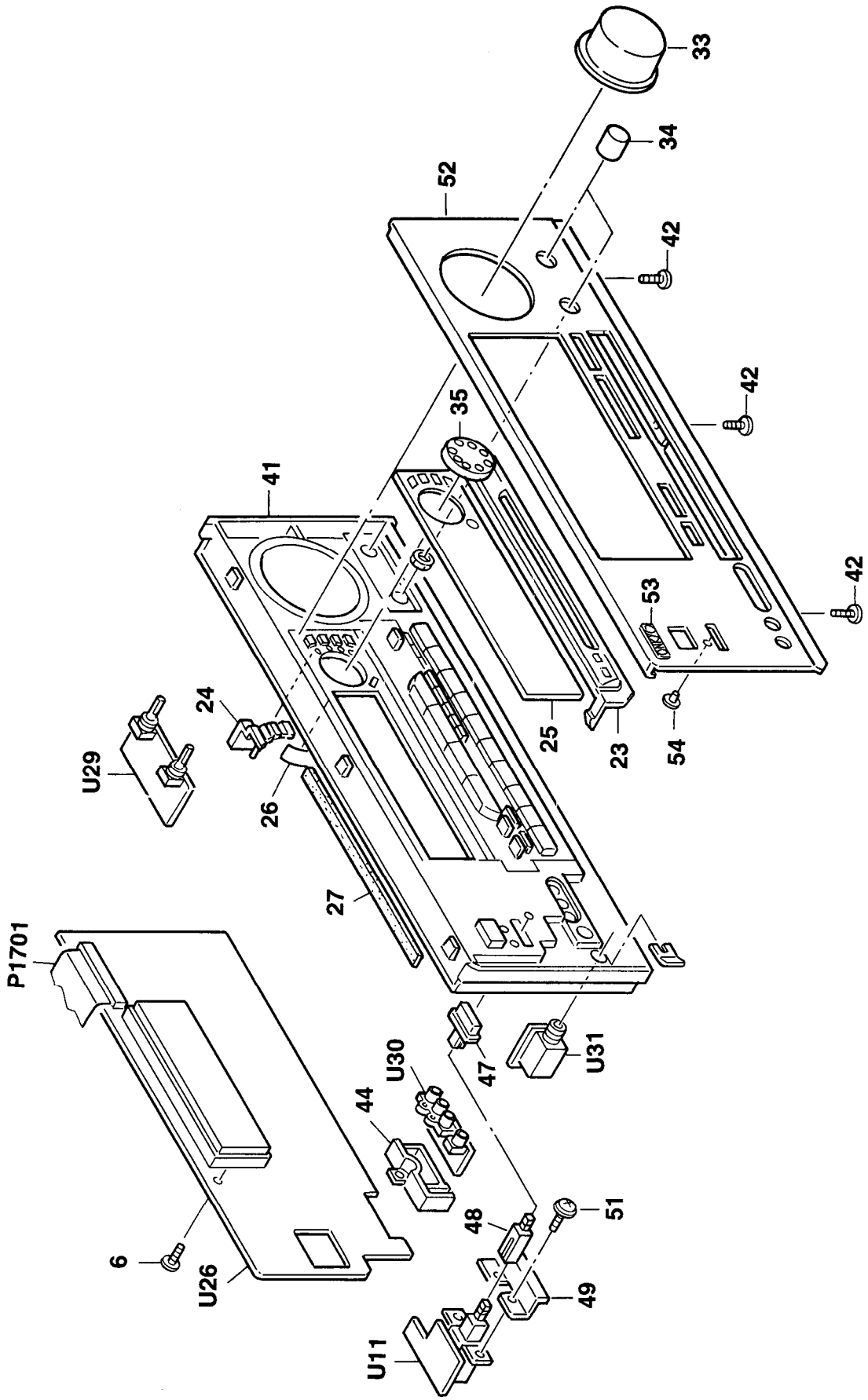
SCHEMATIC DIAGRAM

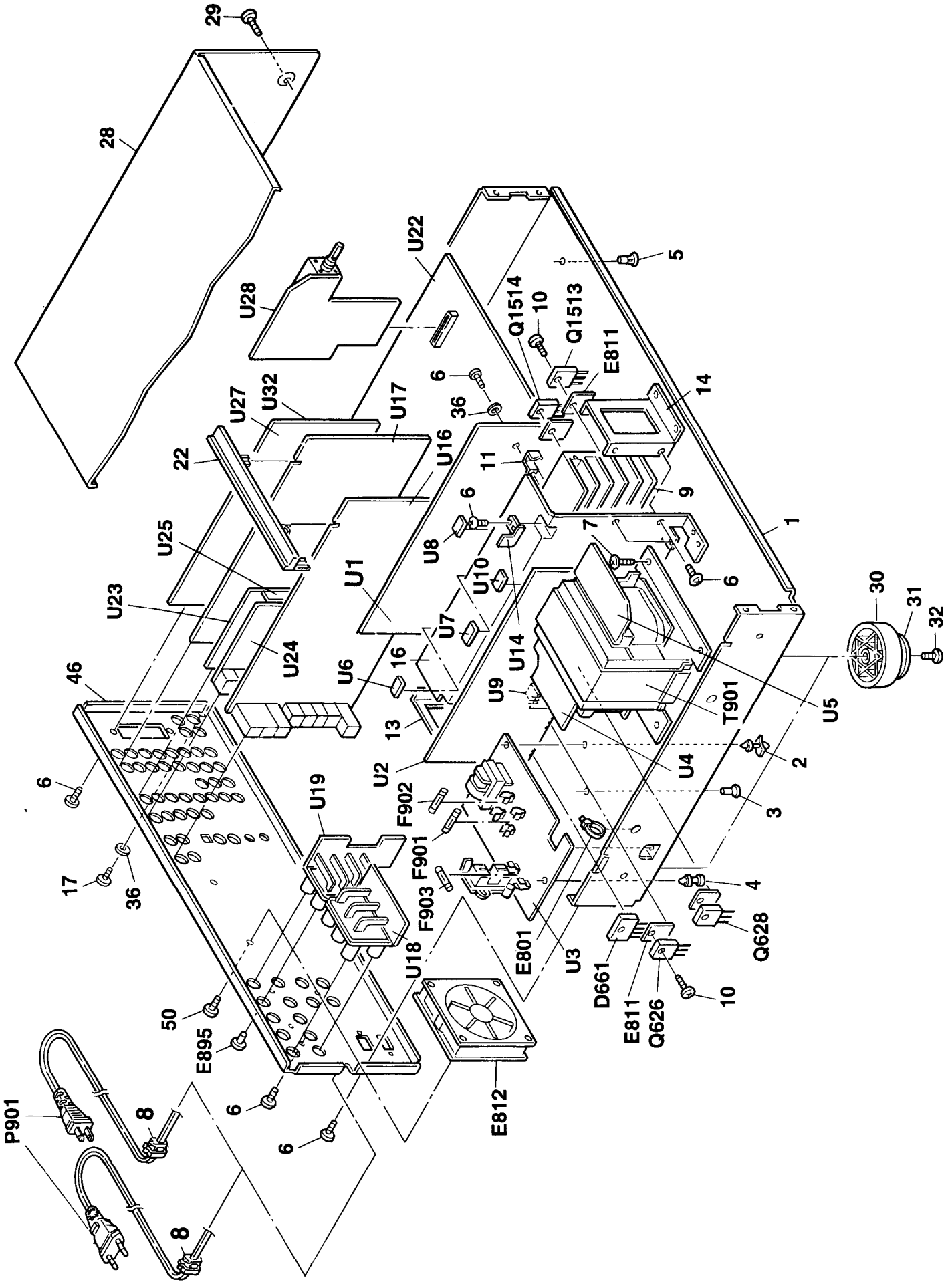


SCHEMATIC DIAGARM



EXPLODED VIEW




29
28
U22
U28
5
Q1514
10
Q1513
E811
14
U27
U32
U17
6
36
22
U16
11
9
U25
6
U8
7
1
U1
U10
6
30
31
32
U23
U7
U14
U24
U6
16
U9
T901
U5
46
13
U2
U4
2
6
U19
F902
3
F901
17
36
F903
4
Q628
U18
E801
U3
D661
E811
Q626
10
50
E895
E812
6
8
P901
6
8

PARTS LIST

REF.NO.	PART NO.		DESCRIPTION
1	27100328C		Chassis
2	27190503A		KGLS-8RF,Holder
3	27190428A		KGLS-10RF,Holder
4	27190802		KGPS-14RF,Holder
5	27190813		KGPS-10RF,Holder
6	838130088		3TTB+8B,Self-tapping screw
7	830440089		4TTC+8C(BC),Self-tapping screw
8	27300750	⚠	#2271,Cord, bushing
9	27160414		Heatsink
10	801433		3SMS8W.SW+14B(BC),Special screw
11	27141681		Retainer PWB
13	27141721		Retainer, Rear
14	27141720		Retainer, Front
16	27160413		Heatsink S
17	838230088		3TTB+8B(NI),Nickel screw
22	27191050		Holder
23	27215303		Decorative frame <B>
	27215304		Decorative frame <G>
24	28325542		Knob, Mode <B>
	28325544		Knob, Mode <G>
25	28191792A		Clear plate <B>
	28191793A		Clear plate <G>
26	29110050		Aluminum tape
27	28140680		Cushion
28	28184738		Top cover <B>
	28184739		Top cover <G>
29	838430088		3TTB+8B(BC), Self-tapping screw <B>
	838230088		3TTB+8B(NI),Nickel screw <G>
30	27175319A		Leg
31	28141332		Cushion
32	831430088		3TTW+8B(BC),Self-tapping screw
33	28325509		Knob, Volume <B>
	28325511		Knob, Volume <G>
34	28325405		Knob, Tone <B>
	28325407		Knob, Tone <G>
35	28325500		Knob, Jog <B>
	28325502		Knob, Jog <G>
36	87643010		W3*10F(BC), Flat washer
41	27111074		Front bracket <D/T/W/A/R>
	27111075		Front bracket <P>
	27111076		Front bracket <G>
42	838130088		3TTB+8B,Self-tapping screw
44	27191014A		Holder, Jack
46	27122477		Rear panel <D>
	27122478		Rear panel <P>
	27122479		Rear panel <T>
	27122480		Rear panel <W>
	27122481		Rear panel <A>
	27122529		Rear panel <R>

REF.NO.	PART NO.		DESCRIPTION
47	28325497A		Knob, Power <P/T/W/A/R>
	28325499A		Knob, Power <G>
48	27273164		Joint
49	27141686A		Retainer POW <P/T/W/A/R>
50	838150108		5TTB+10B,Self-tapping screw
51	838430107		3TTB+10S(BC),Self-tapping screw <P/T/W/A/R>
52	27212014		Front panel <D>
	27212015		Front panel <P>
	27212016A		Front panel <T/W/A/R>
	27212017A		Front panel <G>
53	28135244Y		Badge <B>
	28135245Y		Badge <G>
54	28198778		Facet
D661	22380273		RS804M, Diode
E801	260208		Wire tie
E811	223024Y	⚠	Isolation sheet
E812	24502307		D09T-24TG 02(EX), Fan
E895	880048		Plastic rivet <P/T/A>
F901	252199	⚠	10A-UL, Fuse <D/W/R>
F902	252078	⚠	5A-SE-EAK,Fuse <P/T/W/A/R>
F903	252075	⚠	2.5A-SE-EAK,Fuse <P/T>
P1701	2047272512		NCFC7-272512,Flexible flat cable
P901	253244AMAR	⚠	AS-UC-6#18, Power supply cord <D>
	253245MAR	⚠	AS-CEE, Power supply cord <P/T>
	253246KAW	⚠	AS-CEE-2,Power supply cord <W>
	253268HIT	⚠	AS-SAA,Power supply cord <A>
	253274KAW	⚠	AS-CCEE, Power supply cord <R>
Q1513	2201653,	*	2SC3856-O,
Q525	2201654,	*	2SC3856-Y,
Q526	2201655,	*	2SC3856-P,
Q625	2202842 or	*	2SC5242-R or
Q626	2202843	*	2SC5242-O,Transistor
Q1514	2201663	*	2SA1492-O,
Q527	2201664	*	2SA1492-Y,
Q528	2201665	*	2SA1492-P,
Q627	2202832	*	2SA1962-R or
Q628	2202833	*	2SA1962-O,Transistor
T901	2301335	⚠	NPT-1341D, Power transformer <D>
	2301336	⚠	NPT-1341P,Power transformer <P/T>
	2301337	⚠	NPT-1341DG,Power transformer <W/R>
U1	1A776501-1A		NAAF-6301-1A,Front and center channel power amplifier PC board ass'y <D>
	1A776501-1B		NAAF-6301-1B,Front and center channel power amplifier PC board ass'y <P/T>
	1A776501-1C		NAAF-6301-1C,Front and center channel power amplifier PC board ass'y <W/R>
	1A776501-1D		NAAF-6301-1D,Front and center channel power amplifier PC board ass'y <A>
U2	1A776502-1A		NAAF-6302-1A,Surround amplifier PC board ass'y <D>
	1A776502-1B		NAAF-6302-1B,Surround amplifier PC board ass'y <P/T>
	1A776502-1C		NAAF-6302-1C,Surround amplifier PC board ass'y <W/R>
	1A776502-1D		NAAF-6302-1D,Surround amplifier PC board ass'y <A>
U3	1A776503-1A		NAPS-6303-1A,Power supply circuit PC board ass'y <D>
	1A776503-1B		NAPS-6303-1B,Power supply circuit PC board ass'y <P/T>
	1A776503-1C		NAPS-6303-1C,Power supply circuit PC board ass'y <W/R>
	1A776503-1D		NAPS-6303-1D,Power supply circuit PC board ass'y <A>

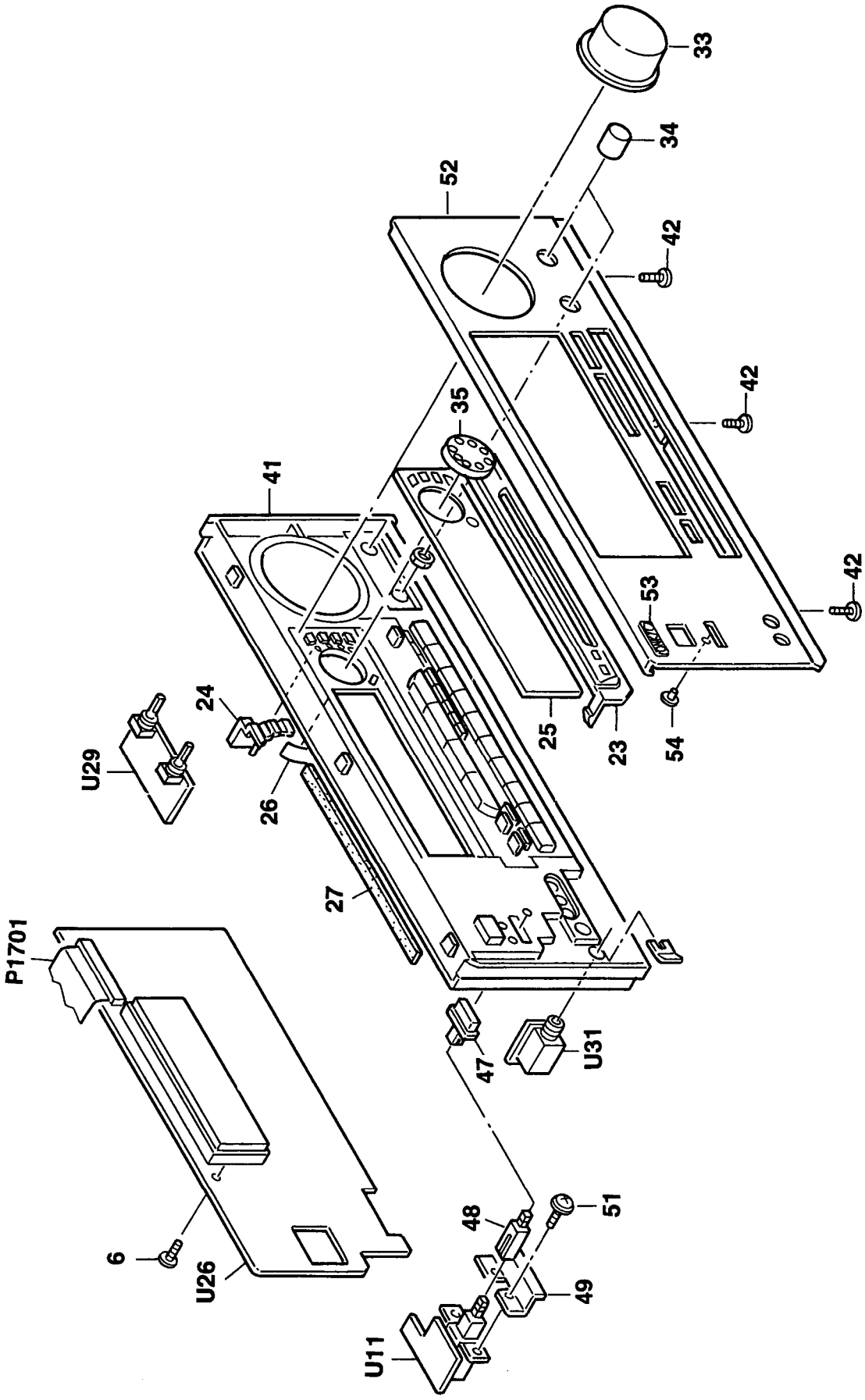
REF.NO.	PART NO.	DESCRIPTION
U4	1A776504-1A	NAETC-6304-1A,Transformer terminal PC board <D>
	1A776504-1B	NAETC-6304-1B,Transformer terminal PC board <P/T>
	1A776504-1C	NAETC-6304-1C,Transformer terminal PC board <W/R>
	1A776504-1D	NAETC-6304-1D,Transformer terminal PC board <A>
U5	1A776505-1A	NAETC-6305-1A,Primary circuit PC board ass'y <D>
	1A776505-1B	NAETC-6305-1B,Primary circuit PC board ass'y <P/T>
	1A776505-1C	NAETC-6305-1C,Primary circuit PC board ass'y <W/R>
	1A776505-1D	NAETC-6305-1D,Primary circuit PC board ass'y <A>
U6	1A776506-1A	NAETC-6306-1A, Thermal detector PC board ass'y <D>
	1A776506-1B	NAETC-6306-1B, Thermal detector PC board ass'y <P/T>
	1A776506-1C	NAETC-6306-1C, Thermal detector PC board ass'y <W/R>
	1A776506-1D	NAETC-6306-1D, Thermal detector PC board ass'y <A>
U7	1A776507-1A	NAETC-6307-1A, Thermal detector PC board ass'y <D>
	1A776507-1B	NAETC-6307-1B, Thermal detector PC board ass'y <P/T>
	1A776507-1C	NAETC-6307-1C, Thermal detector PC board ass'y <W/R>
	1A776507-1D	NAETC-6307-1D, Thermal detector PC board ass'y <A>
U8	1A776508-1A	NAETC-6308-1A, Thermal detector PC board ass'y <D>
	1A776508-1B	NAETC-6308-1B, Thermal detector PC board ass'y <P/T>
	1A776508-1C	NAETC-6308-1C, Thermal detector PC board ass'y <W/R>
	1A776508-1D	NAETC-6308-1D, Thermal detector PC board ass'y <A>
U9	1A776509-1A	NAETC-6309-1A, Thermal detector PC board ass'y <D>
	1A776509-1B	NAETC-6309-1B, Thermal detector PC board ass'y <P/T>
	1A776509-1C	NAETC-6309-1C, Thermal detector PC board ass'y <W/R>
	1A776509-1D	NAETC-6309-1D, Thermal detector PC board ass'y <A>
U10	1A776510-1A	NAETC-6310-1A, Thermal detector PC board ass'y <D>
	1A776510-1B	NAETC-6310-1B, Thermal detector PC board ass'y <P/T>
	1A776510-1C	NAETC-6310-1C, Thermal detector PC board ass'y <W/R>
	1A776510-1D	NAETC-6310-1D, Thermal detector PC board ass'y <A>
U11	1A776511-1B	NASW-6311-1B,Power switch PC board ass'y <P/T>
	1A776511-1C	NASW-6311-1C,Power switch PC board ass'y <W/R>
	1A776511-1D	NASW-6311-1D,Power switch PC board ass'y <A>
U14	1A776514-1A	NAETC-6314-1A,Thermal det. PC board ass'y <D>
	1A776514-1B	NAETC-6314-1B,Thermal det. PC board ass'y <P/T>
	1A776514-1C	NAETC-6314-1C,Thermal det. PC board ass'y <W/R>
	1A776514-1D	NAETC-6314-1D,Thermal det. PC board ass'y <A>
U16	1A776516-1A	NADG-6316-1A,Main circuit PC board ass'y <D>
	1A776516-1B	NADG-6316-1B,Main circuit PC board ass'y <P/T/W/A/R>
U17	1A776517-1A	NAAF-6317-1A,Preamplifier circuit PC board ass'y <D>
	1A776517-1B	NAAF-6317-1B,Preamplifier circuit PC board ass'y <P/T/W/A/R>
U18	1A776518-1A	NAETC-6318-1A,Front/center speaker terminal PC board ass'y <D>
	1A776518-1B	NAETC-6318-1B,Front/center speaker terminal PC board ass'y <P/T/W/A/R>
U19	1A776519-1A	NAETC-6319-1A,Rear/remote speaker terminal PC board ass'y <D>
	1A776519-1B	NAETC-6319-1B,Rear/remote speaker terminal PC board ass'y <P/T/W/A/R>
U22	1A776522-1A	NAAR-6322-1A,Microprocessor circuit PC board ass'y <D>
	1A776522-1B	NAAR-6322-1B,Microprocessor circuit PC board ass'y <P>
	1A776522-1C	NAAR-6322-1C,Microprocessor circuit PC board ass'y <W/R>
	1A776522-1D	NAAR-6322-1D,Microprocessor circuit PC board ass'y <T/A>
U23	1A776523-1A	NAVD-6323-1A,Composite video signal PC board ass'y <D>
	1A776523-1B	NAVD-6323-1B,Composite video signal PC board ass'y <P>
	1A776523-1C	NAVD-6323-1C,Composite video signal PC board ass'y <W/R>
	1A776523-1D	NAVD-6323-1D,Composite video signal PC board ass'y <T/A>
U24	1A776524-1A	NAVD-6324-1A, S video circuit PC board ass'y <D>
	1A776524-1B	NAVD-6324-1B, S video circuit PC board ass'y <P>
	1A776524-1C	NAVD-6324-1C, S video circuit PC board ass'y <W/R>
	1A776524-1D	NAVD-6324-1D, S video circuit PC board ass'y <T/A>
U25	1A776525-1A	NAETC-6325-1A,Connector PC board ass'y <D>
	1A776525-1B	NAETC-6325-1B,Connector PC board ass'y <P>
	1A776525-1C	NAETC-6325-1C,Connector PC board ass'y <W/R>
	1A776525-1D	NAETC-6325-1D,Connector PC board ass'y <T/A>
U26	1A776526-1A	NADIS-6326-1A,Display circuit PC board ass'y <D>
	1A776526-1B	NADIS-6326-1B,Pisplay circuit PC board ass'y <P>
	1A776526-1C	NADIS-6326-1C,Pisplay circuit PC board ass'y <W/R>
	1A776526-1D	NADIS-6326-1D,Pisplay circuit PC board ass'y <T/A>
U27	1A776527-1A	NARF-6327-1A,Tuner circuit PC board ass'y <D>
	1A776527-1B	NARF-6327-1B,Tuner circuit PC board ass'y <P>
	1A776527-1C	NARF-6327-1C,Tuner circuit PC board ass'y <W/R>
	1A776527-1D	NARF-6327-1D,Tuner circuit PC board ass'y <T/A>
U28	1A776528-1A	NAETC-6328-1A,Master volume PC board ass'y <D>
	1A776528-1B	NAETC-6328-1B,Master volume PC board ass'y <P>
	1A776528-1C	NAETC-6328-1C,Master volume PC board ass'y <W/R>
	1A776528-1D	NAETC-6328-1D,Master volume PC board ass'y <T/A>
U29	1A776529-1A	NAETC-6329-1A,Tone control PC board ass'y <D>
	1A776529-1B	NAETC-6329-1B,Tone control PC board ass'y <P>
	1A776529-1C	NAETC-6329-1C,Tone control PC board ass'y <W/R>
	1A776529-1D	NAETC-6329-1D,Tone control PC board ass'y <T/A>
U30	1A776530-1A	NAETC-6330-1A,Front video terminal PC board ass'y <D>
	1A776530-1B	NAETC-6330-1B,Front video terminal PC board ass'y <P>
	1A776530-1C	NAETC-6330-1C,Front video terminal PC board ass'y <W/R>
	1A776530-1D	NAETC-6330-1D,Front video terminal PC board ass'y <T/A>
U31	1A776531-1A	NAETC-6331-1A,Headphone terminal PC board ass'y <D>
	1A776531-1B	NAETC-6331-1B,Headphone terminal PC board ass'y <P>
	1A776531-1C	NAETC-6331-1C,Headphone terminal PC board ass'y <W/R>
	1A776531-1D	NAETC-6331-1D,Headphone terminal PC board ass'y <T/A>
U32	1A776532-1A	NAETC-6332-1A,Input terminal PC board ass'y <D>
	1A776532-1B	NAETC-6332-1B,Input terminal PC board ass'y <P>
	1A776532-1C	NAETC-6332-1C,Input terminal PC board ass'y <W/R>
	1A776532-1D	NAETC-6332-1D,Input terminal PC board ass'y <T/A>

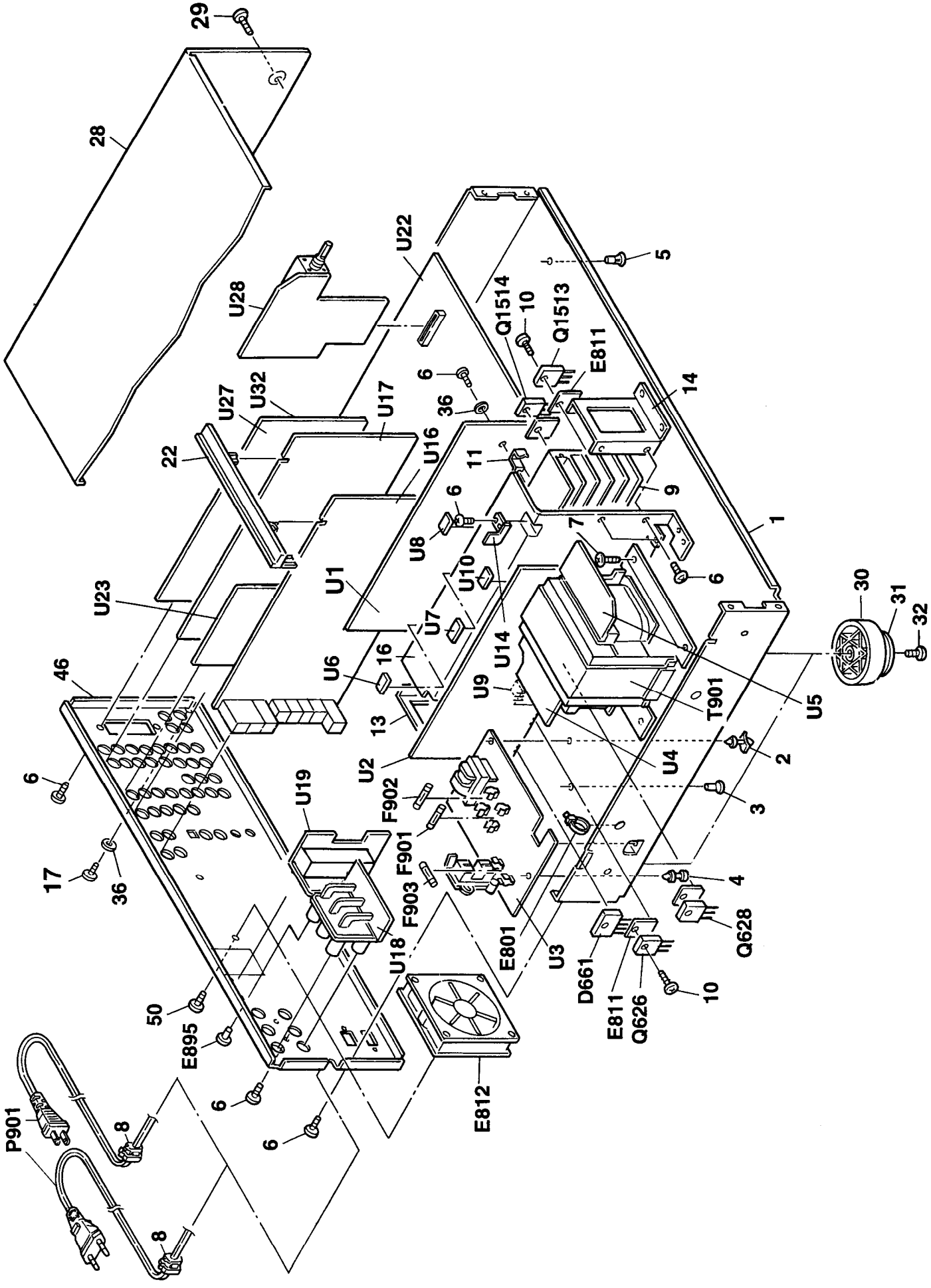
NOTE: <D>:120V model only
<P>:European model only
<T>:Asian model only
<W>:Worldwide model only
<R>:Chinease model only
<A>:Australian model only
<B>:Black model only
<G>:Golden model only

NOTE: THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

PARTS LIST

EXPLODED VIEW

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Q1513
E811
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U27
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U8
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U6
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U9
T901
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U2
U4
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U19
F902
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F901
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F903
4
U18
E801
U3
Q628
D661
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50
E811
Q626
E895
6
E812
6
P901
8
8

PARTS LIST

REF.NO.	PART NO.		DESCRIPTION
1	27100328C		Chassis
2	27190503A		KGLS-8RF,Holder
3	27190428A		KGLS-10RF,Holder
4	27190802		KGPS-14RF,Holder
5	27190813		KGPS-10RF,Holder
6	838130088		3TTB+8B,Self-tapping screw
7	830440089		4TTC+8C(BC),Self-tapping screw
8	27300750	⚠	#2271,Cord, bushing
9	27160414		Heatsink
10	801433		3SMS8W.SW+14B(BC),Special screw
11	27141681		Retainer PWB
13	27141721		Retainer, Rear
14	27141720		Retainer, Front
16	27160413		Heatsink S
17	838230088		3TTB+8B(NI),Nickel screw
22	27191050		Holder
23	27215303		Decorative frame <B>
	27215305		Decorative frame <S>
	27215304		Decorative frame <G>
24	28325542		Knob, Mode <B>
	28325543		Knob, Mode <S>
	28325544		Knob, Mode <G>
25	28191792A		Clear plate <B>
	28191793A		Clear plate <S/G>
26	29110050		Aluminum tape
27	28140680		Cushion
28	28184738		Top cover <B>
	28184740		Top cover <S>
	28184739		Top cover <G>
29	838430088		3TTB+8B(BC), Self-tapping screw <B>
	838230088		3TTB+8B(NI),Nickel screw <G>
30	27175319A		Leg
31	28141332		Cushion
32	831430088		3TTW+8B(BC),Self-taping screw
33	28325539		Knob, Volume <B>
	28325540		Knob, Volume <S>
	28325541		Knob, Volume <G>
34	28325405		Knob, Tone <B>
	28325474		Knob, Tone <S>
	28325407		Knob, Tone <G>
35	28325500		Knob, Jog <B>
	28325538		Knob, Jog <S>
	28325502		Knob, Jog <G>
36	87643010		W3*10F(BC), Flat washer
41	27111077		Front bracket <D/T/W/A/R>
	27111078		Front bracket <P>
	27111079		Front bracket <S>
	27111080		Front bracket <G>
42	838130088		3TTB+8B,Self-tapping screw
44	27191014A		Holder, Jack

REF.NO.	PART NO.		DESCRIPTION
46	27122483		Rear panel <D>
	27122484		Rear panel <P>
	27122485		Rear panel <T>
	27122486		Rear panel <W>
	27122487		Rear panel <A>
	27122530		Rear panel <R>
47	28325497A		Knob, Power <P/T/W/A/R>
	28325547A		Knob, Power <S>
	28325499A		Knob, Power <G>
48	27273164		Joint
49	27141686A		Retainer POW <P/T/W/A/R>
50	838150108		5TTB+10B,Self-tapping screw
51	838430107		3TTB+10S(BC),Self-tapping screw <P/T/W/A/R>
52	27212019		Front panel <D>
	27212020		Front panel <P>
	27212021		Front panel <S>
	27212022A		Front panel <T/W/A/R>
	27212023A		Front panel <G>
53	28135244Y		Badge <B>
	28135245Y		Badge <G/S>
54	28198778		Facet
D661	22380038 or		RBV602 or
	22380274		RSW603M,Diode
E801	260208		Wire tie
E811	223024Y	⚠	Isolation sheet
E812	24502307		D09T-24TG 02(EX), Fan
E895	880048		Plastic rivet <P/T/A>
F901	252198	⚠	8A-UL, Fuse <D/W/R>
F902	252077	⚠	4A-SE-EAK,Fuse <P/T/W/A/R>
F903	252075	⚠	2.5A-SE-EAK,Fuse <P/T>
P1701	2047272512		NCFC7-272512,Flexible flat cable
P901	253244AMAR	⚠	AS-UC-6#18, Power supply cord <D>
	253245MAR	⚠	AS-CEE, Power supply cord <P/T>
	253246KAW	⚠	AS-CEE-2,Power supply cord <W>
	253268HIT	⚠	AS-SAA,Power supply cord <A>
	253274KAW	⚠	AS-CCEE, Power supply cord <R>
Q1513 or	2203063,	*	2SC5198-O,
Q525	2203062,	*	2SC5198-R,
Q526	2202523,	*	2SC4468-O,
Q625	2202526 or	*	2SC4468-P or
Q626	2202524	*	2SC4468-Y,Transistor
Q1514 or	2203053,	*	2SA1941-O,
Q527	2203052,	*	2SA1491-R,
Q528	2202513,	*	2SA1695-O,
Q627	2202516 or	*	2SA1695-P,
Q628	2202514	*	2SA1695-Y,Transistor
T901	2301339	⚠	NPT-1342D, Power transformer <D>
	2301340	⚠	NPT-1342P,Power transformer <P/T>
	2301341	⚠	NPT-1342DG,Power transformer <W/R>
U1	1A778501-2A		NAAF-6301-2A,Front and center channel power amplifier PC board ass'y <D>
	1A778501-2B		NAAF-6301-2B,Front and center channel power amplifier PC board ass'y <P/T>
	1A778501-2C		NAAF-6301-2C,Front and center channel power amplifier PC board ass'y <W/R>
	1A778501-2D		NAAF-6301-2D,Front and center channel power amplifier PC board ass'y <A>

REF.NO.	PART NO.	DESCRIPTION
U2	1A778502-2A	NAAF-6302-2A,Surround amplifier PC board ass'y <D>
	1A778502-2B	NAAF-6302-2B,Surround amplifier PC board ass'y <P/T>
	1A778502-2C	NAAF-6302-2C,Surround amplifier PC board ass'y <W/R>
	1A778502-2D	NAAF-6302-2D,Surround amplifier PC board ass'y <A>
U3	1A778503-2A	NAPS-6303-2A,Power supply circuit PC board ass'y <D>
	1A778503-2B	NAPS-6303-2B,Power supply circuit PC board ass'y <P/T>
	1A778503-2C	NAPS-6303-2C,Power supply circuit PC board ass'y <W/R>
	1A778503-2D	NAPS-6303-2D,Power supply circuit PC board ass'y <A>
U4	1A778504-2A	NAETC-6304-2A,Transformer terminal PC board <D>
	1A778504-2B	NAETC-6304-2B,Transformer terminal PC board <P/T>
	1A778504-2C	NAETC-6304-2C,Transformer terminal PC board <W/R>
	1A778504-2D	NAETC-6304-2D,Transformer terminal PC board <A>
U5	1A778505-2A	NAETC-6305-2A,Primary circuit PC board ass'y <D>
	1A778505-2B	NAETC-6305-2B,Primary circuit PC board ass'y <P/T>
	1A778505-2C	NAETC-6305-2C,Primary circuit PC board ass'y <W/R>
	1A778505-2D	NAETC-6305-2D,Primary circuit PC board ass'y <A>
U6	1A778506-2A	NAETC-6306-2A, Thermal detector PC board ass'y <D>
	1A778506-2B	NAETC-6306-2B, Thermal detector PC board ass'y <P/T>
	1A778506-2C	NAETC-6306-2C, Thermal detector PC board ass'y <W/R>
	1A778506-2D	NAETC-6306-2D, Thermal detector PC board ass'y <A>
U7	1A778507-2A	NAETC-6307-2A, Thermal detector PC board ass'y <D>
	1A778507-2B	NAETC-6307-2B, Thermal detector PC board ass'y <P/T>
	1A778507-2C	NAETC-6307-2C, Thermal detector PC board ass'y <W/R>
	1A778507-2D	NAETC-6307-2D, Thermal detector PC board ass'y <A>
U8	1A778508-2A	NAETC-6308-2A, Thermal detector PC board ass'y <D>
	1A778508-2B	NAETC-6308-2B, Thermal detector PC board ass'y <P/T>
	1A778508-2C	NAETC-6308-2C, Thermal detector PC board ass'y <W/R>
	1A778508-2D	NAETC-6308-2D, Thermal detector PC board ass'y <A>
U9	1A778509-2A	NAETC-6309-2A, Thermal detector PC board ass'y <D>
	1A778509-2B	NAETC-6309-2B, Thermal detector PC board ass'y <P/T>
	1A778509-2C	NAETC-6309-2C, Thermal detector PC board ass'y <W/R>
	1A778509-2D	NAETC-6309-2D, Thermal detector PC board ass'y <A>
U10	1A778510-2A	NAETC-6310-2A, Thermal detector PC board ass'y <D>
	1A778510-2B	NAETC-6310-2B, Thermal detector PC board ass'y <P/T>
	1A778510-2C	NAETC-6310-2C, Thermal detector PC board ass'y <W/R>
	1A778510-2D	NAETC-6310-2D, Thermal detector PC board ass'y <A>
U11	1A778511-2B	NASW-6311-2B,Power switch PC board ass'y <P/T>
	1A778511-2C	NASW-6311-2C,Power switch PC board ass'y <W/R>
	1A778511-2D	NASW-6311-2D,Power switch PC board ass'y <A>
U14	1A778514-2A	NAETC-6314-2A,Thermal det. PC board ass'y <D>
	1A778514-2B	NAETC-6314-2B,Thermal det. PC board ass'y <P/T>
	1A778514-2C	NAETC-6314-2C,Thermal det. PC board ass'y <W/R>
	1A778514-2D	NAETC-6314-2D,Thermal det. PC board ass'y <A>
U16	1A778516-2A	NADG-6316-2A,Main circuit PC board ass'y <D>
	1A778516-2B	NADG-6316-2B,Main circuit PC board ass'y <P/T/W/A/R>
U17	1A778517-2A	NAAF-6317-2A,Preamplifier circuit PC board ass'y <D>
	1A778517-2B	NAAF-6317-2B,Preamplifier circuit PC board ass'y <P/T/W/A/R>
U18	1A778518-2A	NAETC-6318-2A,Front/center speaker terminal PC board ass'y <D>
	1A778518-2B	NAETC-6318-2B,Front/center speaker terminal PC board ass'y <P/T/W/A/R>
U20	1A778520-2A	NAETC-6320-2A,Rear/remote speaker terminal PC board ass'y <D>
	1A778520-2B	NAETC-6320-2B,Rear/remote speaker terminal PC board ass'y <P/T/W/A/R>

REF.NO.	PART NO.	DESCRIPTION
U22	1A778522-2A	NAAR-6322-2A,Microprocessor circuit PC board ass'y <D>
	1A778522-2B	NAAR-6322-2B,Microprocessor circuit PC board ass'y <P>
	1A778522-2C	NAAR-6322-2C,Microprocessor circuit PC board ass'y <W/R>
	1A778522-2D	NAAR-6322-2D,Microprocessor circuit PC board ass'y <T/A>
U23	1A778523-2A	NAVD-6323-2A,Composite video signal PC board ass'y <D>
	1A778523-2B	NAVD-6323-2B,Composite video signal PC board ass'y <P>
	1A778523-2C	NAVD-6323-2C,Composite video signal PC board ass'y <W/R>
	1A778523-2D	NAVD-6323-2D,Composite video signal PC board ass'y <T/A>
U26	1A778526-2A	NADIS-6326-2A,Display circuit PC board ass'y <D>
	1A778526-2B	NADIS-6326-2B,Pisplay circuit PC board ass'y <P>
	1A778526-2C	NADIS-6326-2C,Pisplay circuit PC board ass'y <W/R>
	1A778526-2D	NADIS-6326-2D,Pisplay circuit PC board ass'y <T/A>
U27	1A778527-2A	NARF-6327-2A,Tuner circuit PC board ass'y <D>
	1A778527-2B	NARF-6327-2B,Tuner circuit PC board ass'y <P>
	1A778527-2C	NARF-6327-2C,Tuner circuit PC board ass'y <W/R>
	1A778527-2D	NARF-6327-2D,Tuner circuit PC board ass'y <T/A>
U28	1A778528-2A	NAETC-6328-2A,Master volume PC board ass'y <D>
	1A778528-2B	NAETC-6328-2B,Master volume PC board ass'y <P>
	1A778528-2C	NAETC-6328-2C,Master volume PC board ass'y <W/R>
	1A778528-2D	NAETC-6328-2D,Master volume PC board ass'y <T/A>
U29	1A778529-2A	NAETC-6329-2A,Tone control PC board ass'y <D>
	1A778529-2B	NAETC-6329-2B,Tone control PC board ass'y <P>
	1A778529-2C	NAETC-6329-2C,Tone control PC board ass'y <W/R>
	1A778529-2D	NAETC-6329-2D,Tone control PC board ass'y <T/A>
U31	1A778531-2A	NAETC-6331-2A,Headphone terminal PC board ass'y <D>
	1A778531-2B	NAETC-6331-2B,Headphone terminal PC board ass'y <P>
	1A778531-2C	NAETC-6331-2C,Headphone terminal PC board ass'y <W/R>
	1A778531-2D	NAETC-6331-2D,Headphone terminal PC board ass'y <T/A>
U32	1A778532-2A	NAETC-6332-2A,Input terminal PC board ass'y <D>
	1A778532-2B	NAETC-6332-2B,Input terminal PC board ass'y <P>
	1A778532-2C	NAETC-6332-2C,Input terminal PC board ass'y <W/R>
	1A778532-2D	NAETC-6332-2D,Input terminal PC board ass'y <T/A>

NOTE: <D>:120V model only
<P>:European model only
<T>:Asian model only
<W>:Worldwide model only
<R>:Chinease model only
<A>:Australian model only
<B>:Black model only
<S>:Silver model only
<G>:Golden model only

NOTE: THE COMPONENTS IDENTIFIED BY MARK ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

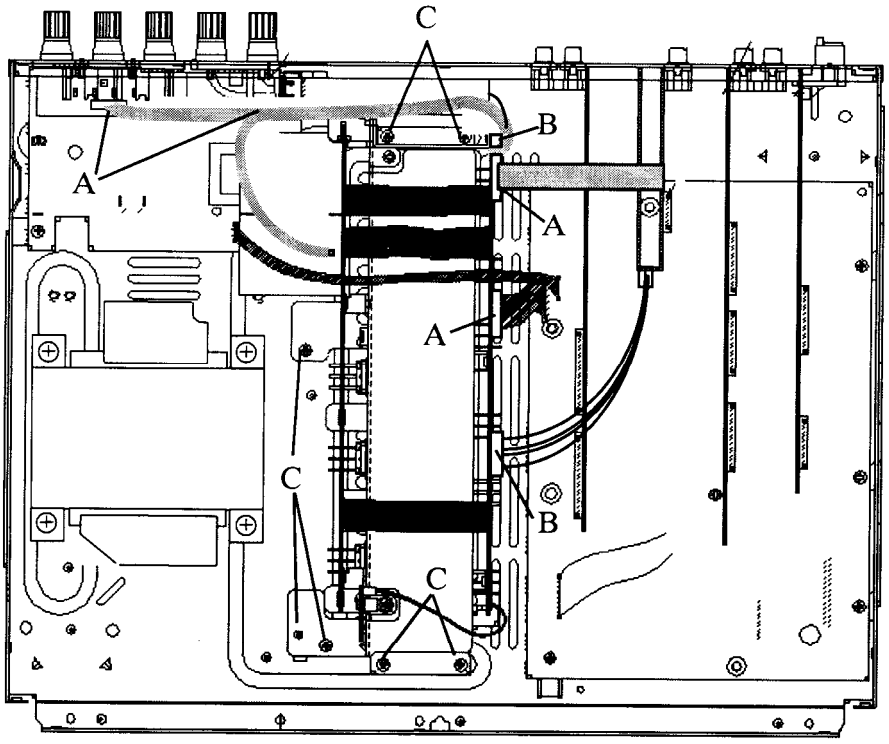
DISASSEMBLING PROCEDURES

1. Top Cover
Remove four screws holding the top cover and the chassis.
Remove three screws holding the top cover and the rear panel.

2. Front Panel
Remove the top cover.
Remove MASTER VOLUME, BASS, and TREBLE knobs.
Remove three screws holding the front panel and the chassis.

3. SMART SCAN CONTROLLER Knob
Remove the top cover.
Push the knob by the screw driver etc. from the hole of Display PC board.

4. Power amplifier PC boards
Remove the top cover.
Remove the holder PCB.
Remove five lead wires A and two sockets B.
Remove seven screws C holding the heatsinks and the chassis.

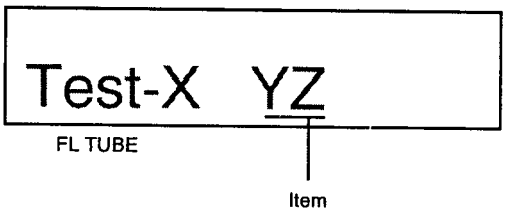


TEST MODE

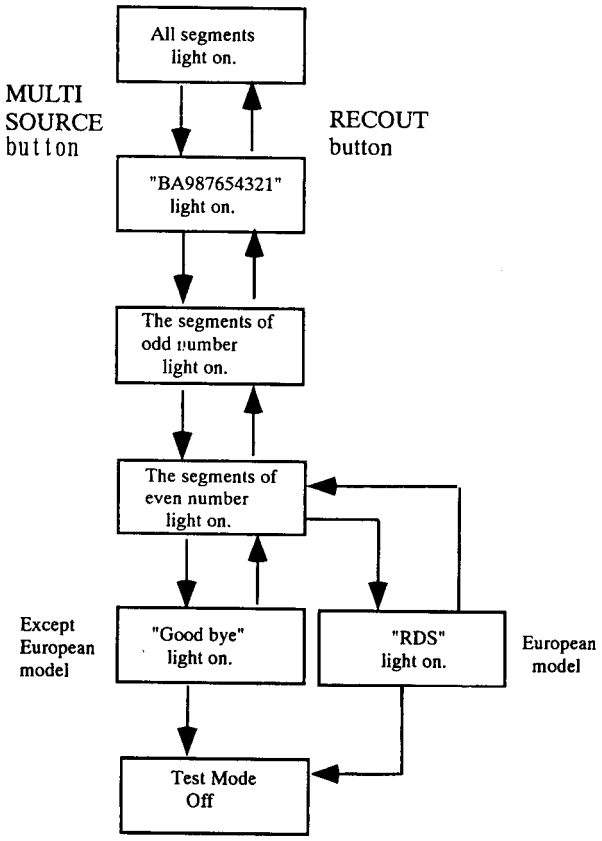
1. Turn POWER button on.
2. Press and hold down CD button, then press SPEAKERS-MAIN and SPEAKERS-REMOTE buttons at the same time.
3. During "TEST-" on the FL tube is displayed, press CD, VIDEO 1, VIDEO 2, or VIDEO 3 button to set the unit to the test mode shown below.
4. Press MULTI SOURCE or RECOUT button to select the test item.

Button Operation in the Test Mode

Button Operation	Test Mode
CD	TEST-0
VIDEO 1	TEST-1
VIDEO 2	TEST-2
VIDEO 3	TEST-3
MULTI SOURCE	UP of item
RECOUT	DOWN of item



TEST-0

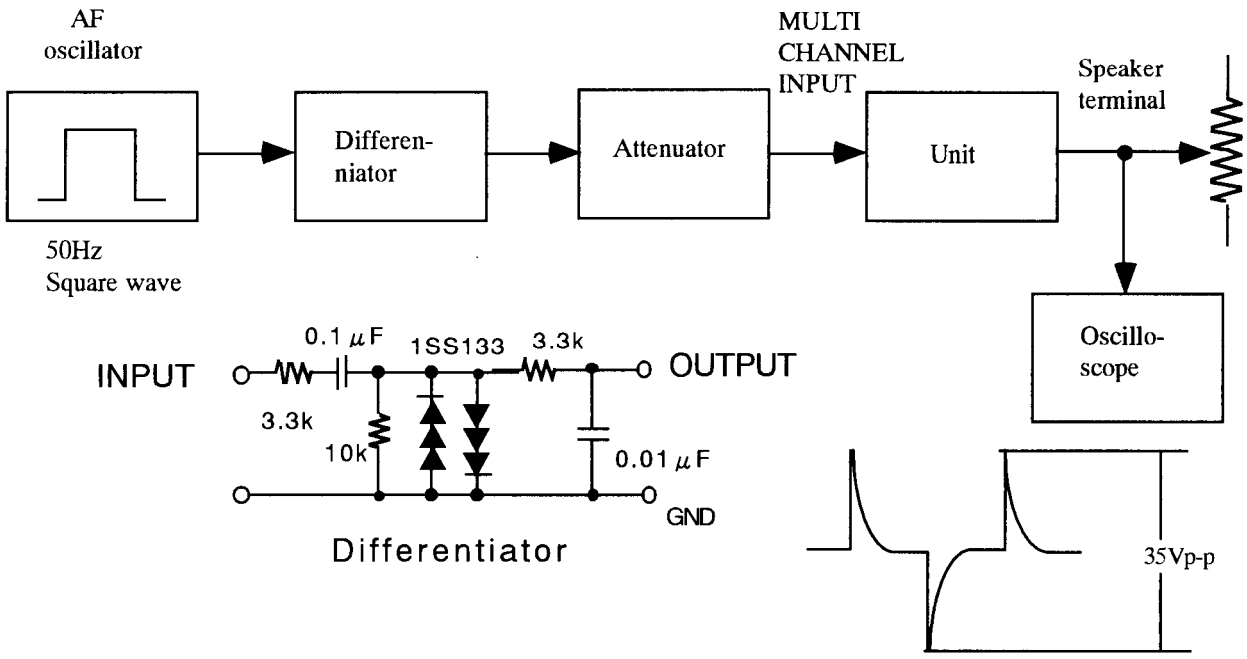


1. Confirmation of protection circuit

1-1. Confirmation of operation of speaker relay
Confirm that the speaker relay turns ON approximate. 5 seconds after the power switch is turned ON.
Confirm that the speaker relay turns OFF approximate. 0.5 seconds after the power switch is turned OFF.

1-2. Confirmation of DC detection circuit
Set the unit to "Test-1 01".
Apply DC 1.5~3V to MULTI CHANNEL INPUT terminals with no load.
Confirm that the speaker relay turns OFF.
Apply DC -1.5~-3V to MULTI CHANNEL INPUT terminals with no load.
Confirm that the spekaer relay turns OFF.

1-3. Confirmation of Current detection circuit
Set the unit to "Test-1 01".
Connect the instrument shown below with no load.
Apply the 50Hz square signal to a terminal of MULTI CHANNEL INPUT.
Adjust the attenuator or Volume so that the output level becomes 35V p-p.
Confirm that the speaker relay does not turn OFF when a 3.0 ohm load is connected.
Confirm that the speaker relay turns OFF when a 1.5 ohm load is connected.



1-4. Confirmation of fan operation
Set the unit to "Test-1 01".
Apply the sine wave signal (1kHz, -30dB) to MULTI CHANNEL INPUT terminal except SUBWOOFER with no load.
Confirm that the fan operates after few seconds.

SERVICE PROCEDURES

1. Replacing the fuses

This symbol located near the fuse indicates that the fuse used is fast operating type. For continued protection against fire hazard, replace with same type fuse. For fuse rating refer to the marking adjacent to the symbol.

Ce symbole indique que le fusible utlise est a rapide. Pour une protection permanente, n'utiliser que des fusibles de meme type. Ce darnier est indique la qu le present symbol est appose.

CIRCUIT NO.	PART NO.	DESCRIPTION
F901	252199	⚠ 10A-UL, Fuse <D/W/R> ,TX-DS656
F902	252078	⚠ 5A-SE-EAK,Fuse <P/T/W/A/R>,TX-DS656
F901	252198	⚠ 8A-UL, Fuse <D/W/R>,TX-DS555
F902	252077	⚠ 4A-SE-EAK,Fuse <P/T/W/A/R>,TX-DS555
F903	252075	⚠ 2.5A-SE-EAK,Fuse <P/T>

NOTE: <D>:120V model only
<P>:European model only
<T>:Asian model only
<W>:Worldwide model only
<R>:Chinease model only
<A>:Australian model only

2. To Initialize the unit

This device employs a microprocessor to perform various functions and operations. If interference generated by an external power supply, radio wave, or other electrical source results in accident which causes the specified operations and functions to operate abnormally.

To perform a result, please follow the procedure below.

120V model

1. Press and hold down the CD button, then press the POWER button.

2. After "clear" is displayed, the prest memory and each mode stored in the memory, such as surround, are initialized and will return to the factory settings.

other models

1. Press and hold down the CD button, then press the SYSTEM button.

2. After "clear" is displayed, the prest memory and each mode stored in the memory, such as surround, are initialized and will return to the factory settings.

3. Safety-check out

(Only U.S.A. model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer. Connect the insulating-resistance tester between the plug of power supply cord and the screw on the back panel.

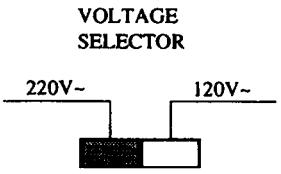
Specifications: 3.3 Mohm±10% at 500V.

4. Change of voltage

Worldwide models are equipment with a voltage selector to conform with local power supplies. This switch is located on the back panel.

Be sure to set this switch to match the voltage of the power supply in your area before turning the power switch on.

This switch is set to 220V at the factory. Voltage is changed by sliding the groove in the switch with the screwdriver to the right or left. Confirm that the switch has been moved all the way to the right or left before turning the power switch on.



5. Memory preservation

This unit does not require memory preservation batteries.

A built-in memory power back-up system preserves contents of the memory during power failures and even when the unit is unplugged.

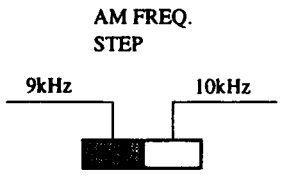
The unit must be plugged in and the power switch turned on and off once in order to charge the back-up system. Note that since this is not a permanent memory, the power switch must be turned on and off a few times each month the keep the back-up system operative.

The period of the time during which memory contents are preserved after power has last been turned off varies depending on climate and placement of the unit. On the average, memory contents are protected over a period of 3 to 4 weeks (a minimum of 2 weeks) after the last time power has been turned off. This period is shorted when the unit is exposed to very high humidity or used in an area with an extremely humid climate.

6. Setting the tuning step frequency

Worldwide models are equipped with a step band selector switch. This switch is located on the back panel. This switch is set to 9 kHz at the factory, but may have to be reset to 10 kHz depending on the area where the unit is used.

	AM band step
Europe:	9 kHz
U.S.A.:	10 kHz

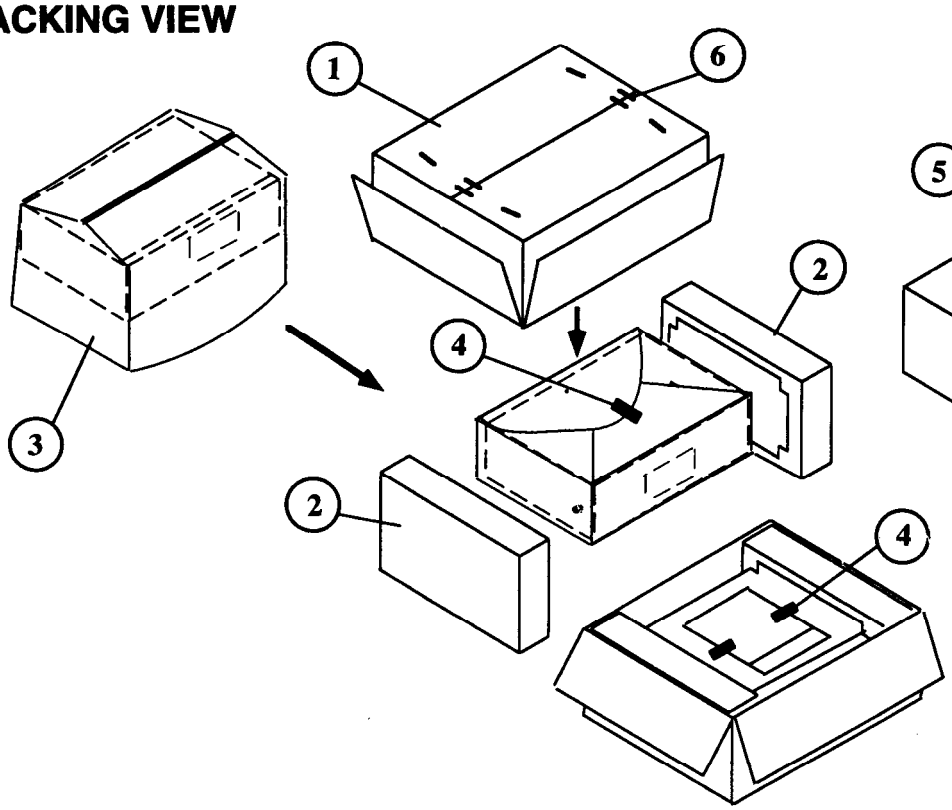


7. Changing the band step

With the exception of the worldwide models, a tuning step selector switch is not provided. When you change the band step, change the parts as shown below.

	To 10kHz	To 9 kHz
R1704	No connection	10k
R1705	10 kohm	open
R1710	10 kohm	open
J1828	Shorted	open
J1762	Shorted	open

PACKING VIEW



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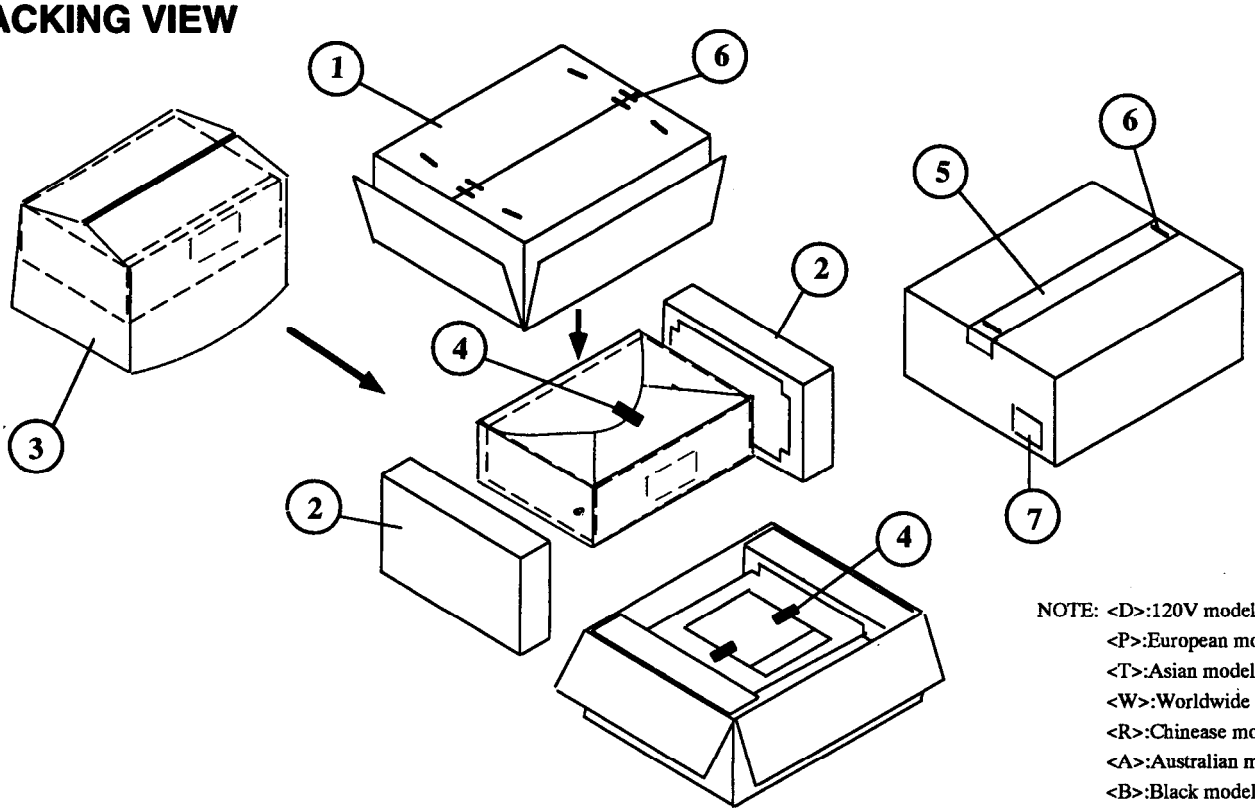
<W>:Worldwide model only
<R>:Chinease model only
<A>:Australian model only
<B>:Black model only
<S>:Silver model only
<G>:Golden model only

REF.NO.	PART NO.	DESCRIPTION
1	29053305	Carton box <D>
	29053306	Carton box <P>
	29053308	Carton box <T/W/A/R>
	29053307	Carton box <S>
	29053309	Carton box <G>
2	29091844	Pad ass'y
3	29100034-1AY	850*650, Poly bag
4	261504	Paper tape
5	29110071	Adhesive tape
6	282301	Staple
7	29362317	UPC label <D>
	29362321	EAN label <P/T/W/A/R>
	29362322	EAN label <S>
	29362323	EAN label <G>

REF.NO.	PART NO.	DESCRIPTION
8	232140	NMA-3057, AM loop antenna
	24140374	RC-374M, remote controller
	25055018	CV-K-1, Conversion plug <W>
	25065462	YAE21-0237, FM antenna adapter <T/W/R/A>
	29100097-1AY	350*250, Poly bag
	292111	FM antenna <D/T/A>
	292112	FM antenna <P/W/R>
	29342580	Instruction manual E
	29342581	Instruction manual U3GDSW <P>
	29342582	Instruction manual U3FSI <P>
	29342583	instruction manual <T/W/R>
	29358002K	Service station list <D>
	29365019B	Warranty card <D>
	3010054	UM-3, Battery

PACKING VIEW



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<W>:Worldwide model only
<R>:Chinease model only
<A>:Australian model only
<B>:Black model only
<G>:Golden model only

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
1	29053301	Carton box <D>	8	232140	NMA-3057, AM loop antenna
	29053302	Carton box <P>		24140373	RC-373M, remote controller
	29053303	Carton box <T/W/A/R>		25055018	CV-K-1, Conversion plug <W>
	29053304	Carton box <G>		25065462	YAE21-0237, FM antenna adapter <T/W/R/A>
2	29091844	Pad ass'y		29100097-1AY	350*250, Styrene bag
3	29100034-1AY	850*650, Styrene bag		292111	FM antenna <D/T/A>
4	261504	Paper tape		292112	FM antenna <P/W/R>
5	29110071	Adhesive tape		29342576	Instruction manual E
6	282301	Staple		29342577	Instruction manual U3GDSW <P>
7	29362316	UPC label <D>		29342578	Instruction manual U3FSI <P>
	29362319	EAN label <P/T/W/A/R>		29342579	instruction manual <T/W/R>
	29362320	EAN label <G>		29358002K	Service station list <D>
				29365019B	Warranty card <D>
				3010054	UM-3, Battery

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