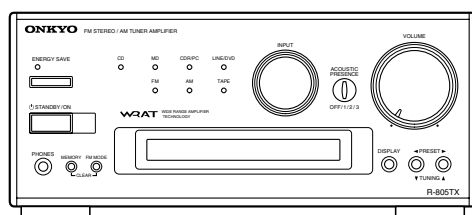
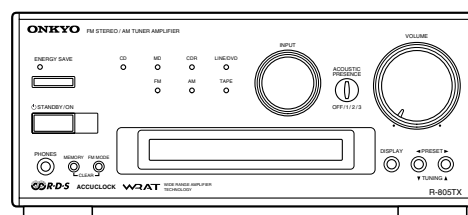


ONKYO SERVICE MANUAL

FM STEREO/AM TUNER AMPLIFIER MODEL R-805TX



Asian model



European model

Silver model

SUPP, SUPT	230-240V AC, 50Hz
SUDT	120 V AC, 60 Hz

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK Δ 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.

SPECIFICATIONS

Amplifier Section

Power output

20 watts per channel, min RMS, at 4 ohms, both channels driven 1 kHz, with no more than 0.6% THD
 15 watt per channel, min RMS, at 8 ohms, both channels driven 1 kHz, with no more than 0.6% THD
 2 X 20 watts at 4 ohms, 1 kHz, DIN
 2 X 17 watts at 6 ohms, 1 kHz, DIN
 2 X 15 watts at 8 ohms, 1 kHz, DIN
 2 X 29 watts at 4 ohms, 1 kHz, EIAJ

Dynamic power output

2 X 24 watts at 4 ohms
 2 X 17 watts at 8 ohms

total harmonic distortion

0.6% at rated power

IM distortion

0.6% at rated power

Damping factor

30 at 8 ohms

Input Sensitivity and Impedance

TAPE/MD PLAY: 150 mV, 50 kohms
 LINE IN: 150 mV, 50 kohms

Frequency and response

10 to 50,000 Hz +0 / -3 dB

Tone control

ACOUSTIC PRESENCE 1
 +4 dB at 82 Hz
 ACOUSTIC PRESENCE 2
 +3 dB at 20.5 Hz, + 3 dB at 82 Hz
 ACOUSTIC PRESENCE 3
 +3 dB at 20.5 Hz, + 6 dB at 82 Hz
 BASS
 ±8 dB at 100 Hz
 TREBLE
 ±8 dB at 10 kHz

Signal to noise ratio

TAPE: 100 dB (IHF-A)

Muting

—∞ dB

Tuner Section

Tuning range

FM: 87.9 to 107.9 MHz (200 kHz steps)
 (U.S. & Canadian models)
 87.5 to 108.00 MHz (50 kHz steps)
 (Other area models)
 AM: 530 to 1710 kHz (10 kHz steps)
 (U.S. & Canadian models)
 522 to 1611 kHz (9 kHz steps)
 (Other area models)

Usable sensitivity

FM: Mono 11.2 dBf,
 1.0 μV (75 ohms IHF)
 0.9 μV (75 ohms DIN)
 Stereo 17.2 dBf,
 2.0 μV (75 ohms IHF)
 23.0 μV (75 ohms DIN)
 AM: 30 μV

50 dB Quieting sensitivity

FM: Mono 17.2 dBf, 2.0 μV (75 ohms)
 Stereo 37.2 dBf, 20.0 μV (75 ohms)

Capture ratio

FM: 2.0 dB

Image rejection ratio

FM: 40 dB (U.S. & Canadian models)
 85 dB (Other area models)
 AM: 40 dB

IF rejection ratio

FM: 90 dB
 AM: 40 dB

Signal to noise ratio

FM: Mono 73 dB, IHF
 Stereo 67 dB, IHF
 AM: 40 dB

Selectivity

FM: 50 dB DIN
 (±300 kHz at 40 kHz Devi.)

AM Suppression Ratio

50 dB

Harmonic distortion

FM: Mono 0.2%
 Stereo 0.3%
 AM: 0.7 %

Frequency response

FM: 30 to 15,000 Hz (±1.5 dB)

Stereo separation

FM: 45 dB at 1,000 Hz
 30 dB at 100 to 10,000 Hz

Stereo threshold

FM: 17.2 dBf, 2.0 μV (75 ohms)

General

Clock precision

monthly error: +/-30 seconds
 (at 25 degrees Celsius)

Power supply

AC 120 V, 60 Hz
 AC 230 V, 50 Hz

Power consumption

61 W (120 V, 50 Hz)
 54 W (230 V, 60 Hz)

Dimensions (W X H X D)

205 X 91 X 302 mm
 8-1/16" X 3-9/16" X 11-7/8"

Weight

3.4 kg, 7.5 lbs

Specifications and external appearance are subject to change without notice as a result of product improvement.

SERVICE PROCEDURES

1. Replacing the fuses



This symbol located near the fuses 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 utilise est a rapide. Pour une protection permanente, n'utiliser que fusibles de meme type. Ce d'arnier est la qu le present symbol est appse.

CIRCUIT NO.	PART NO.	DESCRIPTION
F901	252158	1.6A-UL/T237, Primary <D>
	252083	0.4A-SE-EAWK, Primary <P/T>
F902	252069	0.8A-SE-EAK, AC outlet <P/T>

Note: <D>: 120V model only

<P/T>: 230V 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.

1. Press and hold down the MEMORY button, then press the DISPLAY button.

2. Press the STANDBY/ON button.

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

3. Safety-check out

(120V model only)

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 screw on the back panel.

Specifications: 3.3Mohm+/-10% at 500V.

4. Memory Preservation

This unit does not require memory preservation batteries. A built-in memory power back-up system preserves the contents of the memory during power failures and even when the unit is unplugged. The unit must be plugged in order to charge the back-up system.

The memory preservation period after the unit has been unplugged varies depending on climate and placement of the unit. On the average, memory contents are protected over a period of a few weeks after the last time the unit has been unplugged. This period is shorter when the unit is exposed to a highly humid climate.

5. Changing the AM band step

The tuning step selector switch is not provided in this model. When you change the band step, change the parts as shown below.

	To 10kHz	To 9kHz
R715	3.3k	10k
R716	5.6k	Open

6. Adjustment of clock frequency

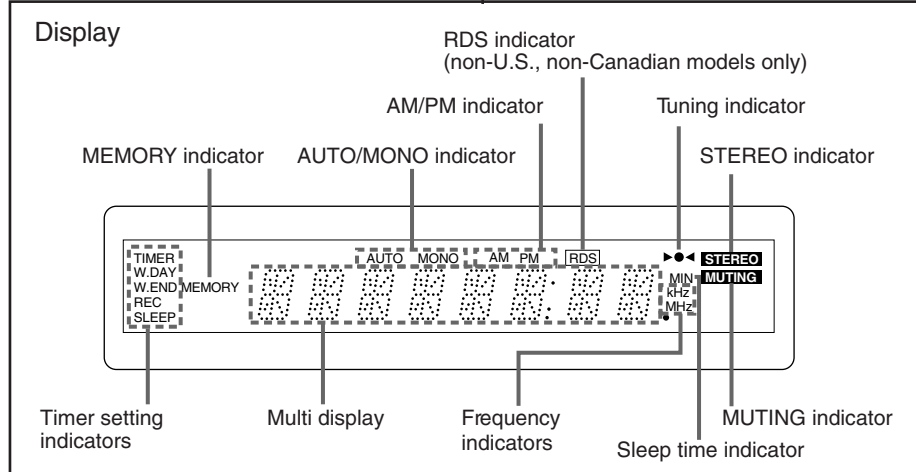
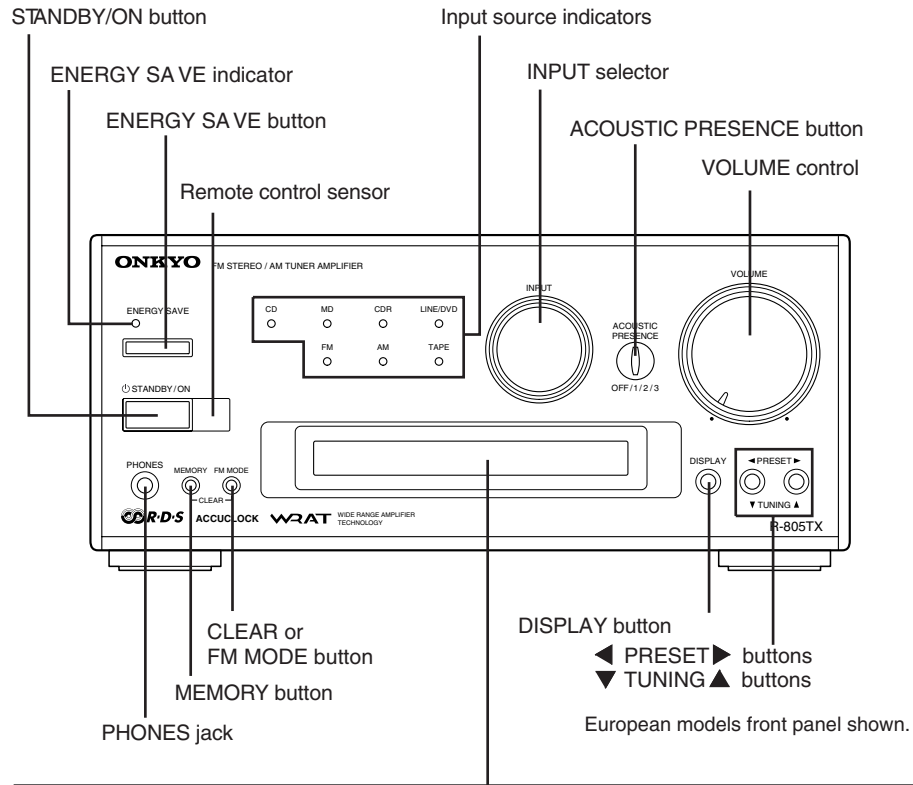
1. Connect the frequency counter to the terminal TP701.

2. Press and hold down the MEMORY button, then press the DISPLAY button. (All segments on FL tube light on)

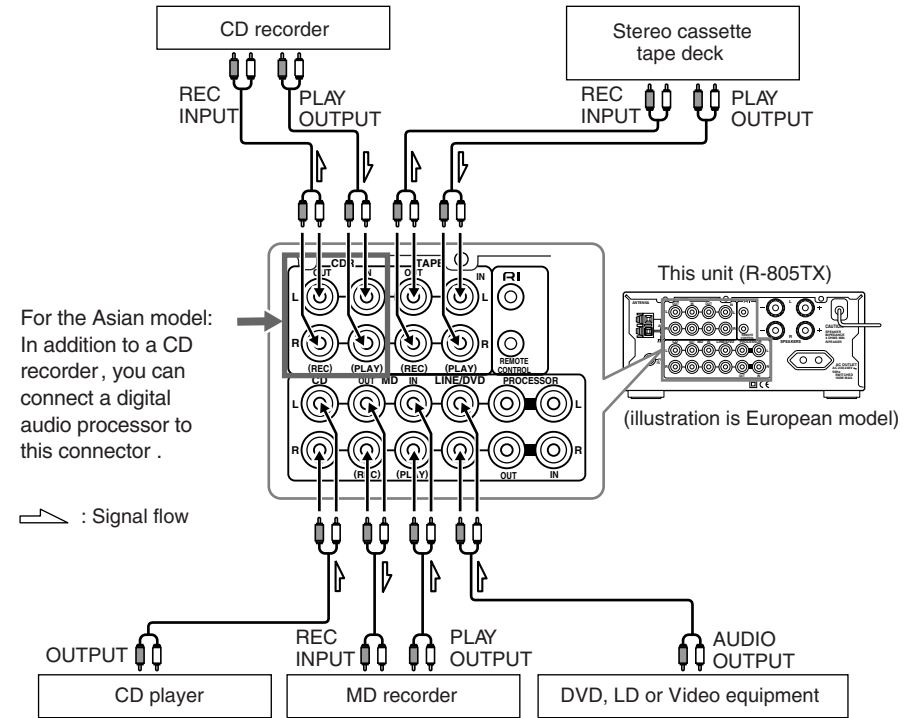
3. Adjust the trimmer capacitor C707 so that the reading of frequency counter becomes 524.288 kHz+/-1Hz.

PANEL VIEWS

FRONT PANEL



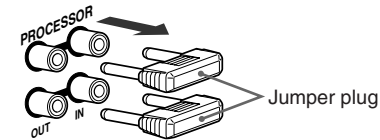
REAR PANEL



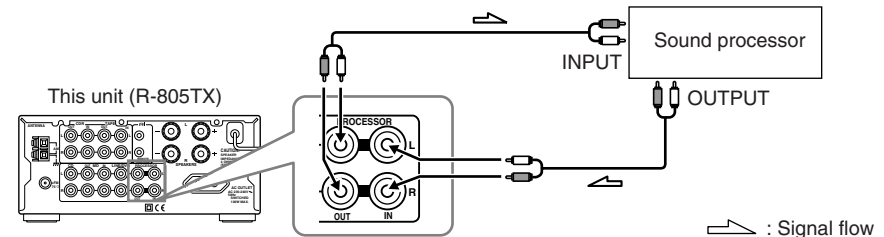
Connecting a sound processor (other than U.S. & Canadian models)

Connections

- 1 Remove the jumper plugs.



- 2 Connect the sound processor to the unit.



REMOTE CONTROLLER

- You can control the other **RI**-connected components with the supplied remote controller.
- The remote controller buttons operate in the same way as the buttons on each component with the same indication.
- For actual operations, please refer to the Instruction Manual for each component.

STANDBY/ON button

Toggles between STANDBY and ON.

Tuner control

◀PRESET▶ : Tuner preset select buttons

FM : FM band select button

AM : AM band select button

TONE button

Enables you to set the tone.

Mode Select buttons

Pressing this button

TIMER:

repeatedly to select one of the following eight settings.

WEEKDAY: Timer playback on the specified day(s) of the week.

WEEKEND: Timer playback on the specified day(s) of the week.

REC: Timer record setting

DAYSET: Sets the day of the week (WEEKDAY & WEEKEND).

ADJUST: Sets the current time and the day of the week.

24H/12H: Enables you to select 24-hour display or 12-hour display by pressing the ENTER button and using the UP ▲/DOWN ▼ buttons.

UP▲/DOWN▼ : Enables you to select a parameter after you press the TIMER or TONE button. Press the ENTER button to confirm the selection.

ENTER Press this button to confirm the selection made via the TIMER, TONE, UP ▲, or DOWN ▼ button.

CLOCK button

Press this button to display the current time.

SLEEP button

Enables you to make the Sleep time setting.

INPUT button

Enables you to select a listening source.

MUTING button

Mutes the sound temporarily.

VOLUME▲/▼ buttons

Enables you to increase or decrease the volume level.

ACOUSTIC PRESENCE button
Switches acoustic presence off and types.

Number buttons

Used to set the time/day and select the PRESET stations.

- Use the following buttons to control components that are connected to the **RI**-system.

Stereo cassette tape deck control

◀ : Reverse play button

■ : Stop button

▶ : Play button

◀◀ : Rewind button

▶▶ : Fast-forward button

DVD player control

◀◀ : Chapter/track down button

▶▶ : Chapter/track up button

■ : Stop button

PAUSE/STEP : Pause/Step forward button

▶ : Play button

CD player (or changer) control

REPEAT : Repeat mode button

RANDOM : Random play button

■ : Stop button

|| : Pause button

▶ : Play button

MEMORY: Memory button

CLEAR : Clear button

DISC : Disc button for CD changer

◀◀ : Track down button

▶▶ : Track up button

Graphic equalizer control

EFFECT: Effect select button

MODE: Mode select button

MD recorder control

REPEAT : Repeat mode button

SCROLL : Scroll button

■ : Stop button

|| : Pause button

▶ : Play button

PLAY MODE: Play mode selection button

CLEAR: Clear button

●REC: Recording button

◀◀ : Track down button

▶▶ : Track up button

CD recorder control

REPEAT : Repeat mode button

PLAY MODE : Play mode selection button

■ : Stop button

|| : Pause button

▶ : Play button

CLEAR: Clear button

●REC: Recording button

◀◀ : Track down button

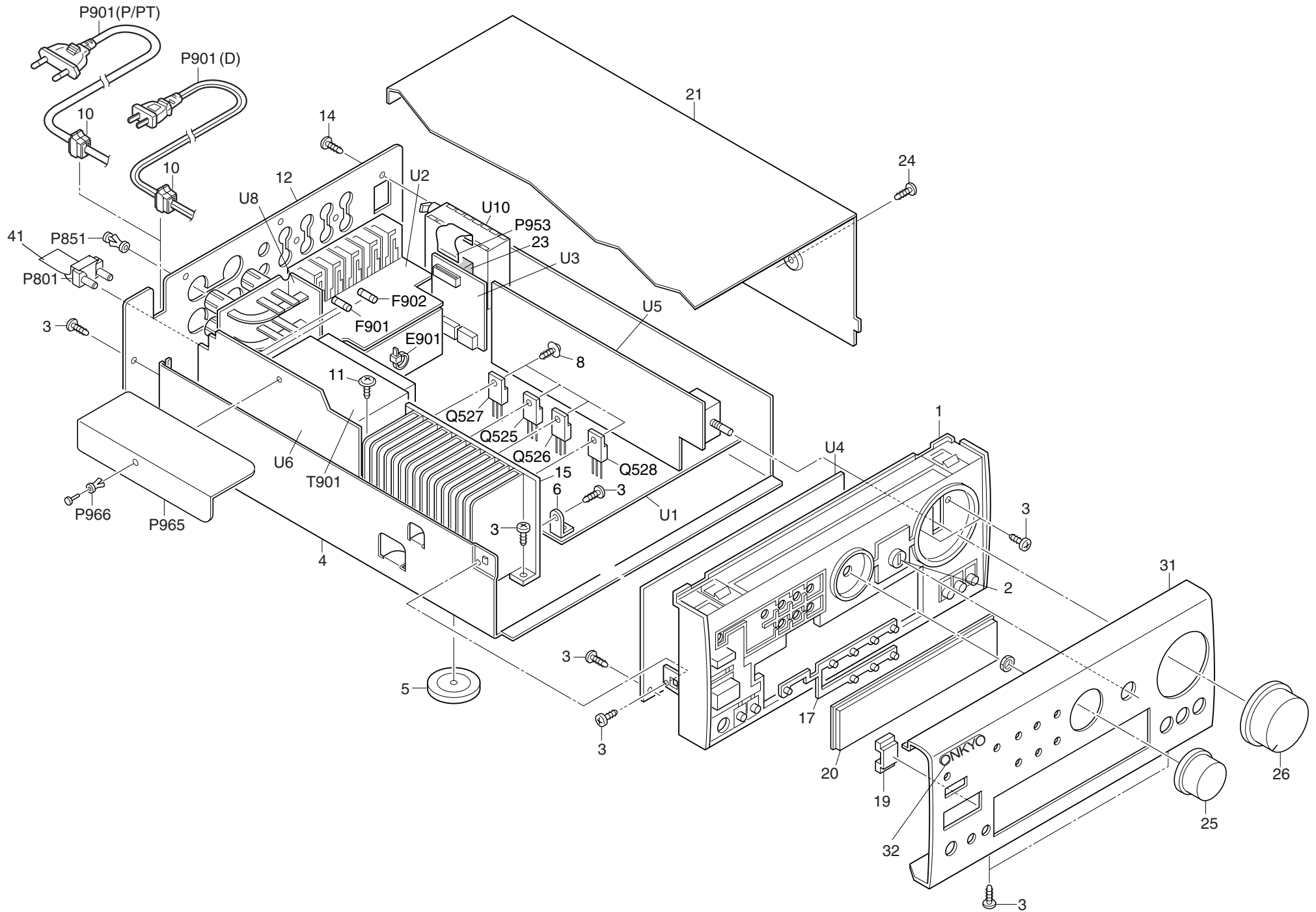
▶▶ : Track up button

CD player (or changer) / MD recorder / CD recorder control

1-9, 10/0 : Number buttons

--/-- : Ten's hold button

EXPLODED VIEW



PARTS LIST

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

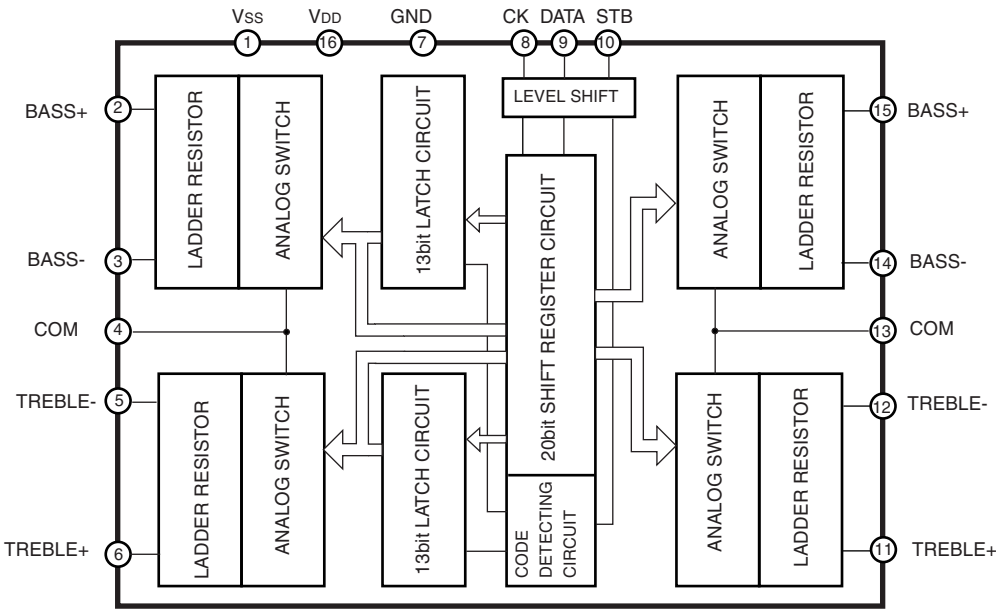
REF.NO.	PART NO.	DESCRIPTION
1	27111147A	Front bracket
2	28325755	Knob, Acoustic
3	838130088	3TTB+8B,Self-tapping screw
4	27100375D	Chassis
5	27175323	Leg
6	27141530A	Retainer HS
8	801433	3SMS8W.SW+14B(BC),Special screw
10	27300750	 #2271,Bushing cord
11	830440089	4TTC+8C(BC),Self-tapping screw
12	27122840	Rear panel <P>
	27122841	Rear panel <D>
	27122856	Rear panel <T>
14	838430068	3TTB+6B(BC),Self-tapping screw
15	27160451B	Heat sink
17	28198901	Facet
19	28191798	Clear plate RE
20	28191873A	Clear plate
21	28184759-1	Top cover
22	28141409A	Cushion
24	838930088	3TTB+8B(UN), Self-tapping screw
25	28325716	Knob INP
26	28325717	Knob VOL
31	27212304	Front panel <P>
	27212317	Front panel <T/D>
32	28135247Y	Badge
41	29362630	Label, processor
42	29110083	Tape, cloth
43	838430088	3TTB+8B(BC),Self-tapping screw
44	29362571	Label, warning
E901	260208	Wire tie
F901	252083	 0.4A-SE-EAWK,Fuse <P/T>
F901	252158	 1.6A-UL/T-237,Fuse <D>
F902	252069	 0.8A-SE-EAK,Fuse <P/T>
P801	25055436	NPLG-2P418,Plug
P851	880009	NRP-345,Plastic rivet <P/T>
P901	253277MIL	 AS-UC-2#18,Power supply cord <D>
	253193HIT	 AS-CEE,Power supply cord <P/T>
P953	2047150512	NCFC7-150512,Flexible flat cable

REF.NO.	PART NO.	DESCRIPTION
P965	27150448A	Shield plate
P966	880009	NRP-345,Plastic rivet
P967	27301779	HL-38-0,Clamp
Q525,Q526	2202064,	* 2SC4511-Y,
	2202063 or	* 2SC4511-O or
	2202066	* 2SC4511-P,Transistor
Q527,Q528	2202054,	* 2SA1725-Y,
	2202053 or	* 2SA1725-O or
	2202056	* 2SA1725-P,Transistor
T901	2301443	 NPT-1385D,Power transformer <D>
	2301444	 NPT-1385P,Power transformer <P/T>
U1	1A911501-2C	NAAF-6801-2C,Main circuit PC board ass'y <P>
	1A911501-2D	NAAF-6801-2D,Main circuit PC board ass'y <T>
	1A911501-2E	NAAF-6801-2E,Main circuit PC board ass'y <D>
U2	1A911502-2C	NAETC-6802-2C,Input/output terminal PC board ass'y <P>
	1A911502-2D	NAETC-6802-2D,Input/output terminal PC board ass'y <T>
	1A911502-2E	NAETC-6802-2E,Input/output terminal PC board ass'y <D>
U3	1A911503-2C	NAPS-6803-2C,Secondary circuit PC board ass'y <P>
	1A911503-2D	NAPS-6803-2D,Secondary circuit PC board ass'y <T>
	1A911503-2E	NAPS-6803-2E,Secondary circuit PC board ass'y <D>
U4	1A911504-2C	NADG-6804-2C,Display circuit PC board ass'y <P>
	1A911504-2D	NADG-6804-2D,Display circuit PC board ass'y <T>
	1A911504-2E	NADG-6804-2E,Display circuit PC board ass'y <D>
U5	1A911505-2C	NAAF-6805-2C,Tone circuit PC board ass'y <P>
	1A911505-2D	NAAF-6805-2D,Tone circuit PC board ass'y <T>
	1A911505-2E	NAAF-6805-2E,Tone circuit PC board ass'y <D>
U6	1A911506-2C	NAPS-6806-2C,Primary circuit PC board ass'y <P>
	1A911506-2D	NAPS-6806-2D,Primary circuit PC board ass'y <T>
	1A911506-2E	NAPS-6806-2E,Primary circuit PC board ass'y <D>
U8	1A911507-2C	NAETC-6807-2C,Speaker terminal PC board ass'y <P>
	1A911507-2D	NAETC-6807-2D,Speaker terminal PC board ass'y <T>
	1A911507-2E	NAETC-6807-2E,Speaker terminal PC board ass'y <D>
U10	240135	TFCE1E512A, Tuner unit

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

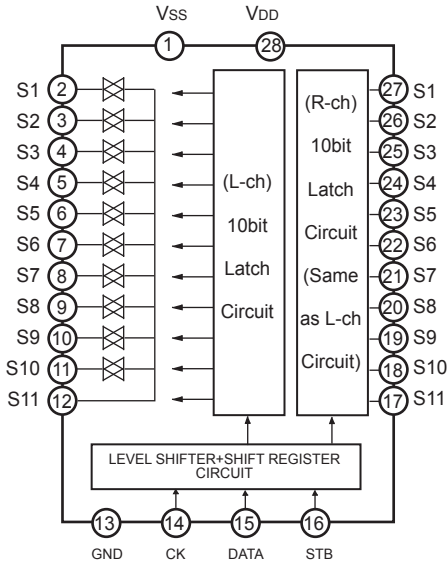
NOTE:<P>:European model only
<T>: 230V model only for Asia
<D>: 120V model only for Asia

IC BLOCK DIAGRAMS AND DESCRIPTIONS
TC9184AP(ELECTRONIC TONE CONTROL)



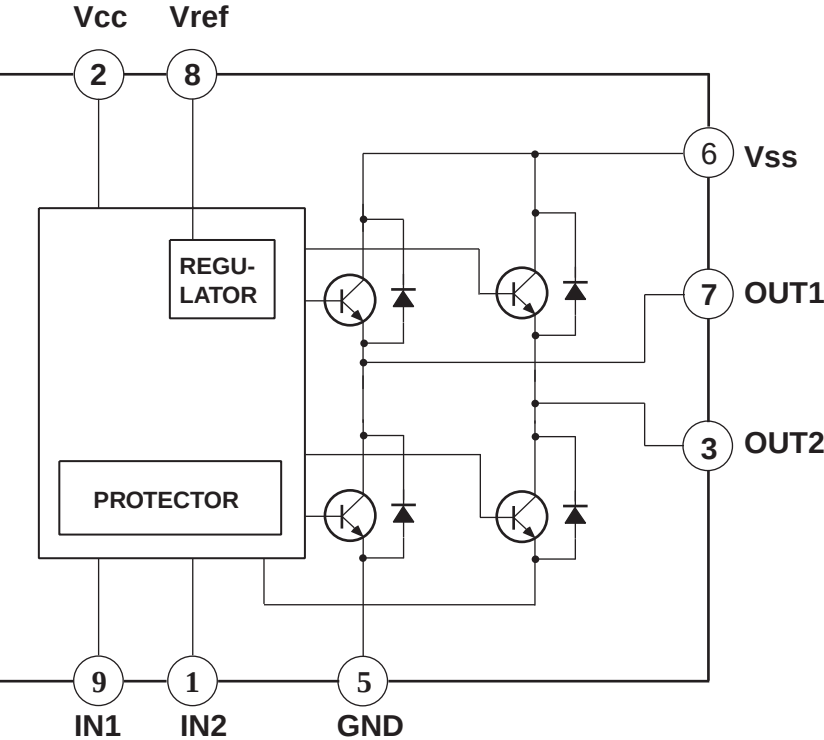
Pin No.	Symbol	Function
1	VSS	Power supply voltage terminals (Analog section)
16	VDD	
2/15	BASS+	
3/14	BASS-	
5/12	TREBLE-	
6/11	TREBLE+	
4/13	COM	
7	GND	Ground terminal (Digital section)
8	CK	Clock input terminal. Clock input receiving data from DATA terminal
9	DATA	Data input terminal. Input 20bit tone control data by synchronizing to the rise of CK signals.
10	STB	Strobe input terminal. The tone control data received from DATA and CK terminals are transferred into IC buy turning this terminal to "H" level. Previous data are kept stored so long as "H" level in not applied to this terminal.

TC9273N-10 (Analog Switch Array)



Pin No.	Symbol	Description
1	Vss	Negative power supply pin
13	GND	Digital ground pin
28	VDD	Positive power supply pin
2/27	S1	Input/Output pins
3/26	S2	
4/25	S3	
5/24	S4	
6/23	S5	
7/22	S6	
8/21	S7	
9/20	S8	
10/19	S9	
11/18	S10	
12/17	S11	
14	CK	Clock input pin for data transfer.
15	DATA	Serial data input pin for setting switches.
16	STB	Strobe input pin for data writing.

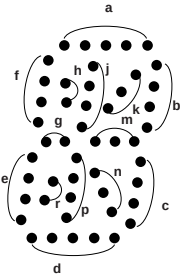
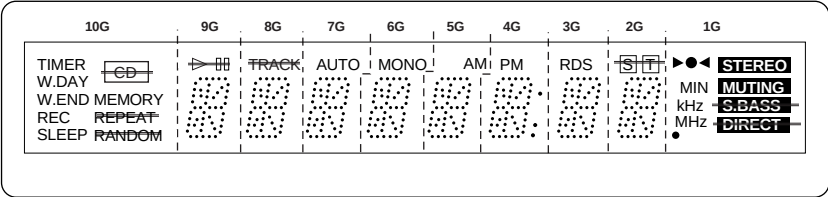
TA7291S(VOLUME MOTOR DRIVER)



INPUT		OUTPUT		MODE
IN1	IN2	OUT1	OUT2	
0	0	∞	∞	STOP
1	0	H	L	CW/CCW
0	1	L	H	CCW/CW
1	1	L	L	BRAKE

CCW: Counter-clockwise direction
CW: Clockwise direction

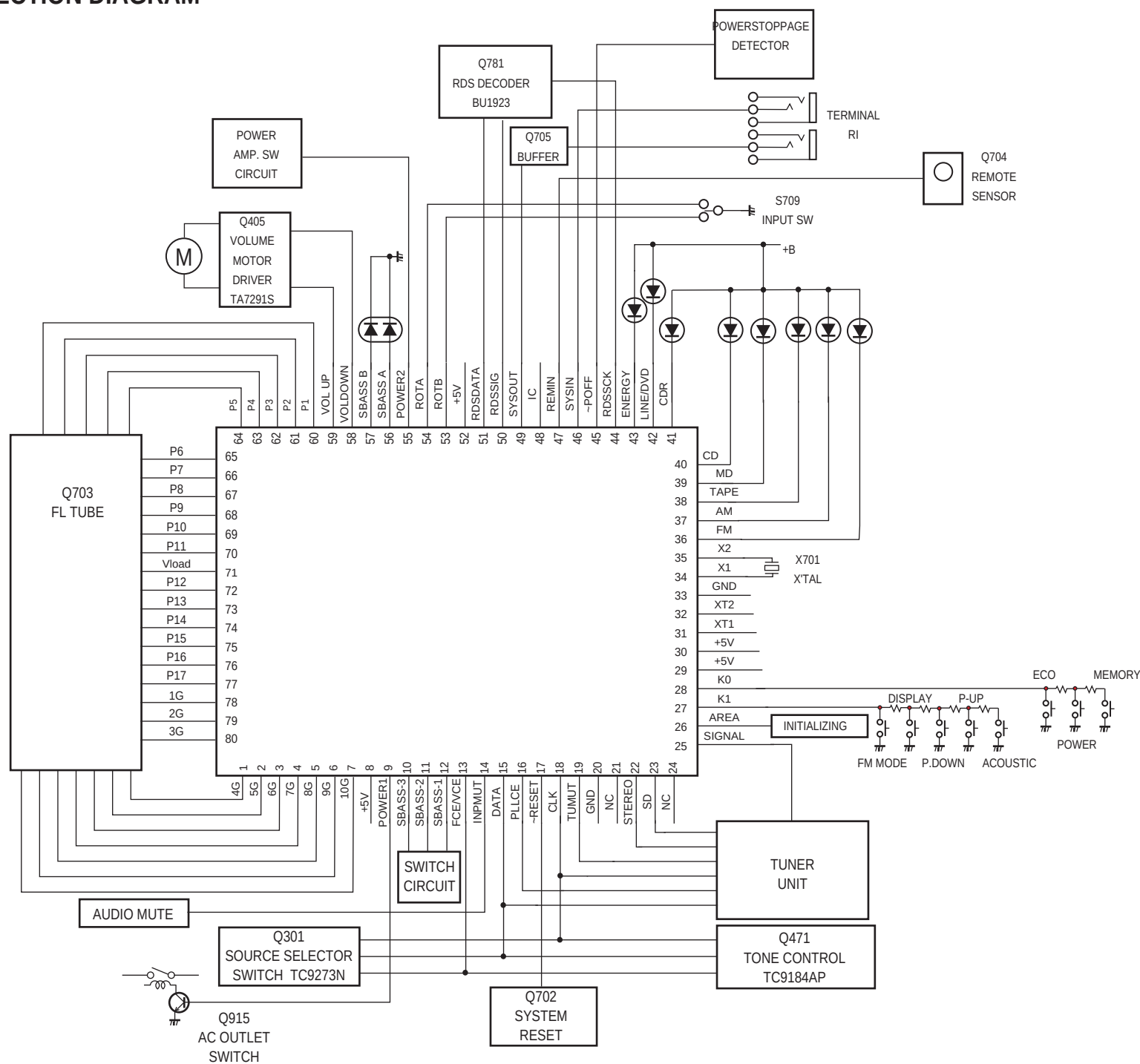
10-BT-167GK(FL TUBE)



— :This model is not used.

	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	-	a	a	a	a	a	a	a	a	-
P2	W.DAY	j	j	j	j	j	j	j	j	MUTING
P3	W.END	h	h	h	h	h	h	h	h	MIN
P4	MEMORY	k	k	k	k	k	k	k	k	S.BASS
P5	-	b	b	b	b	b	b	b	b	-
P6	-	f	f	f	f	f	f	f	f	-
P7	-	g	g	g	g	g	g	g	g	-
P8	REC	m	m	m	m	m	m	m	m	MHz
P9	-	c	c	c	c	c	c	c	c	-
P10	-	e	e	e	e	e	e	e	e	-
P11	REPEAT	n	n	n	n	n	n	n	n	kHz
P12	RANDOM	r	r	r	r	r	r	r	r	DIRECT
P13	-	p	p	p	p	p	p	p	p	-
P14	-	d	d	d	d	d	d	d	d	-
P15	TIMER	▷	TRACK	AUTO	MONO	AM	PM	RDS	S	▶▶◀
P16	CD	⏮	-	-	-	-	Col	-	T	STEREO
P17	SLEEP	-	-	-	-	-	Dp	-	-	•

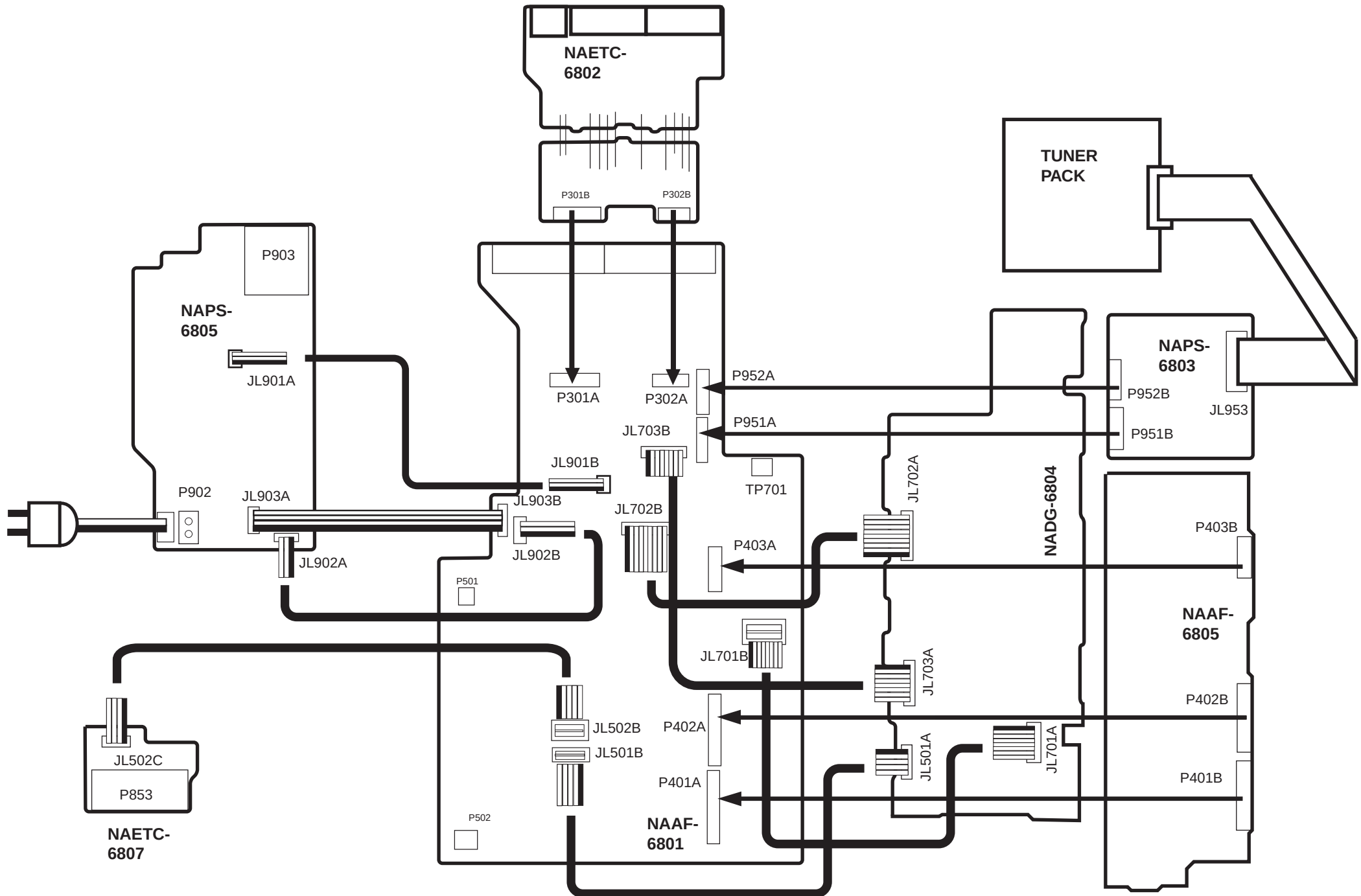
MICROPROCESSOR-CONNECTION DIAGRAM



MICROPROCESSOR-TERMINAL DESCRIPTION

Pin No.	Function	I/O	Description	Pin No.	Function	I/O	Description
1~7	4G~10G	O	Grid output pins for FL tube.	39	CD	O	CD indicator output pin
8	+5V		Positive power supply pin	40	MD	O	MD indicator output pin
9	POWER1	O	Power supply control pin for AC outlet and FL tube.	41	CDR	O	CDR indicator output pin
10	SBASS-3	O	Acoustic presence control output pin	42	LINE/DVD	O	LINE/DVD indicator output pin
11	SBASS-2	O	Acoustic presence control output pin	43	ENERGY	O	ENERGY SAVE indicator output pin
12	SBASS-1	O	Acoustic presence control output pin	44	RDSSCK	I	Clock input pin from RDS decoder
13	FCE/VCE	O	Latch output pin of the function switch and strobe output pin of the tone control	45	~POFF	I	Power failure detection pin
14	INPMUT	O	Audio muting control output pin	46	SYSIN	I	System code input pin
15	DATA	O	Data output pin for function switch, tone control and PLL ICs.	47	REMIN	I	Signal input from remote controller
16	PLLCE	O	Chip enable output pin for PLL IC.	48	IC		Inner connection pin
17	~RESET	I	System reset input pin.	49	SYSOUT	O	System code output pin
18	CLK	O	Clock signal output pin for function switch, tone control and PLL ICs.	50	RDSSIG	I	Quality check signal from RDS decoder.
19	TUMUT	O	Muting output pin for tuner section.	51	RDSDATA	I	Data input pin from RDS decoder.
20	GND		Ground pin for A/D converter.	52	+5V		Positive power supply pin
21	NC		Not used.	53	ROTB	I	Rotary encoder connection pin for Input selector
22	STEREO	I	Stereo broadcast detection pin.	54	ROTA	I	Rotary encoder connection pin for Input selector
23	SD	I	Broadcast detection input pin	55	POWER2	O	Power supply control pin for Power amplifier
24	NC		Not used.	56	SBASS A	O	Acoustic presence indicator output pin
25	SIGNAL	I	Signal strength input pin	57	SBASS B	O	Acoustic presence indicator output pin
26	AREA	I	Initializing input pin for region	58	VOLDOWN	O	DOWN signal output pin for Master volume
27	K1	I	Operation key connection pin	59	VOL UP	O	UP signal output pin for Master volume
28	K0	I	Operation key connection pin	60~70	P1~P11	O	Segment output pin for FL tube
29	+5V		Analog power supply for A/D converter	71	Vload		Pull down resistor connection pin for FL tube
30	+5V		Reference voltage input pin for A/D converter	72~77	P12~P17	O	Segment output pins for FL tube
31	XT1		Oscillator connection pin for sub system. Not used.	78~80	1G~3G	O	Grid output pins for FL tube.
32	XT2		Oscillator connection pin for sub system. Not used.				
33	GND		Ground pin				
34	X1		Crystal oscillator connection pin for main system clock				
35	X2		Crystal oscillator connection pin for main system clock				
36	FM	O	FM indicator output pin				
37	AM	O	AM indicator output pin				
38	TAPE	O	TAPE indicator output pin				

WIRING VIEW



PRINTED CIRCUIT BOARD-PARTS LIST

MAIN CIRCUIT PC BOARD (NAAF-6801-2C/2D/2E)

CIRCUIT NO.	PART NO.	DESCRIPTION
ICs		
Q301	22240881	TC9273N-010
Q405	22240239	TA7291S
Q913	222780565JRC	NJM78M56FA
Transistors		
Q501-Q504	2211733	2SC1845-E
Q505-Q508	2213284	2SC1740S-R
Q509-Q514	2211455	2SA1015-GR
Q515-Q518	2211255	2SC1815-GR
Q519,Q520	2213284	2SC1740S-R
Q521,Q522	2211654 or 2211653	2SC2235-Y or 2SC2235-O
Q523,Q524	2211644 or 2211643	2SA965-Y or 2SA965-O
Q525,Q526	2202064, *	2SC4511-Y,
	2202063 or *	2SC4511-O or
	2202066 *	2SC4511-P
Q527,Q528	2202054, *	2SA1725-Y,
	2202053 or *	2SA1725-O or
	2202056 *	2SA1725-P
Q540	2213284	2SC1740S-R
Q541	2213354	2SA933S-R
Q545	2213510 or 2214350	DTA114ES or RN2202
Q546	2213290	DTC114ES
Q911	2211644	2SA965-Y
Q914	2211256	2SC1815-BL
Q915	2213640	DTC123JS
Q916	2213510	DTA114ES
Q917,Q918	2211164	2SC2120-Y
Diodes		
D501,D502	223163 or	1SS133 or
D570	223205	1SS270A
D576	22380035 or	GP104003E or
D914-D917	22380046	AM01Z
D901	223163 or 223205	1SS133 or 1SS270A
D911	22380022F	RBV402
D912,D913	224471203	MTZJ12C
D918	224471203	MTZJ12C
D919-D922	22380035 or	GP104003E or
D933,D934	22380046	AM01Z
D923	224473004	MTZJ30D
D924	224470683	MTZJ6.8C
D931,D932	223163 or	1SS133 or
D935	223205	1SS270A
Coils		
L501,L502	231176S	S-1.3C
Capacitors		
C301,C302	374721015	100pF+/-10%,50V,Plastic <P>
C305,C306	374721015	100pF+/-10%,50V,Plastic <P>
C307,C308	374721015	100pF+/-10%,50V,Plastic <P>
C311,C312	374722215	220pF+/-10%,50V,Plastic <P>
C325,C326	393341007	10 u F,16V, Elect.
C405	393321017	100 u F,6.3V, Elect.
C501,C502	393341007	10 u F,16V, Elect.
C503,C504	374721015	100pF+/-10%,50V,Plastic
C515,C516	393322217	220 u F,6.3V, Elect.
C529,C530	393344707	47 u F,16V, Elect.
C531-C534	393341007	10 u F,16V, Elect.
C535,C536	374724734	0.047 u F+/-5%,50V,Plastic
C538,C540	393361017	100 u F,35V, Elect.
C550	393361017	100 u F,35V, Elect.
C575	393380107	1 u F,50V, Elect.
C576	353744709	47 u F,16V, Elect.
C911	374722244	0.22 u F+/-5%,50V,Plastic
C912,C913	374721044	0.1 u F+/-5%,50V,Plastic
C914,C915	393363327S	3300 u F,35V, Elect.
C916,C917	393343317	330 u F,16V, Elect.
C918	374721034	0.01 u F+/-5%,50V,Plastic
C919	393384707	47 u F,50V, Elect.
C920,C922	393381017	100 u F,50V, Elect.
C921	354771019	100 u F,63V, Elect.
C923	393380337	3.3 u F,50V, Elect.

CIRCUIT NO.	PART NO.	DESCRIPTION
Capacitors		
C925	393352227	2200 u F,25V, Elect.
C929	393361017	100 u F,35V, Elect.
C930	393341007	10 u F,16V, Elect.
C932	393380107	1 u F,50V, Elect.
C933,C940	374722234	0.022 u F+/-5%,50V,Plastic
Resistors		
R515-R518	443523904	39ohm+/-5%,1/2W,Metal oxide
R519,R520	443523304	33ohm+/-5%,1/2W,Metal oxide
R521,R522	443523904	39ohm+/-5%,1/2W,Metal oxide
R559,R560	443521014	100ohm+/-5%,1/2W,Metal oxide
R561,R562	4500027	MPC708-2WK-0.22,Metal plate
R563,R564	453530824	8.2ohm+/-5%,1/2W,Metal
R565,R566	453530564	5.6ohm+/-5%,1/2W,Metal
R569,R572	443522204	22ohm+/-5%,1/2W,Metal oxide
R911	443525604	56ohm+/-5%,1/2W,Metal oxide
R912,R915	441623914F	390ohm+/-5%,1W,Metal oxide
R916	453534794	0.47ohm+/-5%,1/2W,Metal
R918	443721024U	1kohm+/-5%,2W,Metal oxide
R919	443522704	27ohm+/-5%,1/2W,Metal oxide
R923	453530274	2.7ohm+/-5%,1/2W,Metal
R924,R925	443622204HT	22ohm+/-5%,1W,Metal oxide
R928	443722714U	270ohm+/-5%,2W,Metal oxide
R945	443622714HT	270ohm+/-5%,1W,Metal oxide
Relay		
RL911	25065537	NRL-2P5A-DC12-107
Terminals		
P303.P304	25045300	NPJ-6PDBL159
Sockets		
JL501B	25050269	NSCT-5P97
JL502B	25050268	NSCT-4P96
JL701B	25055629	NPLG-8P591
JL702B	25051095	NSCT-11P882
JL703B	25051093	NSCT-9P880
JL901B	25051087	NSCT-3P874
JL902B	25051107	NSCT-3P894
JL903B	25051108	NSCT-4P895
Plugs		
P301A	25055704	NPLG-8P660
P302A	25055701	NPLG-5P657
P401A,P402A	25055708	NPLG-12P664
P403A	25055703	NPLG-7P659
P501,P502	25055038	NPLG-2P29
P951A,P952A	25055703	NPLG-7P659
TP701	25055038	NPLG-2P29
Heat sink		
Q913A	27160145-1	RAD-51
Screw		
Q913B	838430107	3TTB+10S(BC),Self-tapping

INPUT/OUTPUT TERMINAL PC BOARD (NAETC-6802-2C/2D/2E)

CIRCUIT NO.	PART NO.	DESCRIPTION
Capacitors		
C315,C316	374721015	100pF+/-10%,50V,Plastic <P>
C319,C320	374721015	100pF+/-10%,50V,Plastic <P>
Terminals		
P306,P307	25045303	NPJ-4PDBL162
P308	25045330	NPJ-2PDBL184
Sockets		
P301B	25051233	NSCT-8P1023
P302B	25051230	NSCT-5P1020

POWER SUPPLY PC BOARD (NAPS-6803-2C/2D/2E)

CIRCUIT NO.	PART NO.	DESCRIPTION
IC		
Q951	222780125	78M12HF
Transistors		
Q952	2213284	2SC1740S-R <P>
Q953	2213510	DTA114ES
Q955,Q956	2215024	2SD1468S-R
Diode		
D951	223163 or 223205	1SS133 or 1SS270A

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

CIRCUIT NO.	PART NO.	DESCRIPTION
Capacitors		
C951,C962	354780339	3.3 u F,50V, Elect.
C952	393384797	0.47 u F,50V, Elect.
C965	393361017	100 u F,35V, Elect.
C966	393341007	10 u F,16V, Elect.
Resistors		
R965	453530824	8.2ohm+/-5%,1/2W,Metal
R966	443621204	12ohm+/-5%,1W,Metal oxide
Sockets		
P951B,P952B	25051232	NSCT-7P1022
P953A	25052248	NSCT-15P2145
Heat sink		
Q951A	27160145-1	RAD-51
Screw		
Q951B	838430107	3TTB+10S(BC),Self-tapping

DISPLAY CIRCUIT PC BOARD (NADIS-6804-2C/2D/2E)

CIRCUIT NO.	PART NO.	DESCRIPTION
FL tube		
Q703	212141	10BT-167GK
Remote sensor		
Q704	241329	PIC-26043TH2
ICs		
Q701	22241625NEC	MPD78044FGF-192-3B9
Q781	22241302	BU1923 <P>
Transistors		
Q702	221282 or 2213560	DTC144ES or RN1204
Q705	2212600 or 2213580	DTA124ES or RN2203
Diodes		
D701-D706	223163 or 223205	1SS133 or 1SS270A
D707	224470562	MTZJ5.6B
D709	225339	SPR-39MVWF
D710	225338	SLR-332VR
D711-D717	225340	SLR-332DU
D781	223163 or 223205	1SS133 or 1SS270A <P>
Crystals		
X701	3010224	XTL-4.19M
X781	3010321 or 3010203	HC-49/U034.332MHz or AF6146CG <P>
Capacitors		
C701	3000078	DX-5R5L104,Super
C703	353780229	2.2 u F,50V, Elect.
C705	353741009	10 u F,16V, Elect.
C707	3060011	NTC-45P10,Trimmer
C708,C710	393384707	47 u F,50V, Elect.
C711	353721019	100 u F,6.3V, Elect.
C713	353741009	10 u F,16V, Elect.
C783	353721019	100 u F,6.3V, Elect. <P>
C786	353780229	2.2 u F,50V, Elect. <P>
Terminal		
P701	25045396	LGT1516-0101
Resistors		
R801,R802	443523914	390ohm+/-5%,1/2W,Metal oxide
Switches		
S701-S708	25035699	NPS-111-S662
S709	25065534	REB161PVB
Sockets		
JL501A	25051109	NSCT-5P896
JL701A	25051092	NSCT-8P879
JL702A	25051095	NSCT-11P882
JL703A	25051093	NSCT-9P880
Holder		
Q703A	27191093A	(FL)

TONE CIRCUIT PC BOARD (NAAF-6805-2C/2D/2E)

CIRCUIT NO.	PART NO.	DESCRIPTION
ICs		
Q411	22240191	NJM4565D-D
Q413,Q414	22240250	NJM2068L-D
Q471	22241253	TC9184AP

NOTE:<P>: European model only
 <T>: Asian model only for 230V
 <D>: Asian model only for 120V

CIRCUIT NO.	PART NO.	DESCRIPTION
Transistors		
Q415-Q422	2211945	2SK246-GR
Q423-Q426	2213631 or 2213632	RN1241-A or RN1241-B
Q431-Q433	2212600	DTA124ES
Diodes		
D411-D416	223163 or 223205	1SS133 or 1SS270A
Capacitors		
C401	374722234	0.022 u F+/-5%,50V,Plastic
C413,C414	393381007	10 u F,50V, Elect.
C415,C416	374721024	1000pF+/-5%,50V,Plastic
C417,C418	374721044	0.1 u F+/-5%,50V,Plastic
C419,C420	353780229	2.2 u F,50V, Elect.
C421,C422	374722244	0.22 u F+/-5%,50V,Plastic
C423,C424	374723934	0.039 u F+/-5%,50V,Plastic
C425,C426	374721044	0.1 u F+/-5%,50V,Plastic
C427,C428	374724744	0.47 u F+/-5%,50V,Plastic
C429,C430	374728224	8200pF+/-5%,50V,Plastic
C431,C432	393381007	10 u F,50V, Elect.
C433-C437	393341007	10 u F,16V, Elect.
C471,C472	393380477	4.7 u F,50V, Elect.
C473,C474	374721844	0.18 u F+/-5%,50V,Plastic
C475,C476	374723334	0.033 u F+/-5%,50V,Plastic
C477,C478	393380107	1 u F,50V, Elect.
C479,C480	374725624	5600pF+/-5%,50V,Plastic
C481,C482	374723334	0.033 u F+/-5%,50V,Plastic
C483,C484	393341007	10 u F,16V, Elect.
Resistor		
R401	5104383	N16RGL100KBT20F,Variable
Sockets		
P403B	25051232	NSCT-7P1022
P401B	25051237	NSCT-12P1027
P402B	25051237	NSCT-12P1027
Shield plate		
R401A	27150449	(M)

PRIMARY CIRCUIT PC BOARD (NAPS-6806-2C/2D/2E)

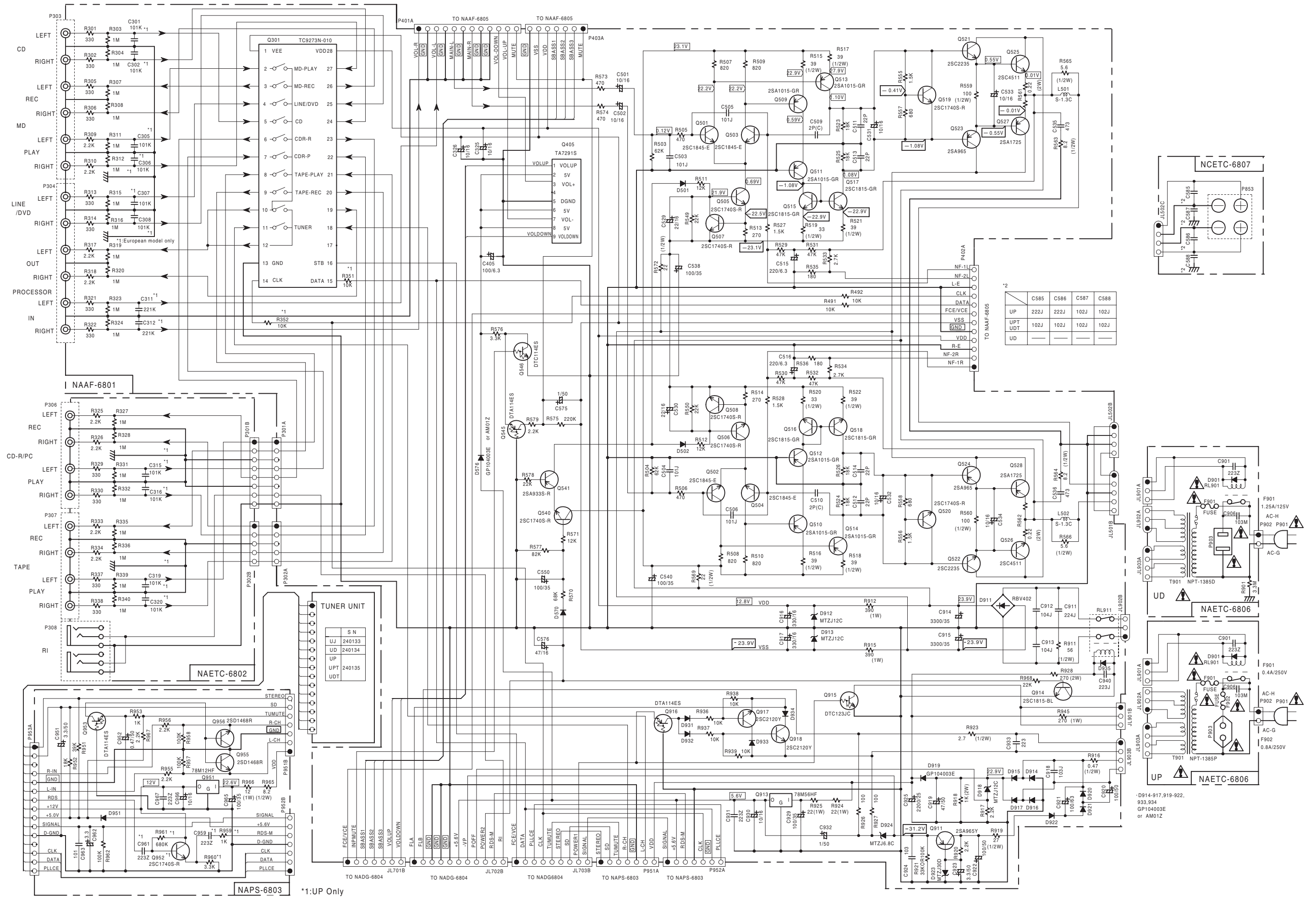
CIRCUIT NO.	PART NO.	DESCRIPTION
Capacitor		
C906	3300055	DE1610F103M-KH,IS
Resistor		
R901	431533355	3.3Mohm,1/2W,Solid <D>
AC outlet		
P903	25051637	NSCT-2P1424 <P/T>
	25051990	NSCT-2P1777 <D>
Relay		
RL901	25065594	NRL-1P10A-DC12-146
Fuse holders		
F901A	25050065	YSH403T
F902A	25050065	YSH403T <P/T>
Sockets		
JL901A	25051087	NSCT-3P874
JL902A	25051107	NSCT-3P894
JL903A	25051108	NSCT-4P895
Plug		
P902	25055676	NPLG-2P632
Cover		
C906A	27301216	SB1925A <P/T>
Fuse label		
F901B	29361919	T400MAL250V <P/T>

SPEAKER TERMINAL PC BOARD (NAETC-6807-2C/2D/2E)

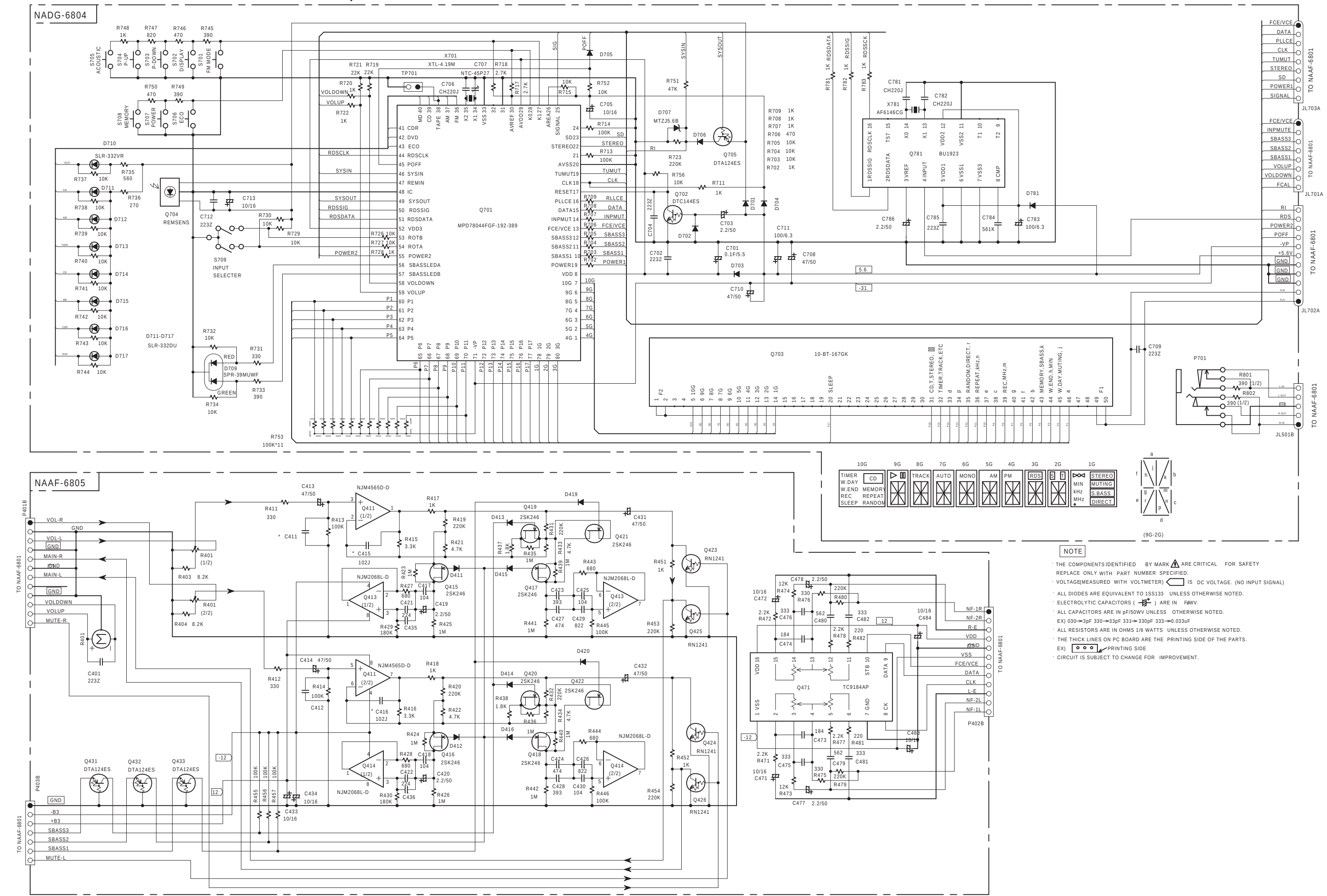
CIRCUIT NO.	PART NO.	DESCRIPTION
Capacitors		
C585,C586	374722224	2200pF+/-5%,50V,Plastic <P>
C585,C586	374721024	1000pF+/-5%,50V,Plastic <T/D>
C587,C588	374721024	1000pF+/-5%,50V,Plastic
Terminal		
P853	25060295	NTM-4PDMN226
Socket		
JL502C	25051108	NSCT-4P895

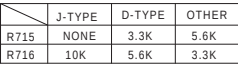
NOTE:THE COMPONENTS IDENTIFIED BY MARK  ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

SCHEMATIC DIAGRAM MOTHER BOARD



SCHEMATIC DIAGRAM
DISPLAY/TONE SECTIONS(European model only)





THE COMPONENTS IDENTIFIED BY MARK  ARE CRITICAL FOR SAFETY
REPLACE ONLY WITH PART NUMBER SPECIFIED.

VOLTAGE (MEASURED WITH VOLT METER)  IS DC VOLTAGE. (NO INPUT SIGNAL)

ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.

ELECTROLYTIC CAPACITORS () ARE IN μ MMV.

ALL CAPACITORS ARE IN pF/50V UNLESS OTHERWISE NOTED.

EX) 030 $\rightarrow$ 3pF 330 $\rightarrow$ 33pF 331 $\rightarrow$ 330pF 333 $\rightarrow$ 0.033F

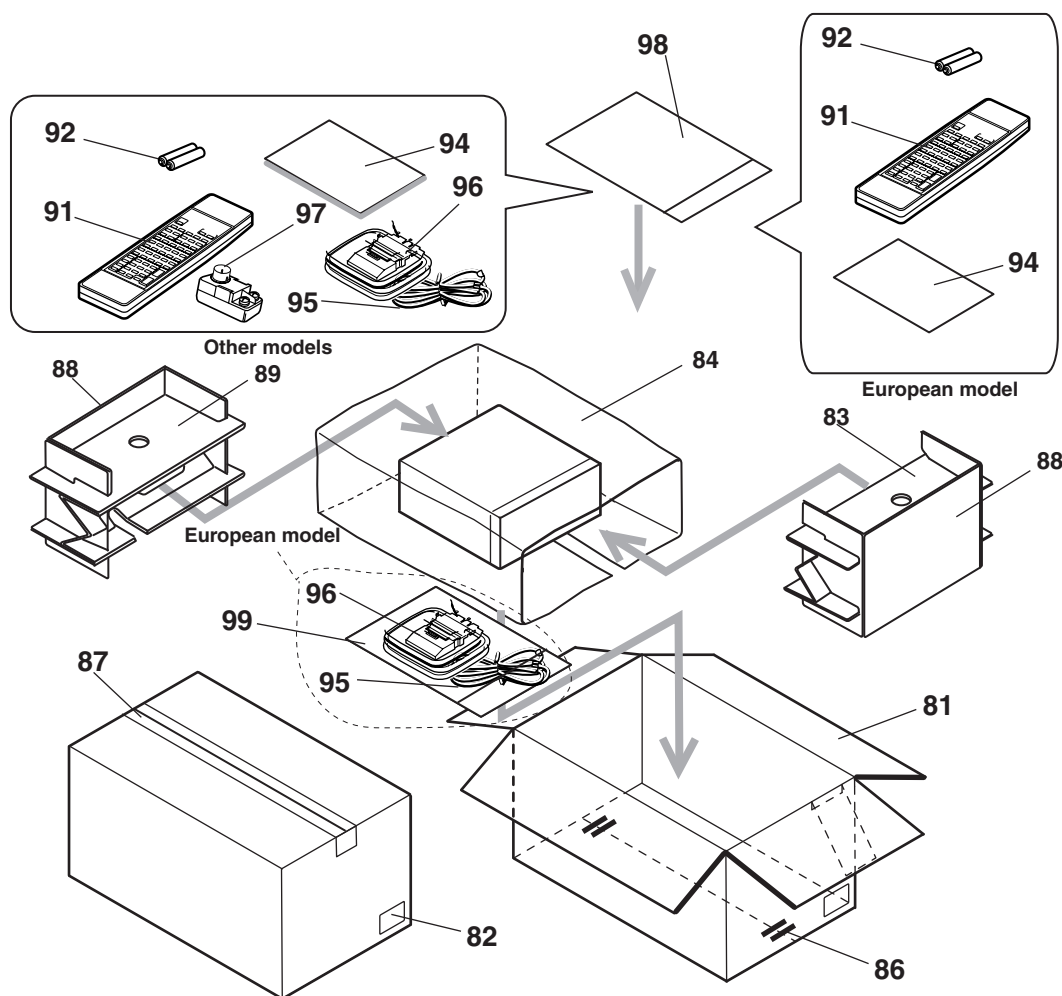
ALL RESISTORS ARE IN OHMS 1/6 WATTS UNLESS OTHERWISE NOTED.

THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.

EX)   PRINTING SIDE

CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

PACKING VIEW



REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
81	29053724	Carton box <T/D>	92	3010054	UM-3, Battery
	29053725	Carton box <P>	94	29343070	Instruction manual E
82	29362827	Label EAN		29343071	Instruction manual FS <P>
83	29091901B	Pad A, Front		29343072	Instruction manual DG <P>
84	29095835	0.515*650*550, Protection sheet		29343074	Instruction manual CT <T/D>
86	282301	Staple	95	292116	FM antenna
87	29110071	PP tape	96	232140	NMA-3057, AM loop antenna
88	29091887	Pad B <T/D>	97	25065462	YAE21-0237, Antenna adapter <T/D>
	29091902	Pad B <P>	98	29100097-1A	350*250, Polybag
89	29091886	Pad A, Rear	99	29100180	D240*W250, Polybag <P>
91	24140456	RC-456S, Remote controller			

NOTE: <P>: European model only
 <T>: Asian model only for 230V
 <D>: Asian model only for 120V

ONKYO CORPORATION

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ONKYO CHINA LIMITED

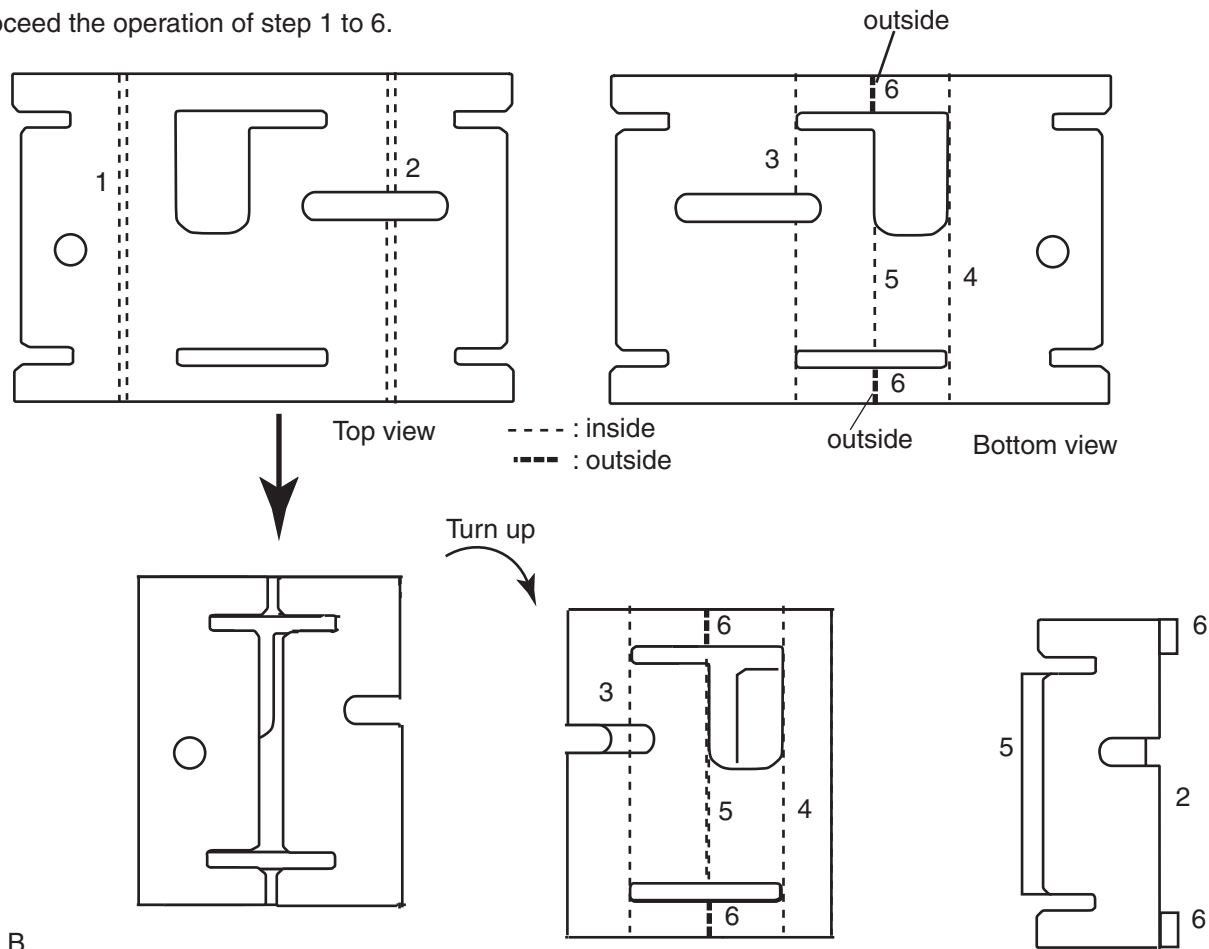
Units 2102-2107, Metroplaza Tower I, 223 Hing Fong Road, Kwai Chung,
 N.T., HONG KONG Tel: 852-2429-3118 Fax: 852-2428-9039



PACKING PROCEDURES

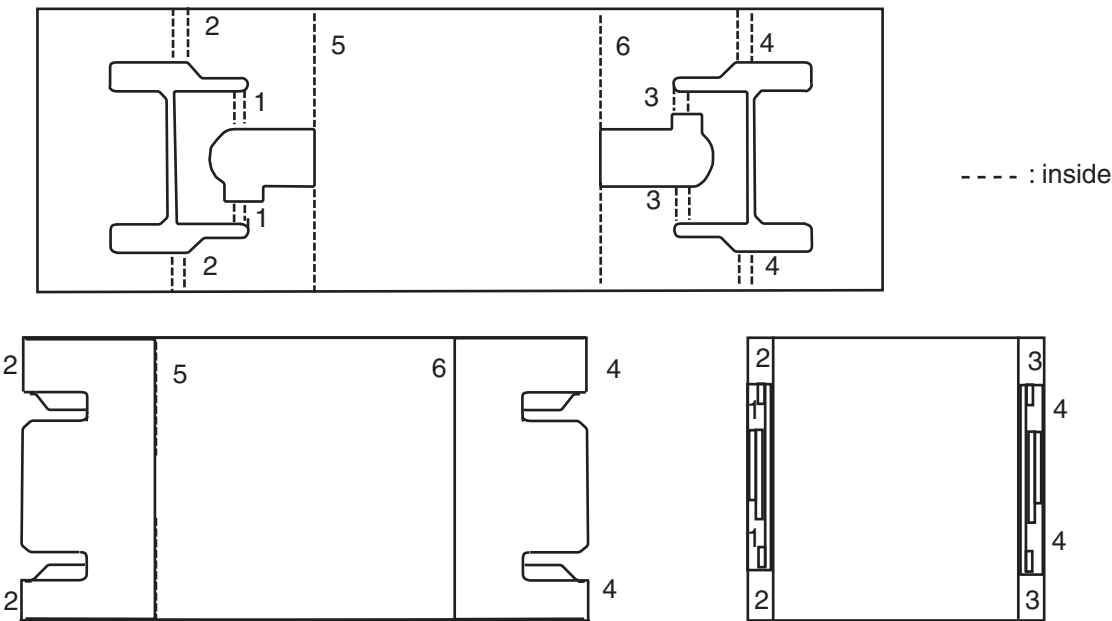
1. Pad A

Proceed the operation of step 1 to 6.



2. Pad B

Proceed the operation of step 1 to 6.



Insert the pad A to pad B.

