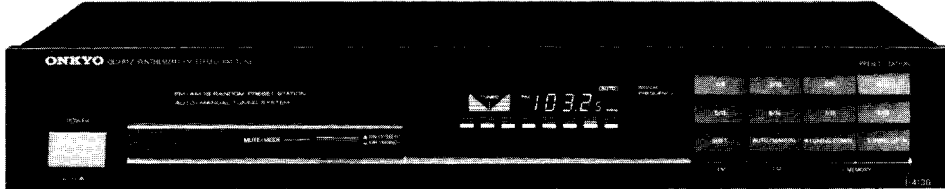


ONKYO SERVICE MANUAL

SYNTHESIZED FM STEREO/AM TUNER MODEL T-4130



Black model

BUD, BUDN	120V AC, 60Hz
BUG	220V AC, 50Hz
BUW	120V/220V AC, 50/60Hz
BUQA	240V AC, 50Hz

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 PART 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.

TABLE OF CONTENTS

Specifications	2
Service procedures	2
Block diagram	3
Exploded view	4
Parts list	5
Circuit description	6
Block diagram of IC	8
Packing view	10
Adjustment procedures	12
Pc board view/parts list	
Display/Switch	14
Main circuit view	14
Main circuit parts list	19
Schematic diagram	15

ONKYO
AUDIO COMPONENTS

SPECIFICATIONS

FM:	120V model	Other models
Tuning Range:	87.9-107.9MHz(200kHz steps)	87.5-108.0MHz(50kHz, steps)
Usable Sensitivity:	Mono: 11.2dBf, 2.0 μ V,IHF Stereo: 17.2dBf, 4.0 μ V	11.2 dBf, 1.0 μ V, IHF, 0.9 μ V, 75ohms DIN 2.0 μ V 75ohm
50dB Quieting Sensitivity:	Mono: 16.1dBf, 3.5 μ V Stereo: 36.1dBf, 35 μ V	1.7 μ V 75ohm 17 μ V 75ohm
Capture Ratio:	1.5dB	1.5dB
Image Rejection Ratio:	40dB	80dB
IF Rejection Ratio:	90dB	90dB
Signal-to-Noise Ratio:	Mono: 73dB Stereo: 66dB	Mono: 73dB Stereo: 66dB
ACA:	50dB IHF(\pm 400kHz)	
Selectivity:		55dB DIN(\pm 300kHz, 40kHz devi.)
AM Suppression Ratio:	50dB	50dB
Harmonic Distortion:	Mono: 0.1% Stereo: 0.2%	Mono: 0.1% Stereo: 0.2%
Frequency Response:	30-15,000Hz \pm 1.5dB	30-15,000Hz \pm 1.5dB
Stereo Separation:	40dB at 1kHz 30dB at 70-10,000Hz	40dB at 1kHz 30dB at 70-10,000Hz
Output voltage:	500mV	750mV
Muting level:	17.2dBf, 4 μ V	2 μ V, 75ohm
AM:		
Tuning Range:	530-1,620kHz(10kHz steps)	522-1,611kHz(9kHz steps)
Usable Sensitivity:	25 μ V	25 μ V
Image Rejection Ratio:	40dB	40dB
IF Rejection Ratio:	30dB	30dB
Signal-to-Noise Ratio:	40dB	40dB
Harmonic Distortion:	0.8%	0.8%
Output voltage:	150mV	150mV
GENERAL:		
Dimensions(W \times H \times D):	435 \times 71 \times 268mm 17-1/8" \times 2-13/16" \times 10-9/16"	
Weight:	3.0kg., 6.6lbs.	

Specifications and features are subject to change without notice.

SERVICE PROCEDURES

1. 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 chassis.

Specifications: 3.3Mohm \pm 10% at 500V.

2. 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 to keep the back-up system operative.

The period of 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 shorter when the unit is exposed to very high humidity or used in an area with an extremely humid climate.

3. Change of FM/AM band step.

— 120V model —

This model is not located the band selector switch.

If the FM band step is changed from 200kHz to 50kHz, add two diodes (1SS133) to D706 and D707 on the display PC board.

If the AM band step is changed from 10kHz to 9kHz, add a diode (1SS133) to D718 on the display PC board.

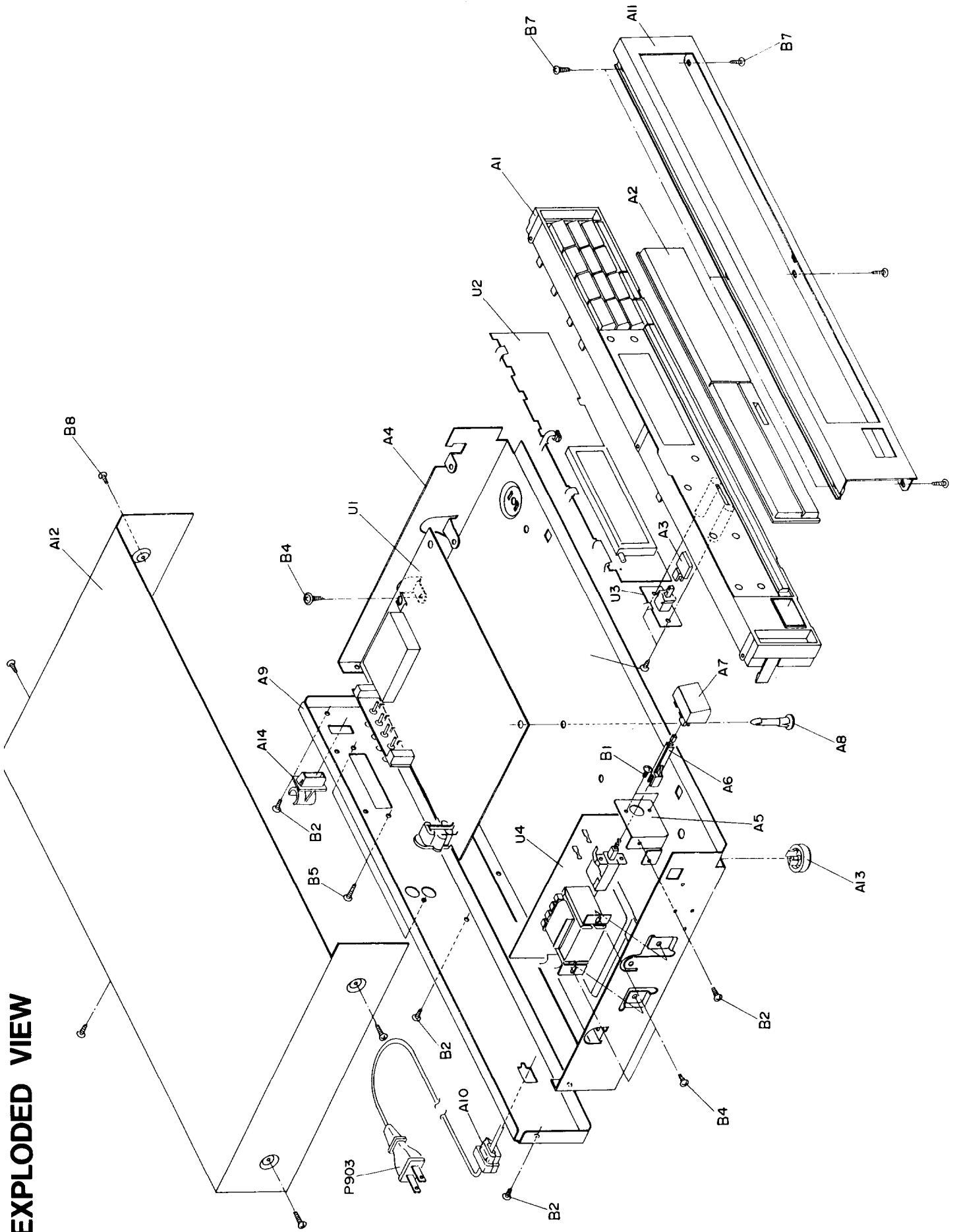
— 220V model —

This model is not located the band selector switch.

If the FM band step is changed from 50kHz to 200kHz, remove two diodes (1SS133) to D706 and D707 on the display PC board.

If the AM band step is changed from 9kHz to 10kHz, remove a diode (1SS133) to D718 on the display PC board.


EXPLODED VIEW



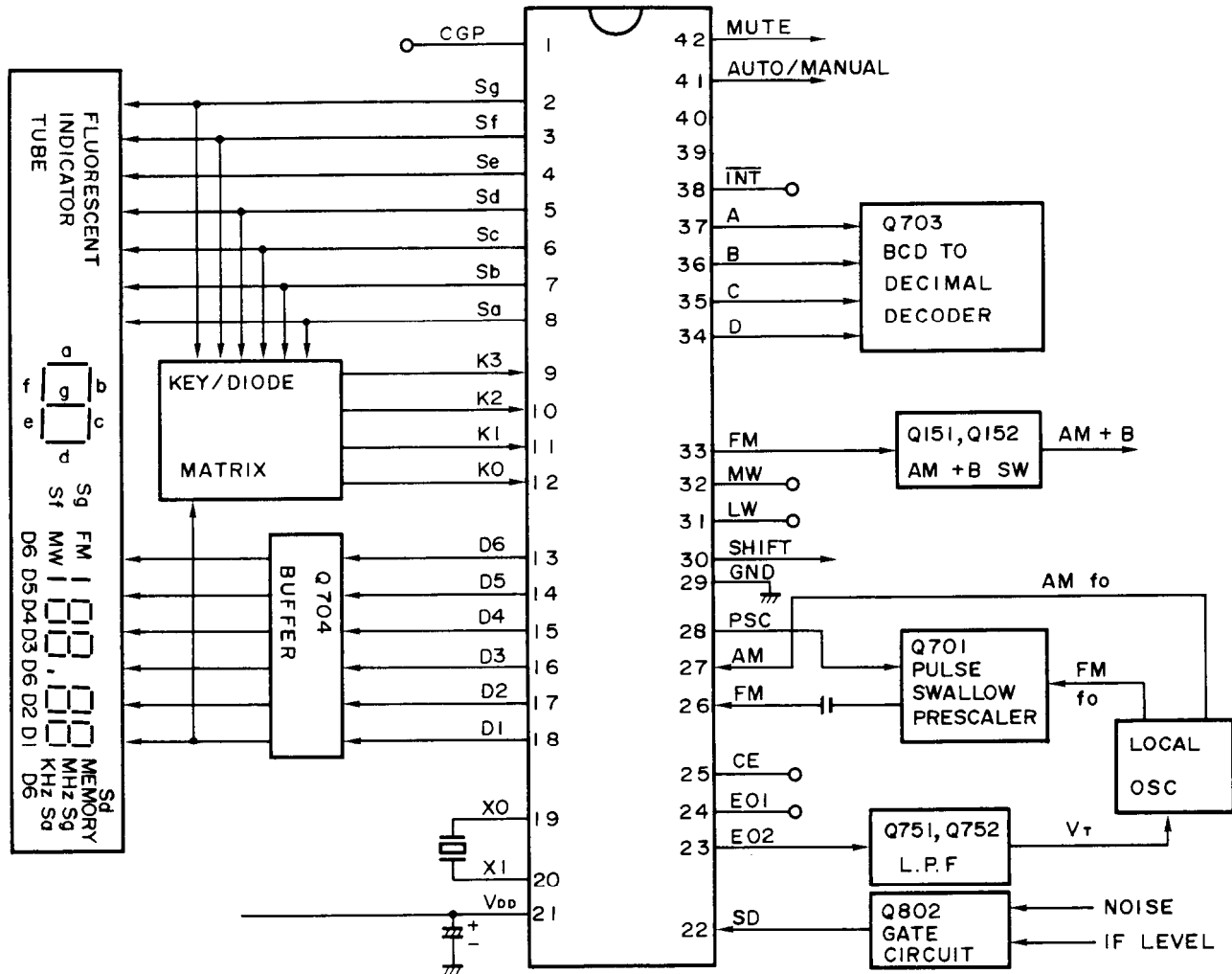
PARTS LIST

REF NO.	PART NO.	DESCRIPTION	U2	U3	U4
A1	27110327B	Front bracket ass'y	1A046559-1		
A2	28191384A	Clear plate	1A034559-1A		
A3	28322797	Knob PUSH			
A4	27100116	Chassis	1A034559-1B		
A5	27141112	Bracket, power			
A6	27260170A	Joint, switch			
A7	28322795A	Knob, power	1A046560-1		
A8	27190511	Holder	1A046561-1		
A9	27120955	Back panel <D>			
	27120956	Back panel <G>	1A034561-1A		
	27120958	Back panel <W>			
	27120963	Back panel <Q>	1A034561-1B		
A10	27300750	Strainrelief	1A033561-1C		
A11	27210811	Front panel			
A12	28184350A	Top cover			
A13	27175130	Leg			
A14	27190105	Holder, antenna			
B1	82143006	3P+6FN(BC), Pan head screw			
B2	834430068	3TTS+6B(BC), Tapping screw			
B4	831130088	3TTW+8B, Tapping screw			
B5	834430108	3TTS+10B(BC), Tapping screw			
B7	833430080	3TTP+8P(BC), Tapping screw			
B8	834430088	3TTS+8B(BC), Tapping screw			
B9	838430088	3TTB+8B(BC), Tapping screw			
P903	253142A or 253142	AC-UC-7#18, Power supply cord <D>			
	253127A or 253129A	AS-CEE, Power supply cord <G/W>			
	253118	AS-SAA, Power supply cord <Q>			
S902	25065123	NSS-1258P, Voltage selector switch <W>			
U1	1A034558-2	NARF-2858-2, Main circuit pc board ass'y <D>			
	1A034558-2A	NARF-2858-2A, Main circuit pc board ass'y <G/Q>			
	1A034558-2B	NARF-2858-2B, Main circuit pc board ass'y <W>			

NOTE: <D>: Only 120V model
 <G>: Only 220V model
 <Q>: Only 240V model
 <W>: Only Worldwide model

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

CIRCUIT DESCRIPTION



Pin No.	Symbol	Terminal	Description
1	CGP		Output terminal for sound "PEE".
2 - 8	Sa - Sg	Segment outputs	Display tube signal terminal output and key return signal source terminals; active high. Since these terminals can handle 30V, they are connected directly to the segment terminals of the fluorescent display tube.
9 - 12	K0 - K3	Key return signal inputs	Terminals for input of the key return signals from external matrix circuit.
13 - 18	D1 - D6	Digit outputs	Display tube digit output signal terminals; active low. D1 is used the key return signal source to diode matrix.
19, 20	X1, X2	X'tal	Connect to the 4.5MHz crystal oscillator.
21	V _{DD}	Power source input	Device power source terminal; supplies 5V during normal operation and 2.5V from the super capacitor C701 for memory preservation.

Pin No.	Symbol	Terminal	Description																																													
22	SD	Station detector signal input	Input terminal for detecting whether or not a broadcast signal is being received during auto-tuning. Stopped by the high level.																																													
23, 24	E01, E02	Error outputs	Charge pump output of the phase detector with constitutes the PLL. High level is output when the divided oscillation frequency is higher than the reference frequency. In the opposite case, low level is output. Floating occurs when the frequencies match. The output is applied to the variable capacitor diode in the front end through the low pass filter Q751 and Q752. The output from both terminals is same, but only E02 is used.																																													
25	CE	Chip enable	Device selection signal input terminal. High level ... Normal operation Low level ... Memory preservation																																													
26	FM	FM local oscillator signal input	Input terminal for FM local oscillator is divided by 1/16 or 1/17 by prescaler Q701.																																													
27	AM	AM local oscillator signal input	Terminal for input of the AM local oscillator signal.																																													
28	PSC	Pulse swallow control output	This terminal outputs a signal that switches the prescaler division ratio of Q701 to 1/16 or 1/17 when the pulse swallow method is used for division. (FM only)																																													
29	GND	Ground																																														
30	SHIFT	Preset reverse indication output	Terminal for indication output whether M1 – M8 or M9 – M16 the preset key. M1 – M8: Low level M9 – M16: High level																																													
31	LW	Band switching signal outputs	Terminals for signal output switching of each band. High level is output from terminal of FM (pin no. 33) and low level is output from other terminals (pin no. 31 & 32) during FM reception.																																													
32	MW																																															
33	FM																																															
34 35 36 37	A B C D	Preset station indication outputs	Terminals for BCD code output of preset station indicator. <table border="1" style="margin-left: 40px;"> <thead> <tr> <th></th> <th>M1</th> <th>M2</th> <th>M3</th> <th>M4</th> <th>M5</th> <th>M6</th> <th>M7</th> <th>M8</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>1</td> <td>0</td> <td>1</td> <td>0</td> <td>1</td> <td>0</td> <td>1</td> <td>0</td> </tr> <tr> <td>B</td> <td>0</td> <td>1</td> <td>1</td> <td>0</td> <td>0</td> <td>1</td> <td>1</td> <td>0</td> </tr> <tr> <td>C</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>0</td> </tr> <tr> <td>D</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> </tr> </tbody> </table>		M1	M2	M3	M4	M5	M6	M7	M8	A	1	0	1	0	1	0	1	0	B	0	1	1	0	0	1	1	0	C	0	0	0	1	1	1	1	0	D	0	0	0	0	0	0	0	1
	M1	M2	M3	M4	M5	M6	M7	M8																																								
A	1	0	1	0	1	0	1	0																																								
B	0	1	1	0	0	1	1	0																																								
C	0	0	0	1	1	1	1	0																																								
D	0	0	0	0	0	0	0	1																																								
38	INT		Not used.																																													
39	MEMORY	Memory down input	Terminal for down signal input of preset memory. Active low. Not used.																																													
40	MEMORY UP	Memory up input	Terminal for up signal input of preset memory. Active low. Not used.																																													
41	AUTO/ MANUAL	Auto/Manual indication output	Terminal for indication output whether or auto the tuning mode. This terminal becomes high during auto mode and low during manual mode.																																													
42	MUTE	Muting output	Output terminal which mutes the shock noise occurring when the PLL is released; active high. The muting signal is output as shown below. UP/DOWN of manual/auto mode, preset memory is recalled, band switching and preset scan.																																													

Control key and diode matrix connections

	K3(9)	K2(10)	K1(11)	K0(12)
Sg(2)	M4/M14	M3/M13	M2/M12	M1/M11
Sf(3)	M8/M18	M7/M17	M6/M16	M5/M15
Se(4)		PRESET SCAN	M10/M20	M3/M19
Sd(5)	SHIFT	LW	MW	FM
Sc(6)	AUTO MANUAL	MEMORY	DOWN	UP
Sb(7)	HI-BLEND	DISPLAY	PROGRAM	WIDE/ NARROW
Sa(8)	*10/9kHz	*LW2	*LW1	*AM
D1(18)	*BAND 0	*BAND 1	*10/8	STATIC/ DYNA

*Diode matrix

table 1

BAND0, BAND1 FM band settings. See table 2.
10/9kHz AM band settings. See table 3.

BAND0	BAND1	REGION	FREQUENCY RANGE	CHANNEL SPACE
D706	D707			
0	0	U.S.A.	87.9-107.9MHz	200kHz
1	1	Europe	87.50-108.00MHz	50kHz

0: Open 1: Connect the diode (1SS133).

table 2

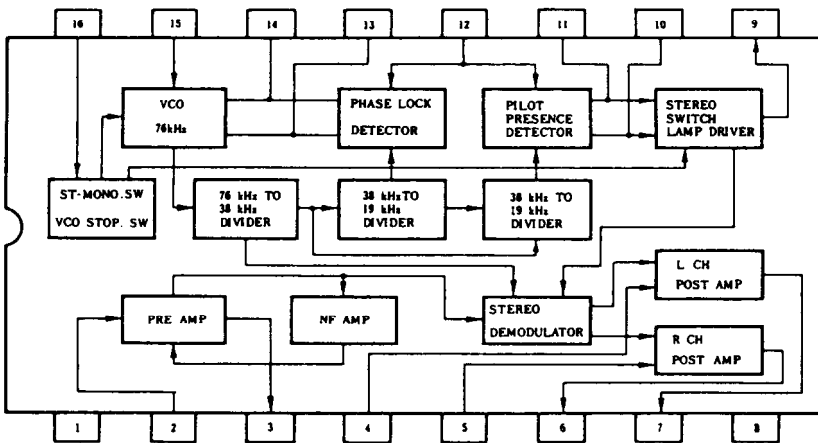
AM	10kHz/9kHz	FREQUENCY RANGE	CHANNEL SPACE
D712	D718		
0	0	530-1620kHz	10kHz
0	1	522-1611kHz	9kHz
1	0	531-1602kHz	9kHz

0: Open 1: Connect the diode (1SS133).

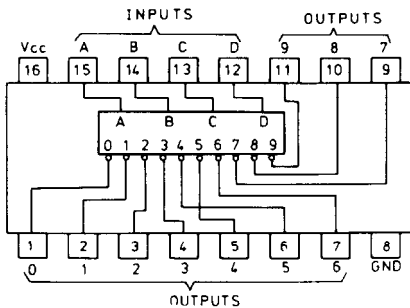
table 3

BLOCK DIAGRAM OF IC

μPC1161C3(Stereo decoder)

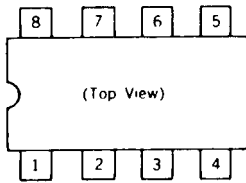


74LS42(BCD to decimal decoder)



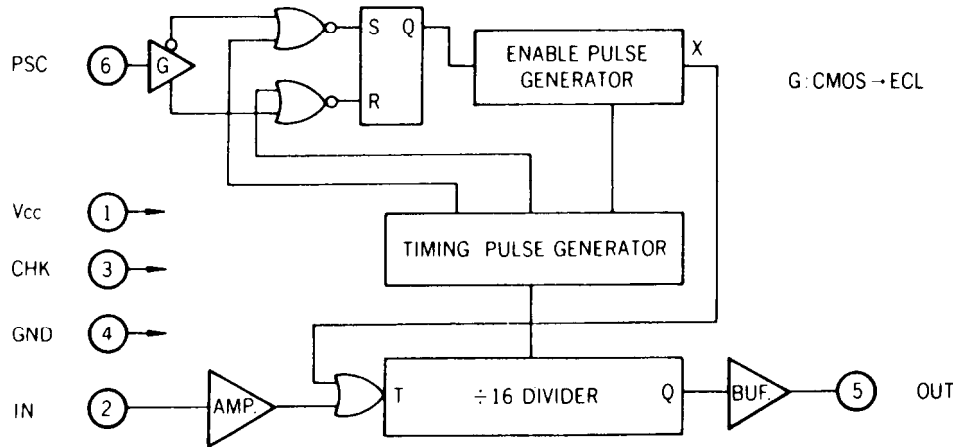
μPB53AC(Prescaler)

Pin Connection

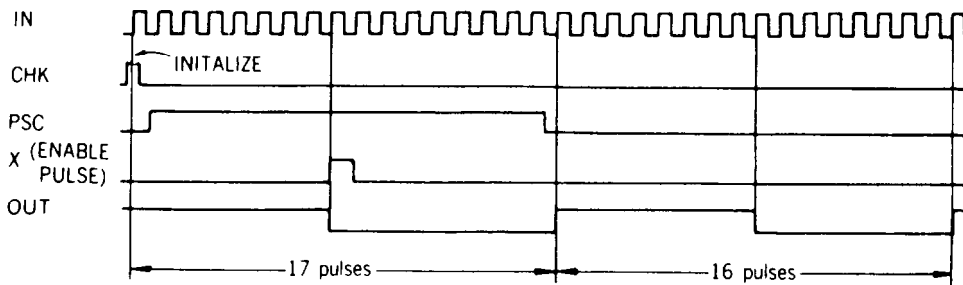


1. Pin 1 (Vcc)..... + 5 volts Supply
2. Pin 2 (IN).....FM local oscillator signal input
3. Pin 3 (CHK).....Check terminal
4. Pin 4 (GND).....Ground terminal
5. Pin 5 (OUI).....Prescaler terminal
6. Pin 6 (PSC).....Prescaler control terminal
7. Pin 7,8.....Not connected

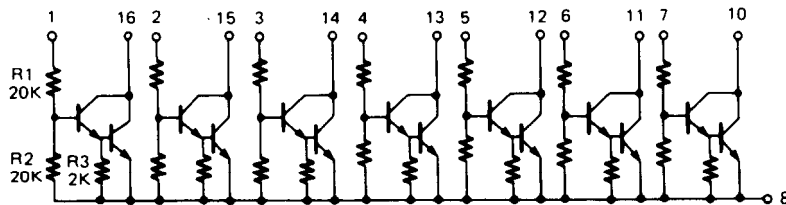
Block Diagram



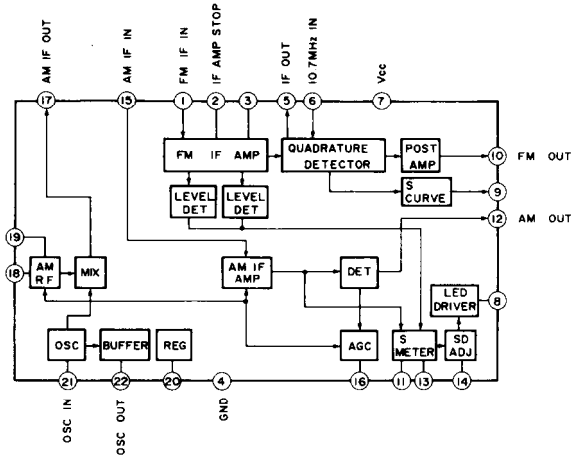
Timing Chart



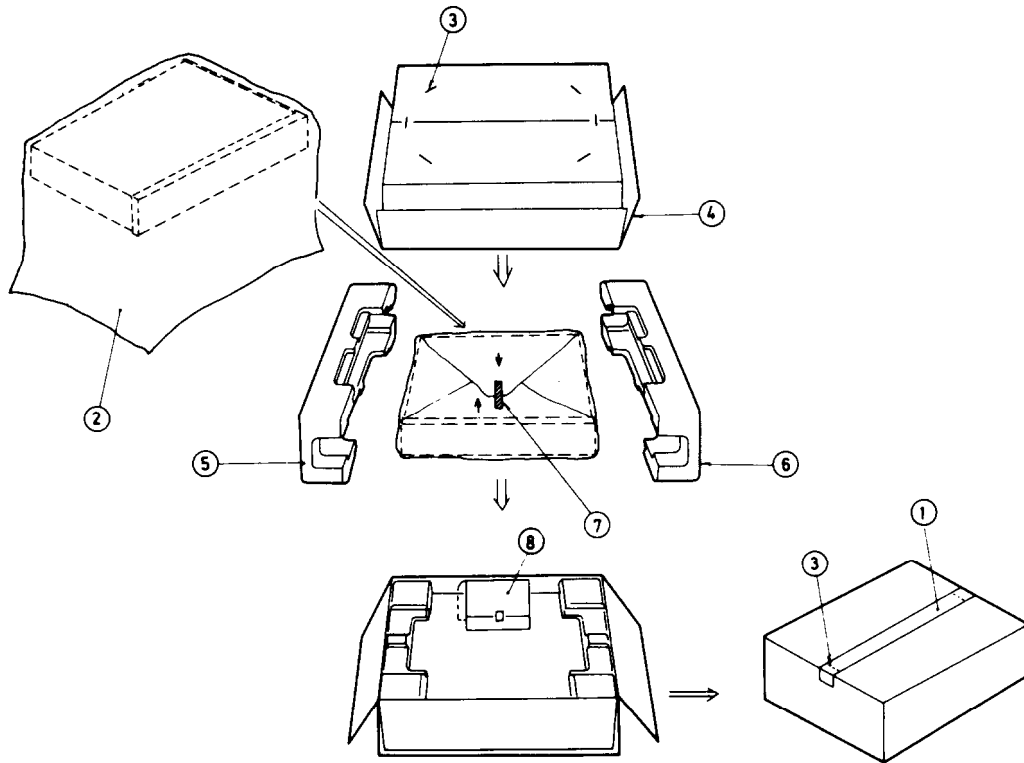
μPA80C(Buffer amplifier)



LA1265(AM radio/FM IF system)



PACKING VIEW



REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	260012	50×700mm, Damp-look tape	8	Accessory bag ass'y	
2	29100037A	650×500mm, Poly-vinyl bag		292064B	FM antenna <D>
3	282301	Sealing hook		232119	NMA-3052, AM loop antenna
4	29051472	Master carton box		2010098A	Connection cord
5	29090533F	Pad R		29341126	Instruction manual <D>
6	29090532B	Pad L		29365019	Warranty card <UDN>
7	29110032	W=15mm, Adhesive tape		29358002E	Service station list <UDN>
				29100006A	250×350mm, Poly-vinyl bag
				292092	FM antenna <G/Q/W>
				29341127	Instruction manual <G/Q/W>
				25055018	CV-K-1, Conversion plug <W>
				25060088	AEZ1-0050, Antenna adaptor <W/Q>

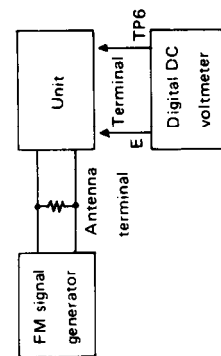
NOTE: <UDN>: Only U.S.A. model
 <D>: Only 120V model
 <G>: Only 220V model
 <Q>: Only 240V model
 <W>: Only Worldwide model

ADJUSTMENT PROCEDURES

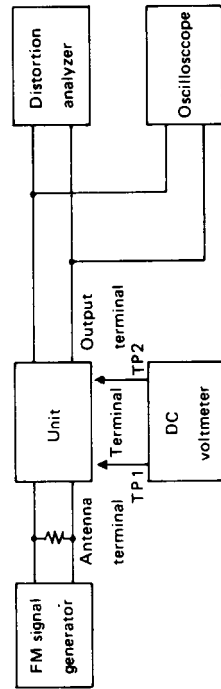
FM section

Item	Step	Connection of instrument	FM SG output	Stereo modulator output	Tuned frequency	Output indicator	Adjustment point	Adjust for	Remarks
IF	1	Fig.2	99.1MHz 1kHz, 75kHz devi. 65dBf(60dB)		99.1MHz	DC voltmeter	L101	0V±20mV	Set the mode switch to MONO. Repeat the steps 1 and 2 until no further adjustment is necessary.
	2								
Tuned indicator level		Fig.2	99.1MHz 1kHz, 75kHz devi. 17.2dBf(12dB)		99.1MHz	Tuned indicator	R101	Light on	
VCO		Fig.3	99.1MHz 1kHz, 75kHz devi. 65dBf(60dB)		99.1MHz	Frequency counter	R201	19kHz±10Hz	Set the mode switch to STEREO
Stereo distortion		Fig.3	99.1MHz Ext. modulation 65dBf(60dB)	L+R 1kHz 67.5kHz devi.	99.1MHz	Distortion analyzer	IF on the front end	Minimum	
Stereo separation	1	Fig.3	99.1MHz Ext. modulation 65dBf(60dB)	Lch. 1kHz	99.1MHz	Rch. AC voltmeter	R202	Minimum	Maximum and same separation
	2								
Tuned voltage	1	Fig.1			87.9MHz (87.5MHz)	Digital DC voltmeter		1.5±0.5V	
	2								

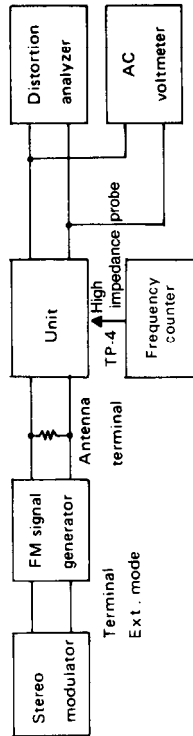
() : 50kHz step model



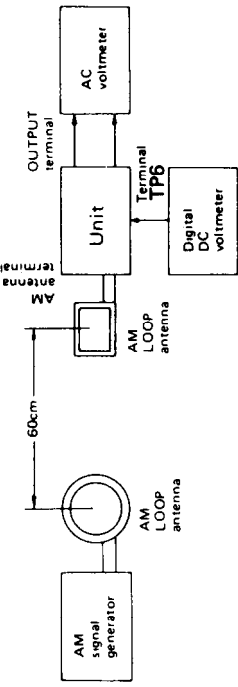
<Fig.1>



<Fig.2>



<Fig.3>

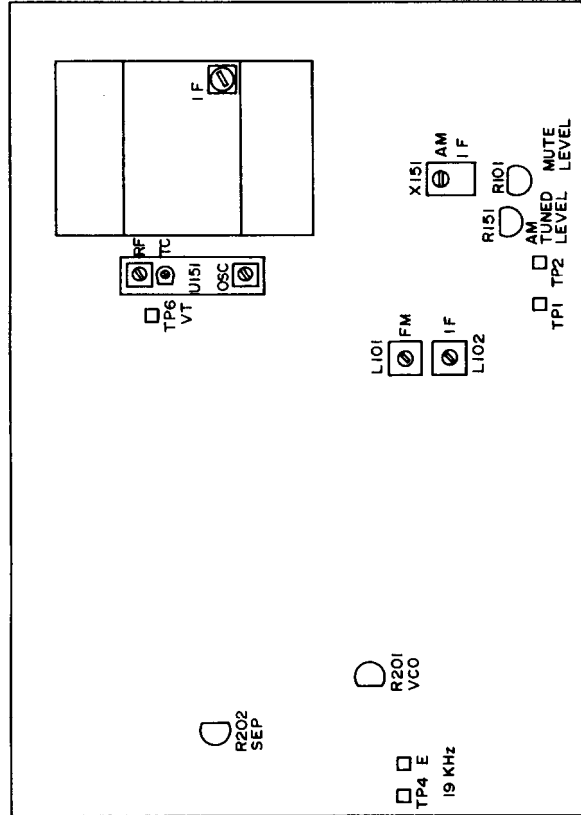


(Fig.4)

AM section

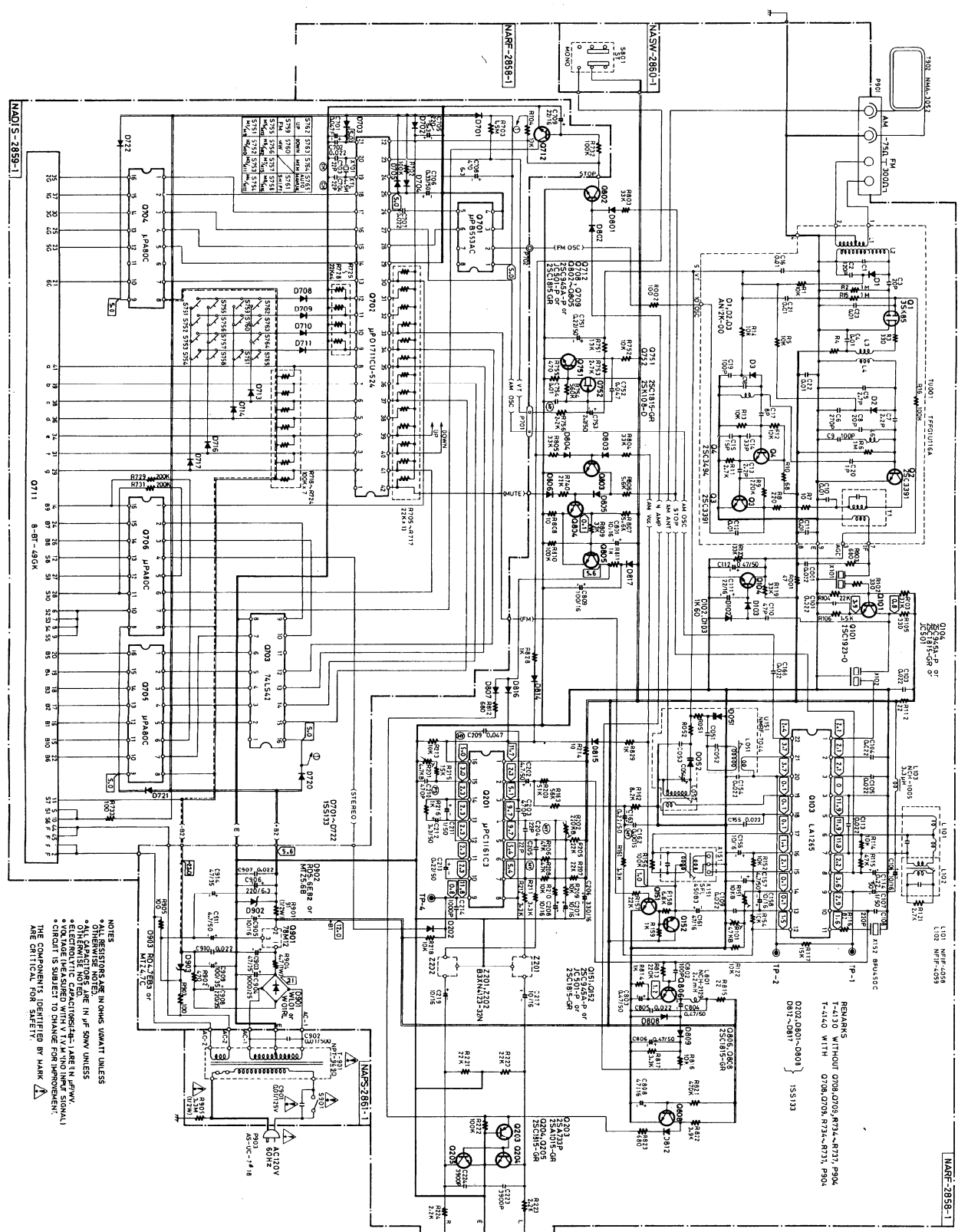
Step	AMSG output	Tuned Frequency	Output indicator	Adjustment point	Adjust for	Remarks
1		530kHz (522kHz)	Digital DC voltmeter	OSC on U151	1.5V±0.1V	
2		1620kHz (1611kHz)	Digital DC voltmeter		8.0±1.0V	
3	600kHz, 64dB/m (603 kHz) 400Hz 30% mod.	600kHz (603kHz)	AC voltmeter	RF on U151	Maximum	Repeat the steps and 4 until no further adjustment is necessary.
4	1400kHz, 64dB/m (1404kHz) 400Hz 30% mod.	1400kHz (1404kHz)	AC voltmeter	TC on U151	Maximum	
5	1000kHz, 64dB/m (990kHz) 400Hz 30% mod.	1000kHz (990kHz)	AC voltmeter	X151	Maximum	
6	1000kHz, 64dB/m (990kHz) 400Hz 30% mod.	1000kHz (990kHz)	TUNED indicator	R151	Light on	

() : 9kHz step model

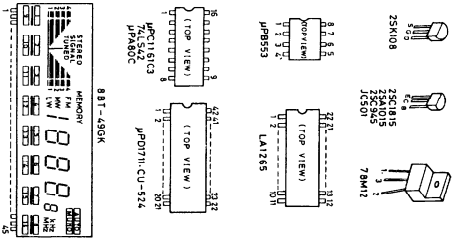


SCHEMATIC DIAGRAM

- 120V model -



- NOTES
- ALL RESISTORS ARE IN OHMS UNLESS NOTED OTHERWISE
 - ALL CAPACITORS ARE IN MICROFARADS UNLESS NOTED OTHERWISE
 - ALL DIODES ARE IN OHMS UNLESS NOTED OTHERWISE
 - ALL TRANSISTORS ARE IN OHMS UNLESS NOTED OTHERWISE
 - ALL INTEGRATED CIRCUITS ARE IN OHMS UNLESS NOTED OTHERWISE
 - ALL COMPONENTS IDENTIFIED BY MARK ARE CRITICAL FOR SAFETY.



A B C D E F G H

1 2 3 4 5 6

PRINTED CIRCUIT BOARD—PARTS LIST

MAIN CIRCUIT PC BOARD (NARF-2858-2/2A/2B)

CIRCUIT NO.	PART NO.	DESCRIPTION			
	Front end				
TU001	240070	TFFG1U116A <D>	C211	354780109	1μF, 50V, Elect.
	240072	TFFG3E111X <G/Q/W>	C212	354780339	3.3μF, 50V, Elect.
	Transistors		C213	354782299	0.22μF, 50V, Elect.
Q101	2211723	2SC1923(O)	C217, C219	354741009	10μF, 16V, Elect.
Q102	2210746	2SC945A(P) <G/Q/W>	C751	354782299	0.22μF, 50V, Elect.
Q104	2211255 or	2SC1815(GR) or	C753	354780229	2.2μF, 50V, Elect.
Q151, Q152	2210746	2SC945A(P)	C801	354741009	10μF, 16V, Elect.
Q203	2211455 or	2SA1015(GR) or	C803, C804	354784799	0.47μF, 50V, Elect.
	2210803	2SA733(P)	C806	354784799	0.47μF, 50V, Elect.
Q204, Q205	2211255	2SC1815(GR)	C808	354744709	47μF, 16V, Elect.
Q751	2211255	2SC1815(GR)	C809	354741019	100μF, 16V, Elect.
Q752	2212294	2SK108(D)	C903	354764709	47μF, 35V, Elect.
Q802-Q805	2211255 or	2SC1815(GR) or	C904	354751029	1000μF, 25V, Elect.
	2210746	2SC945A(P)	C905	354741009	10μF, 16V, Elect.
Q806, Q808	2211255	2SC1815(GR)	C906	354722219	220μF, 6.3V, Elect.
	ICs		C908	354762219	220μF, 35V, Elect.
Q103	222912	LA1265	C909	354761019	100μF, 35V, Elect.
Q201	222678	μPC1161C3	C911	354780479	4.7μF, 50V, Elect.
Q901	222780122	78M12	C914	354764709	47μF, 35V, Elect.
	Diodes			Resistors	
D102, D103	223132	1K60	R101	5210068	N06HR47KBD, Semi-fixed
D202, D812	223163	1SS133	R151	5210064	N06HR10KBD, Semi-fixed
D801-D809	223163	1SS133	R201	5210062	N06HR4.7KBD, Semi-fixed
D814-D817	223163	1SS133	R202	5210072	N06HR220KBD, Semi-fixed
D901	223862 or	WL01 or	R901	442529104	91ohm, 1/2W, Metal oxide film
	223890	W01RL	R904	441620474	4.7ohm, 1W, Metal oxide film
D902	2239472 or	RD5.6EB2 or		Terminals	
	2243152	MTZ5.6B	P901	25060085	NTM-4PDMN29, Antenna <D>
D903	2243133 or	MTZ4.7C or		25060087	NTM-2PDMN31, Antenna
	2239433	RD4.7EB3	P902	25045182	<G/Q/W>
	Transformers			25045211	NPJ-2PDBL72, Output <D>
L101	233370	NFIF-4058			NPJ-2PDBL91, Output
L102	233371	NFIF-4059			<G/Q/W>
	Coils			Sockets	
L103	233105	NCH-1005	P701	2000643A	NSAS-4P559
L201	233236	NMC-6027 <G/Q/W>	P702	2000673	NSAS-6P629
L202, L203	233294	NMC-5040 <G/Q/W>		Radiator	
L801	231081	NCH-2129		27160176	RAD-56
	RF Block			Screw	
U151	232133	NMRF-7044		82143006	3P+6FN(BC), Pan head
	Filters			Bracket	
X101, X102	3010071	SFE10.7MA5 <D>	S802	25065286	Ground
X101-X103	3010043	SFE10.7MM <G/Q/W>		Switch	
X151	3010075	SFL-450B3		25065286	NSS-22112, Band selector <W>
X152	3010076	BFU-450C		DISPLAY CIRCUIT PC BOARD (NADIS-2859-1/1A/1B)	
Z201, Z202	3020016	B3XN4123-32N <D>		CIRCUIT NO. PART NO. DESCRIPTION	
	Capacitors			ICs	
C106	354741009	10μF, 16V, Elect.	Q701	222619	μPB553AC
C107	354780109	1μF, 50V, Elect.	Q702	22240026	μPD1711CU-524
C111	354742209	22μF, 16V, Elect.	Q703	222740421	74LS42
C112	354784799	0.47μF, 50V, Elect.	Q704-Q706	222801	μPA80C
C114	354780229	2.2μF, 50V, Elect.		Transistor	
C156	354741009	10μF, 16V, Elect.	Q712	2211255 or	2SC1815(GR) or
C157	354780479	4.7μF, 50V, Elect.		2210746	2SC945A(P)
C158	354741009	10μF, 16V, Elect.		Fluorescent indicator tube	
C161	354744709	47μF, 16V, Elect.	Q711	212037	8-BT-49GK
C163	354782299	0.22μF, 50V, Elect.		Crystal	
C202	354780479	4.7μF, 50V, Elect.	X701	3010091	XTL-4.5M
C206	354743319	330μF, 16V, Elect.		Diodes	
C207, C208	354741009	10μF, 16V, Elect.	D701-D705	223163	1SS133
C210	370134714	470pF ±5%, 100V, APS			

D706, D707	223163	1SS133 <G/Q/W >
D708-D711	223163	1SS133
D713, D714	223163	1SS133
D716, D717	223163	1SS133
D718	223163	1SS133 <G/Q>
D719	223163	1SS133 <W>
D720-D722	223163	1SS133

Capacitors

C701	3020027 or 3000050	0.047F, 5V or 0.047F, 5.5V, Super
C705	354722219	220 μ F, 6.3V, Elect.
C706	354783399	0.33 μ F, 50V, Elect.
C708	354724719	470 μ F, 6.3V, Elect.
C709	354742209	22 μ F, 16V, Elect.

Resistors

R705-R717	49163223413	22kohmX13, 1/10W, Network
R718-R724	49163104407	100kohmX7, 1/10W, Network
R725-R728	49163223404	22kohmX4, 1/10W, Network

Switches

S751-S765	25035548	NPS-111-S510, Push
-----------	----------	--------------------

MUTING SWITCH PC BOARD (NASW-2860-1)

CIRCUIT NO.	PART NO.	DESCRIPTION
S801	25035537	NPS-122-L499, Push switch

**POWER SUPPLY CIRCUIT PC BOARD
(NAPS-2861-1/1A/1B/1C)**

CIRCUIT NO.	PART NO.	DESCRIPTION
	2300177	\triangle NPT-949D, Power transformer <D>
	2300178	\triangle NPT-949G, Power transformer <G>
	2300179	\triangle NPT-949DG, Power transformer <W>
	2300188	\triangle NPT-949Q, Power transformer <Q>
C901	3500065A	\triangle 0.01 μ F, AC400V/125V,
		Capacitor IS
R905	431523355	\triangle 3.3Mohm, 1/2W, Solid resistor <D>
S901	25035558	\triangle NPS-111-L520P, Power switch

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

ONKYO CORPORATION

International Division: No. 24 Mori Bldg., 23-5, Nishi-Shimbashi 3-chome, Minato-ku,
TOKYO 105, JAPAN Tel: 03-432-6987 Fax: 03-436-6979 TLX: 242-3551 ONKYO J
ONKYO U.S.A. CORPORATION
200 Williams Drive, Ramsey, N.J. 07446, U.S.A. Tel: 201-825-7950 Fax: 201-825-8150