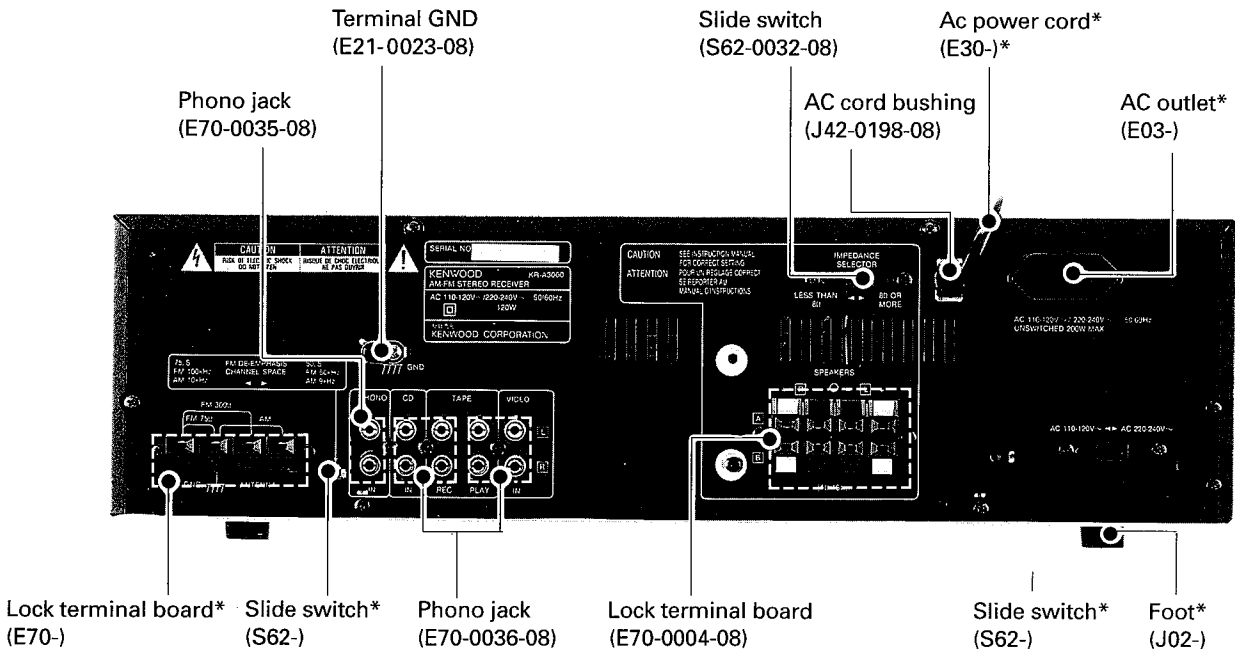
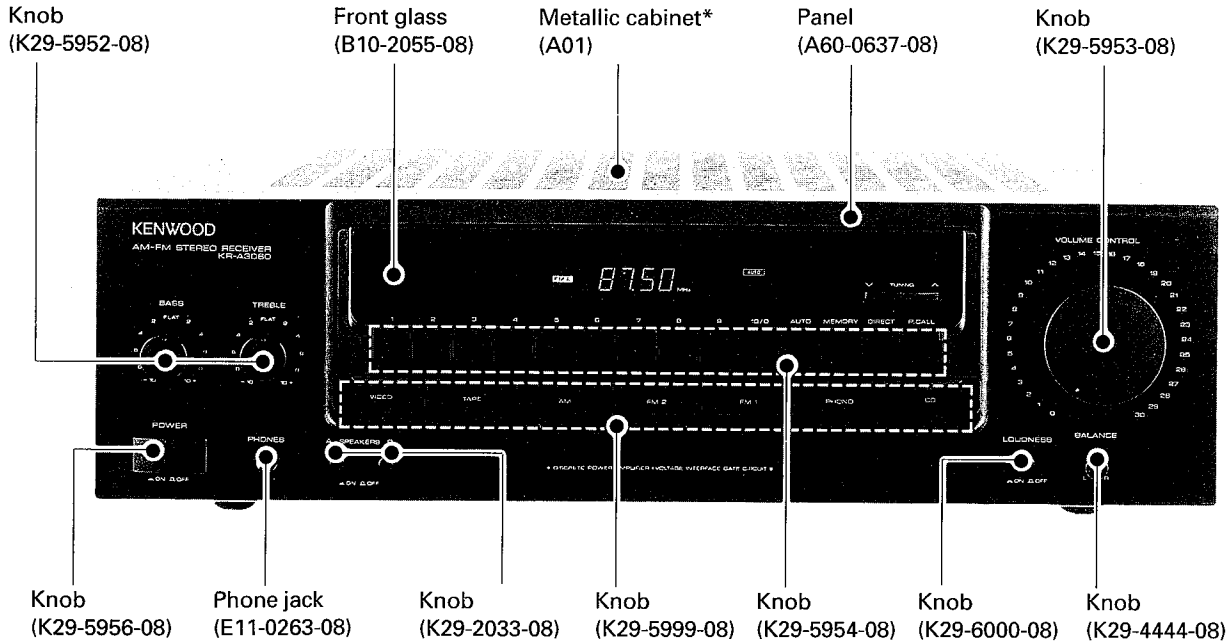


KR-A3060

SERVICE MANUAL

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B51-4890-00(K) 3350



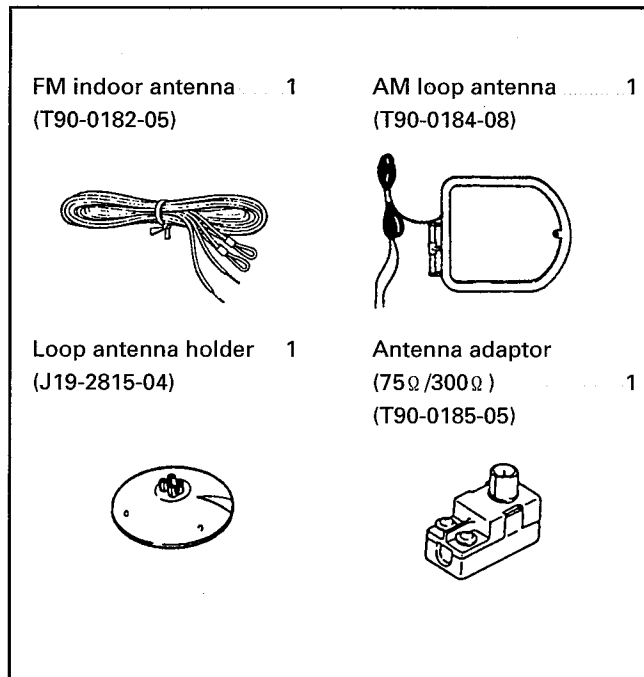
*Refer to parts list on page 24

CONTENTS/ACCESSORIES

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WIRING DIAGRAM	9		

Accessories



INSTRUCTION MANUAL

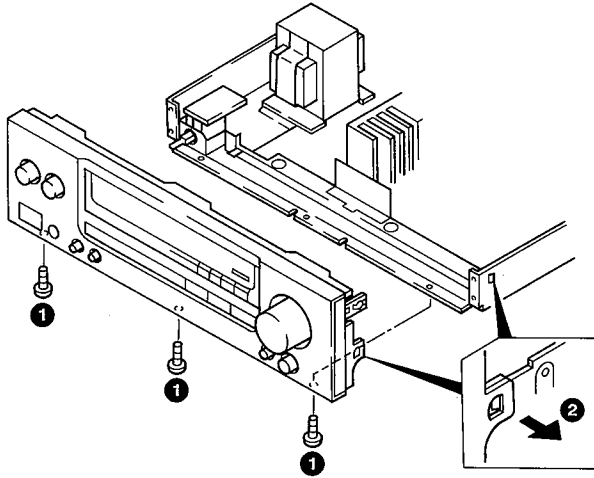
		TYPE
B60-1583-08	ENGLISH	K, X
B60-1584-08	ENG, FRE	P
B60-1585-08	EN, FR, DU, NE, IT	E
B60-1586-08	ENG, CHI	M
B60-1681-08	SPANISH	R

DISASSEMBLY FOR REPAIR

Note : Remove the case before starting

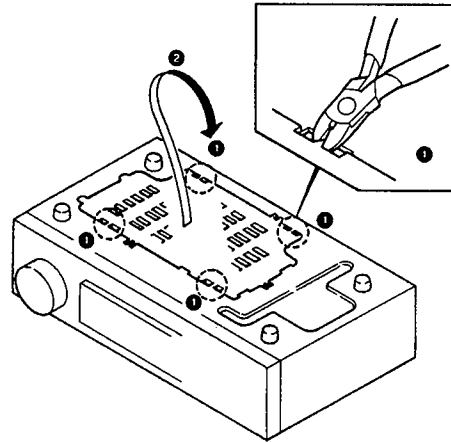
Removing the front panel and sub-panel

Remove the three screws ❶ and two claws ❷, then remove the front panel.



How to remove the repairing chassis

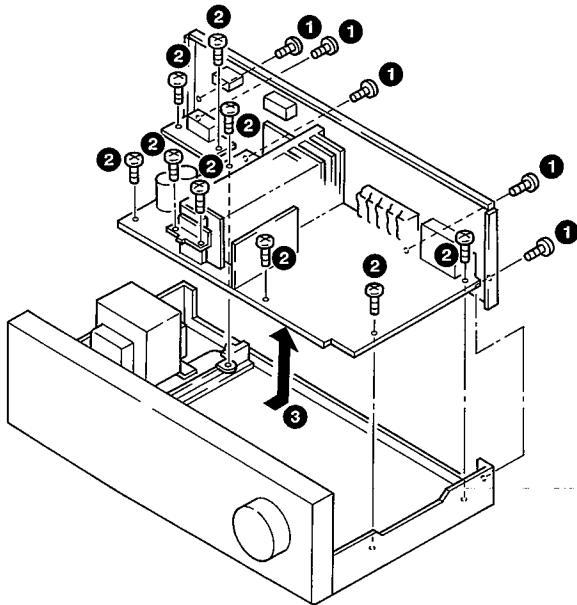
1. Cut the four parts ❶ of the repairing chassis.
Remove the repairing chassis from main chassis.



Removing the main PC board

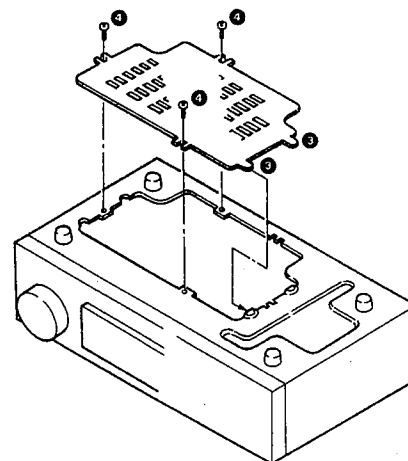
The main PC board can be removed even if the front panel and sub-panel have not been.

1. Remove the five screws ❶ from the rear panel.
2. Remove the nine screws ❷.
3. Remove the main PC board in the direction of arrow ❸.

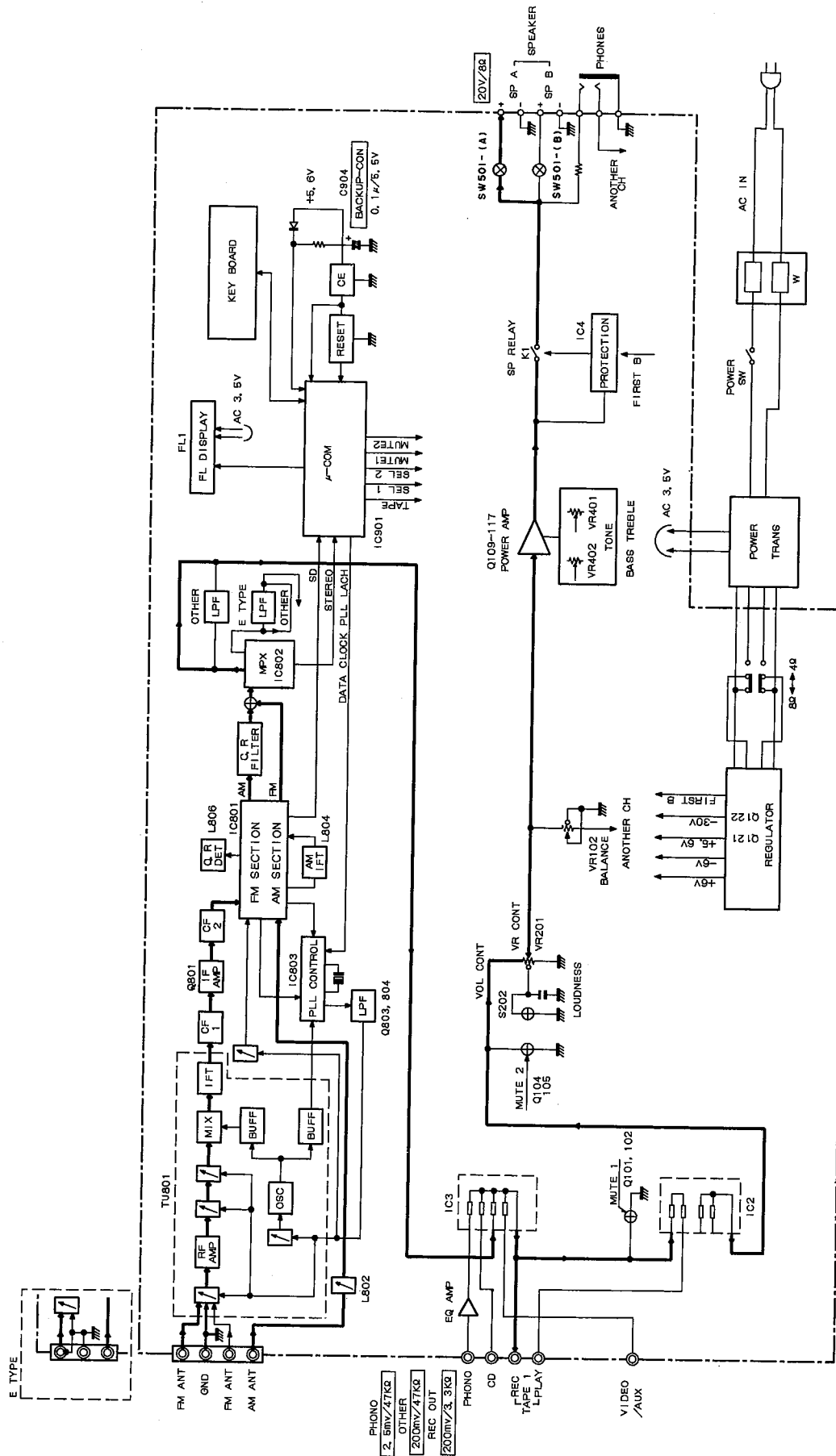


After repair

2. Turn the repairing chassis 180 degrees in the arrow direction ❷.
3. Insert the two claws ❸ into main chassis.
4. Lock to the main chassis by three screws(M3×6) ❹.



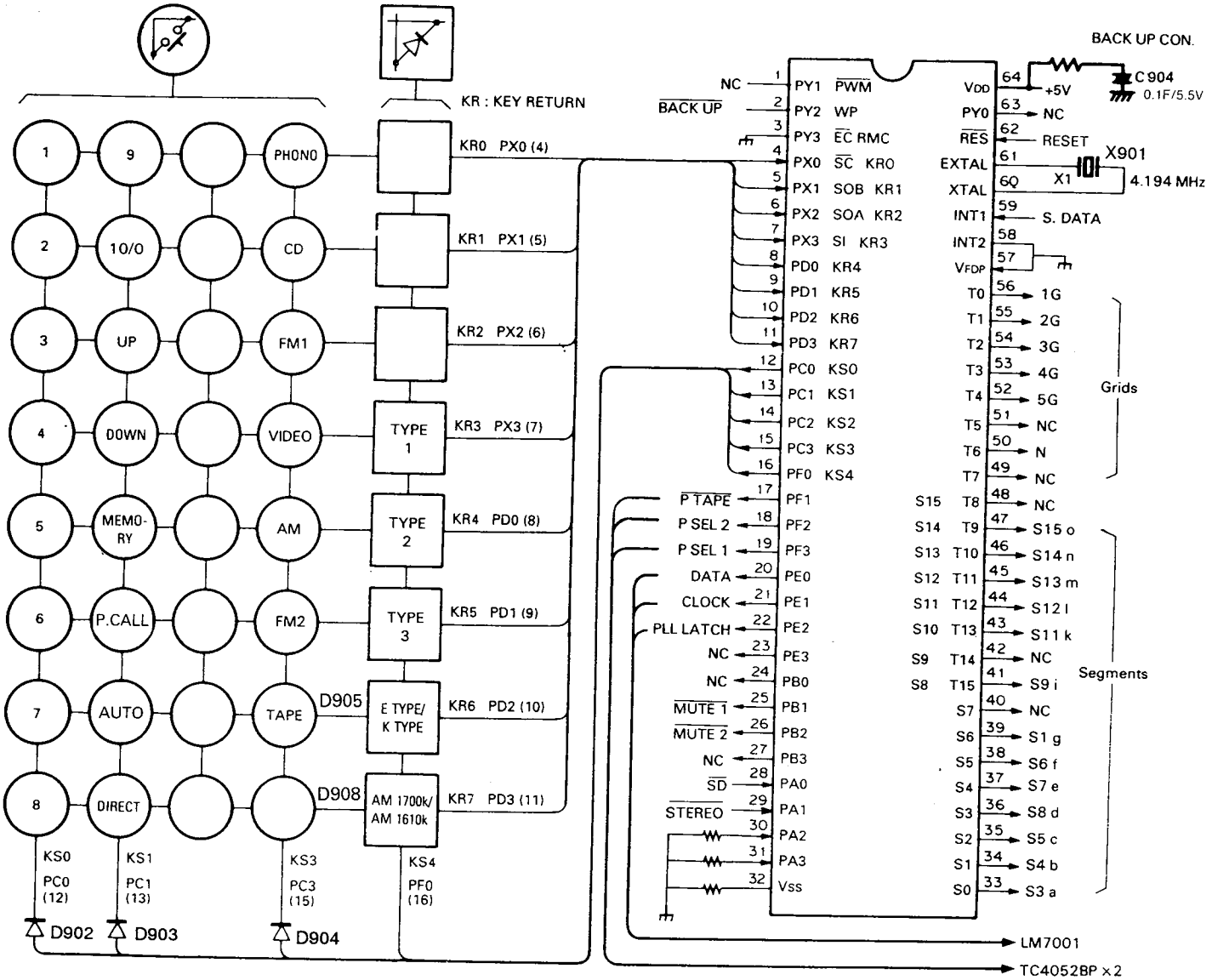
BLOCK DIAGRAM



CIRCUIT DESCRIPTION

1. CXP5016-531S : Receiver microprocessor(FRONT UNIT : IC901)

1-1. Key Matrix connections



1-2. Setting of destinations, models and specifications depending upon diode key matrix

The setting of destinations, models and specifications is made according to the initial set diode key matrix.

In the following, "1" means "with diodes" and "0", "without diodes"

1) Model Set SW

Model set SW			MODEL	Function				
TYPE 1	TYPE 2	TYPE 3		TUNER BAND	DOLBY SURROUND	VOL.CONT with Motor	Switched VIDEO1, 2	REMOCON
0	0	1	-	FM1→FM2→AM	Provided	Provided	Provided	Provided
1	0	1	-	↑	Not provided	↑	↑	↑
0	1	0	-	↑	↑	↑	Not provided	↑
0	0	0	KR-A3060	FM1, FM2, AM	↑	Not provided	↑	Not provided

CIRCUIT DESCRIPTION

1-3. Initial Setting

1) Function initial setting

Last channel memory FM : 87.5MHz
 AM(K) : 530kHz
 AM(E) : 531kHz
 Tuning mode Auto
 Input selector FM1
 Muting OFF

2) Microprocessor output port initial setting

Any figure in () is a pin number.

MUTE 1(25) H
 MUTE 2 (26) H

The initial setting is performed in a following event :

1. When backup memory data is destroyed when reset is applied to the microprocessor.
2. When the power cord is plugged in to the AC wall outlet while pressing the FM1 key.

1-4. Test Mode Setting

1) Method of entering the test mode

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

2) Method of canceling the test mode

1. Unplug the power cord from the AC wall outlet once.
2. Send the reset signal to the RESET pin or some other means to reset the microprocessor.

3) Contents of test mode

1. When the test mode is entered, the FL tube display all lights. This all lighting continues unless the test mode is canceled.
2. The test frequency is stored in memory for each preset channel.(For each frequency to be stored in memory, refer to its associated listing.)

1-5. Frequency memorized for each PRESET channel when the memory is cleared(Test frequency)

BAND	FM1		FM2		FM3		
	Destination	K	E	K	E	K	E
1		87.5MHz	87.5MHz	87.5MHz	87.5MHz	530kHz	531kHz
2		89.1	89.1	87.5	87.5	630	630
3		90.0	90.0	87.5	87.5	990	990
4		92.0	92.0	87.5	87.5	1440	1440
5		94.0	94.0	87.5	87.5	1610	1602
6		98.0	98.0	87.5	87.5	1700*	531
7		100.1	100.1	87.5	87.5	530	531
8		102.0	102.0	87.5	87.5	530	531
9		106.0	106.0	87.5	87.5	530	531
10		108.0	108.0	87.5	87.5	530	531

*1700kHz is set for WIDE only.

1-6. Destination set SW : E type/K type

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

0 : Without diode
 1 : With diode(D905 or Q902 ON state)

K type is described for reference.

1-7. Specification set SW : AM 1700k/AM 1610k

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

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

0 : Without diode
 1 : With diode(D908)

CIRCUIT DESCRIPTION

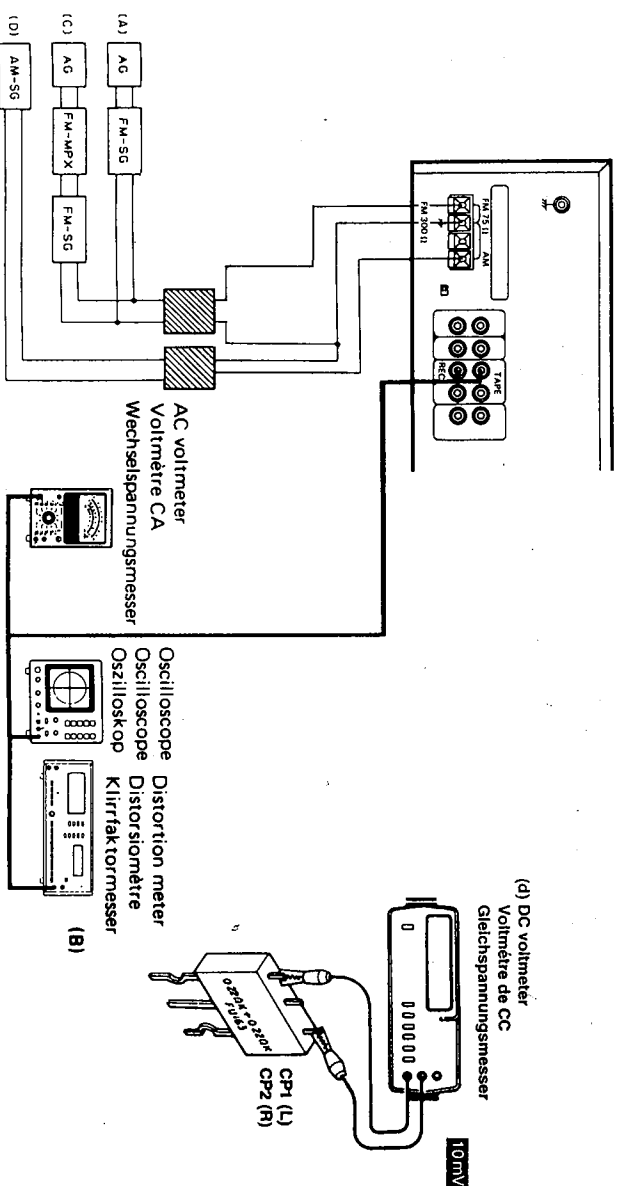
ADJUSTMENT

1-8. Pin description

Pin No.	Pin name	I/O	Name	Function
1	PY1	0	—	N.C.
2	PY2	1	BACK UP	Backup (AC outlet off) detection. High: Normal state Low: AC outlet off
3	RMC	1	—	GND.
4-11	PX0-PX3 PD0-PD3	1	KR0-KR7	KEY RETURN signal input. High: There is input. Low: There is no input.
12-16	PC0-PC3 PF0	0	KS0-KS4	KEY SCAN signal output. Normally high is output. Key scan is performed when KEY is ON.
17	PF1	0	PTAPE	TC4052BP (selector (C) control). Tape monitor on/off control. High: OFF Low: ON
18	PF2	0	PSEL2	TC4052BP (selector (C) control).
19	PF3	0	PSEL1 (H9070)	TC4052BP (selector (C) control).
20	PE0	0	DATA	LM7001(PLL IC) control serial data output. Data is latched on the rising edge of the clock.
21	PE1	0	CLOCK	LM7001, control serial data transfer shift clock output. Data is latched on the rising edge of the clock.
22	PE2	0	PLLT	CE signal output to LM7001. When the signal is high, LM7001 is enabled.
23	PE3	0	—	N.C.
24	PB0	0	—	N.C.
25	PB1	0	MUTE1	TAPE REC OUT mute control. High: MUTE OFF Low: MUTE ON
26	PB2	0	MUTE 2	LINE OUT mute control. High: MUTE OFF Low: MUTE ON
27	PB3	0	—	N.C.
28	PA0	1	SD	Tuner tuned detection. High: NO SIGNAL Low: TUNED
29	PA1	1	STEREO	Tuner FM stereo detection. High: MONO Low: Stereo
30	PA2	I/O	—	Unused pin.
31	PA3	I/O	—	Unused pin.
32	Vss	—	GND	GND.
33-47	SO-S14	0	Sa-So	Fluorescent display segment drive signal output. N.C.
48-51	T8-T5	0	—	N.C.
52-56	T4-T0	0	G5-G1	Fluorescent display digit drive signal output.
57	V _{top}	—	—	Unused pin. This pin and GND are shorted.
58	INT2	1	—	Unused pin. This pin and GND are shorted.
59	INT1	1	SDATA	This pin and serial data input pin 30 are shorted.
60	XTAL	0	XTAL	Clock generation circuit output.
61	EXTAL	1	EXTAL	Clock generation circuit input.
62	RST	1	RESET	Reset signal input.
63	PV0	0	—	N.C.
64	V _{op}	—	V _{op}	+5 V power supply.

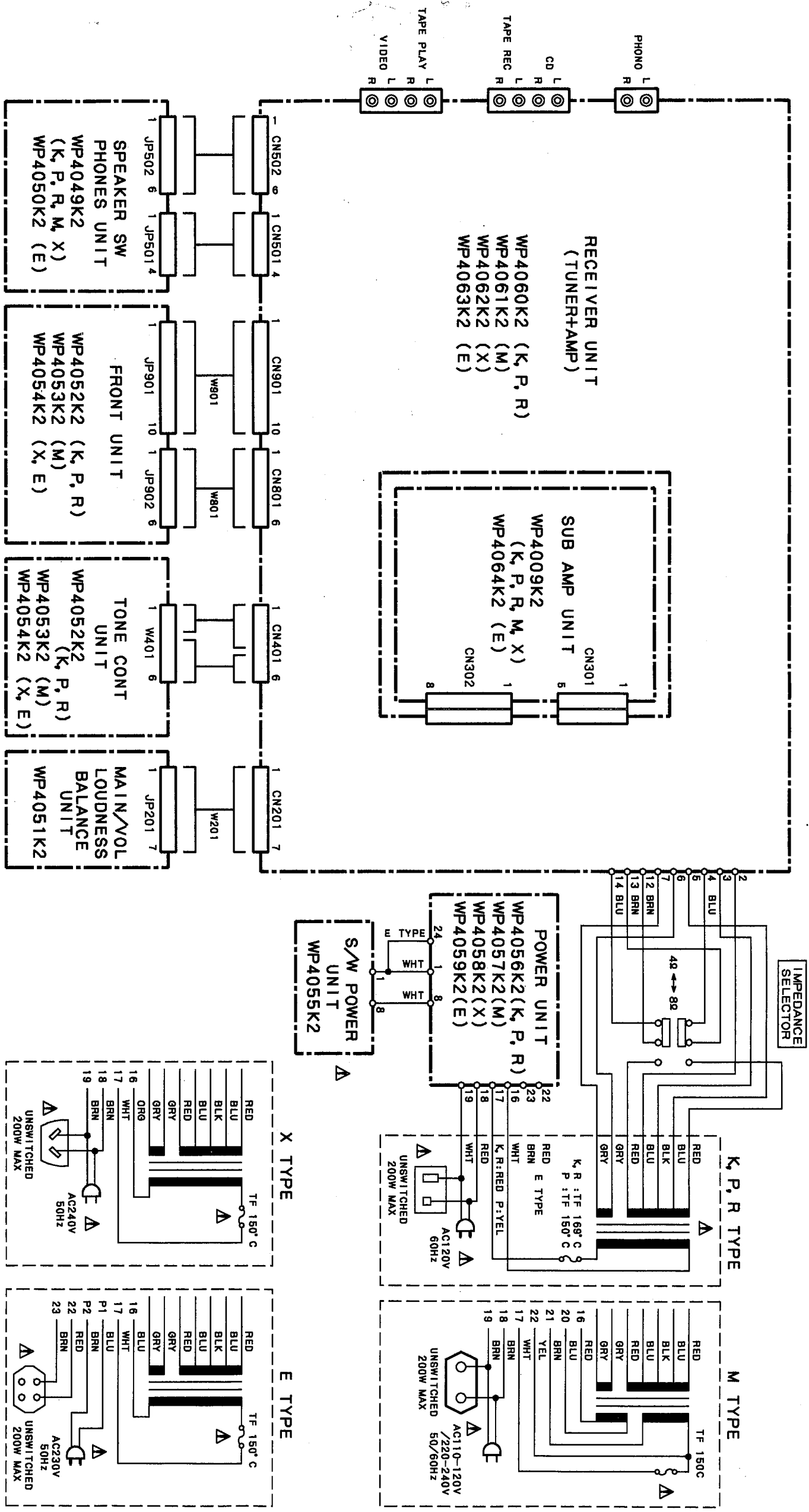
AM Section: If alignment point is "-", Confirm the value.
If not, replace the front end pack.

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
F M SECTION							
1	DISCRIMINATOR	(A) 98.0MHz 1KHz, ±75KHz dev. 60dBc(Ant. input)	Connect a DC voltmeter between TP803 and TP804. (RECEIVER UNIT)	AUTO or MONO 98.0MHz	L806 (RECEIVER UNIT)	0V	(a)
2	VCO	(A) 98.0MHz 0 dev. 60dBc(Ant. input)	Connect a frequency counter between TP805 and TP806. (RECEIVER UNIT)	AUTO 98.0MHz	VR802 (RECEIVER UNIT)	19.00KHz	(b)
3	DISTORTION (STEREO)	(C) 98.0MHz 1KHz, ±68.25KHz dev. Selector: L or R Pilot: ±6.75KHz dev. 60dBc(Ant. input)	(B)	98.0MHz	1PT (K02-)	Minimum distortion. (L or R)	
4	SEPARATION (E type only)	(A) 98.0MHz 1KHz, ±40KHz dev. Pilot: 6KHz dev. Selector: L or R 60dBc(Ant. input)	(B)	AUTO 98.0MHz	VR803 (RECEIVER UNIT)	Minimum crosstalk	
5	TUNING LEVEL	(A) 98.0MHz 0 dev 18dBc(Ant. input)	(B)	AUTO or MONO 98.0MHz	VR801 (RECEIVER UNIT)	Adjust VR801 and stop at the point where FLT901(TUNED) goes on.	
AM SECTION							
(1)	TUNING LEVEL	(D) 1000(999)KHz 26dBc(Ant. input)	(B)	-	VR804 (RECEIVER UNIT)	Adjust VR804 and stop at the point where FLT901(TUNED) goes on.	
AUDIO SECTION							
< 1 >	IDLE CURRENT	—	Connect a DC voltmeter across CP1(L) (RECEIVER UNIT)	Volume: 0	VR101(L) VR102(R) (RECEIVER UNIT)	10mV	(d)



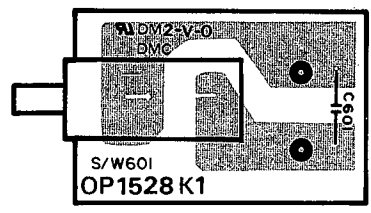
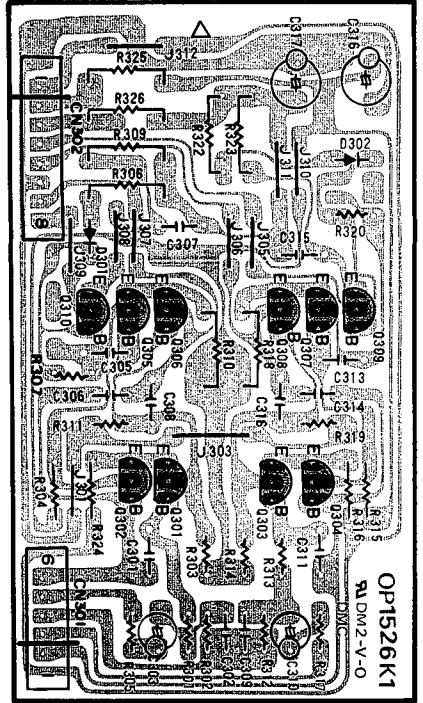
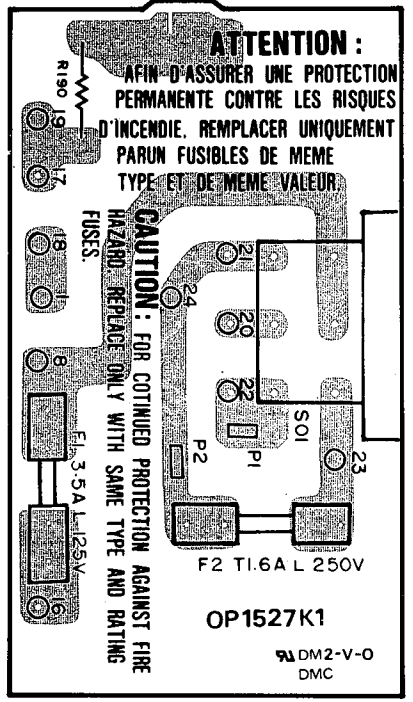
KR-A3060 KR-A3060

WIRING DIAGRAM

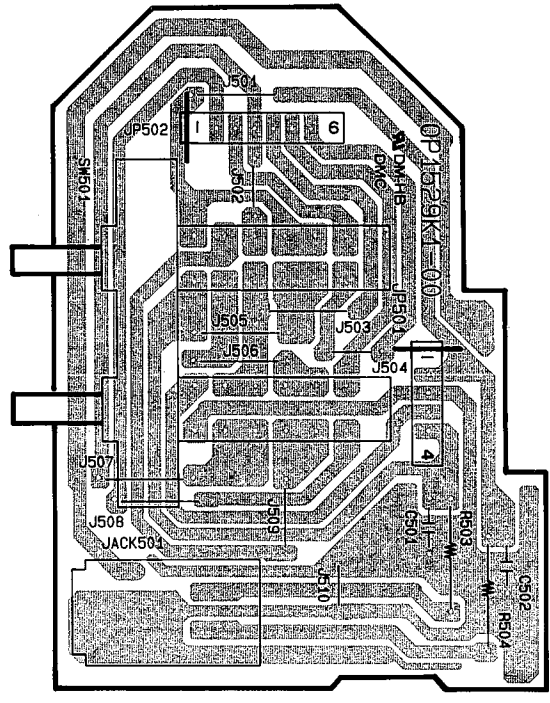


PC BOARD(Component Side View)

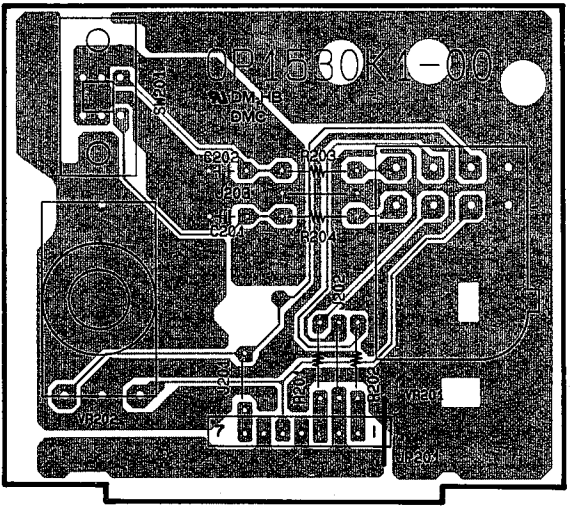
AC220-240V~ AC110-120V~



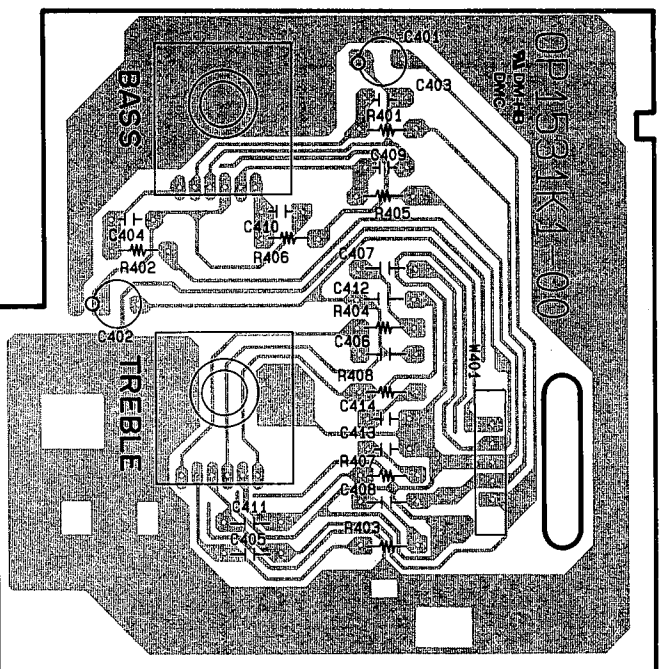
POWER



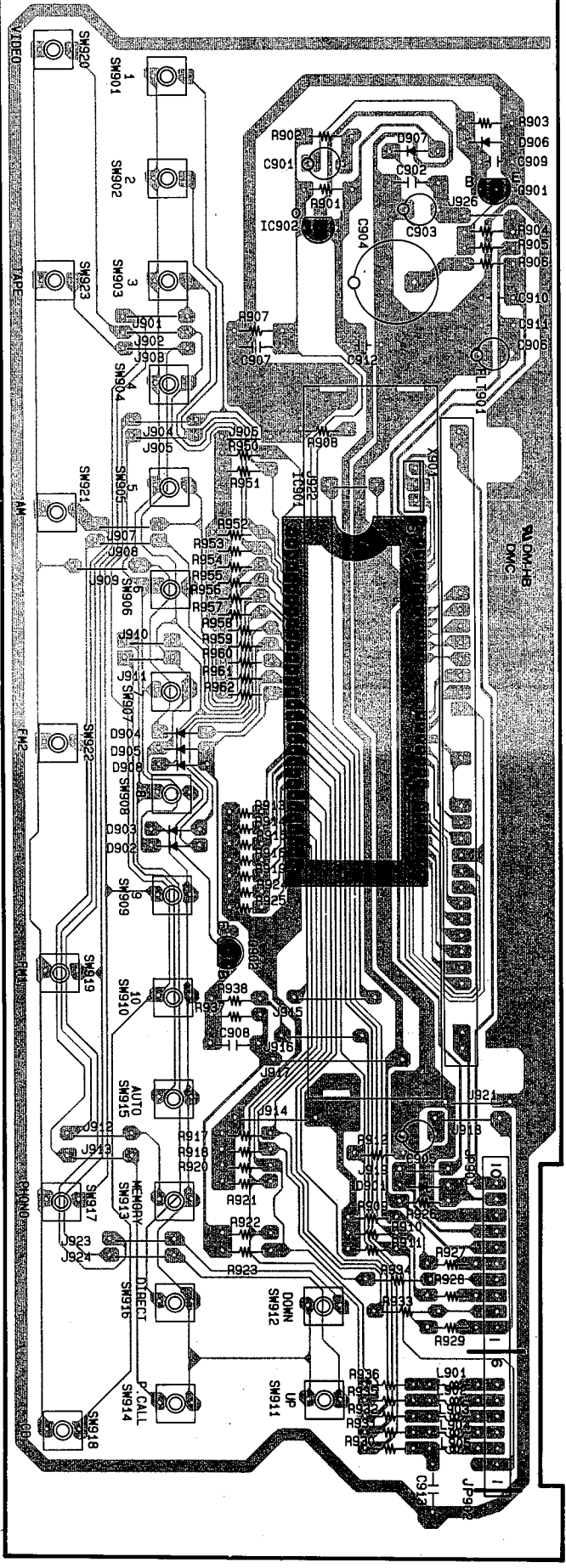
B A
SPEAKERS
PHONES



LOUDNESS BALANCE
L R



FRONT

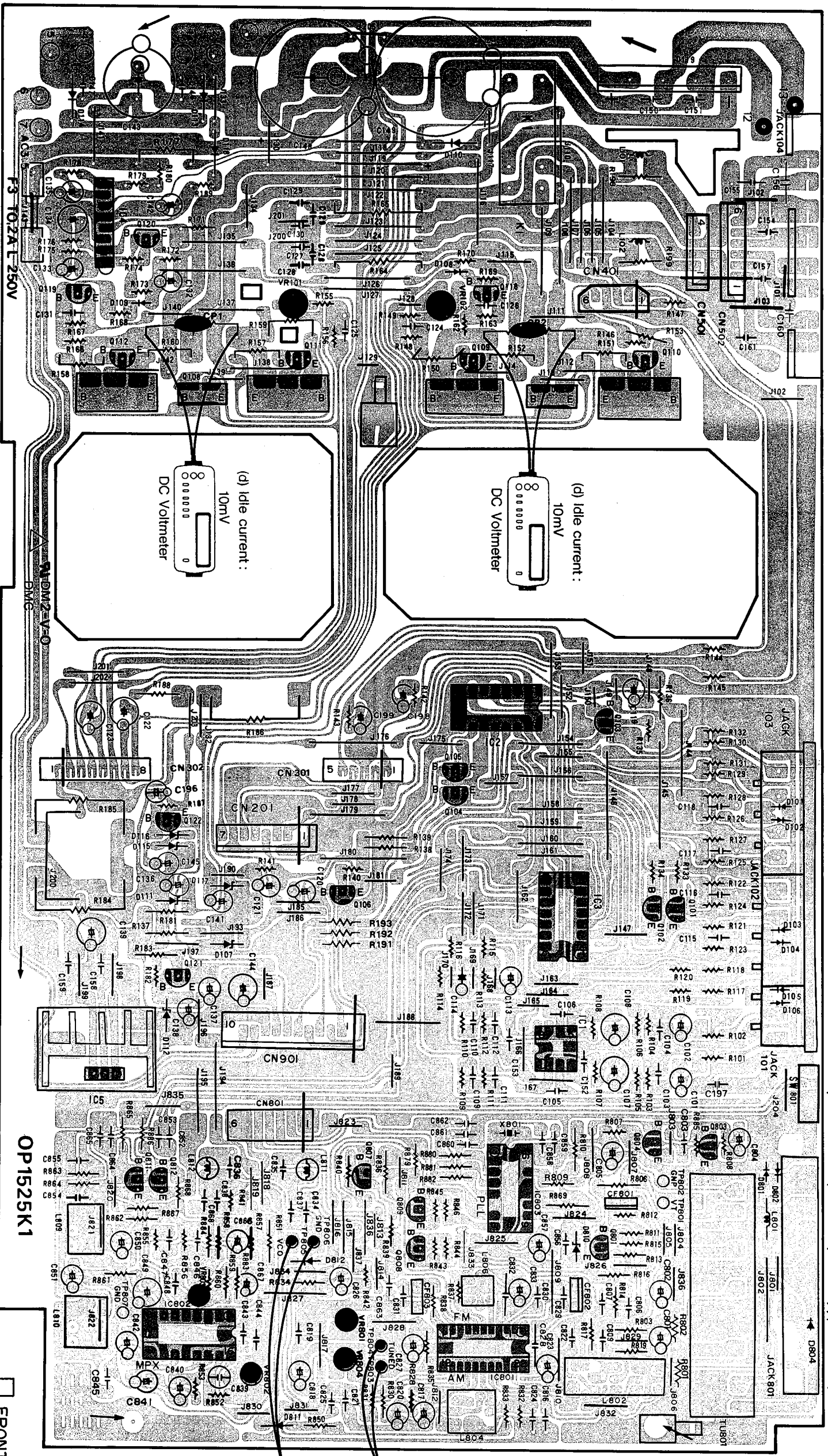


PC BOARD (Component Side View)

A
B + L - (4Ω - 16Ω) - R +

L VIDEO TAPE CD PHONO
R IN PLAY REC IN IN

75μs
50μs
FM100KHz FM DE-EMPHASIS FM50KHz
AM10KHz CHANNEL SPACE AM9KHz GND
ANTENNA FM300Ω
AM FM75Ω



(d) Idle current:
10mV
DC Voltmeter

(d) Idle current:
10mV
DC Voltmeter

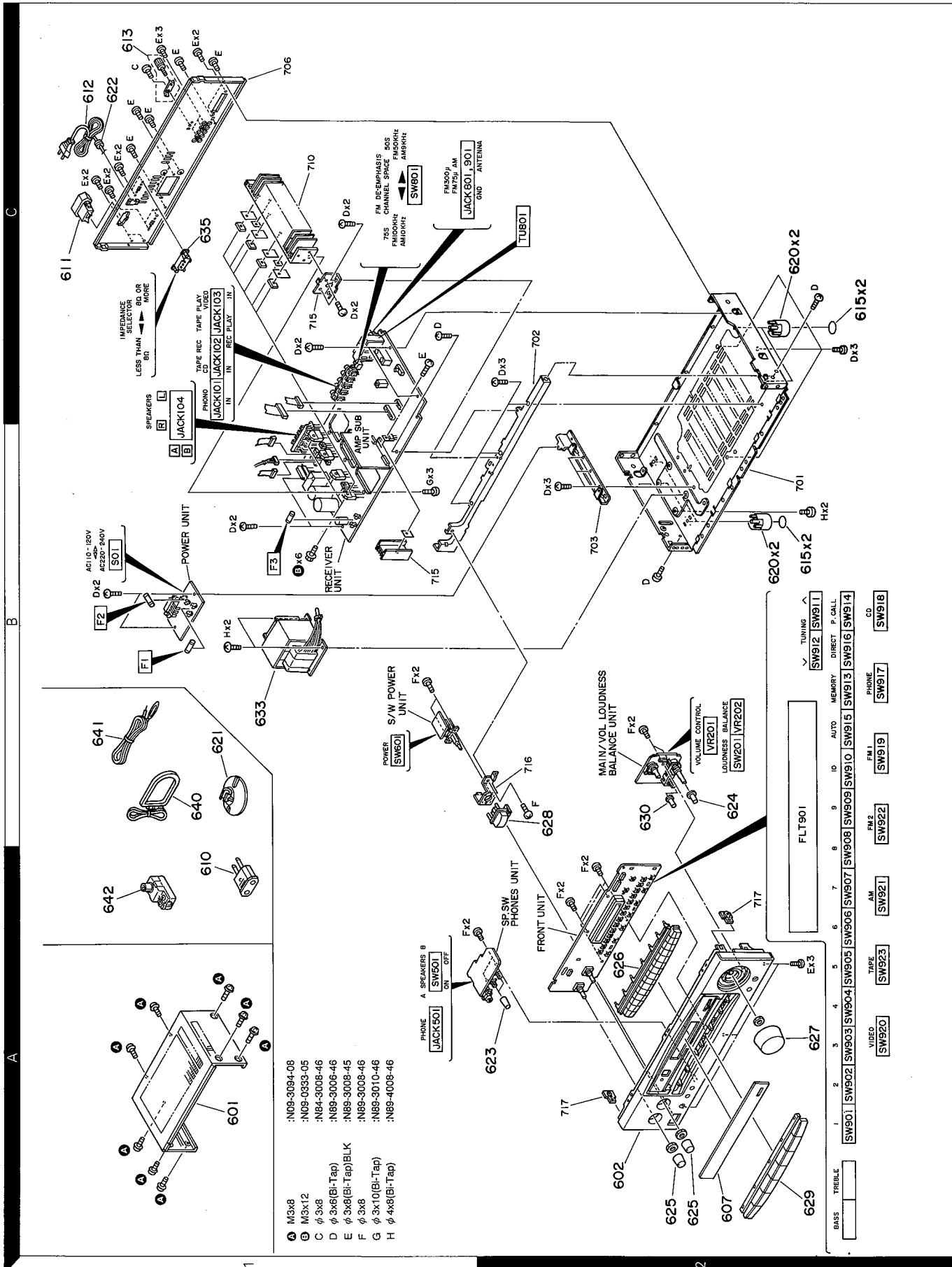
(a) Discriminator:
0V
DC Voltmeter

(b) VCO : 19.00KHz
Frequency counter

OP1525K1

FRONT

EXPLODED VIEW



- A M3x8
 - B M3x12
 - C φ 3x8
 - D φ 3x6(BI-Tap)
 - E φ 3x8(BI-Tap)BLK
 - F φ 3x8
 - G φ 3x10(BI-Tap)
 - H φ 4x8(BI-Tap)
- :N09-3094-08
 - :N09-0333-05
 - :N84-3006-46
 - :N89-3008-46
 - :N89-3009-45
 - :N89-3008-46
 - :N89-3010-46
 - :N89-4008-46

1	BASS	TREBLE	SW501	SW902	SW903	SW904	SW905	SW906	SW907	SW908	SW909	SW910	SW915	SW916	SW917	SW918
2			JACK 501	VIDEO	SW920											
3				TAPE	SW923											
4				AM	SW921											
5				FM I	SW919											
6				FM II	SW922											
7				PHONE	SW917											
8				CD	SW918											
9				MEMORY	SW913											
10				DIRECT P. CALL	SW916											
11				TUNING	SW912											

PARTS LIST

PCB UNIT	Ref no of electric parts	DESTINATION					
		K	P	R	M	X	E
RECEIVER	1 x x, 8 x x		WP4060K2		WP4061K1	WP4062K2	WP4063K3
VOL / LOUDNESS	2 x x				WP4051 K2		
AMP SUB	3 x x			WP4009 K2			WP4064 K2
TONE CONTROL	4 x x		WP4052 K2		WP4053 K2	WP4054 K2	
SP.SW/PHONES	5 x x			WP4049 K2			WP4050 K2
S/W POWER	6 x x				WP4055 K2		
FRONT	9 x x		WP4052 K2		WP4053 K2	WP4054 K2	
POWER	F1, 2, S01		WP4056 K2		WP4057 K2	WP4058 K2	WP4059 K2

1

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

Ref. No. 参照番号	Address 位置	New Parts 新部品番号	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 備考
KR-A3060(UNIT)						
601	1A	*	A01-1974-08	METALLIC CABINET	MXE	
601	1A	*	A01-3170-08	METALLIC CABINET	KPR	
602	2A	*	A60-0637-08	PANEL FRONT		
607	2A	*	B10-2055-08	FRONT GLASS	K	
-	-	-	B46-0092-33	WARRANTY CARD	X	
-	-	-	B46-0096-43	WARRANTY CARD	P	
-	-	-	B46-0121-33	WARRANTY CARD	E	
-	-	-	B46-0122-23	WARRANTY CARD		
-	-	-	B46-0197-00	QUESTION CARD	K	
-	-	-	B60-1583-08	INSTRUCTION MANUAL (ENGLISH)	KX	
-	-	-	B60-1584-08	INSTRUCTION MANUAL (ENG, FRE)	P	
-	-	-	B60-1585-08	INSTRUCTION MANUAL (E, F, D, N, I)	E	
-	-	-	B60-1586-08	INSTRUCTION MANUAL (ENG, CHI)	M	
-	-	-	B60-1618-08	INSTRUCTION MANUAL (SPANISH)	R	
610	1A	*	E03-0115-05	AC PLUG ADAPTOR	M	
611	1C	*	E03-0120-08	AC OUTLET	ME	
611	1C	*	E03-0121-08	AC OUTLET	KPR	
611	1C	*	E03-0141-05	AC OUTLET	X	
612	1C	*	E30-0459-05	AC POWER CORD	ME	
612	1C	*	E30-0974-05	AC POWER CORD	KPR	
612	1C	*	E30-2714-05	AC POWER CORD	X	
613	1C	*	E21-0023-08	TERMINAL GND		
615	2B, 2C	*	G13-0267-08	CUSHION (FOOT)	KPMXR	
615	2B, 2C	*	G13-0275-08	CUSHION (FOOT)	E	
-	-	-	H10-5348-08	POLYSTYRENE FOAMED FIXTURE		
-	-	-	H25-0675-08	PROTECTION BAG		
-	-	-	H25-0676-04	PROTECTION BAG		
-	-	-	H50-1030-08	ITEM CARTON CASE	KPXER	
-	-	-	H50-1031-08	ITEM CARTON CASE	M	
620	2B, 2C	*	J02-1079-08	FOOT	E	
620	2B, 2C	*	J02-1107-08	FOOT	KPMXR	
621	1B	*	J19-2815-04	ANTENNA HOLDER		
622	1C	*	J42-0198-08	AC CORD BUSHING		
623	2A	*	K27-2033-08	KNOB (SPEAKERS A, B ON/OFF)		
624	2B	*	K29-4444-08	KNOB (BALANCE)		
625	2A	*	K29-5952-08	KNOB (BASS, TREBLE)		
626	2A	*	K29-5954-08	KNOB (TONE)		
627	2A	*	K29-5953-08	KNOB (VOLUME CONTROL)		
628	1B	*	K29-5956-08	KNOB (POWER ON/OFF)		
629	2A	*	K29-5999-08	KNOB (VIDEO, TAPE, TUNER, PHONE, CD)		
630	2B	*	K29-6000-08	KNOB (LOUDNESS)		
633	1B	*	L07-0383-08	POWER TRANSFORMER	P	
633	1B	*	L07-0385-08	POWER TRANSFORMER	X	
633	1B	*	L07-0387-08	POWER TRANSFORMER	KR	
633	1B	*	L07-0389-08	POWER TRANSFORMER	M	
633	1B	*	L07-0567-08	POWER TRANSFORMER	E	
635	1C	*	S62-0032-08	SLIDE SWITCH IMPEDANCE SEL		
A	1A	*	N09-3094-08	SCREW		
B	1B	*	N09-0333-05	TAPPING SCREW		
C	1C	*	N84-3008-46	TAPTITE SCREW		
D	1A	*	N89-3006-46	BINDING HEAD TAPTITE SCREW		

L:Scandinavia
Y:FX(Far East, Hawaii)
Y:AAFES(Europe)

K:USA
T:England
X:Australia

P:Canada
E:Europe
M:Other Areas

R:Mexico
G:Germany

△ indicates safety critical components.

PARTS LIST

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

Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 備考
C306			CC45FCHI1H150J	15PF	E	
C307			CC45FCHI1H221J	220PF	J	
C308			CC45FSL1H680J	68PF	J	
C309			CC45FCHI1H181J	180PF	J	
C310			CE04KW1H010M	1.0UF	50WV	
C311			CC45FSL1H680J	68PF	J	
C313			CC45FSL1H680J	68PF	J	KPMXR
C314			CC45FCHI1H040J	4.0PF	J	E
C314			CC45FCHI1H150J	15PF	J	
C315			CC45FCHI1H221J	220PF	J	
C316			CC45FSL1H680J	68PF	J	
C401, 318			CE04KW1H470M	4.7UF	50WV	
C401, 402			CE04KW1H470M	4.7UF	50WV	
C403, 404			CF92FV1H153J	0.015UF	J	
C405, 406			CC45FCHI1H220J	22PF	J	
C407, 408			CK45FB1H822J	8200PF	J	
C409, 410			CF92FV1H683J	0.068UF	J	
C411, 412			CC45FCHI1H010J	100PF	J	
C413, 414			CF92FV1H333J	0.033UF	J	
C501, 502			CC45FSL1H221J	220PF	J	
C601			KHR-QM4726M6	4700PF		
C801			CE04KW1H010M	1.0UF	50WV	
C802			CE04KW1C470M	4.7UF	16WV	
C803			CF92FV1H273J	0.027UF	J	
C804			CE04KW1H010M	1.0UF	50WV	
C805			CE04KW1C470M	4.7UF	16WV	
C806, 807			CK45FF1H103Z	0.10UF	Z	
C809			CK45FF1H23Z	0.022UF	Z	
C816			CK45FF1H23Z	0.022UF	Z	
C817			CE04KW1H2R2M	2.2UF	50WV	
C818			CE04KW1H4R7M	4.7UF	50WV	
C819			CK45FF1H23Z	0.022UF	Z	
C820			CE04KW1H3R3M	3.3UF	50WV	
C821			CK45FF1H103Z	0.10UF	Z	
C822			CK45FF1H23Z	0.022UF	Z	
C823			CE04KW1H100M	10UF	50WV	
C824			CK45FF1H23Z	0.022UF	Z	
C825			CF92FV1H153J	0.015UF	J	
C826			CE04KW1H100M	10UF	50WV	
C827			CE04KW1HR47M	0.47UF	50WV	
C828-830			CK45FF1H103Z	0.10UF	Z	
C831			CC45FCHI1H010J	100PF	J	
C832			CK45FF1H103Z	0.10UF	Z	
C833			CE04KW1C470M	4.7UF	16WV	
C834			CK45FB1H471K	470PF	K	
C835			CC45FSL1H121J	120PF	J	
C836			CC45FCHI1H271J	270PF	J	
C837			CF92FV1H152J	1500PF	J	
C838			CF92FV1H122J	1200PF	J	
C839			CC93FCHI1H471J	470PF	J	
C840			CE04KW1H2R2M	2.2UF	50WV	
C841			CE04KW1H3R3M	3.3UF	50WV	
C842			CE04KW1HR47M	0.47UF	50WV	
C843			CF92FV1H473J	0.047UF	J	
C844			CK45FB1H471K	470PF	K	

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E	1A		N89-3008-45	BINDING HEAD TAPTITE SCREW		
F	2A		N89-3008-46	BINDING HEAD TAPTITE SCREW		
G	1B		N89-3010-46	BINDING HEAD TAPTITE SCREW		
H	1B, 2B		N89-4008-46	BINDING HEAD TAPTITE SCREW		
640	1B		T90-0184-08	LOOP ANTENNA		
641	1B		T90-0182-05	FM IND00R ANTENNA		
642	1A		T90-0185-05	ANTENNA ADAPTOR	E	
ELECTRIC UNIT						
C101, 102			CE04KW1H100M	10UF	50WV	
C103, 104			CC45FCHI1H221J	220PF	J	KPMXR
C105, 106			CK45FB1H102K	1000PF	K	E
C105, 106			CK45FB1H102K	1000PF	K	KPMXR
C105, 106			CK45FB1H221J	220PF	J	E
C107, 108			CE04KW1C101M	100UF	16WV	
C109, 110			CF92FV1H123J	0.012UF	J	
C111, 112			CF92FV1H333J	3300PF	J	
C113, 114			CE04KW1H4R7M	4.7UF	50WV	
C115-116			CC45FCHI1H221J	220PF	J	
C119, 120			CE04KW1H010M	1.0UF	50WV	
C121			CE04KW1HR47M	0.47UF	50WV	
C122, 123			CE04KW1V220M	22UF	35WV	
C124-126			CK45FF1H103Z	0.10UF	Z	
C127-130			CF92FV1H104J	0.10UF	Z	
C127-130			CF92FV1H473J	0.047UF	J	
C131			CK45FF1H103Z	0.010UF	Z	
C132			CE04KW1H4R7M	4.7UF	50WV	
C133			CE04KW1C220M	22UF	16WV	
C134			KHR-PA161102	22UF	16WV	
C135			CE04KW1C300M	33UF	16WV	
C136-138			CE04KW1C470M	4.7UF	16WV	
C139			CE04KW1C101M	100UF	16WV	
C141			CE04KW1C470M	4.7UF	16WV	
C142			CE04KW1C2R2M	2.2UF	16WV	
C142			CE04KW1C2R2M	2.2UF	16WV	
C143			CE04KW1H471M	470UF	50WV	
C144			CE04KW1V101M	100UF	35WV	
C145			CE04KW1H100M	10UF	50WV	
C146, 147			CK45FB1H103Z	0.10UF	Z	
C148, 149			KHR-PB022102	4700UF	50WV	
C150, 151			CK45FB1H103Z	0.010UF	Z	
C152, 153			CK45FB1H103Z	0.010UF	Z	
C154-157			CK45FB1H103Z	0.022UF	Z	
C158, 159			CF92FV1H104J	0.10UF	J	
C160, 161			CK45FB1H223Z	0.022UF	Z	
C162, 163			CK45FB1H102K	1000PF	K	
C196			CE04KW1H4R7M	4.7UF	50WV	
C197			CK45FF1H103Z	0.10UF	Z	
C198, 199			CE04KW1C470M	4.7UF	16WV	
C201, 202			CF92FV1H273J	0.027UF	J	
C301			CC45FSL1H680J	68PF	J	
C302			CC45FCHI1H181J	180PF	J	
C303			CE04KW1H010M	1.0UF	50WV	
C305			CC45FSL1H680J	68PF	J	
C306			CC45FCHI1H040J	4.0PF	J	

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Ref. No. 参照番号	Address 位 置	New Parts 新 部 品	Parts No. 部 品 番 号	Description 部 品 名 / 規 格	Desti- nation 任 向	Re- marks 備 考
C845			CK45FE1H103Z	CERAMIC	KPMXR	
C846, 847			CC45SL1H151J	0.010UF Z	E	
C846, 847			CK45FE1H102K	150PF J	E	
C848			CC45FCH1H221J	1000PF K	E	
C849			CB04KW1C221M	200PF J	E	
				220UF 16WV		
C850, 851			CE04KW1H010M	ELECTR0	KPMXR	
C850, 851			CE04KW1H2R2M	1.0UF 50WV	E	
C852			CF92FV1H222J	2.0UF 50WV	M	
C853			CF92FV1H562J	2000PF J	M	
C854, 855			CF92FV1H153J	5000PF J	M	
				0.015UF J	MX	
C854, 855			CF92FV1H223J	MF	KP	
C854, 855			CF92FV1H472J	0.022UF J	E	
C856			CK45FE1H103Z	4700PF J		
C857			CE04KW1C470M	0.010UF Z		
C858, 859			CC45FCH1H220J	47UF 16WV		
				22PF J		
C860-862			CC45FCH1H101J	100PF J		
C863			CK45FE1H103Z	0.010UF Z		
C864			CF92FV1H222J	2000PF J	M	
C865			CF92FV1H562J	5000PF J	M	
C866, 867			CE04KW1C220M	22UF 16WV	E	
C868			CC45FCH1H101J	100PF J	E	
C890			CC45FCH1H220J	22PF J		
C901			CE04JW1HR47M	R47UF 50WV		
C902			CK45FE1H103Z	0.010UF Z		
C903			CE04KW1A101M	100UF 10WV		
C904			KHR-PX0001N3	0.1F 5.5WV		
C905, 906			CE04KW1H010M	1.0UF 50WV		
C907			CK45FE1H103Z	0.010UF Z		
C908			CK45FE1H103Z	0.010UF Z	M	
C909-912			CK45FE1H104J	0.10UF J		
C913			CC45FC1H680J	CERAMIC 68PF J		
JACK101	1C		E70-0035-08	PH0N0 JACK(2P)(PH0N0)	KPMXR	
JACK102	1C		E70-0036-08	PH0N0 JACK(4P)(CP, TAPE)	E	
JACK103	1C		E70-0036-08	PH0N0 JACK(4P)(TAPE, VIDEO)		
JACK104	1C		E70-0004-08	LOCK TERMINAL BOARD(SPEAKERS)		
JACK501	1B		E11-0263-08	PHONE JACK(PHONES)		
JACK801	1C		E70-0005-08	LOCK TERMINAL BOARD(ANTENNA)		
JACK901	1C		E70-0023-08	LOCK TERMINAL BOARD(ANTENNA)		
F1			F05-1623-05	FUSE(250V T1.6A)		
F1			F50-0012-08	FUSE(125V 3.5A)		
F2			F05-1623-05	FUSE(250V T1.6A)		
F2			F05-2525-05	FUSE(250V T2.5A)		
F3			F05-2015-05	FUSE(250V T0.2A)		
-			J13-0075-05	FUSE CLIP		
-			J13-0075-05	FUSE CLIP		
CF801, 802			L72-0531-05	CERAMIC FILTER		
CF801, 802			L72-0570-08	CERAMIC FILTER		
CF803			L72-0096-05	CERAMIC FILTER		
L101, 102			L39-1303-08	SMALL FIXED INDUCTOR		
L801			L40-1091-17	SMALL FIXED INDUCTOR(1UH)		
L802			L39-0189-05	COMBINATION COIL		
L804			L30-0488-05	AM IFT		
L806			L30-0439-05	FM IFT(DISCRIMINATOR ADJ.)		

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L809, 810			L72-0569-08	LC FILTER	E	
L811			L33-0376-08	SMALL FIXED INDUCTOR(5.6mH)	E	
L812			L33-0376-08	SMALL FIXED INDUCTOR(6.6mH)	E	
L901-905			L40-1091-17	SMALL FIXED INDUCTOR(1UH)	E	
X801			L77-1122-05	CRYSTAL RESONATOR(7.2MHz)		
X901			L78-0209-05	RESONATOR(4.194MHz)		
CP1, 2			KHR-RT0R21K0	MULTI-COMP 0.22X2 K 3W	KPR	
R137, 2			R90-0187-05	MULTI-COMP 0.22X2 K 5W	MXE	
R150, 151			R014GB2E391J	FL-PROOF RD 390 J 1/4W		
R152, 153			R014GB2E470J	FL-PROOF RD 47 J 1/4W		
R157, 158			R014GB2E151J	FL-PROOF RD 150 J 1/4W		
R159, 160			RS14KB3D100J	FL-PROOF RS 10 J 2W		
R164, 165			RS14KB3A561J	FL-PROOF RS 560 J 1W		
R177			R014GB2E331J	FL-PROOF RD 330 J 1/4W		
R181			R014GB2E101J	FL-PROOF RD 100 J 1/4W		
R183			R014GB2E220J	FL-PROOF RS 22 J 2W		
R184, 185			RS14KB3D222J	FL-PROOF RS 2.2K J 2W		
R186			R014GB2E101J	FL-PROOF RD 100 J 1/4W		
R188			R92-0173-05	RC 2.2M	KPR	
R190			R014GB2E221J	FL-PROOF RD 220 J 1/4W		
R306			R014GB2E271J	FL-PROOF RD 270 J 1/4W		
R309			R014GB2E271J	FL-PROOF RD 270 J 1/4W		
R310			R014GB2E271J	FL-PROOF RD 270 J 1/4W		
R318			R014GB2E221J	FL-PROOF RD 220 J 1/4W		
R322, 323			R014GB2E101J	FL-PROOF RD 100 J 1/4W		
R325			R014GB2E470J	FL-PROOF RS 47 J 1/4W		
R326			RS14KB3A561J	FL-PROOF RS 560 J 1W		
R503, 504			R014GB2E101J	FL-PROOF RD 100 J 1/4W		
R806			R014GB2E101J	FL-PROOF RD 100 J 1/4W		
R836			R014GB2E101J	FL-PROOF RD 100 J 1/4W		
R851			R014GB2E820J	FL-PROOF RD 82 J 1/4W		
R869			R014GB2E221J	FL-PROOF RD 220 J 1/4W		
R933, 934			R014GB2E102J	POTENTIOMETER(1.0K) (IDLE CURRENT)		
VR101, 102			R06-5200-08	POTENTIOMETER 100K(VOLUME)		
VR201	2B		R01-5084-08	POTENTIOMETER 200K(BALANCE)		
VR202	2B		KHR-VR0750G1	POTENTIOMETER(100K)(BASS, TREB)		
VR401, 402	2A	*	R12-3164-08	POTENTIOMETER(33K)(FM T-LEVEL)		
VR801			R12-1053-05	POTENTIOMETER(4.7K)(VCO)		
VR802			R12-5079-08	POTENTIOMETER(220K)(SEPARATION)	E	
VR803			R12-3071-05	POTENTIOMETER(10K)(AM T-LEVEL)		
VR804			S76-0035-08	MAGNETIC RELAY		
K1		*	S62-0014-08	SLIDE SWITCH(VOLTAGE SELECTOR)	M	
S01			S48-0040-08	PUSH SWITCH(LOWNESS)		
SW201	2B		S42-2156-05	PUSH SWITCH(SPEAKERS ON/OFF)		
SW501	1B		S40-1089-05	PUSH SWITCH(POWER)		
SW601	1B		S62-0012-08	SLIDE SWITCH(DE-EM., CH. SPACE)	M	
SW801	1C	*	KHR-ST0530G1	TACT SWITCH		
SW901-923	2A, 2B	*	1SS133	DIODE		
D101-106			RD3.9ES(B2)	ZENER DIODE		
D107			1SS133	DIODE		
D108, 109						

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PARTS LIST

* New Parts

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D110			1N4002	DIODE		
D111, 112			R06.25S(B2)	ZENER DIODE		
D113, 114			1N4002	DIODE		
D115			RD16ES(B2)	ZENER DIODE		
D116			RD11ES(B2)	ZENER DIODE		
D117			R06.8ES(B2)	ZENER DIODE		
D118			1N4002	DIODE		
D119			D3S8A20F03	DIODE		
D301, 302			1SS133	DIODE		
D801, 802			1SS133	DIODE		
D804			1SS133	DIODE		
D810			R05.1ES(B2)	ZENER DIODE		E
D811, 812			1SS133	DIODE		
D901			RD10ES(B2)	ZENER DIODE		
D902-904			1SS133	DIODE		
D905			1SS133	DIODE		XE
D906, 907			1SS133	DIODE		
D908			1SS133	DIODE		XPR
D910			1SS133	DIODE		
FL7901	2B	*	5-WT-167GK	FLUORESCENT INDICATOR TUBE		
IC1			NJM4558DD	IC(OP AMP X2)		
IC2, 3			TC4052BP	IC(4CH MPX/DE-MPX)		
IC4			UPC1237HA	IC(POWER AMP)		
IC5			UPC7812HF	IC(VOLTAGE REGULATOR/ +12V)		
IC801			LA1265	IC(FM/AM TUNER)		
IC802			AN7470	IC(FM MPX)		
IC803			LM7001	IC(PLL FREQUENCY SYNTHESIZER)		
IC901			XP5016-S315	IC(4BIT MICROPROCESSOR)		
IC902			RST529C	IC(RESET)		
Q101, 102			2SC2078(B)	TRANSISTOR		
Q103			DTA114TS	TRANSISTOR		
Q104, 105			2SC2078(B)	TRANSISTOR		
Q106			DTA114TS	TRANSISTOR		
Q107, 108			2SC4137(V, W)	TRANSISTOR		
Q109			2SC2316(Y)	TRANSISTOR		
Q110, 111			2SA916	TRANSISTOR		
Q112			2SC2316(Y)	TRANSISTOR		
Q113			2SC4467*5	TRANSISTOR		
Q114			2SA1694*5	TRANSISTOR		
Q116			2SA1694*5	TRANSISTOR		
Q117			2SC4467*5	TRANSISTOR		
Q118, 119			2SC1845(F, E)	TRANSISTOR		
Q120			2SA992	TRANSISTOR		
Q121			2SC2316(Y)	TRANSISTOR		
Q122			KHR-TN0965Y2	TRANSISTOR		
Q301-304			2SA992(F, E)	TRANSISTOR		
Q305-308			2SC1845(F, E)	TRANSISTOR		
Q309, 310			2SA992(F, E)	TRANSISTOR		
Q801			KHR-TF519401	TRANSISTOR		
Q803			2SC1740S(Q, R)	TRANSISTOR		
Q804			2SC1845(F, E)	TRANSISTOR		E
Q807			2SC1740S(Q, R)	TRANSISTOR		
Q808, 809			2SA933S(Q, R)	TRANSISTOR		
Q811, 812			2SC1740S(Q, R)	TRANSISTOR		M
Q901			2SC1740S(Q, R)	TRANSISTOR		

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Q902			2SA933S(Q, R)	TRANSISTOR		
TU601	2C		W02-1042-05	FM FRONT-END ASSY		
TU801	2C		W02-1146-08	FM FRONT-END ASSY		KPMXR E

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KR-A3060

SPECIFICATIONS

Audio section

Rated power output

50 watts per channel minimum RMS, both channels driven at 8 Ω , from 30Hz to 20,000Hz with no more than 0.09% total harmonic distortions.(FTC)

Total harmonic distortion(1kHz, 8 Ω) 0.03% at 25W

Signal to noise ratio (IHF A)

PHONO(MM) 76dB(6mV input)

CD, TAPE, VIDEO 100dB

Input sensitivity / impedance

PHONO(MM) 2.5mV/47k Ω

CD, TAPE, VIDEO 200mV / 47k Ω

Tone controls

BASS ± 10 dB(at 100 Hz)

TREBLE ± 10 dB(at 10 kHz)

Loudness control at -30dB level +8dB(100 Hz)

FM Tuner section

Tuning frequency range 87.5MHz~108MHz

Usable sensitivity(IHF) 13.2dBf(1.2 μ V at 75 Ω)

50 dB quieting sensitivity

STEREO 41.2dBf(32 μ V at 75 Ω)

Total harmonic distortion at 1kHz

MONO 0.6%

STEREO 0.7%

Signal to noise ratio at 65 dBf(IHF)

MONO 75 dB

STEREO 68 dB

Selectivity(IHF ± 400 kHz) 50 dB

Stereo separation (IHF at 1kHz) 40 dB

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

AM Tuner section

Tuning frequency range 530kHz~1,700kHz

Usable sensitivity 12 μ V / (500 μ V /m)

Total harmonic distortion 0.7%

Signal to noise ratio 48 dB

selectivity 30 dB

General

Power consumption 1.3A

AC outlet

SWITCHED 1 : (200W, 1.6 A max.)

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

H : 129mm (5-5/8")

D : 284mm(13-18")

Weight(net) 5.7kg(20.9 lb)

Note : KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Note :

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the U.S.A.(K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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