ACTIVE SERVO PROCESSING SUPER WOOFER SYSTEM

YST-SW500

SERVICE MANUAL

IMPORTANT NOTICE

This manual has been provided for the use of authorized YAMAHA Retailers and their service personnel. It has been assumed that basic service procedures inherant to the industry, and more specifically YAMAHA Products, are already known and understood by the users, and have therefore not been restated.

WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components and failure of the product to perform as specified. For these reasons, we advise all YAMAHA product owners that all service required should be performed by an authorized YAMAHA Retailer or the appointed service representative.

IMPORTANT: The presentation or sale of this manual to any individual or firm does not constitute authorization, certification or recognition of any applicable technical capabilities, or establish a principle-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The reserch, engineering, and service departments of YAMAHA are continually striving to improve YAMAHA products. Modifications are, therefore, inevitable and specifications are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss).

IMPORTANT: Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

■ CONTENTS

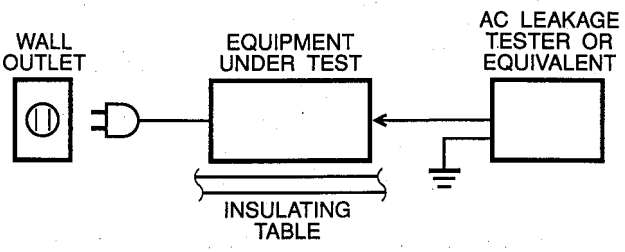
100443

YAMAHA
YAMAHA CORPORATION
P.O.Box 1, Hamamatsu, Japan
1.55K-702 ⊖ Printed in Japan '93.3

■ TO SERVICE PERSONNEL

1. Critical Components Information.
   Components having special characteristics are marked and must be replaced with parts having specifications equal to those originally installed.
2. Leakage Current Measurement (For 120V Models Only).
   When service has been completed, it is imperative to verify that all exposed conductive surfaces are properly insulated from supply circuits.

- Meter impedance should be equivalent to 1500 ohm shunted by 0.15μF.
- Leakage current must not exceed 0.5mA.
- Be sure to test for leakage with the AC plug in both polarities.



- **POLARIZATION (U, C models only)**
  This amplifier product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature.

WARNING: CHEMICAL CONTENT NOTICE!

The solder used in the production of this product contains LEAD. In addition, other electrical/electronic and/or plastic (where applicable) components may also contain traces of chemicals found by the California Health and Welfare Agency (and possibly other entities) to cause cancer and/or birth defects or other reproductive harm.

DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHATSOEVER!

Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

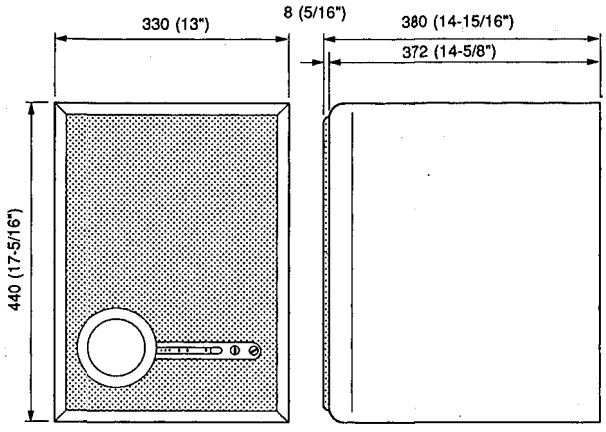
If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

■ SPECIFICATIONS

Type ..... Active servo processing type super woofer
Speaker Unit ..... 25 cm (10") cone woofer (JA2540) magnetic-shield type
Amplifier Output ..... 120W/5 ohms (THD 0.1%, 100Hz)
High-Cut Filter ..... 40 Hz—140 Hz (–24 dB/oct.)
Frequency Response ..... 20 Hz—160 Hz (–10 dB)
Power Supply
U.S.A. and Canada model ..... AC 120V, 60 Hz
General model ..... AC 110/120/220/240V, 50/60 Hz
Power Consumption 130W
Dimensions (W x H x D) ..... 330 mm x 440 mm x 380 mm (13" x 17-5/16" x 14-15/16")
Weight ..... 22 kg (48 lbs. 6 oz.)
Accessories ..... Remote control transmitter
Batteries
Speaker cords

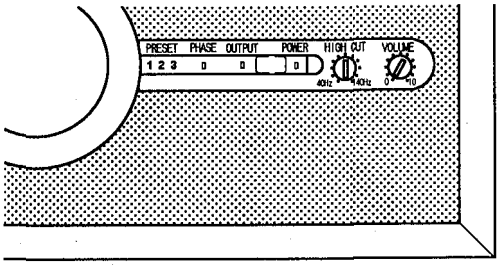
* *Specifications and appearance may be changed for improvement without prior notice.*

■ DIMENSIONS



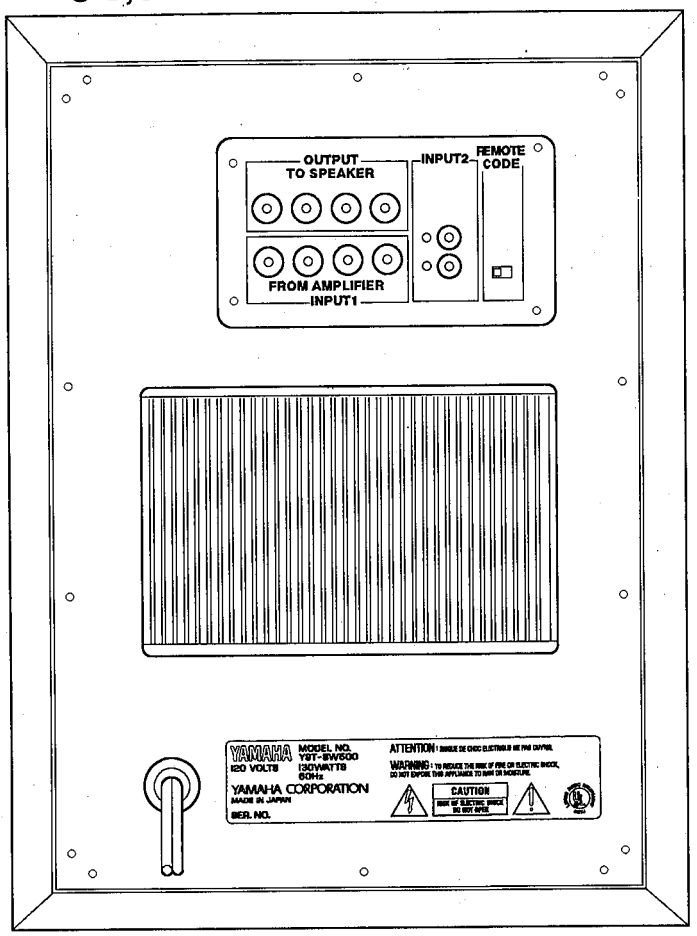
Unit : mm (inch)

■ FRONT PANEL

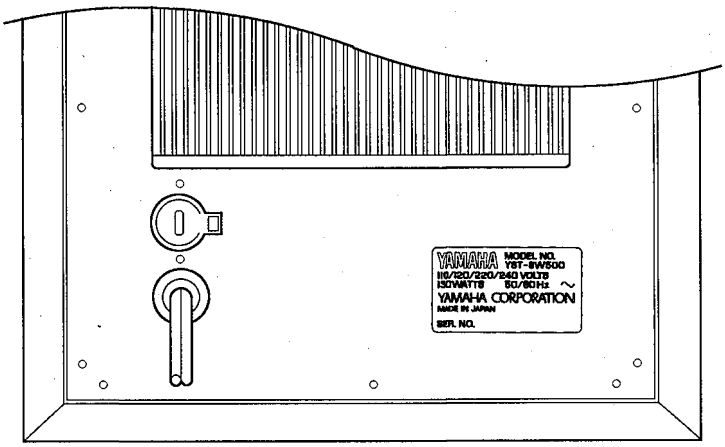


■ REAR PANEL

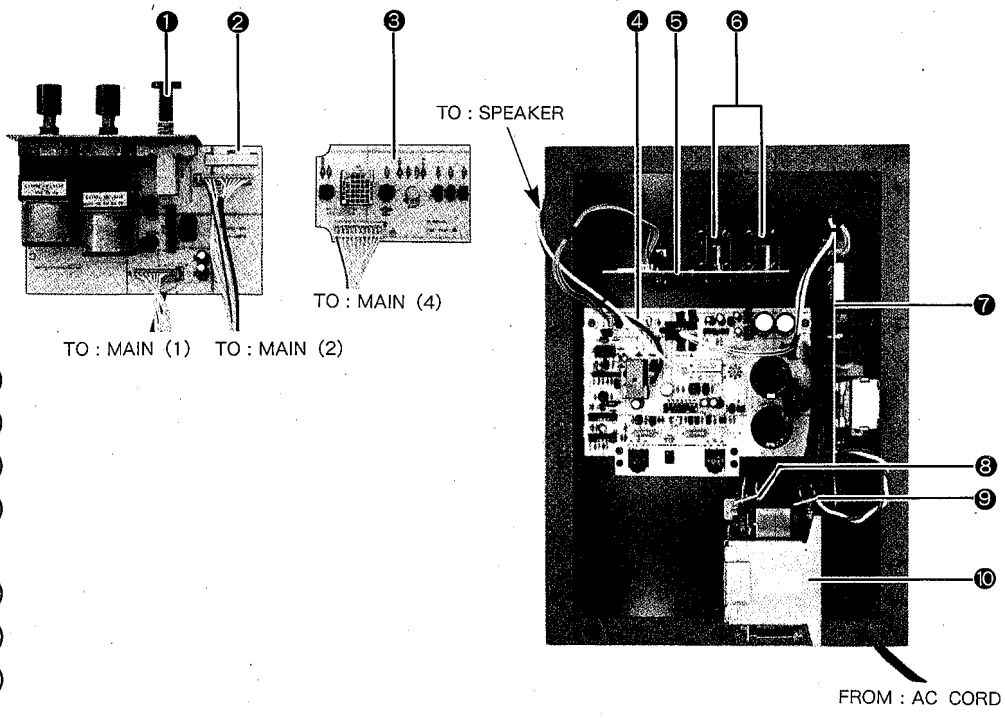
● U,C models



● R model



■ INTERNAL VIEW



❶ POWER SWITCH
❷ MAIN CIRCUIT BOARD (4)
❸ MAIN CIRCUIT BOARD (5)
❹ MAIN CIRCUIT BOARD (1)
❺ MAIN CIRCUIT BOARD (3)
❻ SPEAKER TERMINAL
❼ MAIN CIRCUIT BOARD (2)
❽ MAIN CIRCUIT BOARD (6)
❾ MAIN CIRCUIT BOARD (7)
❿ POWER TRANSFORMER

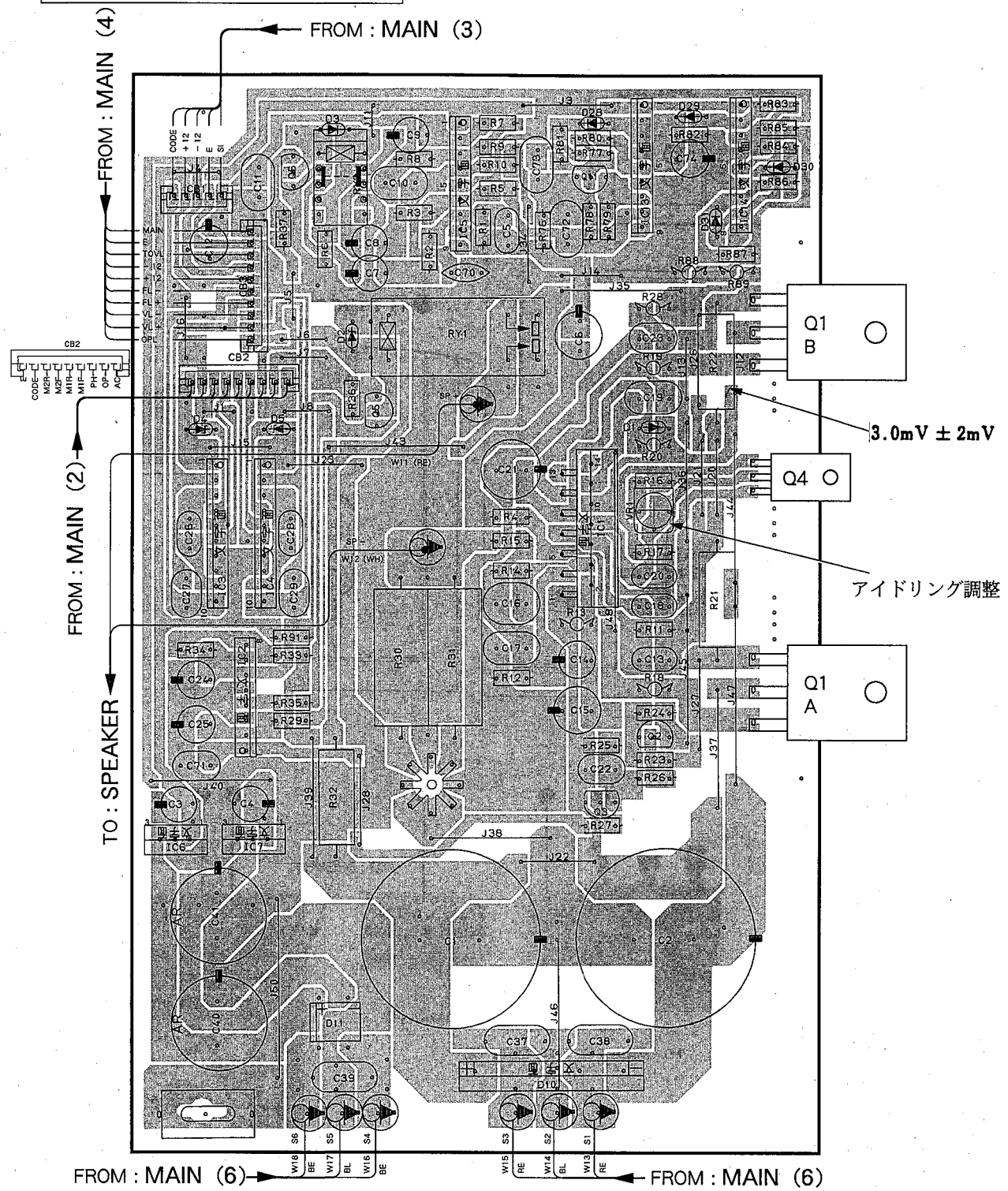
■ ADJUSTMENT

Adjust VR1 with neither load nor signal applied so that 3.0mV±2mV voltage is obtained at both ends of R22 resistor.

■ CIRCUIT BOARD DIAGRAM

Notes) 文字面 : Component side

Main Circuit Board(1)



● **Semiconductor Location**

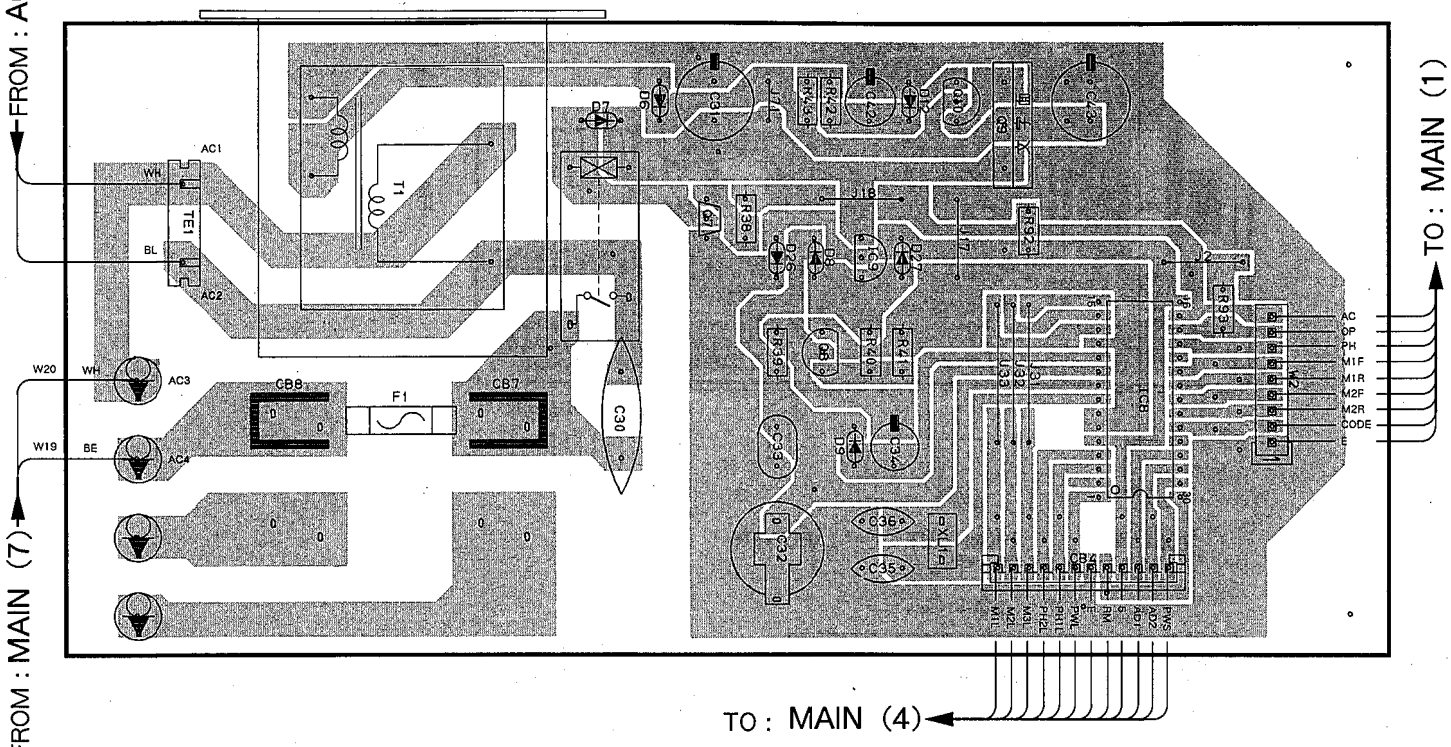
Lef . No	Location
IC1	C – 3
IC2	B – 4
IC3	B – 3
IC4	B – 3
IC5	C – 2
IC6	B – 5

Lef . No	Location
IC7	B – 5
IC13	D – 2
IC14	D – 2
Q1A	D – 4
Q1B	D – 3
Q2	D – 4

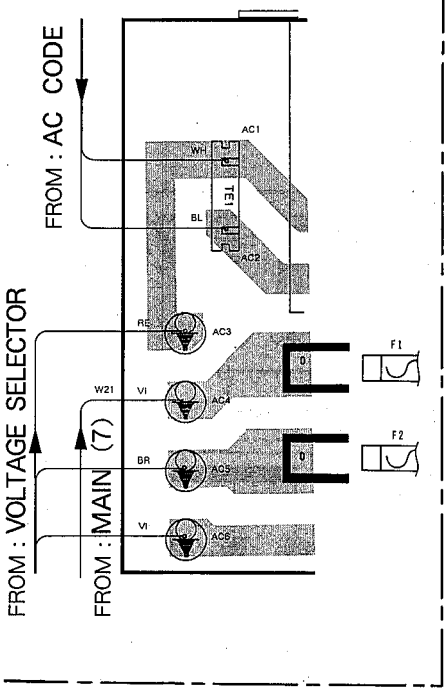
Lef . No	Location
Q3	C – 5
Q4	D – 3
Q5	B – 3
Q6	B – 2
Q11	C – 2

Main Circuit Board(2)

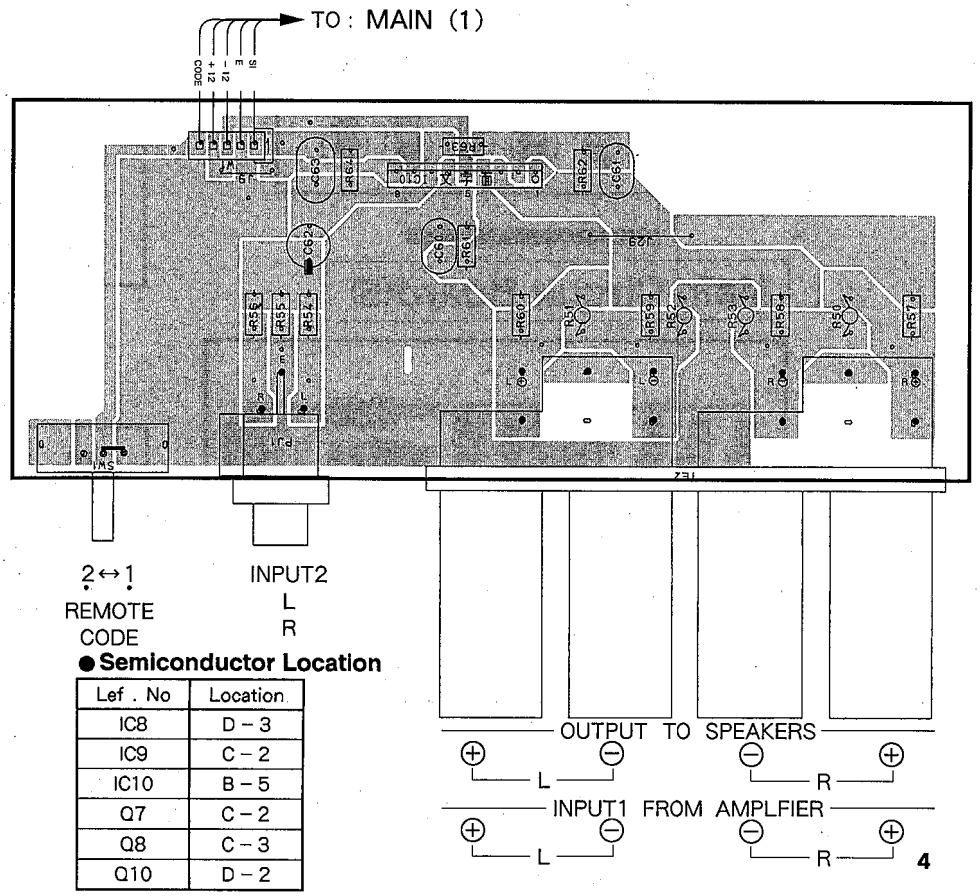
U,C models



R model



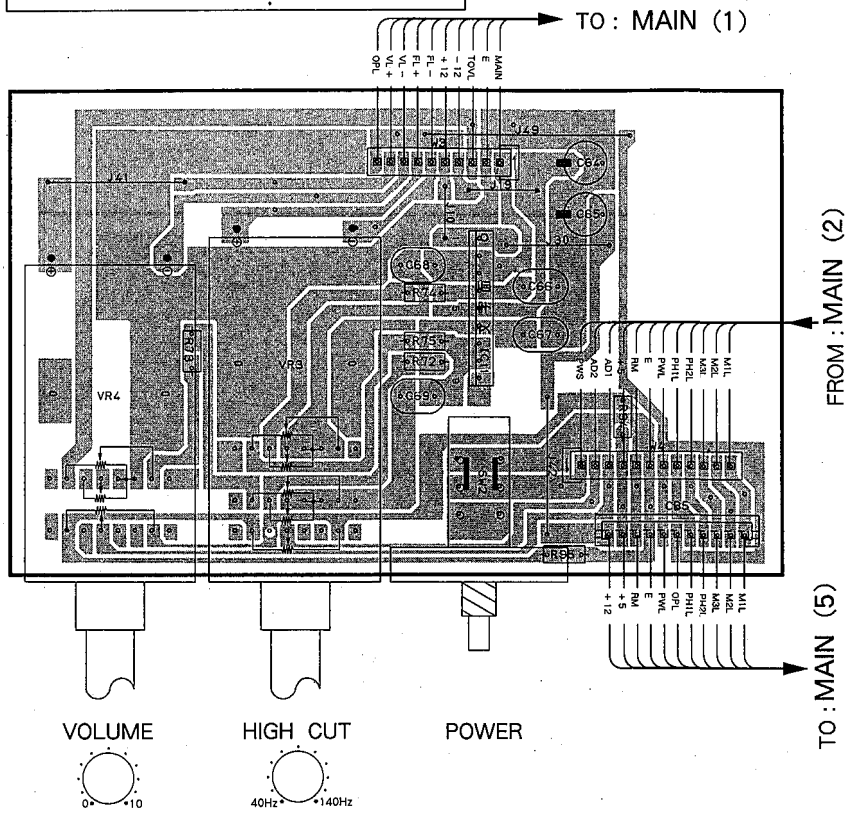
Main Circuit Board(3)



● **Semiconductor Location**

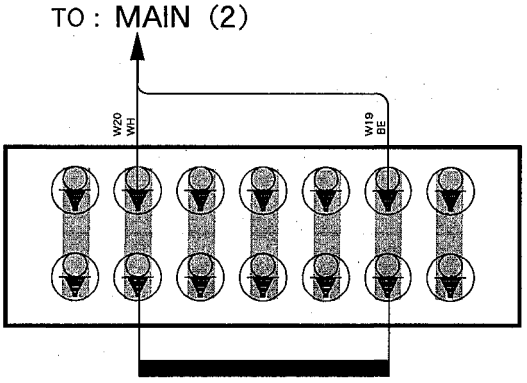
Lef . No	Location
IC8	D – 3
IC9	C – 2
IC10	B – 5
Q7	C – 2
Q8	C – 3
Q10	D – 2

Main Circuit Board(4)

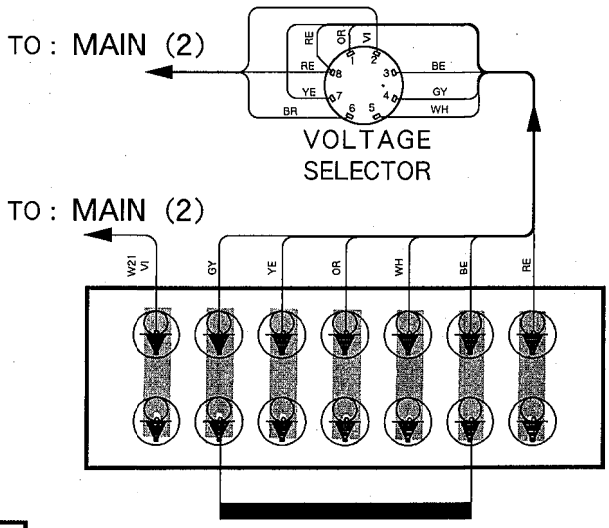


Main Circuit Board(7)

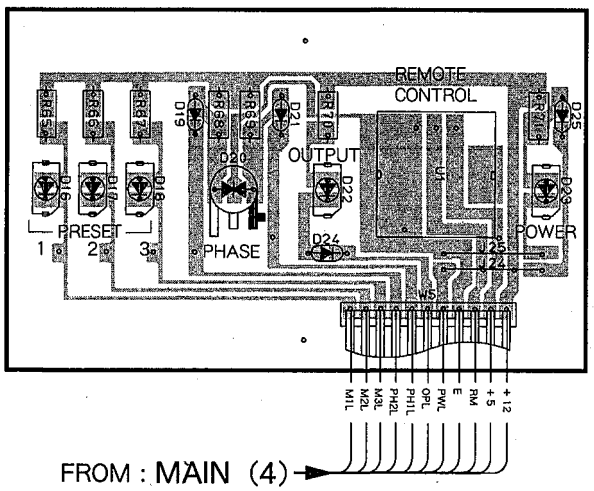
U,C models

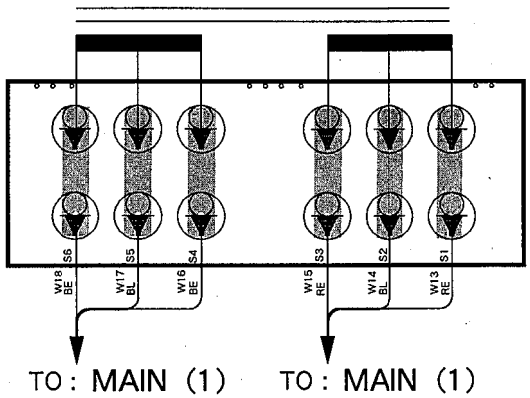


R model



Main Circuit Board(5)





Main Circuit Board(6)

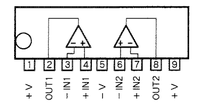
■ SCHEMATIC DIAGRAM

RESISTOR	
REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (1/6W)
▽	CARBON FILM RESISTOR (1/4W)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
◪	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

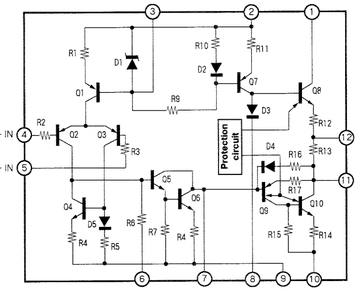
CAPACITOR		
REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	#
⊗	TANTALUM CAPACITOR	#
NO MARK	CERAMIC CAPACITOR	##
◉	AXIAL LEAD CERAMIC CAPACITOR	##
◎	POLYESTEL FILM CAPACITOR	##
○	POLYSTYRENE FILM CAPACITOR	##
⊡	MICA CAPACITOR	##
℗	POLYPROPYLENE FILM CAPACITOR	##
●	SEMICONDUCTIVE CERAMIC CAPACITOR	##

NOTICE
(J)····· Japanese model
(U)····· U.S.A model
(C)····· Canadian model
(A)····· Australian model
(G)····· European model
(B)····· British model
(R)····· General model
(P)····· PP model

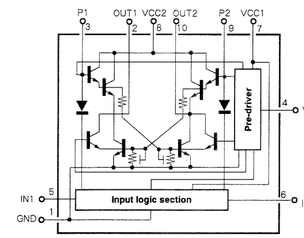
IC5,10,11,13,14: μ PC4570HA



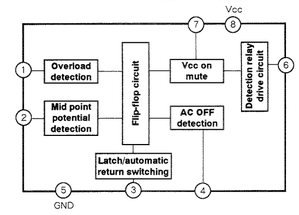
IC1: μ PC1298V



IC3:LB1641



IC2: μ PC1237HA



D16	PRESET1
D17	PRESET2
D18	PRESET3
D20	PHASE
D22	OUT PUT
D23	POWER

Interchangeable Parts at Manufacture-Stage

Mark	Reference Parts Number	Parts Name
& 1	IC9	NJM78L05A,AN78L05
& 2	Q2,8	2SC2240 [GR/BL],2SC2909 [S/T]
& 3	Q3	2SA970 [GR,BL],2SA1207 [S/T]
& 4	Q5,6	2SC2061 [P/Q/R],2SD438 [F/E]
& 5	Q7	2SD1915 [S/T],2SD1915F [S/T]
& 6	IC6	NJM78M12FA
& 7	IC7	NJM79M12FA,AN79M12F
& 8	RY3	DC12D1-0 [M],DC5D-1

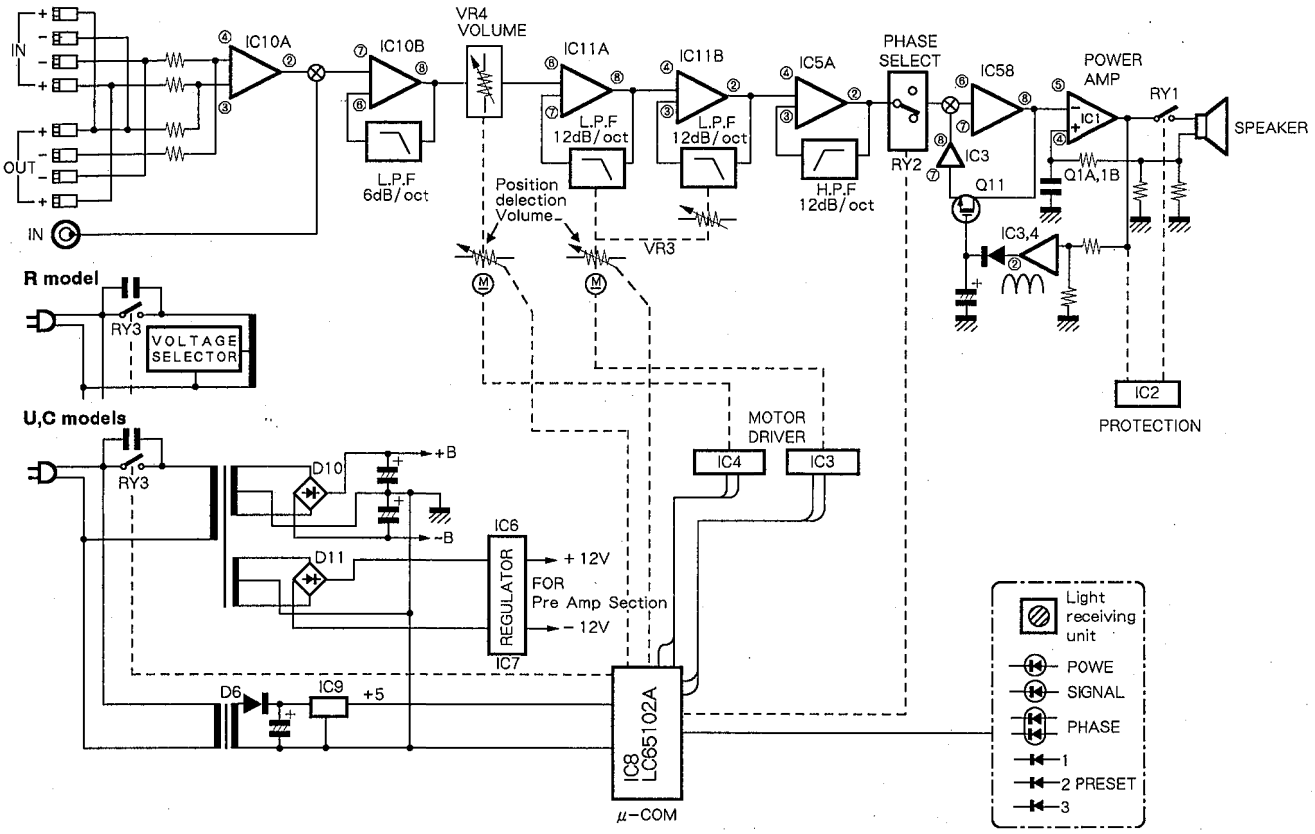
	LAST No.
C	74
R	95
Q	11
D	31
IC	14
CB	9

S		J	U,C	R
1	C43	×	×	220/63
2	C42	×	×	10/50
3	R42,R43	×	×	4.7K
4	F1	3.5A250V KB00037	3.5A250V KB00263	3.5A250V KB00037
5	D12	×	×	MTZJ12C
6	Q10	×	×	C2603 [E/F] C1740S [R/S] C3311A [Q/R/S]
7	Q9	×	×	C4688 [R/D]
8	J71	2.2	2.2	×
9	F2	×	×	1.5A250V
10	T1	XI084	XI085	XI086

■ PIN CONNECTION DIAGRAM OF TRANSISTORS,DIODE AND ICS.

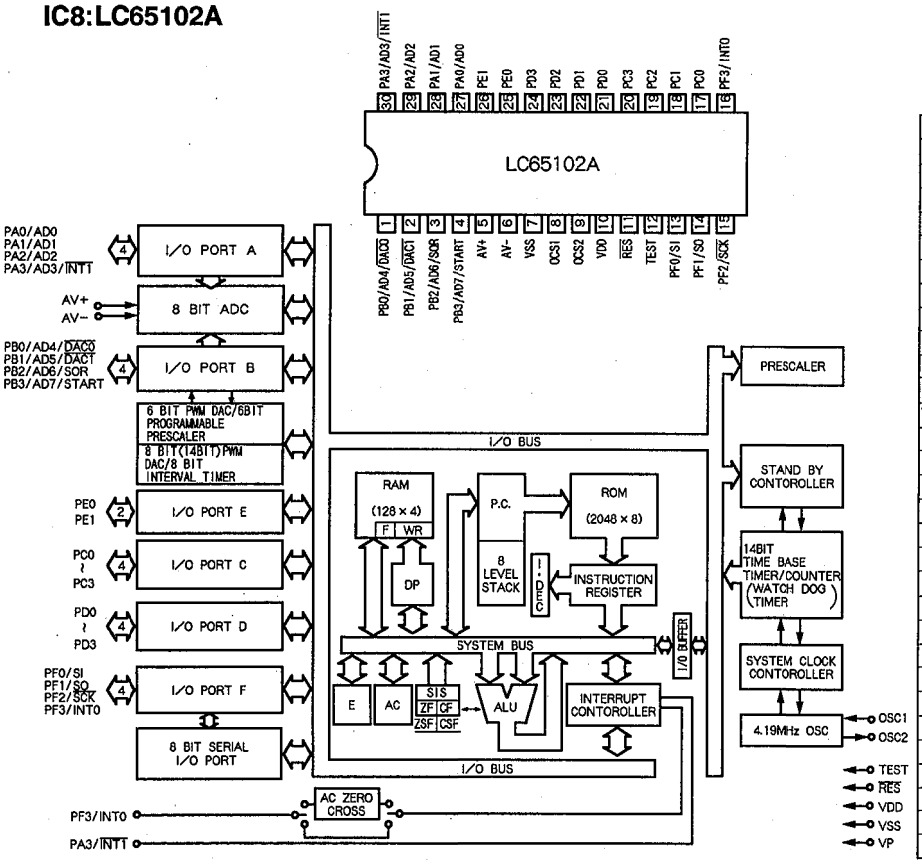
2SA970(GR,BL) 2SC2240(GR,BL) 2SC2061(P,Q,R)	2SK105	2SC1915	2SC2603	1SS133 MTZJ24B 1SR139-100 MTZJ5.1C	SLR-55URC3H SLR-54VC3H3	SPR-54MVW	SLR-34VC3H3	RBV-602	DF02M	LB1841	LC6527C	μPC1237HA	μPC1298V	μPC4570HA	NJM78M12FA NJM79M12FA	NJM78L05A

■ BLOCK DIAGRAM



■ MICROPROCESSOR DATA

IC8:LC65102A



Port	Pin No.	Name	Function
PB0	1	PWL	Power LED output
PB1	2	OPL	Output LED output (unused)
PB2	3	PH1L	PHASE LED output 1 (positive phase)
PB3	4	PH2L	PHASE LED output 2 (opposite phase)
AV+	5	AV+	Reference voltage input for AD converter
AV-	6	AV-	Reference voltage input for AD converter
VSS	7	VSS	GND
OSC1	8	OSC1	Oscillator
OSC2	9	OSC2	Oscillator
VDD	10	VDD	Power supply
$\overline{RES}$	11	RES	Reset input
TEST	12	TEST	LSI test terminal
PF0	13	M1L	Preset LED 1 output
PF1	14	M2L	Preset LED 2 output
PF2	15	M3L	Preset LED 3 output
PF3	16	STBY	Input for detecting power failure
PC0	17	AC	Output for AC relay
PC1	18	OP	Output for output relay
PC2	19	PH	Output for PHASE relay
PC3	20	EUL	European version power LED sub-output (unused)
PD0	21	M1F	Output for motor driver 1 (for higher volume)
PD1	22	M1R	Output for motor driver 1 (for lower volume)
PD2	23	M2F	Output for motor driver 2 (for high-cut up)
PD3	24	M2R	Output for motor driver 2 (for high-cut down)
PE0	25	LR	Remote controller cord switch signal input
PE1	26	EU	European version switching input (unused)
PA0	27	AD1	AD converter input 1 (volume)
PA1	28	AD2	AD converter input 2 (high-cut)
PA2	29	PWS	Power switch signal input
PA3	30	RM	Remote controller signal input

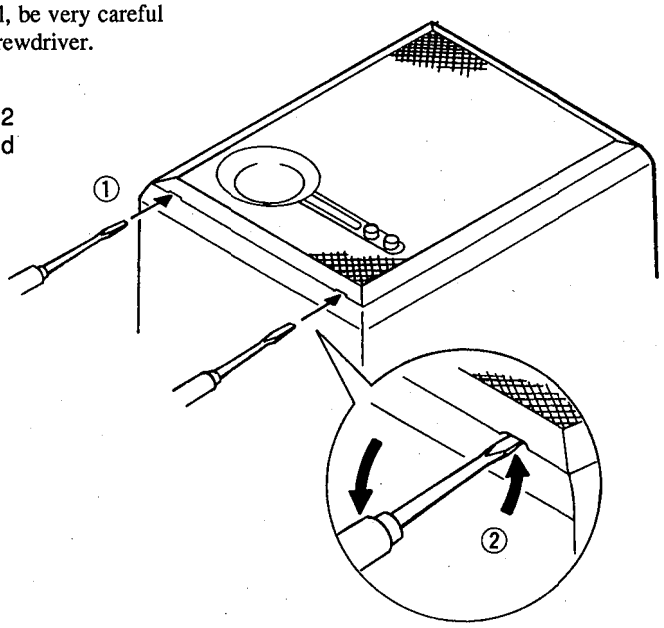
■ DISASSEMBLY DRAWING

● Removal of Front Grille

Follow Steps ① to ⑤ described below.

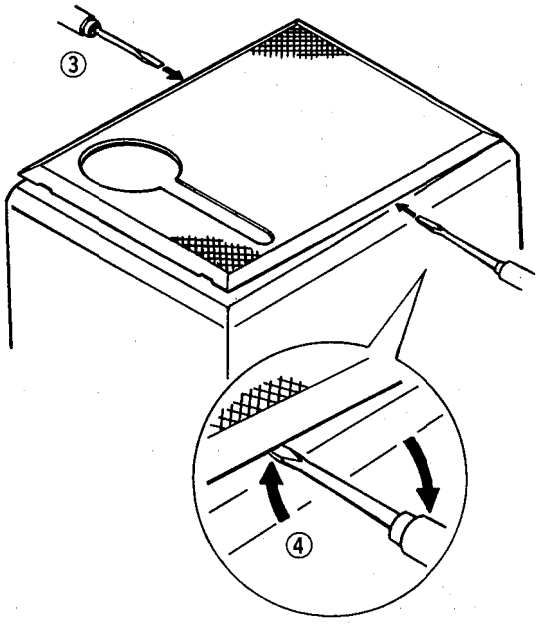
* As a slotted screwdriver is used for removal, be very careful not to cause damage to the unit with the screwdriver.

① Insert a slotted screwdriver into 2 gaps provided at the lower end of the front grille.



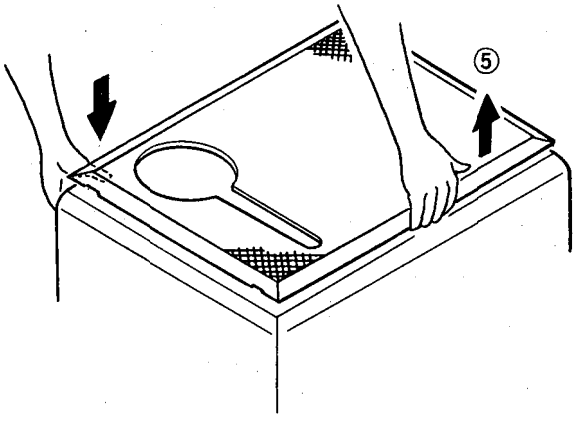
② Pry the front grille up.

③ Insert the screwdriver into opening between the front grille and the speaker unit from both sides.



④ Pry the front grille up.

⑤ As the front grille is fixed to the speaker unit with 6 dowels, pull it up while holding the speaker unit at each dowel position one after another.



PARTS LIST

■ ELECTRICAL PARTS

■ **WARNING**
Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.
● Carbon resistors (1/6W or 1/4W) are not included in the ELECTRICAL PARTS List. For the parts No. of the carbon resistors, refer to P 15.

Schm Ref.	PART NO.	Description			
※	VP307300	P.C.B.	MAIN(UC)		
※	VP479300	P.C.B.	MAIN(R)		
CB1	VD004800	CN.BS.PIN	PH i-TYPE 5P TE		
CB2	VD005200	CN.BS.PIN	PH i-TYPE 9P TE		
CB3	VD005300	CN.BS.PIN	PH i-TYPE 10P TE		
CB4	VG699800	CN.BS.PIN	PH 12P TE		
CB5	VG699700	CN.BS.PIN	PH 11P TE		
CB7	LB201880	HOLDER.FUS	PC-FH1		
CB8	LB201880	HOLDER.FUS	PC-FH1(R)		
CB9	LB201880	HOLDER.FUS	PC-FH1(R)		
C1	VF807300	C.EL	10000uF	63V	
C2	VF807300	C.EL	10000uF	63V	
C3	VG291000	C.EL	22uF	50V	
C4	VG291000	C.EL	22uF	50V	
C5	UT452100	C.PP	100pF	100V	
C6	VG287800	C.EL	330uF	16V	
C7	VG290900	C.EL	10uF	50V	
C8	VG290900	C.EL	10uF	50V	
C9	VG290900	C.EL	10uF	50V	
C10	UA655220	C.MYLAR	0.22uF	50V	
C11	UA655220	C.MYLAR	0.22uF	50V	
C12	VG291200	C.EL	47uF	50V	
C13	UA654100	C.MYLAR	0.01uF	50V	
C14	VG288900	C.EL	100uF	25V	
C15	Ui377470	C.EL	47uF	63V	
C16	UA656100	C.MYLAR	1uF	50V	
C17	UA655220	C.MYLAR	0.22uF	50V	
C18	UA653150	C.MYLAR	1500pF	50V	
C19	UA655220	C.MYLAR	0.22uF	50V	
C20	UA654220	C.MYLAR	0.022uF	50V	
C21	UH178100	C.EL	100uF	63V	
C22	UA655100	C.MYLAR	0.1uF	50V	
C23	UA654470	C.MYLAR	0.047uF	50V	
C24	VG288900	C.EL	100uF	25V	
C25	VG286900	C.EL	220uF	10V	
C26	UA654100	C.MYLAR	0.01uF	50V	
C27	UA655100	C.MYLAR	0.1uF	50V	
C28	UA654100	C.MYLAR	0.01uF	50V	
C29	UA655100	C.MYLAR	0.1uF	50V	
C30	Fi414100	C.CE.SAFTY	0.01uF	VA-1	⚠
C31	VG289200	C.EL	470uF	25V	
C32	VE632800	C.EL	0.047F	5.5V	
C33	UA655100	C.MYLAR	0.1uF	50V	
C34	VG290500	C.EL	1uF	50V	
C35	FG212330	C.CE	330pF	50V	
C36	FG212330	C.CE	330pF	50V	
C37	FC255100	C.MYLAR	0.1uF	250V	
C38	FC255100	C.MYLAR	0.1uF	250V	
C39	FC255100	C.MYLAR	0.1uF	250V	
C40	VE741300	C.EL	1000uF	25V	
C41	VE741300	C.EL	1000uF	25V	
C42	VG290900	C.EL	10uF	50V(R)	
C43	V0030500	C.EL	220uF	63V(R)	

※ : New Parts (新規部品)

Schm Ref.	PART NO.	Description		
C60	UT452220	C.PP	220pF	100V
C61	UT452220	C.PP	220pF	100V
C62	VG290900	C.EL	10uF	50V
C63	UA654220	C.MYLAR	0.022uF	50V
C64	VG290500	C.EL	1uF	50V
C65	VG290500	C.EL	1uF	50V
C66	UA655150	C.MYLAR	0.15uF	50V
C67	UA655220	C.MYLAR	0.22uF	50V
C68	UA655330	C.MYLAR	0.33uF	50V
C69	UA655560	C.MYLAR	0.56uF	50V
C70	VA761000	C.CE	22pF	50V
C71	UA655100	C.MYLAR	0.1uF	50V
C72	UA655470	C.MYLAR	0.47uF	50V
C73	UA655470	C.MYLAR	0.47uF	50V
C74	VG290900	C.EL	10uF	50V
CB10	LB201880	HOLDER.FUS	PC-FH1	
D1	VH770800	DIODE	1SR139-100 T-32	
D2	VG442500	DIODE.ZENR	MTZJ24B 24V	
D3	iF004600	DIODE	1SS133	
D4	VG437500	DIODE.ZENR	MTZJ5.1C 5.1V	
D5	VG437500	DIODE.ZENR	MTZJ5.1C 5.1V	
D6	VH770800	DIODE	1SR139-100 T-32	
D7	iF004600	DIODE	1SS133	
D8	iF004600	DIODE	1SS133	
D9	iF004600	DIODE	1SS133	
D10	Vi234100	DIODE.BRG	RBV-602	⚠
D11	VE367900	DIODE.BRG	DF02M	⚠
D12	VG440300	DIODE.ZENR	MTZJ12C 12V(R)	
D16	Vi013600	LED	SLR-34VC3H3 (re)	
D17	Vi013600	LED	SLR-34VC3H3 (re)	
D18	Vi013600	LED	SLR-34VC3H3 (re)	
D19	iF004600	DIODE	1SS133	
D20	VC615800	LED	SPR-54MVW	
D21	iF004600	DIODE	1SS133	
D22	iF004270	LED	SLR-55URC3H (re)	
D23	iF004270	LED	SLR-55URC3H (re)	
D24	iF004600	DIODE	1SS133	
D25	iF004600	DIODE	1SS133	
D26	iF004600	DIODE	1SS133	
D27	iF004600	DIODE	1SS133	
D28	iF004600	DIODE	1SS133	
D29	iF004600	DIODE	1SS133	
D30	iF004600	DIODE	1SS133	
D31	iF004600	DIODE	1SS133	
F1	KB000370	FUSE	T3.5A 250V(R)	
F1	KB002630	FUSE	3.5A 250V(UC)	⚠
F2	KB000340	FUSE	1.5A 250V(R)	
IC1	Xi115A00	IC	uPC1298V	⚠
IC2	XF663A00	IC	uPC1237HA	
IC3	XF494A00	IC	LB1641	
IC4	XF494A00	IC	LB1641	
IC5	XB247301	IC	uPC4570HA	
IC6	XJ602A00	IC	NJM78M12FA	⚠

※ : New Parts (新規部品)

Schm Ref.	PART NO.	Description			
IC7	XD343A00	IC	NJM79M12FA		⚠
※ IC8	XL568B00	IC	LC65102A		
IC9	iG065510	IC	NJM78L05A		⚠
IC10	XB247301	IC	uPC4570HA		
IC11	XB247301	IC	uPC4570HA		
IC13	XB247301	IC	uPC4570HA		
IC14	XB247301	IC	uPC4570HA		
PJ1	LB202610	JACK.PIN	2P		
Q2	iC224030	TR	2SC2240 GR,BL		
Q3	iA097000	TR	2SA970 GR,BL		
Q5	iC206110	TR	2SC2061 P,Q,R		
Q6	iC206110	TR	2SC2061 P,Q,R		
Q7	VF835100	TR	2SD1915 T		
Q8	iC224030	TR	2SC2240 GR,BL		
Q9	VK801200	TR	2SC4688 R,O(R)		
Q10	iC260320	TR	2SC2603 E,F(R)		
Q11	iE101210	FET	2SK105 E		
R4	HU576330	R.MTL.FLM	3.3KΩ	1/4W	
R11	HU578100	R.MTL.FLM	100KΩ	1/4W	
R13	HV453220	R.CAR.FP	2.2Ω	1/4W	⚠
R18	HV453220	R.CAR.FP	2.2Ω	1/4W	
R19	HV453220	R.CAR.FP	2.2Ω	1/4W	
R20	HV454330	R.CAR.FP	33Ω	1/4W	⚠
R21	VG730500	R.MTL.OXD	0.15Ω	3W	⚠
R22	VG730500	R.MTL.OXD	0.15Ω	3W	⚠
R28	HV453470	R.CAR.FP	4.7Ω	1/4W	
R30	VG529200	R.WW	0.2Ω	3W	
R31	VG529200	R.WW	0.2Ω	3W	
R32	HL425820	R.MTL.OXD	820Ω	2W	
R50	HV456470	R.CAR.FP	4.7KΩ	1/4W	
R51	HV456470	R.CAR.FP	4.7KΩ	1/4W	
R52	HV456220	R.CAR.FP	2.2KΩ	1/4W	
R53	HV456220	R.CAR.FP	2.2KΩ	1/4W	
R88	HV455120	R.CAR.FP	120Ω	1/4W	
R89	HV456270	R.CAR.FP	2.7KΩ	1/4W	
R96	HV453220	R.CAR.FP	2.2Ω	1/4W(UC)	
RY1	KC002020	RELAY	DH24D2-0TM		
RY2	VJ791100	RELAY	ATQ203 DC12V		
RY3	VD506000	RELAY	AC DG12D1-0		⚠
SW1	VP379000	SW.SLIDE			
SW2	VJ810700	SW.PUSH	SPUL12		
T1	Xi085A00	TRANS.PWR	(UC)		
T1	Xi086A00	TRANS.PWR	(R)		
TE1	LA003870	TERM.WRAP	2P L-TYPE P=10		
TE2	VC313700	TERM.SP	8P		
U1	VJ791000	L.DTCT	SPS-420-1		
VR1	VJ693000	VR.TRIM	B1KΩ		
VR3	VP379200	VR.MTR	C10KΩx4		
VR4	VP379100	VR.MTR	A5KΩx2		
XL1	GG000500	RSNR.CE	400Hz		
	VA932900	VOLT.SELCT	ESE-37226(R)		
	VL914800	HEAT.SINK			
	ED330066	SCR.BND.HD	3x6	FCRM3-BL	

※ : New Parts (新規部品)

Schm Ref.	PART NO.	Description
	BB069510	GND.MTL No.6951
	BB070700	GND.MTL

※ : New Parts (新規部品)

■ DISASSEMBLY DRAWING

● **Removal of Rear Panel and Front Panel**

a. Remove 14 screws (12) and remove the rear panel.

b. Remove connectors between main circuit boards [5-4-8] (1), (2) and [5-4-8] (4).

c. Disconnect the cords connected to the speaker.

d. Remove the front grille assembly (3). (refer to p.10.)

e. Remove 4 screws (10) and remove the front panel [4-1].

● **Removal of Speaker**

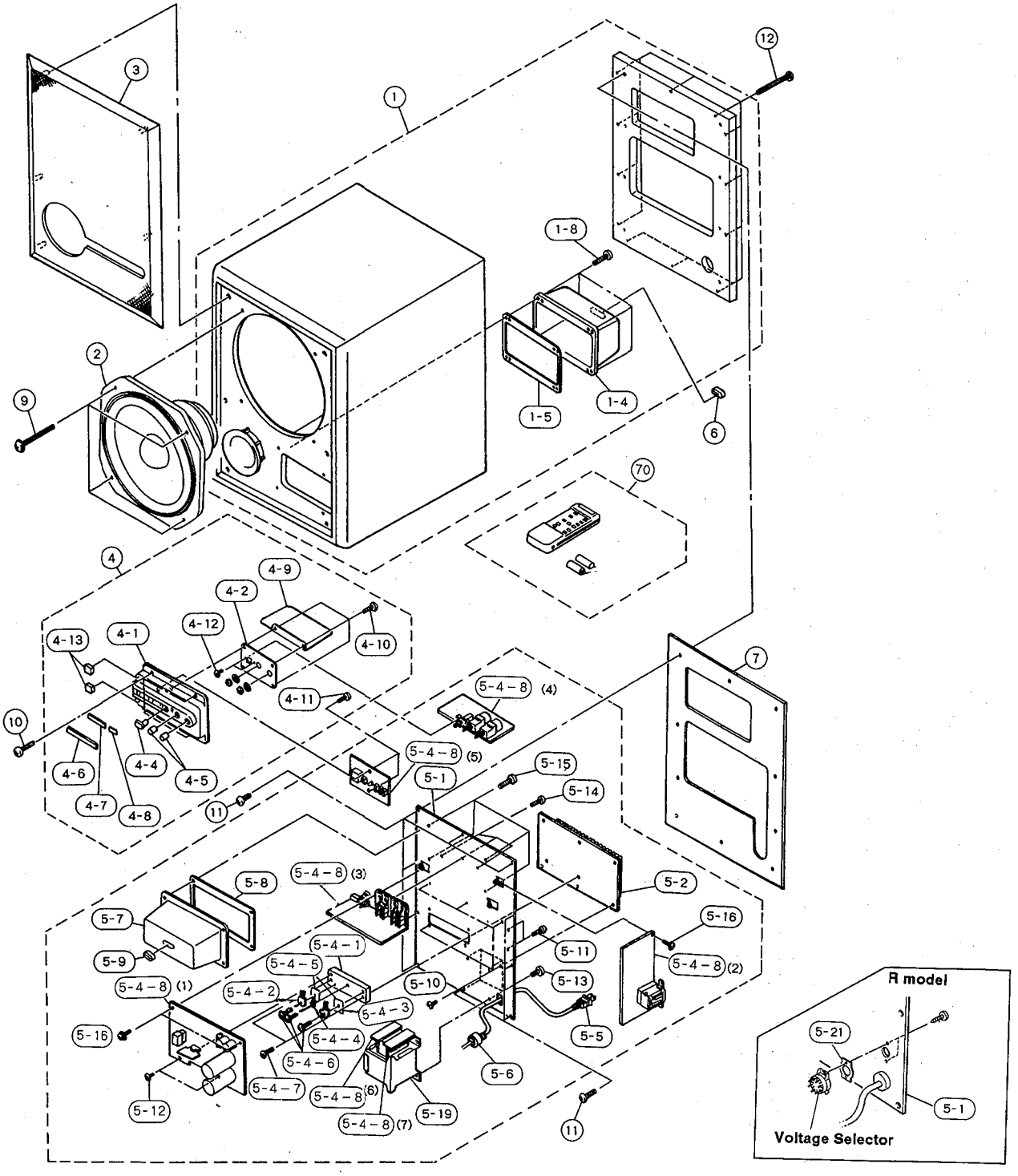
a. Remove the front grille assembly (3). (refer to p.10.)

b. Remove 4 screws (9).

c. Disconnect the cords connected to the speaker.

* After replacing the speaker, be sure to tighten screws securely and with a 40Hz signal applied, check that air leakage (abnormal noise) from the speaker box does not occur.

* When reinstalling the front grille assembly (3), tap it lightly by hand, noting where dowels are (on the back side) and using care not to cause damage to the net.



■ MECHANICAL PARTS

Ref. No.	PART NO.	Description		Remarks	Markets
※ 1	VP146000	CABINET ASS'y	(UC)		(UC)
※ 1	VP351900	CABINET ASS'y	(R)		(R)
1-1	VK882100	COVER			
1-2	Ei340166	BIND HEAD TAPPING SCREW	4x16	FCRM3-BL	
1-3	CB070450	BINDING TIE	L=100		
※ 1-4	VP147400	FELT	A		
※ 1-5	VP151400	FELT	B		
※ 2	XL562A00	SPEAKER UNIT	JA2540		
※ 3	VP146200	FRONT GRILLE ASS'y			
※ 4- 1	VP148400	FRONT PANEL			
※ 4- 2	VP148500	PLATE, SWITCH			
※ 4- 4	VP148700	KNOB,P	P		
※ 4- 5	VP148900	KNOB,V	V		
※ 4- 6	VP149100	WINDOW	L		
※ 4- 7	VP480700	TAPE,WINDOW	A		
※ 4- 8	VP480800	TAPE,WINDOW	B		
4- 9	VP277600	SHIELD SHEET			
4-10	EX602740	BIND HEAD P-TITE SCREW	4x12	FCRM3-BL	
4-11	EX601360	BIND HEAD P-TITE SCREW	3x10	FCRM3-BL	
4-12	ED330066	BIND HEAD SCREW	3x6	FCRM3-BL	
※ 4-13	VP659500	GRILE SPACER			
※ 5- 1	P149300	REAR PANEL	(UC)		(UC)
※ 5- 1	VP359300	REAR PANEL	(R)		(R)
※ 5- 2	VP149400	RADIATOR			
※ 5-4-1	VP149500	TR BLOCK			
※ 5-4-2	iX606460	TRANSISTOR	2SA1492 O,P,Y	⚠	
※ 5-4-3	iX606470	TRANSISTOR	2SC3856 O,P,Y	⚠	
5-4-4	VC398100	TRANSISTOR	2SC1846 S	⚠	
5-4-5	VK195900	SHEET	19x24		
5-4-6	EX600250	CUP B-TITE SCREW	3x10	FCRM3-BL	
5-4-7	Ei330056	BIND HEAD B-TITE SCREW	3x5	ZMC2-BL	
※ 5-4-8	VP307300	P.C.B. ASS'y, MAIN	MAIN(UC)		
※ 5-4-8	VP479300	P.C.B. ASS'y, MAIN	MAIN(R)		
5- 5	VE370900	POWER CORD	10A 125V		
5- 5	VL948500	POWER CORD	7A 250V 2.0m		
5- 6	VH903000	CORD STOPPER	KF-41		
5- 7	VK882100	COVER			
5- 8	VK906100	PACKING	C		
5- 9	VL121400	PACKING	C2		
5-10	Ei330056	BIND HEAD B-TITE SCREW	3x5	ZMC2-BL	
5-11	EP630280	BIND HEAD B-TITE SCREW	3x10	FCRM3-BL	
5-12	EP630260	BIND HEAD B-TITE SCREW	3x14	FCRM3-BL	
5-13	Ei340806	BIND HEAD B-TITE SCREW	4x8	FCRM3-BL	
5-14	EX601360	BIND HEAD P-TITE SCREW	3x10	FCRM3-BL	
5-15	EX602740	BIND HEAD P-TITE SCREW	4x12	FCRM3-BL	
5-16	EK336010	BW HEAD TAPPING SCREW	3x8	FCRM3-BL	
5-17	ED330086	BIND HEAD SCREW	3x8	FCRM3-BL	
5-18	CB069250	BINDING TIE	BK-1		
※ 5-19	XL649A00	POWER TRANSFORMER	(UC)	⚠	
※ 5-19	XL650A00	POWER TRANSFORMER	(R)		
5-21	VH908900	PACKING	V		(R)
6	VL121400	PACKING	C2		
※ 7	VP147500	PACKING	R		

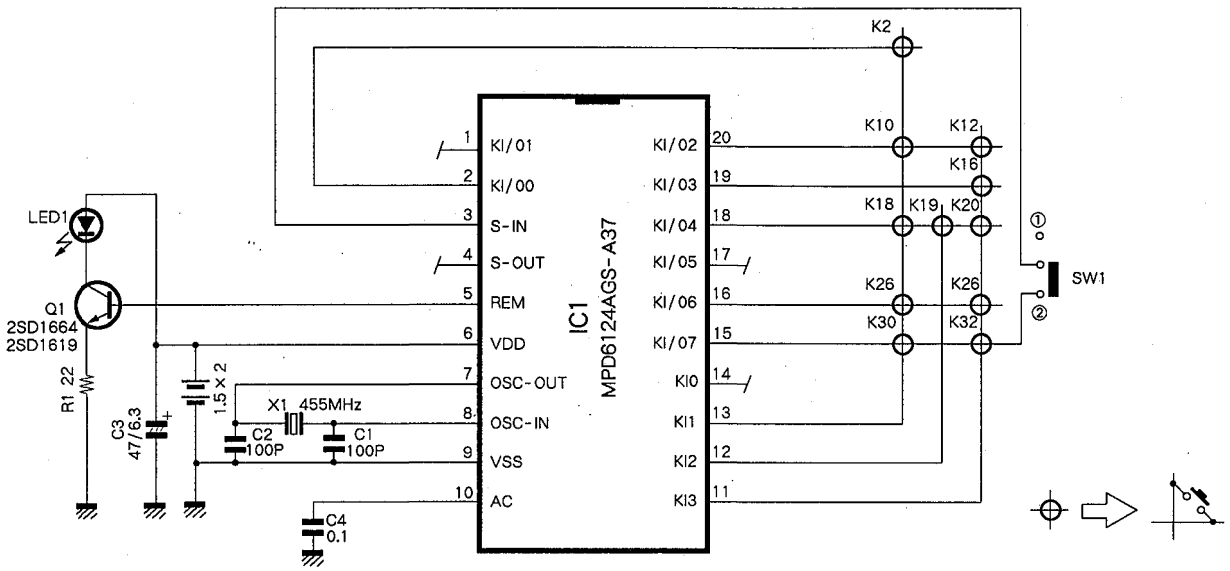
※ : New Parts (新規部品)

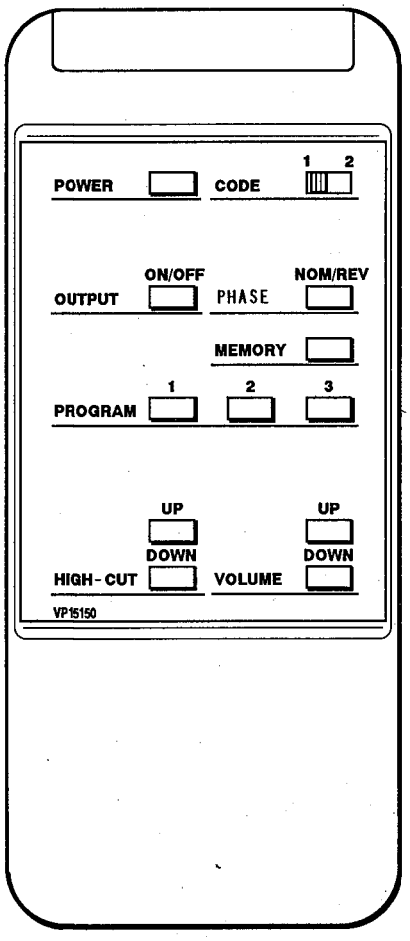
Ref. No.	PART NO.	Description		Remarks	Markets
※ 8	VL064500	PAN HEAD SCREW	5x40 SW	ZMC2-BL	
9	Ei340166	BIND HEAD TAPPING SCREW	4x16	FCRM3-BL	
10	Ei340126	BIND HEAD TAPPING SCREW	4x12	FCRM3-BL	
※ 11	03702490	FLAT HEAD WOOD SCREW	4.1x38	FCRM3-BL	(C)
※ 12	EP341456	FLAT HEAD WOOD SCREW	4.1x45	ZMC2-BL	(UR)
14	CB069250	BINDING TIE	BK-1		
		ACCESSORIES			
※ 70	VP151500	REMOTE CONTROL TRANSMITTER	SBAH00393A 12KEY		
70-1	CX616900	LID	54x34N3ALPS		
※	VD341000	SPEAKER CORD	4.0m		
		BATTERY, MANGANESE	SUM-3,AA,R06		

※ : New Parts (新規部品)

■ REMOTE CONTROL TRANSMITTER

● SCHEMATIC DIAGRAM





CUSTOM CODE

KEY NO.	FUNCTION	DATA CODE								HEX CODE	DATA CODE								HEX CODE
		D0	D1	D2	D3	D4	D5	D6	D7		D0	D1	D2	D3	D4	D5	D6	D7	
K 2	POWER	0	0	0	0	0	0	1	0	40	0	0	0	0	1	0	1	0	50
K10	OUTPUT ON/OFF	1	0	0	0	0	0	1	0	41	1	0	0	0	1	0	1	0	51
K12	PHASE NOM/REV	0	1	0	0	0	0	1	0	42	0	1	0	0	1	0	1	0	52
K16	MEMORY	0	1	0	1	0	0	1	0	4A	0	1	0	1	1	0	1	0	5A
K18	PRESET 1	1	1	0	1	0	0	1	0	4B	1	1	0	1	1	0	1	0	5B
K19	PRESET 2	0	0	1	1	0	0	1	0	4C	0	0	1	1	1	0	1	0	5C
K20	PRESET 3	1	0	1	1	0	0	1	0	4D	1	0	1	1	1	0	1	0	5D
K26	HI-CUT UP	0	1	1	0	0	0	1	0	46	0	1	1	0	1	0	1	0	56
K28	VOLUME UP	0	0	1	0	0	0	1	0	44	0	0	1	0	1	0	1	0	54
K30	HI-CUT DOWN	1	1	1	0	0	0	1	0	47	1	1	1	0	1	0	1	0	57
K32	VOLUME DOWN	1	0	1	0	0	0	1	0	45	1	0	1	0	1	0	1	0	55
CUSTOM CODE C0~C7		1	1	0	1	1	1	1	0	7B	1	1	0	1	1	1	1	0	7B
CUSTOM CODE C0'~C7'		0	0	1	0	0	0	0	1	84	0	0	1	0	0	0	0	1	84