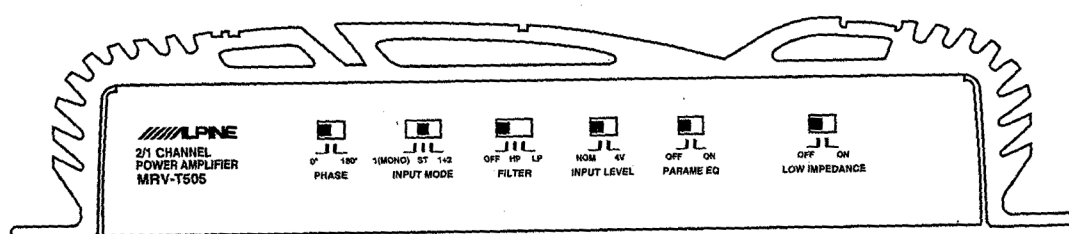


# **ALPINE<sup>®</sup>** **SERVICE MANUAL**

## **2 Channel Power Amplifier**



サービス費用区分	B
技術資料 No.	PM-65-0

**MRV-T505/  
MRV-T501**

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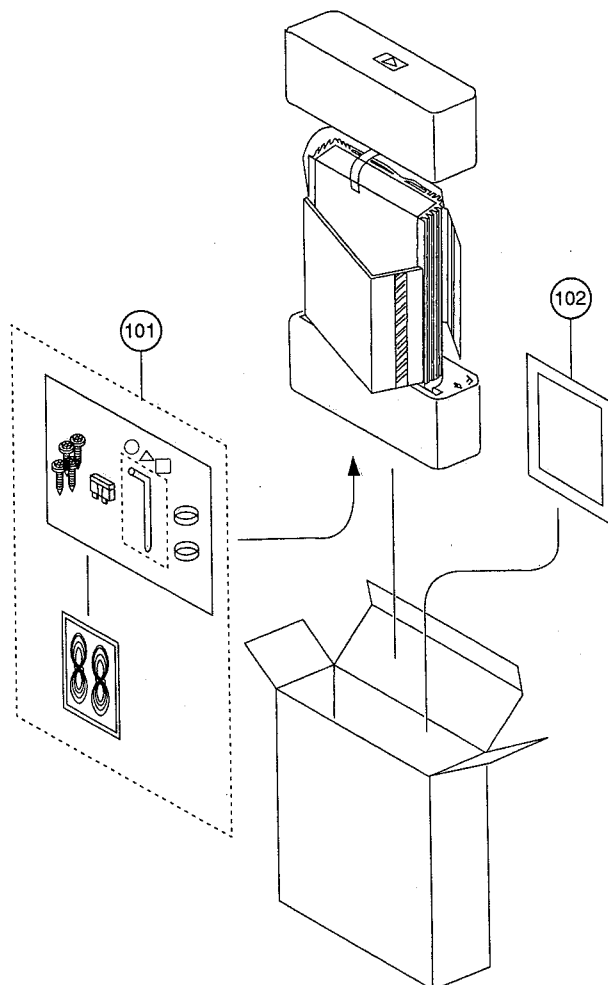
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## Packing Assembly Parts List

Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
△ 101-1	03E11447S01	Screw, Tapping (M4X14)	△ 101-8	01E20928S01	Assy., Remote Wire
□ 101-2	28E20925S01	Housing Rubber-A	□ 101-8	01E20928S01	Assy., Remote Wire
△ 101-3	28E25541S01	Housing Rubber-E	□ 101-9	01E22152S01	Assy., Speaker Wire (+)
△ 101-4	65E25308S01	Fuse, Auto 30A (For Battery Line)	□ 101-10	01E22153S01	Assy., Speaker Wire (-)
△ 101-5	01E22150S01	Assy., Battery Wire	○ 102	68P90664W49	Owner's Manual
□ 101-5	01E22150S01	Assy., Battery Wire	△ 102	68P90664W50	Owner's Manual
△ 101-6	01E22151S01	Assy., GND Wire	△ 102	68P90664W90	Owner's Manual
□ 101-6	01E22151S01	Assy., GND Wire	□ 102	68P90664W53	Owner's Manual
△ 101-7	29E25574S01	Lug Terminal	● 102	68P90664W51	Owner's Manual
□ 101-7	29E25574S01	Lug Terminal			

NOTE: ○: For MRV-T505 (North American) Model Only, △: For MRV-T505 (General Foreign) Model Only,  
□: For MRV-T505 (Japanese) Model Only, ●: For MRV-T501 Model Only, Others: Common.

## Packing Method View



NOTE: ○: For MRV-T505 (North American) Model Only, △: For MRV-T505 (General Foreign) Model Only,  
□: For MRV-T505 (Japanese) Model Only, ●: For MRV-T501 Model Only, Others: Common.

## Specifications

Power Output	4ohm-2channel, 0.2% (20Hz~20kHz) T.H.D., 14.4V : 100W 4ohm-2channel, 0.2% (20Hz~20kHz) T.H.D., 12V : 70W 2ohm-2channel, 0.8% (20Hz~20kHz) T.H.D., 14.4V : 150W 2ohm-2channel, 0.8% (20Hz~20kHz) T.H.D., 12V : 105W 4ohm-1channel, 0.8% (20Hz~20kHz) T.H.D., 14.4V, BRIDGE MONO : 300W 4ohm-1channel, 0.8% (20Hz~20kHz) T.H.D., 12V, BRIDGE MONO : 210W
S/N Ratio (Ref. Output 100W/ch/4ohm, Input shorted)	95dB
Input Sensitivity	100W Output, Gain-Volume (Normal) : 1V±3dB 100W Output, Gain-Volume (MAX.) : 0.2V±3dB 100W Output, Gain-Volume (MIN.) : 4V±3dB
Input Impedance (RCA Input)	20k ohm±10%
Ferquency Response (0±1dB, Ref. 1kHz)	20Hz~40kHz
Current Drain	No Signal : 2A 4ohm-2channel, 0.3% T.H.D. : 35A 2ohm-2channel, 0.8% T.H.D. : 55A 4ohm-1channel, BTL, 0.8% T.H.D. : 55A
Residual Noise (Input Shorted, 4ohm×2)	VR Center : 3mV VR MIN. : 3mV VR MAX. : 4mV
Channel Separation (Input Shorted, Ref. 1kHz)	55dB
Remote on Voltage (1W Output)	6.5 +1, -1.5V
Remote Current Drain	1.3±0.5mA
Back Up Current Drain	1.2mA
Fuse Requirement	30A (For Battery Line)
Power Source	DC14.4V (11~16V)
Semiconductors	12IC's (○△□), 7IC's (●), 52Transistors, 16Diodes, 12Zener Diodes, 14FET's
Dimensions (W×H×D)	240×53×250mm
Weight	3.15kg (○△□) 3.1kg (●)

NOTE : Due to Continuing product improvement, specifications and designs are subject to change without notice.  
 ○ : For MRV-T505 (North American) Model Only,    △ : For MRV-T505 (General Foreign) Model Only,  
 □ : For MRV-T505 (Japanese) Model Only,    ● : For MRV-T501 Model Only,    Others : Common.

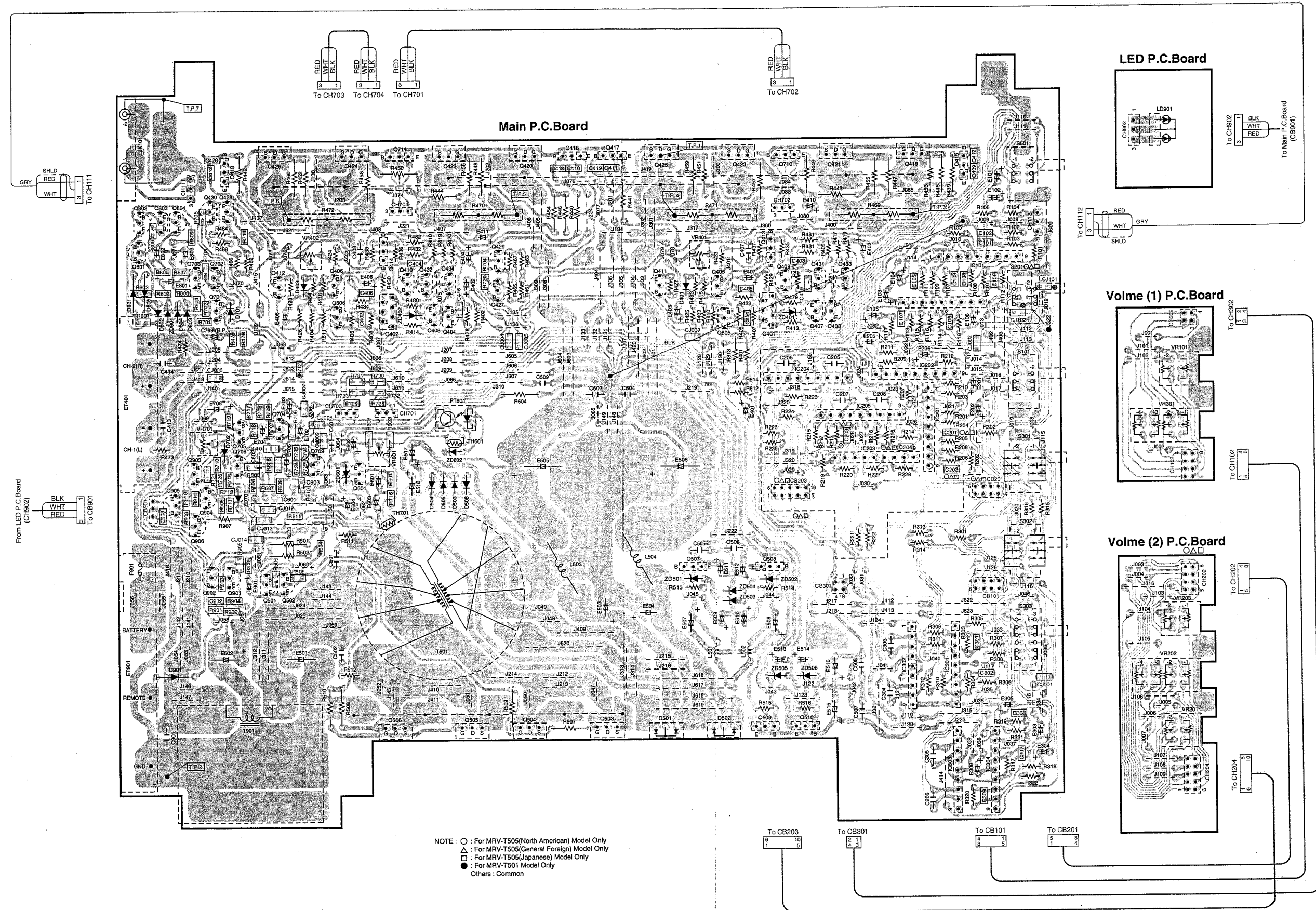


MRV-T505/  
MRV-T501

MRV-T505/  
MRV-T501

# Parts Layout on P.C. Board and Wiring Diagram

All P.C. Boards viewed from soldered side.



Blue Color Pattern : Foil Side Pattern

A

B -7-

C

D

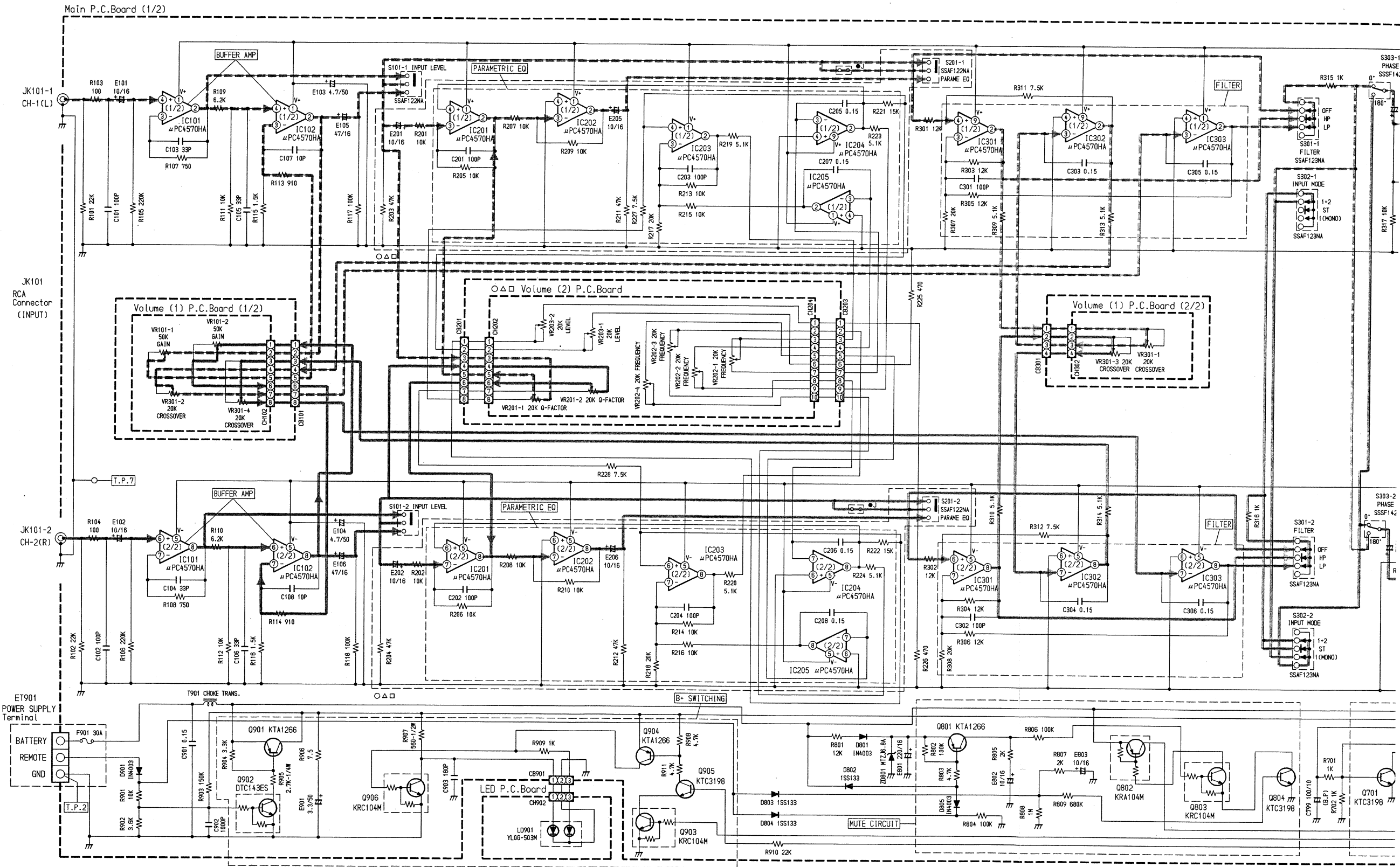
E

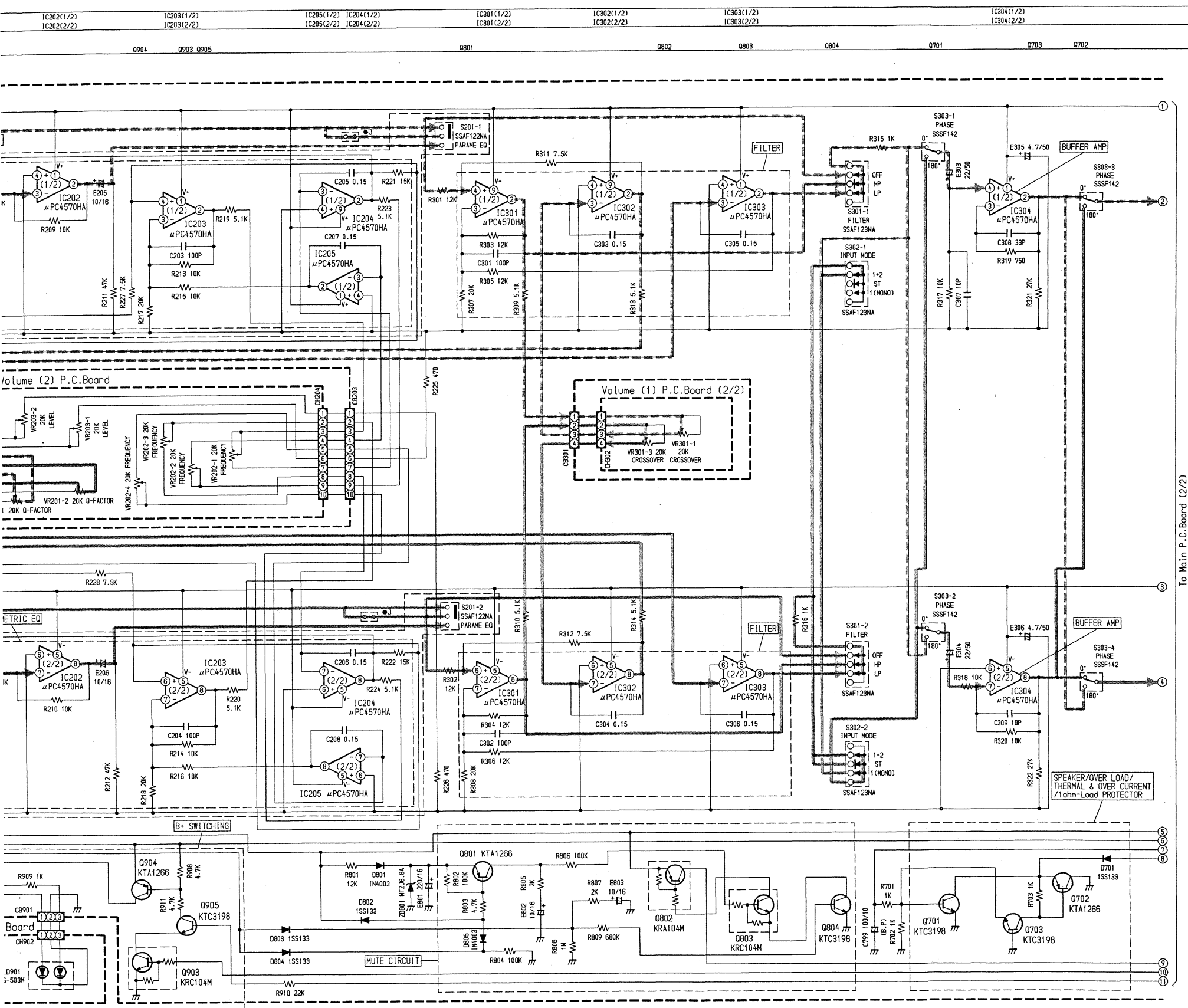
F -8-

G

Schematic Diagram (1/2)

IC	IC101(1/2) IC101(2/2)	IC102(1/2) IC102(2/2)	IC201(1/2) IC201(2/2)	IC202(1/2) IC202(2/2)	IC203(1/2) IC203(2/2)	IC205(1/2) IC205(2/2)	IC204(1/2) IC204(2/2)	IC301(1/2) IC301(2/2)	IC302(1/2) IC302(2/2)	IC303(1/2) IC303(2/2)
Transistor (Q)	Q902 Q901		Q906	Q904 Q903 Q905		Q801		Q802	Q803	Q804 Q701





(○△□ Model Only)

IC101	IC102	IC201	IC202	IC203	IC204	IC205	IC301	IC302
1 15.2V	1 15.3V	1 15.1V	1 15.2V	1 15.2V	1 NC	1 15.3V	1 NC	1 NC
2 10.7mV	2 50.6mV	2 2.9mV	2 6.5mV	2 6mV	2 5mV	2 8.3mV	2 5.4mV	2 6.3mV
3 10.7mV	3 13.7mV	3 3.7mV	3 6.7mV	3 7.1mV	3 6.5mV	3 6.6mV	3 5.7mV	3 5.9mV
4 11.7mV	4 17.7mV	4 4mV	4 5.9mV	4 6.2mV	4 6.2mV	4 6.3mV	4 6.5mV	4 6.4mV
5 -15.2V	5 -15.2V	5 -15.1V	5 -15.1V	5 -15.2V	5 -15.3V	5 -15.3V	5 -15.3V	5 -15.3V
6 18.6mV	6 13.9mV	6 4.5mV	6 6mV	6 6.1mV	6 6.3mV	6 6.3mV	6 6.3mV	6 6.4mV
7 19.2mV	7 14.2mV	7 4.5mV	7 7mV	7 6.5mV	7 6.5mV	7 6.4mV	7 7mV	7 6.3mV
8 15.1mV	8 58.3mV	8 4mV	8 7.6mV	8 6mV	8 5.9mV	8 6.4mV	8 6.9mV	8 6.1mV
9 NC	9 NC	9 NC	9 NC	9 NC	9 15.3V	9 NC	9 15.3V	9 15.3V

IC303		IC304	
1	15.3V	1	15.4V
2	4.7mV	2	7.4mV
3	6.6mV	3	7.5mV
4	6.5mV	4	6.9mV
5	-15.3V	5	-15.3V
6	6.5mV	6	6.6mV
7	6.5mV	7	7.5mV
8	7.5mV	8	6.1mV
9	NC	9	NC

	E	C	B		E	C	B
Q701	1.5mV	33.33V	1.6mV	Q901	14.4V	14.34V	1.6V
Q702	33.33V	1.6mV	33.2V	Q902	1.6mV	25.3mV	13.6V
Q703	1.6mV	33.2V	1.6mV	Q903	1.6mV	5.6mV	4.94V
Q801	6.4V	9.56mV	6.39V	Q904	14.34V	1.6mV	14.3V
Q802	14.4V	-7.53V	14.4V	Q905	5.6mV	14.34V	0.31V
Q803	8.6mV	14.4V	8.6mV	Q906	1.6mV	14.34V	1.6mV
Q804	1.6mV	5.6mV	0.56mV				

(● Model Only)

IC101	IC102	IC301	IC302	IC303	IC304
1 15.3v	1 15.2v	1 NC	1 NC	1 15.3v	1 15.3v
2 11.5mV	2 53.5mV	2 5.5mV	2 6.7mV	2 4.3mV	2 7.5mV
3 10.5mV	3 12.6mV	3 5.4mV	3 6.2mV	3 6.3mV	3 7.2mV
4 10.7mV	4 18.3mV	4 5.8mV	4 5.5mV	4 6.2mV	4 6.5mV
5 -15.3V	5 -15.3v	5 -15.2V	5 -15.2V	5 -15.2V	5 -15.2v
6 17.8mV	6 14.2mV	6 6.5mV	6 6.7mV	6 6.4mV	6 6.7mV
7 18.9mV	7 15.2mV	7 6.8mV	7 6.5mV	7 6.7mV	7 6.5mV
8 15.6mV	8 72.5mV	8 6.1mV	8 6.4mV	8 6.3mV	8 7.1mV
9 NC	9 NC	9 15.2V	9 15.2V	9 NC	9 NC

	E	C	B		E	C	B
Q701	1.7mV	33.35V	1.8mV	Q901	14.4V	14.25V	13.8V
Q702	33.35V	1.8mV	33.25V	Q902	1.8mV	23.7mV	2.55V
Q703	1.8mV	33.35V	1.8mV	Q903	1.8mV	5.8mV	5.05V
Q801	6.45V	9.67mV	6.42V	Q904	14.25V	1.8mV	15.7mV
Q802	14.4V	-7.54V	14.4V	Q905	5.4mV	14.25V	0.35V
Q803	5.8mV	14.4V	8.3mV	Q906	1.8mV	14.25V	1.8mV
Q804	1.8mV	5.3mV	0.63V				

[Measuring Conditions]

- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Meter
- Measuring Point Reference : Between Ground
- Measuring Conditions : No Signal Input

NOTE: ○ : For MRV-T505 (North American) Model Only,    △ : For MRV-T505 (General Foreign) Model Only,  
 □ : For MRV-T505 (Japanese) Model Only,    ● : For MRV-T501 Model Only,    Others : Common.

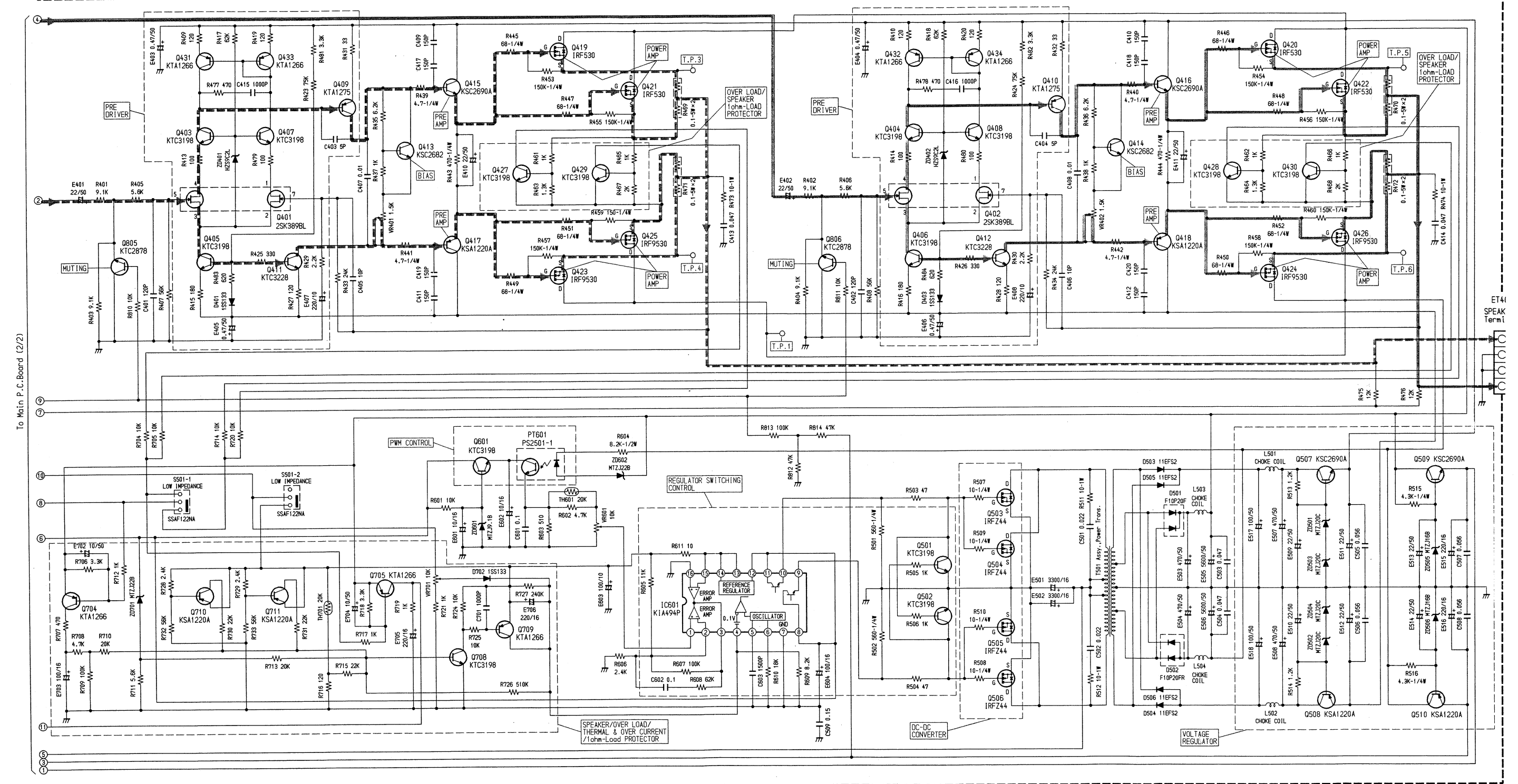
**NOTE:**

1. All resistance values are in ohms.  $K = 1,000$
2. All capacitance values are in microfarads.  $P = \frac{1}{1,000,000}$

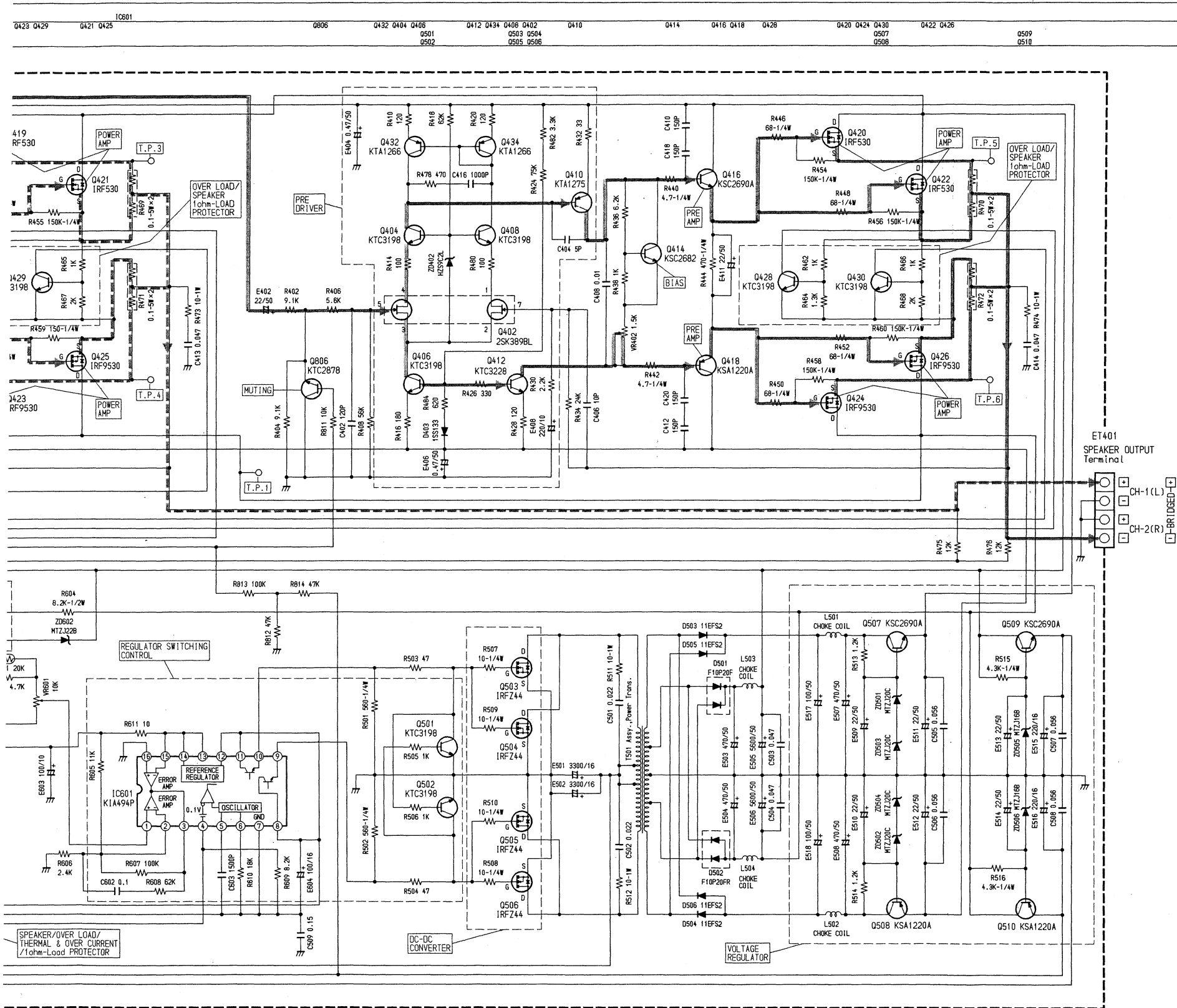
## Schematic Diagram (2/2)

IC	IC501																			
Transistor (Q,PT)	0805	Q431 Q403 Q405	Q411 Q433 Q407 Q401	Q409	Q413	Q415 Q417 Q501	Q427	PT601	Q419 Q423 Q429	Q421 Q425	Q805	Q432 Q404 Q406	Q412 Q434 Q408 Q402	Q410	Q414	Q416 Q418	Q428	Q420 Q424 Q430	Q422 Q426	Q509 Q510
	Q704	Q710	Q711	Q705		Q708	Q709					Q501 Q502	Q503 Q504 Q505 Q506					Q507 Q508		

Main P.C.Board (2/2)



ET41  
SPEAK  
Topic:



## (○△ Model Only)

## IC601

1	0.93V	9	0.65V
2	0.93V	10	0.65V
3	3.64V	11	14.34V
4	0.16V	12	14.34V
5	1.56V	13	4.96V
6	3.68V	14	4.96V
7	2mV	15	4.96V
8	14.3V	16	1.6mV

	E	C	B		E	C	B		E	C	B
Q403	9.23V	38.77V	9.83V	Q416	3.87V	39.46V	4.37V	Q507	39.16V	43.93V	39.78V
Q404	9.21V	38.78V	9.82V	Q417	-3.11V	-39.4V	-3.66V	Q508	-39.6V	-44.1V	-40.1V
Q405	-39.1V	0.49V	-38.5V	Q418	-3.45V	-39.4V	-3.97V	Q509	15.3V	33.76V	15.92V
Q406	-39.1V	0.53V	-38.5V	Q427	6.1mV	3.8mV	6.7mV	Q510	-15.4V	-33.9V	-15.9V
Q407	9.23V	38.7V	9.83V	Q428	3.3mV	1.2mV	2.2mV	Q601	8.13V	14.33V	8.8V
Q408	9.21V	38.7V	9.82V	Q429	6.2mV	33.9V	6.7mV	Q704	33.6V	23.1mV	33.5V
Q409	39.3V	3.85V	38.8V	Q430	3.4mV	33.6V	2.2mV	Q705	33.49V	0.5V	33.49V
Q410	39.31V	4.37V	38.7V	Q431	38.5V	38.7V	39.19V	Q706	1.6mV	4.92V	27.5mV
Q411	-39.1V	-3.58V	-38.5V	Q432	38.6V	38.6V	39.2V	Q709	4.92V	0.18V	4.92V
Q412	-39.1V	-3.91V	-38.5V	Q433	38.6V	38.6V	39.22V	Q710	4.92V	28.1mV	4.71V
Q413	-0.81V	3.86V	-0.19V	Q434	38.6V	38.6V	39.3V	Q711	4.92V	27.9mV	4.71V
Q414	-0.13V	4.38V	0.46V	Q501	1.5V	0.61V	0.6V	Q805	1.5mV	1.6mV	-7.5V
Q415	4.33V	39.46V	3.85V	Q502	1.5mV	0.58V	0.58V	Q806	1.5mV	1.6mV	-7.5V

	G	D	S		G	D	S
Q419	3.34V	33.8V	5mV	Q425	-3.09V	-33.7V	3.2mV
Q420	3.88V	33.78V	0.3mV	Q426	-3.42V	-33.7V	2.1mV
Q421	3.34V	33.78V	5mV	Q503	0.61V	14.4V	1.8mV
Q422	3.87V	33.76V	0.4mV	Q504	0.61V	14.4V	1.8mV
Q423	-3.09V	-33.7V	3.5mV	Q505	0.58V	14.4V	1.5mV
Q424	-3.42V	-33.7V	1.8mV	Q506	0.58V	14.4V	1.5mV

	1	2	3	4	5	6	7
Q401	9.1V	0.5V	0.5V	9.1V	5.5mV	—	4.2mV
Q402	9.08V	0.52V	0.52V	9.08V	5.5mV	—	-0.8mV

## (● Model Only)

## IC601

1	0.95V	9	0.63V
2	0.93V	10	0.65V
3	3.45V	11	14.32V
4	0.15V	12	14.32V
5	1.45V	13	5.06V
6	3.73V	14	5.06V
7	1.8mV	15	5.06V
8	14.3V	16	1.8mV

	E	C	B		E	C	B		E	C	B
Q403	9.23V	38.77V	9.83V	Q416	3.87V	39.46V	4.37V	Q507	39.16V	43.93V	39.78V
Q404	9.21V	38.78V	9.82V	Q417	-3.11V	-39.4V	-3.66V	Q508	-39.6V	-44.1V	-40.1V
Q405	-39.1V	0.49V	-38.5V	Q418	-3.45V	-39.4V	-3.97V	Q509	15.3V	33.76V	15.92V
Q406	-39.1V	0.53V	-38.5V	Q427	6.1mV	3.8mV	6.7mV	Q510	-15.4V	-33.9V	-15.9V
Q407	9.23V	38.7V	9.83V	Q428	3.3mV	1.2mV	2.2mV	Q601	8.13V	14.33V	8.8V
Q408	9.21V	38.7V	9.82V	Q429	6.2mV	33.9V	6.7mV	Q704	33.6V	23.1mV	33.5V
Q409	39.3V	3.85V	38.8V	Q430	3.4mV	33.6V	2.2mV	Q705	33.49V	0.5V	33.49V
Q410	39.31V	4.37V	38.7V	Q431	38.5V	38.7V	39.19V	Q706	1.6mV	4.92V	27.5mV
Q411	-39.1V	-3.58V	-38.5V	Q432	38.6V	38.6V	39.2V	Q709	4.92V	0.18V	4.92V
Q412	-39.1V	-3.91V	-38.5V	Q433	38.6V	38.6V	39.22V	Q710	4.92V	28.1mV	4.71V
Q413	-0.81V	3.86V	-0.19V	Q434	38.6V	38.6V	39.3V	Q711	4.92V	27.9mV	4.71V
Q414	-0.13V	4.38V	0.46V	Q501	1.5V	0.61V	0.6V	Q805	1.5mV	1.6mV	-7.5V
Q415	4.33V	39.46V	3.85V	Q502	1.5mV	0.58V	0.58V	Q806	1.5mV	1.6mV	-7.5V

	G	D	S		G	D	S
Q419	3.46V	33.85V	5.6mV	Q425	-3.12V	-33.8V	3.5mV
Q420	3.75V	33.81V	0.5mV	Q426	-3.47V	-33.8V	2.4mV
Q421	3.46V	33.73V	5.6mV	Q503	0.63V	14.4V	1.7mV
Q422	3.75V	33.73V	0.5mV	Q504	0.63V	14.4V	1.7mV
Q423	-3.12V	-33.8V	3.8mV	Q505	0.55V	14.4V	1.7mV
Q424	-3.45V	-33.8V	1.8mV	Q506	0.55V	14.4V	1.7mV

	1	2	3	4	5	6	7
Q401	9.3V	0.53V	0.55V	9.3V	6.8mV	—	4.5mV
Q402	9.2V	0.55V	0.57V	9.15V	6.8mV	—	-0.9mV

## [Measuring Conditions]

- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Meter
- Measuring Point Reference : Between Ground
- Measuring Conditions : No Signal Input

NOTE: ○: For MRV-T505 (North American) Model Only, △: For MRV-T505 (General Foreign) Model Only,  
□: For MRV-T505 (Japanese) Model Only, ●: For MRV-T501 Model Only, Others : Common.

## NOTE:

- All resistance values are in ohms. K = 1,000
- All capacitance values are in microfarads. P =  $\frac{1}{1,000,000}$

# Electrical Parts List

Resistor : Carbon resistors under 1/4 watts are not mentioned in the parts list, please confirm them by schematic diagram.

Capacitor :  $\mu$ F=microfarads, pF=picofarads

Abbreviations			
RES.= Resistor		CAP.= Capacitor	
C.F.= Carbon Film		ELY.= Electrolytic	
M.F.= Metal Film		CER.= Ceramic	
M.O.= Metal Oxide Film		MYL.= Mylar	
M.P.= Metal Plate		TAN.= Tantalum	
TR. = Transistor		POLY.= Polystyrol	
TRANS.= Transformer		PP. = Polypropylene	
CP. = Chip		PLT.= Polyethylene	
		PF. = Polyester Film	
Symbol No.	Part No.	Description	
Main P.C.Board			
IC's			
○	IC101	51E22137S01	μPC4570HA
△	IC102	51E22137S01	μPC4570HA
□	IC201	51E22137S01	μPC4570HA
○	IC201	51E22137S01	μPC4570HA
△	IC201	51E22137S01	μPC4570HA
□	IC202	51E22137S01	μPC4570HA
○	IC202	51E22137S01	μPC4570HA
△	IC202	51E22137S01	μPC4570HA
□	IC202	51E22137S01	μPC4570HA
○	IC203	51E22137S01	μPC4570HA
△	IC203	51E22137S01	μPC4570HA
□	IC203	51E22137S01	μPC4570HA
○	IC204	51E22137S01	μPC4570HA
△	IC204	51E22137S01	μPC4570HA
□	IC204	51E22137S01	μPC4570HA
○	IC204	51E22137S01	μPC4570HA
△	IC205	51E22137S01	μPC4570HA
□	IC205	51E22137S01	μPC4570HW
○	IC301	51E22137S01	μPC4570HA
△	IC302	51E22137S01	μPC4570HA
□	IC303	51E22137S01	μPC4570HA
○	IC304	51E22137S01	μPC4570HA
△	IC601	51E20883S01	KIA494P
Transistors / FET's			
○	Q401	48T61719F01	FET, 2SK389BL
△	Q402	48T61719F01	FET, 2SK389BL
□	Q403	48E09088S01	KTC3198
○	Q404	48E09088S01	KTC3198
△	Q405	48E09088S01	KTC3198
□	Q406	48E09088S01	KTC3198
○	Q407	48E09088S01	KTC3198
△	Q408	48E09088S01	KTC3198
□	Q409	48E23700S01	KTA1275

Symbol No.	Part No.	Description
Q410	48E23700S01	KTA1275
Q411	48E23701S01	KTC3228
Q412	48E23701S01	KTC3228
Q413	48E08329S01	KSC2682
Q414	48E08329S01	KSC2682
Q415	48E10027S01	KSC2690A
Q416	48E10027S01	KSC2690A
Q417	48E05943S01	KSA1220A
Q418	48E05943S01	KSA1220A
Q419	48E25499S01	FET, IRF530
Q420	48E25499S01	FET, IRF530
Q421	48E25499S01	FET, IRF530
Q422	48E25499S01	FET, IRF530
Q423	48E25500S01	FET, IRF9530
Q424	48E25500S01	FET, IRF9530
Q425	48E25500S01	FET, IRF9530
Q426	48E25500S01	FET, IRF9530
Q427	48E09088S01	KTC3198
Q428	48E09088S01	KTC3198
Q429	48E09088S01	KTC3198
Q430	48E09088S01	KTC3198
Q431	48E09036S02	KTA1266
Q432	48E09036S02	KTA1266
Q433	48E09036S02	KTA1266
Q434	48E09036S02	KTA1266
Q501	48E09088S01	KTC3198
Q502	48E09088S01	KTC3198
Q503	48E25311S01	FET, IRFZ44
Q504	48E25311S01	FET, IRFZ44
Q505	48E25311S01	FET, IRFZ44
Q506	48E25311S01	FET, IRFZ44
Q507	48E10027S01	KSC2690A
Q508	48E05943S01	KSA1220A
Q509	48E10027S01	KSC2690A
Q510	48E05943S01	KSA1220A
Q601	48E09088S01	KTC3198
Q701	48E09088S01	KTC3198
Q702	48E09036S02	KTA1266
Q703	48E09088S01	KTC3198
Q704	48E09036S02	KTA1266
Q705	48E09036S02	KTA1266
Q708	48E09088S01	KTC3198
Q709	48E09036S02	KTA1266
Q710	48E05943S01	KSA1220A
Q711	48E05943S01	KSA1220A
Q801	48E09036S02	KTA1266

NOTE: ○: For MRV-T505 (North American) Model Only, △: For MRV-T505 (General Foreign) Model Only, □: For MRV-T505 (Japanese) Model Only, ●: For MRV-T501 Model Only, Others: Common.

Symbol No.	Part No.	Description
Q802	48E10239S01	KRA104M
Q803	48E09035S02	KRC104M
Q804	48E09088S01	KTC3198
Q805	48E08335S01	KTC2878
Q806	48E08335S01	KTC2878
Q901	48E09036S02	KTA1266
Q902	48E25515S01	DTC143ES
Q903	48E09035S02	KRC104M
Q904	48E09036S02	KTA1266
Q905	48E09088S01	KTC3198
Q906	48E09035S02	KRC104M
<b>Photo Coupler</b>		
PT601	48E25501S01	PS2501-1
<b>Diodes</b>		
D401	48E22916S01	1SS133
D403	48E22916S01	1SS133
D501	48E22154S01	F10P20F
D502	48E22155S01	F10P20FR
D503	48E25517S01	11EFS2
D504	48E25517S01	11EFS2
D505	48E25517S01	11EFS2
D506	48E25517S01	11EFS2
D701	48E22916S01	1SS133
D702	48E22916S01	1SS133
D801	48E23703S01	1N4003
D802	48E22916S01	1SS133
D803	48E22916S01	1SS133
D804	48E22916S01	1SS133
D805	48E23703S01	1N4003
D901	48E23703S01	1N4003
ZD401	48T83128F26	Zener, HZS9C2L
ZD402	48T83128F26	Zener, HZS9C2L
ZD501	48E25518S01	Zener, MTZJ20C
ZD502	48E25518S01	Zener, MTZJ20C
ZD503	48E25518S01	Zener, MTZJ20C
ZD504	48E25518S01	Zener, MTZJ20C
ZD505	48E22436S01	Zener, MTZJ16B
ZD506	48E22436S01	Zener, MTZJ16B
ZD601	48E22162S01	Zener, MTZJ9.1B
ZD602	48E08332S01	Zener, MTZJ22B
ZD701	48E08332S01	Zener, MTZJ22B
ZD801	48E22917S01	Zener, MTZJ6.8A

Symbol No.	Part No.	Description
<b>Coils</b>		
L501	24E25516S01	Choke
L502	24E25516S01	Choke
L503	25E20892S01	Choke
L504	25E20892S01	Choke
<b>Switches</b>		
○ S101	40E23679S01	Slide, SSAF122NA (INPUT LEVEL)
△ S201	40E23679S01	Slide, SSAF122NA (PARAM)
□ S201	40E23679S01	Slide, SSAF122NA (PARAM)
□ S201	40E23679S01	Slide, SSAF122NA (PARAM)
S301	40E20895S01	Slide, SSAF123NA (FILTER)
S302	40E20895S01	Slide, SSAF123NA (INPUT MODE)
S303	40T94668F06	Slide, SSSF142 (PHASE)
S501	40E23679S01	Slide, SSAF122NA (LOW IMPEDANCE)
<b>Termistors</b>		
TH601	48E20887S01	20K ohm
TH701	48E20887S01	20K ohm
<b>Transformers</b>		
T501	01E25503S01	Assy., Power Trans.
T901	25E20891S01	Choke Trans.
<b>Capacitors</b>		
C101	08E23598S01	CP., 100pF
E101	23E08383S08	ELY., 10μF / 16V
C102	08E23598S01	CP., 100pF
E102	23E08383S08	ELY., 10μF / 16V
C103	08E23581S01	CP., 33pF
E103	23E08383S16	ELY., 4.7μF / 50V
C104	08E23581S01	CP., 33pF
E104	23E08383S16	ELY., 4.7μF / 50V
C105	08E25511S01	CP., 33pF
E105	23E20208S01	ELY., 47μF / 16V
C106	08E25511S01	CP., 33pF
E106	23E20208S01	ELY., 47μF / 16V
C107	08E23745S01	CP., 10pF
C108	08E23745S01	CP., 10pF
○ C201	08E23598S01	CP., 100pF
△ C201	08E23598S01	CP., 100pF

NOTE: ○: For MRV-T505 (North American) Model Only, △: For MRV-T505 (General Foreign) Model Only,  
□: For MRV-T505 (Japanese) Model Only, ●: For MRV-T501 Model Only, Others: Common.

Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
□ C201	08E23598S01	CP., 100pF	C402	08E25509S01	CP., 120pF
○ E201	23E08383S08	ELY., 10μF / 16V	E402	23E08383S12	ELY., 22μF / 50V
△ E201	23E08383S08	ELY., 10μF / 16V	C403	08E23744S01	CP., 5pF
□ E201	23E08383S08	ELY., 10μF / 16V	E403	23E08383S10	ELY., 0.47μF / 50V
○ C202	08E23598S01	CP., 100pF	C404	08E23744S01	CP., 5pF
△ C202	08E23598S01	CP., 100pF	E404	23E08383S10	ELY., 0.47μF / 50V
□ C202	08E23598S01	CP., 100pF	C405	08E08423S03	CP., 10pF
○ E202	23E08383S08	ELY., 10μF / 16V	E405	23E08383S10	ELY., 0.47μF / 50V
△ E202	23E08383S08	ELY., 10μF / 16V	C406	08E08423S03	CP., 10pF
□ E202	23E08383S08	ELY., 10μF / 16V	E406	23E08383S10	ELY., 0.47μF / 50V
○ C203	08E23598S01	CP., 100pF	C407	08E20216S01	MYL., 0.01μF
△ C203	08E23598S01	CP., 100pF	E407	23E08383S03	ELY., 220μF / 10V
□ C203	08E23598S01	CP., 100pF	C408	08E20216S01	MYL., 0.01μF
○ C204	08E23598S01	CP., 100pF	E408	23E08383S03	ELY., 220μF / 10V
△ C204	08E23598S01	CP., 100pF	C409	08E25510S01	CP., 150pF
□ C204	08E23598S01	CP., 100pF	C410	08E25510S01	CP., 150pF
○ C205	08E07631S11	MYL., 0.15μF	E410	23E08383S12	ELY., 22μF / 50V
△ C205	08E07631S11	MYL., 0.15μF	C411	08E25510S01	CP., 150pF
□ C205	08E07631S11	MYL., 0.15μF	E411	23E08383S12	ELY., 22μF / 50V
○ E205	23E08383S08	ELY., 10μF / 16V	C412	08E25510S01	CP., 150pF
△ E205	23E08383S08	ELY., 10μF / 16V	C413	08E07631S18	MYL., 0.047μF
□ E205	23E08383S08	ELY., 10μF / 16V	C414	08E07631S18	MYL., 0.047μF
○ C206	08E07631S11	MYL., 0.15μF	C415	08E10252S01	CP., 1000pF
△ C206	08E07631S11	MYL., 0.15μF	C416	08E10252S01	CP., 1000pF
□ C206	08E07631S11	MYL., 0.15μF	C417	08E25510S01	CP., 150pF
○ E206	23E08383S08	ELY., 10μF / 16V	C418	08E25510S01	CP., 150pF
△ E206	23E08383S08	ELY., 10μF / 16V	C419	08E25510S01	CP., 150pF
□ E206	23E08383S08	ELY., 10μF / 16V	C420	08E25510S01	CP., 150pF
○ C207	08E07631S11	MYL., 0.15μF	C501	08E07631S10	MYL., 0.022μF
△ C207	08E07631S11	MYL., 0.15μF	E501	23T75491W14	ELY., 3300μF / 16V
□ C207	08E07631S11	MYL., 0.15μF	C502	08E07631S10	MYL., 0.022μF
○ C208	08E07631S11	MYL., 0.15μF	E502	23T75491W14	ELY., 3300μF / 16V
△ C208	08E07631S11	MYL., 0.15μF	C503	08E07631S18	MYL., 0.047μF
□ C208	08E07631S11	MYL., 0.15μF	E503	23E22148S01	ELY., 470μF / 50V
C301	08E23598S01	CP., 100pF	C504	08E07631S18	MYL., 0.047μF
C302	08E23598S01	CP., 100pF	E504	23E22148S01	ELY., 470μF / 50V
C303	08E07631S11	MYL., 0.15μF	C505	08E20913S01	MYL., 0.056μF
E303	23E08383S12	ELY., 22μF / 50V	E505	23T95403W01	ELY., 5600μF / 50V
C304	08E07631S11	MYL., 0.15μF	C506	08E20913S01	MYL., 0.056μF
E304	23E08383S12	ELY., 22μF / 50V	E506	23T95403W01	ELY., 5600μF / 50V
C305	08E07631S11	MYL., 0.15μF	C507	08E20913S01	MYL., 0.056μF
E305	23E08383S16	ELY., 4.7μF / 50V	E507	23E22148S01	ELY., 470μF / 50V
C306	08E07631S11	MYL., 0.15μF	C508	08E20913S01	MYL., 0.056μF
E306	23E08383S16	ELY., 4.7μF / 50V	E508	23E22148S01	ELY., 470μF / 50V
C307	08E08423S03	CP., 10pF	C509	08E07631S11	MYL., 0.15μF
C308	08E23581S01	CP., 33pF	E509	23E08383S12	ELY., 22μF / 50V
C309	08E08423S03	CP., 10pF	E510	23E08383S12	ELY., 22μF / 50V
C401	08E25509S01	CP., 120pF	E511	23E08383S12	ELY., 22μF / 50V
E401	23E08383S12	ELY., 22μF / 50V	E512	23E08383S12	ELY., 22μF / 50V

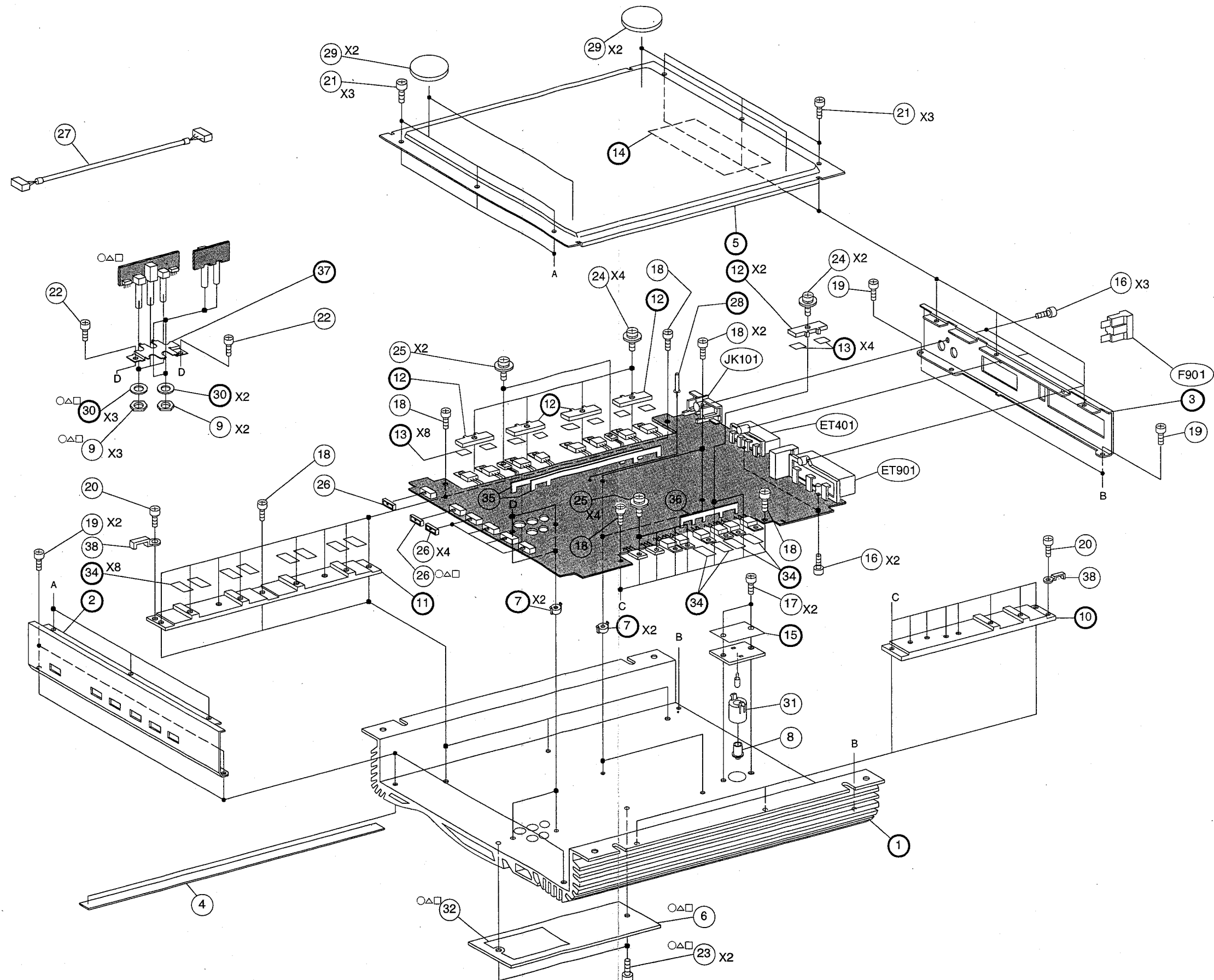
NOTE: ○: For MRV-T505 (North American) Model Only, △: For MRV-T505 (General Foreign) Model Only,  
□: For MRV-T505 (Japanese) Model Only, ●: For MRV-T501 Model Only, Others: Common.

Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
E513	23E08383S12	ELY., 22 $\mu$ F / 50V	R605	06E22112S01	11K ohm
E514	23E08383S12	ELY., 22 $\mu$ F / 50V	R606	06E22924S01	2.4K ohm
E515	23E20210S01	ELY., 220 $\mu$ F / 16V	R607	06E22065S01	100K ohm
E516	23E20210S01	ELY., 220 $\mu$ F / 16V	R608	06E25508S01	62K ohm 1/8W
E517	23E22147S01	ELY., 100 $\mu$ F / 50V	R609	06E22057S01	8.2K ohm
E518	23E22147S01	ELY., 100 $\mu$ F / 50V	R610	06E22059S01	18K ohm
C601	08E07631S08	MYL., 0.1 $\mu$ F	R611	06E25506S01	10 ohm 1/8W
E601	23E08383S08	ELY., 10 $\mu$ F / 16V	R701	06E22048S01	1K ohm
C602	08E07631S08	MYL., 0.1 $\mu$ F	R702	06E22048S01	1K ohm
E602	23E08383S08	ELY., 10 $\mu$ F / 16V	R703	06E22048S01	1K ohm
C603	08E25318S01	TF, 1500pF	R704	06E20903S01	10K ohm
E603	23E20849S01	ELY., 100 $\mu$ F / 10V	R705	06E20903S01	10K ohm
E604	23E10238S01	ELY., 100 $\mu$ F / 16V	R706	06E22053S01	3.3K ohm
C701	08E22081S01	CP., 1000pF	R707	06E22505S01	470 ohm
E702	23E22158S01	ELY., 10 $\mu$ F / 50V	R708	06E22055S01	4.7K ohm
E703	23E10238S01	ELY., 100 $\mu$ F / 16V	R709	06E22065S01	100K ohm
E704	23E22158S01	ELY., 10 $\mu$ F / 50V	R710	06E22508S01	20K ohm
E705	23E20210S01	ELY., 220 $\mu$ F / 16V	R711	06E22111S01	5.6K ohm
E706	23E20210S01	ELY., 220 $\mu$ F / 16V	R712	06E22030S01	1K ohm 1/8W
C799	23E11142S01	ELY., (B.P) 100 $\mu$ F / 10V	R713	06E22508S01	20K ohm
E801	23E20210S01	ELY., 220 $\mu$ F / 16V	R714	06E20903S01	10K ohm
E802	23E08383S08	ELY., 10 $\mu$ F / 16V	R715	06E22060S01	22K ohm
E803	23E08383S08	ELY., 10 $\mu$ F / 16V	R716	06E25507S01	120 ohm 1/8W
C901	08E07631S11	MYL., 0.15 $\mu$ F	R717	06E22030S01	1K ohm 1/8W
E901	23E20908S01	ELY., 3.3 $\mu$ F / 50V	R718	06E22053S01	3.3K ohm
C902	08E22081S01	CP., 1000pF	R719	06E22048S01	1K ohm
C903	08E22510S01	CP., 180pF	R720	06E20903S01	10K ohm
(All resistors are chip 1/10W $\pm$ 5% unless otherwise noted.)			R721	06E22048S01	1K ohm
Resistors			R724	06E20903S01	10K ohm
R469	06E22136S01	Cement, 0.1 ohm 5W X2	R725	06E20903S01	10K ohm
R470	06E22136S01	Cement, 0.1 ohm 5W X2	R726	06E23692S01	510K ohm
R471	06E22136S01	Cement, 0.1 ohm 5W X2	R727	06E23743S01	240K ohm
R472	06E22136S01	Cement, 0.1 ohm 5W X2	R728	06E22968S01	2.4K ohm 1/8W
R473	06E20907S01	M.O., 10 ohm 1W	R729	06E22968S01	2.4K ohm 1/8W
R474	06E20907S01	M.O., 10 ohm 1W	R730	06E22036S01	22K ohm 1/8W
R475	06E22058S01	12K ohm	R731	06E22036S01	22K ohm 1/8W
R476	06E22058S01	12K ohm	R732	06E25388S01	56K ohm 1/8W
R503	06E23571S01	47 ohm	R733	06E25388S01	56K ohm 1/8W
R504	06E23571S01	47 ohm	R801	06E22058S01	12K ohm
R505	06E22048S01	1K ohm	R802	06E22065S01	100K ohm
R506	06E22048S01	1K ohm	R803	06E22055S01	4.7K ohm
R511	06E20907S01	M.O., 10 ohm 1W	R804	06E22065S01	100K ohm
R512	06E20907S01	M.O., 10 ohm 1W	R805	06E22545S01	2K ohm
R601	06E20903S01	10K ohm	R806	06E22065S01	100K ohm
R602	06E22055S01	4.7K ohm	R807	06E22545S01	2K ohm
R603	06E23857S01	510 ohm	R808	06E22068S01	1M ohm
R604	06E20933S01	M.O., 8.2K ohm 1/2W	R809	06E22547S01	680K ohm
			R901	06E20903S01	10K ohm
			R902	06E22506S01	3.6K ohm

Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
R903	06E22509S01	150K ohm	JK101	09E22143S01	RCA Connector (INPUT)
R904	06E22053S01	3.3K ohm			
R905	06E23694S01	2.7K ohm 1/4W			
R906	06E23689S01	7.5 ohm			
R907	06E22433S01	M.O., 560 ohm 1/2W			
R908	06E22055S01	4.7K ohm			
R909	06E22048S01	1K ohm			
R910	06E22036S01	22K ohm 1/8W			
R911	06E22055S01	4.7K ohm			
VR401	18E25512S01	Variable, 1.5K ohm			
VR402	18E25512S01	Variable, 1.5K ohm			
VR601	18E20754S01	Variable, 10K ohm			
VR701	18E20754S01	Variable, 10K ohm			
Volume (1) P.C.Board					
Resistors					
VR101	18E25496S01	Volume, 50K ohmX2 (GAIN)			
VR301	18E25495S01	Volume, 20K ohmX4 (CROSSOVER)			
Volume (2) P.C.Board (○△□)					
Resistors					
VR201	18E25497S01	Volume, 20K ohmX2 (Q-FACTOR)			
VR202	18E25495S01	Volume, 20K ohmX4 (FREQUENCY)			
VR203	18E25498S01	Volume, 20K ohmX2 (LEVEL)			
LED P.C.Board					
LED					
LD901	48E25502S01	YLOG-503M (GRN/ORG)			
Miscellaneous					
ET401	09E20896S01	SPEAKER OUTPUT Terminal			
ET901	09E20897S01	POWER SUPPLY Terminal			
F901	65E25308S01	Fuse, Auto 30A (For Battery Line)			

MEMO

## Exploded View (Cabinet)



# Cabinet Assembly Parts List

NOTE: No parts number on parts list are not supplied.

Symbol No.	Index	Part No.	Description	Symbol No.	Index	Part No.	Description
○ 4	5-C	15E25526S01	Cover, Plate				
△ 4	5-C	15E25526S01	Cover, Plate				
□ 4	5-C	15E25526S01	Cover, Plate				
● 4	5-C	15E25543S01	Cover, Plate				
○ 6	5-E	15E25590S01	Badge, (V12) EXPERT				
△ 6	5-E	15E25589S01	Badge, (V12) DC-STRAIGHT				
□ 6	5-E	15E25590S01	Badge, (V12) EXPERT				
8	4-E	61E25527S01	Lens, LED				
9	3-B	02E25528S01	Nut (M7)				
16		03E09416S09	Screw, TPG-TPT (M3X10)				
17	4-E	03E24424S01	Screw, TPG-TPT (M2.6X5)				
18		03E09417S06	Screw, TPG-TPT (M3X11)				
19		03E09417S08	Screw, TPG-TPT (M3X5)				
20		03E20920S01	Screw, TPG-TPT (M3X5)				
21		03E20921S01	Screw, MCH-TPT (M3X5)				
22		03E25522S01	Screw, TPG-TPT (M3X12)				
○ 23	5-E	03E25523S01	Screw, Hex. Socket (M2.6X10)				
△ 23	5-E	03E25523S01	Screw, Hex. Socket (M2.6X10)				
□ 23	5-E	03E25523S01	Screw, Hex. Socket (M2.6X10)				
24		03E20922S01	Screw, TPG-TPT (M3X11)				
25		03E20923S01	Screw, TPG-TPT (M3X9)				
26		15E11445S01	Cover, Switch				
27	2-B	01E25505S01	Assy., Shield Wire				
29		75E25536S01	Cushion, Sponge				
31	4-E	43E25538S01	Holder, LED				
○ 32	5-D	34E25539S01	Scale, Plate				
△ 32	5-D	34E25539S01	Scale, Plate				
□ 32	5-D	34E25539S01	Scale, Plate				
35	3-D	45E25493S01	Plate, Jump (E)				
36	3-E	64E23790S01	Plate, Jump				
38		29E22427S01	Lug, GND				

NOTE ○: For MRV-T505 (North American) Model Only, △: For MRV-T505 (General Foreign) Model Only,  
□: For MRV-T505 (Japanese) Model Only, ●: For MRV-T501 Model Only, Others: Common.