

# BOSS GL-100 GUITAR DRIVER

## SERVICE NOTES

First Edition

### SPECIFICATIONS

**INPUT**  
 Input Level (Rated) : -20dBm  
 Input Impedance : 1M  $\Omega$

**BUFFER OUT**  
 Output Level (Rated) : -20dBm  
 Output Load Impedance : More than 10k  $\Omega$

**SEND OUT**  
 Output Level (Rated) : -20dBm  
 Output Load Impedance : More than 10k  $\Omega$

**RETURN L/R**  
 Input Level (Rated) : -20dBm  
 Input Impedance : 47k  $\Omega$

**MONITOR OUTPUT L/R**  
 Output Level (Rated) : +4dBm  
 Output Load Impedance : More than 10k  $\Omega$

**OUTPUT L/R**  
 Output Level (Rated) : -10dBm  
 Output Load Impedance : More than 50k  $\Omega$

**BALANCE OUTPUT L/R**  
 Output Level (Rated) : +4dBm  
 Output Load Impedance : 600  $\Omega$   
 1-GND (Earth)  
 2-COLD (Cold)  
 3-HOT (Hot)

**EQUALIZER**

**CH1**  
 Boost/Cut :  $\pm 20$ dB  
 Low : 100Hz (Shelving)  
 Low Mid : 100Hz to 1.6kHz (Peaking)  
 High Mid : 500Hz to 8kHz (Peaking)  
 High : 8kHz (Shelving)

**CH2**  
 Boost/Cut :  $\pm 20$ dB  
 Low : 100Hz (Shelving)  
 Mid : 250Hz to 4kHz (Peaking)  
 High : 8kHz (Shelving)

**POWER CONSUMPTION**  
 : AC 100,120,220or240V  
 : 10W

**DIMENSIONS**  
 : 480(W) x 233(D) x 44(H)mm  
 : 18-7/8(W) x 9-3/16(D) x 1-3/4(H)in.  
 : 2.6kg / 5 lb. 12 oz.

**WEIGHT**  
 : 2.6kg / 5 lb. 12 oz.

**ACCESSORY**  
 Angle (for rack mounting) x 2 (Part No.2212062000)

**Owner's Manual**  
 : English  
 : Japanese

**OPTIONS**  
 BOSS Foot Switch : FS-5L

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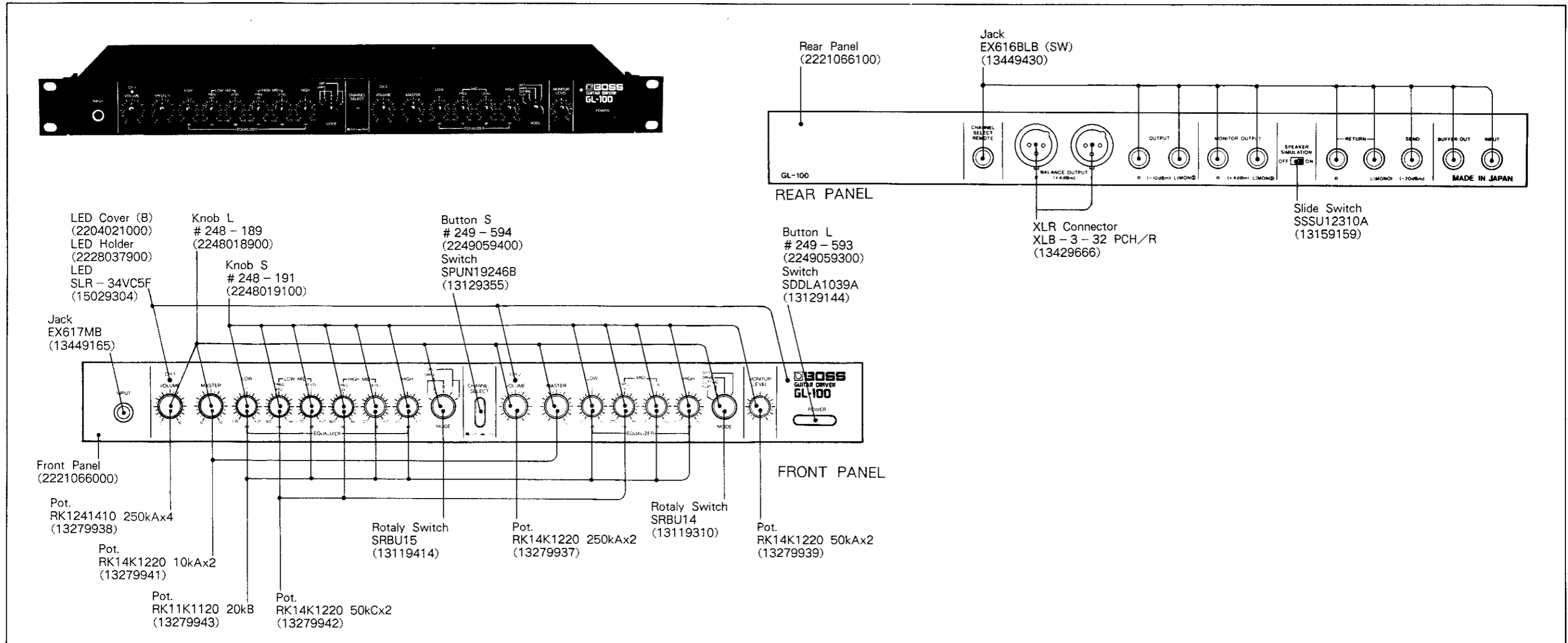
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 SW BOARD  
 LED 1 BOARD  
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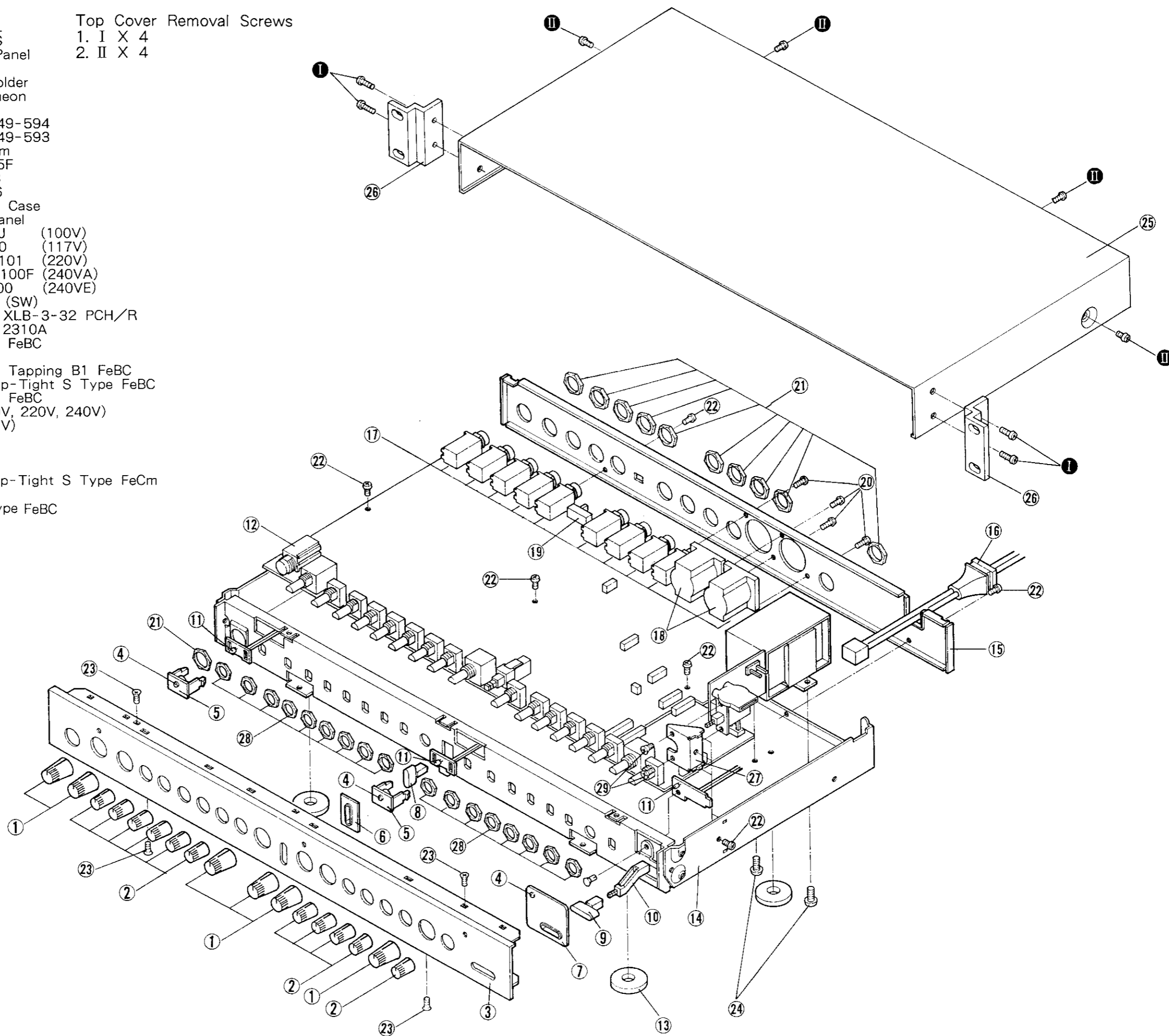
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EXPLODED VIEW 分解図

- |     |            |                                  |                          |
|-----|------------|----------------------------------|--------------------------|
| 1.  | 2248018900 | GL-100 Knob L                    | Top Cover Removal Screws |
| 2.  | 2248019100 | GL-100 Knob S                    | 1. I X 4                 |
| 3.  | 2221066000 | GL-100 Front Panel               | 2. II X 4                |
| 4.  | 2204021000 | LED Cover (B)                    |                          |
| 5.  | 2228037900 | GL-100 LED Holder                |                          |
| 6.  | 2222034500 | GL-100 Escutcheon                |                          |
| 7.  | 2222034300 | Escutcheon (R)                   |                          |
| 8.  | 2249059400 | Button (S) # 249-594             |                          |
| 9.  | 2249059300 | Button (L) # 249-593             |                          |
| 10. | 2214023700 | Switch Joint Arm                 |                          |
| 11. | 15029304   | LED SLR-34VC5F                   |                          |
| 12. | 13449165   | Jack EX617BMB                    |                          |
| 13. | 2235043600 | Base # 235-436                   |                          |
| 14. | 2201023300 | GL-100 Bottom Case               |                          |
| 15. | 2221066100 | GL-100 Rear Panel                |                          |
| 16. | 2349015300 | △ AC Cord DP-8J (100V)           |                          |
|     | 13499166   | △ AC Cord DP-70 (117V)           |                          |
|     | 13499165   | △ AC Cord DEP-101 (220V)         |                          |
|     | 13499164   | △ AC Cord DAP-100F (240VA)       |                          |
|     | 13499162   | △ AC Cord BS6500 (240VE)         |                          |
| 17. | 13449430   | Jack EX616BLB (SW)               |                          |
| 18. | 13429666   | XLR Connector XLB-3-32 PCH/R     |                          |
| 19. | 13159159   | Slide SW SSSU12310A              |                          |
| 20. |            | 3X6mm Binding FeBC               |                          |
| 21. |            | 12mm Nut                         |                          |
| 22. |            | 3X6mm Binding Tapping B1 FeBC    |                          |
| 23. |            | 3X6mm Flat Tap-Tight S Type FeBC |                          |
| 24. |            | 4X8mm Binding FeBC               |                          |
| 25. | 2202045200 | Top Cover (100V, 220V, 240V)     |                          |
|     | 2202045400 | Top Cover (117V)                 |                          |
| 26. | 2212062000 | Rack Angle                       |                          |
| 27. | 2220037400 | Switch Holder                    |                          |
| 28. |            | Volume Nut                       |                          |
| 29. |            | 3X6mm Flat Tap-Tight S Type FeCm |                          |

I. 3X10mm Binding Tap - Tight S Type FeBC  
 II. 3X6mm Binding Tapping B1 FeBC



# PARTS LIST

**SAFETY PRECAUTIONS:**  
*The parts marked  $\Delta$  have safety-related characteristics. Use only listed parts for replacement.*  
**安全上の注意:**  
 *$\Delta$ が付いている部品は、安全上特別な規格でつくられたものです。交換の際は、指定された部品番号以外の部品は使わないようにして下さい。*

**CONSIDERATIONS ON PARTS ORDERING**  
*When ordering any parts listed in the parts list, please specify the following items in the order sheet.*

QTY	PART NUMBER	DESCRIPTION	MODEL NUMBER
Ex. 10	22575241	Sharp Key	C-20/50
15	2247017300	Knob (orange)	DAC-15D

*Failure to completely fill the above items with correct number and description will result in delayed or even undelivered replacement.*

**パーツ発注に関するお願い**  
 オーダーシートには、必ず下記の4項目は正確に記入して下さい。(例外は除く)  
 例) 必要数 パーツナンバー 品名 使用機種  
 10 22575241 Sharp Key C-20/50  
 15 2247017300 Knob (orange) DAC-15D  
 もし記入漏れ、誤記等がある場合、必要部品が発送出来なかったり、大幅な遅れの原因になります。ご協力をお願いします。

**Cautionary points in returning a PCB when repair is impossible.**  
 When returning a PCB that cannot be repaired, first pack the PCB carefully and then clearly enter all necessary information in the sheet (see below) and always include it with the PCB.

**修理不可能で基板を返却する場合の注意点**  
 修理不可能で基板を返却する場合、必要事項(詳細は下記参照)を明記して、必ず対象の返却基板に添えて返却して下さい。又、その際基板は、丁寧に梱包して返却するようにして下さい。

**Necessary information**  
 必要事項

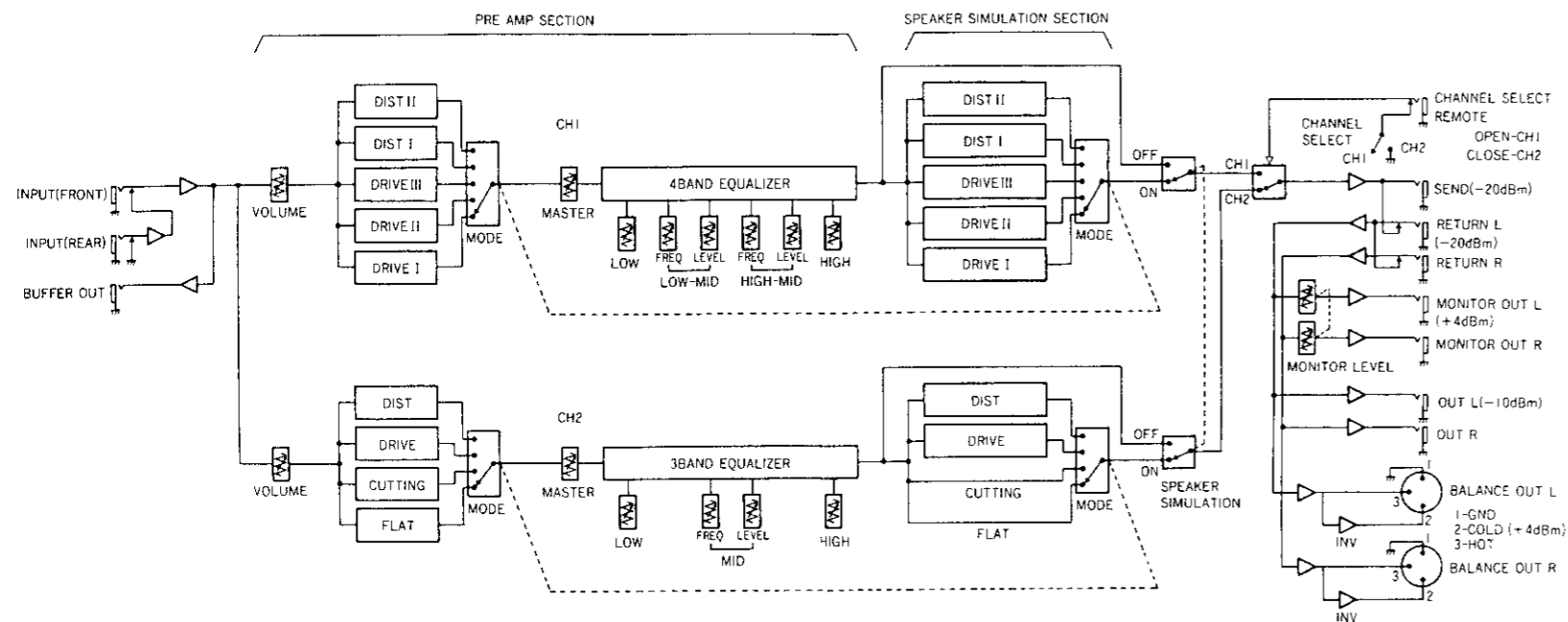
1. Company Name	2. Model	3. Serial Number	4. Symptom
サービス名	機種名	製造番号	症状

<b>CASING</b>	<b>ケース</b>		
2221066000	GL-100 Front Panel		
2221066100	GL-100 Rear Panel		
2201023300	GL-100 Bottom Case		
2202045200	TOP Cover	100V, 220V, 240V (GE-131 Compatible)	
2202045400	TOP Cover (117V)	117V	
2222034300	Escutcheon (R) # 222-343	POWER (GE-131 Compatible)	
2222034500	GL-100 Escutcheon # 222-345	CHANNEL SELECT	
2235043600	Base # 235-436	(GE-131 Compatible)	
<b>PCB ASSY</b>	<b>基板完成品</b>		
75113320	GL-100 MT Board Assy (pcb 2292079800)		
75113310	GL-100 SUB Board (pcb 2292079900)		
	SUB Board includes the following five Boards:		
	GL-100 POWER Board (pcb 2292079900)		
	GL-100 SW Board (pcb 2292079900)		
	GL-100 LED 1 Board Assy (pcb 2292079900)	POWER	
	GL-100 LED 2 Board Assy (pcb 2292079900)	CH 1	
	GL-100 LED 3 Board Assy (pcb 2292079900)	CH 2	
<b>KNOB, BUTTON</b>	<b>ツマミ、ボタン</b>		
2248018900	Rack Round Knob L # 248-189	Large	
2248019100	Rack Round Knob S # 248-191	Small	
2249059400	Button (S) # 249-594	CHANNEL SELECT (GE-131 Compatible)	
2249059300	Button (L) # 249-593	POWER (GE-131 Compatible)	
<b>SWITCH</b>	<b>スイッチ</b>		
13119310	SRBU14	CH2 MODE (SW3: Rotary)	
13119414	SRBU15	CH1 MODE (SW1: Rotary)	
13159159	SSSU12310A	SPEAKER SIMULATION (SW 4)	
13129355	SPUN19246B	CHANNEL SELECT (SW 2)	
$\Delta$ 13129144	SDDLA1039A	POWER (GE-131 Compatible)	
<b>JACK, SOCKET</b>	<b>ジャック、ソケット</b>		
13449430	EX616BLB (SW)	(GE-131 Compatible)	
13449165	EX617BMB	Front INPUT (J 1)	
13429666	XLB-3-32 PCH/R	XLR Connector (GE-131 Compatible)	
<b>POWER TRANSFORMER</b>	<b>電源トランス</b>		
$\Delta$ 22450582N0	GE-131 Transformer # 245-582	TYPE N	100V (GE-131 Compatible)
$\Delta$ 22450583C0	GE-131 Transformer # 245-583	TYPE C	117V (GE-131 Compatible)
$\Delta$ 22450584D0	GE-131 Transformer # 245-584	TYPE D	220V (GE-131 Compatible)
$\Delta$ 22450585A0	GE-131 Transformer # 245-585	TYPE A	240V (GE-131 Compatible)
<b>POTENTIOMETER</b>	<b>ボリューム</b>		
13279938	RK1241410 250kAx4	CH 1 VOLUME (VR 1)	
13279937	RK14K1220 250kAx2	CH 2 VOLUME (VR 9)	
13279942	RK14K1220 50kCx2	FREQUENCY (VR 4, 6, 12)	
13279941	RK14K1220 10kAx2	MASTER (VR 2, 10)	
13279939	RK14K1220 50kAx2	MONITOR (VR 15)	
13279943	RK11K1120 20kB	EQ LEVEL (VR 3, 5, 7, 8, 11, 13, 14)	

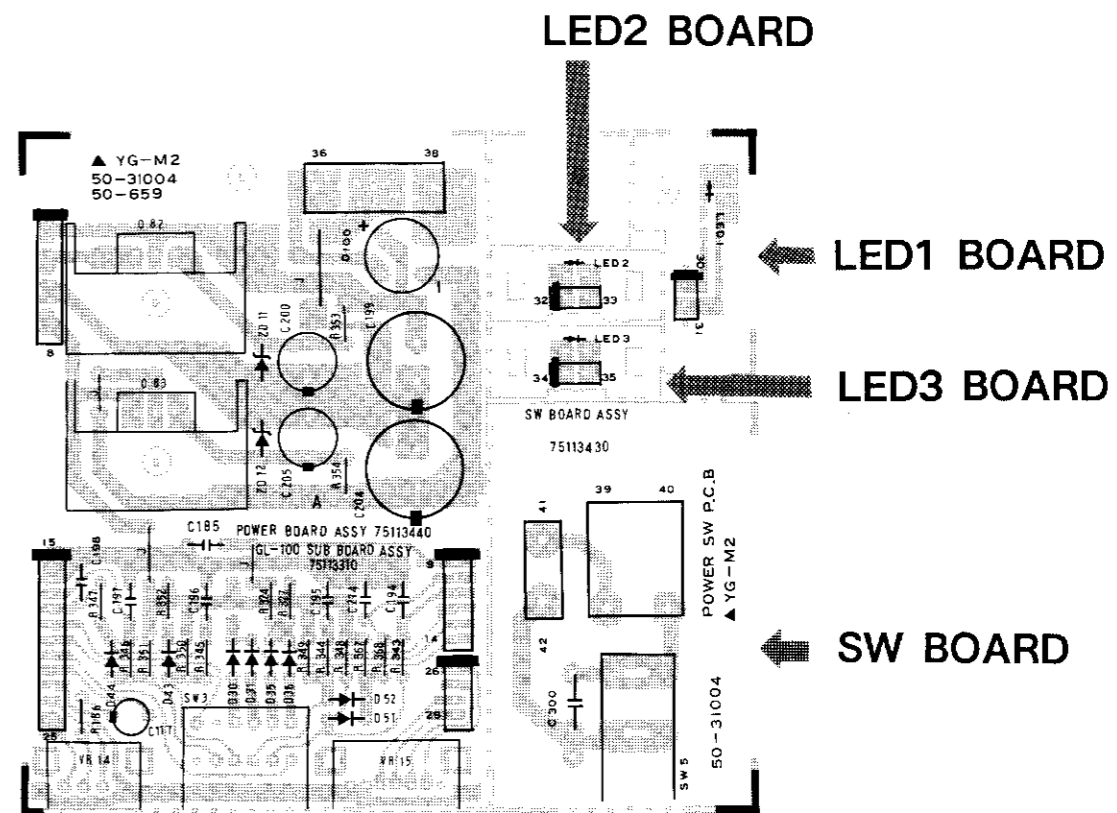
<b>TRANSISTOR</b>	<b>トランジスタ</b>		
$\Delta$ 15119717	2SB1094		
$\Delta$ 15129843	2SD1585		
$\Delta$ 15119602	2SB647C		
$\Delta$ 15129602	2SD667C		
15119106DR	2SA933R		
	or 15119149	2SA1048-GR	
15119111	2SA970GR		
	or 15119150	2SA1335-GR	
15129113	2SC1740R		
	or 15129185	2SC2458-GR	
15129120	2SC2240		
15129189	2SC3327A		
151391160Y	2SK118-Y		FET
15139131	2SK184-GR		FET
<b>IC</b>			
15189136	M5218L		OP Amp
<b>DIODE, LED</b>	<b>ダイオード、LED</b>		
$\Delta$ 15039103	W-02M	Rectifier bridge	
15019167	1SS131		
	or 15019125	1SS133	
15019336	MTZJ18A	zener	
15019334	MTZJ12C	zener	
15019335	MTZJ9.1C	zener	
15019333	MTZJ5.1C	zener	
15029304	SLR-34VC5F	LED	
<b>CAPACITOR</b>	<b>コンデンサ</b>		
$\Delta$ 13559358	0.01/400	Polypropylene (GE-131 Compatible 220V,240V)	
<b>AC CORD, CORD SET</b>	<b>ACコード</b>		
$\Delta$ 2349015300	AC Cord DP-8J	100V (GE-131 Compatible)	
$\Delta$ 13499166	AC Cord DP-70	117V (GE-131 Compatible)	
$\Delta$ 13499165	AC Cord DEP-101	220V (GE-131 Compatible)	
$\Delta$ 13499164	AC Cord DAP-100F	240A (GE-131 Compatible)	
$\Delta$ 13499163	DS 3PIN FUSED PLUG	240E (GE-131 Compatible)	
$\Delta$ 13499162	AC Cord BS6500	240E (GE-131 Compatible)	
<b>MISCELLANEOUS</b>	<b>その他</b>		
2228037900	GL-100 LED Holder		
2220037400	Switch Holder	(GE-131 Compatible)	
2214023700	Switch Joint Arm	(GE-131 Compatible)	
2204021000	LED Cover (B)	(GE-131 Compatible)	
12029885	Condenser Cover	(GE-131 Compatible)	
2246018100	Heat Sink	(GE-131 Compatible)	
<b>ACCESSORIES</b>	<b>付属品</b>		
2212062000	Rack Angle # 212-620		(GE-131 Compatible)
*****	Owner's Manual	English	
*****	Owner's Manual	Japanese	

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

**BLOCK DIAGRAM**



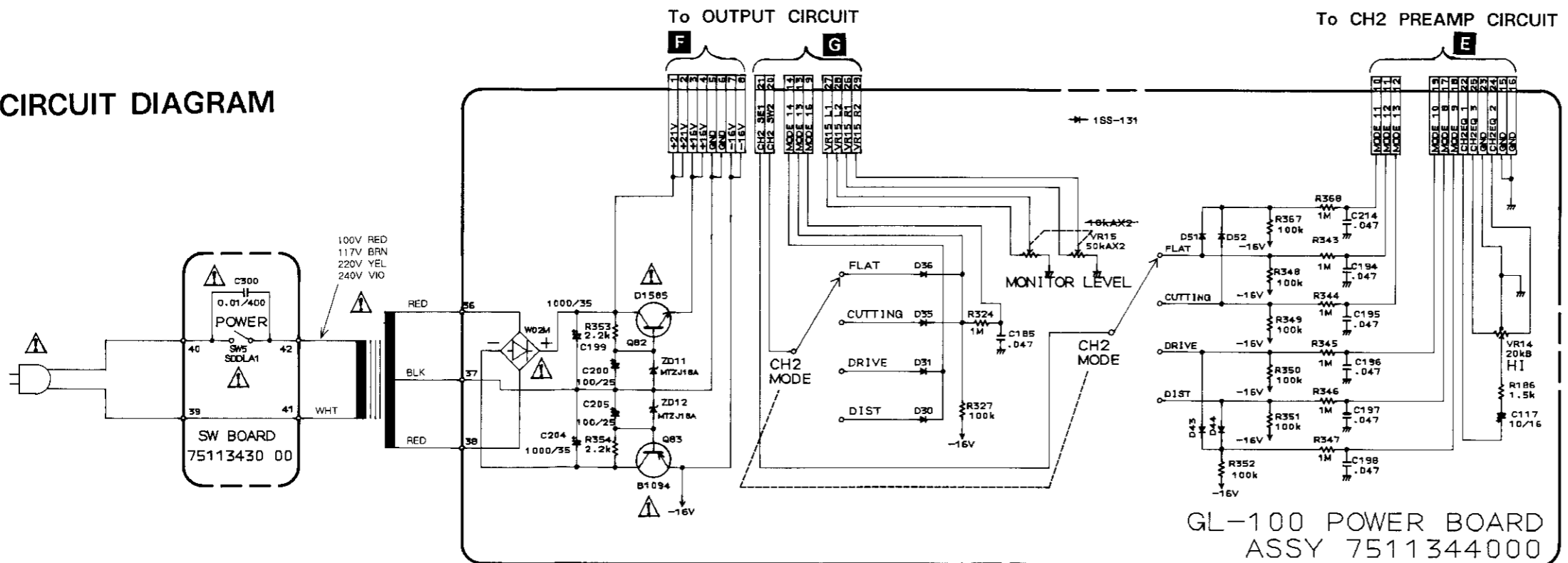
**SUB BOARD**  
ASSY 75113310  
(pcb 2292079900)



**POWER BOARD**

View from component side.

**CIRCUIT DIAGRAM**



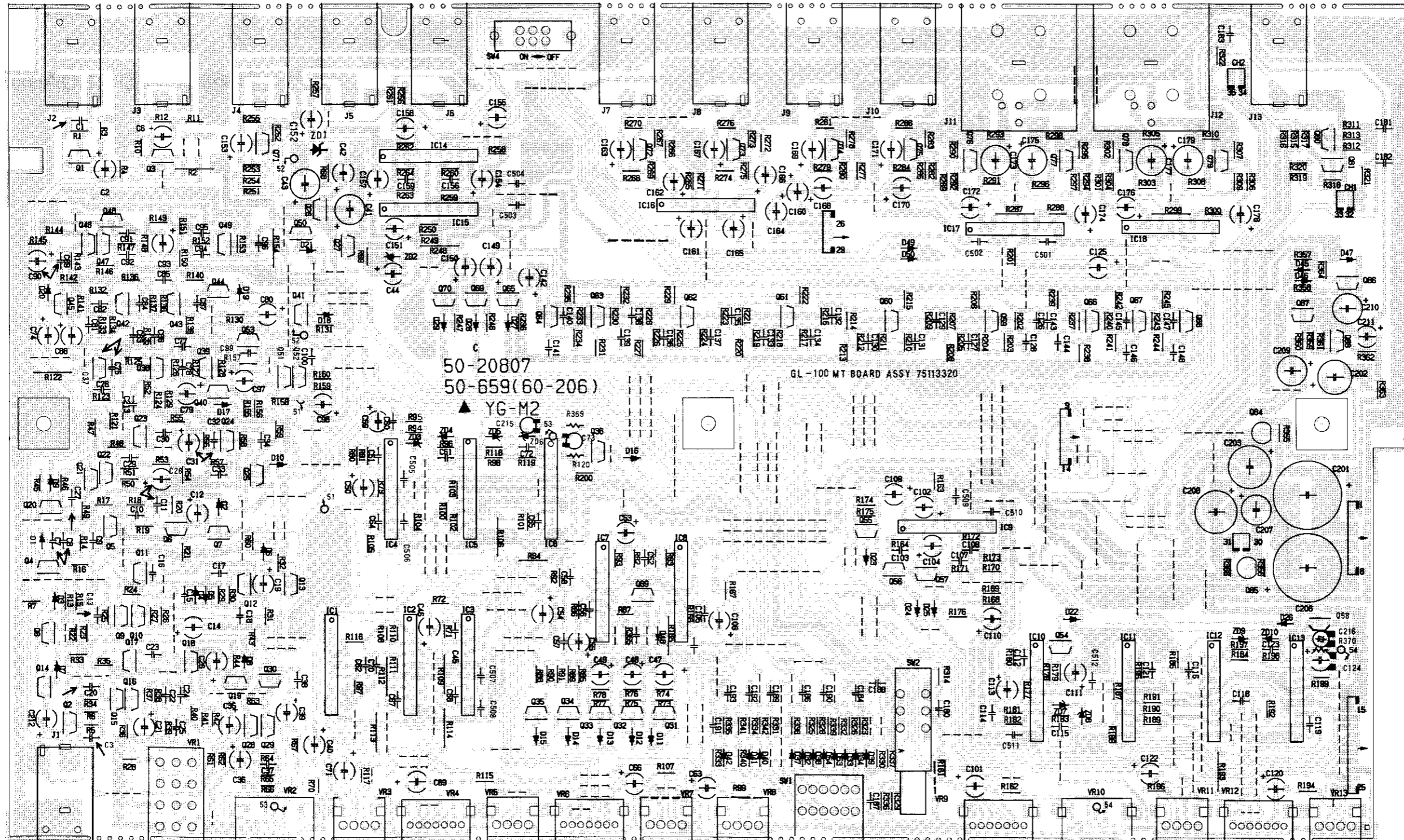
**GL-100 POWER BOARD**  
ASSY 7511344000

**REPLACEMENT** 補修用

SUB BOARD  
ASSY 75113310  
(pcb 2292079900)

Replacement SUB BOARD includes the following five Boards:  
補修用SUB基板には、次の基板が含まれます。  
POWER BOARD  
SW BOARD  
LED 1 BOARD  
LED 2 BOARD  
LED 3 BOARD

MT BOARD  
ASSY 75113320  
(pcb 2292079800)

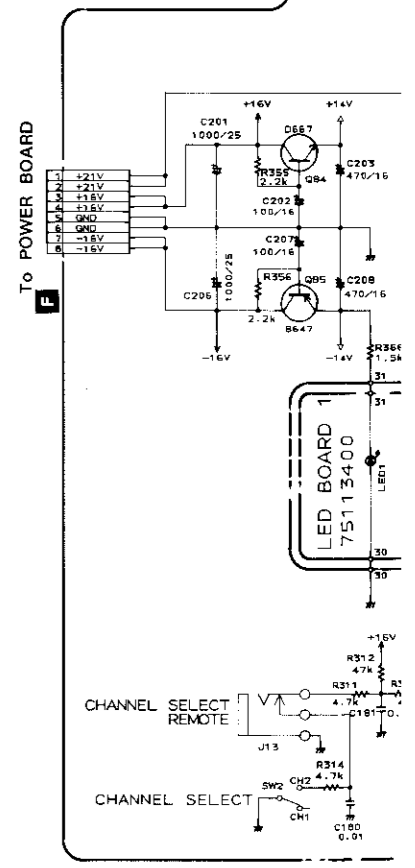


50-20807  
50-659(60-206)  
YG-M2

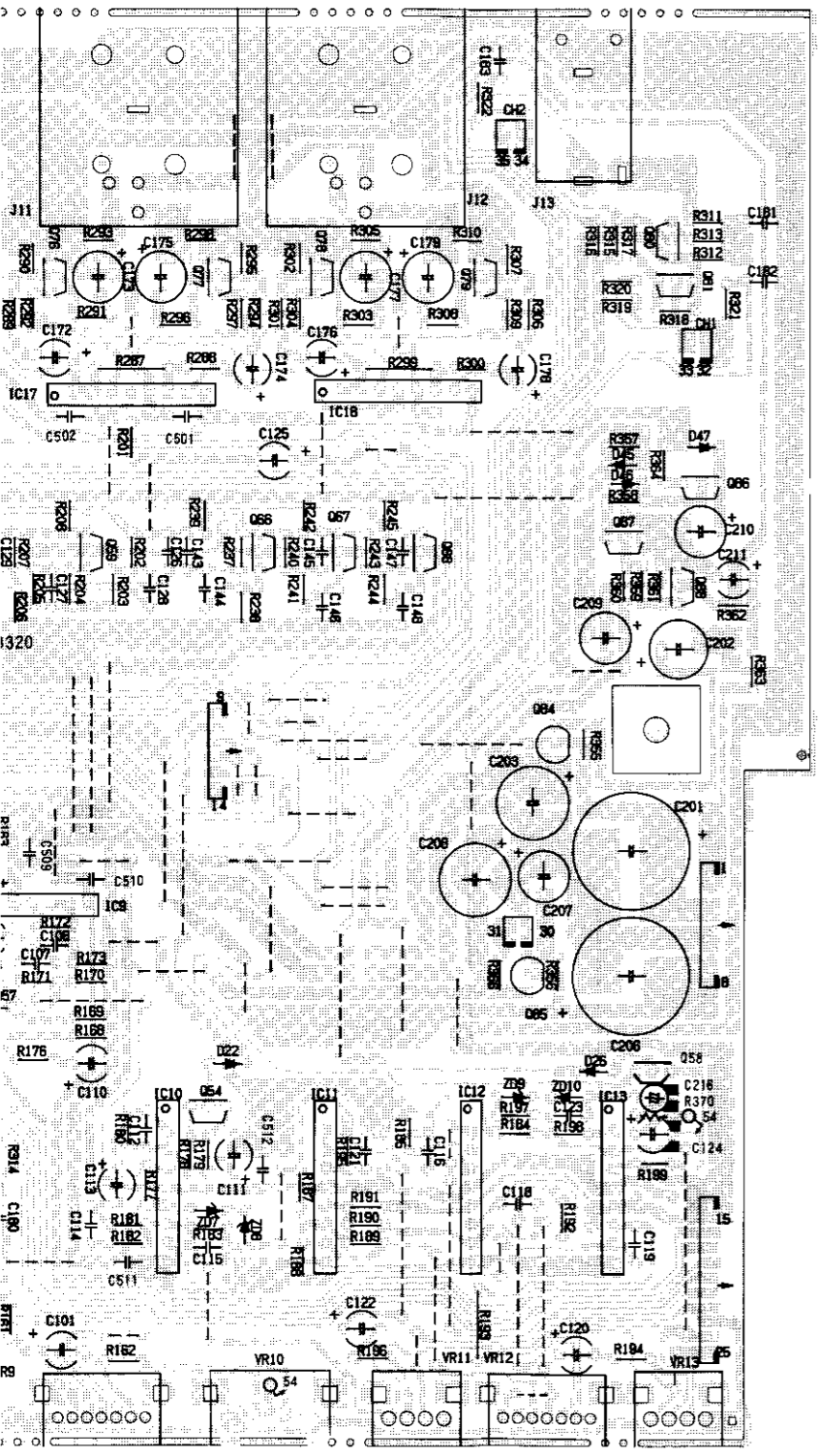
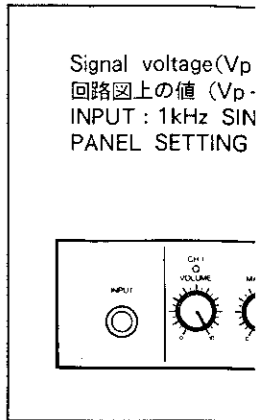
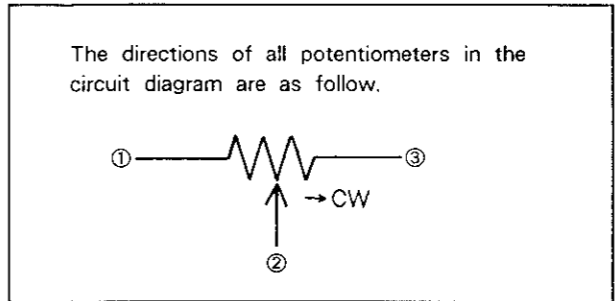
GL-100 MT BOARD ASSY 75113320

CIRCUIT DIAGRAM

- A** To CH1 PREAMP CIRCUIT (CH1 IN R12)
- D** To CH2 PREAMP CIRCUIT (CH2 IN R12)

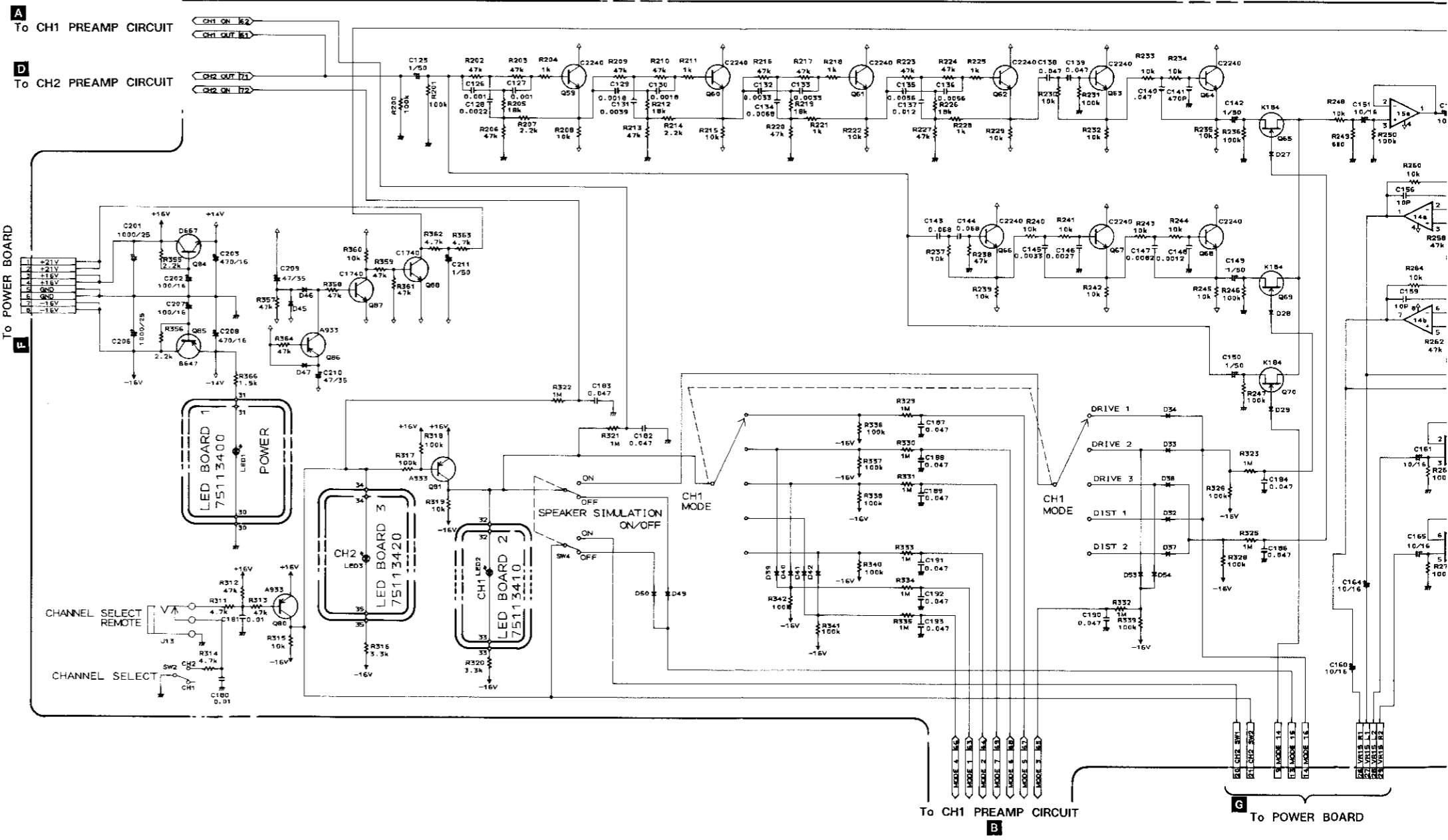


View from component side.



View from component side.

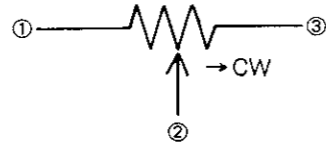
CIRCUIT DIAGRAM



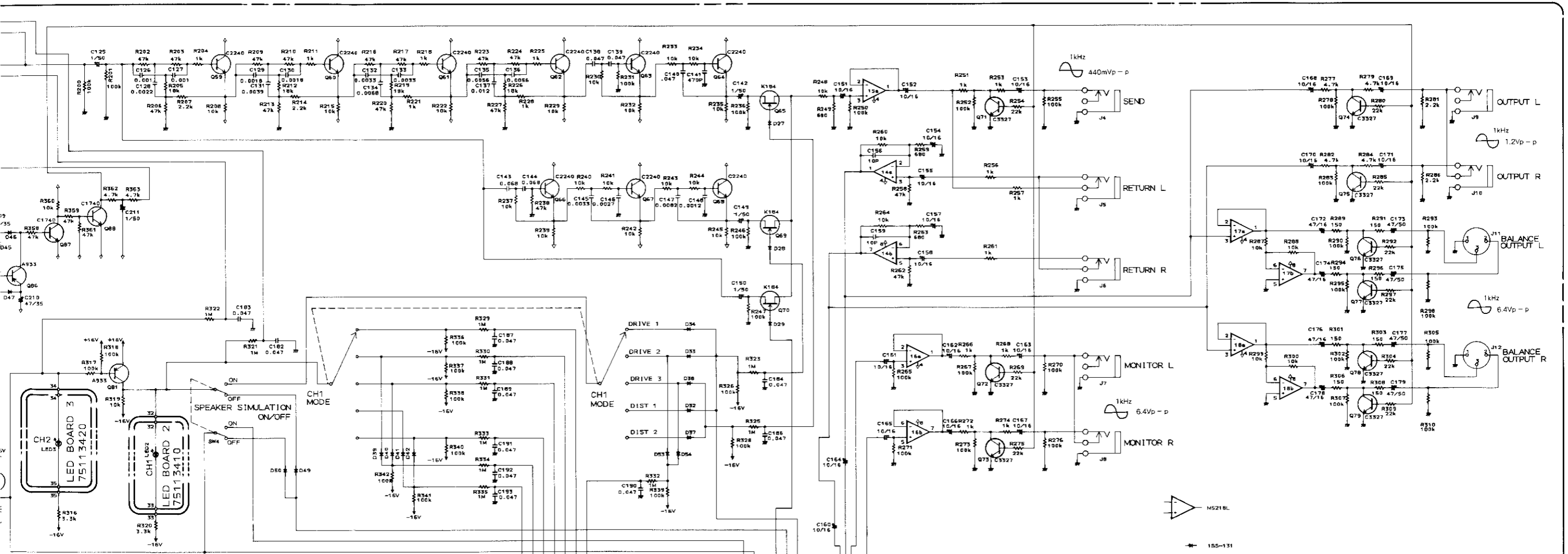
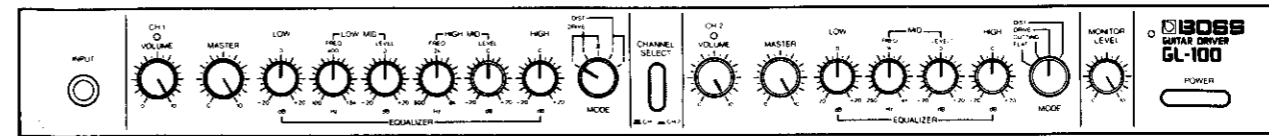
To CH1 PREAMP CIRCUIT

To POWER BOARD

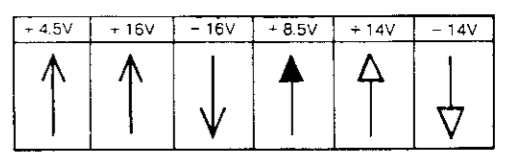
The directions of all potentiometers in the circuit diagram are as follow.



Signal voltage(Vp-p) taken under conditions.  
回路図上の値 (Vp-p)は、下図の設定で得られます。  
INPUT : 1kHz SINE 60mVp-p(-31.2dBm)  
PANEL SETTING

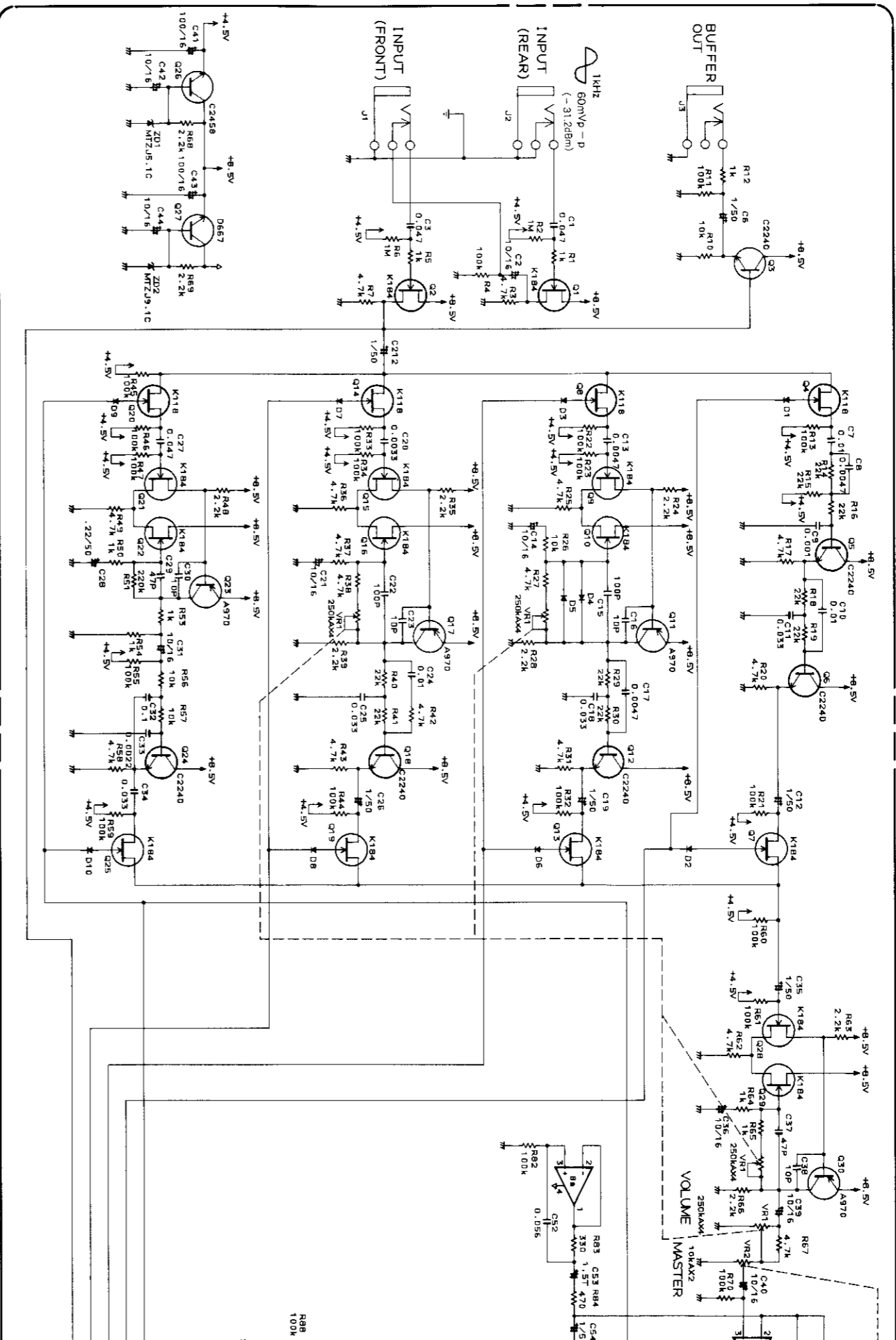


MT BOARD  
ASSY 7511332000  
GL-100  
OUTPUT CIRCUIT



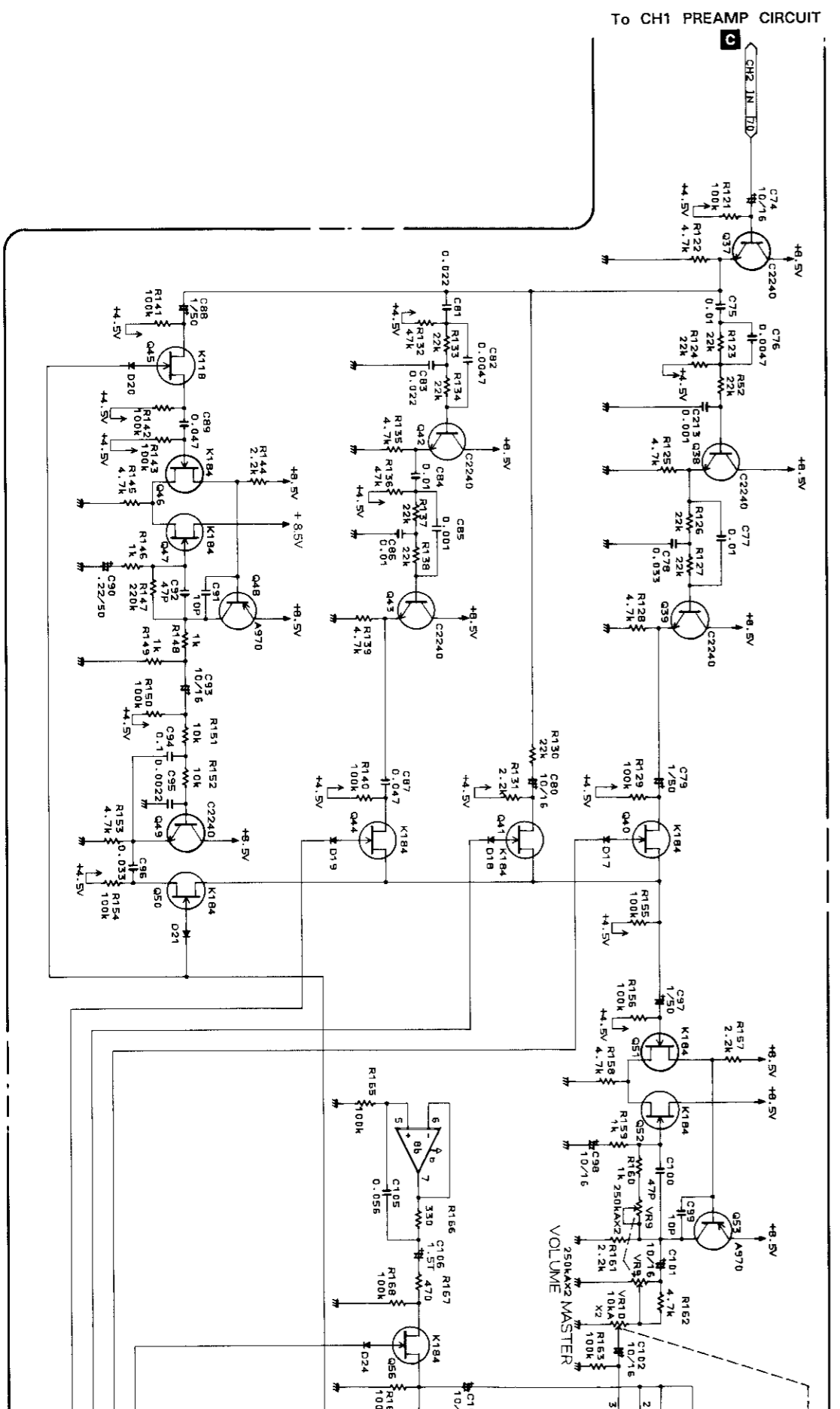
To CH1 PREAMP CIRCUIT  
To POWER BOARD

CIRCUIT DIAGRAM



Signal voltage (Vp - p) taken under conditions.  
 回路図上の値 (Vp - p) は、下図の設定で得られます。  
 INPUT : 1KHz SINE 60mVp - p (-31.2dBm)  
 PANEL SETTING : See Fig.A.

CIRCUIT DIAGRAM





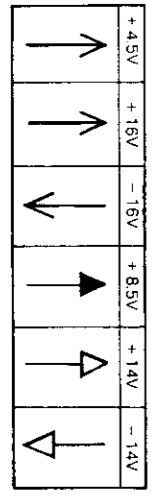
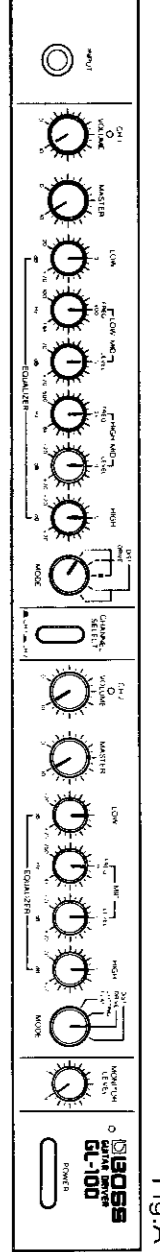
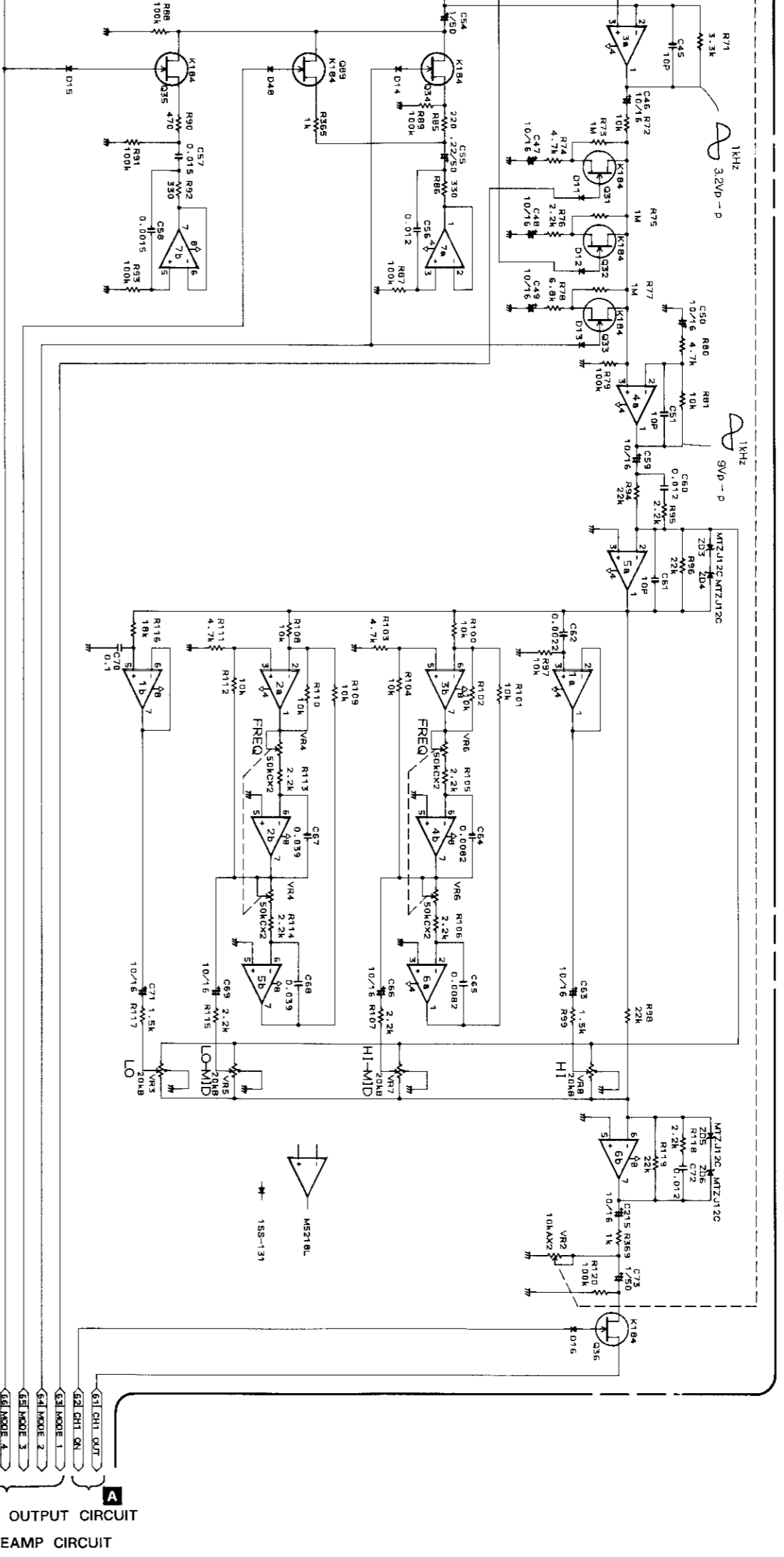
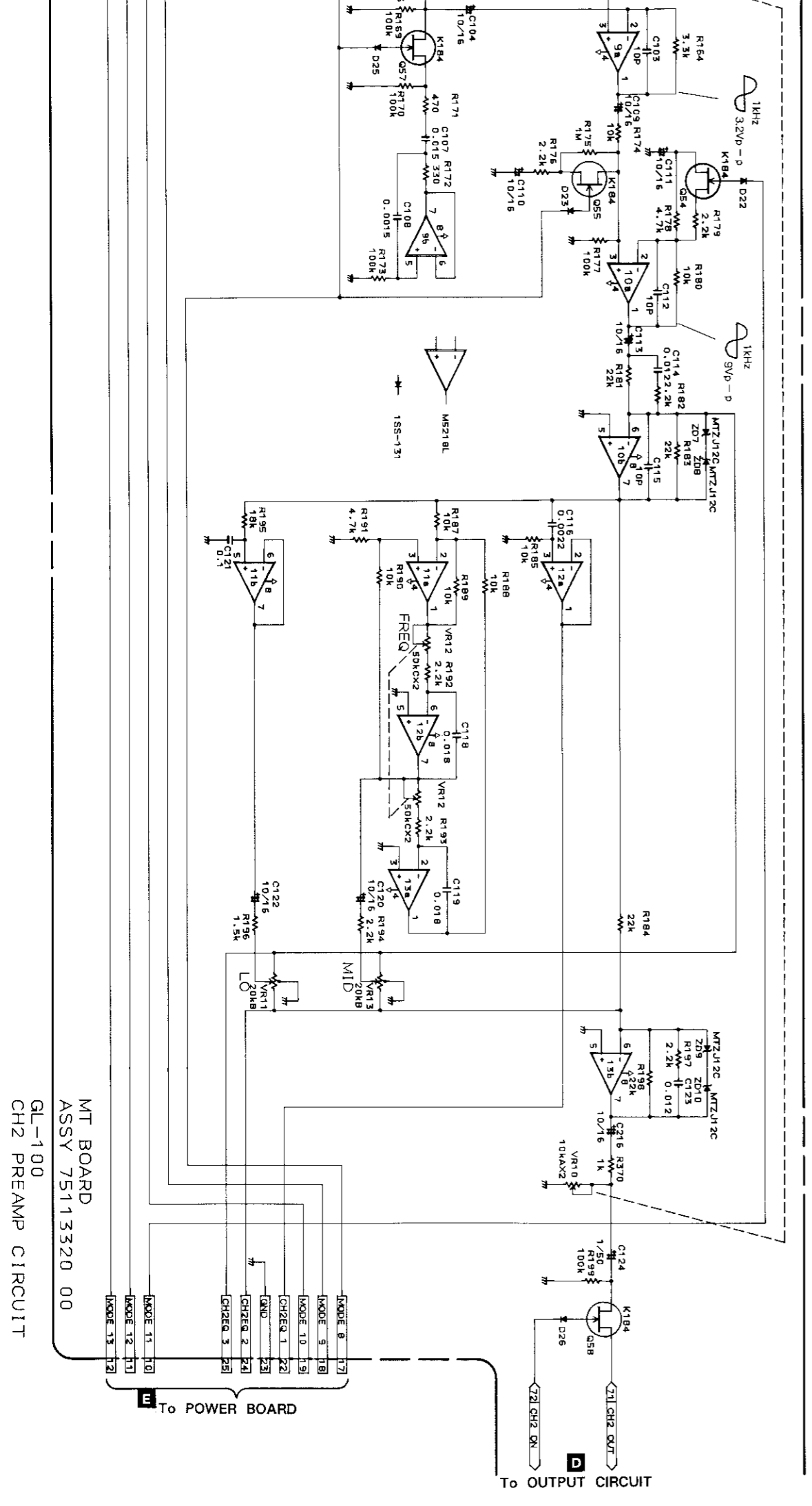


Fig.A



MT BOARD  
ASSY 75113320 00  
GL-100  
CH1 PREAMP CIRCUIT



MT BOARD  
ASSY 75113320 00  
GL-100  
CH2 PREAMP CIRCUIT

 Roland®

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UPC

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