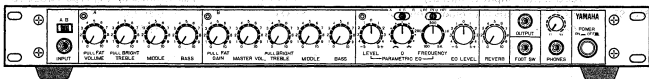


PG1

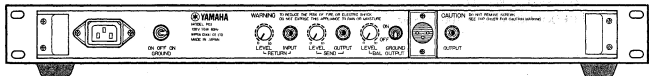
SERVICE MANUAL

FRONT PANEL

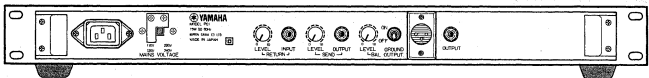


REAR PANEL

US & CANADIAN MODELS



GENERAL MODEL



CONTENTS

SPECIFICATIONS	1
BLOCK DIAGRAM	1
CHECKS AND ADJUSTMENTS	2
WIRING	6
SCHEMATIC DIAGRAM	7

006478

SINCE 1887



YAMAHA

NIPPON GAKKI CO., LTD. HAMAMATSU, JAPAN
2.5K Printed in Japan 9.81

SPECIFICATIONS

INPUT	INPUT jack: -20dB RETURN INPUT jack: -20dB
OUTPUT	OUTPUT jack (front panel): 0dB/10k Ω OUTPUT jack (rear panel): 0dB/10k Ω PHONES OUTPUT: -8dB/8 Ω SEND OUTPUT jack: 0dB/10k Ω BALANCED OUTPUT jack XLR-3-32: 0dB/600 Ω
GAIN	36dB (input to output at 1kHz) Ach 56dB (input to output at 1kHz) Bch 54dB (input to send output at 1kHz) Ach 56dB (input to balanced output at 1kHz) Ach 15dB (return input to output)
NOISE	Less than -75dB (all volume controls at Min.) Ach Less than -77dB (all volume controls at Min.) Bch Less than -67dB (VOLUME, TREBLE, MIDDLE, BASS at Max.) Ach Less than -49dB (GAIN, MASTER VOL., TREBLE, MIDDLE, BASS at Max.) Bch
EQ.	(P.EQ.) LEVEL control: ± 15 dB Q control: 0.35 ~ 3.0 FREQUENCY control 100 ~ 5kHz EQ. LEVEL control ± 15 dB

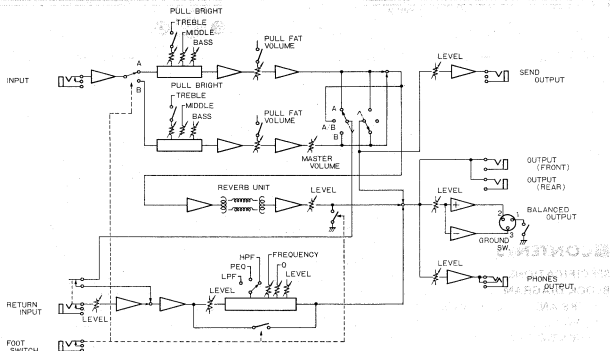
CONTROLS (front panel)	[A channel] VOLUME (pull FAT), TREBLE (pull BRIGHT), MIDDLE, BASS [B channel] GAIN (pull FAT), MASTER VOL., TREBLE (pull BRIGHT), MIDDLE, BASS, (P.EQ.) LEVEL, Q, FREQUENCY, EQ LEVEL, REVERB, PHONES LEVEL, A/B SW, A/B B SW, LPF P.EQ, HPF SW., POWER SW.
(rear panel)	RETURN LEVEL, SEND LEVEL, BALANCED LEVEL, GROUND (lift) SW., GROUND (polarity) SW.
REVERB	Accutronics Spring-type 1EB2C1B
FOOT SW. JACK	(Ach/Bch, EQ ON/OFF REVERB ON/OFF)
ACCESSORIES	FOOT SW.
POWER REQUIREMENTS	US & Canadian Models 120V, 60Hz General Model 110-120V/220-240V, 50/60Hz
POWER CONSUMPTION	US & Canadian Models 10W General Model 15W
DIMENSIONS (W x H x D)	18-3/4"x2-1/8"x12-3/4" (480x54x325mm)
WEIGHT	12.6 lbs (5.7 kg)

* 0dB is referenced to 0.775V RMS.

* Measured with a 6dB/octave filter @12.47kHz

Specifications subject to change without notice.

BLOCK DIAGRAM



■ CHECKS AND ADJUSTMENTS

I. ADJUSTMENTS

● Power supply Voltage Check

Verify that each of the following ranges is within the specification given.

Test Points	Voltage
Between +15 and E	+15V ± 2V
Between -15 and E	-15V ± 2V
Between +7 and E	+7V ± 1V
Between -7 and E	-7V ± 1V

● Foot Switch Circuit Adjustment

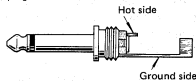
1. Reference Voltage Adjustment

Plug and open plug into the FOOT SW jack and adjust the B10K trimpot so that the voltage between the hot side of the plug and the E terminal is +10V ± 0.1V.

* This adjusts the open-circuit voltage of the foot switch. Use a standard phone plug with nothing connected to it and the sleeve removed.

Open plug

(Standard plug with sleeve removed)



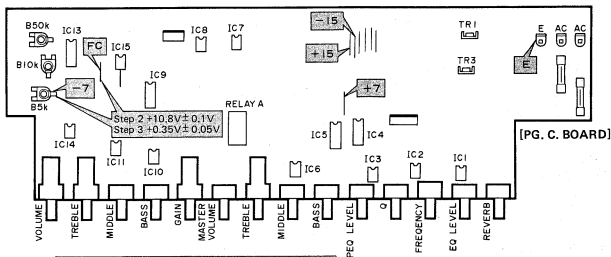
2. Voltage Adjustment (At maximum load)

Set the A/B switch for the Ch. A mode. With nothing plugged into the FOOT SW jack, set the B5K trimpot so that the voltage between the points FC and -7 is +10.8V ± 0.1V.

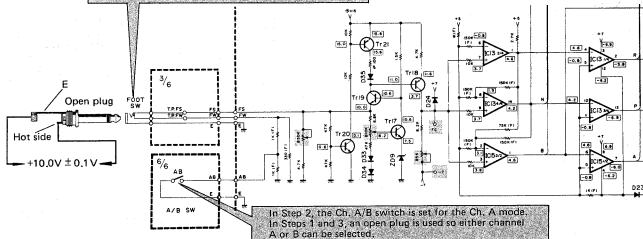
3. Voltage Adjustment (At minimum load)

With the open plug inserted into the FOOT SW jack, adjust the B50K trimpot for a voltage of 0.35V ± 0.05V between the points FC and -7.

4. Repeat adjustments 2 and 3 two or three times until specifications are achieved.



Step 1: Plug the open plug in and measure the voltage between the hot side and the E terminal.
Step 2: Nothing plugged in.
Step 3: Plug in the open plug.



II. CHECKS

- The checks and specifications given are for reference and it may not be a requirement to check all controls in this manner.
- Use an oscillator with an input impedance of less than $1k\Omega$.
- Use an oscilloscope and AC/dB meter with an input impedance of over $100k\Omega$.
- Set each control and switches according to Table 1.

Table 1

CONTROLS & SWITCHES	SETTINGS	CONTROLS & SWITCHES	SETTINGS
(FRONT PANEL)		(REAR PANEL)	
A/B Push Switch	Ach (■) MODE	RETURN LEVEL	max.
Ach		SEND LEVEL	max.
VOLUME	max.	BAL OUTPUT	
PULL FAT	OFF	LEVEL	max.
TREBLE	max.	GROUND	min. amount of noise
PULL BRIGHT	OFF		
MIDDLE	max.		
BASS	max.		
Bch			
GAIN	max.		
PULL FAT	OFF		
MASTER VOL.	max.		
TREBLE	max.		
PULL BRIGHT	OFF		
MIDDLE	max.		
BASS	max.		
A/B Slide Switch	A/B		
LPF PEQ HPF Slide Switch	PEQ		
PARAMETRIC EQ			
LEVEL	center (0)		
Q	min. (∩)		
FREQUENCY	min. (100)		
EQ LEVEL	center (0)		
REVERB	min.		
PHONES	max.		

- Perform measurement with the following load resistance connected to each output connector.

Table 2

OUTPUT	LOAD	OUTPUT	LOAD
(FRONT PANEL)		(REAR PANEL)	
OUTPUT	$10k\Omega$	OUTPUT	$10k\Omega$
PHONES	L, R each 8Ω	SEND OUTPUT	$10k\Omega$
		BAL OUTPUT	600Ω (between pins 2 and 3)

PARTS LIST

PG1

■ CONTENTS

EXPLODED VIEW	1
PARTS LIST	2
EXPLODED VIEW (FOOT SWITCH)	4
PARTS LIST	4
PARTS LIST (ELECTRONIC)	5

J: Japanese model
U: U.S. model
C: Canadian model
G: General model

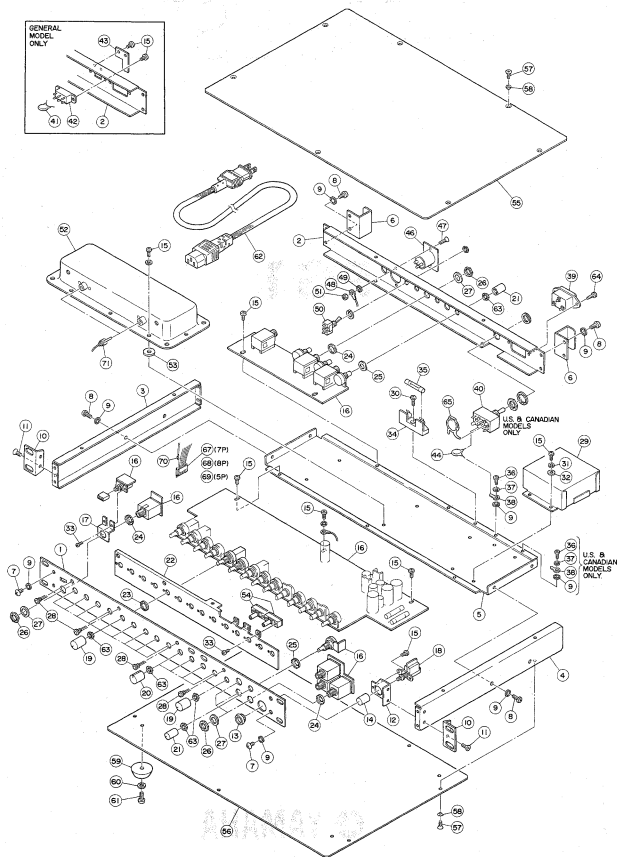
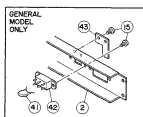
SINCE 1887



YAMAHA

NIPPON GAKKI CO., LTD. HAMAMATSU, JAPAN

EXPLODED VIEW



PARTS LIST

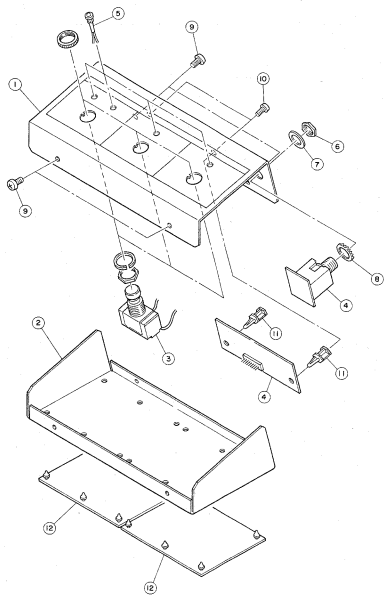
Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
1	AA:8179:40	Front Panel	フロントパネル			
2	AA:8179:50	Rear Panel	リアパネル		J	
"	AA:8179:60	"	"		U,C	
"	AA:8179:70	"	"		G	
3	AA:8179:80	Side Panel (Left)	サイドパネル(左)			J,U,C
4	AA:8179:90	" (Right)	" (右)			J,U,C
5	AA:8180:00	Center Stay	センターステー			
6	AA:8178:00	Rear Stabilizer	リアスタビライザー			
7	EC:34:00:80	Truss Screw	M4 x 8 FCM3-BX			
8	ED:34:00:80	Bind Screw	M4 x 8 ZMC2-BX			
9	EV:41:00:40	Toothed Lock Washer	A4S ZMC2-BX			
10	AA:8178:10	Mount Angle	ラックアングルト調整器具			
11	EB:33:00:80	Flat Head Screw	M3x8 ZMC2-BX			
12	AA:8180:10	Power Switch Plate	パワースイッチ取付金具			
13	CB:81:92:00	Switch Escutcheon	スイッチエスカッション		PB1	
14	CB:06:65:10	Push Button	Black プッシュボタン		"	
15	ED:33:00:60	Bind Screw	M3x6 ZMC2-BX			
16	NA:80:86:90	PG C. Board	#87302 P G シート		J	
"	NA:80:87:00	"	#87302 "		U,C	
"	NA:80:87:10	"	#87302 "		G	
17	AA:8180:40	Switch Plate	A/B Switch スイッチ取付金具			
18	KA:80:28:60	Push Switch	プッシュスイッチ		J	
"	KA:80:28:70	"	"		U,C	
"	KA:80:24:70	"	"		G	
19	BA:80:55:40	Knob (Yellow)	ツ マ ミ (黄)		PB1	
20	BA:80:55:50	" (Red)	PARAMETRIC EQ " (赤)		"	
21	BA:80:55:60	" (Yellow)	" (黄)		"	
22	AA:8180:30	Sub Panel (VOLUME)	サブパネル			
23	EV:41:00:70	Toothed Lock Washer	A7S ZMC2-BX			
24	AA:80:58:20	Spacer	9S スペーサー			
25	AA:80:49:50	"	7S "			
26	LX:20:00:60	Hexagonal Nut	9S 特殊六角ナット			
27	LX:20:00:10	Flat Washer	9S 特殊平座金			
28	IF:00:13:10	LED	L E D		PB1	
29	GA:82:69:00	Power Transformer	電源トランス		J	
"	GA:82:70:00	"	"		U,C	
"	GA:82:71:00	"	"		G	
30	ED:33:00:90	Bind Screw	M3x8 ZMC2-BX			
31	EV:30:30:30	Spring Lock Washer	3s ZMC2-BX			
32	EV:20:30:30	Flat Washer	3s ZMC2-BX			
33	EA:32:00:40	Pan Head Screw	M2x4 ZMC2-BX			
34	LB:20:12:10	Fuse Holder	ヒューズホルダー		J,U,C	
"	LB:20:14:70	"	"		J	
35	KB:00:03:10	Fuse	250V 0.5A ヒューズ		G	
"	KB:00:10:10	" UL	250V 0.5A "		U,C	
"	KB:00:07:10	"	250V T500mA "		G	
36	ED:34:00:60	Bind Screw	M4x6 ZMC2-BX			
37	EV:30:30:40	Spring Lock Washer	4s ZMC2-BX			
38	LA:00:02:90	Ground Lug	4s アースラグ			
39	LB:30:05:60	AC Socket	3P インレット		J,U,C	
"	LB:20:18:60	"	2P "		J	
40	KA:30:04:40	Toggle Switch	トグルスイッチ		G	
"	KA:30:03:50	"	"		U	

* New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
40	KA:30:04:40	Toggle Switch	トグルスイッチ			C
41	FZ:00:22:70	Spark Suppression Cap.	0.01μF 250V スパークキラー			G
42	KA:40:07:40	Slide Switch	スライドスイッチ			G
43	CB:81:42:50	Stopper	ストッパ			G
44	FZ:00:20:30	Ceramic Cap.	0.01μF 125V セラコン			J,U,C
45	FZ:00:21:60	"	0.0033μF AC125V "			J,U,C
46	LB:30:01:60	Cannon Connector	XLR3-32 キャノンコネクター			
47	EM:23:00:80	Oval Head Tapping Screw	M3x8 FNM3-3g 丸頭タップネジ			
48	LA:00:02:80	Ground Lug	3s アースラグ			
49	EV:41:30:30	Toothed Lock Washer	A3S ZMC2-BX			
50	KA:30:04:30	Toggle Switch	トグルスイッチ			
51	EV:10:00:30	Hexagonal Nut	M3 ZMC2-Y			
52	JH:00:01:50	Reverb Unit	リバーブユニット			
53	CB:80:15:90	Rubber Bush	ゴムブッシュ			
54	KA:90:27:60	Slide Switch	スライドスイッチ			
55	AA:8180:50	Top Cover	トップカバー			
56	AA:8180:60	Bottom Cover	ボトムカバー			
57	EB:33:00:60	Flat Head Screw	M3x6 ZMC2-BX			
58	EV:42:30:30	Toothed Lock Washer	B3S ZMC2-BX			
59	CB:80:12:70	Leg	ゴム脚			
60	EV:20:30:40	Flat Washer	4s ZMC2-BX			
61	ED:34:01:00	Bind Screw	M4x10 ZMC2-BX			
62	MG:00:05:60	Power Supply Cord	電源コード			J
"	MG:00:05:80	"	"			U,C
"	MG:00:10:50	"	"			G
63	EZ:30:07:10	Hexagonal Nut	7s FCM3-BX			
64	EI:33:00:80	Bind Tapping Screw	3x8 ZMC2-BX			
65	CB:09:52:60	Capacitor Cover	コンデンサカバー			J,U,C
"	CB:08:19:40	"	"			G
67	LB:60:24:40	Connector Housing	7P コネクタハウジング			
68	LB:60:24:80	"	8P "			
69	LB:50:02:40	"	5P "			
70	BB:00:44:30	Contact Pin	ピンコンタクト			
71	LB:10:00:40	Pin Plug	ピンプラグ			

* New Parts (新規部品)

■EXPLODED VIEW (FOOT SWITCH)



■PARTS LIST

Ref. No.	Part No.	Description	部品名	Remarks	Common Model	Markets
1	AA:818180	Foot Switch Top Cover	フットSWトップカバー			
2	AA:818190	Foot Switch Bottom Cover	フットSWボトムカバー			
3	KA:900010	Push Switch	プッシュスイッチ			
4	NA:808840	F S C. Board	F S シート			
5	IF:901310	LED	L E D			
6	LX:200060	Hexagonal Nut	特殊六角ナット			
7	LX:200010	Flat Washer	特殊平座金			
8	AA:805820	Spacer	スペーサー			
9	FD:340060	Blind Screw	M4x8 ZMC2-B			
10	EI:335080	Blind Tapping Screw	M3.5x8 ZMC2-B			
11	CB:035410	Tapping Support	タップタングサポート			
12	CB:815150	Bottom Mat	底葉マット	CP-10		

■PARTS LIST (ELECTRONIC)

Ref. No.	Part No.	Description	部品名	Remarks	Common Model	Markets
#	NA:808690	PG C. Board	# 87302	P G シート		J
#	NA:808700	"	# 87302	"		U,C
#	NA:808710	"	# 87302	"		G
	UK:337220	Electrolytic Cap. (8P)	22μF 16V	B P ケミコン		
	UK:337470	"	47μF 16V	"		
	UK:365470	"	0.47μF 50V	"		
	UK:346100	"	1μF 25V	"		
	FM:226220	"	2.2μF 25V	"		
	UK:346470	"	4.7μF 25V	"		
	UK:347100	"	10μF 25V	"		
	UK:367470	"	47μF 50V	"		
	UK:348220	"	220μF 25V	"		
	HL:515100	Metal Oxide Film Resistor	1P 100Ω	酸化金属皮膜抵抗		
	HL:515680	"	1P 680Ω	"		
	HU:578330	Metal Film Resistor	330Ω	金属皮膜抵抗		
	HU:578100	"	1kΩ	"		
	HU:577750	"	75kΩ	"		
	HU:578150	"	150kΩ	"		
	IA:099910	Transistor	2SA999 (E,F)	トランジスタ		
	iB:056000	"	2S8560	"		
	iB:059630	"	2S8596 (O,Y)	"		
	iC:232010	"	25C2320 (E,F)	"		
	iD:043800	"	25D438	"		
	iD:092630	"	25D526 (O,Y)	"		
	iE:000020	FET	2SK30A (GR)	F E T		
	iF:000070	Diode	1S2473	ダイオード		
	iH:000720	Zener Diode	W03B	ツェナーダイオード		
	iF:000170	"	W2075	"		
	iF:000350	"	WZ130	"		
	iF:000650	"	WZ162	"		
	BA:011870	Heat Sink		放熱板		
	ED:030080	Blind Screw	M3 x 8 ZMC2-Y	バイインド小ネジ		
	EK:800630	Flange Nut	M3 ZMC2-Y	フランジナット		
	iG:038100	IC	NJM2901	I C		
	iG:042500	"	NJM4556	"		
	iG:028400	"	NJM4558	"		
	iG:001270	"	TC4066P	"		
	iG:031000	"	NJM2903	"		
	KC:000620	Relay		リレー		
#	HS:311430	Variable Resistor 16Ω	A1kΩ	可変抵抗器		PB1
#	HS:311440	"	A25kΩ	"		"
#	HS:311450	"	A25kΩ	"		"
#	HS:311460	"	A25kΩ SW	"		"
#	HS:311470	"	A50kΩ	"		PB1
#	HS:311480	"	B25kΩ	"		"
#	HS:311500	"	C50kΩ x 2	"		PB1
#	HS:311510	"	G50Ω CC,CT	"		"
#	HT:190040	Semi-Fixed Variable Resistor	B5kΩ	半固定抵抗		
#	HT:190050	"	B10kΩ	"		
#	HT:190070	"	B50kΩ	"		
#	KA:802750	Push Switch		プッシュスイッチ		
#	KB:000310	Fuse	0.5A 250V	ヒューズ		J
#	KB:001010	"	500mA 250V	"		U,C

※ New Parts (新規部品)

Step	Item Checked	Controls & switches	Input Jack	Input signal (Sine wave)	Check points	Measurement conditions	Specifications	Remarks
1 PREAMP. (Ach)								
1-1	Gain	Table 1	INPUT	-60dB @ 1kHz	OUTPUT (FRONT, REAR)		-24dB ± 3dB	Output should disappear when a shorting plug is plugged into RETURN.
1-2	Frequency response	Table 1	INPUT	-60dB @ 20Hz~20kHz	OUTPUT		With 1kHz output as a standard (0dB) -1dB ± 3dB @ 70Hz -8dB ± 3dB @ 400Hz +5dB ± 3dB @ 7kHz	Should be within ± 3dB of the curve in fig. 1.
1-3	Tone control response	Table 1	INPUT	-60dB @ 7kHz @ 400Hz @ 70Hz	OUTPUT	Turning each knob from max. to min. TREBLE MIDDLE BASS	+4dB ± 3dB +18dB ± 3dB +13dB ± 3dB	
1-4	FAT response	Table 1	INPUT	-60dB @ 400Hz	OUTPUT	Set the FAT switch from OFF to ON (Pull).	Level variation range. +9dB ± 3dB	
1-5	BRIGHT response	Table 1	INPUT	-60dB @ 7kHz	OUTPUT	Set the BRIGHT switch from OFF to ON (Pull).	Level variation range. +13dB ± 3dB	
2 PREAMP. (Bch)								
2-1	Gain	Table 1 A/B push switch Bch (A) Mode	INPUT	-60dB @ 1kHz	OUTPUT (FRONT, REAR)		-4dB ± 3dB	
2-2	Frequency response	Table 1 A/B push switch Bch (A) Mode	INPUT	-60dB @ 20Hz~20kHz	OUTPUT		With 1kHz output as a standard (0dB) -1dB ± 3dB @ 70Hz -8dB ± 3dB @ 400Hz +3dB ± 3dB @ 7kHz	Should be within ± 3dB of the curve in fig. 1.
2-3	Tone control response	Table 1 A/B push switch Bch (A) Mode	INPUT	-60dB @ 7kHz @ 400Hz @ 70Hz	OUTPUT	Turning each knob from max. to min. TREBLE MIDDLE BASS	+15dB ± 3dB +4dB ± 3dB +12dB ± 3dB	
2-4	FAT response	Table 1 A/B push switch Bch (A) Mode	INPUT	-60dB @ 400Hz	OUTPUT	Set the FAT switch from OFF to ON (Pull).	Level variation range. +9dB ± 3dB	
2-5	BRIGHT response	Table 1 A/B push switch Bch (A) Mode GAIN center	INPUT	-60dB @ 7kHz	OUTPUT	Set the BRIGHT switch from OFF to ON (Pull).	Level variation range. +11dB ± 3dB	
3	SEND amp.	Table 1	INPUT	-60dB @ 1kHz	SEND OUTPUT		-6dB ± 3dB	
4	RETURN amp.	Table 1	RETURN INPUT	-15dB @ 1kHz	OUTPUT		0dB ± 3dB	
5	P.E.Q.	Table 1	RETURN INPUT	Table 3 each frequency	OUTPUT	With controls set as in fig. 3, vary LEVEL from max. to min.	Level variation range obtained as listed in Table 3.	
6	L.P.F.	Table 1 LFF PEQ HPF slide switch LFF	RETURN INPUT	-15dB @ 90Hz @ 5kHz	OUTPUT	Table 4	Output level obtained as listed in Table 4.	
7	H.P.F.	Table 1 LFF PEQ HPF slide switch HPF	RETURN INPUT	-15dB @ 90Hz @ 5kHz	OUTPUT	Table 5	Output level obtained as listed in Table 5.	
8	A,A/B,B level	Table 1 PEQ LEVEL max.	INPUT	-60dB @ 90Hz	OUTPUT	Table 6	Output level obtained as listed in Table 6.	
9	EQ LEVEL	Table 1	RETURN INPUT	-15dB @ 1kHz	OUTPUT	Vary EQ LEVEL from max. to min.	Level variation range. ± 15dB ± 2dB	
10	PHONES amp.	Table 1	RETURN INPUT	-15dB @ 1kHz	PHONES		-8dB ± 3dB	

Step	Item checked	Controls & switches	Input Jack	Input signal (Sine wave)	Check points	Measurement conditions	Specifications	Remarks
11	BALANCED amp.	Table 1	RETURN INPUT	-30dB @ 1kHz	BAL. OUTPUT (between pins 2 and 3)	Between XLR1 and 3 short GROUND lift switch ON	+5dB ± 3dB -1dB ± 3dB	
12	NOISE level	Table 1			OUTPUT (FRONT, REAR) SEND PHONES BAL OUTPUT		Less than -67dB Less than -46dB Less than -69dB Less than -46dB	Measure after passing through @12.47kHz, -60dB/oct filter.
13	FOOT SW	Table 1	INPUT	-60dB @ 1kHz	OUTPUT	Turn A/B footswitch ON and OFF. PEQ LEVEL max. Turn EQ footswitch ON and OFF. EQ LEVEL max. Turn EQ footswitch ON and OFF. REVERB max. Turn REVERB footswitch ON and OFF.	Should change between channels A and B. PEQ effect should turn ON and OFF. Output level should vary about 15dB. The echoed signal turns ON and OFF.	Note that unchorded signal is also mixed in.

● PEO RESPONSE

Table 3

Control settings	FREQUENCY	Input frequency (Hz)	Variation range (dB)
Q			
min.	100	850	± 7 ± 2
min.	5K	850	± 7 ± 2
max.	5K	850	Less than ± 1
max.	100	850	Less than ± 1
max.	100	*90	± 15 ± 2
max.	5K	*5k	± 15 ± 2

* It is sufficient that the variation range as shown above can be satisfied even when the input frequency is varied between ± 10% from its rating frequency.

● HPF RESPONSE

Table 5

Control settings	FREQUENCY	Input frequency (Hz)	Level (dB)
Q			
min.	100	90	-9 ± 2
max.	100	*90	+10 ± 2
max.	5K	*5k	+8 ± 2
min.	5K	5k	-10 ± 2

* It is sufficient that the output level as shown above can be satisfied even when the input frequency is varied between ± 10% from its rating frequency.

● LFF RESPONSE

Table 4

Control settings	FREQUENCY	Input frequency (Hz)	Level (dB)
Q			
min.	100	90	-8 ± 2
max.	100	*90	+10 ± 2
max.	5K	*5k	+8 ± 2
min.	5K	5k	-11 ± 2

* It is sufficient that the output level as shown above can be satisfied even when the input frequency is varied between ± 10% from its rating frequency.

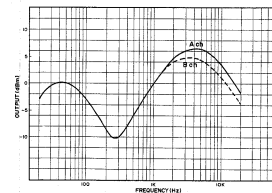
● A/B LEVEL

Table 6

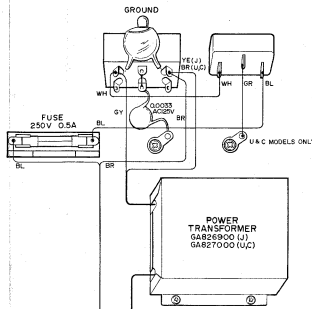
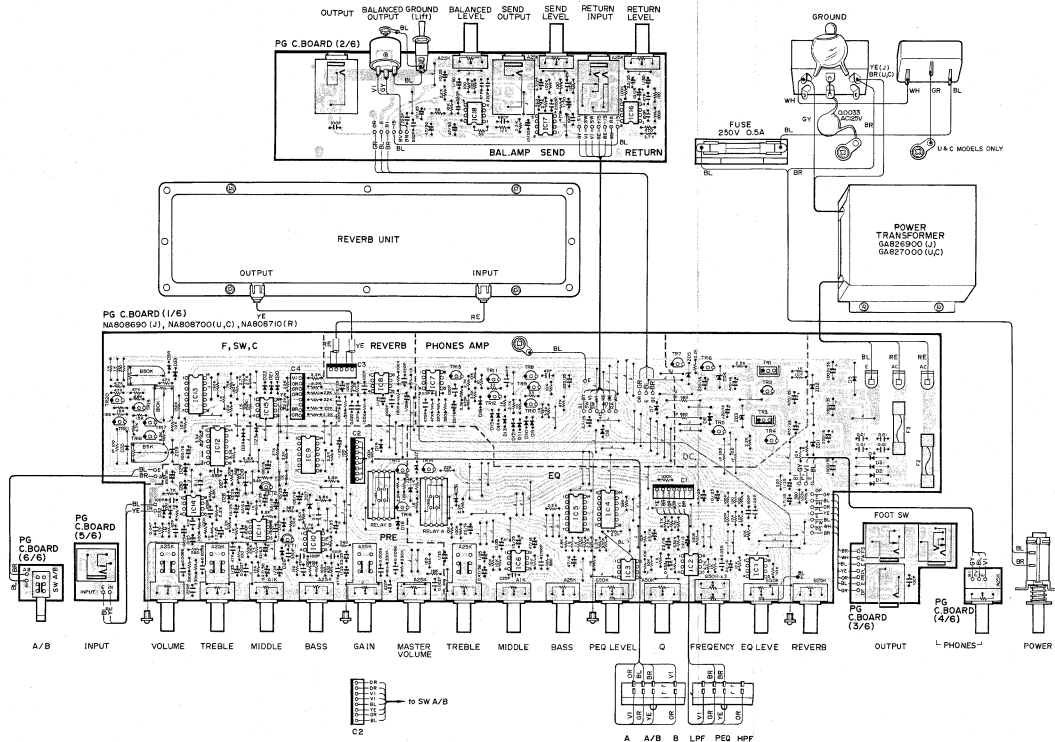
Control settings	Switch position		Level (dB)
	A/B push switch	A/B slide switch	
A	A	A/B	-11 ± 3
B	B	A/B	+9 ± 3
B	A	A	-6 ± 3
A	A	A	-11 ± 3
A	B	B	-25 ± 3
B	B	B	+9 ± 3

● FREQUENCY RESPONSE

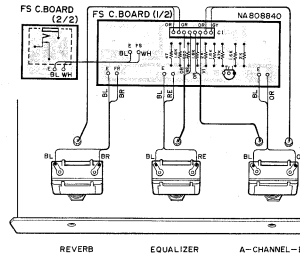
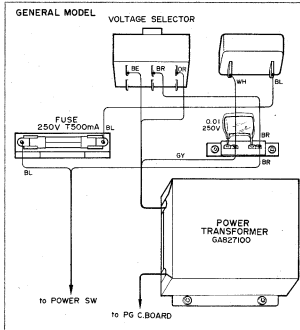
Fig. 1



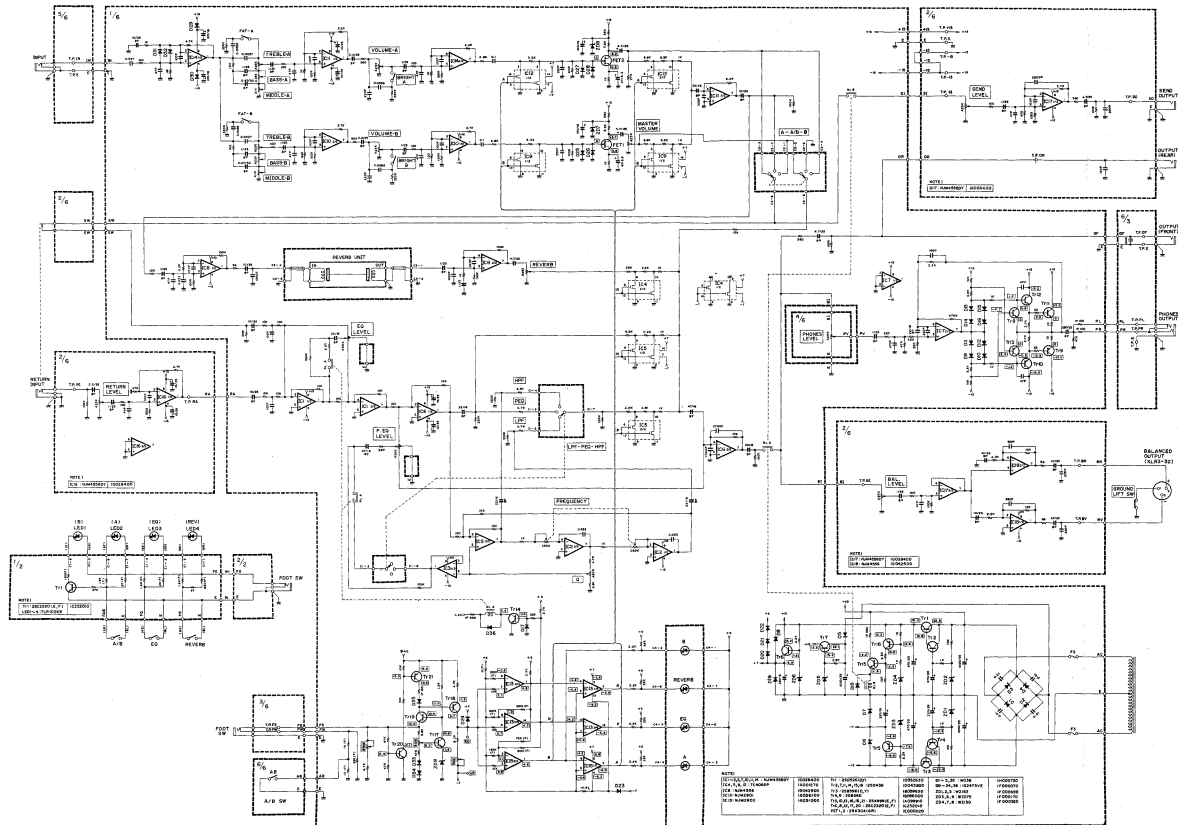
■ WIRING



J: JAPANESE MODEL C: CANADIAN MODEL
 U: USA MODEL R: GENERAL MODEL

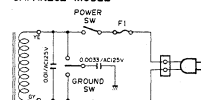


SCHEMATIC DIAGRAM

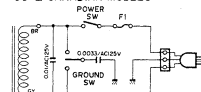


FUSE	F1 - F3
JAPANESE	0.5A 250V
US & CANADIAN	500mA 250V
GENERAL	T500mA 250V

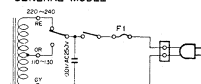
JAPANESE MODEL



US & CANADIAN MODELS



GENERAL MODEL



CHANNEL A/B → A
 EQUALIZER → ON
 REVERB → ON

* All voltages measured with a 10MΩ/V DC electric voltmeter, under no-signal condition.