

*Pm-6*

**marantz.**

*Model Pm-6*

*Stereo Pre Main Amplifier*

#### MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, MARANTZ Company has created the ultimate in stereo sound. Only original MARANTZ parts can insure that your MARANTZ product will continue to perform to the specifications for which it is famous.

Parts for your MARANTZ stereo are generally available within 72 hours throughout the nation via a toll-free line to our National Parts Depot in California. The sales professionals who take your call immediately refer to their own desk top computer terminal and can quickly determine the availability and price information you require. If for some reason, your order should exceed our available stock, we usually can instantly provide an alternate replacement part or current delivery information. When the order is placed and confirmed, the computer simultaneously generates "hard copy" orders at the distribution center. As hard copies come directly from the computer to the national parts depot, your requested stock is assembled and prepared for shipment and placed on the first available carrier for delivery to you.

#### ORDERING PARTS

Phone orders will eliminate mail delays, and we encourage the use of this method. If you order by mail, use MARANTZ parts order forms which are available from our National Parts Depot located at the following address:

SUPERSCOPE NATIONAL PARTS DEPARTMENT  
20525 Nordhoff Street  
Chatsworth, California 91311  
Phone: 1-800-423-5108  
1-213-998-9333

The following information must be supplied to eliminate delays in processing your order:

1. Complete address.
2. Complete part numbers.
3. Complete description of parts.
4. Model number for which part is required (indicate MARANTZ).
5. Account number (for account customers only).

Direct consumers will be provided with the current retail price quotation on available parts in order to advise them of the cost of the parts and shipping.

#### OVERSEAS PARTS ORDERING

Parts may also be ordered from the following overseas addresses:

##### CANADA

Superscope Canada, Ltd.  
3710 Nashua Drive  
Mississauga  
Ontario, Canada L4V1M5

##### AUSTRALIA

Superscope (Australasia) Pty., Ltd.  
32 Cross Street (P.O. Box 604)  
Brookvale 2100 N.S.W.  
Australia

##### JAPAN

Marantz Japan, Inc.  
3622 Kamitsuruma  
Sagamihara Shi  
Kanagawa, Japan

##### EUROPE

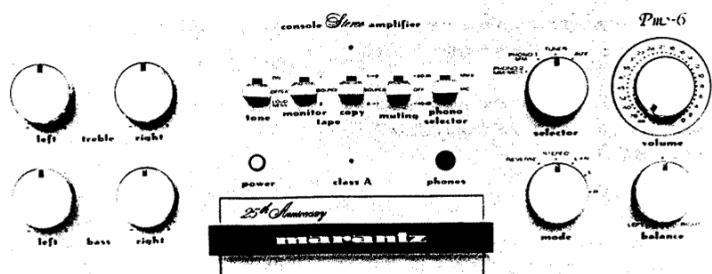
Marantz Europe, S.A.  
Avenue Leopold III, 2  
7120 Peronne-les-Binche  
Belgium

Marantz France  
Rue Louis Armand 9  
92600 Asnieres  
Hauts-de-Seine  
France

Marantz Audio U.K. Ltd.  
London Road, 203  
Staines  
Middlesex  
England

Marantz GmbH  
Max-Planck-Strasse 22  
D-6072 Dreieich 1  
West Germany

All of the above locations are fully equipped to take care of your total service needs. Because various countries have differing configuration requirements, it is necessary that you contact the service facility in your particular country. In the event that there is no service location listed for your country, please contact the nearest facility for the necessary assistance.



## □特長

### ■MCヘッドアンプ(13石構成)

初段はNPN超ローノイズトランジスタ4本を並列に組合せたものとPNP超ローノイズトランジスタ4本を組合せたものとでブッシュブル構成とし、さらに2段目の増幅段もブッシュブル構成とし出力段は十分に電流を流したSEPP構成の片チャンネル当り13石ものトランジスタを使用した本格的なMCヘッドアンプです。

特にS/N比を改善するためフィードバック回路のインピーダンスを徹底的に小さくしています。定格入力 $125\mu V$ で電圧利得は20倍(26dB)となっています。

### ■PHONOアンプ(11石構成)

このPHONOアンプはTIM歪の低減と高S/Nを実現するためにマランツ独特の11石構成の完全全段ブッシュブル回路とされています。

初段はNチャンネル、Pチャンネルの超ローノイズ、ハイGmのFETをブッシュブルに組合せ、さらにカスコードカレントミラー回路を使用し入力段のインピーダンス変化による特性悪化を防止しています。

次段は段間エミッターフォロワーによるバッファアンプを通り2段目ブッシュブル電圧増幅段に入ります。

さらに出力段はどのような負荷でも十分にドライブすることの出来るSEPP回路としS/N比改善のためイコライザ素子のインピーダンスも従来のものに比べ十分低くし、定格入力時のS/Nも90dBを達成しています。

またイコライザ素子には誤差1%以内の金属被膜抵抗と2%以下のポリプロビレンコンデンサを使用し20Hz~20kHz以内でのRIAA偏差を0.2dB以内に抑えています。

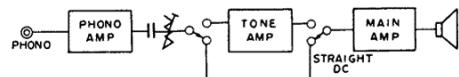
なおPHONO1のポジションではカートリッジの最適負荷を選ぶためカートリッジロードを $27k\Omega$ 、 $47k\Omega$ 、 $100k\Omega$ に切換えることができます。

さらに電源ON-OFF時の不快なノイズを取り除くためにフォノアンプ出力にミューティングリレーを挿入し万全を期しています。

さらにターンテーブルのゴロやフラッターを取り除くために出力部にEQ Subsonicフィルターを入れています。

### ■STRAIGHT DC(OPERATIONスイッチ)

PHONOアンプの出力を直接メインアンプに送り込むことによって段間のカップリングコンデンサを1つだけにすることが出来ます。



このスイッチを操作することによってSTRAIGHT DC-TONE IN-TONE OUTの動作状態を選ぶことが出来ます。なお各動作でのゲイン及び入力感度の変化はありません。

### ■メインアンプ

STRAIGHT DC動作をさせるため入力感度は $150mV$ で出力 $120W$ ( $8\Omega$ 、ABクラス)を得られるゲインを持っています。完全DCアンプとしてマランツ独特の回路方式としTIM歪の低減とDCサーボ回路によりDCドリフトの低減に万全を期しています。

### 電圧増幅段(Voltage Amp)

入力段はペア特性の良いデュアルFETによるソースフォローアンプを使用し入力段のインピーダンス変化による特性悪化を防いでいます。インピーダンスを下げた信号はデュ

## □調整方法

アルトランジスタによる差動アンプで増幅されますが、この負荷にはやはりリデュアルトランジスタを使った能動バランス負荷回路を使用しています。

差動出力の片側は位相反転し、それぞれの差動出力は段間エミッタフォロワーによるバッファーアンプを通し2段目のブッシュブル増幅段に入ります。

### 電力増幅段(Power output)

電力増幅段には新開発のスーパーハイ $f_t$ (70~90MHz)のパワートランジスタを並列接続した3段ダーリントン方式の出力段でバイアス電流及び出力供給電圧を切換えることにより純Aクラス30W(8Ω)とABクラス120W(8Ω)を切り換えることが出来ます。

### ●バイアス電流調整

(1)CLASS B (フロントパネル、ポケットカバー内のCLASS④のスイッチをOFFにする)  
調査箇所 RH07, RH08(1kΩ)

入 力 \_\_\_\_\_

出 力 8Ω(LOAD)

測定箇所 Lch, TP1~TP2間、Rch TP4~TP5間にデジタルボルトメーターを接続し端子電圧が安定する(約30秒~1分)まで待ち、その後14mVになるようRH07, RH08を調整します。

(2)CLASS A (フロントパネル、ポケットカバー内のCLASS⑤のスイッチをONにする)  
調査箇所 RH05, RH06 4.7kΩ

入 力 \_\_\_\_\_

出 力 8Ω(LOAD)

測定箇所 Lch TP1~TP2間、Rch TP4~TP5間にデジタル、ボルトメーターを接続し端子電圧が安定する(約30秒~1分)まで待ち、その後380mVになるようRH05, RH06を調整します。

## □サービスに必要な測定器

項目	使用法
電流計	アンプ出力の直と電圧を測定する。
低周波発振器	正弦波および矩形波の信号源として使用する。
オシロスコープ	波形分析およびトラブル・シューティングに使用する。
V T V M	電圧および抵抗値の測定に使用する。
交流ワットメーター	アンプの一次側消費電力をモニターする。
電源電圧計	アンプの一次側電源電圧をモニターする。
スライダック (0~140VAC, 10A)	アンプの一次側電圧を調節する。
ショート用プラグ	雑音を拾わないようにアンプ入力を短絡するのに使用する。
出力負荷抵抗 (8Ω±0.5%, 250W)	アンプの出力に8Ωの負荷を与える。
出力負荷抵抗 (4Ω±0.5%, 250W)	アンプの出力に4Ωの負荷を与える。

## MARANTZ MODEL Pm-6 STEREO PRE MAIN AMPLIFIER



### FEATURES

- **MC HEAD amplifier**

The first stage uses 4 super-low noise NPN transistors and 4 super-low noise PNP transistors connected in parallel to form push-pull circuit. The second stage is also a push-pull circuit. The output stage is a high gain SEPP amplifier. Totally, 13 transistors are used for a channel. The feedback circuit has very low impedance, thus improving the S/N. With this design, this MC head amplifier provides a high voltage gain (20 dB or 10 times) at a rated input of 220  $\mu$ V.

- **PHONO amplifier**

The PHONO amplifier is a unique Marantz full-stage push-pull circuit using 11 transistors that ensures low TIM distortion and a high S/N.

The first stage uses super-low noise, high Gm FETs in push-pull connection (N and P channels) and a cascode current mirror circuit to prevent the deterioration of the characteristics due to changes in input impedance. The PHONO signal is fed through the emitter follower buffer amplifier to the push-pull voltage amplifier in the second stage.

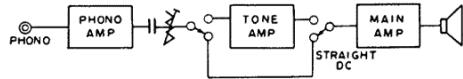
The output stage is an SEPP circuit which has sufficient driving ability. The equalizer circuit has a very low impedance so that the S/N is a high 90 dB at the rated input. This circuit uses high quality metallic film resistors ( $\pm 1\%$ ) and polypropylene capacitors ( $\pm 2\%$ ) to reduce the deviation from the RIAA characteristic to less 0.2 dB at 20 Hz – 20 kHz.

Optimum cartridge load can be selected between 27 k $\Omega$ , 47 k $\Omega$  and 100 k $\Omega$  by using the PHONO switch on the front panel. The output stage includes a muting relay to eliminate the shock noise which is normally generated when the power is turned on and off.

The output stage is also provided with an EQ subsonic filter to eliminate wow and flutter generated by the turntable.

- **Straight DC (Operation switch)**

By using this switch, the output of the PHONO amplifier, passing through the coupling capacitor, is directly fed to the main amplifier without affecting the gain and input sensitivity, thus the main amplifier operates in the STRAIGHT DC/TONE-IN/TONE-OUT mode.



- **Main amplifier**

The main amplifier has sufficient gain to provide 120W (class AB, 8 ohms) of output power at 150 mV input to ensure satisfactory STRAIGHT DC operation. This full-stage DC amplifier employs a unique Marantz circuit design to minimize TIM distortion and a DC servo circuit to eliminate DC drift.

#### Voltage amplifier stage

The input stage uses a matched pair of dual FETs as a source follower amplifier to prevent the deterioration of the characteristics due to changes in input impedance. The low impedance signal is amplified by the dual transistor differential amplifier with an active load balancing circuit. The differential output is fed through the emitter follower buffer amplifier to the push-pull amplifier in the next stage.

- **PLUS**

The speaker protection circuit uses high performance ICs and relays. The power supply circuit is complete with a large, high regulation transformer and large capacity electrolytic audio capacitors.

The power output circuit is equipped with high efficiency heat sinks to cool the power transistors, thus providing continuous high output power.

**Power amplifier stage**

The power amplifier stage uses newly developed super-high  $f_T$  (70 ~ 90 MHz) power transistors connected in parallel to form a 3-stage Darlington circuit. By selecting the bias current and output voltage, the output stage can be switched between pure class A amplification, 30W (8 ohms) and class AB amplification, 120W (8 ohms). To use of unique Marantz push-pull and 2-pole phase compensating circuits provides excellent open-loop characteristics and distortion-free output.

## ADJUSTMENT

- **Bias current adjustment**

1. Class B (Set the front panel CLASS A button to the OFF position.)  
 Adjustment: RH07 and RH08 (1 kΩ)  
 Input:  
 Output: 8-ohm load  
 Procedure: Connect a digital voltmeter across TP1 and TP2 (L ch.) and across TP4 and TP5 (R ch.). After the terminal voltages stabilize (30 ~ 60 seconds later), adjust RH07 and RH08 until the voltmeter reads 14 mV for each channel.

2. Class A (Press the front panel CLASS A button to the ON position.)  
 Adjustments: RH05 and RH06 (4.7 kΩ)  
 Input:  
 Output: 8-ohm load  
 Procedure: Connect a digital voltmeter across TP1 and TP2 (L ch.) and across TP4 and TP5 (R ch.). After the terminal voltages stabilize (30 ~ 60 seconds later), adjust RH05 and RH06 until the voltmeter reads 380 mV for each channel.

## REQUIRED MEASURING INSTRUMENTS

Table 1. List of required measuring instruments

Item	Purpose
Distortion meter	Measures distortion in amplifier output and its voltage.
Audio frequency generator	Signal source for audio-frequency sine and square waves.
Oscilloscope	Waveform analysis and troubleshooting.
V T V M	Voltage and resistance measurement.
AC power meter	Monitors amplifier's primary power consumption.
Voltmeter	Monitors amplifier's primary supply voltage.
Slidac (0 ~ 140V AC, 10A)	Adjusts amplifier's primary supply voltage.
Shorting plug	Used to short input jacks for noise prevention.
Output load resistor (8Ω ± 0.5%, 250W)	Load to amplifier output (8Ω).
Output load resistor (4Ω ± 0.5%, 250W)	Load to amplifier output (4Ω).

Model Pm-6 (F)

Model Pm-6 (E)

REF. DESIG.	Q'TY	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY	PART NO.	DESCRIPTION
				PE01	1	WK21441820	P.W. Board, Tone Amp (R)
					1	ZZ21441820	P.W. Board Assembly
				PF00	1	WK21441850	P.W. Board, Loudness
					1	ZZ21441850	P.W. Board Assembly
				PG00	1	WH21441310	P.W. Board, Mode Balance
					1	ZZ21441310	P.W. Board Assembly
				PH00	1	WK21441520	P.W. Board, Filter SW
					1	ZZ21441520	P.W. Board Assembly

## TECHNICAL SPECIFICATIONS

<b>AUDIO SECTION</b>	
Rated Power Output (20 Hz to 20 kHz, both channels driven)	120W x 2 (8Ω Load) Class AB 30W x 2 (4Ω Load) Class A
Power Bandwidth (8Ω Load, THD 0.05%)	5 Hz to 100 kHz
THD (20 Hz to 20 kHz, 8Ω Load)	0.015%
I.M. Distortion	0.015%
Frequency Response (20 Hz to 20 kHz)	+0, -0.2 dB
Damping Factor (8Ω Load)	5 Hz to 100 kHz
(+0, -1 dB)	100
Input Sensitivity and Impedance (at MAIN IN)	1.5V/30 kΩ
Phono 1 (MM)	2.5 mV/27 kΩ/47 kΩ/100 kΩ
Phono 1 (MC)	125 µV/75 kΩ
Phono 2 (MM)	2.5 mV/47 kΩ
Phono 2 (MC)	150 mV/40 kΩ
High Level	1.5V/200Ω
Rated Power Output and Impedance	1.5V/200Ω
Pre Out	1.5V/200Ω
Tape Out	150 mV/600Ω
Frequency Response, RIAA 20 Hz to 20 kHz	±0.2 dB
Equivalent Input Noise (Phono, IHF-A)	0.24 µV
Dynamic Range (Phono)	120 dB
Signal-to-Noise Ratio (IHF-A Network)	120 dB
Phono (MM)	86 dB
Phono (MC)	68 dB
TAPE/TUNER/AUX	110 dB
Phono MAX Input Voltage, 1 kHz	220 mV
Phono (MM)	.10 mV
Phono (MC)	
Tone Control Response	
Bass Range 100 Hz	±8 dB
TREBLE Range 10 kHz	±8 dB
<b>GENERAL</b>	
Power Requirements	110/120/220/240V AC, 50/60 Hz
Power Consumption	350W
Dimensions	
Panel Width	16 3/8" (416 mm)
Panel Height	5 3/4" (146 mm)
Depth	13-1/16" (332 mm)
Weight	
Unit alone	34 lbs 1 oz (15.5 kg)

Model Pm-6 (F)

Model Pm-6 (E)

REF. DESIG.	Q'TY	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY	PART NO.	DESCRIPTION
005D	1	2144861010	Label	005D	1	201H861010	Label
001E	1	2144160210	Bracket, Rear Panel	007D	1	59030805P1	Label
005E	1	1455259090	Bushing	001E	1	2144160220	Bracket, Rear Panel
				005E	1	1455259040	Bushing
				016E	1	201H053030	Cover
				017E	2	51280308U0	B.H. Tapped Screw B3 x 8
				018E	2	51280308U0	B.H. Tapped Screw B3 x 8
				901F	1	62030039W0	Lug
				902F	1	5128030880	B.H. Tapped Screw B3 x 8
001S	1	2144801010	Packing Case	001S	1	2144801020	Packing Case
005S	1	2864804010	Sleeve	007S	1	2144851310	Instructions
007S	1	2144851110	Instructions	012S	2	9526019060	Serial No. Card
010S	1	9631000110	Guarantee Card				
012S	2	9526019040	Serial No. Card				
013S	1	2976813020	Envelope				
014S	1	2976851040	Instructions				
018S	1	9650000030	S. Station Card	024S	1	2147863010	Hang Tag
023S	1	2461107010	Sheet	030S	1	2731821010	Silicagel
				031S	1	2144856010	Circuit Diagram
				032S	1	2144851020	Instructions
				001R	1	2932861010	Label
				003R	1	2578861010	Label
				005R	1	2882861020	Label
				901R	1	2461861030	Label
				902R	1	2461861030	Label
				903R	1	2461861020	Label
GU01	1	BF10400030	Cap. Comp. 0.1μF + 120Ω	GU01	1	BF10400060	Cap. Comp. 0.1μF + 120Ω
				J091	1	BY05080010	Voltage Selector
L001	1	TS60508010	Power Transformer	L001	1	TS60508040	Power Transformer
PN00	1	YH22870210	P.W. Board, ASO Protector				
W001	1	YC02400180	A.C. Power Cord	W001	1	YC01900030	A.C. Power Cord
015F	1	2144123010	Contactor	015F	1	2144123070	Contactor
016F	1	2144123020	Contactor				
017F	1	2144123030	Contactor				
019F	3	51100308E0	B.H.B. Screw B3 x 8	006F	2	201H120010	Insulator
007L	1	2144259020	Bushing for Power Transistor	045L	2	62051870W0	Lug
044L	1	51280306U0	B.H. Tapped Screw B3 x 6				
CH01	1	EA10603590	Elect	C703	1	DF76680550	Film 68pF
CH02	1	EA10603590	Elect	C704	1	DF76680550	Film 68pF
RH03	1	GD05471140	470Ω	RH03	1	GD05271140	270Ω
RH04	1	GD05471140	470Ω	RH04	1	GD05271140	270Ω
C703	1	DF76470550	Film 47pF ±10%	C703	1	DF76680550	Film 68pF
C704	1	DF76470550	Film 47pF ±10%	C704	1	DF76680550	Film 68pF
C711	1	DF16474510	Film 0.47μF ±10%	C711	1	DF16105510	Film 1μF
C712	1	DF16474510	Film 0.47μF ±10%	C712	1	DF16105510	Film 1μF
C773	1	EA47601630	Elect 47μF 16V	C775	1	EA22708020	Elect 220μF 80V
C775	1	EA10710010	Elect 100μF 100V	C776	1	EA22708020	Elect 220μF 80V
C776	1	EA10710010	Elect 100μF 100V				

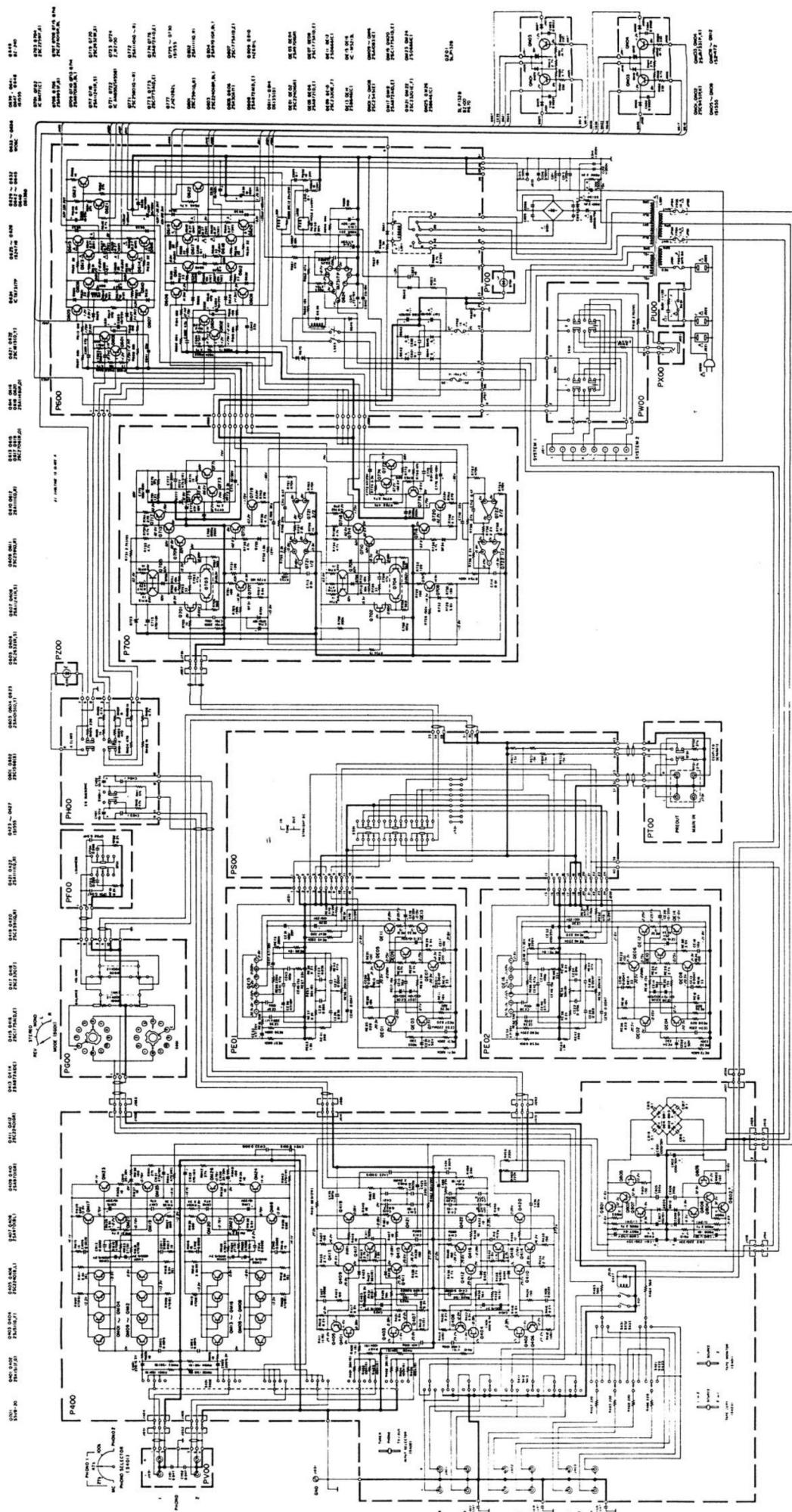
Model Pm-6 (F)

Model Pm-6 (E)

REF. DESIG.	Q'TY	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY	PART NO.	DESCRIPTION
R723	1	GD05330140	33Ω 1/4W	R723	1	GD05331140	330Ω 1/4W
R724	1	GD05330140	33Ω 1/4W	R724	1	GD05331140	330Ω 1/4W
R761	1	GD05474140	470KΩ 1/4W	R761	1	GD05334140	330KΩ 1/4W
R762	1	GD05474140	470KΩ 1/4W	R762	1	GD05334140	330KΩ 1/4W
R763	1	GD05474140	470KΩ 1/4W	R763	1	GD05334140	330KΩ 1/4W
R764	1	GD05474140	470KΩ 1/4W	R764	1	GD05334140	330KΩ 1/4W
C603	1	EA10602530	Elect 10μF 25V	C603	1	EA10703540	Elect 100μF 35V
C604	1	EA10602530	Elect 10μF 25V	C604	1	EA10703540	Elect 100μF 35V
C616	1	EA22708020	Elect 220μF 80V	C616	1	EA22708050	Elect 100μF 80V
C617	1	EA22708020	Elect 220μF 80V	C617	1	EA22708050	Elect 100μF 80V
C618	1			C618	1	EA22708020	Elect 220μF 80V
C631	1	DF16105510	Film 1μF ±10%	C619	1	EA22708020	Elect 220μF 80V
C632	1	DF16105510	Film 1μF ±10%				
C640	1	EA22601630	Elect 22μF 16V				
C641	1	DF76220500	Film 220pF ±10%	C641	1	DF76220550	Film 22pF
C642	1	DF76220500	Film 22pF ±10%	C642	1	DF76220550	Film 22pF
Q613	1	HT327062A0	Transistor 2SC2706 (R or O)	Q613	1	HT328372A0	Transistor 2SC2837 (R or O)
Q614	1	HT111462A0	Transistor 2SA1146 (R or O)	Q614	1	HT111862A0	Transistor 2SA1186 (R or O)
Q615	1	HT327062A0	Transistor 2SC2706 (R or O)	Q615	1	HT328372A0	Transistor 2SC2837 (R or O)
Q616	1	HT111462A0	Transistor 2SA1146 (R or O)	Q616	1	HT111862A0	Transistor 2SA1186 (R or O)
Q617	1	HT327062A0	Transistor 2SC2706 (R or O)	Q617	1	HT328372A0	Transistor 2SC2837 (R or O)
Q618	1	HT111462A0	Transistor 2SA1146 (R or O)	Q618	1	HT111862A0	Transistor 2SA1186 (R or O)
Q619	1	HT327062A0	Transistor 2SC2706 (R or O)	Q619	1	HT328372A0	Transistor 2SC2837 (R or O)
Q620	1	HT111462A0	Transistor 2SA1146 (R or O)	Q620	1	HT111862A0	Transistor 2SA1186 (R or O)
CM19	1	EA22603590	Elect 22μF 35V	CM19	1	EQ22602520	Elect 22μF 25V
CM20	1	EA22603590	Elect 22μF 35V	CM20	1	EQ22602520	Elect 22μF 25V
R809	1	GD05512140	5.1KΩ 1/4W	R809	1	GM21448710	4.87KΩ 1/4W
R810	1	GD05512140	5.1KΩ 1/4W	R810	1	GM21448710	4.87KΩ 1/4W
CE19	1	EA10603530	Elect 10μF 35V	CE19	1	EQ10602510	Elect 10μF 25V
CE20	1	EA10603530	Elect 10μF 35V	CE20	1	EQ10602510	Elect 10μF 25V
RE49	1	GD05471120	470Ω 1/2W	RE49	1	GG05471120	470Ω 1/2W
RE50	1	GD05471120	470Ω 1/2W	RE50	1	GG05471120	470Ω 1/2W
RE51	1	GD05471120	470Ω 1/2W	RE51	1	GG05471120	470Ω 1/2W
RE52	1	GD05471120	470Ω 1/2W	RE52	1	GG05471120	470Ω 1/2W
JX01	1	YJ01001340	Jack, Head Phone	C010	1	DF16103350	Film Cap. 0.01μF 50V
				JX01	1	YJ01001400	Jack, Head Phone
				J063	1	YB00250070	Connective Cord
				J064	1	YB00250080	Connective Cord
				J065	1	YB00250090	Connective Cord
				006L	1	201H120010	Insulator
				P400	1	WK21441510	P.W. Board, Pre Amp
					1	ZZ21441510	P.W. Board Assembly
				P401	1	WH21441330	P.W. Board, MM TR
					1	ZZ21441330	P.W. Board Assembly
				P600	1	WK21441210	P.W. Board, Output Amp
					1	ZZ21441210	P.W. Board Assembly
				P700	1	WK21441220	P.W. Board, Voltage
					1	ZZ21441220	P.W. Board Assembly
				PE01	1	WK21441810	P.W. Board, Tone Amp (L)
					1	ZZ21441810	P.W. Board Assembly

# Model Pm-6

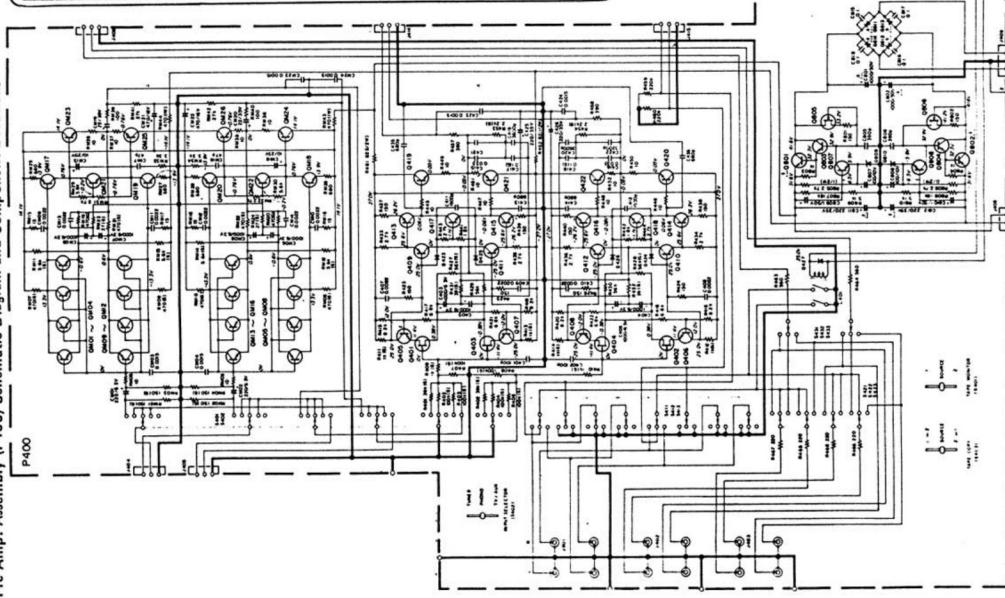
## 回路図



(安全上の注意：△が付いている部品は、安全上重要な部品です。必ず指定されている部品番号の部品を使用してください。  
本機の回路は改良のため予告なく変更することがあります。ご了承ください。)

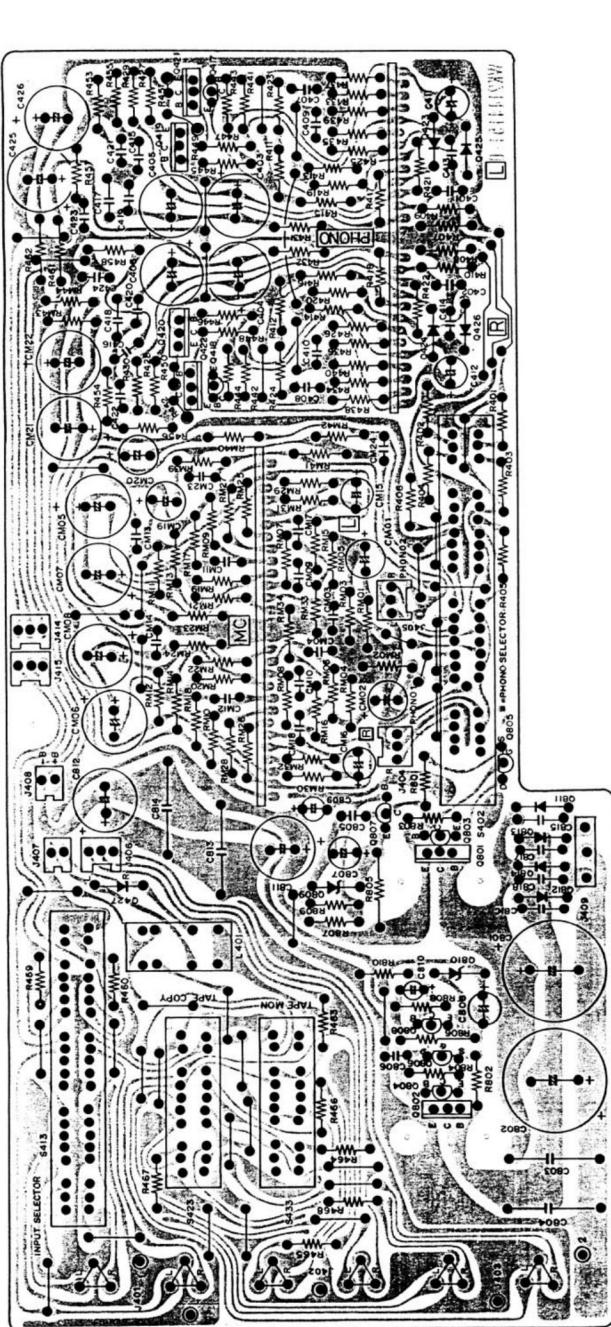
回路図と基板

## **Pre AMP Assembly (P490) Schematic Diagram and Component Locations**



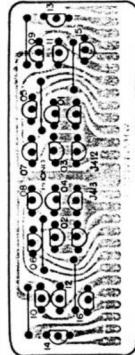
## **Pre AMP Assembly (P490) Schematic Diagram and Component Locations**

## **Pre AMP Assembly (P490) Schematic Diagram and Component Locations**



NM Transistor Block Assembly (PA01)

NM Transistor Block Assembly (PA01)



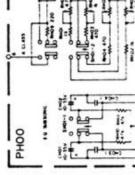
MC Transistor Block Assembly (PM01)

MC Transistor Block Assembly (PM01)



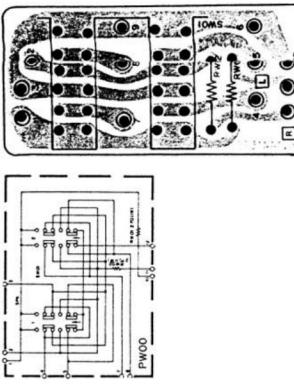
Filter Assembly (DH000)

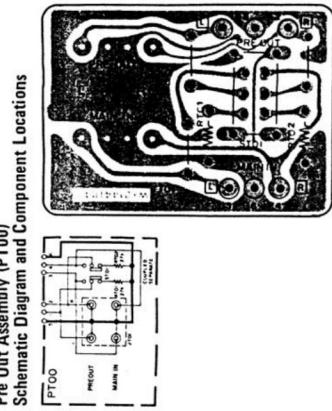
Editor's Announcement (RH000)



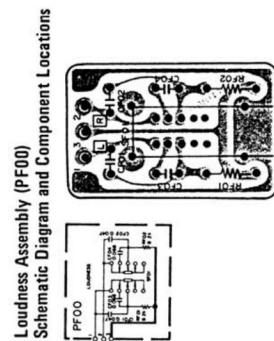
Sneaker Switch Assembly (PW00)

Speaker Switch Assembly (PW00)

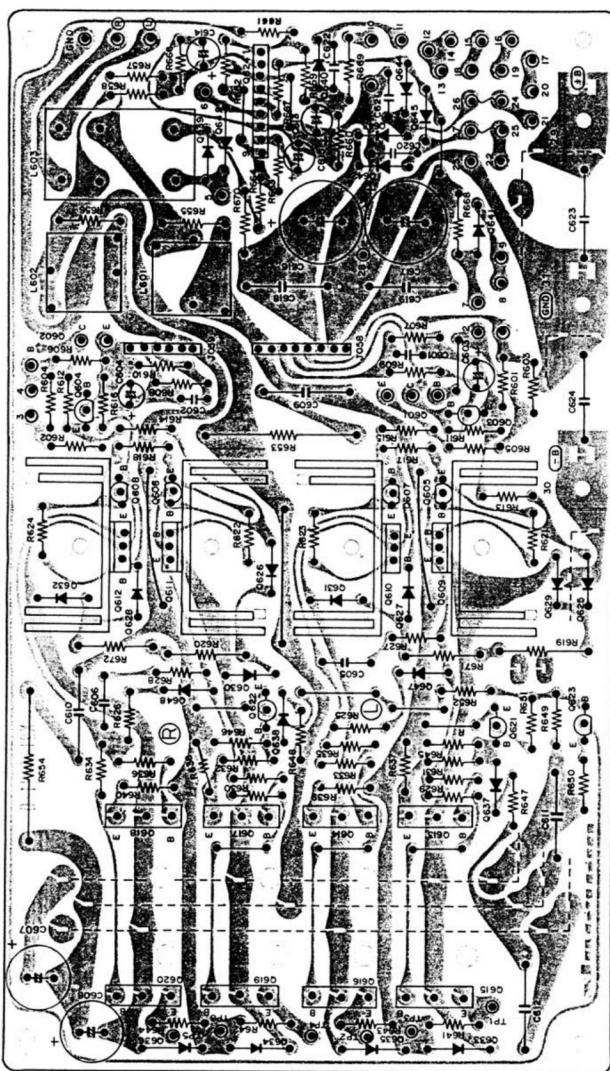




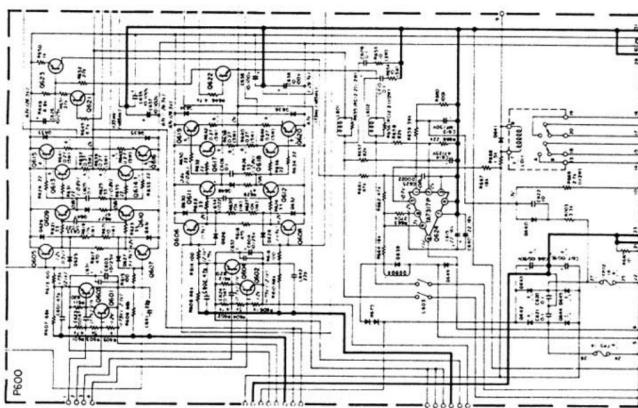
Pre Out Assembly (PT00)  
Schematic Diagram and Component Locations



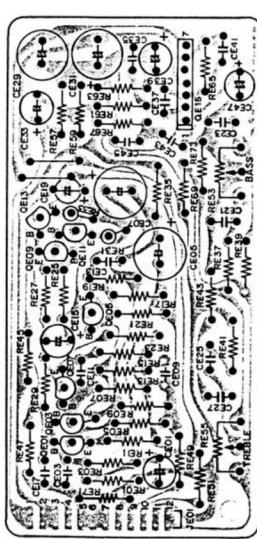
Loudness Assembly (PF00) Schematic Diagram and Component Locations



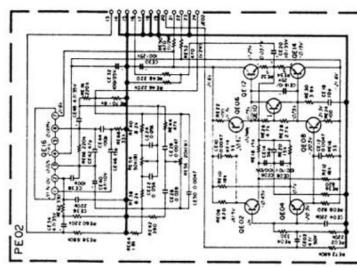
## Output Amp. Assembly (P600) Schematic Diagram and Component Locations



## Tone Amp. (L ch) Assembly (PE01) Schematic Diagram and Component Locations

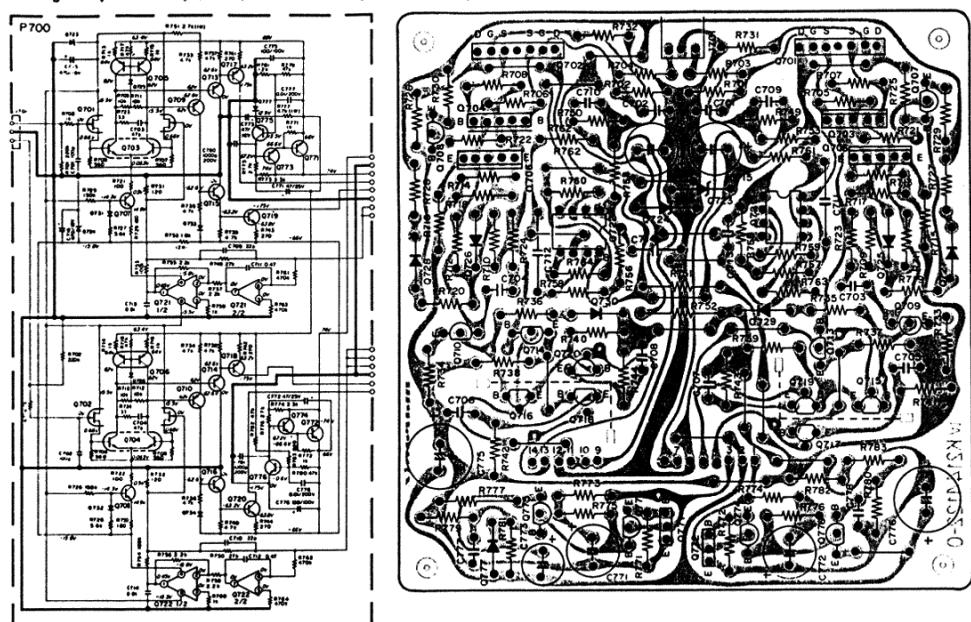


## Tone Amp. (R ch) Assembly (PE02) Schematic Diagram and Component Locations

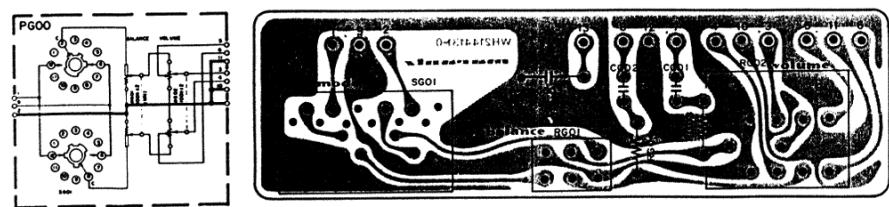


The image shows a detailed schematic diagram of an integrated circuit (IC) labeled S-1000A. The diagram is organized into several functional blocks: a left section containing resistors R101 through R110, capacitors C101 through C105, and diodes D101 through D105; a central section with transistors T101 through T105, resistors R121 through R130, and capacitors C121 through C125; and a right section with transistors T106 through T109, resistors R141 through R150, and capacitors C141 through C145. Various interconnections between these blocks are shown using lines and junction points. A legend on the right side lists component values: R101-R110 = 1MΩ, C101-C105 = 0.01µF, D101-D105 = 1N4007, T101-T105 = BC547, R121-R130 = 10kΩ, C121-C125 = 0.001µF, T106-T109 = BC547, R141-R150 = 10kΩ, C141-C145 = 0.001µF, and various diodes and resistors for biasing and feedback.

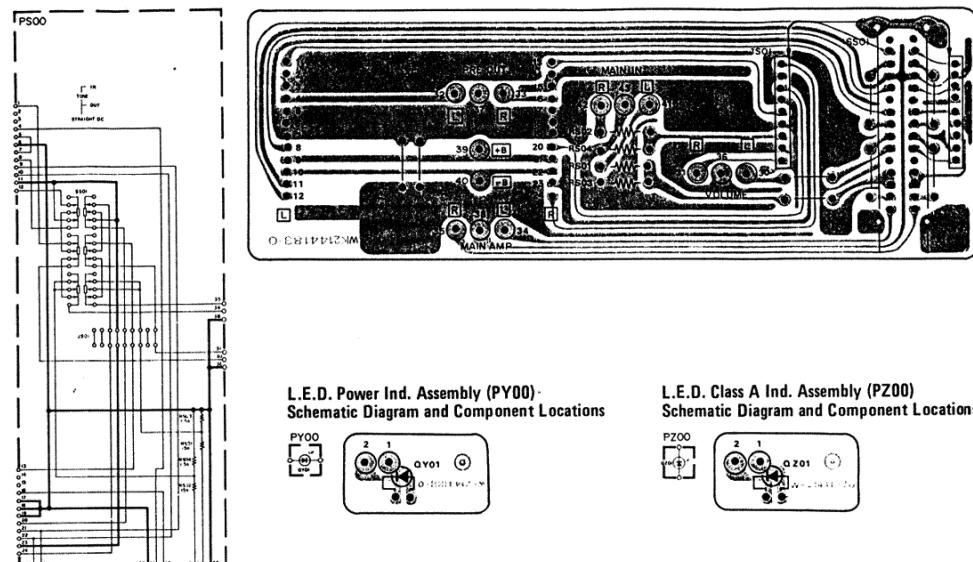
Voltage Amp. Assembly (P700) Schematic Diagram and Component Locations



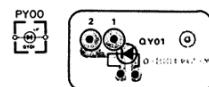
## **Balance Control Assembly (PG00) Schematic Diagram and Component Locations**



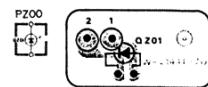
**Straight DC Assembly (PS00) Schematic Diagram and Component Locations**



**L.E.D. Power Ind. Assembly (PY00) Schematic Diagram and Component Locations**



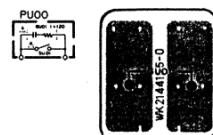
**L.E.D. Class A Ind. Assembly (PZ00) Schematic Diagram and Component Locations**



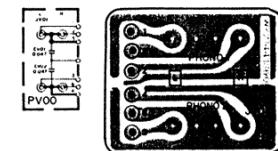
**Head Phone Assembly (PX00) Schematic Diagram and Component Locations**



**Power Switch Assembly (PU00) Schematic Diagram and Component Locations**



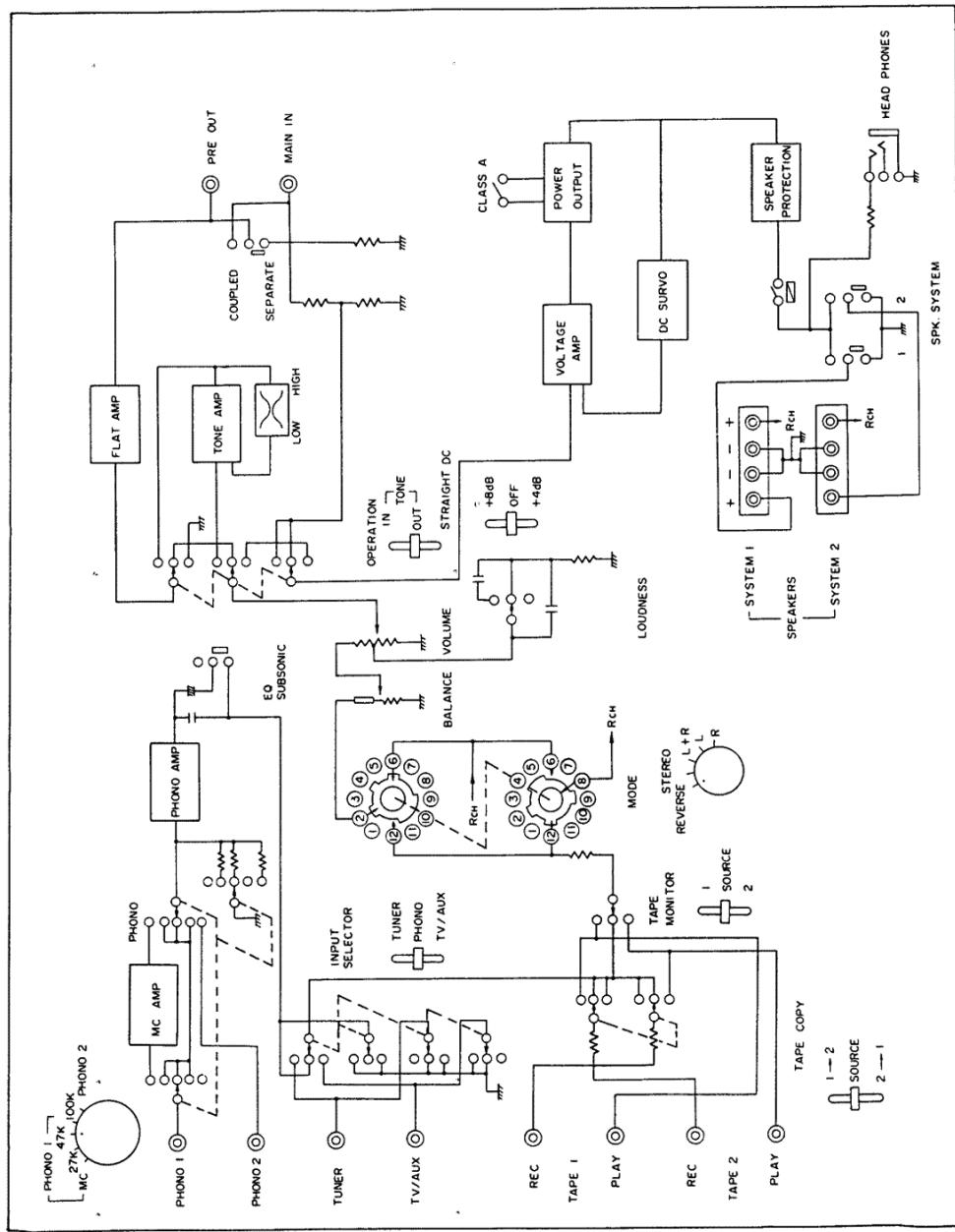
**Phone Input Assembly (PV00) Schematic Diagram and Component Locations**



**Fuse Assembly (PP00) Component Locations**

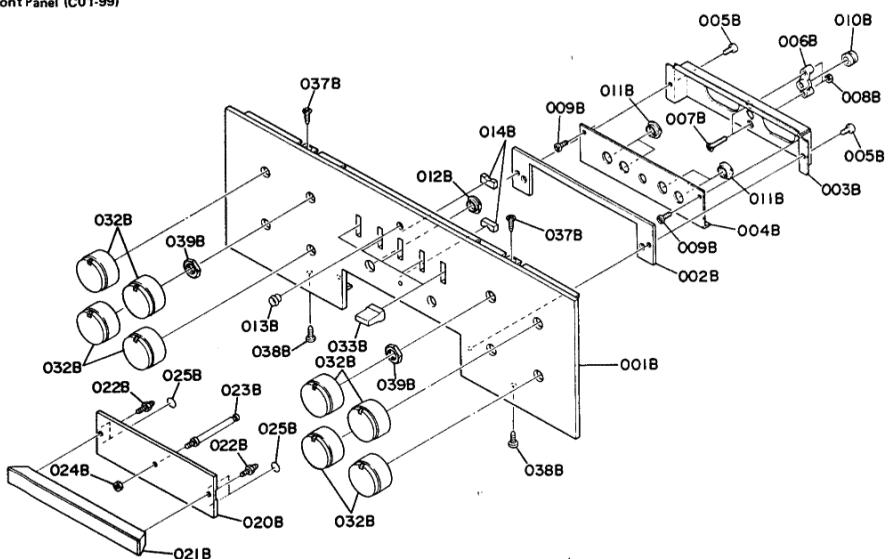


□ブロックダイアグラム



□ 分解及び部品表

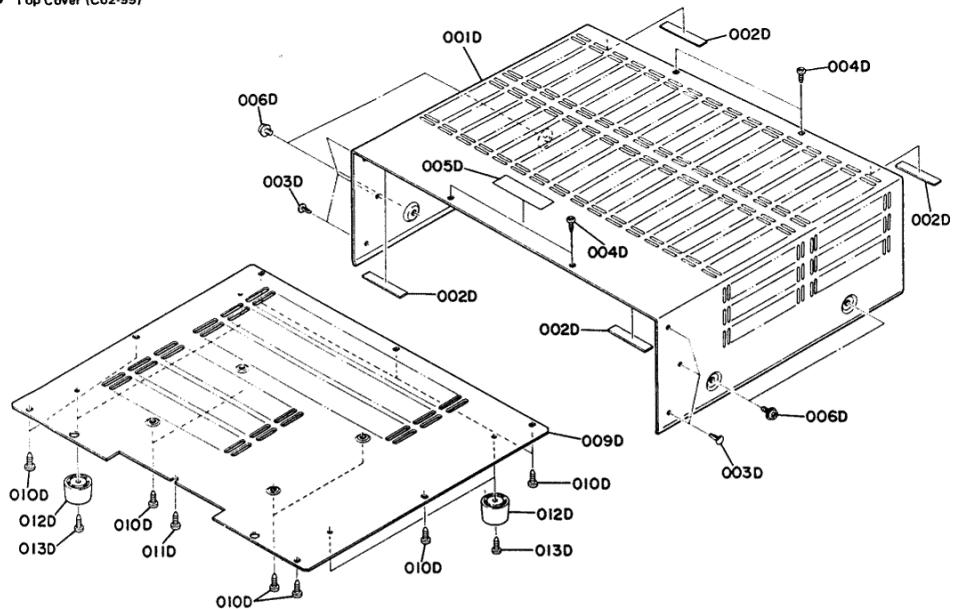
• Front Panel (C01-99)



REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
A	1	2144063400	Front Panel Assembly
001B	1	2144063010	Escutcheon, Front Panel
002B	1	2461063030	Escutcheon, Pocket Frame
003B	1	2144160020	Bracket
004B	1	2144063020	Escutcheon, Pocket Panel
005B	2	51060305A9	P.H.M. Screw P3 x 5
006B	1	2461271010	Holder
007B	2	51042610A0	F.H.M. Screw F2.6 x 10
008B	2	53112603A0	Hexagon Nut
009B	2	51100204E0	B.H.M. Screw B2 x 4
010B	1	1143259010	Bushing, Pin Holder
011B	4	2978259010	Bushing, Push Switch
012B	1	2978259010	Bushing, Power Switch
013B	1	2462259010	Bushing, LED

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
B	1	2144063410	Pocket Cover Assembly
020B	1	2461063050	Escutcheon, Pocket Cover
021B	1	2461253110	Handle
022B	2	2461254010	Pin
023B	1	2461254020	Pin
024B	1	53110303E9	Hexagon Nut
025B	4	2461107020	Sheet
014B	2	2112053030	Cover
032B	8	2462154260	Knob
033B	5	2144154110	Knob, Lever Switch
037B	2	5134030680	F.H. Tapped Screw F3 x 6
038B	2	51280308U0	B.H. Tapped Screw B3 x 8
039B	2	53118129G0	Hexagon Nut

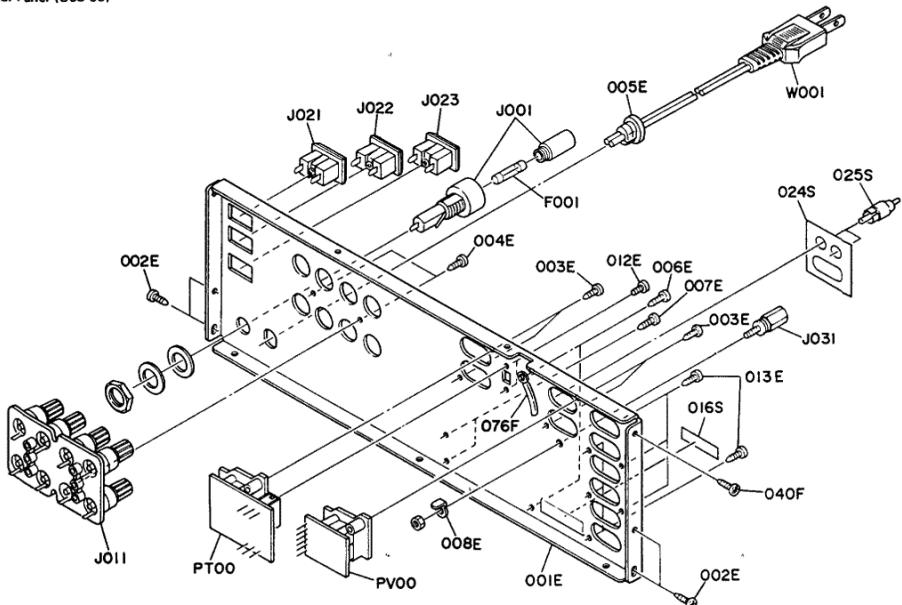
- Top Cover (C02-99)



REF. DESIG.	O'TY F	PART NO.	DESCRIPTION		
001D	1	2461257010	Lid, Top Cover		
002D	4	2965118010	Spacer		
003D	6	2991259010	Bushing		
004D	4	51260308Z0	Tapped Screw	3 x 8	
005D	1	2144861010	Label		
006D	4	51480406Z9	F. Washer Screw	4 x 6	

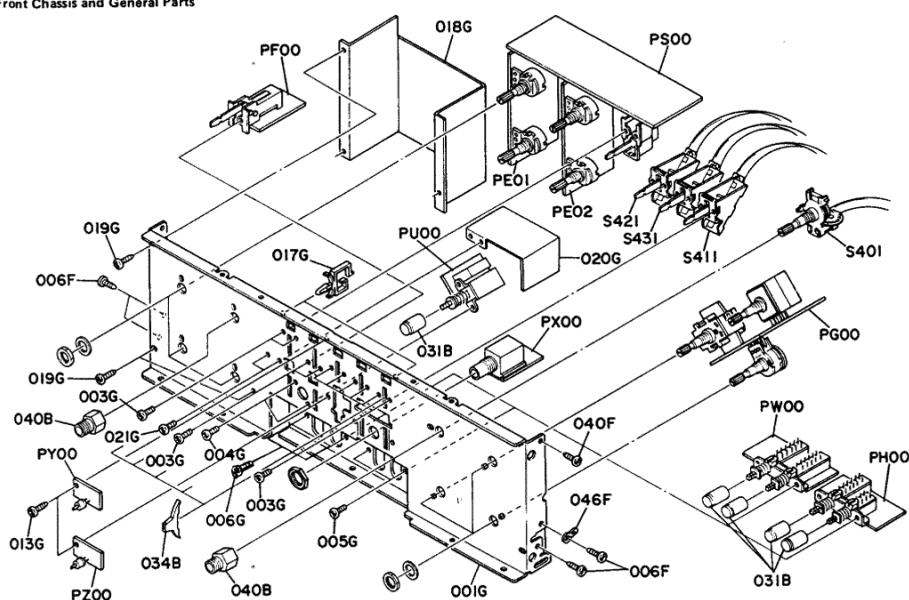
REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
009D	1	2144257010	Lid, Bottom Cover
010D	11	51280410U0	B.H. Tapped Screw B4 x 10
011D	1	51280406U0	B.H. Tapped Screw B4 x 6
012D	4	2759057010	Leg
013D	4	51570410SO	P. Taptite Screw P4 x 10

- Rear Panel (C03-99)



REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
001E	1	2144160210	Bracket, Rear Panel	016S	1	2112265010	Indicator
002E	4	5110030859	B.H.M. Screw B3 x 8	024S	1	2144863010	Hang Tag
003E	4	51280308U0	B.H. Tapped Screw B3 x 8	025S	2	YQ01000020	Short Plug
004E	2	51280308U0	B.H. Tapped Screw B3 x 8	J.F001	1	FS10800010	Fuse 8A 250V
005E	1	1455259090	Bushing	J.J001	1	YJ08000300	Jack, Fuse Holder
006E	2	51280308U0	B.H. Tapped Screw B3 x 8	J011	1	YT01080030	Terminal, Speaker System
007E	2	51280308U0	B.H. Tapped Screw B3 x 8	J.J021	1	YJ04000560	Jack, AC Outlet
008E	1	62040029W0	Lug	J.J022	1	YJ04000560	Jack, AC Outlet
012E	2	5110260550	B.H.M. Screw B2.6 x 5	J.J023	1	YJ04000560	Jack, AC Outlet
013E	6	51280308U0	B.H. Tapped Screw B3 x 8	J031	1	YT01010050	Terminal, Ground
040F	1	51280308B0	B.H. Tapped Screw B3 x 8	J032	1	YL01020080	Terminal (2P)
076F	1	4220005040	Clamper	J.W001	1	YC02400182	A.C. Power Cord

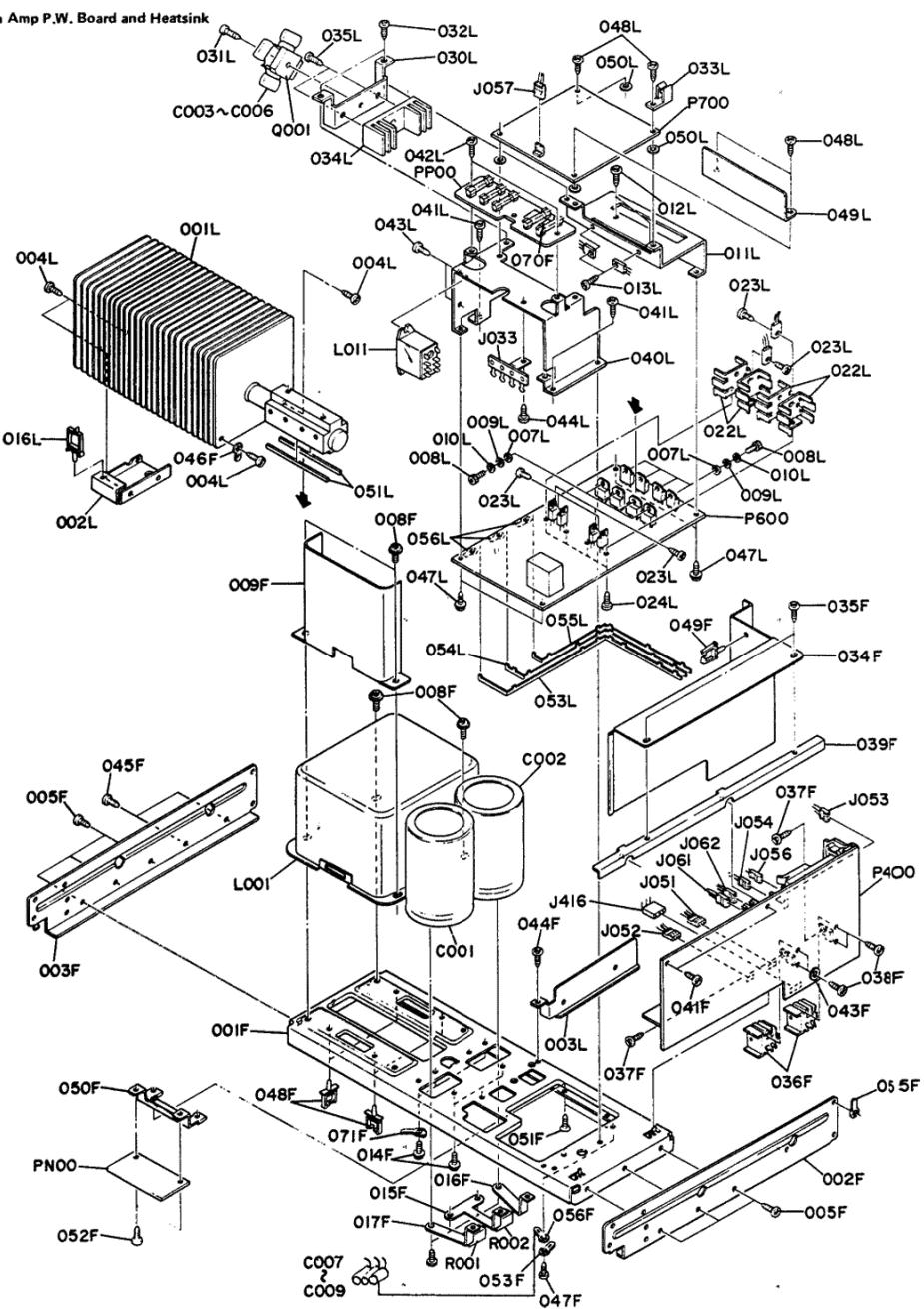
• Front Chassis and General Parts



REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
O31B	5	2462154220	Knob, Push Switch
O34B	5	2144259010	Bushing, Lever Switch
O40B	2	2462101040	Support
O06F	4	5128030880	B.H. Tapped Screw B3 x 8
O40F	1	5128030880	B.H. Tapped Screw B3 x 8
O46F	1	62030039W0	Lug
O01G	1	2144160010	Bracket, Front Chassis
O03G	10	51100306A9	B.H.M. Screw B3 x 6
O04G	2	51100306A9	B.H.M. Screw B3 x 6
O05G	2	51100306A9	B.H.M. Screw B3 x 6
O13G	2	5128030880	B. H. Tapped Screw B3 x 8
O17G	2	2129005010	Clamper
O18G	1	2144109050	Shield
O19G	3	5128030880	B.H. Tapped Screw B3 x 8
O20G	1	2144109020	Shield
O21G	2	51100306A9	B.H.M. Screw B3 x 6
O06G	2	51100306A9	B.H.M. Screw B3 x 6

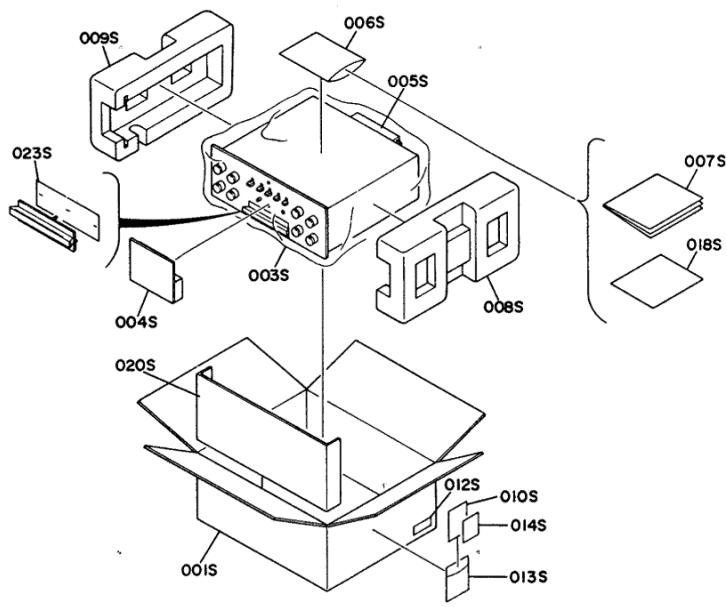
REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
S401	1	SR00050040	Rotary Switch, Phone Selector
S411	1	SC00030010	Switch, Input Selector
S421	1	SC00030010	Switch, Tape Copy
S431	1	SC00030010	Switch, Tape Monitor

• Main Amp P.W. Board and Heatsink



REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
001F	1	2144105010	Chassis, Center	± C001	1	EB22907510	Elect Cap. 22000µF 75V
002F	1	2979105020	Side Chassis (R)	± C002	1	EB22907510	Elect Cap. 22000µF 75V
003F	1	2979105030	Side Chassis (L)	C003	1	DF17104520	Film Cap. 0.1µF ±20% 200V
005F	6	5128040880	B.H. Tapped Screw B4 x 8	C004	1	DF17104520	Film Cap. 0.1µF ±20% 200V
008F	4	51490410S9	L. Washer Screw 4 x 10	C005	1	DF17104520	Film Cap. 0.1µF ±20% 200V
009F	1	2144109030	Shield	C006	1	DF17104520	Film Cap. 0.1µF ±20% 200V
014F	6	51480406S9	F. Washer Screw 4 x 6	C007	1	DK18473320	Ceramic Cap. 0.47µF 50V
015F	1	2144123010	Contactor	C008	1	DK18473320	Ceramic Cap. 0.47µF 50V
016F	1	2144123020	Contactor	C009	1	DK18473320	Ceramic Cap. 0.47µF 50V
017F	1	2144123030	Contactor	J033	1	YJ01040160	Terminal, (4P)
019F	3	51100308E9	B.H.M. Screw B3 x 8	J051	1	YJ06002200	Jack, (3P)
034F	1	2144109010	Shield	J052	1	YJ06002210	Jack, (3P)
035F	2	51280308U0	B.H. Tapped Screw B3 x 8	J053	1	YJ06002220	Jack, (3P)
036F	2	2144267030	Heatsink	J054	1	YJ06002230	Jack, (2P)
037F	2	51280308B0	B.H. Tapped Screw B3 x 8	J056	1	YJ06002240	Jack, (2P)
038F	4	51300308B0	B.H. Tapped Screw P3 x 8	J057	1	YJ06002250	Jack, (3P)
039F	1	2144160080	Bracket	J061	1	YJ06002300	Jack, (3P)
041F	2	51280308B0	B.H. Tapped Screw B3 x 8	J062	1	YJ06002310	Jack, (3P)
044F	1	51280308B0	B.H. Tapped Screw B3 x 8	± L001	1	TS60508010	Power Transformer
045F	2	51280308B0	B.H. Tapped Screw B3 x 8	± L011	1	LY20480050	Relay FRL263
046F	1	62030039W0	Lug	± Q001	1	HD20004290	Diode S5VB-20
047F	1	51280308B0	B.H. Tapped Screw B3 x 8	± R001	1	GS10222030	Resistor 2.2KΩ ±10% 3W
048F	5	2129005010	Clamper	± R002	1	GS10222030	Resistor 2.2KΩ ±10% 3W
049F	1	2886005060	Clamper	± R003	1	GD05332140	Resistor 3.3KΩ ±5% 2W
050F	1	2144160090	Bracket	C011	1	DF17105540	Film 1µF ±20%
051F	2	51500306B0	F.H. Tapped Screw F3 x 6	C012	1	DF17105540	Film 1µF ±20%
052F	2	51280306B0	B.H. Tapped Screw B3 x 6	C013	1	DF17105540	Film 1µF ±20%
055F	1	62030049W0	Lug	C014	1	DF17105540	Film 1µF ±20%
056F	1	62030049W0	Lug	C015	1	DF16105520	Film 1µF ±10%
001L	1	2144267010	Heatsink	C016	1	DF16105520	Film 1µF ±10%
002L	1	2144160040	Bracket	J058	1	YU08200010	Jumper Lead 115mm
003L	1	2144160050	Bracket	J059	1	YU06200010	Jumper Lead
004L	4	51280306B0	B.H. Tapped Screw B3 x 6	043F	1	59030805P1	Washer
008L	8	52730310S9	H.S. Head Bolt 3 x 10	053F	1	62030039W0	Lug For Chassis
009L	8	54020301E0	Flat Washer, P.	007L	8	2144259020	Bushing For Power Transistor
010L	8	54040302N0	Spring Washer	013L	2	51280308U0	B.H. Tapped Screw B3 x 8
011L	1	2144160070	Bracket	034L	1	2144267040	Heatsink
012L	2	51280306U0	B.H. Tapped Screw B3 x 6	035L	2	51280308B0	R.H.M. Screw B3 x 8
013L	2	51280308U0	B.H. Tapped Screw B3 x 8	049L	1	2144109040	Shield
016L	1	2886005020	Clamper	070F	2	9510601010	1A 250V FUSE (LABEL)
022L	4	2212267020	Heatsink	071F	4	62051870W0	Lug for C011~C014
023L	8	51280308B0	B.H. Tapped Screw B3 x 8				
024L	4	51280308B0	B.H. Tapped Screw B3 x 8				
030L	1	2144267020	Heatsink				
031L	1	51280314B0	B.H. Tapped Screw B3 x 14				
032L	2	51280308U0	B.H. Tapped Screw B3 x 8				
033L	1	2887005110	Clamper				
040L	1	2144160060	Bracket				
041L	3	51280308U0	B.H. Tapped Screw B3 x 8				
042L	2	51280308U0	B.H. Tapped Screw B3 x 8				
043L	2	51280308U0	B.H. Tapped Screw B3 x 8				
044L	1	51280306U0	B.H. Tapped Screw B3 x 6				
047L	4	51260308B0	Screw 3 x 8				
048L	4	51280308U0	B.H. Tapped Screw B3 x 8				
050L	4	59030808P0	Washer				
051L	2	2144118010	Spacer				
053L	1	2144123040	Contactor				
054L	1	2144123050	Contactor				
055L	1	2144123060	Contactor				
056L	3	62031240W0	Lug				

- **Packing Materials**



REF. DESIG.	O'TY F	PART NO.	DESCRIPTION
001S	1	2144801010	Packing Case
003S	1	9090909040	Polyethylene Sheet
004S	1	2144809020	Cushion
005S	1	2864804010	Sleeve
006S	1	9013025010	Polyethylene Bag
007S	1	2144851110	Instructions
008S	1	2139809010	Cushion (R)
009S	1	2139809020	Cushion (L)

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
010S	1	9631000110	Guarantee Card
012S	2	9526019040	Serial No. Card
013S	1	2976813020	Envelope
014S	1	2976851040	Instructions
018S	1	9650000030	S. Station Card
020S	1	2144807010	Reinforcing
023S	1	2461107010	Sheet

□電気部品表

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
P400	1	WK21441510	P400-PRE-AMP, CIRCUIT BOARD P.W. Board, Pre-Amp.	C808	1	EA10701030	Elect 100μF 10V
CM01	1	EA22700690	Elect 220μF 6.3V	C809	1	EA10505030	Elect 1μF 50V
CM02	1	EA22700690	Elect 220μF 6.3V	C810	1	EA10505030	Elect 1μF 50V
CM03	1	DF16152510	Film 0.0015μF ±10%	± C811	1	EA22703590	Elect 220μF 35V
CM04	1	DF16152510	Film 0.0015μF ±10%	± C812	1	EA22703590	Elect 220μF 35V
CM05	1	EA10800690	Elect 1000μF 6.3V	C815	1	DK18103510	Ceramic 0.01μF
CM06	1	EA10800690	Elect 1000μF 6.3V	C816	1	DK18103510	Ceramic 0.01μF
CM07	1	EA10800690	Elect 1000μF 6.3V	C817	1	DK18103510	Ceramic 0.01μF
CM08	1	EA10800690	Elect 1000μF 6.3V	C818	1	DK18103510	Ceramic 0.01μF
CM09	1	DF16222510	Film 0.0022μF ±10%				P400-RESISTORS (All Resistors are ±5% and 1W)
CM10	1	DF16222510	Film 0.0022μF ±10%	RM01	1	GM21415000	150Ω ±2%
CM11	1	DF16222510	Film 0.0022μF ±10%	RM02	1	GM21415000	150Ω ±2%
CM12	1	DF16222510	Film 0.0022μF ±10%	RM03	1	GM21415000	150Ω ±2%
CM13	1	DF16222510	Film 0.0022μF ±10%	RM04	1	GM21415000	150Ω ±2%
CM14	1	DF16222510	Film 0.0022μF ±10%	RM05	1	GD05010140	1Ω
CM15	1	EA10602530	Elect 10μF 25V	RM06	1	GD05010140	1Ω
CM16	1	EA10602530	Elect 10μF 25V	RM07	1	GM21447000	470Ω ±2%
CM17	1	DF76470550	Film 47pF ±10%	RM08	1	GM21447000	470Ω ±2%
CM18	1	DF76470550	Film 47pF ±10%	RM09	1	GM21447000	470Ω ±2%
CM19	1	EA22603590	Elect 22μF 35V	RM10	1	GM21447000	470Ω ±2%
CM20	1	EA22603590	Elect 22μF 35V	RM11	1	GM21456010	5.6KΩ ±2%
CM21	1	EA47701690	Elect 470μF 16V	RM12	1	GM21456010	5.6KΩ ±2%
CM22	1	EA47701690	Elect 470μF 16V	RM13	1	GM21456010	5.6KΩ ±2%
CM23	1	DF16152510	Film 0.0015μF ±10%	RM14	1	GM21456010	5.6KΩ ±2%
CM24	1	DF16152510	Film 0.0015μF ±10%	RM15	1	GD05150140	15Ω
C401	1	DF76101550	Film 100pF ±10%	RM16	1	GD05150140	15Ω
C402	1	DF76101550	Film 100pF ±10%	RM17	1	GD05150140	15Ω
C403	1	EA10800690	Elect 1000μF 6.3V	RM18	1	GD05150140	15Ω
C404	1	EA10800690	Elect 1000μF 6.3V	RM19	1	GM21447000	470Ω ±2%
C405	1	EA10800690	Elect 1000μF 6.3V	RM20	1	GM21447000	470Ω ±2%
C406	1	EA10800690	Elect 1000μF 6.3V	RM21	1	GM21447000	470Ω ±2%
C407	1	DF16222510	Film 0.0022μF ±10%	RM22	1	GM21447000	470Ω ±2%
C408	1	DF16222510	Film 0.0022μF ±10%	RM23	1	GM214270G0	27Ω ±2%
C409	1	DF16222510	Film 0.0022μF ±10%	RM24	1	GM214270G0	27Ω ±2%
C410	1	DF16222510	Film 0.0022μF ±10%	RM25	1	GD05680140	680Ω
C411	1	DF16152300	Film 1500pF ±10%	RM26	1	GD05680140	680Ω
C412	1	DF16152300	Film 1500pF ±10%	RM27	1	GD05680140	680Ω
C413	1	DF55681090	Film 680pF ±5%	RM28	1	GD05680140	680Ω
C414	1	DF55681090	Film 680pF ±5%	RM29	1	GD05562140	5.6KΩ
C415	1	DF74333010	Film 0.033μF ±2%	RM30	1	GD05562140	5.6KΩ
C416	1	DF74333010	Film 0.033μF ±2%	RM31	1	GD05272140	2.7KΩ
C417	1	DF74104010	Film 0.1μF ±2%	RM32	1	GD05272140	2.7KΩ
C418	1	DF74104010	Film 0.1μF ±2%	RM33	1	GD05332140	3.3KΩ
C419	1	DF14362010	Film 3600pF ±2%	RM34	1	GD05332140	3.3KΩ
C420	1	DF14362010	Film 3600pF ±2%	RM39	1	GD05101140	100Ω
C421	1	DF64272010	Film 2700pF ±2%	RM40	1	GD05101140	100Ω
C422	1	DF64272010	Film 2700pF ±2%	RM41	1	GD05273140	27KΩ
C423	1	DF16152510	Film 1500pF ±10%	RM42	1	GD05273140	27KΩ
C424	1	DF16152510	Film 1500pF ±10%	RM43	1	GA05471010	470Ω 1W
C425	1	EA22703590	Elect 220μF 35V	RM44	1	GA05471010	470Ω 1W
C426	1	EA22703590	Elect 220μF 35V	R401	1	GM21439020	39KΩ ±2%
C427	1	DF55681090	Film 680pF ±5%	R402	1	GM21439020	39KΩ ±2%
C428	1	DF55681090	Film 680pF ±5%	R403	1	GM21410030	100KΩ ±2%
C429	1	DF55681090	Film 680pF ±5%	R404	1	GM21410030	100KΩ ±2%
C430	1	DF55681090	Film 680pF ±5%	R405	1	GM21410030	100KΩ ±2%
C431	1	DF55681090	Film 680pF ±5%	R406	1	GM21410030	100KΩ ±2%
C432	1	DF55681090	Film 680pF ±5%	R407	1	GM21410030	100KΩ ±2%
C433	1	DF55681090	Film 680pF ±5%	R408	1	GM21410030	100KΩ ±2%
C434	1	DF55681090	Film 680pF ±5%	R409	1	GM21410010	100Ω ±2%
C435	1	DF55681090	Film 680pF ±5%	R410	1	GM21410010	100Ω ±2%
C436	1	DF55681090	Film 680pF ±5%				
J.C801	1	EB10805070	Elect 1000μF 50V				
J.C802	1	EB10805070	Elect 1000μF 50V				
C805	1	DF55391090	Film 390pF ±5%				
C806	1	DF55391090	Film 390pF ±5%				
C807	1	EA10701030	Elect 100μF 10V				

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
R411	1	GM21410010	1KΩ ±2%	R801	1	GD05151140	150Ω
R412	1	GM21410010	1KΩ ±2%	R802	1	GD05151140	150Ω
R413	1	GM21410010	1KΩ ±2%	R803	1	GD05102140	1KΩ
R414	1	GM21410010	1KΩ ±2%	R804	1	GD05102140	1KΩ
R415	1	GD05822140	8.2KΩ	R805	1	GG05272120	2.7KΩ ½W
R416	1	GD05822140	8.2KΩ	R806	1	GG05272120	2.7KΩ ½W
R417	1	GD05682140	6.8KΩ	R807	1	GD05183140	18KΩ
R418	1	GD05682140	6.8KΩ	R808	1	GD05183140	18KΩ
R419	1	GD05822140	8.2KΩ	R809	1	GD05121140	5.1KΩ
R420	1	GD05822140	8.2KΩ	R810	1	GD05512140	5.1KΩ
R421	1	GD05682140	6.8KΩ	<b>P400-SEMICONDUCTORS</b>			
R422	1	GD05682140	6.8KΩ	Q417	1	HT323201F0	Transistor 2SC2320(F)
R423	1	GD05151140	150Ω	Q418	1	HT323201F0	Transistor 2SC2320(F)
R424	1	GD05151140	150Ω	Q419	1	HT325912B0	Transistor 2SC2591(Q or R)
R425	1	GD05151140	150Ω	Q420	1	HT325912B0	Transistor 2SC2591(Q or R)
R426	1	GD05151140	150Ω	Q421	1	HT111112B0	Transistor 2SA1111(Q or R)
R427	1	GM21456020	56KΩ ±2%	Q422	1	HT111112B0	Transistor 2SA1111(Q or R)
R428	1	GM21456020	56KΩ ±2%	Q423	1	HD20011050	Diode 1S1555
R429	1	GM21456020	56KΩ ±2%	Q424	1	HD20011050	Diode 1S1555
R430	1	GM21456020	56KΩ ±2%	Q425	1	HD20011050	Diode 1S1555
R431	1	GM214390G0	39Ω ±2%	Q426	1	HD20011050	Diode 1S1555
R432	1	GM214390G0	39Ω ±2%	Q427	1	HD20011050	Diode 1S1555
R433	1	GD05272140	2.7KΩ	Q801	1	HT325912B0	Transistor 2SC2591(Q or R)
R434	1	GD05272140	2.7KΩ	Q802	1	HT111112B0	Transistor 2SA1111(Q or R)
R435	1	GD05272140	2.7KΩ	Q803	1	HT22402A0	Transistor 2SC2240(GR or BL)
R436	1	GD05272140	2.7KΩ	Q804	1	HT109702A0	Transistor 2SA970(GR or BL)
R437	1	GD05151140	150Ω	Q805	1	HF200301C0	F.E.T. 2SK30A(Y)
R438	1	GD05151140	150Ω	Q806	1	HF200301C0	F.E.T. 2SK30A(Y)
R439	1	GD05151140	150Ω	Q807	1	HT317752D0	Transistor 2SC1775A(D or E)
R440	1	GD05151140	150Ω	Q808	1	HT108722D0	Transistor 2SA872A(D or E)
R441	1	GD05182140	1.8KΩ	Q809	1	HD30008010	Zener HZ6B1L
R442	1	GD05182140	1.8KΩ	Q810	1	HD30008010	Zener HZ6B1L
R443	1	GD05272140	2.7KΩ	Q811	1	HD20015030	Diode DS135D
R444	1	GD05272140	2.7KΩ	Q812	1	HD20015030	Diode DS135D
R445	1	GD05100140	10Ω	Q813	1	HD20015030	Diode DS135D
R446	1	GD05100140	10Ω	Q814	1	HD20015030	Diode DS135D
R447	1	GD05100140	10Ω	<b>P400-MISCELLANEOUS</b>			
R448	1	GD05100140	10Ω	J401	1	YT2040330	Terminal (4P) RCA
R449	1	GD05100140	10Ω	J402	1	YT2040330	Terminal (4P) RCA
R450	1	GD05100140	10Ω	J403	1	YT2040330	Terminal (4P) RCA
R451	1	GD05100140	10Ω	J404	1	YP01001030	Plug (3P)
R452	1	GD05100140	10Ω	J405	1	YP01001030	Plug (3P)
R453	1	GM21422010	2.2KΩ ±2%	J406	1	YP01001030	Plug (3P)
R454	1	GM21422010	2.2KΩ ±2%	J407	1	YP10001980	Plug (2P)
R455	1	GM214680G0	68Ω ±2%	J408	1	YP10001980	Plug (2P)
R456	1	GM214680G0	68Ω ±2%	J409	1	YP06001040	Plug (3P)
R457	1	GD05391140	390Ω	J414	1	YP01001030	Plug (3P)
R458	1	GD05391140	390Ω	J415	1	YP01001030	Plug (3P)
R459	1	GD05224140	220KΩ	J416	1	YJ06001040	Jack (3P)
R460	1	GD05224140	220KΩ	L401	1	LY20240160	Relay FRL-644D24/2BS
R461	1	GG05820120	82Ω ½W	S401	1	SR00050040	Rotary Switch, Phono Selector
R462	1	GG05820120	82Ω ½W	S402	1	SS06060030	Slide Switch Phono
R463	1	GD05561140	560Ω	S411	1	SC00030010	Switch, Input Selector
R464	1	GD05561140	560Ω	S412	1	SB13070200	Switch Band, FLX
R465	1	GD05221140	220Ω	S413	1	SS08040020	Slide Switch 8-4 S Main
R466	1	GD05221140	220Ω	S421	1	SC00030010	Switch, Tape Copy
R467	1	GD05221140	220Ω	S422	1	SB13970010	Switch Band, FLX, Tape copy
R468	1	GD05221140	220Ω	S423	1	SS04040040	Slide Switch 4-4 NS Main
R471	1	GD05222140	2.2KΩ	S431	1	SC00030010	Switch, Tape Monitor
R472	1	GD05222140	2.2KΩ	S432	1	SB13670010	Switch Band, FLX, Tape Monitor
				S433	1	SS04040040	Slide Switch 4-4 NS Main

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
P401	1	WH21441330	P401-MM TRANSISTOR BLOCK CIRCUIT BOARD P.W. Board, MM Transistor Block	R601	1	GD05472140	4.7KΩ
Q401	1	HF201512B0	P401-SEMICONDUCTORS F.E.T. 2SK151(F or G)	R602	1	GD05472140	4.7KΩ
Q402	1	HF201512B0	F.E.T. 2SK151(F or G)	R603	1	GD05153140	15KΩ
Q403	1	HF100512B0	F.E.T. 2SJ51(F or G)	R604	1	GD05153140	15KΩ
Q404	1	HF100512B0	F.E.T. 2SJ51(F or G)	R605	1	GD05102140	1KΩ
Q405	1	HT322401B0	Transistor 2SC2240(BL)	R606	1	GD05102140	1KΩ
Q406	1	HT322401B0	Transistor 2SC2240(BL)	R607	1	GD05683140	68KΩ
Q407	1	HT109701B0	Transistor 2SA970(BL)	R608	1	GD05683140	68KΩ
Q408	1	HT109701B0	Transistor 2SA970(BL)	R609	1	GD05683140	68KΩ
Q409	1	HT109701A0	Transistor 2SA970(GR)	R610	1	GD05683140	68KΩ
Q410	1	HT109701A0	Transistor 2SA970(GR)	R611	1	GD05821140	820Ω
Q411	1	HT322401A0	Transistor 2SC2240(GR)	R612	1	GD05821140	820Ω
Q412	1	HT322401A0	Transistor 2SC2240(GR)	R613	1	GG05101140	100Ω
Q413	1	HT108722D0	Transistor 2SA872A(D or E)	R614	1	GG05101140	100Ω
Q414	1	HT108722D0	Transistor 2SA872A(D or E)	R615	1	GG05101140	100Ω
Q415	1	HT317752D0	Transistor 2SC1775A(D or E)	R616	1	GG05101140	100Ω
Q416	1	HT317752D0	Transistor 2SC1775A (D or E)	R617	1	GG05471140	47Ω
J412	1	YP06000750	P401-PLUGS Plug, (14P)	R618	1	GG05471140	47Ω
J413	1	YP06000750	Plug, (14P)	R619	1	GA05103010	10KΩ 1W
P600	1	WK21441210	P600-OUTPUT AMP. CIRCUIT BOARD P.W. Board, Output Amp.	R620	1	GA05103010	10KΩ 1W
C601	1	DF76470550	P600-CAPACITORS Film 47pF ±10%	R621	1	GG05330140	33Ω
C602	1	DF76470550	Film 47pF ±10%	R622	1	GG05330140	33Ω
C603	1	EA10602530	Elect 10μF 25V	R623	1	GG05330140	33Ω
C604	1	EA10602530	Elect 10μF 25V	R624	1	GG05330140	33Ω
C605	1	DF16104350	Film 0.1μF ±10%	R625	1	GG05470140	47Ω
C606	1	DF16104350	Film 0.1μF ±10%	R626	1	GG05470140	47Ω
C609	1	DF17104520	Film 0.1μF ±20%	R627	1	GG05330140	33Ω
C610	1	DF17104520	Film 0.1μF ±20%	R628	1	GG05330140	33Ω
C613	1	EA10505030	Elect 1μF 50V	R629	1	GG05220140	22Ω
C614	1	EA47602530	Elect 47μF 25V	R630	1	GG05220140	22Ω
C615	1	EA22601630	Elect 22μF 16V	R631	1	GG05220140	22Ω
C616	1	EA22708020	Elect 220μF 80V	R632	1	GG05220140	22Ω
C617	1	EA22708020	Elect 220μF 80V	R633	1	GG05220140	22Ω
C620	1	DK18103510	Ceramic 0.01μF	R634	1	GG05220140	22Ω
C621	1	DK18103510	Ceramic 0.01μF	R635	1	GG05220140	22Ω
C622	1	DK18103510	Ceramic 0.01μF	R636	1	GG05220140	22Ω
C625	1	DF16222350	Film 2200pF ±10%	R637	1	GO10272050	0.27Ω ±10% 5W
C626	1	EA10602530	Elect 10μF 25V	R638	1	GO10272050	0.27Ω ±10% 5W
C627	1	DF16473350	Film 0.047μF ±10%	R639	1	GO10272050	0.27Ω ±10% 5W
C628	1	DF16473350	Film 0.047μF ±10%	R640	1	GO10272050	0.27Ω ±10% 5W
C631	1	DF16105510	Film 1μF ±10%	R641	1	GO10272050	0.27Ω ±10% 5W
C632	1	DF16105510	Film 1μF ±10%	R642	1	GO10272050	0.27Ω ±10% 5W
C633	1	DF16223300	Film 0.022μF ±10%	R643	1	GO10272050	0.27Ω ±10% 5W
C634	1	DF16223300	Film 0.022μF ±10%	R644	1	GO10272050	0.27Ω ±10% 5W
C635	1	EA10610010	Elect 10μF 100V	R645	1	GD05472140	4.7KΩ
C636	1	EA10610010	Elect 10μF 100V	R646	1	GD05472140	4.7KΩ
C637	1	EA10610010	Elect 10μF 100V	R649	1	GD05682140	6.8KΩ
C638	1	EA10610010	Elect 10μF 100V	R650	1	GD05102140	1KΩ
C640	1	EA22601630	Elect 22μF 16V	R651	1	GD05273140	27KΩ
C641	1	DF76220500	Film 22pF ±10%	R652	1	GD05273140	27KΩ
C642	1	DF76220500	Film 22pF ±10%	R653	1	GA05100030	10Ω 3W
				R654	1	GA05100030	10Ω 3W
				R655	1	RC10022120	2.2Ω ±10% ½W
				R656	1	RC10022120	2.2Ω ±10% ½W
				R657	1	GD05823140	82KΩ
				R658	1	GD05823140	82KΩ
				R659	1	GD05393140	39KΩ
				R660	1	GD05104140	100KΩ
				R661	1	GD05473140	47KΩ
				R662	1	GD05473140	47KΩ

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
R663	1	GD05274140	270KΩ
R664	1	GD05183140	18KΩ
R666	1	GD05223140	22KΩ
R667	1	GD05183140	18KΩ
R668	1	GA05152010	1.5KΩ 1W
R669	1	GG05272120	2.7KΩ ½W
R670	1	HD30037090	Zener BZ-140
R671	1	GA05103010	10KΩ 1W
R672	1	GA05103010	10KΩ 1W
<b>P600-SEMICONDUCTORS</b>			
Q601	1	HT315681S0	Transistor 2SC1568(S)
Q602	1	HT315681S0	Transistor 2SC1568(S)
Q603	1	HT110152A0	Transistor 2SA1015(Q or Y)
Q604	1	HT110152A0	Transistor 2SA1015(Q or Y)
Q605	1	HT326322R0	Transistor 2SC2632(R or S)
Q606	1	HT326322R0	Transistor 2SC2632(R or S)
Q607	1	HT111242R0	Transistor 2SA1124(R or S)
Q608	1	HT111242R0	Transistor 2SA1124(R or S)
Q609	1	HT325912B0	Transistor 2SC2591(Q or R)
Q610	1	HT111112B0	Transistor 2SA1111(Q or R)
Q611	1	HT325912B0	Transistor 2SC2591(Q or R)
Q612	1	HT111112B0	Transistor 2SA1111(Q or R)
Δ Q613	1	HT327062A0	Transistor 2SC2706(R or Q)
Q614	1	HT111462A0	Transistor 2SA1146(R or O)
Δ Q615	1	HT327062A0	Transistor 2SC2706(R or O)
Δ Q616	1	HT111462A0	Transistor 2SA1146(R or O)
Δ Q617	1	HT327062A0	Transistor 2SC2706(R or O)
Q618	1	HT111462A0	Transistor 2SA1146(R or O)
Δ Q619	1	HT327062A0	Transistor 2SC2706(R or O)
Δ Q620	1	HT111462A0	Transistor 2SA1146(R or O)
Q621	1	HT318152A0	Transistor 2SC1815(O or Y)
Q622	1	HT318152A0	Transistor 2SC1815(Q or Y)
Q623	1	HT110152A0	Transistor 2SA1015(O or Y)
Q624	1	HC10042050	IC TA7317P
Q625	1	HD20010210	Diode 1S2471G
Q626	1	HD20010210	Diode 1S2471G
Q627	1	HD20010210	Diode 1S2471G
Q628	1	HD20010210	Diode 1S2471G
Q629	1	HD200115030	Diode DS135D
Q630	1	HD200115030	Diode DS135D
Q631	1	HD200115030	Diode DS135D
Q632	1	HD200115030	Diode DS135D
Q633	1	HD20011010	Diode W06C
Q634	1	HD20011010	Diode W06C
Q635	1	HD20011010	Diode W06C
Q636	1	HD20011010	Diode W06C
Q639	1	HD20011050	Diode 1S1555
Q640	1	HD200115030	Diode DS135D
Q641	1	HD20011050	Diode 1S1555
Δ Q642	1	HD200115030	Diode DS135D
<b>P600-MISCELLANEOUS</b>			
L601	1	LJ28115090	Coil
L602	1	LJ28115090	Coil
L603	1	LY20240152	Relay

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
P700	1	WK21441220	<b>P700-VOLTAGE AMP. CIRCUIT BOARD</b> P.W. Board, Voltage Amp.
C701	1	DF55101090	<b>P700-CAPACITORS</b> Film 100pF ±5%
C702	1	DF55101090	Film 100pF ±5%
C703	1	DF76470550	Film 47pF ±10%
C704	1	DF76470550	Film 47pF ±10%
C709	1	DF76220550	Film 22pF ±10%
C710	1	DF76220550	Film 22pF ±10%
C711	1	DF16474510	Film 0.47μF ±10%
C712	1	DF16474510	Film 0.47μF ±10%
C713	1	DF16102350	Film 0.001μF ±10%
C714	1	DF16102350	Film 0.001μF ±10%
C715	1	EA47701630	Elect 470μF 16V
C716	1	EA47701630	Elect 470μF 16V
C771	1	EA47602530	Elect 47μF 25V
C772	1	EA47602530	Elect 47μF 25V
C773	1	EA47601630	Elect 47μF 16V
C775	1	EA10710010	Elect 100μF 100V
C776	1	EA10710010	Elect 100μF 100V
C777	1	DF16102510	Film 0.001μF ±10%
C778	1	DF16102510	Film 0.001μF ±10%
C779	1	75061001P0	Jumper
C780	1	DF15102350	Film 0.001μF ±5%
C781	1	DF15102350	Film 0.001μF ±5%
R701	1	GD05224140	<b>P700-RESISTORS</b> (All Resistors are ±5% and ½W)
R702	1	GD05224140	220KΩ
R703	1	GD05102140	220KΩ
R704	1	GD05102140	1KΩ
R705	1	GD05561140	560Ω
R706	1	GD05561140	560Ω
R707	1	GD05561140	560Ω
R708	1	GD05561140	560Ω
R709	1	GD05103140	10KΩ
R710	1	GD05103140	10KΩ
R711	1	GD05103140	10KΩ
R712	1	GD05103140	10KΩ
R713	1	GD05102140	1KΩ
R714	1	GD05102140	1KΩ
R715	1	GD05102140	1KΩ
R716	1	GD05102140	1KΩ
R717	1	GD05473140	47KΩ
R718	1	GD05473140	47KΩ
R721	1	GD05101140	100Ω
R722	1	GD05101140	100Ω
R723	1	GD05330140	33Ω
R724	1	GD05330140	33Ω
R725	1	GD05154140	150KΩ
R726	1	GD05154140	150KΩ
R727	1	GD05562140	5.6KΩ
R728	1	GD05562140	5.6KΩ
R729	1	GD05181140	180Ω
R730	1	GD05181140	180Ω
R731	1	GD05121140	120Ω
R732	1	GD05121140	120Ω

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
R733	1	GD05472140	4.7KΩ	Q723	1	HD30025090	Zener WZ150
R734	1	GD05472140	4.7KΩ	Q724	1	HD30025090	Zener WZ150
R735	1	GD05472140	4.7KΩ	Q725	1	HD20011050	Diode 1S1555
R736	1	GD05472140	4.7KΩ	Q726	1	HD20011050	Diode 1S1555
R737	1	GD05472140	4.7KΩ	Q727	1	HD20011050	Diode 1S1555
R738	1	GD05472140	4.7KΩ	Q728	1	HD20011050	Diode 1S1555
R739	1	GD05472140	4.7KΩ	Q729	1	HD20011050	Diode 1S1555
R740	1	GD05472140	4.7KΩ	Q730	1	HD20011050	Diode 1S1555
R741	1	GG05271140	270Ω	Q771	1	HT325902B0	Transistor 2SC2590(Q or R)
R742	1	GG05271140	270Ω	Q772	1	HT111012B0	Transistor 2SA1110(Q or R)
R743	1	GG05271140	270Ω	Q773	1	HT317752D0	Transistor 2SC1775A(D or E)
R744	1	GG05271140	270Ω	Q774	1	HT108722D0	Transistor 2SA872A(D or E)
R749	1	GD05273140	27KΩ	Q775	1	HT317752D0	Transistor 2SC1775A(D or E)
R750	1	GD05273140	27KΩ	Q776	1	HT108722D0	Transistor 2SA872A(D or E)
R751	1	GA05272010	2.7KΩ	Q777	1	HD30009010	Zener HZ12B2L
R752	1	GA05182020	1.8KΩ	J701	1	YP01001030	P700-PLUG Plug, (3P)
R753	1	GD05104140	100KΩ				PE01-TONE AMP. CIRCUIT BOARD (L-CH) P.W. Board, Tone Amp. (L-ch)
R754	1	GD05104140	100KΩ	PE01	1	WK21441810	PE01-CAPACITORS
R755	1	GD05222140	2.2KΩ	CE01	1	EA47505030	Elect 4.7μF 50V
R756	1	GD05222140	2.2KΩ	CE03	1	DF55221090	Film 220pF ±5%
R757	1	GD05222140	2.2KΩ	CE05	1	EA10701030	Elect 100μF 10V
R758	1	GD05222140	2.2KΩ	CE07	1	EA10701030	Elect 100μF 10V
R759	1	GD05102140	1KΩ	CE09	1	DF16472350	Film 4700pF ±10%
R760	1	GD05102140	1KΩ	CE11	1	DF16472350	Film 4700pF ±10%
R761	1	GD05474140	470KΩ	CE13	1	DF76560550	Film 56pF ±10%
R762	1	GD05474140	470KΩ	CE15	1	EA10602530	Elect 10μF 25V
R763	1	GD05474140	470KΩ	CE17	1	DF76100550	Film 10pF ±10%
R764	1	GD05474140	470KΩ	CE19	1	EA10603530	Elect 10μF 35V
R771	1	GD05102140	1KΩ				PE01-SEMICONDUCTORS
R772	1	GD05102140	1KΩ	CE21	1	DF15563300	Film 0.056μF ±5%
R773	1	GD05332140	3.3KΩ	CE23	1	DF15563300	Film 0.056μF ±5%
R774	1	GD05332140	3.3KΩ	CE25	1	DF15393300	Film 0.039μF ±5%
R775	1	GD05272140	2.7KΩ	CE27	1	DF16472350	Film 4700pF ±10%
R776	1	GD05272140	2.7KΩ	CE29	1	EA10702530	Elect 100μF 25V
R777	1	GA05472010	4.7KΩ	CE31	1	EA10702530	Elect 100μF 25V
R779	1	GD05473140	47KΩ	CE33	1	EA47503530	Elect 4.7μF 35V
R780	1	GD05473140	47KΩ	CE35	1	DF55221090	Film 220pF ±5%
R781	1	GD05123140	12KΩ	CE37	1	DF76101550	Film 100pF ±10%
R782	1	GD05473140	47KΩ	CE39	1	EA47601030	Elect 47μF 10V
R783	1	GD05821140	820Ω				
Q701	1	HC10021020	IC M47F(C)	CE41	1	DF76470550	Film 47pF ±10%
Q702	1	HC10021020	IC M47F(C)	CE43	1	DF76101550	Film 100pF ±10%
Q703	1	HT322592F0	Transistor 2SC2259(F or G)	CE45	1	DF76150550	Film 15pF ±10%
Q704	1	HT322592F0	Transistor 2SC2259(F or G)	CE47	1	EA47503530	Elect 4.7μF 35V
Q705	1	HT109952A0	Transistor 2SA995(F or G)				PE01-RESISTORS (All Resistors are ±5% and 1W)
Q706	1	HT109952A0	Transistor 2SA995(F or G)	RE01	1	GD05224140	220KΩ
Q707	1	HT322402A0	Transistor 2SC2240(GR or BL)	RE03	1	GD05331140	33Ω
Q708	1	HT322402A0	Transistor 2SC2240(GR or BL)	RE05	1	GD05821140	820Ω
Q709	1	HT109702A0	Transistor 2SA970(GR or BL)	RE07	1	GD05821140	820Ω
Q710	1	HT109702A0	Transistor 2SA970(GR or BL)	RE09	1	GD05183140	18KΩ
Q713	1	HT109702A0	Transistor 2SA970(GR or BL)	RE11	1	GD05183140	18KΩ
Q714	1	HT109702A0	Transistor 2SA970(GR or BL)	RE13	1	GD05330140	33Ω
Q715	1	HT322402A0	Transistor 2SC2240(GR or BL)	RE15	1	GD05330140	33Ω
Q716	1	HT322402A0	Transistor 2SC2240(GR or BL)	RE17	1	GD05153140	15KΩ
Q717	1	HT111242R0	Transistor 2SA1124(R or S)	RE19	1	GD05153140	15KΩ
Q718	1	HT111242R0	Transistor 2SA1124(R or S)				
Q719	1	HT326322R0	Transistor 2SC2632(R or S)				
Q720	1	HT326322R0	Transistor 2SC2632(R or S)				
Q721	1	HC10019020	IC AN6552(4558)				
Q722	1	HC10019020	IC AN6552(4558)				

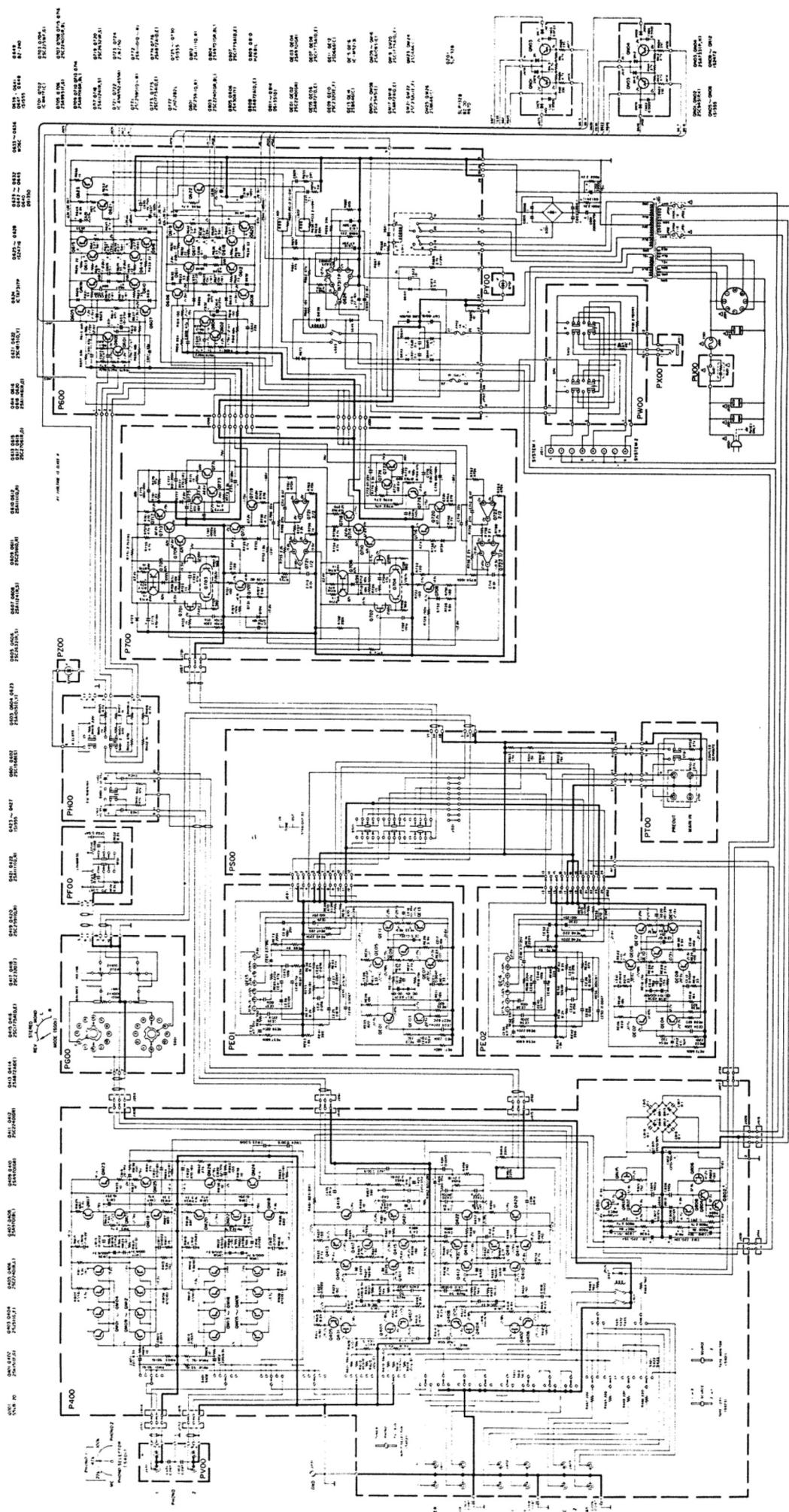
REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
RE21	1	GD05101140	100Ω	CE42	1	DF76470550	Film 47pF ±10%
RE23	1	GD05101140	100Ω	CE44	1	DF76101550	Film 100pF ±10%
RE25	1	GD05472140	4.7KΩ	CE46	1	DF76150550	Film 15pF ±10%
RE27	1	GD05272140	2.7KΩ	CE48	1	EA47503530	Elect 4.7μF 35V
RE29	1	GD05392140	3.9KΩ	CE49	1	DF15472300	Film 4700pF ±5%
RE31	1	GF05150140	15Ω	CE50	1	DF15472300	Film 4700pF ±5%
RE33	1	GF05150140	15Ω	<b>PE02-RESISTORS</b>			
RE35	1	GD05822140	820Ω*	RE02	1	GD05224140	(All Resistors are ±5% and 1W) 220KΩ
RE37	1	GD05822140	8.2KΩ	RE04	1	GD05331140	33Ω
RE39	1	GD05822140	8.2KΩ	RE06	1	GD05821140	82Ω
RE41	1	GD05391140	390Ω	RE08	1	GD05821140	82Ω
RE43	1	GD05473140	47KΩ	RE10	1	GD05183140	18KΩ
RE45	1	GD05224140	220KΩ	RE12	1	GD05183140	18KΩ
RE47	1	GD05221140	220Ω	RE14	1	GD05330140	33Ω
RE49	1	GD05471120	470Ω ½W	RE16	1	GD05330140	33Ω
RE51	1	GD05471120	470Ω ½W	RE18	1	GD05153140	15KΩ
RE53	1	RK05030330	50KΩ(B), Variable	RE20	1	GD05153140	15KΩ
RE55	1	RK02030530	20KΩ(B), Variable	RE22	1	GD05101140	100Ω
RE57	1	GD05684140	680KΩ	RE24	1	GD05101140	100Ω
RE59	1	GD05224140	220KΩ	RE26	1	GD05472140	4.7KΩ
RE61	1	GD05331140	330Ω	RE28	1	GD05272140	2.7KΩ
RE63	1	GD05182140	1.8KΩ	RE30	1	GD05392140	3.9KΩ
RE65	1	GD05224140	220KΩ	RE32	1	GD05150140	15Ω
RE67	1	GD05333140	33KΩ	RE34	1	GD05150140	15Ω
RE69	1	GD05182140	1.8KΩ	RE36	1	GD05821140	82Ω
RE71	1	GD05684140	680KΩ	RE38	1	GD05822140	8.2KΩ
RE73	1	GD05224140	220KΩ	RE40	1	GD05822140	8.2KΩ
<b>PE01-SEMICONDUCTORS</b>							
QE01	1	HT322401AO	Transistor 2SC2240(GR)	RE42	1	GD05391140	390Ω
QE03	1	HT109701AO	Transistor 2SA970(GR)	RE44	1	GD05473140	47KΩ
QE05	1	HT108722D0	Transistor 2SA872A(D or E)	RE46	1	GD05224140	220KΩ
QE07	1	HT317752D0	Transistor 2SC1775A(D or E)	RE48	1	GD05221140	220Ω
QE09	1	HT323201FO	Transistor 2SC2320(E or F)	RE50	1	GD05471120	470Ω ½W
QE11	1	HT406661CO	Transistor 2SD666(C)	RE52	1	GD05471120	470Ω ½W
QE13	1	HT206461CO	Transistor 2SB646(C)	RE54	1	RK05030330	50KΩ(B), Variable
QE15	1	HC10011200	IC M5213L	RE56	1	RK02030530	20KΩ(B), Variable
<b>PE01-PLUG</b>							
JE01	1	YP06000730	Plug, (12P)	RE58	1	GD05684140	680KΩ
JS01	1	YU09045210	Jumper Lead	RE60	1	GD05224140	220KΩ
<b>PE02-TONE AMP. CIRCUIT BOARD (R-CH)</b>							
PE02	1	WK21441820	P.W. Board, Tone Amp. (R-ch)	RE62	1	GD05331140	33Ω
<b>PE02-CAPACITORS</b>							
CE02	1	EA47505030	Elect 4.7μF 50V	RE64	1	GD05182140	1.8KΩ
CE04	1	DF55221090	Film 220pF ±5%	RE66	1	GD05224140	220KΩ
CE06	1	EA10701030	Elect 100μF 10V	RE68	1	GD05333140	33KΩ
CE08	1	EA10701030	Elect 100μF 10V	RE70	1	GD05182140	1.8KΩ
CE10	1	DF16472350	Film 4700pF ±10%	RE72	1	GD05684140	680KΩ
CE12	1	DF16472350	Film 4700pF ±10%	RE74	1	GD05224140	220KΩ
CE14	1	DF76560550	Film 56pF ±10%	<b>PE02-SEMICONDUCTORS</b>			
CE16	1	EA10602530	Elect 10μF 25V	QE02	1	HT322401AO	Transistor 2SC2240(GR)
CE18	1	DF76100550	Film 10pF ±10%	QE04	1	HT109701AO	Transistor 2SA970(GR)
CE20	1	EA10603530	Elect 10μF 35V	QE06	1	HT108722D0	Transistor 2SA872A(D or E)
CE22	1	DF15563300	Film 0.056μF ±5%	QE08	1	HT317752D0	Transistor 2SC1775A(D or E)
CE24	1	DF15563300	Film 0.056μF ±5%	QE10	1	HT323201FO	Transistor 2SC2320(E or F)
CE26	1	DF15393300	Film 0.039μF ±5%	QE12	1	HT406661CO	Transistor 2SD666(C)
CE28	1	DF16472350	Film 4700pF ±10%	QE14	1	HT206461CO	Transistor 2SB646(C)
CE30	1	EA10702530	Elect 100μF 25V	QE16	1	HC10011200	IC M5213L
CE32	1	EA10702530	Elect 100μF 25V	<b>PE02-PLUG</b>			
CE34	1	EA47503530	Elect 4.7μF 35V	JE02	1	YP06000730	Plug, (12P)
CE36	1	DF55221090	Film 220pF ±5%				
CE38	1	DF76101550	Film 100pF ±10%				
CE40	1	EA47601030	Elect 47μF 10V				

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
PF00	1	WK21441850	PF00-LOUDNESS CIRCUIT BOARD P.W. Board, Loudness	QM01	1	HT325451E0	PM01-SEMICONDUCTORS Transistor 2SC2545(E)
CF01	1	DF15473300	PF00-CAPACITORS Film 0.047μF ±5%	QM02	1	HT325451E0	Transistor 2SC2545(E)
CF02	1	DF15473300	Film 0.047μF ±5%	QM03	1	HT325451E0	Transistor 2SC2545(E)
CF03	1	DF15683300	Film 0.068μF ±5%	QM04	1	HT325451E0	Transistor 2SC2545(E)
CF04	1	DF15683300	Film 0.068μF ±5%	QM05	1	HT325451E0	Transistor 2SC2545(E)
RF01	1	GD05822140	PF00-RESISTORS 8.2KΩ ±5% 1/4W	QM06	1	HT325451E0	Transistor 2SC2545(E)
RF02	1	GD05822140	8.2KΩ ±5% 1/4W	QM07	1	HT325451E0	Transistor 2SC2545(E)
SF01	1	SC02030140	PF00-SWITCH Switch, Loudness	QM08	1	HT325451E0	Transistor 2SC2545(E)
PG00	1	WH21441310	PG00-BALANCE CONTROL CIRCUIT BOARD P.W. Board, Balance Control	QM09	1	HT110831E0	Transistor 2SA1083(E)
RG01	1	RM01040300	PG00-RESISTORS 100KΩ x 2 Variable, Balance	QM10	1	HT110831E0	Transistor 2SA1083(E)
RG02	1	RM01040360	100KΩ x 2 Variable	QM11	1	HT110831E0	Transistor 2SA1083(E)
SG01	1	SR04050180	PG00-SWITCH Rotary Switch, Mode	QM12	1	HT110831E0	Transistor 2SA1083(E)
PH00	1	WK21441520	PH00-FILTER CIRCUIT BOARD P.W. Board, Filter	QM13	1	HT110831E0	Transistor 2SA1083(E)
CH01	1	EA10603590	PH00-CAPACITORS Elect 10μF 35V	QM14	1	HT110831E0	Transistor 2SA1083(E)
CH02	1	EA10603590	Elect 10μF 35V	QM15	1	HT110831E0	Transistor 2SA1083(E)
CH03	1	DF16105510	Film 1μF ±10%	QM16	1	HT110831E0	Transistor 2SA1083(E)
CH04	1	DF16105510	Film 1μF ±10%	QM17	1	HT108722D0	Transistor 2SA872A(D or E)
RH01	1	GD05102140	PH00-RESISTORS (All Resistors are ±5% and 1/4W)	QM18	1	HT108722D0	Transistor 2SA872A(D or E)
RH02	1	GD05102140	1KΩ	QM19	1	HT317752D0	Transistor 2SC1775A(D or E)
RH03	1	GD05471140	470Ω	QM20	1	HT317752D0	Transistor 2SC1775A(D or E)
RH04	1	GD05471140	470Ω	QM21	1	HT323201F0	Transistor 2SC2320(E or F)
RH05	1	RA05020130	4.7KΩ, Trimming	QM22	1	HT323201F0	Transistor 2SC2320(E or F)
RH06	1	RA05020130	4.7KΩ, Trimming	QM23	1	HT406661C0	Transistor 2SD666(C)
RH07	1	RA01020150	1KΩ, Trimming	QM24	1	HT406661C0	Transistor 2SD666(C)
RH08	1	RA01020150	1KΩ, Trimming	QM25	1	HT206461C0	Transistor 2SB646(C)
RH09	1	GD05221140	220Ω	QM26	1	HT206461C0	Transistor 2SB646(C)
RH10	1	GD05473140	47KΩ	J410	1	YP06000750	PM01-PLUGS Plug, (14P)
RH11	1	GD05473140	4.7KΩ	J411	1	YP06000750	Plug, (14P)
RH12	1	GD05224140	220KΩ	PN00	1	YH22870210	PN00-ASO PROTECTOR CIRCUIT BOARD P.W. Board, ASO Protector
RH13	1	GD05224140	220KΩ	CN01	1	DF16222350	PN00-CAPACITORS Film 2200pF ±10%
SH01	1	SP04020290	PH00-SWITCH Push Switch	CN02	1	DF16222350	Film 2200pF ±10%
PM01	1	WH21441320	PM01-MC TRANSISTOR BLOCK CIRCUIT BOARD P.W. Board, MC Transistor Block	CN03	1	DF16222350	Film 2200pF ±10%
RM35	1	GF05100140	PM01-RESISTORS 10Ω ±5% 1/4W	CN04	1	DF16222350	Film 2200pF ±10%
RM36	1	GF05100140	10Ω ±5% 1/4W	RN01	1	GD05331140	PN00-RESISTORS (All Resistors are ±5% and 1/4W)
RM37	1	GF05100140	10Ω ±5% 1/4W	RN02	1	GD05331140	330Ω
RM38	1	GF05100140	10Ω ±5% 1/4W	RN03	1	GD05331140	330Ω
				RN04	1	GD05331140	330Ω
				RN09	1	GD05472140	4.7KΩ
				RN10	1	GD05472140	4.7KΩ
				RN11	1	GD05472140	4.7KΩ
				RN12	1	GD05472140	4.7KΩ
				RN13	1	GD05273140	27KΩ
				RN14	1	GD05273140	27KΩ
				QN01	1	HT309452C0	PN00-SEMICONDUCTORS Transistor 2SC945(P or K)
				QN02	1	HT309452C0	Transistor 2SC945(P or K)
				QN03	1	HT107332C0	Transistor 2SA733(P or K)
				QN04	1	HT107332C0	Transistor 2SA733(P or K)
				QN05	1	HD20011050	Diode 1S1555
				QN06	1	HD20011050	Diode 1S1555
				QN07	1	HD20011050	Diode 1S1555
				QN08	1	HD20011050	Diode 1S1555
				QN09	1	HD20002210	Diode 1S2472
				QN10	1	HD20002210	Diode 1S2472
				QN11	1	HD20002210	Diode 1S2472
				QN12	1	HD20002210	Diode 1S2472

REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY F	PART NO.	DESCRIPTION
PP00	1	WF21440010	PP00-FUSE CIRCUIT BOARD P.W. Board, Fuse	PX00	1	WK21441540	PX00-HEAD PHONE CIRCUIT BOARD P.W. Board, Head Phone
FP01	1	FS10100090	PP00-MISCELLANEOUS	JX01	1	YJ01001340	Jack, Head Phone
FP02	1	FS10100090	Fuse 1A 250V				
FP04	1	FS10100900	Fuse 1A 250V	PY00	1	WK21441880	PY00-L.E.D. POWER IND. CIRCUIT BOARD P.W. Board, L.E.D. Power Ind.
FP05	1	FS10100900	Fuse 1A 250V	QY01	1	HI10004030	L.E.D. SLP132B
JP01	8	YJ08000170	Jack, Fuse Crip				
JP10				PZ00	1	WK21441870	PZ00-L.E.D. CLASS, A IND. CIRCUIT BOARD P.W. Board, L.E.D. Class A Ind.
PS00	1	WK21441830	PS00-STRAIGHT DC CIRCUIT BOARD P.W. Board, Straight DC	QZ01	1	HI10004030	L.E.D. SLP132B
RS01	1	GD05153140	PS00-RESISTORS				
RS02	1	GD05153140	15KΩ ±5% 1/4W				
RS03	1	GD05152140	15KΩ ±5% 1/4W				
RS04	1	GD05152140	1.5KΩ ±5% 1/4W				
			1.5KΩ ±5% 1/4W				
SS01	1	SC06030070	PS00-SWITCH Switch, Straight DC				
PT00	1	WK21441840	PT00-PRE-OUT CIRCUIT BOARD P.W. Board, Pre-Out				
RT01	1	GD05273140	Resistor 27KΩ ±5% 1/4W				
RT02	1	GD05273140	Resistor 27KΩ ±5% 1/4W				
JT01	1	YT02040320	Terminal, (4P) RCA				
ST01	1	SS02020640	Slide Switch, Pre-Out				
PU00	1	WK21441550	PU00-POWER SWITCH CIRCUIT BOARD P.W. Board, Power Switch				
SU01	1	SP01010320	Push Switch, Power				
GU01	1	BF10400030	Cap. Comp. 0.1μF + 120Ω				
PV00	1	WK21441860	PV00-PHONO INPUT CIRCUIT BOARD P.W. Board, Phono Input				
CV01	1	DK18473320	Ceramic Cap. 0.047μF				
CV02	1	DK18473320	Ceramic Cap. 0.047μF				
JV01	1	YT02040320	Terminal, (4P) RCA				
PW00	1	WK21441530	PW00-SPEAKER SWITCH CIRCUIT BOARD P.W. Board, Speaker Switch				
RW01	1	GA05271010	Resistor 270Ω ±5% 1W				
RW02	1	GA05271010	Resistor 270Ω ±5% 1W				
SW01	1	SP04020200	Push Switch, Speaker	(W01-99)		Assembly and Wiring	
				(T01-99)		Adjustment	
				(X01-00)		Correction	

Model Pm-6

SCHEMATIC DIAGRAM



**Note on safety:** The parts marked with  $\triangle$  are important parts on the safety. Please use the parts having the designated parts number without fail.

**Components and wiring are subject to change for modification without notice.**

## 規格

### Model Pm-6

定格出力(20Hz～20kHz両ch同時駆動).....	CLASS AB.....	120W×2 (8Ω負荷)
出力帯域幅(8Ω負荷、THD0.05%).....	CLASS A.....	30W×2 (8Ω負荷)
全高調波歪率(20Hz～20kHz 8Ω負荷).....		5Hz～100kHz
混変調歪率.....		0.03%以下
周波数特性(20Hz～20kHz).....		0.015%以下
(5Hz～100kHz).....	+0, -0.2dB	
ダンピングファクター(8Ω負荷).....	+1, -1dB	
入力感度及びインピーダンス(メインアンプ入力).....		100以上
入力感度及びインピーダンス(マイアンプ入力).....		1.5V/15kΩ
フォノ 1(MM).....		2.5mV/27kΩ/47kΩ/100kΩ
フォノ 1(MC).....		125μV/75Ω
フォノ 2(MM).....		2.5mV/47kΩ
高レベル.....		150mV/40kΩ
定格出力及びインピーダンス.....	PRE OUT.....	1.5V/220Ω
	TAPE OUT.....	150mV/250Ω
PIAA偏差(20Hz～20kHz).....		±0.2dB
入力等化端子(フォノ、IHF-A).....		0.24μV
ダイナミックレンジ(フォノ).....		120dB
トーンコントロール特性.....	(低域100Hz)	±8dB
	(高域10kHz)	±8dB
その他		
電 源.....		100V 50/60Hz
消費電力(電気用品取締法).....		350W
外形寸法(幅×高さ×奥行き) .....		416×146×332mm
重 量(セット単体).....		15.5kg

仕様規格及び外観は改良のため予告なく変更することがあります。