

# OPERATING GUIDE

## ProBass™ 1000 Instrument Preamplifier



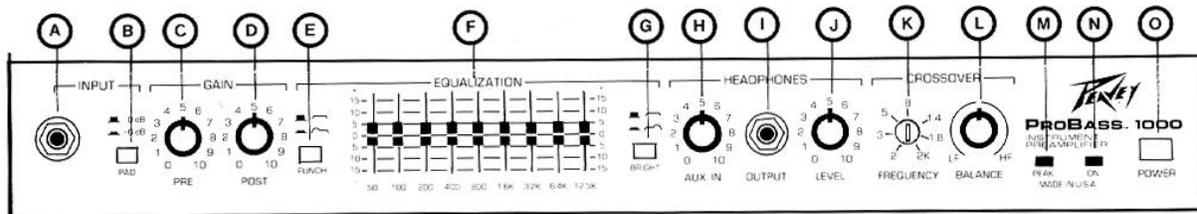
 Intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

 Intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

**CAUTION: Risks of electrical shock — DO NOT OPEN**

**CAUTION: To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer Servicing to qualified service personnel.**

**WARNING: TO PREVENT ELECTRICAL SHOCK OR FIRE HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. BEFORE USING THIS APPLIANCE, READ THE OPERATING GUIDE FOR FURTHER WARNINGS.**



## FRONT PANEL CONTROLS

### INPUT (A)

This input will accept signals from all types of bass pickups.

### INPUT PAD SWITCH (B)

Provided for instruments that have extremely high output, which can result in overdriving (distorting) the input gain stage. Depressing the switch to its "in" position reduces the level of the input signal by 6 dB.

### PRE GAIN CONTROL (C)

Controls the input volume level of the amplifier, and adjusts the level of the signal at the Pre-EQ Send Jack on the rear panel.

### POST GAIN CONTROL (D)

Controls the overall output level of the amplifier, and adjusts the level of the signal at the Post-EQ Send Jack on the rear panel.

### PUNCH SWITCH (E)

Provides a preset boost (+8 dB) to midbass frequencies. To activate, depress the switch to its "in" position.

### 9-BAND GRAPHIC EQ (F)

Provides +/- 15 dB equalization at each center frequency.

### BRIGHT SWITCH (G)

Provides a preset boost (+/-8 dB) to treble frequencies. To activate, depress the switch to its "in" position.

### HEADPHONE AUXILIARY LEVEL CONTROL (H)

Adjusts the level of signals at the Headphone Auxiliary Input on the rear panel.

### HEADPHONE JACK (I)

This stereo jack allows signal to flow to both sides of any stereo headset. A monaural headset may be used, but is not recommended.

### INPUT (A)

**(Eingang)**  
Dieser Eingang verarbeitet das Signal sämtlicher Bass-Pickups.

### INPUT PAD SWITCH (B)

**(Eingangs-Absenkungs-Schalter)**  
Wird für Instrumente mit extrem hohem Ausgangs-Pegel verwendet, damit die Vorverstärker-Stufe nicht übersteuert wird, was zu Verzerrungen führen würde. Bei eingedrücktem Schalter wird das Eingangssignal um 6 dB abgesenkt.

### PRE GAIN CONTROL (C)

**(Pre Gain-Regler)**  
Regelt das Eingangs-Volumen des Verstärkers, und bestimmt den Pegel am rückseitigen Pre-EQ-Vorverstärker-Ausgang.

### POST GAIN CONTROL (D)

**(Post Gain-Regler)**  
Regelt den Gesamt-Ausgangspegel des Verstärkers, und bestimmt den Pegel am rückseitigen Post-EQ-Vorverstärker-Ausgang.

### PUNCH SWITCH (E)

**(Punch-Schalter)**  
Bewirkt eine voreingestellte Anhebung um 8 dB im Bassbereich. Wird bei eingedrücktem Schalter ("In") aktiviert.

### 9-BAND GRAPHIC EQ (F)

**(9-Band Grafik-Equalizer)**  
Ermöglicht Klangregelung über +/- 15dB an jeder der neun Mittenfrequenzen.

### BRIGHT SWITCH (G)

**(Bright-Schalter)**  
Bewirkt eine voreingestellte Anhebung der hohen Frequenzen um 8 dB. Die Bright-Einstellung wird bei eingedrücktem Schalter ("In") aktiviert.

### HEADPHONE AUXILIARY LEVEL CONTROL (H)

**(Zusätzlicher Kopfhörer-Eingangs-Regler)**  
Bestimmt den Eingangs-Pegel am zusätzlichen rückseitigen Kopfhörer-Signal-Eingang.

### HEADPHONE JACK (I)

**(Kopfhörer-Anschluss)**  
Dieser Stereo-Jack-Anschluss überträgt das Signal auf beide Kopfhörer-Muscheln. Ein Mono-Kopfhörer kann zwar verwendet werden, wird jedoch nicht empfohlen.

### INPUT (A)

**(Entrée)**  
Cette prise d'entrée acceptera les signaux de toutes les basses.

### INPUT PAD SWITCH (B)

**(Atténuateur d'entrée)**  
Ce poussoir atténue le niveau du signal d'entrée de 6 dB. A utiliser pour les instruments donnant un signal très élevé qui risque de saturer le circuit préamplificateur.

### PRE GAIN CONTROL (C)

**(Volume Avant)**  
Commande le niveau à l'entrée de l'amplificateur, ainsi que sur la prise d'envoi "Pre-EQ Send" du panneau arrière.

### POST GAIN CONTROL (D)

**(Volume Aval)**  
Dose le volume général de l'amplificateur, ainsi que le niveau de la prise d'envoi "Post-EQ" du panneau arrière.

### PUNCH SWITCH (E)

**(Interrupteur)**  
Apporte une basse de présence aux fréquences médiums.

### 9-BAND GRAPHIC EQ (F)

**(Egaliseur graphique)**  
Egaliseur à 9 bandes avec correction de +/-15 dB sur chaque fréquence centrale.

### BRIGHT SWITCH (G)

**(Interrupteur "Bright" Son clair)**  
Ajoute une basse de présence de 8 dB avec fréquences aiguës.

### HEADPHONE AUXILIARY LEVEL CONTROL (H)

**(Volume entrée casque)**  
Commande le niveau du signal à l'entrée "Headphone Auxiliary Input" du panneau arrière.

### HEADPHONE JACK (I)

**(Prise casque)**  
Prise jack stéréo acceptant tout type de casque stéréo.

### INPUT (A)

**(Entrada)**  
Esta entrada aceptará señal de todo tipo de pastilla de bajo eléctrico.

### INPUT PAD SWITCH (B)

**(Botón para Controlar Ganancia de Entrada)**  
Este botón es para controlar instrumentos que tienen mucha potencia, la cual puede distorsionar la ganancia de la entrada. Poniendo este botón hacia adentro "in", reduce el nivel de la señal de entrada por 6 dB.

### PRE GAIN CONTROL (C)

**(Control de preganancia)**  
Controla el nivel de volumen del amplificador y ajusta el nivel de la señal al jack de envío del pre-equalizador en el panel posterior.

### POST GAIN CONTROL (D)

**(Control de ganancia posterior)**  
Controla el nivel de salida general del amplificador, y ajusta el nivel de señal al jack de envío del post-equalizador en el panel posterior.

### PUNCH SWITCH (E)

**(Botón para Ponce)**  
Este botón da un aumento de +8 dB a los medios-graves. Para activar se oprime hacia adentro.

### 9-BAND GRAPHIC EQ (F)

**(Ecuilizador Gráfico de 9 Bandas)**  
Provee +/-15 dB de equalización a cada frecuencia central.

### BRIGHT SWITCH (G)

**(Botón para Sonido Brillante)**  
Puede obtener un aumento de +8 dB a las frecuencias agudas. Para activar se empuja el botón hacia adentro.

### HEADPHONE AUXILIARY LEVEL CONTROL (H)

**(Control Auxiliar de Audífonos)**  
Ajusta el nivel de señales en la entrada auxiliar para audífonos en la sección posterior del aparato.

### HEADPHONE JACK (I)

**(Entrada para audífonos)**  
Esta conexión estereo permite a la señal fluir a ambos lados de cualquier audífono estereo. Un audífono monoaural puede ser usado, pero no es recomendable.

**HEADPHONE LEVEL CONTROL (J)**  
Adjusts the level of all signals at the Headphone Jack.

**HEADPHONE LEVEL CONTROL (J)**  
**(Kopfhörer-Pegel-Regler)**  
Steuert den Pegel aller Signale am Kopfhörer-Ausgang.

**HEADPHONE LEVEL CONTROL (J)**  
**(Réglage de niveau casque)**  
Commande le volume de la prise Headphone.

**HEADPHONE LEVEL CONTROL (J)**  
**(Control de Nivel de Audifonos)**  
Ajusta el nivel de todas las señales en la entrada de audifonos.

**CROSSOVER FREQUENCY CONTROL (K)**  
Adjusts the frequency of the crossover dividing network.

**CROSSOVER FREQUENCY CONTROL (K)**  
**(Trennfrequenz-Regler)**  
Bestimmt die Trennfrequenz (Übergangsfrequenz) der Frequenzweiche.

**CROSSOVER FREQUENCY CONTROL (K)**  
**(Commande de fréquence de filtre)**  
Détermine la fréquence de coupure du filtre actif.

**CROSSOVER FREQUENCY CONTROL (K)**  
**(Control de frecuencias del "crossover")**  
Este control ajusta las frecuencias del "crossover".

**CROSSOVER BALANCE CONTROL (L)**  
Controls the relative levels of output signals from the crossover. Adjusting this control will only affect signals at the High Range Output Jack and the Low Range Output Jack on the rear panel. All other output signals are unaffected by this control.

**CROSSOVER BALANCE CONTROL (L)**  
**(Frequenzweichen-Balance)**  
Bestimmt das Verhältnis der Ausgangs-Pegel der Frequenzweiche. Nur die Signale über die rückseitigen Jack-Anschlüsse "High Range Output" und "Low Range Output" werden beeinflusst. Alle anderen Ausgänge bleiben unverändert.

**CROSSOVER BALANCE CONTROL (L)**  
**(Réglage de balance du filtre)**  
Ajuste les niveaux relatifs entre les sorties du filtre actif : aigus sur High Range Output et graves sur Low Range Output. Les autres sorties ne sont pas affectées par ce réglage.

**CROSSOVER BALANCE CONTROL (L)**  
**(Control de balance para el "crossover")**  
Controla los niveles relativos de las señales del "crossover". Ajustando el control solo afectara las señales de la salida de agudos y la salida de graves de la parte posterior. Todas las otras no son afectadas por este control.

**PEAK INDICATOR LED (M)**  
This LED illuminates when signal levels exceed the levels set by the Peak Indicator Level Control on the rear panel.

**PEAK INDICATOR LED (M)**  
**(Spitzenwert-LED)**  
Diese LED leuchtet auf, wenn der höchstzulässige Spitzenpegel überschritten wird. Dieser Spitzenpegel kann am rückseitigen Regler "Peak Indicator Level Control" eingestellt werden.

**PEAK INDICATOR LED (M)**  
**(Diode témoin de crête)**  
Cette diode s'allume lorsque le niveau du signal excède le niveau fixé par le réglage "Peak Indicator Level Control" du panneau arrière.

**PEAK INDICATOR LED (M)**  
**(Indicador de Limite)**  
Este foco se enciende cuando las señales se pasan del límite del nivel ajustado en el control de nivel en la sección posterior.

**POWER LED (N)**  
Illuminates when AC power is being supplied to the amp.

**POWER LED (N)**  
Zeigt die eingeschaltete Netzspannung an.

**POWER LED (N)**  
**(Diode-Témoin de Mise Sous Tension)**  
S'allume lorsque l'ampli est alimenté par le secteur.

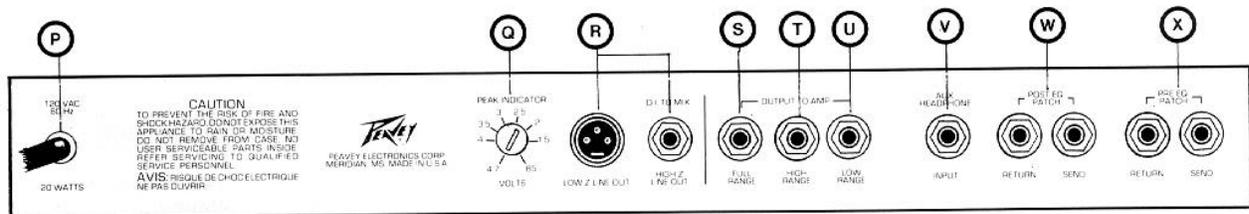
**POWER LED (N)**  
Illuminates when AC power is being supplied to the unit.

**POWER SWITCH (O)**  
Depress the switch to the "On" position. The red pilot light (LED) will illuminate indicating power is being supplied to the unit.

**POWER SWITCH (O)**  
**(Netzschalter)**  
Bringen Sie den Schalter auf die ON-Position. Die rote Kontrolllampe (LED) leuchtet und zeigt an, daß das Gerät eingeschaltet ist.

**POWER SWITCH (O)**  
**(Interrupteur Secteur)**  
Interrupteur général. En position Marche, une diode LED rouge s'allume.

**POWER SWITCH (O)**  
**(Interruptor de Poder)**  
Presione el interruptor a la posición de encendido (ON). La luz roja del piloto (indicador) se encenderá indicando que la unidad esta recibiendo el poder.



## REAR PANEL CONTROLS

**LINE CORD (P)**  
For your safety, we have incorporated a 3-wire line (mains) cable on the back of the chassis with proper grounding facilities. It is not advisable to remove the ground pin under any circumstances. If it is necessary to use this unit without proper grounding facilities, suitable grounding adapters should be used. Less noise and greatly reduced shock hazard exists when the unit is operated with the proper grounded receptacles. NOTE: The above statement in reference to removing the ground pin is applicable only to 120 volt model products.

**LINE CORD (P)**  
Die Netzanschlußschrund und die Sicherheitsvorrichtungen entsprechen den neuesten gültigen VDE-Richtlinien.

**LINE CORD (P)**  
**(Cordon Secteur)**  
Cordon d'alimentation secteur avec câble à trois conducteurs dont terre. Ne pas tenter d'enlever la broche de mise à la terre qui assure une sécurité électrique et participe à minimiser le bruit de fond.

**LINE CORD (P)**  
**(Cable de Línea)**  
Para su seguridad hemos incorporado un cable trifásico en la parte posterior del chasis con instalaciones apropiadas para su conexión. No es recomendable quitar la clavija de conexión en ningún momento. Si se necesita usar el amplificador sin instalaciones de conexión adecuadas se deberá usar un adaptador. Cuando se usa el aparato con buenos receptáculos conectados se tendrá menos ruido y menos peligro de descarga.

**PEAK INDICATOR LEVEL CONTROL (Q)**

Adjusts the sensitivity of the Peak Indicator LED on the front panel. Sensitivity will normally be adjusted to match the input sensitivity of the next in-line system component.

**LINE OUTPUT (R)**

Routes the signal directly to mixing/recording consoles using special EQ to simulate loudspeaker response. A shielded cable must be used for connection. Refer to Specification Section.

**FULL RANGE OUTPUT (S)**

Provides a full-range signal to the power amplifier(s). Signal level is adjusted by the Post Gain Control.

**HIGH RANGE OUTPUT (T)**

Provides a post-crossover high range signal to the power amplifier. Signal level is adjusted by the Post Gain Control and the Crossover Balance Control.

**LOW RANGE OUTPUT (U)**

Provides a post-crossover low range signal to the power amplifier. Signal level is adjusted by the Post Gain Control and the Crossover Balance Control.

**HEADPHONE AUXILIARY INPUT (V)**

Accepts signals to be mixed into the amplifier's headphone circuit. Signal levels at this input are adjusted by the Auxiliary Level Control on the front panel.

**POST-EQ PATCH JACKS (W)**

Provided for connecting external effects devices into the signal path. To patch an effects device, connect the send jack to the input of the device. Connect the output of the device to the return jack. High-quality shielded cables should be used for these connections.

**PRE-EQ PATCH JACKS (X)**

Provided for connecting external effects devices into the signal path. To patch an effects device, connect the send jack to the input of the device. Connect the output of the device to the return jack. High-quality shielded cables should be used for these connections.

**PEAK INDICATOR LEVEL CONTROL**

**(Spitzenpegel-Regler)**  
Dieser Regler steuert die Empfindlichkeit der Spitzenwert-LED an der Vorderseite. Die Empfindlichkeit sollte im allgemeinen an die Eingangsempfindlichkeit der nachfolgenden Komponente angepasst werden.

**LINE OUTPUT (R)**

Sendet das Signal direkt zum Mixer/Bandmaschine. Für die Verbindung muß ein abgeschirmtes Kabel benutzt werden.

**FULL RANGE OUTPUT (S)**

**(Full-Range-Ausgang)**  
Gibt das gesamte Signal über die ganze Bandbreite an eine oder mehrere nachgeschaltete Endstufen aus. Der Signal-Pegel wird vom "Post Gain"-Regler bestimmt.

**HIGH RANGE OUTPUT (T)**

**(High-Range-Ausgang)**  
Gibt den Hochton-Anteil des Signals nach der Frequenzweiche an eine oder mehrere nachgeschaltete Endstufen aus. Der Signal-Pegel wird vom "Post Gain"-und vom "Crossover Balance"-Regler bestimmt.

**LOW RANGE OUTPUT (U)**

**(Low-Range-Ausgang)**  
Gibt den Tiefton-Anteil des Signals nach der Frequenzweiche an eine oder mehrere nachgeschaltete Endstufen aus. Der Signal-Pegel wird vom "Post Gain"-und vom "Crossover Balance"-Regler bestimmt.

**HEADPHONE AUXILIARY INPUT (V)**

**(Kopfhörer Zusatz Eingang)**  
Dieser Eingang kann für Signale verwendet werden, welche dem Kopfhörer-Signal beigemischt werden sollen. Der Eingangs-Pegel wird durch den "Auxiliary Level"-Regler an der Vorderseite bestimmt.

**POST-EQ PATCH JACKS (W)**

**(Post-EQ-Einschlaufpunkt)**  
Ermöglicht das Einschleifen von externen Effekten in den Signalfluss. Der "Send"-Jack muss mit dem Eingang des Effekt-Geräts verbunden werden, und der Ausgang des Effekt-Geräts mit dem "Return"-Jack. Für diese Verbindungen sollten nur hochwertige, gut abgeschirmte Kabel verwendet werden.

**PRE-EQ PATCH JACKS (X)**

**(Pre-EQ-Einschlaufpunkt)**  
Ermöglicht das Einschleifen von externen Effekten in den Signalfluss. Der "Send"-Jack muss mit dem Eingang des Effekt-Geräts verbunden werden, und der Ausgang des Effekt-Geräts mit dem "Return"-Jack. Für diese Verbindungen sollten nur hochwertige, gut abgeschirmte Kabel verwendet werden.

**PEAK INDICATOR LEVEL CONTROL (Q)**

**(Réglage de niveau de témoin de crête)**  
Ajuste la sensibilité de la diode "Peak Indicator" du panneau avant. Ce niveau devra être réglé pour s'adapter à la sensibilité d'entrée de l'appareil connecté à la sortie.

**LINE OUTPUT (R)**

**(Sortie Ligne)**  
Cette prise de sortie permet d'amener le signal par exemple à une console de mélange ou d'enregistrement. Ce branchement doit être assuré par un câble blindé.

**FULL RANGE OUTPUT (S)**

**(Sortie générale)**  
Sortie du signal général vers amplificateur de puissance. Le niveau du signal est déterminé par le réglage "Post Gain Control".

**HIGH RANGE OUTPUT (T)**

**(Sortie Aigus)**  
Sortie de la partie aigue du signal vers amplificateur de puissance. Le niveau du signal est déterminé par les réglages "Post Gain Control" et "Crossover Balance Control".

**LOW RANGE OUTPUT (U)**

**(Sortie Graves)**  
Sortie de la partie grave du signal vers amplificateur de puissance. Le niveau du signal est déterminé par les réglages "Post Gain Control" et "Crossover Balance Control".

**HEADPHONE AUXILIARY INPUT (V)**

**(Entrée Auxiliaire Casque)**  
Reçoit les signaux à mélanger dans le circuit casque. Le niveau du signal sur cette entrée dépend du réglage "Auxiliary Level Control" du panneau avant.

**POST EQ PATCH JACKS (W)**

**(Boucle d'effet après égalisation)**  
Prises pour insertion d'un boîtier de trafic sonore dans le cheminement du signal. Pour brancher le boîtier, amener le signal de la sortie "Send" sur l'entrée du boîtier, puis brancher la sortie du boîtier sur l'entrée "Return". Utiliser du câble blindé de qualité.

**PRE-EQ PATCH JACKS (X)**

**(Boucle d'effet avant égalisation)**  
Prises pour insertion d'un boîtier de trafic sonore dans le cheminement du signal. Pour brancher le boîtier, amener le signal de la sortie "Send" sur l'entrée du boîtier, puis brancher la sortie du boîtier sur l'entrée "Return". Utiliser du câble blindé de qualité.

**PEAK INDICATOR LEVEL CONTROL (Q)**

**(Control del limite de nivel)**  
Ajusta la sensibilidad del foco de límite en la sección delantera del aparato. La sensibilidad normalmente se ajusta para igualar la señal del componente conectado con el siguiente aparato en línea.

**LINE OUTPUT (R)**

**(Linea de Salida)**  
Manda la señal directamente a las consolas de mezcla o grabadoras, usando EQ especial para simular la respuesta de un altavoz. Se debe usar un cable blindado para la conexión. Ver la sección de especificaciones de los aparatos.

**FULL RANGE OUTPUT (S)**

**(Salida de Rango Completo)**  
Provee una señal de todas las frecuencias al amplificador. El nivel de la señal es controlado por el control de ganancia posterior.

**HIGH RANGE OUTPUT (T)**

**(Salida de rangos agudos)**  
Esta salida provee los rangos agudos después del "crossover" al amplificador. El nivel de la señal esta controlado por el control de ganancia posterior y por el control de balance del "crossover".

**LOW RANGE OUTPUT (U)**

**(Salida de Graves)**  
Esta salida provee los rangos graves después del "crossover" que van al amplificador. Esta señal esta controlada por el control de ganancia posterior y por el control de balance del divisor de frecuencias.

**HEADPHONE AUXILIARY INPUT (V)**

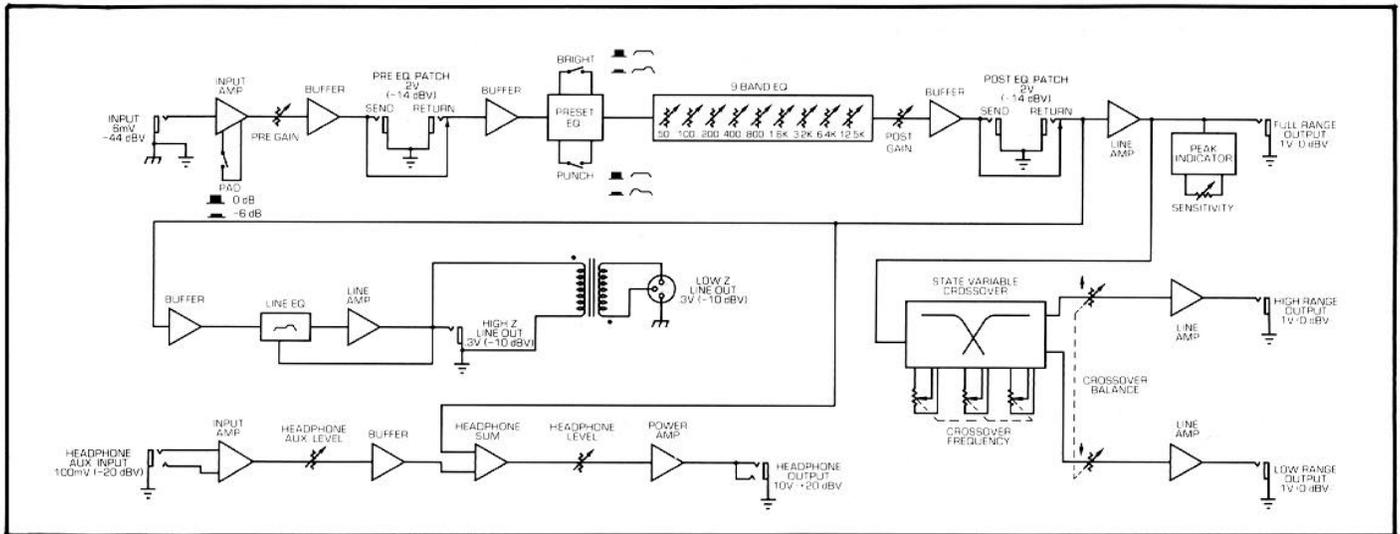
**(Entrada Auxiliar para Audifonos)**  
Acepta señales que van a ser mezcladas en los circuitos de la sección para audifonos. Las señales en esta entrada son ajustadas con el control de nivel auxiliar al frente del aparato.

**POST EQ PATCH JACKS (W)**

**(Entrada para conectar Posterior al Ecuilizador)**  
Estas entradas son para conectar efectos externos a la señal. Para usarla, conecte la salida del aparato a la entrada del efecto, y la salida del efecto a la entrada del aparato. Cables de buena calidad deben ser usados para estas conexiones.

**PRE-EQ PATCH JACKS (X)**

**(Entrada para conectar antes del Ecuilizador)**  
Estas entradas son para conectar efectos externos a la señal. Para usarla, conecte la salida del aparato a la entrada del efecto, y la salida del efecto a la entrada del aparato. Cables de buena calidad deben ser usados para estas conexiones.



**BLOCK DIAGRAM**  
This block diagram shows the signal path within the preamp. In order to thoroughly understand the functions of the preamp, please study the block diagram carefully.

**BLOCK DIAGRAM (Block-Diagramm)**  
Das Block-Diagramm zeigt den Signalfluss innerhalb des Verstärkers auf. Um die verschiedenen Funktionen des Verstärkers und deren Zusammenhänge voll verstehen zu können, empfehlen wir ihnen, das Block-Diagramm sorgfältig zu studieren.

**BLOCK DIAGRAM (Schéma de principe)**  
Ce schéma détaille le cheminement du signal à travers l'amplificateur. Pour mieux comprendre et mieux utiliser cet appareil, il sera utile de se référer à son schéma.

**BLOCK DIAGRAM (Diagrama de "Block")**  
Este diagrama muestra por donde pasa la señal dentro del amplificador. Para entender completamente las funciones del amplificador, por favor estudie el diagrama con cuidado.

## PROBASS™ 1000 SPECIFICATIONS

### INSTRUMENT INPUT:

#### Input Level: (No Pad)

Nominal: 63 mV (-24 dBV)  
(Input Gain 50%, Post CW, EQ Flat, Freq 400 Hz, 1V @ Full Range)  
Minimum: 5 mV (-46 dBV)  
Maximum: 3V (+9.5 dBV)

#### Input Level: (With Pad)

Nominal: 126 mV (-18 dBV)  
(Input Gain 50%, Post CW, EQ Flat, Freq 400 Hz, 1V @ Full Range)  
Minimum: 10 mV (-40 dBV)  
Maximum: 6V (+15.5 dBV)

**Input Impedance (No Pad): Greater than 100K ohms**

**Input Impedance (Pad): Greater than 33K ohms**

### PRE EQ PATCH:

#### Send:

Level:  
Nominal: .2V (-14 dBV)  
Maximum: 8V RMS (+18 dBV)  
Output Impedance: 100 ohms

#### Return

Level:  
Nominal: .2V (-14 dBV)  
Maximum: 8.0V RMS (+18 dBV)  
Input Impedance: 20K ohms

### EQ:

**Voicing: Electric Bass Guitar**

**Bright: +8 dB @ 7 kHz**

**Punch: +6 dB @ 80 Hz**

#### Graphic Equalizer:

Gain: +/-15 dB @ center Frequency  
(50, 100, 200, 400, 800, 1.6K, 3.2K, 6.4K and 12.8 kHz)

### POST EQ PATCH:

#### Send:

Level:  
Nominal: .2V (-14 dBV)  
Maximum: 8V RMS (+18 dBV)  
Output Impedance: 100 ohms

#### Return:

Level:  
Nominal: .2V (-14 dBV)  
Maximum: 1.7V RMS (+4.6 dBV)  
Input Impedance: 50K ohms

### OUTPUTS:

#### (Full Range, Low Range, High Range)

Level:  
Nominal: 1V RMS (0 dBV)  
Maximum: 8V RMS (+18 dBV)  
Impedance: 100 ohms

#### LINE OUT: (Equalized)

##### Unbalanced:

Level:  
Nominal: .32V RMS (-10 dBV)  
Maximum: 1.7V RMS (+5 dBV)  
Impedance: 1000 ohms

##### Balanced:

Level:  
Nominal: .32V RMS (-10 dBV)  
Maximum: 1.7V RMS (+5 dBV)  
Impedance: 600 ohms ( 150)

### HEADPHONE:

**Stereo (Mono Signal) 8 to 200 ohms**

**500 mW Total Power**

**Less than 1% distortion**

#### Aux Input:

Level:  
Nominal: .2V RMS (-14 dBV) (1V @ HP Level)  
Maximum: 8V RMS (+18 dBV)  
Minimum: .1V RMS (-20 dBV)  
Impedance: 40K ohms

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**Esta garantía es válida solamente cuando el producto es comprado en E.U. continentales o en Canada. Todos los productos que sean comprados en el extranjero, están sujetos a las garantías y servicio que cada distribuidor autorizado determine y ofrezca en los diferentes países.**

#### ONE-YEAR LIMITED WARRANTY/REMEDY

PEAVEY ELECTRONICS CORPORATION ("PEAVEY") warrants this product, EXCEPT for covers, footswitches, patchcords, tubes and meters, to be free from defects in material and workmanship for a period of one (1) year from date of purchase, PROVIDED, however that this limited warranty is extended only to the original retail purchaser and is subject to the conditions, exclusions and limitations hereinafter set forth:

#### PEAVEY 90-DAY LIMITED WARRANTY ON TUBES AND METERS

If this product contains tubes or meters, Peavey warrants the tubes or meters contained in the product to be free from defects in material and workmanship for a period of ninety (90) days from date of purchase; PROVIDED, however, that this limited warranty is extended only to the original retail purchaser and is also subject to the conditions, exclusions and limitations hereinafter set forth.

#### CONDITIONS, EXCLUSIONS AND LIMITATIONS OF LIMITED WARRANTIES

These limited warranties shall be void and of no effect if:

- The first purchase of the product is for the purpose of resale; or
- The original retail purchase is not made from an AUTHORIZED PEAVEY DEALER; or
- The product has been damaged by accident or unreasonable use, neglect, improper service or maintenance, or other causes not arising out of defects in material or workmanship; or
- The serial number affixed to the product is altered, defaced or removed.

In the event of a defect in material and/or workmanship covered by this limited warranty, Peavey will:

- In the case of tubes or meters, replace the defective component without charge;
  - In other covered cases (i.e., cases involving anything other than covers, footswitches, patchcords, tubes or meters), repair the defect in material or workmanship or replace the product, at Peavey's option;
- and provided, however, that, in any case, all costs of shipping, if necessary, are paid by you, the purchaser.

THE WARRANTY REGISTRATION CARD SHOULD BE ACCURATELY COMPLETED AND MAILED TO AND RECEIVED BY PEAVEY WITHIN FOURTEEN (14) DAYS FROM THE DATE OF YOUR PURCHASE.

In order to obtain service under these warranties, you must:

- Bring the defective item to any AUTHORIZED PEAVEY DEALER or AUTHORIZED PEAVEY SERVICE CENTER and present therewith the ORIGINAL PROOF OF PURCHASE supplied to you by the AUTHORIZED PEAVEY DEALER in connection with your purchase from him of this product.  
If the DEALER or SERVICE CENTER is unable to provide the necessary warranty service you will be directed to the nearest other PEAVEY AUTHORIZED DEALER or AUTHORIZED PEAVEY SERVICE CENTER which can provide such service.

OR

- Ship the defective item, prepaid, to:

PEAVEY ELECTRONICS CORPORATION  
International Service Center  
Highway 80 East  
MERIDIAN, MS 39301

including therewith a complete, detailed description of the problem, together with a legible copy of the original PROOF OF PURCHASE and a complete return address. Upon Peavey's receipt of these items:

If the defect is remedial under these limited warranties and the other terms and conditions expressed herein have been complied with, Peavey will provide the necessary warranty service to repair or replace the product and will return it, FREIGHT COLLECT, to you, the purchaser.

Peavey's liability to the purchaser for damages from any cause whatsoever and regardless of the form of action, including negligence, is limited to the actual damages up to the greater of \$500.00 or an amount equal to the purchase price of the product that caused the damage or that is the subject of or is directly related to the cause of action. Such purchase price will be that in effect for the specific product when the cause of action arose. This limitation of liability will not apply to claims for personal injury or damage to real property or tangible personal property allegedly caused by Peavey's negligence. Peavey does not assume liability for personal injury or property damage arising out of or caused by a non-Peavey alteration or attachment, nor does Peavey assume any responsibility for damage to interconnected non-Peavey equipment that may result from the normal functioning and maintenance of the Peavey equipment.

UNDER NO CIRCUMSTANCES WILL PEAVEY BE LIABLE FOR ANY LOST PROFITS, LOST SAVINGS, ANY INCIDENTAL DAMAGES OR ANY CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT, EVEN IF PEAVEY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

THESE LIMITED WARRANTIES ARE IN LIEU OF ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE; PROVIDED, HOWEVER, THAT IF THE OTHER TERMS AND CONDITIONS NECESSARY TO THE EXISTENCE OF THE EXPRESS, LIMITED WARRANTIES, AS HEREINABOVE STATED, HAVE BEEN COMPLIED WITH, IMPLIED WARRANTIES ARE NOT DISCLAIMED DURING THE APPLICABLE ONE-YEAR OR NINETY-DAY PERIOD FROM DATE OF PURCHASE OF THIS PRODUCT.

SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THESE LIMITED WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

THESE LIMITED WARRANTIES ARE THE ONLY EXPRESS WARRANTIES ON THIS PRODUCT, AND NO OTHER STATEMENT, REPRESENTATION, WARRANTY OR AGREEMENT BY ANY PERSON SHALL BE VALID OR BINDING UPON PEAVEY.

In the event of any modification or disclaimer of express or implied warranties, or any limitation of remedies, contained herein conflicts with applicable law, then such modification, disclaimer or limitation, as the case may be, shall be deemed to be modified to the extent necessary to comply with such law.

Your remedies for breach of these warranties are limited to those remedies provided herein and Peavey Electronics Corporation gives this limited warranty only with respect to equipment purchased in the United States of America.

#### INSTRUCTIONS — WARRANTY REGISTRATION CARD

1. Mail the completed WARRANTY REGISTRATION CARD to:

PEAVEY ELECTRONICS CORPORATION  
POST OFFICE BOX 2898  
MERIDIAN, MISSISSIPPI 39302-2898

- Keep the PROOF OF PURCHASE. In the event warranty service is required during the warranty period, you will need this document. **There will be no identification card issued by Peavey Electronics Corporation.**
2. IMPORTANCE OF WARRANTY REGISTRATION CARDS AND NOTIFICATION OF CHANGES OF ADDRESS:
    - Completion and mailing of WARRANTY REGISTRATION CARDS — Should notification become necessary for any condition that may require correction, the REGISTRATION CARD will help ensure that you are contacted and properly notified.
    - Notice of address changes — If you move from the address shown on the WARRANTY REGISTRATION CARD, you should notify Peavey of the change of address so as to facilitate your receipt of any bulletins or other forms of notification which may become necessary in connection with any condition that may require dissemination of information or correction.
  3. You may contact Peavey directly by telephoning (601) 483-5365.
  4. Please have the Peavey product name and serial number available when communicating with Peavey Customer Service.

**DANGER**

EXPOSURE TO EXTREMELY HIGH NOISE LEVELS MAY CAUSE A PERMANENT HEARING LOSS. INDIVIDUALS VARY CONSIDERABLY IN SUSCEPTIBILITY TO NOISE INDUCED HEARING LOSS, BUT NEARLY EVERYONE WILL LOSE SOME HEARING IF EXPOSED TO SUFFICIENTLY INTENSE NOISE FOR A SUFFICIENT TIME.

THE U.S. GOVERNMENT'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) HAS SPECIFIED THE FOLLOWING PERMISSIBLE NOISE LEVEL EXPOSURES:

DURATION PER DAY IN HOURS	SOUND LEVEL dBA, SLOW RESPONSE
8	90
6	92
4	95
3	97
2	100
1½	102
1	105
¾	110
½ or less	115

ACCORDING TO OSHA, ANY EXPOSURE IN EXCESS OF THE ABOVE PERMISSIBLE LIMITS COULD RESULT IN SOME HEARING LOSS.

EAR PLUGS OR PROTECTORS IN THE EAR CANALS OR OVER THE EARS MUST BE WORN WHEN OPERATING THIS AMPLIFICATION SYSTEM IN ORDER TO PREVENT A PERMANENT HEARING LOSS IF EXPOSURE IS IN EXCESS OF THE LIMITS AS SET FORTH ABOVE. TO INSURE AGAINST POTENTIALY DANGEROUS EXPOSURE TO HIGH SOUND PRESSURE LEVELS, IT IS RECOMMENDED THAT ALL PERSONS EXPOSED TO EQUIPMENT CAPABLE OF PRODUCING HIGH SOUND PRESSURE LEVELS SUCH AS THIS AMPLIFICATION SYSTEM BE PROTECTED BY HEARING PROTECTORS WHILE THE UNIT IS IN OPERATION.

**CAUTION**

THIS AMPLIFIER HAS BEEN DESIGNED AND CONSTRUCTED TO PROVIDE ADEQUATE POWER RESERVE FOR PLAYING MODERN MUSIC WHICH MAY REQUIRE OCCASIONAL PEAK POWER. TO HANDLE OCCASIONAL PEAK POWER, ADEQUATE POWER "HEADROOM" HAS BEEN DESIGNED INTO THIS SYSTEM. EXTENDED OPERATION AT ABSOLUTE MAXIMUM POWER LEVELS IS NOT RECOMMENDED SINCE THIS COULD DAMAGE THE ASSOCIATED LOUDSPEAKER SYSTEM. PLEASE BE AWARE THAT **MAXIMUM** POWER CAN BE OBTAINED WITH VERY LOW SETTINGS OF THE GAIN CONTROLS IF THE INPUT SIGNAL IS VERY STRONG.

1. Read all safety and operating instructions before using this product.
2. All safety and operating instructions should be retained for future reference.
3. Obey all cautions in the operating instructions and on the back of the unit.
4. All operating instructions should be followed.
5. This product should not be used near water, i.e. a bathtub, sink, swimming pool, wet basement, etc.
6. This product should be located so that its position does not interfere with its proper ventilation. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
7. This product should not be placed near a source of heat such as a stove, radiator or another heat producing amplifier.
8. Connect only to a power supply of the type marked on the unit adjacent to the power supply cord.
9. Never break off the ground pin of the power supply cord. For more information on grounding write for our free booklet "Shock Hazard and Grounding."
10. Power supply cords should always be handled carefully. Never walk or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the plug and the point where the cord exits the unit.
11. The power supply cord should be unplugged when the unit is to be unused for long periods of time.
12. If this product is to be mounted in an equipment rack, rear support should be provided.
13. Metal parts can be cleaned with a damp rag. The vinyl covering used on some units can be cleaned with a damp rag or an ammonia based household cleaner if necessary.
14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation holes or any other openings.
15. This unit should be checked by a qualified service technician if:
  - A. The power supply cord or plug has been damaged.
  - B. Anything has fallen or been spilled into the unit.
  - C. The unit does not operate correctly.
  - D. The unit has been dropped or the enclosure damaged.
16. The user should not to attempt to service this equipment. All service work should be done by a qualified service technician.



Features and specifications subject to change without notice.



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