

# PV™ SERIES

P O W E R   A M P L I F I E R

## O P E R A T I N G   G U I D E





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

**CAUTION:** Risk 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.



Este símbolo tiene el propósito de alertar al usuario de la presencia de "(voltaje) peligroso" que no tiene aislamiento dentro de la caja del producto que puede tener una magnitud suficiente como para constituir riesgo de corrientazo.



Este símbolo tiene el propósito de alertar al usuario de la presencia de instrucciones importantes sobre la operación y mantenimiento en la literatura que viene con el producto.

**PRECAUCION:** Riesgo de corrientazo – No abra.

**PRECAUCION:** Para disminuir el riesgo de corrientazo, no abra la cubierta. No hay piezas adentro que el usuario pueda reparar. Deje todo mantenimiento a los técnicos calificados.

**ADVERTENCIA:** Para evitar corrientazos o peligro de incendio, no deje expuesto a la lluvia o humedad este aparato. Antes de usar este aparato, lea más advertencias en la guía de operación.



Ce symbole est utilisé pur indiquer à l'utilisateur la présence à l'intérieur de ce produit de tension non-isolée dangereuse pouvant être d'intensité suffisante pour constituer un risque de choc électrique.



Ce symbole est utilisé pour indiquer à l'utilisateur qu'il ou qu'elle trouvera d'importantes instructions sur l'utilisation et l'entretien (service) de l'appareil dans la littérature accompagnant le produit.

**ATTENTION:** Risques de choc électrique – NE PAS OUVRIR!

**ATTENTION:** Afin de réduire le risque de choc électrique, ne pas enlever le couvercle. Il ne se trouve à l'intérieur aucune pièce pouvant être réparée par l'utilisateur. Confier l'entretien à un personnel qualifié.

**AVERTISSEMENT:** Afin de prévenir les risques de décharge électrique ou de feu, n'exposez pas cet appareil à la pluie ou à l'humidité. Avant d'utiliser cet appareil, lisez les avertissements supplémentaires situés dans le guide.



Dieses Symbol soll den Anwender vor unisolierten gefährlichen Spannungen innerhalb des Gehäuses warnen, die von Ausreichender Stärke sind, um einen elektrischen Schlag verursachen zu können.



Dieses Symbol soll den Benutzer auf wichtige Instruktionen in der Bedienungsanleitung aufmerksam machen, die Handhabung und Wartung des Produkts betreffen.

**VORSICHT:** Risiko – Elektrischer Schlag! Nicht öffnen!

**VORSICHT:** Um das Risiko eines elektrischen Schlages zu vermeiden, nicht die Abdeckung entfernen. Es befinden sich keine Teile darin, die vom Anwender repariert werden könnten. Reparaturen nur von qualifiziertem Fachpersonal durchführen lassen.

**ACHTUNG:** Um einen elektrischen Schlag oder Feuergefahr zu vermeiden, sollte dieses Gerät nicht dem Regen oder Feuchtigkeit ausgesetzt werden. Vor Inbetriebnahme unbedingt die Bedienungsanleitung lesen.

Congratulations! You have just purchased the world's finest, low-cost power amplifier. Peavey is proud to introduce you to its new PV™ series. This series combines the latest in semi-conductor technology with the newest approach to power transformer design and a unique, fan-cooled heat sink arrangement to produce a very low cost power amplifier that doesn't sacrifice performance or reliability and will meet the needs of the most demanding sound reinforcement application. Unlike typical home stereo units, the PV Series employs massive power transformers, very effective two speed fan cooling, and offers impressive specifications and features not found on any other competitive unit in this price range. Although designed to drive 4 ohm loads per channel typically, the amplifiers can also supply impressive high power ratings at 2 ohms per channel and, thus, can deliver awesome performance levels at 4 ohm bridge mode.

The following is a brief summary of the PV specifications:

- PV-4C:** 210 W RMS into 4 ohms; 250 W RMS into 2 ohms (per channel)  
420 W RMS into 8 ohms; 500 W RMS into 4 ohms (bridged)  
5-1/4" (3 rack space) unit with two speed fan cooling
- PV-8.5C:** 425 W RMS into 4 ohms; 550 W RMS into 2 ohms (per channel)  
850 W RMS into 8 ohms; 1100 W RMS into 4 ohms (bridged)  
5-1/4" (3 rack space) unit with two speed fan cooling
- PV-1.3K:** 650 W RMS into 4 ohms; 1000 W RMS into 2 ohms (per channel)  
1300 W RMS into 8 ohms; 2000 W RMS into 4 ohms (bridged)  
7" (4 rack space) unit with two speed fan cooling
- COMMON:** DDT™ compression with LED indicators and defeat switch  
Slew Rate: 20 V/microsecond, stereo mode, each channel  
Frequency Response: 20 Hz - 20 KHz, ±0.2 dB, rated power  
Total Harmonic Distortion: Less than 0.1%, rated power  
Hum and Noise: 100 dB below rated power, unweighted

Each amplifier is attractively packaged with rugged rack-mountable construction and more than adequate patching capability. The front panel of each amplifier contains a rocker mains switch, a resettable circuit breaker, an LED power indicator, and dual LED DDT activation indicators. The back panel of each amplifier has an input level control, dual 1/4" phone jack inputs, 5-way binding post outputs, and dual 1/4" phone jack outputs for each channel. Additionally, the back panel contains switches for stereo/bridge select and DDT defeat and a barrier strip for the input connections.

This operating guide serves all of the PV Series power amplifiers. Although each has different power ratings, the overall packaging and features are similar. Wherever differences occur, they will be pointed out.



### WARNING!

For optimum performance and reliability DO NOT PRESENT THE AMPLIFIER WITH A SPEAKER LOAD OF LESS THAN 2 OHMS, OR A COMBINATION OF SPEAKERS THAT TOGETHER ARE LESS THAN 2 OHMS!

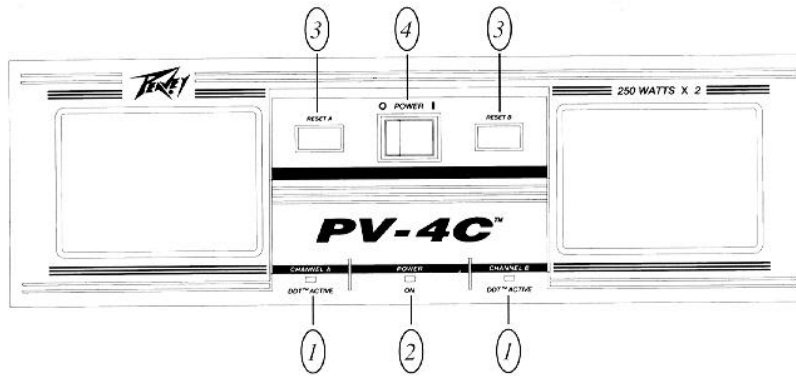
- Using one speaker, it must be rated at 2 ohms minimum.
- Using two speakers, they must be rated each at 4 ohms minimum.
- Using three speakers, they must be rated each at 8 ohms minimum.



### AVIS!

Pour assurer la Fiabilité et obtenir une performance optimale, ne soumettez jamais l'amplificateur à une charge d'impédance totale inférieure à 2 ohms, ni avec un H.P. ni en combinaison des H.P.

- AVEC un H.P., il faut une charge d'impédance minimum de 2 ohms.
- AVEC deux H.P., il faut pour chacun une charge d'impédance minimum de 4 ohms.
- AVEC trois H.P., il faut pour chacun une charge d'impédance minimum de 8 ohms.



### DDT™ ACTIVE LED (1)

Illuminates when DDT compression is taking place in the channel. With the ENABLE/DEFEAT switch on the back panel in the DEFEAT position, this LED indicates when channel clipping is occurring.

### POWER LED (2)

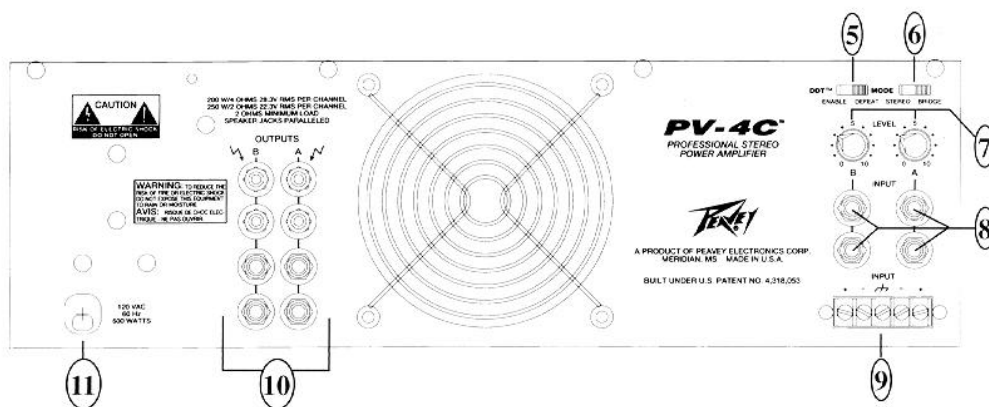
Illuminates when AC mains power is being supplied to the amp and both channels are operational. If either channel were to experience fault conditions, exceed the safe operating temperature limits, or have the associated circuit breaker trip, then the power LED will go out indicating such conditions exist.

### CIRCUIT BREAKER (3)

On the PV™-4C there are two, one for each channel. On the PV™-8.5C and the PV™-1.3K there is only one. These breakers are provided to limit the current to the associated power transformer and, thereby, protect it from overheating and possible destruction due to fault conditions in the amplifier. The trip current values have been carefully chosen to allow continuous power output performance while still protecting the power transformer. Normally, these breakers should not trip unless there is a fault in the amplifier circuitry that draws excessive mains current. However, abnormal conditions such as a short circuit on either or both channels or continuous operation at overload or clipping (especially into 2 ohm load) will cause the breaker(s) to trip. If this occurs, simply reset the breaker and correct the cause of the overload. When tripped, the button on the breaker will be outward nearly 1/2", and can be reset by pushing inward. A normal reset button length is about 1/4". If this "thermal" type breaker does trip, then simply pushing the button back in will reset it, after waiting a brief period of time to allow it to cool down. If the breaker trips instantly each time you attempt to reset it, the unit should be taken to a qualified service center for repair.

### MAINS POWER SWITCH (4)

A heavy duty, rocker-type switch (selecting the O position) turns off the power amplifier.



### DDT™ SWITCH (5)

This switch is used to either ENABLE or DEFEAT the DDT™ compressor. Normally the DDT function should be enabled to minimize the possibility of either or both channels going into clipping or overload. With

DDT defeated, a severe overload could cause the mains circuit breakers to trip as a matter of course. *(The Peavey DDT compression system will be covered in greater detail later in this manual.)*

### **MODE SWITCH (6)**

This switch is used to select either STEREO or BRIDGE mode of operation. Care should be exercised whenever the BRIDGE mode is selected. Accidental selection of this mode could damage loudspeakers, particularly in BIAMPED systems. The BRIDGE mode will be covered in greater detail later in this manual.

### **INPUT GAIN (7)**

These controls used to adjust the input gain of each channel. Thus, they determine how "loud" each channel of the power amplifier will "play" for a given input signal level. Maximum input gain (minimum sensitivity rating) is achieved at the full clockwise setting, and this setting yields maximum mixer/system headroom. A setting of less than full clockwise will yield lower system noise at the expense of mixer/system headroom.

### **HIGH Z INPUT JACKS (8)**

Two parallel (bridged) input jacks are provided for each channel. This allows for one to be used as a conventional input and, simultaneously, the other to be used as a "line out" (Y-cord) to connect to another input jack on this amplifier or other amps or equipment. These 1/4" jacks are not "chassis grounded" and when used, will provide a QUASI-BALANCED input capability due to the unique "ground loop" elimination circuitry associated with each input. This feature will normally allow "hum free" operation when relatively short 1/4" cable patches are made between the jacks on this amp and other jacks on various other equipment that share the same rack with this amp. This QUASI-BALANCED capability is automatic and fool-proof, but it can be defeated with jumpers on the associate barrier strip. *(See next section.)*

### **BARRIER STRIP INPUTS (9)**

This is a third way "in." Again, in parallel with the dual bridged input jacks for each channel, this feature allows direct connection of input cables without using the phone plug. The center screw of this five terminal strip is chassis ground. Each channel HIGH Z input is on the end screws marked "+," and each channel "QUASI" ground is on the screws marked "-." Connect single conductor shielded cables to each channel with the center conductor on the "+" and the shield on the "-." For balanced feeds using two conductor shielded cables, connect the positive "feed" to the respective "+" screws, the negative "feed" to the respective "-" screws, and both shields to the ground center screw. *(A diagram is provided later in this manual showing this wiring.)* To defeat the QUASI-BALANCED input capability of either or both channels, connect a jumper between the ground screw and the associated "-" screw for each channel. *(Again, a diagram is included on this.)*

### **SPEAKER OUTPUTS (10)**

Two 1/4" jacks and 5-way binding post speaker output terminals are provided for each channel. Again, for each channel, these outputs are in parallel; hence, the speaker connection cables can be terminated with 1/4" phone plugs, banana plugs, or stripped wires for use in the binding post terminals. For sustained high power applications, the use of the binding post terminals is recommended. However, care must be exercised to assure correct speaker phasing. Regardless of what connections are used, the typical parallel speaker load should always be limited to 2 ohms per channel or 4 ohms BRIDGE mode for any application. Operation at loads of 4 ohms per channel or 8 ohms BRIDGE mode is more desirable for sustained operation applications due to the fact that the amplifier will run much cooler at this load. Operation above 4 ohms per channel, and even open circuit conditions, can always be considered safe. However, sustained operation at loads below 2 ohms could result in temporary amplifier shutdown due to the thermal limits and/or the amplifier internal fault circuitry.

### **MAINS POWER SOURCE (120V products only) (11)**

All the PV Series power amplifiers are fitted with a single, heavy duty 3-conductor line cord and a conventional



AC plug with a ground pin. It should be connected to an independent circuit capable of supporting at least 15 AMPS or greater continuously. This is particularly critical for sustained high power applications. If the socket used does not have a ground pin, a suitable ground lift adaptor should be used and the third wire grounded properly. **Never break off the ground pin on any equipment. It is provided for your safety.** The use of extension cords should be avoided but, if necessary, always use a three-wire type with at least a #14 AWG wire size. The use of lighter wire will severely limit the power capability of this power amplifier. Always use a qualified electrician to install any new electrical equipment. To prevent the risk of shock or fire hazard, always be sure that the amplifier is properly grounded.

### **INSTALLATION AND CONNECTION:**

The PV professional series of power amplifiers is designed for durability in commercial installations and has the quality of performance required in studio and home applications. These units are a standard rack-mount configuration height, and each is cooled by an automatic two-speed internal fan. All input and output connections are on the back panel. Additionally, the level controls and selector switches are on the back panel. The front panel contains LED indicators for power & DDT activation, the mains power switch, and the resettable circuit breaker(s).

### **INDUSTRIAL AND COMMERCIAL INSTALLATIONS:**

For commercial and other installations where sustained high power operation is required, the amplifiers should be mounted in a standard 19" rack. It is not necessary to leave a rack space between each amplifier in the stack since each fan pulls air in from the rear and exhausts the hot air out the front. However, an adequate "COOL" air supply must be provided for the amplifier when rack-mounted. The internal fan must have a source of air that is not preheated by other equipment. The amplifier will start up in "low speed" fan operation and will normally stay at low speed operation unless sustained high power operating levels occur. Then, as the amplifier "heat sinks" heat up, the automatic thermal sensing circuitry will cause high speed operation to occur. Depending upon signal conditions and amp loading, high speed fan operation may continue or it may cycle continuously between high and low. This situation is quite normal. If cooling is inadequate due to preheated air or a reduction of air flow occurs due to blockage of the amplifier inlet/outlet ports or if the amplifier is severely overloaded or short circuited, the amplifier thermal sensing system may cause temporary shutdown of the unit. This is indicated by the power LED on the front panel ceasing to illuminate. Depending upon the available cooling air, operation should be restored relatively quickly, and the power LED will be illuminated. In any event, corrective action should be taken to determine the cause of the thermal shutdown. If the amplifier is not severely overloaded or shorted and air flow is normal in and out of the amplifier, then steps should be taken to provide a cooler environment for all the amplifiers. As a general rule, the cooler electronic equipment is operated, the longer its useful service life.

### **STUDIO AND HOME INSTALLATION:**

In most low to medium power applications, the power amplifier can be mounted in any configuration. It is desirable that, if at all possible, the power amplifier be located at the top of an equipment stack. This will prevent possible overheating of sensitive equipment by the hot air rising from the power amplifier. As a general rule, most home and studio requirements will never cause high speed fan operation. However, if it does, this may indicate that you have not taken the necessary steps to provide adequate cooling. Remember...closed up in a cabinet, a PV series power amplifier will have severe cooling problems, even at low power levels. Again, inadvertent short circuit or sustained overload usage could also cause temporary thermal shutdown and/or tripping of the mains power breaker. Also, most home wiring and electrical circuits are only 15 AMPS. Two PV-8.5C's or even one PV-1.3K can cause a 15 AMP breaker to trip if a severe overload occurs.

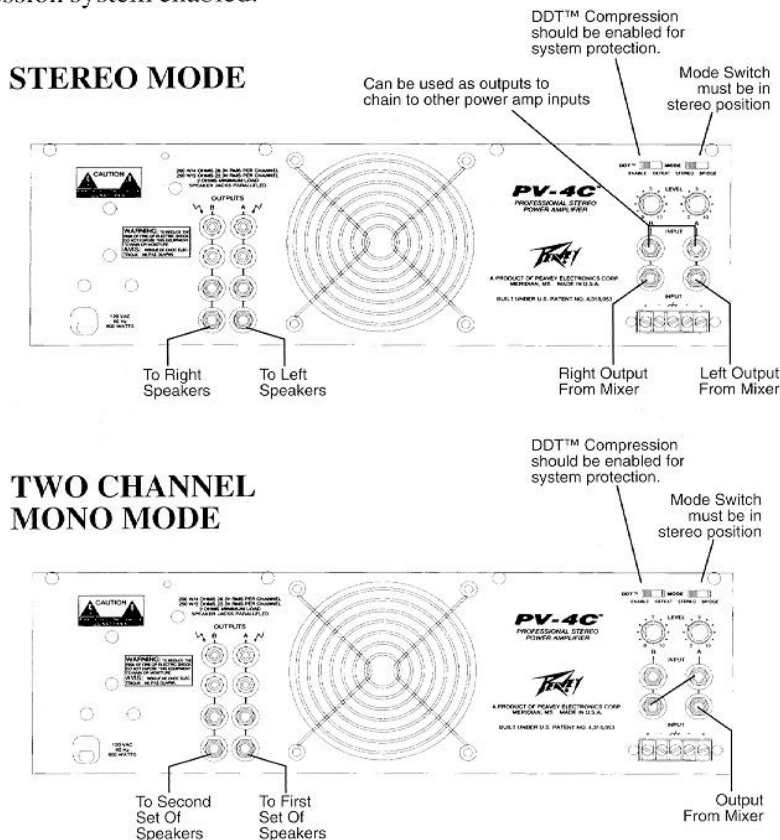
### **BRIDGE MODE:**

The bridge mode on stereo amplifiers is often misunderstood as to the actual operation and usage. In basic terms, when a two channel amplifier is operated in the BRIDGE mode, it is converted into a single channel unit with a POWER RATING equal to the sum of both channels' power ratings at a LOAD RATING of twice that

of the single channel rating. For example, the PV-4C is rated at 250 watts RMS per channel into 2 ohms. The BRIDGE RATINGS are 500 watts RMS into 4 ohms (minimum load). Bridge mode operation is accomplished by placing the mode switch in the "BRIDGE" position, connecting the positive speaker lead to Channel A RED binding post, negative speaker lead to Channel B RED binding post, and using channel A as the input channel. All channel B input functions are defeated, and they serve no purpose now. Another application for BRIDGE mode operation is to drive sound distribution systems in very large public address applications. In this mode, any of the PV Series power amplifiers can actually drive 70 volt systems directly without using matching transformers. The real advantage of such an approach is primarily cost. 70 volt distribution systems are very common in domestic applications where large numbers of relatively small loudspeakers are used for BACKGROUND MUSIC AND PAGING. Such systems require the use of 70 volt TRANSFORMERS at each loudspeaker. Another common use for the BRIDGE mode is in SUBWOOFER applications where very high power levels are required to reproduce extreme low frequencies. Such enclosures usually contain 2 or 4 loudspeakers to handle the power levels involved. For bridge mode usage, the enclosure impedance must be 4 or 8 ohms - never below 4 ohms!

**DDT™:**

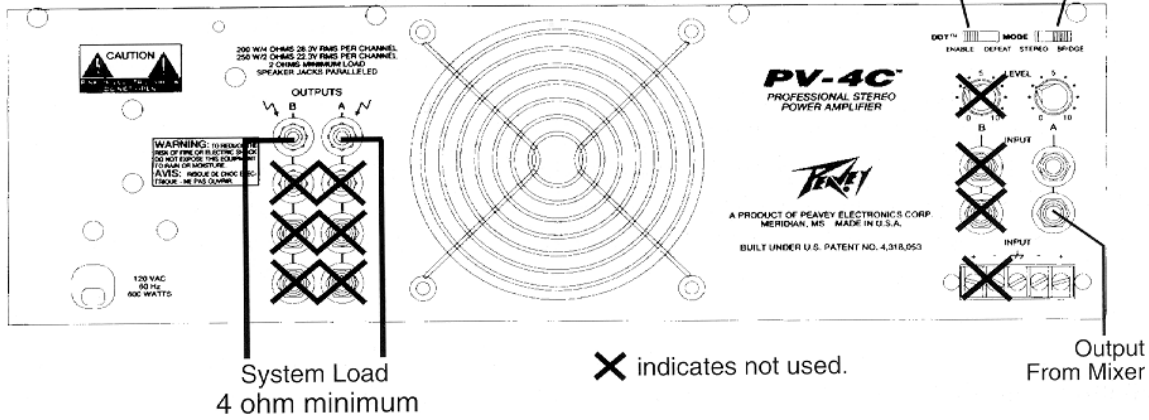
Peavey's patented DDT™ (Distortion Detection Technique) compression circuit enables the sound man to maximize the performance of the amplifier/speaker combination by preventing the power amp from running out of headroom (clipping). This compression system is activated by a very unique circuit that senses signal conditions which might overload the amplifier and activates compression (reduces the amp gain) when clipping is imminent. Threshold of compression, then, is clipping itself, and no specific threshold control is used. This technique effectively utilizes every precious watt available for the power amplifier to reproduce the signal while at the same time minimizes clipping and distortion and thus significantly reduces the potential of loudspeaker degradation and damage. The DDT system is an automatic hands-off approach to the problem of power amplifier clipping. Since the PV Series power amplifiers use circuit breakers for "over current" protection, the DDT compression system plays even a more important role in continuous performance by preventing each channel from clipping and overload. Continuous operation at clipping can cause the circuit breakers to trip, but with the DDT activated, this problem is minimized. For this reason, you should always have the DDT compression system enabled.



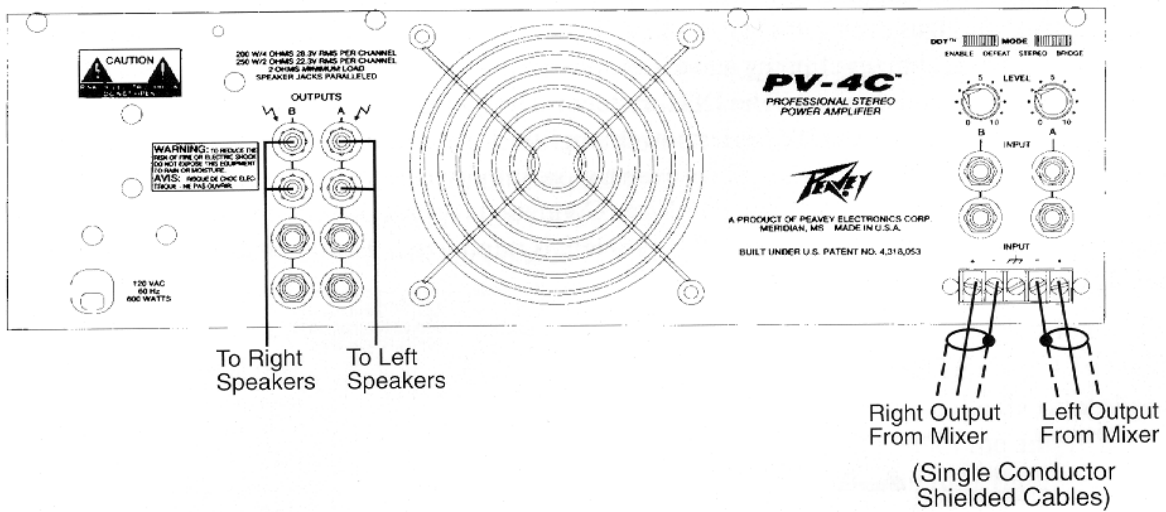
# BRIDGE MODE

DDT™ Compression should be enabled for system protection.

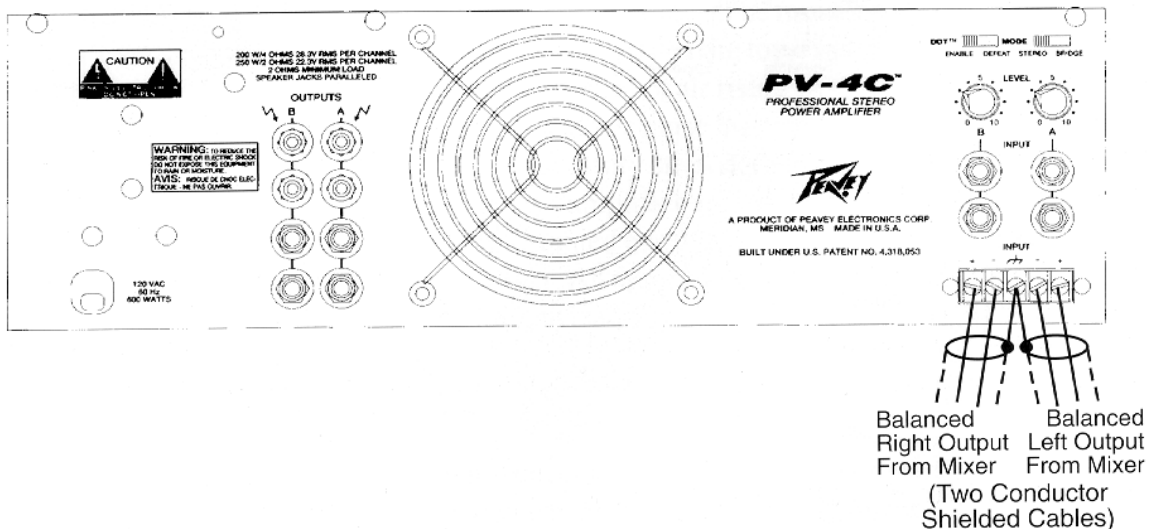
Mode Switch must be in bridge position



# STEREO MODE ALTERNATE INPUT/OUTPUT



# STEREO MODE ALTERNATE INPUT





# SPECIFICATIONS

CHARACTERISTICS <sup>1</sup>	PV-4C	PV-8.5C	PV-1.3K
<b>Output Power<sup>2,3</sup>:</b> 2 ohms, 1 kHz, 1% THD 4 ohms, 1 kHz, 1% THD 8 ohms, 1 kHz, 1% THD (Bridge mode, mono) 4 ohms, 1 kHz, 1% THD 8 ohms, 1 kHz, 1% THD	250 W RMS per channel 210 W RMS per channel 130 W RMS per channel	550 W RMS per channel 425 W RMS per channel 270 W RMS per channel	1000 W RMS per channel 650 W RMS per channel 400 W RMS per channel
<b>Rated Output Power<sup>2</sup>:</b> 4 ohms, 20 Hz - 20 kHz, 0.15% THD 8 ohms, 20 Hz - 20 kHz, 0.1% THD	200 W RMS per channel 120 W RMS per channel	400 W RMS per channel 240 W RMS per channel	600 W RMS per channel 360 W RMS per channel
<b>Slew Rate<sup>3</sup>:</b> Stereo mode, each channel Bridge mode, mono	20 Volts per uSec 40 Volts per uSec	20 Volts per uSec 40 Volts per uSec	20 Volts per uSec 40 Volts per uSec
<b>Total Harmonic Distortion<sup>2,3</sup>:</b> 20 Hz - 20 kHz, @ rated output power, 8 ohms	Less than 0.1%	Less than 0.1%	Less than 0.1%
<b>Input Sensitivity &amp; Impedance<sup>4</sup>:</b> @ rated output power, 8 ohms	1.0 V RMS (0 dBV) 20 K ohms (29 dB gain)	1.0 V RMS (0 dBV) 20 K ohms (32 dB gain)	1.0 V RMS (0 dBV) 20 K ohms (34 dB gain)
<b>Dimensions &amp; Weight:</b> Height Width Depth Weight	5.25" (13.3 cm) 19" (48.3 cm) 9" (22.9 cm) 30 lbs. (13.6 kg)	5.25" (13.3 cm) 19" (48.3 cm) 13" (33.0 cm) 45 lbs. (20.5 kg)	7" (17.8 cm) 19" (48.3 cm) 14" (35.6 cm) 55 lbs. (25.0 kg)
<b>Frequency Response<sup>2,3</sup>:</b> ±1 dB, 1 W RMS, 8 ohms ±0.2 dB, @ rated output, 8 ohms	10 Hz - 40 kHz 20 Hz - 20 kHz	10 Hz - 40 kHz 20 Hz - 20 kHz	10 Hz - 40 kHz 20 Hz - 20 kHz
<b>Damping Factor<sup>2,3</sup>:</b> 8 ohms, 1 kHz	Greater than 300	Greater than 300	Greater than 300
<b>Hum &amp; Noise<sup>2</sup>:</b> Below rated output power, 8 ohms	100 dB, unweighted	100 dB, unweighted	100 dB, unweighted
<b>Power Consumption<sup>2</sup>:</b> @ rated output power, 8 ohms	4.4 A @ 120 V AC	8.6 A @ 120 V AC	12.7 A @ 120 V AC
<b>Cooling System:</b>	2 speed fan	2 speed fan	2 speed fan
<b>DDT™ Compression System:</b>	Switchable with LED	Switchable with LED	Switchable with LED

<sup>1</sup>(@ 120 V AC, 60 Hz) <sup>2</sup>(Stereo mode, both channels driven) <sup>3</sup>(Typical Value) <sup>4</sup>(Input attenuator set FCW)

**THIS LIMITED WARRANTY VALID ONLY WHEN PURCHASED AND REGISTERED IN THE UNITED STATES OR CANADA. ALL EXPORTED PRODUCTS ARE SUBJECT TO WARRANTY AND SERVICES TO BE SPECIFIED AND PROVIDED BY THE AUTHORIZED DISTRIBUTOR FOR EACH COUNTRY. Ces clauses de garantie ne sont valables qu'aux Etats-Unis et au Canada. Dans tous les autres pays, les clauses de garantie et de maintenance sont fixées par le distributeur national et assurées par lui selon la législation en vigueur. Diese Garantie ist nur in den USA und Kanada gültig. Alle Export-Produkte sind der Garantie und dem Service des Importeurs des jeweiligen Landes unterworfen. 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.**

**PEAVEY 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:

- a. The first purchase of the product is for the purpose of resale; or
- b. The original retail purchase is not made from an AUTHORIZED PEAVEY DEALER; or
- c. 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
- d. 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:

- a. In the case of tubes or meters, replace the defective component without charge.
- b. 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:

- a. Bring the defective item to any PEAVEY AUTHORIZED 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**

- b. Ship the defective item, prepaid, to:

PEAVEY ELECTRONICS CORPORATION  
International Service Center  
326 Hwy. 11 & 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, EXPRESSED 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 EXPRESSED, 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 EXPRESSED 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 expressed 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

- a. 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 ADDRESSES:**
  - a. 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.
  - b. 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.

## IMPORTANT SAFETY INSTRUCTIONS

**WARNING:** When using electric products, basic cautions should always be followed, including the following.

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 on 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. Disconnect unit from power supply before cleaning.
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 attempt to service this equipment. All service work should be done by a qualified service technician.
17. This product should be used only with a cart or stand that is recommended by Peavey Electronics.
18. 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
1 1/2	102
1	105
1/2	110
1/4 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 ensure against potentially 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 this unit is in operation.

**SAVE THESE INSTRUCTIONS!**



Features and specifications subject to change without notice.

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