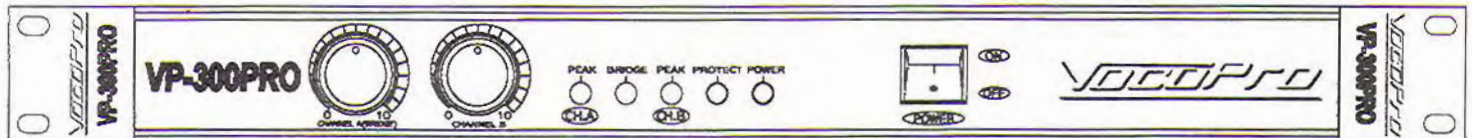


# VOCOPro

## OWNER'S MANUAL



# VP-300PRO

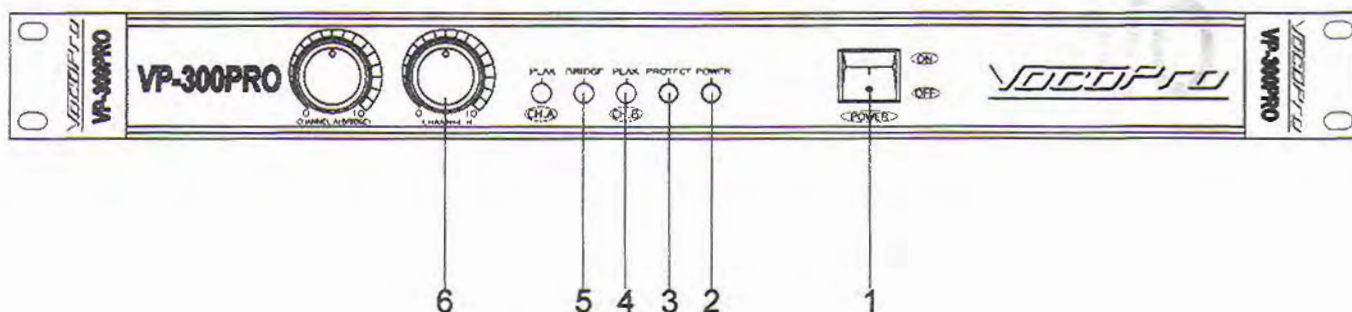
## PROFESSIONAL POWER AMPLIFIER

### EXCELLENT FEATURES:

- 150 WATTS + 150 WATTS RMS OUTPUT AT 4 OHMS  
300 WATTS RMS OUTPUT AT MONO/BRIDGE MODE
- SIGNAL TO NOISE RATIO : 100 dB
- 5 WAY PROTECTION
- BOTH 1/4" JACK INPUTS & XLR JACK INPUTS
- A HEAVY DUTY COMMERCIAL WORK HORSE

# NAMES OF PARTS AND THEIR FUNCTIONS

## Front panel



### 1. Power On/Off Switch

### 2. Power Indicator LED

### 3. Protect indicator LED

If protect conditions should occur, such as a short in a speaker cable or connector or excessively high operating temperatures this LED will light and the amplifier will stop operation until the protect condition is corrected.

The protect LED indicates that there is a problem either in the amplifier's external connections, load or temperature conditions or its internal functions. If one of these situations occurs, the amplifier senses the problem and automatically switches into its "protect mode." The LED will stop working. If this happens, switch off the amplifier and refer to the Trouble shooting Guide at the end of this manual. If you feel that you have been able to correct the protect mode, restart the amplifier to go into the protect mode, restart the amplifier. If the protect LED remains lit when attempting to resume amplifier to an authorized service Facility or contact your dealer for help.

### 4. Peak/ Clip Ind.

A clip LED for each channel indicates that your signal level is so strong that there is distortion at the output of that channel. While it is normal for the clip LED to flash during program peaks, the LED should not remain constantly lit during operation. If it does, most likely you will hear the results in the form of distorted sound that can be damaging to your speaker systems. In this case,

reduce the signal level by lowering the input level control for the channel that is clipping or reduce the level at the source. Note that when using the amplifier in the mono/bridge mode, both clip LEDs of the bridged channels will operate simultaneously.

### 5. Mono/ Bridge Mode Indicate or LED

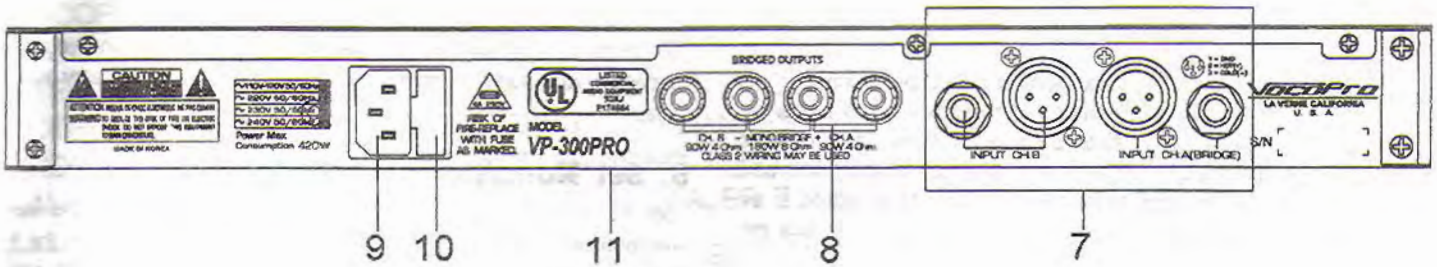
Shows when channels A & B are in the mono/ bridge mode.

The mono/bridge LED for each channel will light when you have set the switch (on the bottom of the amp.) to the mono/bridge position for bridged operation. Always make sure that this switch is in the correct portion and that all speaker connections have been made correctly for the mode of operation you wish to use before powering up the amplifier.

### 6. Input Level Attenuator

Establish the required input level for each channel. In the mono/Bridge mode, only the channel A attenuator is functional.

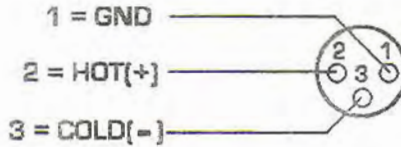
With all level controls set to 0, switch power in. Apply a nominal signal to the inputs. The level of the input signal should be about as high as you will ever need it to be. This way, it will be as far above the amplifier's noise floor as possible, ensuring an excellent performance signal to noise ratio. Adjust the input level controls for channel A on to achieve the desired maximum listening level or until the clip LEDs flash momentarily during program peaks, whichever is lowest. Having set the levels in this manner will render a clean signal at any level as long as the clip LEDs are not constantly on. Remember, when the clip LEDs light, there is distortion present in the amplifier's output section.



## 7. Input Connections

### 1. XLR Input Jacks

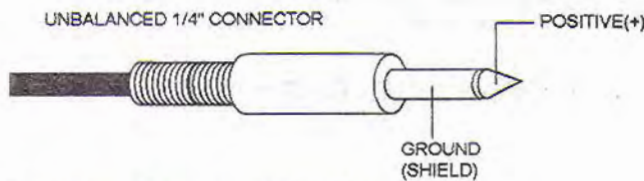
Low impedance, balanced inputs accept a standard XLR male connector. Pin1= ground, pin 2= hot or p-



ositive (+) and pin3= cold or negative (-).

### 2. 1/4 Inch Inputs

Accept an unbalanced line level signal. The unbalanced line uses a normal tip/sleeve connection. The tip is positive and the sleeve is negative /ground.



### 8. Speaker Connections

The total speaker load for each channel must be at least 4 ohms or above for stereo mode. 8ohms or above for mono/bridge mode. If you try to operate at less than 8 ohms in the mono/Bridge mode, the amplifier will go into the protect mode and stop operation until you correct the load conditions.

Speaker connections are dual banana MDP/bare wire binding posts that will accept a standard dual banana plug or bard wire. Either method provides a safe and reliable connection capable of transferring high power signal if properly connected. To avoid ANY possible shock hazard, the power amplifier should be disconnected from the AC power source before making any connections. When connecting your speaker s using either method, be sure to pay close attention to proper polarity. Although connecting your speaker systems out of phase using the wrong polarity will not damage your speakers, it will alter the quality of sound. When using bare wire connections, be sure that your connections are "Clean". If any strands of wire from one connector are allowed to touch the adjacent connector, damage to your amplifier and sound system could occur.

### 9. AC IN NET

### 10. Fuse

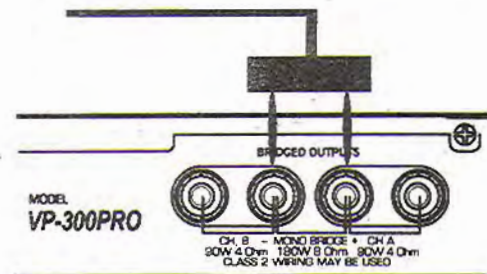
Replace ONLY with correct type and rating as indicated on the rear panel of the amplifier.

Before your amplifier is shipped from the factory, the switch is set to 120V. If you move to an area where the voltage requirements differ, set under the responsibility of the user according to the local power voltage. Be sure to replace the fuse with the specified after changing the voltage setting. 120Vac: 4A 230Vac: 2.5A

### 11. Mono/Bridge Mode Switch

Bridges inputs and outputs in pairs of channels as indicated.

Set the switch(es) on the bottom of the amp. for channel(s) you wish to operate in the mono/bridge mode to the mono/Bridge LED(s) on the front panel will light. If the LED(s) does(do) not illuminate, you have the mono/bridge switch(es) in the wrong position. Change the appropriate switch before continuing. Be sure to have the speaker output connector to the mono/bridge position correctly when using the mono/bridge mode.



**Warning:** Do not hook up more than one speaker unless the speaker's impedance is 16 Ohms or more.

# OPERATION

## A. MOUNTING

VP-300PRO are designed for standard 19 inch rack mounting. In addition, the amplifier are provided with sturdy no-skid rubber feet for secure table top or stacked operation. When rack mounting one or more amplifiers or when mounting in combination with other equipment, be sure to allow adequate front and rear ventilation to avoid possible heat related damage to your amplifier or other rack mounted items.

## B. OPERATING PRECAUTIONS

Your VocoPro VP-300PRO power amplifier is will protected from any external faults. However, we recommend following these common-sense precautions:

### 1. Safety Instructions

Read and follow all of the safety warnings on page 2 of this manual and on the separate safety precautions page enclosed with the unit. Do not expose the VP-300PRO to water or other liquids. Always unplug the unit if water is present. Failure to do so can result in injury or death from electric shock.

### 2. Grounding

If your power amplifier is supplied with a three-conductor, grounded power cord and plug, connect the unit only to a properly grounded mains outlet. Do not use a ground lift adapter or otherwise attempt to defeat the ground on the plug. Failure to properly ground the unit can result on damage to toe amplifier or other equipment connected to it and represents a dangerous safety hazard.

### 3. Line Voltage

Operate from AC mains not more than 5% above or below the specified line voltage. Failure to comply may invalidate your warranty.

### 4. Pre-Connection Caution

Always switch off the power and set all the level controls to minimum

before making any connections. This will eliminate any chance of unexpected, loud audio transients that could damage your speaker systems.

### 5. Set Mono/Bridge Switch(es)

Set the mono/bridge switch(es) on the bottom of the amp. to the stereo position. When the power is on the mono/bridge LED(s) on the front panel will not light. If the LED(s) illuminate, you have switch before continuing.

### 6. Input Connections

With the power off, connect your input source lines to channels 1 and 2 on the VP-300PRO.

### 7. Connect speaker Systems

Connect speaker systems to speaker outputs as shown in installations. The total speaker load for each channel must be at least 4 ohms. The amplifier will not operate at load conditions lower than 4 ohms per channel.

### 8. Level Controls

With all level controls set to 0, switch the power on. Apply a nominal signal to the inputs. The level of the input signal should be about as high as you will ever need it to be. This way, it will be as far above the amplifier's noise floor as possible, ensuring an excellent performance signal to noise ratio. Adjust the input level controls for each channel to achieve the desired maximum listening level or until the clip LEDs flash momentarily during program peaks, which der a clean signal at any level long as the clip LEDs light, there is distortion present in the amplifier's output section.

## C. MONO/BRIDGE OPERATION

This method of operation bridges inputs and outputs and can be used with 8 ohm or higher applications only. Bridging the VP-300PRO converts the amplifier to a mono or single channel amplifier providing 300 watts into a single 8 ohm load.

# SPECIFICATION

Power Output: 150 watts+150 watts(Rms)  
at 4Ω  
300 watts mono/bridge at 8Ω  
Frequency Response: 20kHz-20kHz  
THD: .05%  
Crosstalk: -70dB  
Input Sensitivity: +4dB (1.23V)  
Limiter Range: +12dB (Max THD3%)  
Protection: Short circuit, current limited, thermal

cut off, DC protection for speaker outputs  
power up/down transients AC line fuse  
Signal To Noise Ratio: 100dB  
Net Weight: 15lbs  
Fuse Type/Rating: 120Vac:4A  
230Vac:2.5A  
Dimensions (W×H×D): 18"×2"×9¾"

# TROUBLESHOOTING

INCORRECT OPERATIONS ARE OFTEN MISTAKEN FOR TROUBLE AND MALFUNCTIONS. IF YOU THINK THERE IS SOMETHING WRONG WITH THIS COMPONENT, CHECK THE POINTS BELOW. SOMETIMES THE TROUBLE MAY LIE IN ANOTHER COMPONENT. INVESTIGATE THE OTHER COMPONENTS AND ELECTRICAL APPLIANCES BEING USED. IF THE TROUBLE CANNOT BE RECTIFIED EVEN AFTER EXERCISING THE CHECKS LISTED BELOW, ASK YOUR AUTHORIZED SERVICE CENTER OR YOUR DEALER TO CARRY OUT THE REPAIR WORK.

SYMPTOM	CAUSE	REMEDY
NO SOUND	<ul style="list-style-type: none"><li>•POWER CORD IS UNPLUGGED</li><li>•AMP IS NOT TURN ON</li><li>•INPUT SOURCE NOT ON OR SWITCHED INCORRECTLY</li></ul>	<ul style="list-style-type: none"><li>•CONNECT THE POWERCORD</li><li>•TURN ON AMP</li><li>•SET TO THE CORRECT INPUT AND MAKE SURE THE DESIRE INPUT EQUIPMENT IS BEEN PLAY</li></ul>
SOUND IS DISTORTED.	<ul style="list-style-type: none"><li>•DISTORTION OCCURRING IN SOURCE DEVICE.</li><li>•INPUT LEVEL IS SET TOO HIGH.</li></ul>	<ul style="list-style-type: none"><li>•CHECK CLIP INDICATORS ON INPUT SOURCE DEVICES AND RESET LEVELS WHERE NECESSARY TO ELIMINATE DISTORTION.</li><li>•ADJUST AMPLIFIER LEVEL CONTROLS.</li></ul>
PROTECT LED REMAINS LIT AFTER USING AMPLIFIER FOR A SHORT TIME.	<ul style="list-style-type: none"><li>•UNIT IS OPERATING AT EXCESSIVELY HIGH TEMPERATURE</li><li>•EXTREME LOW SPEAKER IMPEDANCE.</li></ul>	<ul style="list-style-type: none"><li>•CHECK THAT AMPLIFIER IS ADEQUATELY VENTILATED ON THE TOP AND BOTTOM OF THE AMP.</li><li>•CHECK POSITION OF MONO/BRIDGE SWITCH(ES).BE SURE THAT SPEAKER CONNECTIONS ARE MADE IN ACCORDANCE WITH THE SWITCH SETTING.</li><li>•VERIFY SPEAKER SYSTEM IMPEDANCE. BE SURE THAT THE TOTAL SPEAKER SYSTEM IMPEDANCE IS AT LEAST 4 OHMS WHEN THE MONO/BRIDGE MODE SWITCH IS IN THE STEREO POSITION IF THE IMPEDANCE MUST BE AT LEAST 8 OHMS. IF YOU ARE NOT SURE OF YOUR TOTAL SPEAKER IMPEDANCE LOAD, CONTACT YOUR DEALER FOR MORE INFORMATION.</li><li>•CHECK CONDITION AND SIZE OF SPEAKER CABLES. HIGH POWER APPLICATIONS REQUIRE HEAVY GAUGE SPEAKER CABLES WITH HIGH QUALITY CONNECTOR.</li><li>•IF USING BARE WIRE CONNECTIONS AT THE AMPLIFIER, BE SURE THAT NO STRANDS FROM ONE CONNECTOR ARE TOUCHING ANY OTHER CONNECTOR.</li></ul>
PROTECT LED FLASHES DURING PROGRAM PEAKS;AMPLIFIER CUTS OUT INTERMITTENTLY.	SPEAKER LOAD IMPEDANCE IS TOO LOW.	<ul style="list-style-type: none"><li>•CHECK POSITION OF MONO/BRIDGE SWITCH.</li><li>•VERIFY SPEAKER SYSTEM IMPEDANCE.</li><li>•CHECK CONDITION OF SPEAKER CABLES AND CONNECTION.</li></ul>
CHANNEL 2 INPUT DOESN'T WORK.	AMPLIFIER IS IN THE MONO/BRIDGE MODE.	CHECK POSITION OF MONO/BRIDGE SWITCH(ES).