
ROCKTRON

TECHNOLOGY FOR GUITARISTS



User's Manual

**100 Watt Power Amp
50 Watts x 50 Watts
Single Rack Space**

Introduction

Congratulations on your purchase of the Rocktron Velocity 100LTD power amplifier!

The Velocity 100LTD was designed to provide great flexibility and high reliability. This single-rackspace amplifier provides 55 watts of power per channel into a 4 ohm load, or 40 watts per channel into an 8 ohm load.

In addition, the Velocity 100LTD incorporates thermal protection circuitry, as well as output short circuit protection.

This manual will introduce you to the Velocity 100LTD and its features, please keep it for future reference.



Your Rocktron Velocity 100LTD power amplifier has been tested and complies with the following Standards and Directives as set forth by the European Union and CSA:

Standard(s): IEC60065 Professional Audio/Video or Similar
Equipment, EN55013:1997, EN6100LTD0-3-2 (1995)
EN6100LTD0-3-3(1995), EN55020:1995, CSA E65-94

This means that this product has been designed to meet stringent guidelines on how much RF energy it can emit, and that it should be immune from other sources of interference when properly used. Improper use of this equipment could result in increased RF emissions, which may or may not interfere with other electronic products.

To insure against this possibility, always use good shielded cables for all audio input connections. This will help insure compliance with the Directive(s).

Precautions - Please read!!

NOTE: IT IS VERY IMPORTANT THAT YOU READ THIS SECTION TO PROVIDE YEARS OF TROUBLE FREE USE. THIS UNIT REQUIRES CAREFUL HANDLING.

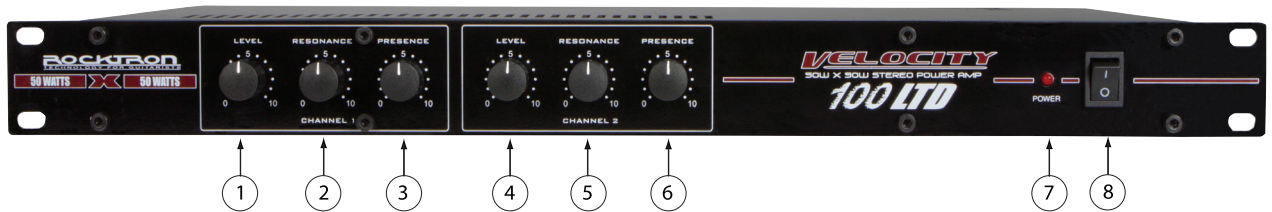
1. Read all instructions contained in this manual
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean with dry cloth.
7. Do not block any ventilation openings.
Install in accordance with the manufacturers instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
9. This product may be equipped with either a polarized alternating-current line plug (which is a plug that has one blade wider than the other) or a plug with two blades with a third grounding prong. The wide blade or the third prong are provided as a safety feature. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched - particularly at the plugs, convenience receptacles, and that the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Do not use this product with any case, stand, tripod, bracket or table that is not specified by the manufacturer. Where it is specified by the manufacturer insure that the case, stand, tripod, bracket, etc. is properly adjusted and setup. Extra care and caution should be taken to avoid tip over and injury.
13. Unplug this apparatus during lightning storms or when unused during long period of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus or if the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

DO NOT ATTEMPT TO SERVICE THIS EQUIPMENT. THIS EQUIPMENT SHOULD BE SERVICED BY QUALIFIED PERSONNEL ONLY. DO NOT MAKE ANY INTERNAL ADJUSTMENTS OR ADDITIONS TO THIS EQUIPMENT AT ANY TIME OR TAMPER WITH INTERNAL ELECTRONIC COMPONENTS AT ANY TIME. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY VOID THE WARRANTY OF THIS EQUIPMENT, AS WELL AS CAUSING SHOCK HAZARD.

OPERATING TEMPERATURE

Do not expose this unit to excessive heat. This unit is designed to operate between 32° F and 104° F (0° C and 40° C). This unit may not function properly under extreme temperatures.

Front Panel



- 1 **LEVEL Control (Channel 1/Ch.1):** When used in stereo (two inputs into Ch.1 and Ch.2 on the back of the unit) this control determines the volume level for Channel 1 output only. When used in MONO (one input into Ch.1 input on the back of the unit) this control determines the volume level of both Ch.1 and Ch.2 outputs.
- 2 **RESONANCE Control (Channel 1/Ch.1):** This control "beefs up" the lower range giving the Velocity 100LTD extra performance at the low-end of the sonic spectrum. When used in stereo (two inputs into Ch.1 and Ch.2 on the back of the unit) this control determines the amount of RESONANCE for Channel 1 only. When used in MONO (one input into Ch.1 input on the back of the unit) this control determines the RESONANCE of both Ch.1 and Ch.2 outputs.
- 3 **PRESENCE Control (Channel 1/Ch.1):** This control opens up the treble and higher end, offering more "voice" for solo playing. When used in stereo (two inputs into Ch.1 and Ch.2 on the back of the unit) this control determines the amount of PRESENCE for Channel 1 only. When used in MONO (one input into Ch.1 input on the back of the unit) this control determines the PRESENCE of both Ch.1 and Ch.2 outputs.
- 4 **LEVEL Control (Channel 2/Ch.2):** This control determines the volume level for Channel 2.
- 5 **RESONANCE Control (Channel 2/Ch.2):** This control determines the amount of RESONANCE for Channel 2. This control "beefs up" the lower range giving the Velocity 100LTD extra performance at the low-end of the sonic spectrum.
- 6 **PRESENCE Control (Channel 2/Ch.2):** This control determines the PRESENCE for Channel 2. This control opens up the treble and higher end, offering more "voice" for solo playing.
- 7 **POWER LED:** This is the "POWER" LED. When the Velocity 100LTD is "ON" the LED will be lit or "ON".
- 4 8 **POWER SWITCH:** This switch powers up the Velocity 100LTD.

Rear Panel



- 1 **POWER Module** This module provides a connection for the power cord and also houses the main fuse of the unit. (For more information about the changing the fuse, please see page 5)

- 2 **OUTPUTS jacks (Ch. 2):** These 1/4" mono jacks provide outputs for Channel 2 to speaker cabinets. These jacks are configured in parallel.

Important!

Do not use these outputs with loads of 2 Ohms or less. When using both output jacks to provide multiple speakers for a given channel, it is important to ensure that the combination of speaker impedances for the given Velocity 100LTD output channel does not equate to a combined impedance of 2 Ohms or less.

- 3 **INPUT jack (Ch.2):** This 1/4" jack provides an input to Channel 2 from the output of a preamp or the device in an effects chain.

- 4 **OUTPUT jacks (Ch. 1):** These 1/4" mono jacks provide outputs for Channel 1 to speaker cabinets. These jacks are configured in parallel.

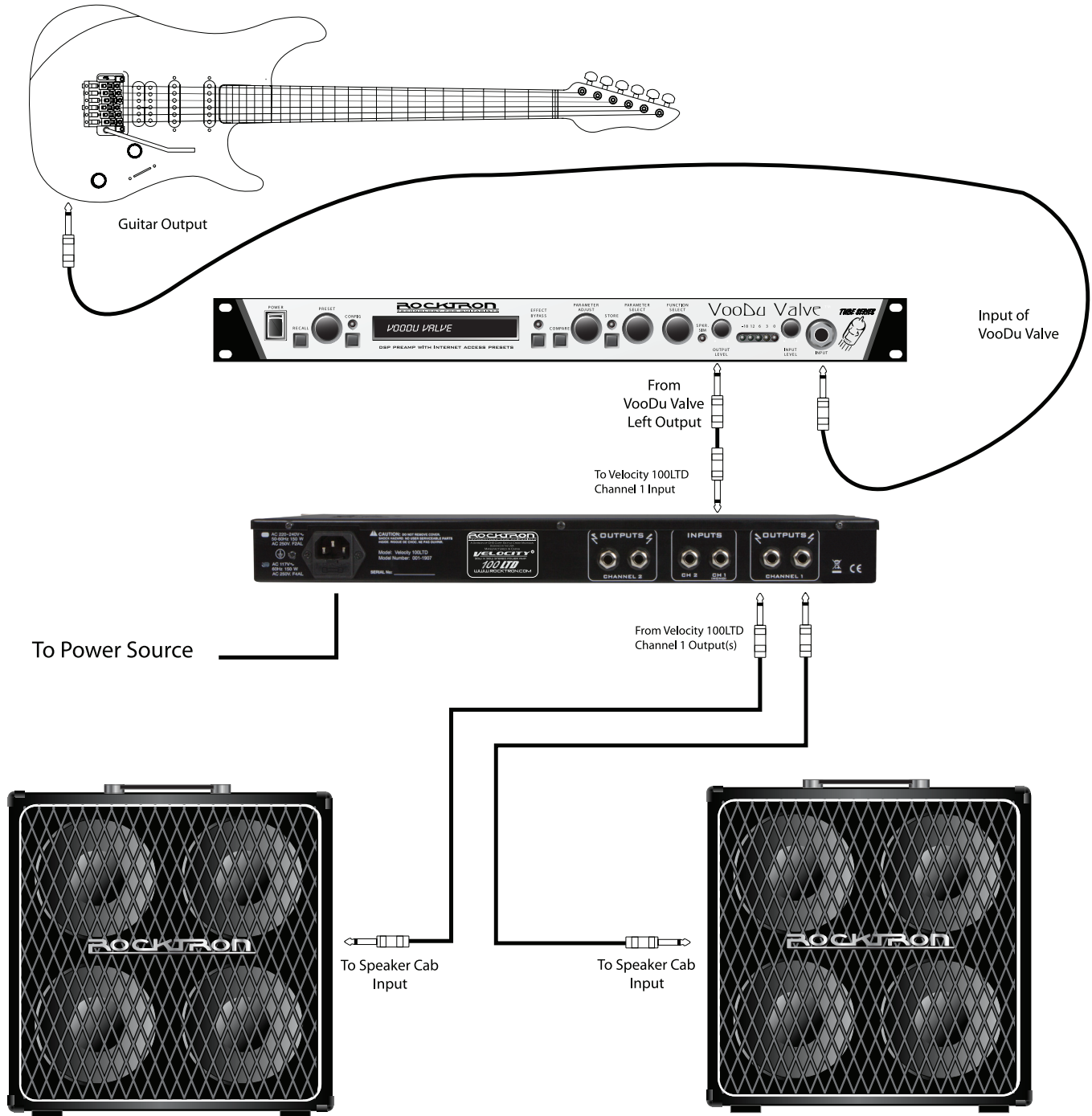
Important!

Do not use these outputs with loads of 2 Ohms or less. When using both output jacks to provide multiple speakers for a given channel, it is important to ensure that the combination of speaker impedances for the given Velocity 100LTD output channel does not equate to a combined impedance of 2 Ohms or less.

- 5 **INPUT jack (Ch. 1 MONO):** This 1/4" jack provides an input to Channel 1 from the output of a preamp or the device in an effects chain. Use this input if running in MONO. If the Channel 2 input jack is not used, then the signal from the Input jack (Ch.1) will be sent to both Output jacks (Ch.1 & Ch.2).

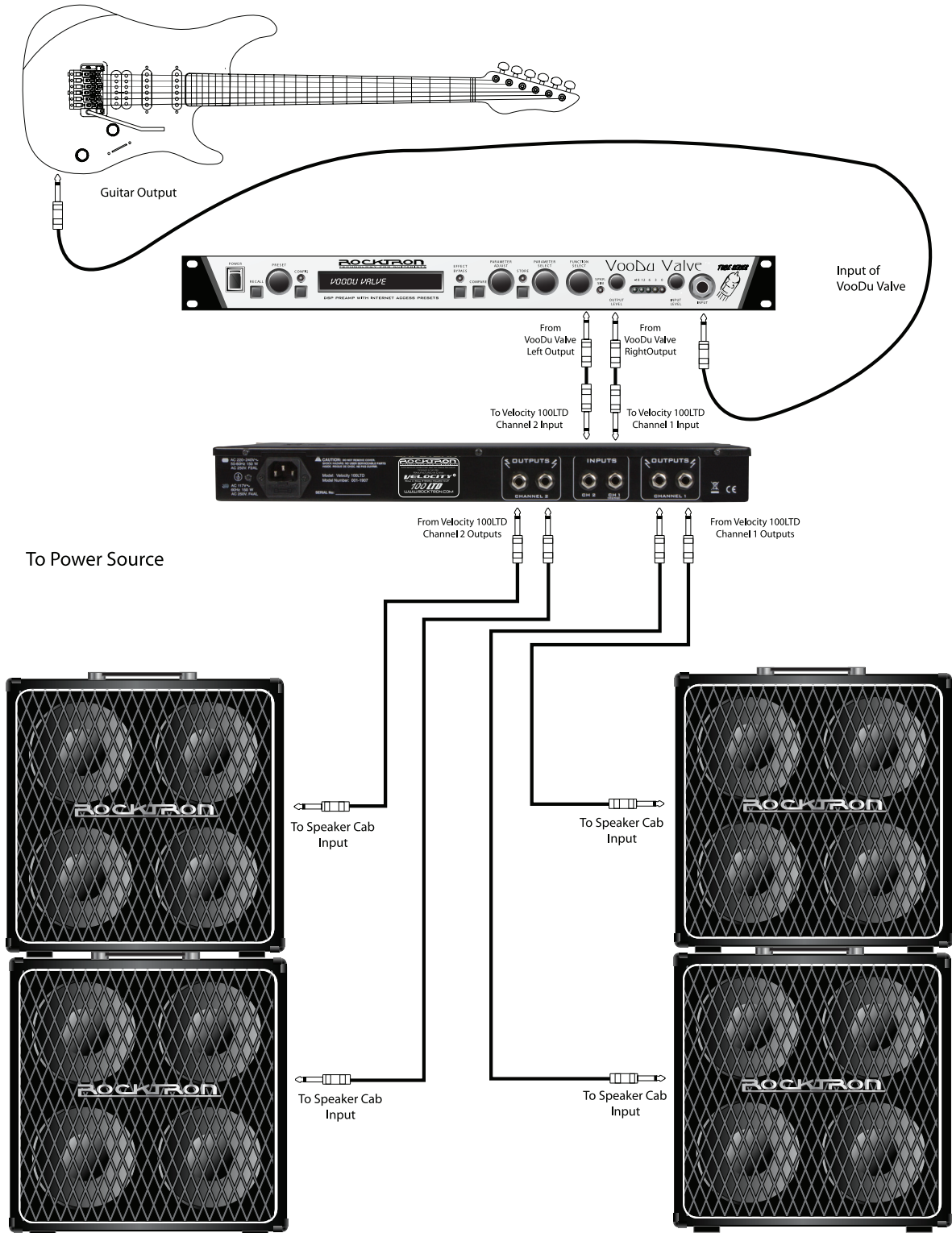
Connections

MONO Application



Connections

STEREO Application



Operating Precautions

Although operation of the Velocity 100LTD is simple once the proper connections have been made, attention to the following precautions is essential to protect your equipment against failure and ensure the long life of your Velocity® amplifier.

- ! The Velocity 100LTD is capable of producing the following power output levels into each of these loads:

55 watts @ 4Ω

40 watts @ 8Ω

28 watts @ 16Ω

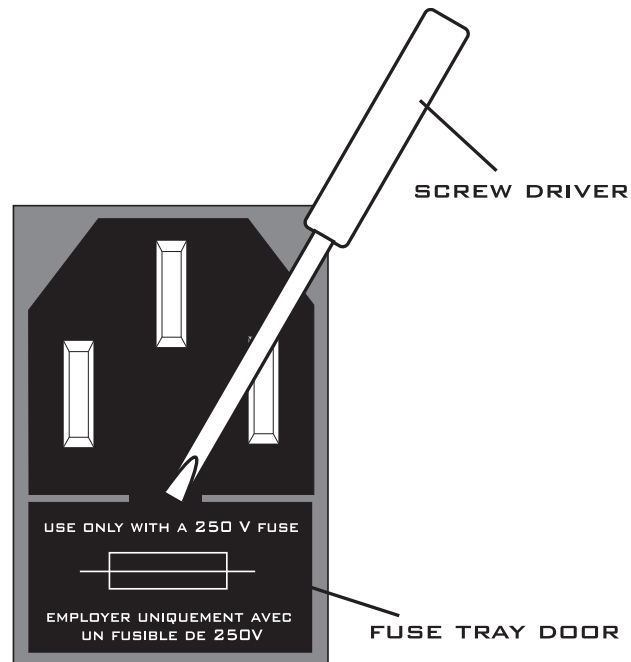
Always be certain to use speakers or speaker cabinets capable of withstanding the power provided for the above loads. Rocktron is not responsible for speaker failure resulting from the use of this equipment.

- ! **Never** connect 2 outputs of the amplifier to the same speaker. This would be equivalent to shorting the outputs of the amplifier together and would shut the unit down immediately.
- ! When plugging and unplugging speaker outputs, shut the amplifier OFF to avoid over-current shutdown of the unit.

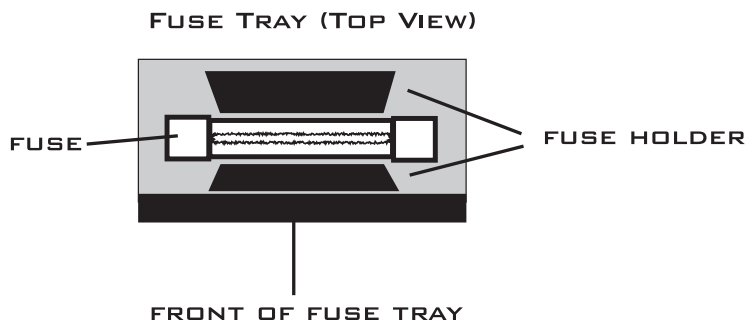
Fuse Replacement

Always replace the main fuse with an identically rated replacement. Your Velocity 100LTD amplifier uses a 5x20mm, (4A amp, 250V slow-blow fuse 118VAC) (2A, 250V slow-blow for 230VAC). The fuse is located immediately below the line cord inlet on the rear panel and can be accessed by removing the fuse cover module as shown below.

Use a small flat screwdriver as shown to slide the fuse cover out from the power inlet module. The fuse can be found inside the fuse cover module after it is pulled out.



Note: A small compartment is also provided within the fuse cover module for storing a spare fuse.



After replacing the fuse with another of identical specifications, push the fuse cover module fully back into place, ensuring that the fuse has snapped onto the fuse holder inside the power inlet module.

Specifications

Input Impedance	<i>10KΩ</i>
Maximum Input	<i>+20dBu</i>
Maximum Gain	<i>26dB</i>
Dynamic Range	<i>over 100dB</i>
Frequency Response	<i>$\pm 1dB$, 20Hz - 20kHz</i>
Output Power <i>(both channels driven @ 1% THD)</i>	<i>55 watts @ 4Ω 40 watts @ 8Ω 28 watts @ 16Ω</i>
Power Consumption	<i>402 watts, 3.5A @ 115VAC</i>
Dimensions	<i>19" single rack space 7.5" deep (190mm)</i>
Weight	<i>10 Lbs (4.53 KG)</i>

** CE Approved **

Note: The Velocity 100 LTD does not have a switching power supply. Therefore, it can only be used in places where the voltage matches the unit. We offer three versions:

100V for Japan
117V for USA (110V)
220-240 for Europe.

DO NOT USE THE VELOCITY 100 LTD WHERE THE VOLTAGE DOES NOT MATCH THE SPECIFICATION ON THE BACK OF THE UNIT



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