

**ROCKTRON**  
TECHNOLOGY FOR GUITARISTS

**Vendetta<sup>TM</sup>**

**VH160R**

***ELECTRIC GUITAR HEAD WITH REVERB  
AND BUILT-IN CHROMATIC TUNER***

**User's Manual**

Vendetta<sup>TM</sup> is a trademark of GHS Corporation Battle Creek MI, USA

*May be covered by one or more of the following: U.S. Patents #4538297, 4647876, 4696044, 4745309, 4881047, 4893099,  
5124657, 5263091, 5268527, 5319713, 5333201, 5402498 and 5493617.  
Other patents pending. Foreign patents pending.*



Your Rocktron Vendetta VH160R amplifier has been designed to comply with the following Standards and Directives as set forth by the European Union:

Council Directive(s): 89/336/EEC, 73/23/EEC, 76/769/EC, 1994/62/EC, 2000/53/EC, 2002/95/EC

Standard(s): EN55022, EN50082-1, EN60065

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

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

- All warnings on this equipment and in the operating instructions should be adhered to and all operating instructions should be followed.
- Do not use this equipment near water. Care should be taken so that objects do not fall and liquids are not spilled into the unit through any openings.
- The power cord should be unplugged from the outlet when left unused for a long period of time.
- Do not block any ventilation openings (if applicable). Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
- Only used attachments/accessories specified by the manufacturer.
- Do not use this product with any case, stand tripod, bracket or table that is not specified by the manufacturer. Insure that the case, stand, tripod, bracket etc. is properly adjusted and setup (follow all instructions). Extra care and caution should be taken to avoid tip over and injury.
- Unplug this apparatus during lightning storms or when unused during long periods of time.

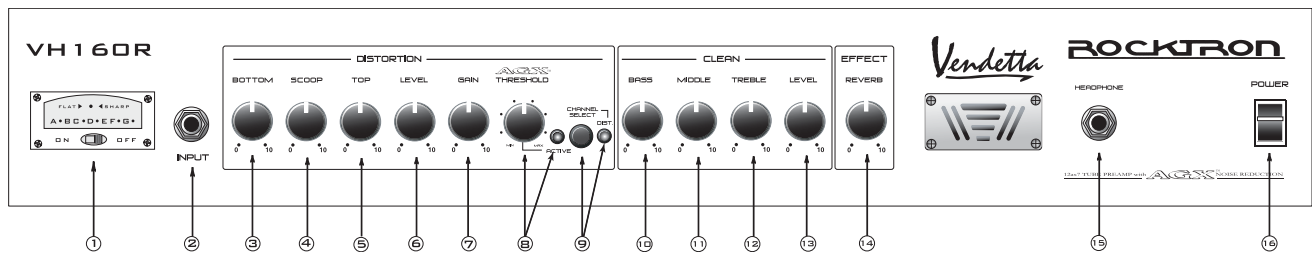
Refer all service to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply or plug is damaged, liquid has been spilled or objects have fallen into the apparatus or if the apparatus has been exposed to rain or moisture, does not operate 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. DO NOT 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 DESCRIPTIONS



## ① CHROMATIC TUNER

This tuner will allow you to tune your guitar. Please see the “Built-in Chromatic Tuner Functions” section for operation details and descriptions later in this manual.

## INPUT JACK

## ② INPUT jack

Connect the output of your guitar to the 1/4” input jack with a shielded guitar cable.

## DISTORTION CHANNEL

## ③ BOTTOM control

This knob controls the overall bass of the DISTORTION channel. The BASS control boosts or cuts the amount of low frequency, or bass sound in the signal.

## ④ SCOOP control

This knob controls the overall MIDDLE frequencies of the DISTORTION channel. The MIDDLE control boosts or cuts the amount of mid-band frequencies present in the signal.

## ⑤ TOP control

This knob controls the overall TREBLE of the DISTORTION channel. The TREBLE control boosts or cuts the amount of high frequencies present in the signal.

## ⑥ LEVEL control

This knob determines the LEVEL (or volume) of the DISTORTION channel. Turning the knob clockwise will increase the LEVEL of the distortion channel. Turning the knob counter-clockwise will decrease the LEVEL of the distortion channel.

## ⑦ GAIN control

This knob determines the amount of GAIN (or distortion) added to the clean signal. Turning the knob clockwise will add more GAIN to the signal. Turning the knob counter-clockwise will decrease the amount of GAIN added to the signal.

## ⑧ AGX THRESHOLD control and ACTIVE LED

This knob determines the AGX Threshold setting. See section in this manual for a more detailed description of how the AGX Threshold operates.

## ⑨ CH SELECT Button /DISTORTION LED

Channel Select button allows you to select between the DISTORTION and CLEAN channel. To activate the DISTORTION channel, push in the button. This will light the LED. To activate the CLEAN channel, depress the button so that it is “out”. The LED will not be lit.

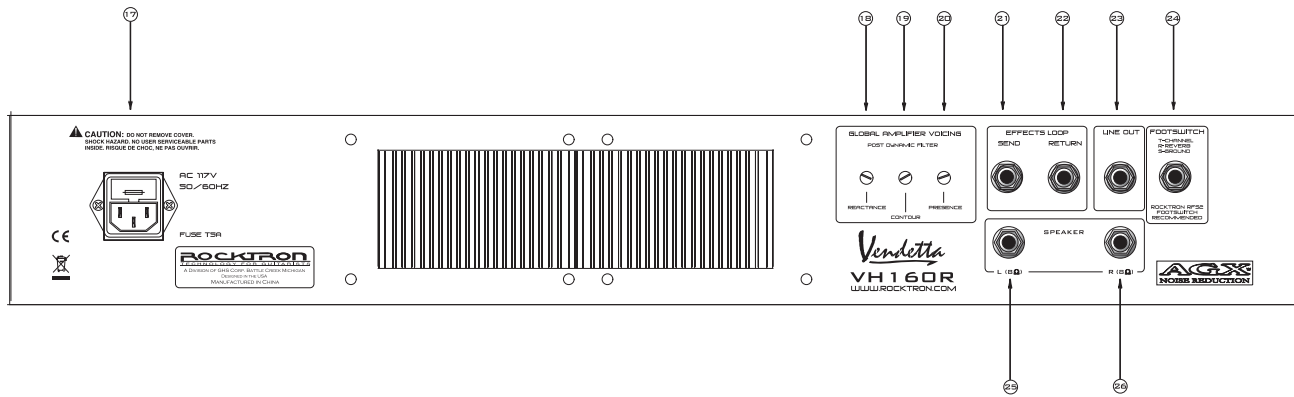
## CLEAN CHANNEL

- ⑩ **BASS control**  
This knob controls the overall bass of the CLEAN channel. The BASS control boosts or cuts the amount of low frequencies, or bass sound in the signal.
- ⑪ **MIDDLE control**  
This knob controls the overall MIDDLE frequencies of the CLEAN channel. The MIDDLE control boosts or cuts the amount of mid-band frequencies present in the signal.
- ⑫ **TREBLE control**  
This knob controls the overall TREBLE of the CLEAN channel. The TREBLE control boosts or cuts the amount of high frequencies present in the signal.
- ⑬ **LEVEL control**  
This knob determines the LEVEL (or volume) of the CLEAN channel. Turning the knob clockwise will increase the LEVEL of the clean channel. Turning the knob counter-clockwise will decrease the LEVEL of the clean channel.

## EFFECTS and CONTROLS

- ⑭ **REVERB control**  
Adjusts the amount of reverb added to your guitar's signal. Turn the knob clockwise to increase the effect.
- ⑮ **HEADPHONE jack**  
Plugging your headphones into this jack disconnects the sound going to the speaker and allows you to practice in private.
- ⑯ **POWER switch**  
Turns the amp ON and OFF. When the LED is lit, the amp is on.

# BACK PANEL DESCRIPTIONS



## 17 POWER CORD PLUG

Using the supplied detachable power cord, plug the amplifier into any standard wall outlet. Please be sure to check your local wiring and voltage to make sure your amplifier is the proper voltage for your area of the world. Please follow all the precaution guidelines found in the front of this manual. When replacing the fuse, please be sure to replace the fuse with the specific fuse as stated on the chassis next to the power cord plug. A description on how to change the fuse is covered later in this manual.

## GLOBAL VOICING - Post Dynamic Filter

The Global Voicing - Post Dynamic Filter controls allow you to adjust the overall equalization of the amplifier after the signal has gone through the preamp and channel EQs. These controls will allow you to make adjustments to the overall sound of the amplifier and make compensations for different dynamics you may be trying to achieve or for the different dynamics of the room, hall, bar, etc. you may be playing in. Adjustments to these controls can be made using a small screw driver.

## 18 REACTANCE control

This control pot knob allows you to adjust the overall low-end “thump” of the amplifier, the type of lows that you “feel” more than you hear. Turning the control to the right will boost the low-end frequencies. Turning it to the left will cut the low-end frequencies.

## 19 CONTOUR control

This control pot allows you to “fine-tune” the speaker’s lower middle range frequencies. Turning the control to the right will boost the middle frequencies. Turning it to the left will cut the middle frequencies.

## 20 PRESENCE control

This control pot allows you to adjust the overall high-end frequency content. This is good for “custom tailoring” distortion texture between coarse and smooth. Turning the control to the right will boost the high-end frequencies. Turning it to the left will cut the high-end frequencies.

## EFFECTS LOOP

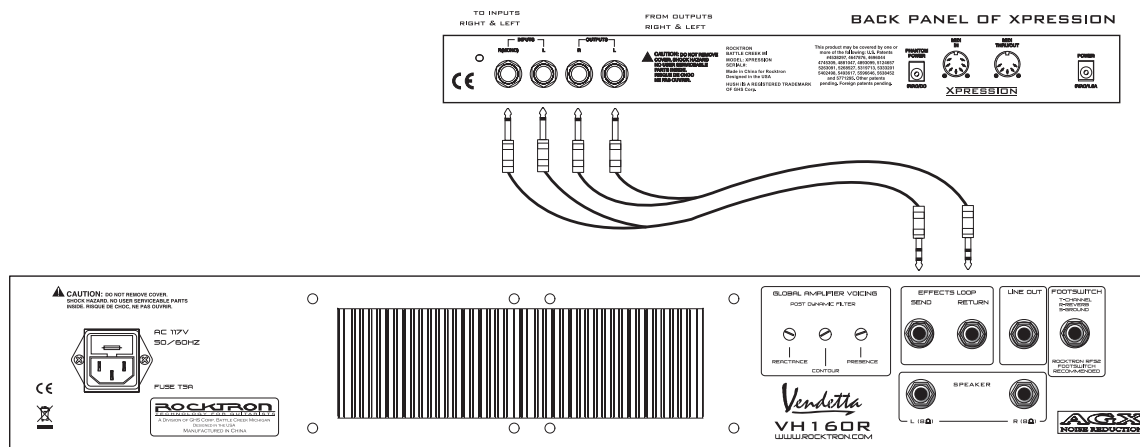
The effects loop allows you to insert different effects into the signal chain after the preamp section of the amplifier. Please follow all manufacturer’s instructions when connection an outboard device to this amplifier. See drawing below showing you how to hook up a Rocktron Xpression effects processor.

## 21 EFFECTS LOOP SEND

Using a standard guitar cable, connect this jack to the input of the outboard effects device you are using. This jack is a mono jack, but delivering a left and right signal feed.

## 22 EFFECTS LOOP RETURN

Using a standard guitar cable, connect this jack from the output of the outboard effects device you are using. This jack is a stereo RTS jack.



## 23 LINE OUT Jack

This 1/4" output jack provides a line level signal. This can allow you to plug into a recording device, power amplifier, speaker simulator, PA system, etc. The line output is not controlled by the master volume control. Please follow all manufacturer's instructions when plugging this product into any outboard device.

## 24 FOOTSWITCH Input RFS2

Using a ROCKTRON RFS2 footswitch and a stereo cord (both sold separately) you can change channels between DISTORTION and CLEAN and turn the REVERB ON and OFF.

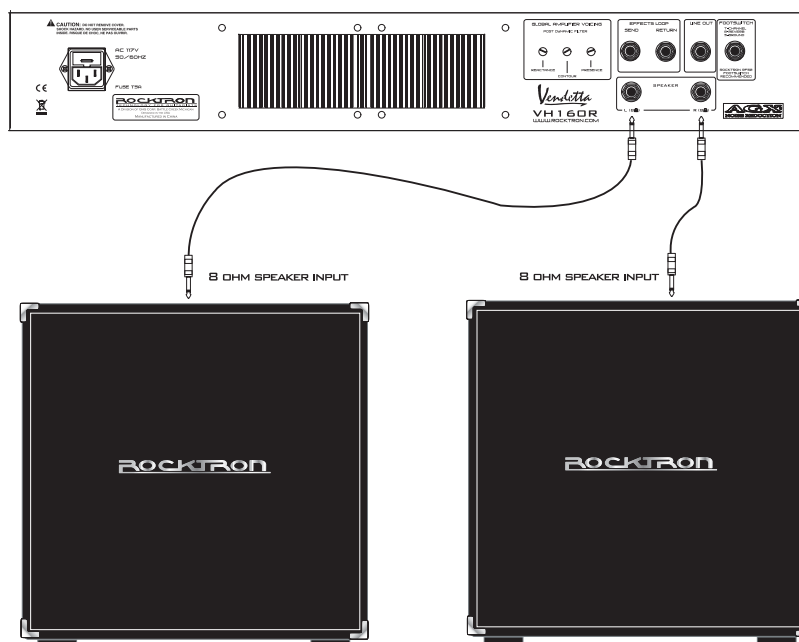
## SPEAKER JACKS

### 25 SPEAKER JACK - L (Left)

Using a speaker cable with 1/4 jacks you can plug into any 8 Ohm speaker cabinet as shown below.

### 26 SPEAKER JACK - R (Right)

Using a speaker cable with 1/4 jacks you can plug into any 8 Ohm speaker cabinet as shown below.



*\* Rocktron single (RFS1) and double (RFS2) footswitches are available and sold separately.*

# AGX (Automatic Gain Expander)

Rocktron's patented AGX system solves the long standing problem encountered by guitar players when using high gain distortion. The AGX circuit expands the gain of the amplification circuit only when required based on the input level. When no signal is present, the AGX circuit expands down the amplification level to a point where hum and noise are dramatically reduced.

## **AGX THRESHOLD control and ACTIVE LED - detailed description:**

This knob allows you to control the "dynamic attack" of the noise reduction. In other words this control may be set to either eliminate the standby noise (distortion "ON" with guitar volume "OFF") or place the AGX in a hard gating attack (useful for heavy hand muted staccato chording). Generally when playing, the AGX ACTIVE LED will be "OFF." The AGX ACTIVE LED will turn "ON" (or light) when the signal crosses the THRESHOLD set by the user.

## **AGX PREAMP NOISE REDUCTION**

To set the AGX for noise reduction, follow these steps:

1. Adjust AGX knob full counter clockwise (full LEFT-OFF).
2. Plug your guitar into the amp and adjust the distortion and volume to your taste.
3. Turn the volume on your guitar "OFF." What is left is the noise produced by the ultra hi-gain circuitry of the preamp.
4. Turn the AGX knob to the right slowly until the preamp noise is gone.

With this setting you can go directly to silence just by rolling your volume "OFF" on your guitar.

## **AGX HARD GATING**

To set the AGX control to "HARD GATING", follow these steps. Please note that the AGX in the hard gating mode is very sensitive and user dependent. It is a tool that you will need to experiment with to fit your personal taste.

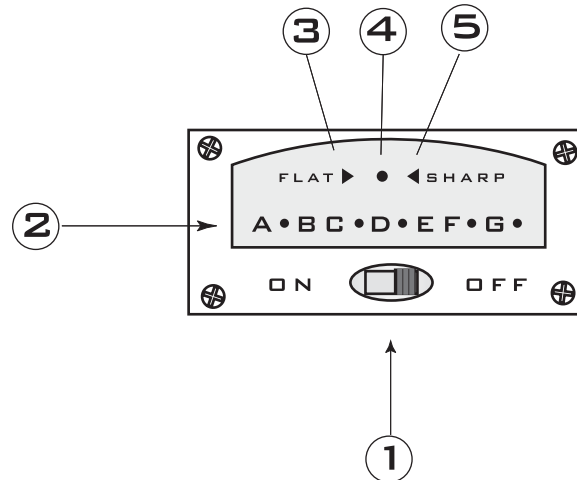
1. Adjust AGX knob full counter clockwise (Full LEFT-OFF).
2. Plug your guitar into the amp and adjust the distortion and volume to your taste.
3. Turn the volume on your guitar FULL UP.
4. While muting your strings with your hand turn the AGX knob to the right until you hear the noise clamp off.

Now you can do very "heavy distorted chord chunking" and then mute to silence by muting your strings.... You may need to adjust the knob then stand away from the amp to find the exact setting you want if you are close to the speakers. You may try a combination of rolling back your guitar volume just a little 1/8-1/4 of its travel and leaving it there to get the best dynamic response. Once again this setting will be different from user to user so experiment to find "your" sweet spot.



# Built-in Chromatic Tuner Functions

The built-in Chromatic Tuner is located on the front of the amplifier. The tuner is calibrated to A440, standard tuning. Please see below for function details.



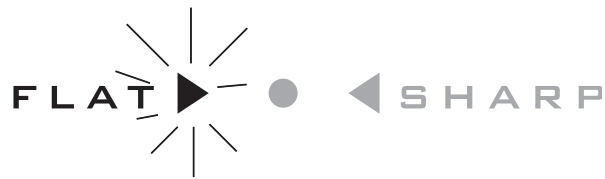
- ① **ON/OFF button**  
Press this button to engage the tuner function. When tuner is “ON” the IN-TUNE (point 4) LED will be blinking.
- ② **NOTE display**  
The notes will light depending on the note being played or tuned. The dots between the notes show sharp or flat notes, such as A# or Bflat or C# or Dflat.
- ③ **FLAT Arrow**  
When lit, this arrow shows that the note being tuned is FLAT.
- ④ **IN-TUNE LED**  
When lit, this green LED shows that you are IN-TUNE.
- ⑤ **SHARP Arrow**  
When lit, this arrow shows that the note being tuned is SHARP.

## To Tune

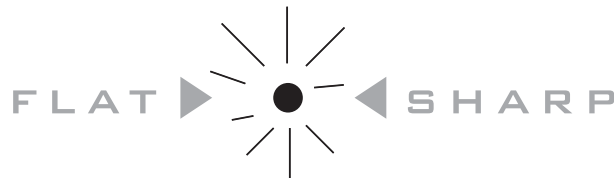
- 1) Turn the tuner “ON”
- 2) Play a note on your guitar. The tuner automatically senses the note being played and will show you the note which is the closest to the one being played by lighting the appropriate NOTE in the NOTE LED display.



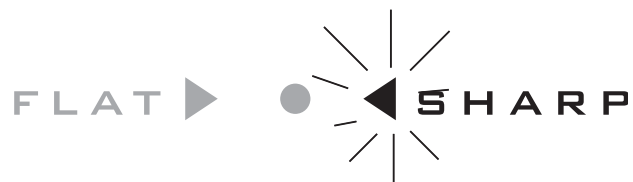
3) If the note being played is flat, the FLAT Arrow, will be flashing as shown below. This shows by “how much” the guitar is out of tune from the note being played (in standard 440Hz tuning).



4) Tune the string “up” until the center green LED is lit. As you are tuning the string up, the FLAT Arrow will decrease the flashing speed as you approach the IN-TUNE LED. Once this Green IN-TUNE LED is lit, the note is in tune.

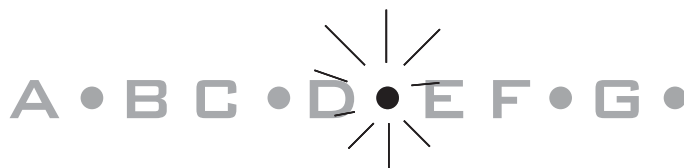


5) If the note being played is sharp, the SHARP Arrow, will be flashing as shown below.



5) Tune the string “down” until the center green LED is lit. As you are tuning the string down, the SHARP Arrow will decrease the flashing speed as you approach the IN-TUNE LED. Once this Green IN-TUNE LED is lit, the note is in tune.

6) To tune the string to a sharp or flat note, such as D# or Eflat tune the string up or down until the dot between the D and E (as shown below) is lit. The illustration below shows the string in Tune to D# (Eflat).



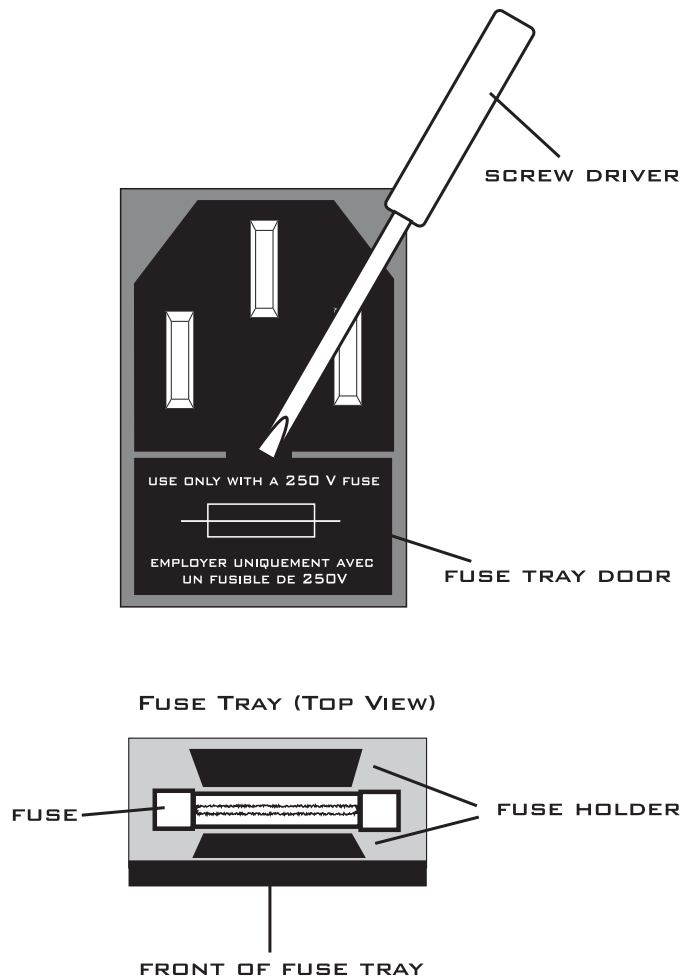
7) Follow instructions 3-5 (above) to accurately tune the string to D# (Eflat)

# VH160R Specifications

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|                          |   |
|--------------------------|---|
| Power Output             | 160 Watts (80 Watts Per Side) at 8 ohms   |
| Input Impedance          |   |
| Tube                     | 12ax7   |
| Minimum Output Impedance |   |
| EQ Distortion            | Bottom<br>Scoop<br>Top<br>Active Shelving<br>Active Bandpass<br>Active Shelving                     |
| EQ Clean                 | Treble<br>Middle<br>Bass<br>Active Shelving<br>Active Bandpass<br>Active Shelving                   |
| Global EQ                | Reactance, Contour and Presence   |
| Line Output              | 1/4" Stereo jack  |
| Effects Loop:            | One 1/4" Mono RTS Jack Send (sending two signal feeds)<br>One 1/4" Stereo RTS Jack Return           |
| Headphone Output         | One Stereo 1/4" jack  |
| Channels                 | DISTORTION and CLEAN (Footswitchable via Rocktron RFS2 footswitch - sold separately)                |
| Effects                  | REVERB (Footswitchable via Rocktron RFS2 footswitch - sold separately)                              |
| Dimensions               | 745mm(W) x 282mm(D) x 295mm(H)<br>29.5" x 11" x 11.5"   |
| Weight                   | 44lbs (20KG)  |
| Power Requirements       | 100 Volts AC 50/60Hz or 117 Volts AC, 60Hz<br>or 220/240 Volts AC, 50/60Hz, as specified on chassis |
| Fuse                     | 100-120V - use T5A<br>220-240V - use T3.15A   |

# Fuse Replacement



We recommend that you use an authorized repair person to change the fuse in this unit.

To access the fuse, first power down the unit and unplug the cable from the wall outlet and the amplifier. Using a small screw driver, open the fuse tray by prying open the small tab as shown in the drawing above.

Please note that the tray will not come all of the way out.

Remove the old fuse and replace with a comparable new fuse and close the tray being sure that the tray snaps into position. You will find the information on the fuse used in the specifications section of this manual.

# TUBE PREAMP

## **Replacing the Preamp Tube**

We recommend that any work to be performed on this amplifier be done by a qualified technician. Note that any work not performed by a qualified technician may void the warranty of this product.

To replace the 12ax7 preamp tube, follow these instructions.

NOTE: Do NOT remove the silver plate on the front panel of the amplifier. This is NOT how you get to the tube.

- 1) Turn OFF the amplifier
- 2) Remove power cord from the wall and amplifier.
- 3) Using a phillip's screw driver, remove the screws on top of the amp
- 4) Carefully slide the entire metal chassis of the back of the amp. You will now have access to the tube.

CAUTION - the tube may be HOT! Allow enough time after using for the tube to "cool".

Note, the speakers may also need to be disconnected to remove the metal chassis.

Reassemble the amplifier following the same steps in reverse.

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