USER’S MANUAL

100 Watt Tube Head

Designed by Bruce Egnater

Vendetta™ 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, 5493617 and 5638452.

Other patents pending. Foreign patents pending.
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 manufacturer's 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.
15. To be in full CE and CSA compliance it is recommended to operate the apparatus at least 6 inches (or 16 centimeters) away from any wall or object.

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

1. **INPUT jack**
   This 1/4" jack accepts the output from the guitar.

2. **CHANNEL switch**
   Selects one of the four channels in sequence - 1 through 4. Also used to store MIDI data. See the MIDI section for more information.

3. **GAIN 1 control**
   Adjusts the amount of drive for Channel 1. Higher settings increase distortion and sustain. 60's British Style clean.

4. **GAIN 2 control**
   Adjusts the amount of drive for Channel 2. Higher settings increase distortion and sustain. Hotter than channel one.

5. **BRIGHT switches (Channel 1 and Channel 2)**
   Increases "sparkle" and "bite" of the channel.

6. **BASS, MID, TREBLE and PRESENCE controls**
   This is where you decide the personality. The BASS, MID and TREBLE controls are your classic bridge-T configuration (found in most of the popular guitar amps throughout history). The PRESENCE control allows you to tailor the high frequency response to suit your taste. Experiment...try new things. There are many great tones at your fingertips!

7. **VOICING switch**
   Select VINTAGE or MODERN. This switch affects both Channel 1 and Channel 2.

8. **PRESENCE control**
   Tailors the high frequency of the channel. This control affects both Channel 1 and Channel 2.

9. **MASTER 1 control and channel on LED**
   Adjusts the overall volume of Channel 1 only and indicates the channel is active when LED is lit.

10. **MASTER 2 control and channel on LED**
    Adjusts the overall volume of Channel 2 only and indicates the channel is active when LED is lit.
**Channels 3 and 4**

11. **GAIN 3 control**  
   Adjusts the amount of drive for Channel 3. Higher settings increase distortion and sustain. British grind to EVH one.

12. **GAIN 4 control**  
   Adjusts the amount of drive for Channel 4. Higher settings increase distortion and sustain. The "hot rod" version of Channel 3.

13. **BRIGHT switches**  
   Increases "sparkle" and "bite" of the channel.

14. **BASS, MID, TREBLE and PRESENCE controls**  
   The BASS, MID and TREBLE controls are your classic British bridge-T configuration (found in most of the popular guitar amps throughout history). The PRESENCE control allows you to tailor the high frequency response to suit your taste. Experiment...try new things. There are many great tones at your fingertips!

15. **VOICING switch**  
   Selects VINTAGE or MODERN. This switch affects both Channel 3 and Channel 4.

16. **PRESENCE control**  
   Tailors the high frequency of the channel. This control affects both Channel 3 and Channel 4.

17. **MASTER 3 control and channel on LED**  
   Adjusts the overall volume of Channel 3 only and indicates the channel is active when LED is lit.

18. **MASTER 4 control and channel on LED**  
   Adjusts the overall volume of Channel 4 only and indicates the channel is active when LED is lit.

**Master Section**

19. **MAIN LEVEL control**  
   This is a master level control which determines the overall output level of the VENDETTA.

20. **EFFECTS control**  
   When using the parallel loop, this control adjusts the amount of effects that will be mixed with your direct signal.

21. **PRESENCE control**  
   This is a master PRESENCE control which tailors the overall high frequency at the outputs of the VENDETTA.

22. **DENSITY control**  
   This is a master DENSITY control which determines the overall fatness of the VENDETTA.

23. **POWER switch**  
   This is the MAINS AC power switch. When powering up the VENDETTA, verify that the STANDBY switch (24) is in the "OFF" position.

24. **STANDBY switch**  
   After powering up the VENDETTA, allow one minute to allow the circuits to stabilize then switch to the "ON" position.
Rear Panel

1. **POWER INLET module**
   The Power Inlet module accepts the detachable power cord included with the unit, and also houses the main power fuse and voltage selector. (Always replace with the Slow-Blow fuse indicated on the rear panel.)

2. **HT FUSE**
   This fuse provides internal protection in the event of a power tube failure. Always replace with the same type and rating.

3. **FOOT CONTROLLER section**
   See page titled MIDI/Switching Section for a detailed operation of the MIDI and channel-switching functions.

4. **POWER TUBE TEST POINTS**
   This feature provides a convenient point for measuring the idle current in the power tubes without disassembling the unit (requires amp meter). Different tube types can be used by readjusting the bias. Please see section on "Power Tube Test Points" for additional information.

5. **IMPEDANCE switch**
   This switch selects the proper impedance to match the output of the amplifier to the load. (See the section on Impedance Settings for more details).

6. **MAIN SPEAKER output**
   This jack connects to the internal speaker on the COMBO version of the VENDETTA or to the primary speaker in a head/cabinet setup. A speaker must always be connected to this jack.

7. **EXTENSION SPEAKER output**
   This jack is used to connect additional speakers to combo or when multiple cabinets are used with the head version of the VENDETTA.

8. **SLAVE OUT jack**
   This 1/4" mono jack provides a FULL RANGE direct output after the power amplifier stage. It is intended to be used as an output to feed an external effects system or to an additional powered speaker system. It is not a RECORDING output.
Rear Panel cont......

9. **SERIES LOOP - SEND jack**
   This 1/4" jack connects to the INPUT of an effects device.

10. **SERIES LOOP - RETURN jack**
    This 1/4" jack connects to the OUTPUT of an effects device. Inserting a plug into this jack automatically activates the effects loop circuit.

11. **PARALLEL LOOP - SEND jack**
    This 1/4" jack connects to the INPUT of an effects device.

12. **PARALLEL LOOP - RETURN jack**
    This 1/4" jack connects to the OUTPUT of an effects device. Inserting a plug into this jack automatically activates the effects loop circuit and the front panel effects loop control.

---

**Operating Precautions**

*Please note the following precautions before operating your VENDETTA:*

* Always use the MAIN SPKR jack first for the speaker connection.

* Do not operate below 4 ohms.

* Never operate the VENDETTA without a load on the output. Always have a speaker cabinet plugged into the speaker output before turning on the unit.

* Always be certain to use speakers or speaker cabinets capable of withstanding the power that the VENDETTA is capable of providing. Rocktron is not responsible for speaker failure resulting from the use of this equipment.

* Always plug and unplug speaker outputs with the power amplifier OFF.

**Temperature Considerations:**

* Note that the power tubes at the rear of the VENDETTA generate considerable heat when operating the amplifier. **DO NOT TOUCH THESE TUBES DURING (OR SOON AFTER) OPERATION!** Failure to heed this warning may result in severe burns!

* Always keep well ventilated. Do not block the top vent.

* Do not let cables rest on power tubes.
MIDI/Switching Section

This section describes the rear panel components (shown below) which relate to MIDI and channel switching options.

VENDETTA rear panel Foot Controller MIDI/Channel switching section.

MIDI Pedal Connection/Operation/Phantom Power

The MIDI "IN" connection on the back panel of the VENDETTA is a 7-Pin MIDI jack. However, a standard 5 Pin MIDI cable will work.

Plug your MIDI controller (pedal) into the MIDI "IN" on the back of the VENDETTA via standard 5 pin MIDI cable. If you have a MIDI Pedal that can be run via Phantom Power then you will need to use a 7 pin MIDI cable. With a 7-pin MIDI cable, pins 6 & 7 will supply power to your MIDI controller. 7-pin MIDI cables are available through your Rocktron dealer.

NOTE: The VENDETTA is programmed at the factory to default to Channel 1.

Plugging in a MIDI Controller (Pedal) whether it is a 4-button controller or a Rocktron MIDI Mate, the VENDETTA channels 1-4 will correspond with the MIDI controller buttons 1-4.

VENDETTA Channel 1 - MIDI Controller Button 1
VENDETTA Channel 2 - MIDI Controller Button 2
VENDETTA Channel 3 - MIDI Controller Button 3
VENDETTA Channel 4 - MIDI Controller Button 4

Pressing Button 1 on your MIDI Controller will call up VENDETTA Channel 1 - Pressing button 2 on your MIDI Controller will call up VENDETTA Channel 2....and so on.

You may also change which button controls which channel on the VENDETTA as well. For example, if you want MIDI Controller Button 2 to turn on VENDETTA channel 1 - first, select button 2 on the MIDI controller. Next scroll through the channels using the "Channel Select" switch on the front panel of the amplifier until you get to Channel 1. Then, press and hold the Channel Select switch for two seconds. This will set the VENDETTA Channel 1 to respond to your MIDI Controller button 2. Follow the same steps to change other channels or to change back to the original configuration.
MIDI Thru and MIDI In Jacks

MIDI THRU

This 7-pin DIN connector passes on the MIDI information that is received at the MIDI IN jack to other MIDI-compatible devices via a MIDI cable. Although, this part is a 7-pin connector, a standard 5-pin MIDI cable can be used.

To control the VENDETTA and another MIDI compatible device (like a Rocktron Xpression), plug a standard 5-pin MIDI cable from the MIDI Thru on the VENDETTA into the MIDI IN on the compatible device. At this point refer to your MIDI controller(pedal) manual for program changes, MIDI Mapping and/or advance functions.

Note: Inherently in MIDI there is a limit to the number of devices which can be chained together (i.e. connected in series). With more than three devices connected, a slight distortion of the MIDI signal can occur (due to signal degradation) which can cause an error in MIDI signal transmission. Should this problem arise, a MIDI box can be used which connects directly to the MIDI device which transmits MIDI information and has multiple connectors for the multiple devices receiving MIDI. MIDI cables should not exceed 50 feet (15 meters) in length.

Impedance Settings

The IMPEDANCE switch on the output must be set to match the speaker load that is connected. The speaker jacks are wired internally in parallel. Use the chart on the following page to determine the proper setting of the IMPEDANCE switch for your particular speaker configuration.

Important Notes:

If only one speaker (internal) or cabinet is used, as with the head model, the MAIN SPEAKER output must be used FIRST. If the MAIN SPEAKER output is not used, no signal will be present and possible damage to the amplifier may result.
### IMPEDANCE settings when using 1 cabinet

<table>
<thead>
<tr>
<th>Set IMPEDANCE switch to:</th>
<th>4Ω</th>
<th>8Ω</th>
<th>16Ω</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPKR MAINS</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>EXT SPKR</td>
<td>NC</td>
<td>NC</td>
<td>NC</td>
</tr>
</tbody>
</table>

### IMPEDANCE settings when using 2 cabinets

<table>
<thead>
<tr>
<th>Set IMPEDANCE switch to:</th>
<th>4Ω</th>
<th>8Ω</th>
<th>16Ω</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPKR MAINS</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>EXT SPKR</td>
<td>NC</td>
<td>NC</td>
<td>NC</td>
</tr>
</tbody>
</table>

*Proper IMPEDANCE switch settings*
Effects Loop Operation

The effects loop on the VENDETTA offers two modes of operation, as described below.

Series Mode

When an effect is inserted into the loop send and return jacks, the direct signal path is interrupted and 100% of the signal is routed through the effects unit. This is the most common style of effects loop in most guitar amplifiers.

This configuration allows the use of most special effects such as reverb, echo, chorus, pitch shift, equalizers, noise reduction, etc. The only disadvantage to this loop is that your TONE may be affected by the effects processor because your signal passes through it at all times.

Parallel Mode

This the more specialized mode that is limited in its use, but offers the advantage of leaving your direct signal intact even when an effects unit is inserted in the loop. Your TONE is not hindered by the effects processor. Think of this mode as similar to the effects buss on a mixing console. Your DIRECT signal is always present, and the processed signal is MIXED in using the FXLEVEL/MIX control.

"Time-based" effects are ideally suited for this application. Echo, reverb, delay, flanging and phasing are all examples of time-based effects.

Processors that WILL NOT function properly in a PARALLEL loop include noise reduction, equalizers, compressors and limiters. The reason for this is because, for these devices to work, they MUST PROCESS 100% of the signal. For example, you cannot equalize the signal if you have the "un-equalized" signal along with it. Makes sense, doesn’t it?

* When using this mode, you must program the effects unit for 100% wet. You do not want any dry (un-effected) signal to be allowed to pass through the effects processor.
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 Replacement

POWER TUBE TEST POINTS USEAGE.

Please note that any adjustments, modifications, upgrades, etc made to the VENDETTA may void the warranty. All work should be performed by a qualified technician.

This feature on the rear panel provides a convenient point for measuring the idle current in the power tubes without disassembling the unit. Different tube types can be installed and used in the VENDETTA and biasing has been simplified. The instructions below explain how it works.

CAUTION!! DO NOT EXCEED THE VALUES SHOWN. This will shorten tube life, cause possible tube failure and damage to the amplifier.

A digital voltmeter capable of displaying DC voltage from 0 to 200 millivolts is required. This can be an inexpensive type found at most electronic suppliers such as Radio Shack. It is not necessary to connect a speaker during this process.

1) Turn all controls full counter clockwise.
2) Turn the power on and allow 5 minutes for warm up.
3) Place the standby switch in the "on" position and allow another 5 minutes for the tubes to stabilize.
4) You are now ready to measure. Set your voltmeter to the 200 millivolt scale. Insert the black test probe into the "common" test point. Insert the red test probe into the #1 test point. You should now see a reading within the range shown in the chart below.

While leaving the black probe connected, move the red probe to each of the four test points and write down the voltage readings at each. You have now measured and documented the actual current that is flowing through each of the four power tubes.

The readings should be within 5 millivolts of each other. If not, the tubes are not closely matched. Now connect your meter to the rest point with the highest reading. Turn the bias adjust with a small screw driver until the reading is within the value on the chart.

<table>
<thead>
<tr>
<th>Tube Type</th>
<th>Min Value</th>
<th>Max Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL34</td>
<td>28mV</td>
<td>40mV</td>
</tr>
<tr>
<td>E34Ls</td>
<td>30mV</td>
<td>45mV</td>
</tr>
<tr>
<td>6L6</td>
<td>25mV</td>
<td>35mV</td>
</tr>
<tr>
<td>5881</td>
<td>25mV</td>
<td>35mV</td>
</tr>
<tr>
<td>KT66</td>
<td>25mV</td>
<td>35mV</td>
</tr>
<tr>
<td>6550</td>
<td>30mV</td>
<td>45mV</td>
</tr>
</tbody>
</table>

Note: 6V6 type is not safe to use due to the high (500 volts) plate voltage.
Specifications

Input Impedance... ....................... 1M
Output Power.............................. 100 watts RMS
Load Impedance ......................... 4Ω, 8Ω or 16Ω (switch selectable)
Maximum Gain ......................... over 80dB
Operating Voltages ..................... 110 VAC
Dimensions .............................. 29 1/4" x 9 1/2" x 10 1/2"
Weight.................................... 55 lbs.
Speaker ................................. 4x12 Cabinet Available Separately
uses two 12" Celestion Vintage 30 Speakers and
two 12" customed Eminence speakers
Equalization ............................. 3-Band Bridge-T — Treble, Middle, Bass
Plus Presence and Density
Other Rocktron Products

**Rack Gear:**
- Gainiac 2 *(preamp w/12ax7 tube)*  
- Xpression *(multi-effects processor)*  
- Blue Thunder *(bass preamp w/multi-effects)*  
- Voodoo Valve® *(preamp w/12ax7 tube and multi-effects)*  
- Prophesy *(our top of the line preamp with multi-effects)*  
- HUSH® Super C *(guitar noise silencing system)*  
- Velocity® 100 *(2x50W Stereo Power Amp for Guitar)*

**Stomp Boxes:**
- Rampage Distortion, Tsunami Chorus, Austin Gold Overdrive, Vertigo Vibe Rotating Vibe Pedal,  
- HUSH® The Pedal, Sonic Glory Overdrive, Short Timer Digital Delay,  
- Big Crush Compressor, Deep Blue Chorus  
- Silver Dragon Tube Distortion Pedal, Metal Planet Distortion,  
- Pulse Tremolo, Hypnotic Flange,  
- X-Tune Tuner Pedal, Black Cat Moan Wah Pedal,  
- Banshee Talk Box, Nitro Booster/Enhancer

**DC OnTap - DC Power supply for Stomp Boxes**  
**DC OnTap Cable Package - extra cables to power other stomp boxes.**

**Foot Controllers:**
- MIDI Mate *(MIDI Foot Controller)*  
- MIDI XChange *(MIDI Foot Controller)*  
- All Access® *(MIDI Foot Controller)*  
- HEX *(Expression Pedal)*  
- RMM900 *(7-pin Din MIDI Cable)*  
- RM4 *(MIDI Controller for Vendetta amps)*  
- RFS1 and RFS2 *(Single and Double Latching Footswitches for Rampage Amps)*

**Electric Guitar - Acoustic Guitar and Bass Amplifiers:**
- Vendetta Head *(100 W Head 4-Channels All Tube - MIDI Switchable)*  
- Vendetta Combo *(100W 2x12 Combo Celestion 90s all Tube4-Channel MIDI Switchable)*  
  - R80DSP *(80W 1x12 Amp w/Digital Effects)*  
  - RT80 *(80W 1x12 Amp w/Reverb & Built-in Tuner)*  
  - R120DSP *(120W 2x10 Amp w/Digital Effects)*  
  - RT122C *(120W 2x12 Amp w/Stereo Chorus, Reverb & Chromatic Tuner)*  
  - R50DSP *(50 Watt 2x8"Guitar Amp w/Digital Effects)*  
  - R50C *(50 Watt 2x8"Guitar Amp w/Reverb & Chorus)*  
  - R20 *(20 Watt 1x8"Amp w/Reverb)*  
  - R10 *(10 Watt 1x6.5")*

- Bass20 *(Bass Amp 20W with 8" Speaker)*  
- Bass30 *(Bass Amp 30W with 10" Speaker)*  
- Bass60 *(Bass Amp 60W with 12" Speaker)*  
- Bass100 *(Bass Amp 120W with 15" Speaker)*
Vendetta

Rocktron - A Division of GHS Corporation
2813 Wilber Ave
Battle Creek MI 49037
USA
Tel: 1-269-968-3351
Fax: 1-269-968-6913
(8am to 5pm Eastern Standard Time)

www.rocktron.com