above unity, but noisy signal will be the result, as well as less headroom.

- 5). A final check for effects loop matching vs. normal levels in your amp is to play a chord, then guickly remove the "Effects In" plug and see if there is an increase or decrease in volume. Then further adjust the receive gain to match the normal level within the amp to keep over-all headroom and power at optimum.
- 6). The use of multiple effects complicates the procedure greatly, but the following rule also applies. Simply think of the output of each effect as the "send" for the following unit.

GENERAL RULE OF THUMB: "Send with as much level as you can without distorting the effect. "Receive" with the minimum level possible to reach unity gain with or without the effect activated.

## **WARNING!!**

The use and operation of this device constitutes an agreement of full release of any and all liability connected with such use. Only personnel familiar with the safe use and operation high-power audio equipment should attempt to operate this device.

In addition, by the use of this device, user agrees to hold both Genz Benz/Tube Works, its designers, sales agents and all other affiliates and related parties harmless in the event of any accident, damage or loss resulting from such use.

Manufacturer's sole responsibility is to provide a warranty on the specified performance of the product under normal

### WARRANTY

Your TUBE WORKS product is warranted for a period of three years against defects in workmanship or materials in the electronic

components. The speaker(s), reverb tank and cabinet are warranted for a period of ninety (90) days from date of purchase. This warranty applies only to the original registered owner provided he/she has returned a completed Owners Registration Card within fifteen (15) days of purchase.

This warranty covers parts and labor only; shipping charges remain the sole responsibility of the owner.

Damage due to misuse, modification or abuse is excluded from this warranty.

Before returning any unit for service, a RETURNED MERCHANDISE

AUTHORIZATION NUMBER (RMA#) must be obtained by calling 480-941-0705 during normal

# Tube Works

a division of **GENZ BENZ ENCLOSURES** 

7811 E. Pierce St. Scottsdale,AZ 85257 480-941-0705 480-946-2412 FAX

# **Tube Works 9100**

## *MosValve GUITAR AMPLIFIER*

## OWNERS MANUAL

#### **IMPORTANT FEATURES**

- ♦ 100 Watt MosValve power section
- 4 Stage, 2 channel, dual TUBE preamp section with seperate EQ sections
- Dynamic, foot-switchable"STACK" function gives the versatility of 3 channels
- Continuous anti-feedback circuitry eliminates over 60% of typical "squeal" or HF screech apparant in many amps
- Mosvalve powered full-sized Accutronics spring reverb
- Sturdy plywood cabinet, covered in dynamic black vinyl.
- Hand built and manufactured
- LED indicator foot-switch included
- Versatile dual voltage design for world touring

#### FRONT PANEL FEATURES

**CHANNEL SWITCH** Selects either Drive (Red LED) or Clean(Green LED) channels. Switch is bypassed and inoperative when footswitch plug is inserted into either footswitch Jack on the rear panel.

**INPUTS** Input 1: 0 db. The most sensitive input.

Input 2: -8 db. Less sensitive input for extra-high output pickups. Inputs are summing so two guitars can be used together.

**DRIVE CONTROL** Controls gain of TUBE #1. Tube #1 is

biased for a thinner articulate Tube Driver-like tone reminiscent of British amps. At control settings lower than 3, tube #1 becomes virtually clean, allowing the Stack control to completely control the overdrive level through Tube #2.

**STACK CONTROL** Controls gain of TUBE#2. TUBE #2 is biased in a more "Blue Tube" manner. As you add more "Stack", the sound will become fatter and fatter. This is of great help when practicing at lower volume to maintain a well-balanced tone. NOTE: This control is switchable via the back-panel footswitch jack labeled"2". The footswitch will switch between the "0" setting and whatever level you preset the Stack control to. This adds a 3rd channel capability to your amp.

**HI, MID, LO** Drive channel EQ. This is an entirely new concept for guitar amplifiers. Each control is a separate passive filter summed actively into the (also) active Master volume. This configuration adds great flexibility and much expanded range over conventional passive designs, and prevents any crosstalk into the clean channel when overdrive is switched off.

Note: Frequencies: HI 3.5 K HZ (upper shelving) MID 800 HZ (center) LO 150 HZ (lower shelving) **All have passive roll-off characteristics.** 

**MASTER** Active master volume control for the Drive channel. No leakage of signal is present with this master at 0. This insures good definition at the ultra-high gain levels, with its Stack configuration.

**VOLUME** Clean channel gain. This channel is also capable of classic overdrive with the use of its master control.

MASTER Master Volume for Clean(Green) channel.

**HI, MID, LO** Classic Tube Works passive EQ. Warmth and tone are the key emphasis for this EQ. **NOTE:** Frequencies: HI 3.5K HZ (upper shelving), MID 800 HZ (center) LO 150 HZ(lower shelving).

All have passive roll-off characteristics.

**EFFECTS MIX** This control mixes the signal present at the "Effects In" jack on the rear panel. turning the control towards "Wet" mixes more of the effect's sound, while "Dry" mixes more of the pre-effect signal. NOTE: This control functions only when there is a plug inserted into the "Effects Return " jack.

**REVERB** Adds desired reverb intensity. Footswitchable when using footswitch jack #1.

#### **REAR PANEL FEATURES**

**POWER INLET SOCKET** Your amp comes with a detachable power cord. Always plug the power cord into the amp and then into an AC socket.

**FUSE** Use fast-blo 4 amp for 115V or fast-blo 2 amp for 230 V.

**VOTAGE SELECTOR SWITCH** This amp is pre-wired for either 115Volt or 230 Volt operation. Use this switch and the appropriate power cord for the foreign country you may be in.

**SPEAKERS** Output for speakers. Minimum impedance is 4 ohms. Operating at less than 4 ohms will cause failure due to overheating.

**VENT SLOTS** It is imperative that this amp receives adequate ventilation. Your MosValve power section normally produces more heat than typical solid-state circuits. Do not block these vents.

**FOOTSWITCH** The two footswitch jacks are provided for the channel switching, Reverb and Stack functions. Jack #1 is for Reverb and Channel Switching. Jack #2 is for Stack and Channel switching.

The footswitch provided is a 2 switch model and will switch either combination depending on which jack is used. If you wish to be able to have Reverb, Channel, and Stack functions footswitchable at all times, you will need to purchase a separate footswitch for this purpose.

To switch all functions, here's how to do it:

1) Plug the Tube Works footswitch into jack #1. 2)Use another push-on, push-off footswitch with a 1/4" plug and plug into jack#2. **Note**: Channel will not function if you reverse the two footswitches. You will now have Reverb/ Channel on the Tube Works footswitch, and Stack on the single footswitch.

**EFFECTS LOOP** This system provides ultimate flexibility and control for your effects. Please follow these simple procedures to help set the levels for the best operation of your effects chain.

- 1). Set both "send" and "receive" controls at "5".
- 2). Insert your effect and activate it. If your effect has input/output levels, set them at "unity gain"- same level activated as bypassed. Use "instrument" level on rack effects.
- 3). While in the clean channel, play a few chords at normal volume, and increase or decrease the "Send" level to a point where there is no distortion through the effect. If your device has clipping indicators, set the "send"level just below the clipping level.

Note: for best S/N(signal-to-noise) ratio, it is important to have as "hot" a drive level as possible. The most common mistake made by musicians is to "send" too low a level to the effects, and then "receive" with too hot a level. All the noise present in the output circuitry of the effect and connecting cords are then amplified, and then amplified.

4). Set the receive level to match the unity gain. (Effects device activated level = bypassed level). Of course, it is permissible to increase "receive" gain