

# REEVES CUSTOM 50/100

## Owner's Manual



### CAUTION

RISK OF ELECTRIC SHOCK  
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,  
DO NOT REMOVE COVER (OR BACK).  
NO USER-SERVICEABLE PARTS INSIDE.  
REFER SERVICING TO QUALIFIED SERVICE  
PERSONNEL.

## Front Panel Controls

**INPUT JACKS – NORMAL AND BRIGHT:** Connect the output of your guitar to one of the 1/4" input jacks with a shielded guitar cable. Select for normal, or bright for higher treble response than normal. These two jacks provide slightly different tonal response. Some guitar players prefer to mix the two channels together by connecting a short, jumper patch cable between the second input of Normal 1 and the first input of Bright 2. Experiment with these and adjust to your tastes.

**Treble:** This control varies the amount of treble frequency in the preamp. Turning it clockwise increases the amount of high frequencies (treble) present in the sound, making your guitar tone brighter.

**Mid:** This adjusts the level of midrange frequencies.

**Bass:** This control varies the amount of bass frequency in the preamp. Turning it clockwise increases the amount of low frequencies in the sound.

**NOTE:** *The Treble, Mid and Bass controls are highly interactive and altering one control can change the way the other two behave.*

**Presence Control:** Adds higher frequencies to the guitar tone by altering the negative feedback. Turning the knob clockwise adds edge, creating crispness and bite.

**Normal Volume:** Controls the preamp level of Channel 1 sent to power amp. . This channel is voiced for flatter response. The amp gets both louder AND more distorted as you turn it up.

**Bright Volume:** Controls the preamp level of Channel 2 sent to power amp. This channel is voiced for more treble response. The amp gets both louder AND more distorted as you turn it up.

**Master Volume:** Controls the output volume of the amplifier. This allows the user to turn up the Pre-Amp Volume control for maximum gain while keeping the amp's overall loudness at a desired level.

**Power ON/OFF Switch & Indicator.** On/Off switch for mains (AC) power to amplifier. Neon lamps indicate power on.

**Standby Switch:** The Standby Switch is used in conjunction with the Power Switch to 'warm up' the amplifier before use and to prolong the life of the output tubes.

When powering up the amplifier always engage the Power Switch first. This allows the application of the voltage required to heat the tubes to their correct operating temperature. After about 2 minutes, when the valves are up to the correct temperature, the Standby Switch can be engaged.

## Rear Panel Controls

**Impedance Selector:** This allows the selection of 4, 8, or 16-ohm output impedance to match the load of the speaker in use. Two speaker jacks are provided to allow use of the amplifier with either the internal speaker (combo units only) or one external speaker cabinet.

1x16 Ohm cabinet - Use 16 Ohm speaker output  
2x16 Ohm cabinets - Use 8 Ohm speaker output  
1x8 Ohm cabinet - Use 8 Ohm speaker output  
2x8 Ohm cabinets - Use 4 Ohm speaker output  
1x4 Ohm cabinet - Use 4 Ohm speaker output

**Voltage Selector:** Matches the amplifier mains transformer voltage to the incoming mains voltage. Ensure that the rotary Mains Selector is set to the correct mains voltage applicable to the country where used. If you do not know the mains input voltage contact your local electric provider. **In the U.S. select 115**

**Mains Fuse(bottom fuse):** The correct value of mains fuse 4 amp

**H.T. Fuse (top fuse):** The correct value of H.T. fuse is 2 amp fast-blo

**Power cord:** is a detachable 3-prong cord

## Basic Operation

- **Never operate without a speaker connected or serious damage to the power tubes or output transformer may result.**
- **WARNING:** Prevent the incursion of moisture into any part of the amplifier.
- Vacuum tube amplifiers require a "warm up" period of up to one minute before they become operational.
- Select the impedance to match the speaker cabinet being used.

## **Maintenance**

Aside from routine vacuum tube replacement, your REEVES should require very little in the way of maintenance. The output tubes are “fixed biasing,” so adjustment is needed when installing new power tubes. **Never attempt** to replace vacuum tubes while the amplifier is on or when the amplifier is hot.

TUBE INFO: (3) 12AX7 in the preamp and either (1) 12AT7 or (1) 12AX7 in the phase inverter(V3), (2) EL-34 working in the power amp.

DISCLAIMER: Tube amplifiers contain potentially lethal, high voltages even after they are unplugged, that may cause personal injury or death. Refer servicing to qualified service personnel.

## **WARRANTY**

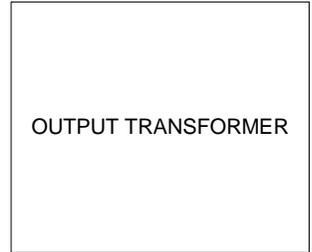
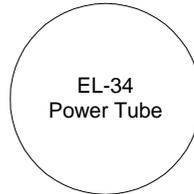
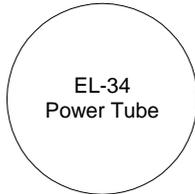
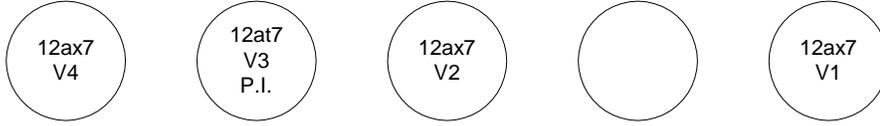
All REEVES amplifiers are warranted to the original owner,  
For 5 years, against defective materials or faulty workmanship.

Vacuum tubes (90 days) and loudspeakers (1 year)

This warranty does not apply if the amplifier has been damaged by accident or misuse, or as a result of repair or modification by other than a REEVES customer service facility authorized to service this product. Should it become necessary to service your REEVES product, please contact the factory. Call 513-451-1071

# CUSTOM 50 Tube Layout

Input  
Jack



Spkr  
Jack

## Bias Procedure

We don't have detailed instructions, but here is the what needs to be done...further more if you don't feel comfortable working with 500vDC you should take it to a qualified technician.

During the course of biasing, you will be exposing yourself to dangerous (lethal) voltages up to 500 volts D.C. If you feel at anytime that you are not sure of what you will be doing, don't do it.

It is recommend that you practice each step several times with the amp's power cable unplugged so if you make a mistake, you will not pay for it with a damaged amplifier or a damaged body.

Remove the chassis from the head cabinet.

You will need to place the chassis in an inverted (upside down) position in order to work on the inside.

Remember that the power tubes are still connected and could be bumped into something.

When you start your biasing procedures, the amp will be operating so the tubes will get hot. You don't want the tubes resting on anything that will melt or burn.

When you are ready to perform the voltage checks, you will need to insert the power cord and a speaker cable.

NOTE: There must ALWAYS be a speaker connected to the chassis when ever you apply power to the chassis.

Make sure the amplifier's power switch is in the OFF position .

- ◆ Turn on the amplifier and let it warm up. Do not put your hands inside the chassis until you are ready to make a reading. This is not the time to be exploring with your fingers.

- ◆ After about 5 ~ 8 minutes, take the amp off standby. This will activate the high voltage and you should hear some low level sounds from the speakers.

### MEASURING THE PLATE VOLTAGE

- ◆ Turn your meter on and the set the meter to read DC voltage in the highest scale available.

- ◆ Place the BLACK probe on the chassis common ground point and the RED probe on pin 3 on one of power tubes. You may hear a crackle from the

speakers. That is normal.

◆ Write down the plate voltage. Usually around 490-510vdc.

◆ Put the amp on standby and go to <http://ax84.com/biascalc.html>

At the top of the page, select the power tube type and put in the plate voltage that was just read on your DVM and hit Calculate.

◆ Take the amp of standby. Place the BLACK probe on the chassis common ground

point and the RED probe on pin 8 on one of power tubes. You may hear a crackle from the speakers. That is normal.

◆ Adjust the black trim pot on the single row turret board till it matches the number calculated on the Weber website. Wait 15 minutes and repeat checking the bias on pin 8.