

Texas Tone® Studio Reverb Owner's Manual

Congratulations!

You are now the proud owner of the Texas Tone Studio Reverb guitar Amplifier. This amp packs dynamic vintage tube sound into a beautiful burgundy snakeskin cabinet with gold trim – giving you an amp that's easy to operate and produces those sweet tube amp sounds that you crave, with authentic tube driven, long-spring reverb. You've never played an amp like the Texas Tone Studio Reverb, because there is no other amp like this one! It's low noise, has a beautiful clean tone, is pedal-friendly, has a unique tone stack, and it's not too loud for your studio, bedroom, coffee house, church, or small venue.

Like all Texas Tone Amplifier products, your Studio Reverb amplifier is designed by musicians and built using the finest components available. Extensive testing confirms that this amplifier is the absolute best it can be. To get the most out of your new amplifier, we strongly urge you to read the information contained in this manual before you begin playing.

Thank you for choosing Texas Tone!



READ, FOLLOW, HEED, AND KEEP ALL INSTRUCTIONS AND WARNINGS.

CAUTION: RISK OF ELECTRIC SHOCK, DO NOT OPEN

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE REAR COVER. NO USER-SERVICEABLE PARTS INSIDE.

- **WARNING:** THIS AMPLIFIER PRODUCES HIGH DC VOLTAGE (300+ VDC). DO NOT REMOVE THE REAR PANEL OR OPERATE WITH THE REAR PANEL REMOVED. SERVICE TO BE PERFORMED BY QUALIFIED PERSONNEL ONLY.
- DO NOT OPERATE NEAR ANY HEAT SOURCE AND DO NOT BLOCK ANY VENTILATION OPENINGS ON THIS AMPLIFIER. FOR PROPER OPERATION, THIS UNIT REQUIRES 3" (75mm) OF WELL-VENTILATED SPACE AROUND HEATSINKS AND OTHER AIR FLOW PROVISIONS IN THE CABINET.
- DO NOT USE THIS AMPLIFIER NEAR SPLASHING, FALLING, SPRAYING, OR STANDING LIQUIDS.
- CLEAN ONLY WITH LINT-FREE DAMP CLOTH AND DO NOT USE CLEANING AGENTS.
- ONLY CONNECT POWER CORD TO A POLARIZED, SAFETY GROUNDED OUTLET WIRED TO CURRENT ELECTRICAL CODES AND COMPATIBLE WITH VOLTAGE, POWER, AND FREQUENCY REQUIREMENTS STATED ON THE REAR PANEL OF THE AMPLIFIER.
- PROTECT THE POWER CORD FROM DAMAGE DUE TO BEING WALKED ON, PINCHED, OR STRAINED.
- UNPLUG THE AMPLIFIER DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME.
- ONLY USE ATTACHMENTS, ACCESSORIES, STANDS, OR BRACKETS SPECIFIED BY THE MANUFACTURER FOR SAFE OPERATION AND TO AVOID INJURY.
- WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK OR FIRE, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.
- SERVICE MUST BE PERFORMED BY QUALIFIED PERSONNEL.
- OUR AMPLIFIERS ARE CAPABLE OF PRODUCING HIGH SOUND PRESSURE LEVELS. CONTINUED EXPOSURE TO HIGH SOUND PRESSURE LEVELS CAN CAUSE PERMANENT HEARING IMPAIRMENT OR LOSS. USER CAUTION IS ADVISED AND EAR PROTECTION IS RECOMMENDED IF UNIT IS OPERATED AT HIGH VOLUME.
- WARNING: THIS UNIT REQUIRES A SAFETY GROUNDED 120VAC 60Hz OUTLET WIRED TO CURRENT ELECTRIC CODES. THE OUTLET MUST REMAIN ACCESSIBLE.

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The Texas Tone Studio Reverb

The Texas Tone Studio Reverb is designed with four purposes in mind – Great tone at low volumes, low noise operation, dynamic and touch-sensitive performance, and tube powered long-spring reverb.

Many amps from the 1950s have little clean headroom. Amps from the 1950s and 1960s often have two-prong electrical plugs and ground switches with “death caps”, along with poor grounding techniques throughout. All Texas Tone amps feature modern grounding techniques, three-prong electrical plugs, and shielded inputs for safe, low-noise operation. Through careful design and tuning, the Studio Reverb amp allows the guitarist to get those sweet and creamy tube tones and crunch available at lower volumes.

The Studio Reverb amp features deep bass and bright highs without being muddy or icepick harsh. Break-up is easily controlled via the guitarist's attack on the strings and judicious use of your guitar's volume and tone controls, especially when the amp is cranked wide open. From clean to dirty, this amp allows you to remain in control of your sound. From jazz to country, to blues, or rock, you'll be surprised at the variety of tones you can achieve with this amp!

The unique reverb circuit on the Studio Reverb is a bit tamer than what you may be used to. We've made the reverb more subtle, so you'll probably end up turning it up more than in traditional reverb amps.

Features of all Texas Tone tube guitar amplifiers:

- Extensive use of MIL-Spec resistors and wiring.
- High-temperature wiring, capacitors, tube sockets, circuit boards and other components.
- Temperature and vibration resistant build techniques and features.
 - Tube dampers
 - Shock-mounted stage one preamp tube and reverb driver.
- Tight-tolerance components.
- Hand wired on a sturdy G10 turret board, with careful attention to lead dress.
- Shielded signal cables.

Specific Features of the Texas Tone Studio Reverb:

- Rugged 14 Gauge Brushed 5025 Aluminum - 0.064" thick chassis.
- Long spring, tube driven reverb.
- Three band EQ with the Texas Tone “Magic Mid” control.
- ToneSpeak™ New Orleans 50-Watt hemp cone speaker – Clean and full, with lots of body and sparkle. Smokey smooth with high-end definition.
- High and low gain inputs.
- JJ Electronic tubes tested and graded by Eurotubes.

Front Panel:



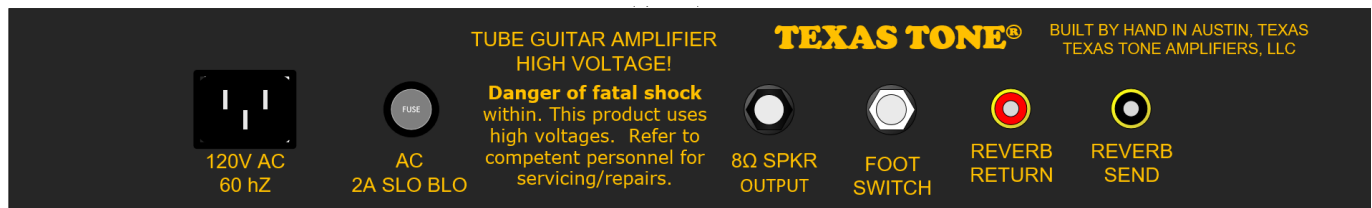
1. **INPUTS:** Two inputs allow you to use the high-gain or low-gain input, or to input two guitars.
 - a. **HIGH:** This is the normal, high gain, high impedance (1Meg Ω) input. Connect your guitar here by means of a shielded signal cable.
 - b. **LOW:** The Low input features a -6dB attenuation compared to the High input. Use the Low input for quieter performance, or when using very high-gain pickups to gain more headroom before the onset of distortion. When both inputs are used at the same time, they offer the same gain characteristics.
2. **VOLUME:** Use this control to adjust the gain and overall volume. At lower levels, the gain is low, and little distortion is produced. As you rotate the control clockwise past the midpoint, the gain increases providing overdrive distortion. You may want to turn it up and control the volume and break up from your guitar.

Three-Band EQ

The unique tone stack of the Studio Reverb is designed to give more tonal flexibility than most reverb style amps, with highly interactive controls and the Texas Tone Magic Mid. NOTE: *Not a standard Fender® tone stack!*

- With all three controls straight up in the “Noon” position, the frequency response is bright, loud, and raw.
 - The “Magic Mid” control is highly interactive with the Bass and Treble controls. Turning the Mid all the way down extends the range of the Bass and Treble from a deep “V” scooped mid to a full signal boost - *when the Mid/Boost is turned all the way up, the Treble and Bass become effectively bypassed.*
 - To get a traditional 1960s Fender blackface tone, run the Mid/Boost control down towards the 7 or 8 O’clock position (or off) and the Treble at about 9 O’clock, and the Bass at Noon or above.
3. **TREBLE:** The Treble control interacts with the Mid/Boost and provides >6 dB boost and >3 dB of cut for all frequencies above 2kHz with the Mid at “1”.
 4. **MIDDLE:** The “Magic Mid” control on the Studio Reverb offers a 6dB boost above the “Noon” mid-point. Turning down the Mid will roll off frequencies below about 200 Hz. Crank it past the Noon position for awesome boost! Use the Mid/Boost along with the Treble to get either a scooped or strong mid response.
 5. **BASS:** The Bass control is best used to boost or roll off or boost the bottom end and works with the Middle control to shape the contour of the overall tone.
 6. **REVERB:** Control the amount of reverb signal mixed with the raw signal. The Studio Reverb is more tame and more subtle than traditional reverb amps to allow more control. You’ll find yourself turning the reverb up more than on a Fender amp.
 7. **Indicator lamp:** The lamp will illuminate whenever the amplifier is plugged in to a 120V power source and turned on.
 8. **STANDBY:** The Standby switch controls the high voltage (430 VDC) to the tubes of the Studio Reverb. This switch may also be used to quiet the amplifier for short periods of time.
 9. **POWER:** To turn on the amplifier, make sure that the standby switch is off, and then turn on the power switch. After sufficient time for the tubes to warm up, about 15 seconds, switch the Standby on. To turn off the amplifier, place this switch in the off position.

The Rear Panel:



1. **Fuse:** If the fuse blows or the amplifier will not power on, consult a qualified tube amp technician. Use only a Slow-Blow 120V GMD type 2 Amp rated fuse. There is an internal 500 mA fuse for the High Voltage lines.
2. **AC Line Cord:** The grounded power cord should only be plugged into a grounded power outlet that meets all applicable electrical codes and is compatible with 120 Volts AC, 60 Hz power. Do not attempt to defeat the safety ground
3. **Half/Full Power switch:** This switch changes the output tubes from a pentode (5 electrodes: cathode, control grid, plate, screen grid and suppressor grid) to a tetrode (4 electrodes since the screen grid is deactivated) but by convention we call it a pentode / triode switch or Half Power switch. This changes its clean and overdrive tone so it's more than just a 'half power' mode. It's really a Full Power / Low Power switch.
4. **Speaker connector:** The Studio Reverb is shipped with a 1/4" cable connected from the 8Ω SPKR OUT jack to the internal ToneSpeak™ New Orleans 1250 12" 8Ω speaker.
 - To connect the amplifier to an external speaker cabinet, ensure that the amplifier is powered off, disconnect the 1/4" plug from the amplifier, and use the jack to connect the external cabinet to the amplifier by means of a heavy-duty speaker cable terminated with 1/4" plugs.

NOTE: Operating the amplifier without a speaker plugged in may damage the amp and will void the warranty!

5. **Foot Switch:** The included footswitch may be used to switch the Reverb on and off. With no footswitch connected, the Reverb is on by default.
6. **Reverb Return (Red):** Connected to the reverb tank's Output jack with a shielded RCA cable.
7. **Reverb Send (Black/White):** Connected to the reverb tank's Input jack with a shielded RCA cable.
8. **Tube sockets** (from right to left):
 - **V1:** High-quality tested JJ ECC803S Long-Plate 12AX7 type vacuum tube.
 - **V2:** High-quality tested JJ ECC83S 12AX7 type vacuum tube.
 - **V3:** High-quality tested JJ ECC83S 12AX7 type vacuum tube.
 - **V4 & V5:** High-quality tested, graded, and matched pair of JJ 5881 power tubes. The power tubes utilize cathode bias (self-bias), set to 93% idle dissipation.
 - **V6:** High-quality tested JJ 5AR4/GZ34 tube rectifier, protected with 1N5408 3A 1000V backup diodes.

NOTE: JJ Electronic tested tubes by Eurotubes are standard equipment on the Studio Reverb

Important Information about Guitar Amp Vacuum Tubes (Valves):

The sound produced by a tube powered amplifier is significantly different from that produced by a solid-state amplifier with identical design specifications. When pushed past their limits, solid state devices tend to go immediately into distortion.

Tubes, on the other hand, are non-linear devices that transition more smoothly into distortion, and produce a more musical set of harmonics, the intensity of which can be controlled by the player. This characteristic adds warmth and definition to the sound which has become the hallmark of tube amplifiers. When tubes are driven into clipping, the harmonic overtones can be both sweet and pleasing or intense and penetrating, depending on the musician's musical taste and playing technique.

Modern application engineers have designed a number of outstanding solid-state amplifiers that sound quite good. Some use modeling circuitry which enables them to simulate the distortion characteristics of a tube amplifier. Since the response of tubes is both dynamic and non-linear, the true range of characteristics of tube amplifiers can only be approximated. Modern tube amplifiers such as Texas Tone amps, offer that classic, dynamic vintage sound in today's contemporary market.

Tube Types and Usage:

Preamp tube circuits amplify the signal from your instrument and shape the sound, and they can often be microphonic (mechanically pick up and transmit external noises). The Studio Reverb first stage preamp tube socket is isolation-mounted to reduce microphonics. Since these tubes are used in the critical first stages of a tube amplifier's circuitry, it is particularly important to use high-quality, low noise/low microphonic tubes for this application. A low-noise JJ Electronic E803CC is standard, shock mounted with MIL-Spec rubber grommets. Although tubes of this quality may typically cost more than standard tubes, the improvement in performance is worth the investment, and in some cases, critical.

Preamplifier tubes are also used to drive the power tubes. The power tubes convert the low-level, conditioned signal from the preamplifier into a level that is sufficient to drive the speakers. There are several types of power tubes available, each of which offers a different performance/sound characteristic. The JJ Electronic 5881 tubes used in the Texas Tone Studio Reverb are both rugged and produce a clean, rich sound. These tubes have been extensively tested for optimum performance and longevity. Silicone tube dampers are standard. Matched sets of power tubes are standard equipment and are highly recommended. JJ Electronic 5881 tubes are preferred for their tone and ruggedness.

Tubes: Why (And When) To Replace Them:

Tubes are made up of many fragile mechanical components that are vacuum sealed in a glass envelope. A tube's longevity is based on several factors, including how hard and often the amplifier is played, vibration from the speakers, road travel, repeated set up and tear down, etc. Any time you notice a change in your amplifier's performance, check the tubes first.

If it's been a while since the tubes were replaced and the sound from your amplifier lacks punch, fades in and out, loses highs or lows or produces unusual sounds, the power tubes may need to be replaced. If your amplifier squeals, makes noise, loses gain, starts to hum, lacks dynamic sensitivity, or feels as if it is working against you, the preamplifier tubes may need to be replaced.

The power tubes are subjected to more stress than the preamplifier tubes. Consequently, they usually fail/degrade first. If deteriorating power tubes aren't replaced, they will fail. Depending on the failure mode, they

may even cause severe damage to the audio output transformer and/or other components in the amplifier. Replacing the tubes before they fail completely has the potential to save you time, money, and unwanted trouble. Since power tubes work together in an amplifier, it is crucial that they be replaced by a matched set. If you're on the road a lot, we recommend that you carry a spare matched set of power tubes and their associated driver tubes.

After turning off the power and disconnecting the amplifier from the power source, carefully check the tubes (in bright light) for cracks or white spots inside the glass or any other apparent damage. Then, with the power on, view the tubes in a dark room. Look for preamplifier tubes that do not glow at all or power tubes that glow excessively red.

Driver and Reverb:

The driver tube determines the shape and amplitude of the signal applied to the power tubes and must work as hard as the power tubes. The reverb driver is a premium JJ ECC803S and reverb return, tone stack and phase splitter tubes are premium JJ Electronic ECC83s/12AX7.

You can check your preamplifier tubes for microphonics by turning the amplifier on, turning up the gain and tapping lightly on each tube with a chop stick, or other light wooden dowel. You will be able to hear the tapping through your speakers, which is normal. It is not normal for a tube to ring like a bell after it's tapped. If it does ring, then it's microphonic and should be replaced. Remember to use only high quality, low microphonic tubes in the preamplifier section. Even though power tubes are rarely microphonic, you should check them anyway. The power tubes can be checked for microphonics just like pre-amp tubes.

Survival Tips for Tube Amplifiers:

To prolong tube life, observe these tips and recommendations:

- Make sure the speaker(s) are properly connected prior to turning on the amplifier.
- Allow the amplifier to warm up to room temperature before turning it on. The heat generated by the tube elements can crack the cold glass housing.
- After playing the amplifier, allow sufficient time for it to properly cool down prior to moving it. A properly cooled amplifier prolongs tube life due to the internal components being less susceptible to the damage caused by vibration.
- Match the impedance of your speaker cabinet(s) to your amplifier. Improper impedance matching will contribute to early tube degradation and may cause premature tube failure and will void the warranty.
- Replace the output tube(s) before the performance degrades or the tubes fail completely. Replace the tube(s) on a regular basis (at least once per year or as often as every 4 to 6 months if you play long and hard every day).
- If the locating notch on the base of a power tube breaks off, replace the tube. This significantly reduces the risk of damaging your amplifier by incorrectly inserting the tube.
- Protect the amplifier from dust and moisture. If liquid gets into the amplifier, or if the amplifier is dropped or otherwise mechanically abused, have it checked out at an authorized service center before using it. A Custom Amp Covers amplifier cover is standard equipment.
- Proper maintenance and cleaning in combination with routine checkups by your authorized service center will ensure the best performance and longest life from your amplifier.

CAUTION: Tube replacement should be performed only by qualified service personnel who are familiar with the dangers of hazardous voltages that are typically present in tube circuitry.

TEXAS TONE STUDIO REVERB TECHNICAL SPECIFICATIONS:

Output Power Rating	18W RMS, 8 Ohm load
Gain:	50Db Typical
Tone Controls	Treble: ± 24 dB <2kHz with Mid at "1" Mid: 16 dB of boost at 1kHz Bass: 3dB of boost at 84Hz
Speaker	12", 50W ToneSpeak™ New Orleans 1250 8 Ω speaker 1.75" voice coil, 50 oz. ferrite magnet, 100 dB sensitivity, 77 Hz resonant frequency.
Preamp Tubes	1 x ECC803S/12AX7, JJ Electronic 2 x ECC83s, JJ Electronic
Power Tubes	1 x 5881 matched pair, JJ Electronic
Rectifier Tube	1 x 5AR4/GZ34, JJ Electronic
Power Requirements	120VAC, 60Hz, 110W
Size and Weight	21" H x 24" W x 9.5" D, 48 lbs.

The Texas Tone Studio Reverb is covered with a durable Tolex material: wipe it clean with lint-free cloth. Never spray cleaning agents onto the cabinet. Avoid abrasive cleansers which would damage the finish.

Specifications and information in this manual are subject to change without notice.

Typical Settings

Recommended settings.



Clean and Punchy



Tube Crunch



Natural Tube Distortion