

Texas Tone Traveler Owner's Manual

Congratulations!

You are now the proud owner of the Texas Tone™ Traveler tube guitar amplifier. This amp packs a dynamic vintage tube sound with two channels into a single combo cabinet – giving you an amp that's easy to operate, easy to transport, and produces those sweet tube amp sounds that we all crave!

Like all Blumentritt Amplification Texas Tone™ products, your Texas Tone Traveler 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 OR REMOVE CHASSIS!

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

- **WARNING:** THIS UNIT REQUIRES A SAFETY GROUNDED 120VAC 60Hz OUTLET WIRED TO CURRENT ELECTRIC CODES. 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.
- **WARNING:** THIS AMPLIFIER PRODUCES HIGH DC VOLTAGE (~400+ VDC). DO NOT REMOVE THE CHASSIS OR OPERATE WITH THE CHASSIS 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.
- **WARNING:** TO REDUCE THE RISK OF ELECTRIC SHOCK OR FIRE, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE. 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.
- 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.
- 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.

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The Texas Tone Traveler

The Texas Tone Traveler is designed as a lightweight and powerful 12" combo, combining vintage tube amp tones with a modern high-gain circuit, which allows the guitarist a wide palette of tones from clean to dirty, from quiet to loud, and anywhere in between. With two channels and a pre- Gain and post- Volume control on the high gain channel, it's really four amps in one: Vintage low gain; clean and loud; dirty and loud, dirty and quiet, or clean and quiet. While the Texas Tone Traveler is inspired by the dynamic performance of the Marshall 18 Watt, the Traveler has little in common with that great amp. We have added some unique touches and modern safety and construction methods.

Vintage tube guitar amplifiers suffer from outdated electrical grounding methods. Texas Tone™ guitar amps feature modern grounding techniques and three-prong electrical plugs for safe, low-noise operation. Many amps from the 1950s also have very little clean headroom. Special features allow the Texas Tone Traveler extra headroom when needed, or total tube amp distortion. This allows the guitarist to get that sweet and creamy tube crunch, or to tame those vintage sounds, depending upon the control panel settings.

The Texas Tone Traveler features two independent channels and controls. Both channels are augmented by shielded inputs and a shock-mounted first-stage preamp tube. The Vintage channel features the unique Texas Tone™ Hi-pass/Low-pass Tone control that provides tone enhancements without affecting the volume control. This channel provides a single gain stage with a traditional mid 1960's tube amp "clean" sound that can be cranked for tube amp crunch without being too loud for smaller venues, studio use, or practicing at home, and is very pedal friendly.

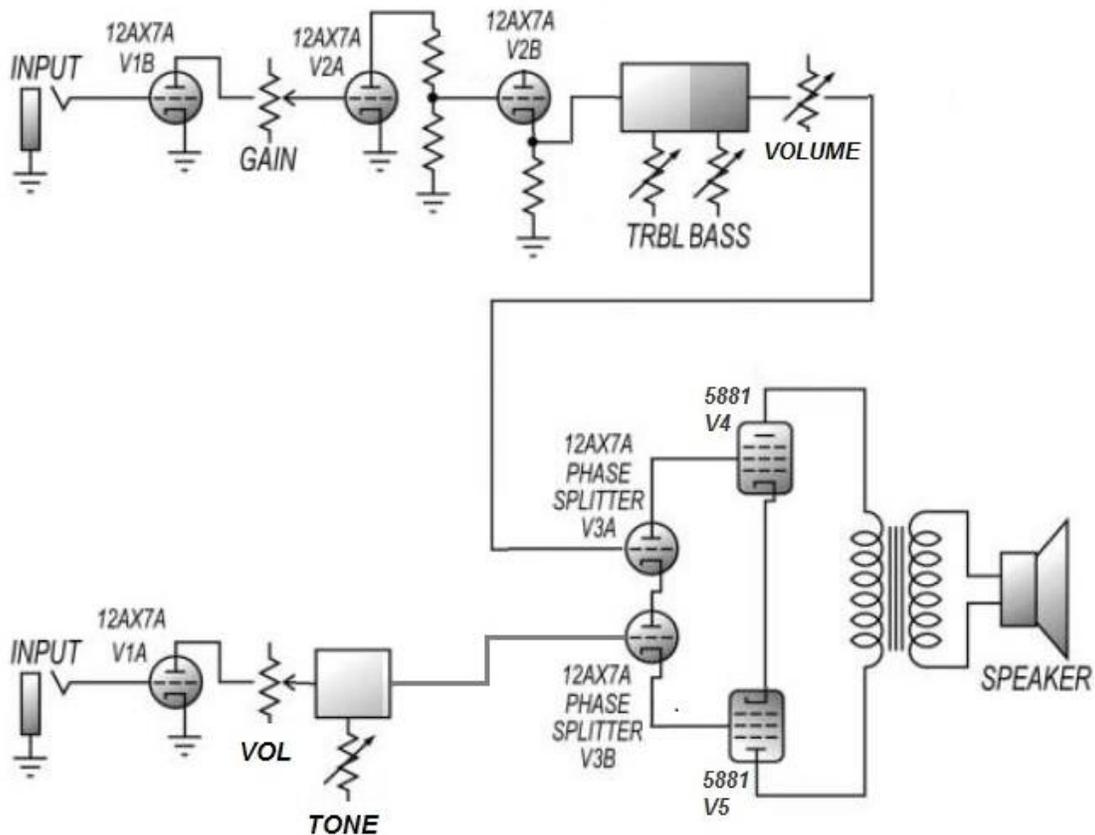
This High Gain channel's gain stage is followed by a Gain control for the unique tone stack that is responsive and low loss, with Treble and Bass controls, with by a Volume control before the phase splitter. By adjusting the Gain and Volume controls, the guitarist can get anything from clean and loud to smooth overdrive.

From clean to dirty, this amp allows you to remain in control of your sound; you will be surprised at the variety of tones you can achieve with this amp.

Specific Features of the Texas Tone Traveler:

- Shock-mounted first stage preamp tube.
- American made transformers
- Isolated Standby switch
- MIL-Spec wire
- Low-noise resistors
- Shielded signal cables
- High quality F&T, JJ, Mallory and Sprague Capacitors
- Hand-wired turret board
- Rugged 16 Gauge Galvanneal Steel chassis.
- Two independent, differently voiced channels
- Texas Tone™ unique Tone control and Tone Stack
- Speaker - Jensen® MOD®, 12", MOD12-70, 70W - Impedance: 8 Ω – loud, dynamic, and well defined, it has a defined warm crunch response to overdrive distortion.

Block Diagram

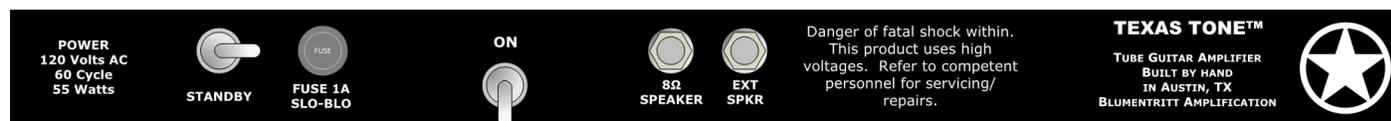


The Front Panel:



- 1. INPUTS:** Texas Tone Traveler has two independent channels, each with High and Low input jacks.
 - a. HIGH Input:** This is the normal, high gain, high impedance (1Meg Ω) input. Connect your guitar here by means of a shielded signal cable.
 - b. LOW Input:** The “Low” input features a -6dB attenuation compared to the “High” Input. Use the low input for lower gain and 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. VINTAGE CHANNEL**
 - a. VOLUME:** Use this control to adjust the input gain and overall volume level. With the control towards the counterclockwise position, the gain is low and very little distortion is produced. As you rotate the control clockwise the gain increases, producing more overdrive distortion and a higher output volume level.
 - b. TONE:** The unique Tone control on the Texas Tone Traveler offers less interaction with the volume control than a typical vintage amplifier tone control circuit. It’s subtle, and yet offers a wide range of tone control. If you’re used to vintage-type tone control circuits that interact with the volume control, you may be surprised and pleased that this tone control circuit doesn’t raise or lower the volume as you rotate the tone control. As the control knob is rotated clockwise, more treble frequencies are emphasized.
- 3. HIGH GAIN CHANNEL**
 - a. GAIN:** Use this control to adjust the input gain driving the tone stack. For the cleanest tone, set the Volume on maximum and run the Gain control at a lower setting.
NOTE: Due to the high gain/low loss structure of the Texas Tone Traveler, we do not recommend running the gain at the maximum setting, above the 3 O’Clock position.
 - b. TREBLE:** Turning the Treble control clockwise from the mid-point (straight up) produces a brighter tone. Counter-clockwise reduces the high frequency response.
 - c. BASS:** The Bass knob controls the response of the lower frequencies. Clockwise for more bass, counterclockwise for less.
 - d. VOLUME:** Use this control to set the overall volume driving the output section of the Texas Tone Traveler. For cleanest tone, run this control at maximum. Most guitarists seem to like a mix of Gain and Volume to get a pleasant tube breakup.
- 4. Indicator lamp:** The lamp will illuminate whenever the amplifier is plugged in to a 120V power source and the Power switch is turned on.

The Rear Panel:



1. **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 connection.
2. **Standby switch:** The isolated Standby switch controls the high voltage to the tubes of the Texas Tone Traveler. The Standby switch may also be used to quiet the amplifier for short periods.
3. **120 VAC Fuse Holder:** Use only a **3AG type Slow Blow 1 Amp** rated fuse. In the event that the fuse blows or the amplifier will not power on, consult a qualified tube amp technician.
4. **Power switch:** To turn on the amplifier, make sure that the Standby switch is in the “STANDBY” position, and then turn on the power switch. After sufficient time for the tubes to warm up, about 15 seconds, turn on the Standby switch. To turn off the amplifier, place the Standby switch back to the STANDBY position, and switch off the Power switch.
5. **High Voltage Fuse Holder:** Use only a **3AG type Slow Blow 500mA (1/2 Amp)** rated fuse for the high voltage (~400V DC). In the event that the fuse blows or the amplifier will not power on, consult a qualified tube amp technician.
6. **Tube sockets** (from left to right – not shown):
 - a. **V4 & V5:** Power output tubes. Use only a matched pair of high quality 5881 tubes. A Premium Matched pair of Tung-Sol 5881 (Short Bottle) new production tubes is standard. The power tubes utilize an adjustable fixed bias, set at around 60% maximum dissipation, designed specifically for the Tung-Sol 5881 tubes. Any substitution will alter the bias. While it is possible to substitute 6L6 power tube matched pairs, bear in mind at 6L6's will be biased cool unless the amplifier is professionally re-biased.
 - b. **V3:** Phase splitter. The phase splitter circuit in the Texas Tone Traveler is specially designed to use a 12AT7 type tube for maximum bandwidth and drive. Use only a high quality 12AT7 type vacuum tube. An Electro-Harmonix long plate 12AT7 tube, tested for low noise and low microphonics, is standard. A 12AZ7 tube may be used, resulting in more gain to the power tubes.
 - c. **V2:** Preamp and tone stack driver. Use only a high quality 12AX7/ECC83/7025 type vacuum tube. JJ Electronics ECC83S (12AX7) is standard for its outstanding low noise characteristics and is tested and selected for high gain and low noise and low microphonics.
 - d. **V1:** First stage preamp tube. Use only a high quality 12AX7/ECC83/7025 type vacuum tube. A JJ Electronics ECC83S (12AX7) is standard and is tested and selected for high gain and low noise and low microphonics. The V1 tube socket is shock-mounted to aid in reducing noise.
7. **Speake Impedance Selector:** The *Classic Tone*™ output transformer of the Texas Tone Traveler can drive speakers rated at 4Ω, 8Ω, or 16Ω. The Speaker - Jensen® MOD®, 12", MOD12-70, 70W - 8 Ω standard speaker is chosen for its defined warm crunch response to overdrive distortion. The Jensen

Mod 12-70 is Loud, dynamic, and well defined, with tight lows, subdued mids, bright highs, and its edgy overdrive. Use only a similar 8Ω speaker as a replacement.

8. **Speaker connector:** The Texas Tone Traveler ships with a 1/4" cable connected from the 8Ω chassis speaker jack to the internal Jense® 8Ω speaker. There is an additional speaker output for an extension cabinet.

NOTE: Do not power on or operate the amplifier without a speaker plugged in! Damage will result.

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 similar 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 that 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 sometimes become microphonic (mechanically pick up and transmit external noises). Since these tubes are used in the critical first stages of a tube amplifier's circuitry, it is very important to use high quality, low noise/low microphonic tubes for this application. 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. Blumentritt Amplification performs extensive testing and works with tube suppliers to determine the best tube for each position in the amplifier.

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 5881 tubes used in the Texas Tone Traveler produce a full range, rich and creamy sound with nice distortion. Some tubes are available in matched sets. These tubes are extensively tested for optimum performance and longevity. Matched sets of power tubes are highly recommended. A Premium Matched pair of new production Tung-Sol 5881 tubes is standard on the Texas Tone Traveler.

Tubes: Why (And When) To Replace Them:

Tubes are made of a number of fragile mechanical components that are vacuum sealed in a glass envelope. The longevity of a tube depends upon 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 has 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 replacing. 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 replacing.

The power tubes are subjected to considerably more stress than the preamplifier tubes. Consequently, they usually fail/degrade first. If deteriorating power tubes are not replaced, they will ultimately 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 are replaced by a matched set. If you are on the road a lot, we recommend that you carry a spare matched set of replacement 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.

Whenever you replace the power tubes:

The output tubes of the Texas Tone Traveler are fix-biased, adjustable with proper techniques. When changing the output tubes, it is necessary to re-bias the replacement output tubes. The output section of the Texas Tone Traveler is designed for long tube life. When the output tubes are replaced, use only a tested and matched pair, and we recommend that you replace the phase inverter tube as well. The phase inverter tube determines the shape and amplitude of the signal applied to the power tubes and has to work almost as hard as the power tubes. The phase inverter on the Texas Tone Traveler is a special design that yields wide bandwidth and gain characteristics when used with a 12AT7 tube.

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 chopstick 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 is tapped. If it does ring, then it is microphonic and should be replaced. The first stage preamp tube is shock-mounted to reduce noise and microphonics. 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. DO NOT OPERATE THE AMPLIFIER WITHOUT A SPEAKER OR PROPER DUMMY LOAD ATTACHED. TO DO SO WILL DAMAGE 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.
- Replace the output tube(s) before the performance degrades or the tubes fail completely. Check the tube(s) when you notice degraded performance.
- 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 proper, or if the amplifier is dropped or otherwise mechanically abused, have it checked out at an authorized service technician before using it.
- Proper maintenance and cleaning in combination with routine checkups by an authorized technician will insure 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 Traveler TECHNICAL SPECIFICATIONS:

| | |
|---------------------|--|
| Output Power Rating | 34W RMS into an 8 Ohm load |
| Gain: | 65Db Typical |
| Tone Controls | Treble +/- 12 dB @ 10k Hz Bass +/- 6 dB @ 80 Hz |
| Internal Speaker | 12", 70W Jensen®, 8Ω, 1.5" copper voice coil, 22.5 oz ferrite magnet, 97.5dB sensitivity, 78 Hz resonant freq. |
| Preamp Tubes | 2 x ECC83s JJ Electro-Harmonix long plate 12AT7 |
| Power Tubes | 2 x 5881 Tung-Sol Matched Pair |
| Rectifier | 1N5408 Diodes |
| Power Requirements | 120VAC, 60Hz |
| Size and Weight | (H) 17-1/8" x (W) 21" x (D) 9.5", 34 lbs. |

The Texas Tone Traveler is covered with a durable Tolex material: wipe it clean with a 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.