GETTING STARTED

TUBES

Your amp comes with premium tubes. The output tubes are made in the St. Petersburg, Russia factory previously known as Svetlana. These special tubes were originally designed for video applications in the Russian military. Because of this, they have much wider bandwidth than common audio tubes. The output tubes that come with your amplifier are factory matched and should last between 6 months and 2 years depending on how many hours the amp is used.

The input tube (smallest one) is typically a 12AX7. If you run a preamp in front of your Taboo you can also try 12AT7 and 12AU7. Both of these alternates have less gain than the 12AX7 and will therefore require more gain from your preamp.

Any 5Y3GT rectifier (largest tube) will work. Alternately you can experiment with 5AR4 and 5U4 type rectifiers (or compatible models) however you will probably find the best sound comes from the 5Y3GT that we ship with the amp.

The popular 6BQ5/EL84 output tubes can be used in place of the SV83/6P15P output tubes as a direct plug-in replacement. In the Taboo, these tubes have a bit more spank, while the SV83/6P15P tubes tend to have more tone.

Look at the photo on the front of this manual to see which tubes go where.

Now that you know which tubes do what, carefully install them into the amplifier. The rectifier (5Y3GT) should last for many years. This amplifier was biased and voiced with a 5Y3GT rectifier so it is logical that it would sound best. Having said that, no harm will come to the amplifier from using a 5AR4 or even a 5U4 rectifier.

BEFORE POWERING UP

Be sure that you always have speakers connected to this or any tube amp before turning it on. Tube amps are typically the opposite of solid state in that you can short the speaker wires together and nothing bad will happen.

With your speakers and line level source connected, you can turn the amplifier on by flipping the switch on the rear. The switch on the front is not the power switch, but rather a signature altering switch that changes the amp from “normal” to “lucid” mode. It may be operated in either position and can be operated on the fly while you listen.

After allowing the amplifier to warm up for a few minutes, you can slowly raise the volume (located on the front) to the desired listening level.

DURING OPERATION

After about 30 minutes you will notice the amplifier getting warm. This is intentional, the higher temperatures brought on by the pure class A operation push the fidelity higher. Some areas of the chassis may be hotter than others. This is normal. However, proper ventilation is recommended. If you operate the amplifier inside a cabinet, allow a minimum of 4 inches on the sides, and 10 inches above if possible.
The output tubes have a glass temperature of 200 degrees centigrade by design, and you can be assured that they will be \textit{that hot} if you touch them or your cat decides to lick one.

The last heat related comment is this - turn your amp off when your not using it. Tube life is directly tied to hours of operation so there is no point wasting it when your not listening.

\textbf{INITIAL BREAK-IN EXPERIENCE}

Unfortunately the esoteric parts in this amplifier need to break-in. The combination of a fast amplifier and fresh parts can be a little rude so we will explain the process.

Specifically it is the exotic capacitors that actually require the burn-in to sound right. The fastest way to achieve a burn-in is to play the amplifier for 5 hours and then turn it off and let it rest for 5 hours. Once you have repeated this process 5 times your soundstage will bloom and the focus will begin to lock into a crystal clear image.

If you listen to your amp during the burn-in process this is what you will experience: First the amp will sound good followed by almost an immediate increase in harshness which after 30 minutes will change to dullness and continue to go back and forth. During this mind bending experience the imaging and soundstage will be unstable and somewhat restricted. There will be moments of incredible sound during this process and equally ugly sound. You will know when the amp is burned-in because \textit{out of nowhere} some night when your listening the amp will bloom with a soundstage almost double in size and forever stay that way in all successive listening sessions. As you amplifier ages, it will season like fine wine and continue to do so for many years. An amplifier that is a couple years old almost always sounds superior to a brand new one assuming both are using a fresh set of tubes.

\textbf{DESIGN GOAL}

The design goal behind this amplifier was simply to take our stock Zen Triode platform and push the envelope of its design to the limit. It uses many of the same parts as found in our other amps and is every bit the equal in fidelity. Unquestionably this single ended pentode amplifier is completely at home in head to head comparisons with any SET (Single ended Triode) amps including our own.

Since you only hear the weakest link in a high end audio system, you will find the quality of your source and cables as well as your speakers to effect profound changes in the overall fidelity of your system. This amplifier will show you the weak links in your system and because of it’s resolution some of the weak links may come as a real surprise to you. Point is your Taboo is not likely to ever be the weak link in your system provided you have sensitive speakers that don’t require gobs of power to sound good.

Like the stock Zen amp, this is intended for those who like to get lost in a huge 3-D image and experience the emotional side of music that only this type of resolution can accurately convey without grain or ear fatigue. It is not intended for loud playback levels, or parties. Unless of course you have full range horn speakers around 100dB efficiency in which case you can have both. We recommend 4 to 16 ohm speakers at least 90dB 1w/1m for most listening. Small live rooms (12 x 14 for example) or nearfield listening setups can work with speakers below 90dB. On speakers that are 96dB, the Taboo takes you to a new level approaching live music and dynamics that would make you think you’ve got a hundreds watts or more. Always strive for more efficient speakers if you’re
going for unrestricted listening of exceptional quality.

**CIRCUIT DESIGN**

The Zen Taboo amp is a combination of simple yet unique circuit design, high quality parts selected for their signature, intense quality control, and layout. The small size makes possible the art of hand soldering the entire circuit with only parts leads and no hook-up wire. The ground buss is silver and so are the cathode leads.

The power supply is significantly over sized and breaths naturally with the music while holding steady to less than a 0.05 millivolt sag at clipping.

There are less then 11 solder nodes between the input and output jacks of this amplifier making it around the complexity of a single Op-amp. The output transformers were meticulously designed and hand built in the USA for this amplifier, as is the power transformer.

These features combine to create a unique and magical amplifier that sounds better than anything in its power range. If you find this to be less then 100% true please return it on the 30 day trial period.

**INPUT OPTIONS**

This amplifier features input jacks on the rear with a front mounted ALPs volume control so that you can use it without a preamp. Using a good pair of interconnects directly from the outputs of your CD player or DAC will clearly demonstrate how bad most preamps really are. That said, the Taboo has a higher then normal input sensitivity of around 3 volts. That means that without a preamp you will not be able to clip the amp, even at full volume. A good preamp with gain (such as our SE84CSP ) will add weight, body, dynamics, and size to the sound of this amplifier and is often recommended.

**BIASING**

One of the hallmarks of this amplifier like the stock Zen amp, is the fact that it is self-biasing. That means you never have to adjust the bias, even when you change to different tubes such as from an EL84 to an SV83. This eliminates the headache of owning tube gear resulting in a product that never requires maintenance or tune-ups. Just replace the output tubes every year or so and that’s it. This also makes it possible to run un-matched output tubes with no sonic side effects other then the obvious fact one tube will be slightly stronger then the other - or put another way, one channel would clip slightly before the other. *(If this ever became an issue it is a strong indicator that you need more efficient speakers or higher power amplifiers for your listening habits.)*

**LISTENING**

There is no doubt you may find the fidelity of this amplifier superior to almost anything within its power range and everything above it’s power range regardless of price. It really is that good. Having said that with great confidence we find many people do not experience the full potential of its spell casting abilities due to weak links in their system - usually these weak links are speaker and room related but don’t be surprised if it’s your source!
Because of the incredible resolution of this amplifier, you will find it easier to adjust your speakers properly for best imaging because there is no time smearing, or filtering common in most amps. Perhaps the amp's strongest weapon is the huge soundstage it casts. To hear music get completely holographic, you need to work on room acoustics and speaker placement. Do not put your speakers near any walls, especially the front wall. Do not put reflective surfaces (TV SETS) between your speakers. Pull them out into the room several feet from the front wall and toe them in to create a triangle with your listening chair.

Take the opportunity to try different speakers whenever possible, you may find that now with a good amp the differences in speakers will be even more profound. Since you always hear ONLY the weakest link in your system, you will want to pay attention to cables and speaker wires as they too will make far more difference than you think.

Power conditioners (real ones) are recommended. Clean power is essential. To find out what clean power sounds like, listen to the amp at 2:00 a.m. when there are fewer nasty harmonics in the power line. Once you have your first out of body experience during a late night listening session we have a forum on our web site where you can share your experiences with other Zen Taboo owners and get tips on set-ups that really work well.

LUCID MODE

Lucid mode is an alternate signature that your Taboo can have at the flip of a switch while you listen. The switch located on the front of the amplifier is in “standard mode” when it is towards the front of the amp, and in “lucid mode” when it switched towards the back of the amp. Lucid mode is part of this amplifiers very original output circuit design. It adds presence and decay when compared to “standard mode”. This can go a long way to making digital sources sound more listenable. To become familiar with “lucid mode” you should flip the switch with each recording you listen to. As you do so, you will find that the effects of “lucid mode” act on some recordings more then others. With a little listening time under your belt, you will know based on preference which mode to use every time you fire up your amplifier.

FEEDBACK CONTROLS

The Taboo has stereo feedback controls that create the ability to make fine adjustments to the feedback taper on each channel. All the way to left is more feedback, all the way to the right is less feedback. The control as it is being swept from one extreme to the other adjusts the taper or frequencies that feedback are applied to. The controls are generally found to sound best just left of center, however you may find the best sound to be hiding anywhere in the controls range, so experimenting with it frequently is advantageous.

USING YOUR AMP AS A MONO BLOCK

The Zen Taboo was designed specifically as a stereo amplifier. Even though our original Zen Triode amps can be run mono by bridging the outputs, this amplifier has a bit more power so bridging should not be required. If you find that this amp is not enough power and are unwilling to find more efficient speakers, we have it’s big brother available in a push-pull circuit using KT88’s that would have the power your after.
WARRANTY

Your new amplifier is built so well that during research and development we took one and dropped it from a height of 15 feet onto concrete 40 times, followed by putting it into a paint shaker for 2 hours. Badly beaten, the amp was retubed and played perfectly with ZERO internal damage. This is why we offer you a lifetime warranty on parts and labor to the original owner. You have purchased a 100% hand made amplifier with some of the highest build quality in the industry. It was designed to give 30 years of trouble free service. Enjoy.

SERVICE

This amplifier operates at 450 volts DC and should not have the bottom cover removed except by qualified service personal. No user serviceable parts are inside. Output tubes should be replaced after 3000 hours of use. The input tube should be checked each time the output tubes are replaced. Input tubes can range from 3000 ~ 8000 hours of use or more before replacement. The rectifier tube typically lasts for many years and only need be checked periodically.

If your amplifier develops a problem the first step is to call us and talk to Steve directly. 90% of all problems they might develop over time are found to be a bad tube(s) or faulty/intermittent ground in an interconnect or power cable causing ground loop hum.

There is a paper on the website in the articles section that was written as a guide for troubleshooting hum problems. If you experience any hum when using this amplifier you should consult the web site and go through the step-by-step diagnosis for isolate the source. The Taboo has on average 0.6 milivolts of AC hum which is staggeringly low for tube gear. You shouldn’t be able to hear any hum, ever.

Should your amp require service for any reason please return it to Decware so we can discover the cause of the failure and make the proper repairs.

Always pack the amp using the original shipping carton of something of equal effectiveness. If you need a new carton please call us and order one. Don’t take chances with shipping damage. All shippers will TRY TO BREAK THE AMP, it's just a fact of life.

Repairs when needed are typically complete within 72 hours of the amps arrival at Decware. Most are done the same day.

ADDITIONAL INFORMATION

Specifications and design notes can be found at our web site: www.decware.com

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