

Ceriatone

Tweedle Delight

16W all-tube
guitar amplifier

User's Manual

Thank you for the purchase of your Ceriatone Tweedle Dee guitar amplifier!

Here, we hope to explain how best to use your new amp.

Table of Contents

1) About the Tweedle D.....page 2
2) Quick setup.....page 3
3) Front Panel controls.....page 4
4) Rear Panel controls.....page 6
5) Tube compliment.....page 8
6) Frequently Asked Questions.....page 9

1) About the Tweedle Delight

The release of our Overtone series of amplifiers has been overwhelmingly popular, and the support of customers such as you has instigated the release of currently over ten different versions within the series. In addition, we have released the Kleinulator and C-lator effects loop interfaces specifically for use with our Overtone amplifiers. We have been pleased to provide many players access to our unique take on these legendary amplifiers.

A few years ago, information about a modified Tweed Deluxe was shared on the Internet. The amplifier was modified by one of the most legendary and mythical amplifier builders in modern history. Due to many, many requests we have decided to release our version of this unique amplifier. The Tweedle Deelight has lineage in the 5C3/5E3 Deluxe amplifiers, but is faster, tighter, and has more headroom and a different harmonic footprint.

Most importantly, we hope the Tweedle Dee fills the gap you have been searching for and becomes an integral part of your tone equation to exhilarate your playing and music.

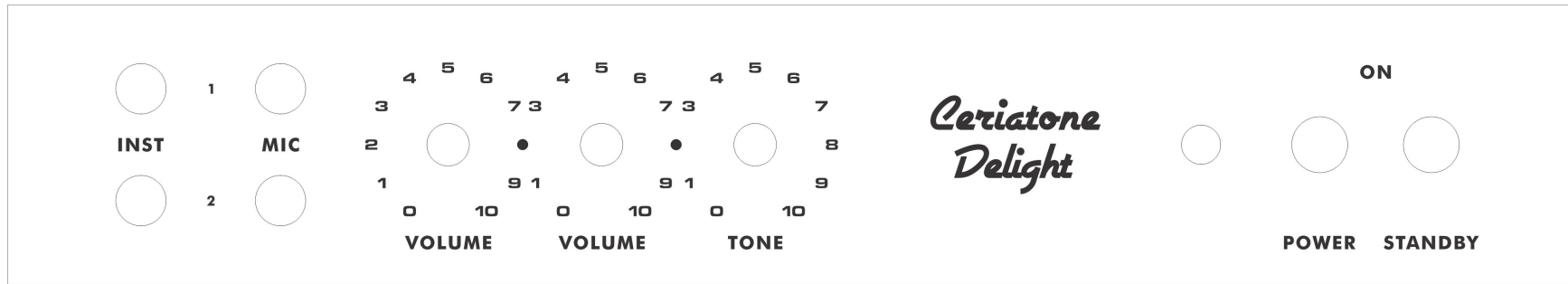
Rock on!

- Nik Azam

2) QUICK SETUP *(for instant gratification)*

- 1) Plug your guitar using a 1/4" instrument cable into the INST 1 INPUT on the left of the front panel
- 2) Plug a suitable power cable from the Tweedle Dee's rear panel A.C. MAINS cable inlet to your wall power receptacle
- 3) Plug the Tweedle Dee into your speaker cabinet using 1/4" speaker cable
- 4) Set the IMPEDENCE selector to match the impedance of your speaker cabinet
- 5) Set all rotary controls on the front panel to 12:00 (clock face)
- 6) Set front panel POWER switch in the ON position (with adjacent switch to STANDBY) for 30 seconds to allow tube filaments to warm up
- 7) Set front panel STANDBY switch to ON
- 8) **ROCK!!!!!!**

3) FRONT PANEL CONTROLS



From left to right:

- 1) **INPUT INST 1 and 2, MIC 1 and 2** ¼" instrument jacks
- 2) **INST VOLUME** control
- 3) **MIC VOLUME** control
- 4) **TONE** control
- 5) **INDICATOR** lamp
- 6) **POWER** two-way switch
- 7) **STANDBY** two-way switch

INST 1, 2 and MIC 1, 2 are ¼" jacks for instrument cables. Plug your guitar in here.

The INST jacks send the guitar primarily through a circuit that is brighter and tighter sounding.

The MIC jacks send the guitar primarily through a circuit that is fatter and darker sounding.

The jacks marked 1 are higher gain, and those marked 2 are lower gain.

This setup is a “vestigial tail” from the original amplifier which was a modified 5C3 Deluxe with three inputs. We used the same labeling, but provided high and low inputs for each channel for added flexibility.

INST VOLUME adjusts the signal strength in the INST channel of the Tweedle Dee. Again, this is for the brighter, tighter channel. Think of it as a traditional volume control in non-master volume amplifiers.

MIC VOLUME adjusts the signal strength in the MIC channel of the Tweedle Dee. Again, this is for the fatter, darker channel. Think of it as a traditional volume control in non-master volume amplifiers.

NOTE – experiment with jumpering both channels together and various combinations of INST and MIC volumes for a wide palate of guitar tones!

TONE adjusts the frequency balance for both channels. At counter-clockwise settings, the tone has more bottom end and less treble. At clockwise settings, the tone has less bottom end and more treble.

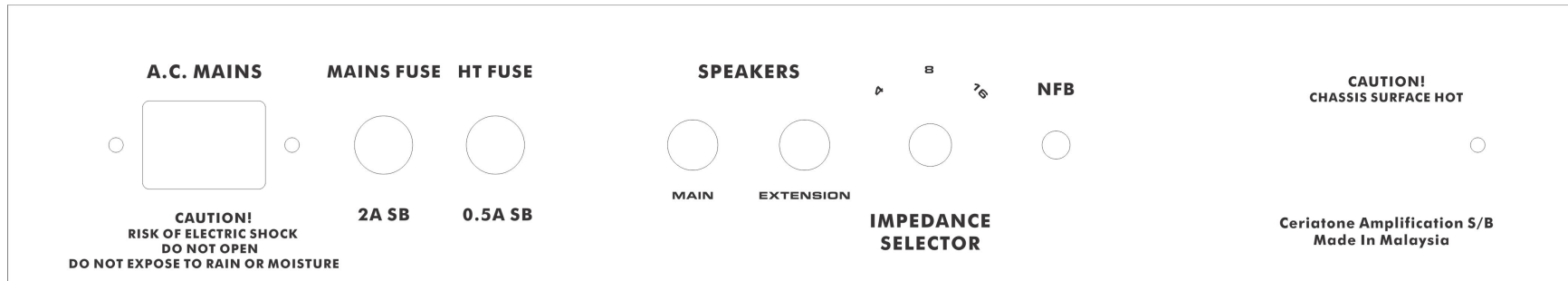
NOTE – various combinations of TONE, and individual channel VOLUME controls will provide the greatest flexibility in a deceptively simple amplifier!

INDICATOR will illuminate when the Tweedle Dee is powered by turning the front panel POWER toggle switch to the ON position. If INDICATOR does not turn on, check your power cable connections, and then the fuses on the rear of the unit.

POWER (ON / OFF) two-way toggle switch powers the Tweedle Dee on and off. With the toggle switch in the UP position, the Tweedle Dee is ON. In the DOWN position, the amplifier is OFF.

STANDBY (ON / OFF) applies high voltage to the vacuum tube anodes (and screen grids) during use of the Tweedle Dee. With the toggle switch in the UP position, the amplifier is operational. In the DOWN position, the Tweedle Dee is in STANDBY mode.

4) REAR PANEL CONTROLS



- 1) **A.C. MAINS** IEC cable inlet
- 2) **MAINS** slow-blow fuse
- 3) **HT** slow-blow fuse
- 4) **SPEAKER OUTPUT** ¼" speaker jacks
- 5) **IMPEDANCE** three-way rotary selector
- 6) **NFB** three-way toggle switch

A.C. MAINS IEC cable inlet – plug a suitable IEC power cable into this inlet to power your amplifier

MAINS slow-blow fuse – used to protect your amplifier from voltage spikes or excessive current draw. Replace only when necessary. Use a 2A slow blow fuse.

HT slow-blow fuse – used to protect your amplifier from voltage spikes or excessive current draw. Replace only when necessary. Use a 0.5A slow blow fuse.

SPEAKER OUTPUT ¼" speaker cable jacks. Use a ¼" speaker cable to connect your speaker cabinet to the amplifier using these jacks. If you use one speaker cabinet, use the jack labeled MAIN. If you want to run two cabinets in parallel, connect the second cabinet to the amplifier using the jack labeled EXTENSION.

NOTE – *never turn your amplifier to OPERATE mode without connecting the amplifier to a speaker cabinet or suitable dummy load! Failing to do so may damage your amplifier!*

IMPEDANCE three-way rotary selector. Set this selector to the position that matches the impedance of your speaker cabinet.

NOTE – *if you are using two speaker cabinets in parallel (ex – two 16 Ohm cabinets), set the impedance selector to half that of a single cabinet (in this case, 8 Ohms).*

NFB three-way toggle switch. This gives you the ability to select between three different negative feedback settings. In the UP position, the NFB is at a stock setting - NONE. This will provide the most gain and the smoothest transition into overdriven tones.

In the middle position, there is still no negative feedback – but it adjusts the phase inverter for less output. This will provide a slightly cleaner tone than the stock setting.

In the bottom position, there added negative feedback to the middle setting. This provides the most linear setup, and more power section headroom.

There is no right or wrong, so use your ears for what works best for you, your guitars, pedals, and speakers!

NOTE – *experiment with different input jack combinations and NFB settings if you are trying to maximize your clean headroom!*

5) TUBE COMPLIMENT



From left to right:

V5 – 5AR4 / GZ34 rectifier tube (yellow arrow)

V4, V3 – 6V6 power tubes (red arrows)

V2 – 12AX7 / ECC83 phase inverter (green arrow)

V1 – 12AX7 / ECC83 input/gain stages (blue arrow)

A FEW COMMENTS ON BIASING

...well, don't worry about it! The Tweedle Dee is a cathode-biased amplifier and requires no bias adjustment.

1) FREQUENTLY ASKED QUESTIONS

How do I hook up this thing?

- See Section 2, beginning on page 3.

Can I substitute different tube types for the 12AX7/ECC83s, 6V6s, or GZ34?

- Although you can try 12AT7s, 12AU7s, 5751s without any harm, the design is optimized for 12AX7s, and are therefore the only recommended tube in the preamp positions. For a more traditional Tweed feel and tone, try a 12AY7 in V1. Usage of other power tubes is not recommended. Please first consult Ceriatone Amplification or your local competent amplifier technician.

What settings do you recommend?

- Try setting all controls at 12:00!

Do I need to use matched power tubes?

- Although not necessary, matched power tube sets are recommended for best results.

Do I need to use a matched and balanced phase inverter?

- It is not necessary. Feel free to experiment with different tubes (of the same type) in your amp, though!

I've read that the components used in this type of amplifier are really important. What is inside my Tweedle Dee?

- We use a combination of parts custom-made for us to our specifications (power transformer, output transformer, choke, high-temperature / low-ESR electrolytic capacitors, inductors, custom Alpha

potentiometers) and those used in the original amplifiers (Vishay/Dale RN65 precision metal film resistors, 1W carbon film resistors, SBE 6PS polyester film capacitors, high-quality ceramic disc capacitors, Belton tube sockets, Alpha potentiometers). We prefer high-quality enclosed Cliff (built in the UK) jacks to the open-style Switchcraft jacks used in the originals and many clones. Finally, we occasionally use NOS components from our vast surplus parts collection in locations they work well and complement the voicing or enhance the performance of the amplifier.

I've read about something called a PI trimmer inside of the amp. Does the Tweedle Dee have it, and what does it do?

- Yes, the Tweedle Dee amplifier has a PI (short for phase inverter) trimmer. This is part of the original design that controls the balance of the signal sent to each of the power tubes. Different settings on this control are very subtle, and are typically monitored with an oscilloscope and not ears.
- We highly recommend the use of a non-conductive rubber screwdriver, and only adjust the trimpot when the amplifier is not powered and disconnected from the wall outlet. **DO NOT ADJUST THE PI TRIMMER WHILE THE AMPLIFIER IS ON!** Note that the power supply capacitors in the amplifier can/will still store charge, and you can still be bitten by 450VDC even though the amp isn't connected to the wall! Adjust the PI TRIMMER only at your own risk!
- On the next page, there is a picture with an arrow. The BLUE arrow is the PI trimmer. If you are so inclined, this is where you make your adjustment.
- Adjust this with a non-conductive screwdriver **ONLY!**

Adjusting that PI trimmer sounds intimidating. Am I missing anything if I don't experiment with them?

- Absolutely not. We adjust each trimmer to ensure the best results for each amplifier leaving our shop.

