

# MULTICAB4

Thank you for purchasing the MultiCab 4!

Maintaining the simplicity and the functionality of the highly recommended MK3.5 version, we redefined our cab-simulation process delivering even better performance, clarity and dynamics to your tone. All this with the added ability to store your favorite cabs to the 8 presets via USB and the dedicated PC/MAC app "T.A.W. Editor".

Send your signal directly from your guitar or pedal board to the PA or any audio interface. Use it as an amp DI between your amplifier cabinet to send your pure tube tone to the PA. Pair it with a dummy load to practice silently on your tube amp at home with headphones, and even jam along with your favorite backing tracks using the AUX input. The MultiCab 4 lets you do all the above and more without having to deal with any complex menus and sub-menus. An easy plug'n'play set-up lets you dial in the perfect settings in a matter of minutes.

A mixture of elements from both the analog and digital worlds were used to achieve the most realistic response. While developing the MultiCab 4, we made a conscious decision not to use IR technology. This way, and in conjunction with parallel analog audio path, we managed to create a unit that minimizes latency up to 1.2 ms, providing the most genuine and direct experience possible. It features 8 presets each pre-loaded with a different virtual guitar cabinet heavily inspired by some legendary and iconic guitar amps and cabinets. The main advantage of the MultiCab 4 is that you have the ability to load more guitar cabs from the dedicated PC/MAC app. **Visit our website [www.tsakalisaudioworks.com/product/multicab4](http://www.tsakalisaudioworks.com/product/multicab4) to download the app and the constantly updated library of available cabs for free!**

**Analog world:** The always active analog path is responsible for the pre-amp modes, power amp voicing, cabinet back type and microphone type voicing. **[Note: For best performance use a 12V DC (center -) power supply.]**

- The pre-amp (**PRE**) section was designed with 2 jfet stages for a tube like response and touch, featuring a versatile tone control and 2 modes (CLEAN & HOT). When the PRE switch is in the OFF position the pre-amp section is true bypassed and the tone control is disabled. When the PRE switch is in the CLN position the pre-amp is enable mimicking the clean settings of a mid scooped American amp type pre amp section. When the PRE switch is in the HOT position the pre-amp is enable mimicking the clean settings of a British amp type pre-amp section with more mids, volume and breakup when pushed.
- The power (**PWR**) section mimics the voicing and feel of a power amp in a push pull topology loaded with EL34 or 6L6 tubes. When the PWR switch is in the OFF position the power amp voicing is disabled. **(WARNING: THIS IS NOT A POWER AMP AND IT CANNOT DRIVE A SPEAKER)**
- The cabinet **BACK** type section features 3 selections of cabinet back types. The closed back (**CLS**) setting makes the sound feel more directional with tight and punchy bass. The semi open back (**SEM**) setting introduces some frequency phases and reflections, making the tone feel fuller with subtly looser bass. The open back (**OPN**) setting enriches the tone with many complex frequency phases and reflections, contributing to less low-end punch and generally looser bass.
- The microphone (**MIC**) section is responsible for the microphone type voicing. The (**DYN**) setting mimics the frequency response inspired by the Shure™ SM57™ dynamic microphone placed on axis in front of the cab. The (**RIB**) setting mimics the frequency response inspired by the Royer™ R121™ ribbon microphone placed on axis in front of the cab. The (**BOTH**) setting mimics the frequency response inspired by both SM57™ & R121™ microphones placed on axis in front of the cab.

**Digital World:** The parallel digital path is responsible for the virtual guitar cabinets and the natural room ambience. The MultiCab 4 has a very low latency of 1.2 ms max measured from input to output!  
The 8 pre-loaded guitar cabs are:

- 1-inspired by Fender™ Princeton™ amp loaded with one one 10" Jupiter™ 10SC speaker.
- 2- inspired by Fender™ Super Reverb™ amp loaded with four 10" CTS™ blue label square back speakers.
- 3-inspired by Fender™ Deluxe Reverb™ amp loaded with one 12" Jensen™ C12K speaker.
- 4\*-inspired by Zilla™ Fatbaby™ closed back cabinet loaded with one 12" Celestion™ Vintage30™ speaker.
- 5-inspired by VOX™ AC30-JMI™ amp loaded with two 12" Celestion™ blue speakers.
- 6-inspired by Marshall™ 1936 cabinet loaded with two 12" Celestion™ G12T-75 speakers.
- 7-inspired by Marshall™ 1960B cabinet loaded with four 12" Celestion™ G12H-30 greenback speakers.
- 8-inspired by Mesa Boogie™ Rectifier™ angled cabinet loaded with four 12" Celestion™ Vintage30™ speakers.

With the **AMBIENCE** control you can adjust the level of natural room ambience. Imagine having a 3rd microphone, placed away from the cabinet, that captures the reflections from the room in which the cab is placed. Dial it past noon for a warm and small sized room reverb effect.

**Connectivity:** Find the perfect place for the MultiCab 4 depending on your needs.

- On your pedalboard. For best results we recommend placing the MultiCab 4 after the overdrive/distortion pedals and before any time based effects (reverb, delay, modulation, etc). This way, you also get to use them in stereo if possible. You can also place it at the end of your board.
- Between your amp and cabinet as an amp DI box. Connect the speaker-output of your amp to the **IN** of the MultiCab 4 and your cabinet to the **THROUGH OUT** of the pedal, and then from the **XLR** or **LINE** out to the PA or a mixer.
- After a load box to push the settings of your favorite amp without tearing down the walls of your place.

**(WARNING: MULTICAB 4 IS NOT A LOADBOX! ALWAYS KEEP CONNECTED A CABINET OR A LOADBOX TO THE THROUGH OUT WHEN USING A POWER AMP TO THE IN OF THE PEDAL)**

The Multicab 4 features an input gain switch that allows you to control the amount of level coming into the pedal depending on the source (guitar, pedals, preamp, power amp), in order to obtain the best result of signal to noise ratio without clipping. We recommend the **+12db** setting for instruments and pedals (sometimes 0db will work better), **0db** or **+12db** setting for pre-amps, **-24db** setting for power amps (for low power amps such as 15watts or lower 0db may work better).

Practice or even jam along your favorite tunes by connecting a phone/player to the **AUX** input. Connect a pair of headphones to the headphones out and your neighbors won't even know you are there!

#### **INS & OUTS:**

- **IN:** 1/4" (6.35mm) Jack unbalanced (TS)
- **IN LEVEL** switch affects the input sensitivity and impedance as follow:  
+12dB: Max level: 5 dBu, Impedance: 1 MOhms  
0dB: Max level: 16 dBu, Impedance: 57 KOhms  
-24dB: Max level: 40 dBu, Impedance: 47 KOhms
- **THROUGH OUT:** 1/4" (6,35mm) Jack unbalanced (TS). Unbuffered & unprocessed direct out.
- **DI OUT:** XLR balanced with max level at 9 dBu & Impedance at 300 Ohms. Equipped with ground lift switch and protection against phantom power up to 60Volts DC.
- **LINE OUT:** 1/4" Jack balanced (TRS) with max level at 9 dBu & Impedance at 300 Ohms.
- **HEADPHONES OUT:** 1/8" (3.5mm) stereo mini jack.
- **AUX:** 1/8" (3.5mm) stereo mini jack. Input signal is down-mixed to mono.
- **USB:** Type B USB 2 port for serial communication with PC/MAC & TAW Editor app. (USB cable included)

#### **DSP:**

- **LATENCY:** 1,2 ms max measured from input to output
- **AD/DA CONVERTERS:** 24-bit / 44.1KHz.
- **PROCESSING:** 24bits linear
- **SIGNAL TO NOISE RATIO (SNR):** 92db
- **BANDWIDTH:** 50Hz to 18KHz

#### **SPECS:**

- Handmade in Athens, Greece
- 8 presets of virtual guitar cabinets
- Natural room ambience
- 2 types of pre-amp with tone control
- 2 types of power amp voicing
- 3 types of cabinet back type voicing
- 3 types of microphone voicing
- Input gain pad
- Through out
- Balanced XLR and line out
- Headphones out
- Auxiliary in
- Type B USB 2 connector for serial communication with PC/MAC & TAW Editor app. (USB cable included)
- Power Supply: Boss-type DC adapter (center -) min 9V – max 12V for best performance.
- Max power consumption : 115mA @ 9V DC – 125mA @ 12V DC
- Heavy duty & light weight aluminum box
- Dimensions : 130mm(Width) x 96mm(Length) x 63mm(Height)
- T.A.W. Limited Life-Time warranty

**"Each Tsakalis AudioWorks product comes with a limited life time warranty"**

*Live & Breathe Tone...*

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