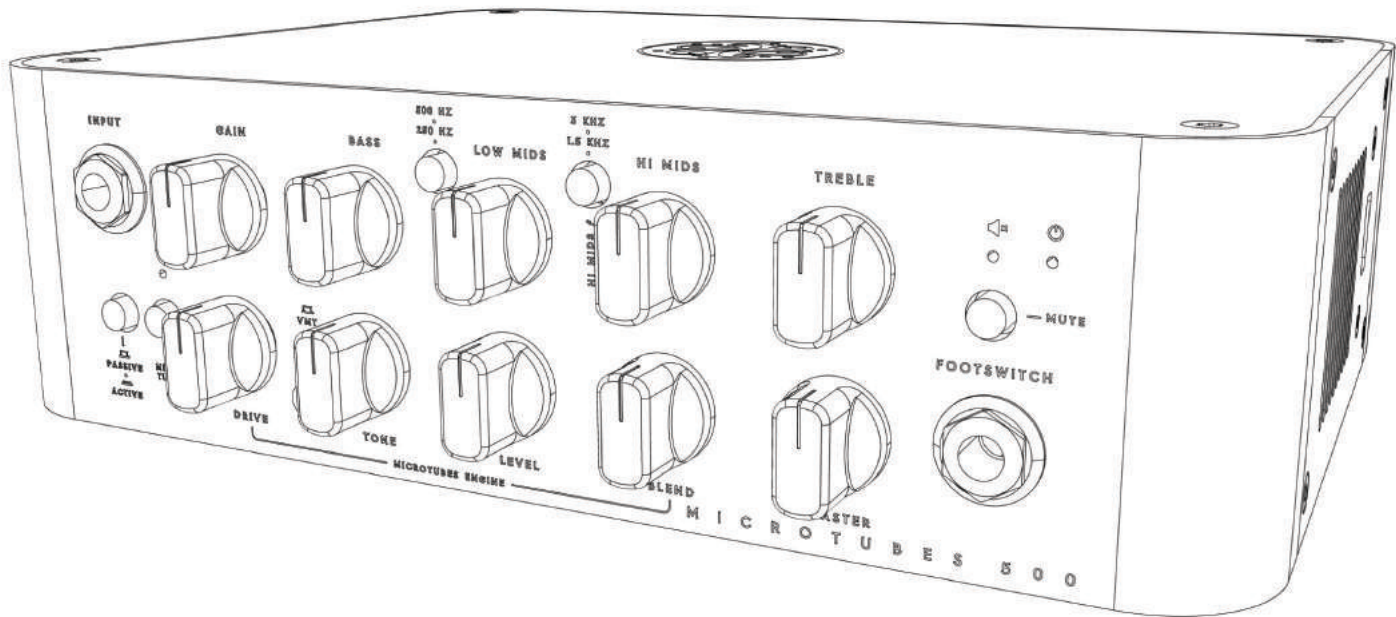


M I C R O T U B E S 5 0 0

OWNER'S MANUAL



DESCRIPTION

The Microtubes® 500 is a 500W amplifier equipped with an **all analog solid state preamplifier** and a Class D Power Module. The first thing you will notice from the Microtubes 500 is its unusual control layout:

On the top row, you will find the **clean section** which is the foundation of your tone. It features a **Gain** control and an active **4 band EQ**: along with **Low** and **Treble** controls, you will find **Low Mids** and **Hi Mids** controls, each knob with their own **2-way frequency switch**.

On the bottom row, you will find the **Microtubes Engine®**, an extra channel that will bring your clean tone to the next level by helping you **cut through the mix** while adding anything from subtle, tube-like, harmonics and natural compression to obliterating distortion.

The Microtubes Engine can be engaged via the front panel or our own digitally controlled **Intelligent Footswitch™** and **Super Intelligent Footswitch™** (both sold separately).

FEATURES

FRONT PANEL

INPUT : Connect your instrument via a standard ¼" mono cable.

PASSIVE/ACTIVE : Switch from passive to active mode. Some active basses can have a hotter signal output which can make the amplifier distort early (feel free to use it on Passive mode even with active basses if such additional distortion is desired).

MICROTUBES : Engages the Microtubes Engine™ to add natural compression, organic harmonic enhancement, and saturation ranging from mild overdrive to high gain bass rage.

The Microtubes Engine operates before the clean section (you can, therefore, use the 4 Band Active EQ for additional tone shaping in addition to the Tone knob described below).

DRIVE : Sets the Microtubes Engine's distortion level. Ranging from soft, warm overdrive to devastating saturation plus everything in between.

TONE : Controls the high harmonic content of the Microtubes Engine via a variable low pass filter: crank it up for additional attack and definition or dim it down for a smoother sound. This is handy when

running bright EQ settings or cabinets with tweeters.

LEVEL : Controls the Microtubes Engine's output volume.

BLEND : Mixes between the Clean and Distortion signals (Microtubes Engine).

B3K/VMT : Selects between two overdrive circuits: B3K mode will deliver an aggressive, percussive sound while the VMT will bring up the mids for a warmer, more neutral character.

CLEAN SECTION

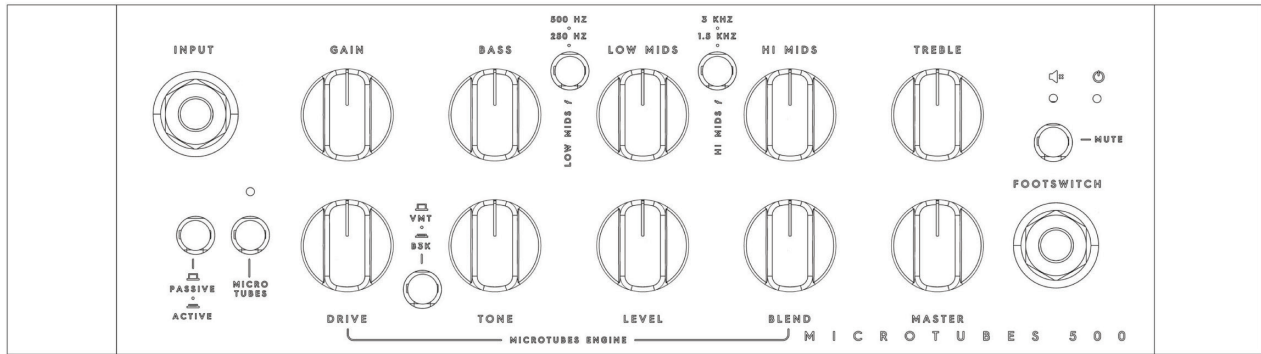
GAIN : Changes the volume of the signal driving the Active 4 Band EQ. You can set it low for cleaner tone or set it higher for more aggressive growl.

BASS : +-12dB at 80Hz. Changes the low content of the signal.

LOW MIDS : +-12dB of the selected frequency via the LOW MIDS *f* switch (described below).

LOW MIDS *f* : Use this switch to change the frequency of the low mid band between 250Hz and 500Hz.

HI MIDS : +-12dB of the selected frequency via the HI MIDS *f* switch (described below).



HI MIDS *f* : Use this switch to change the frequency of the hi mid band between 1.5kHz and 3kHz.

TREBLE : +/-12dB at 5kHz. Changes the high content of the signal.

MASTER : Controls the overall volume of the amplifier. This control does not affect DI output or effects loop level.

FOOTSWITCH: The Footswitch jack allows you to remotely engage and disengage the Microtubes Engine via our Intelligent Footswitch (sold separately). Hold the footswitch to Mute the amplifier. The VMT/B3K push button will remain operational with the Intelligent Footswitch plugged in.

Use a regular mono instrument cable to connect the amplifier to the footswitch.

Remove the cable from the footswitch jack in the rear panel if you want to control the amplifier from the front panel.

The Microtubes 500 will only work with our proprietary Intelligent Footswitch or Super Intelligent Footswitch (both sold separately). A generic Footswitch will not work with the Microtubes 500.

MUTE: Mutes the amplifier.

FEATURES

BACK PANEL

SPEAKER OUTPUT : Connects the amplifier to your cabinet. This Speakon combo jack allows for either Speakon or 1/4" speaker cable operation. The minimum load for the amplifier is 4Ω. For higher impedance loads the maximum output power is reduced.

The Microtubes 500 amplifier can run without a cabinet connected to this output.

WARNING: Do not use an instrument cable with this jack. Using an instrument cable can damage your amplifier. Do not use a load lower than 4Ω.

HEADPHONE OUTPUT : Headphones with 1/4" plug connector can be connected to this jack. For quiet operation remove any speaker cabinet connected to the amplifier, as connecting the headphones does not disable the speaker output.

SEND : Line level effects loop output. Connect a cable from this jack to the input of any pedals used in the effects loop. The output can be used to

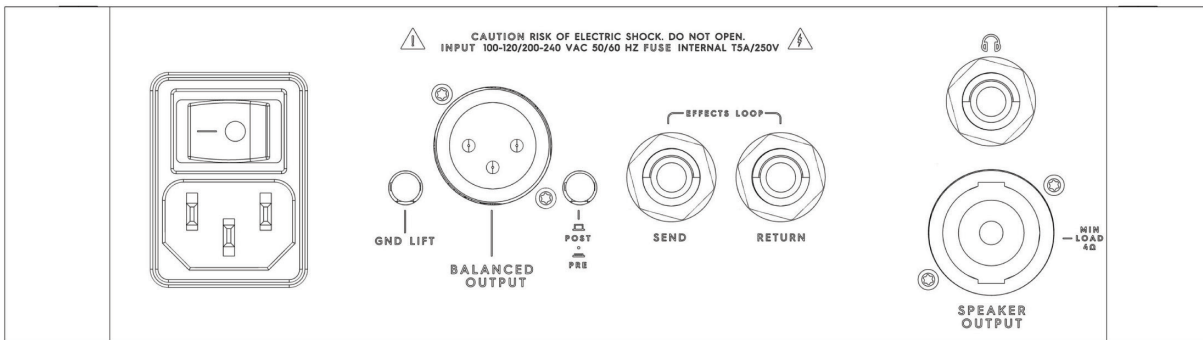
connect to another power amplifier or a sound card. The output is not controlled by the Master volume. Gain control can be used to change the signal level.

RETURN : Line level effects loop input. Connect the output from your effects loop pedals to this connector.

POST - PRE : Selects which signal will be sent to the Balanced output. Selecting PRE, sends a clean copy of your input bass signal. Selecting POST delivers the processed signal by the preamplifier (Microtubes Engine, gain, eq.)

GROUND LIFT : Lifts the ground of the Balanced output. If you are hearing mains frequency hum in your setup, try changing this setting.

BALANCED OUTPUT : Connects the Microtubes 500 preamplifier to balanced equipment (mic preamp, console, recorder, compressor, audio interface, etc.) via a standard XLR connector. The balanced signal level is not affected by the Master volume.

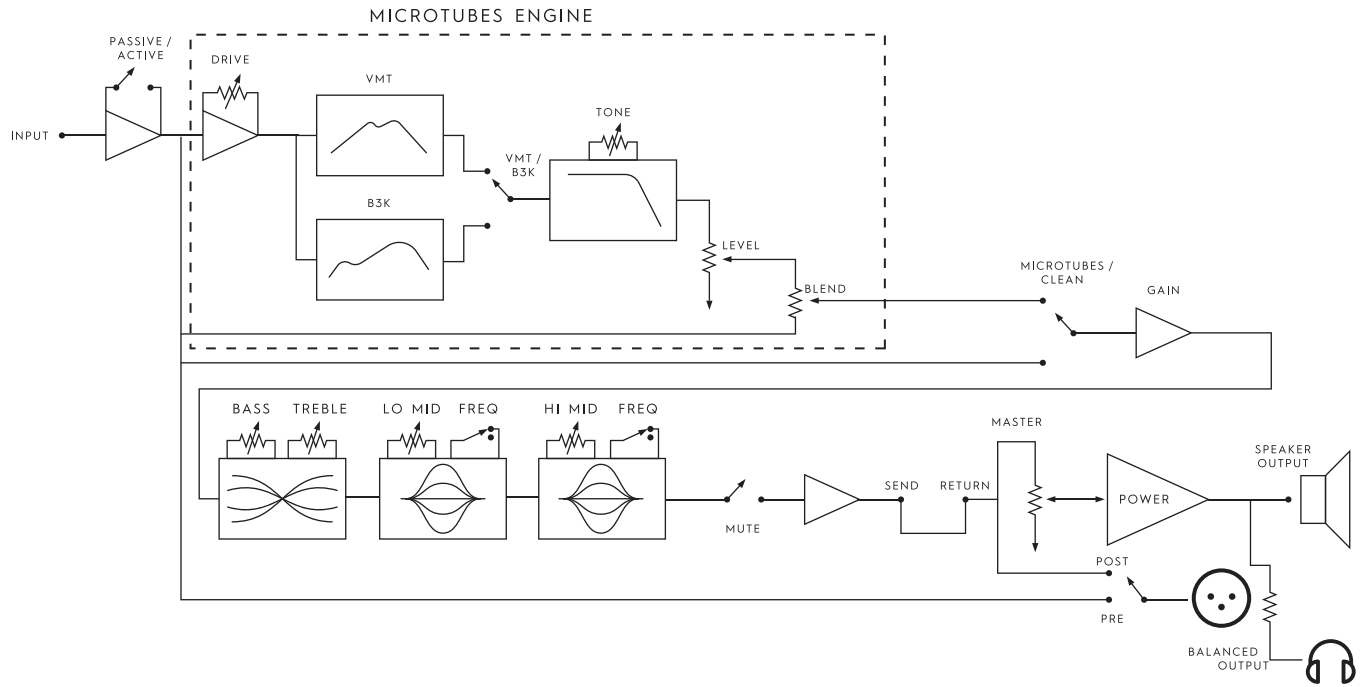


FAN : The fan cools the amplifier and should run at all times. Be sure to never cover the vent holes on either side of the chassis.

AC SOCKET : Connects the power cord to the amplifier.

AC POWER ON/OFF : Turns the amplifier on or off.

BLOCK DIAGRAM



WARNING

- Do not open the amplifier. No user serviceable parts inside
- Make sure the voltage selector switch on the right side panel is set properly (115V/230V) before plugging the amplifier on the AC outlet.
- Never use the amplifier in a high moisture environment or near liquids.
- The Microtubes 500 can deliver more than 115 dB of SPL. Exposure to this level of sound can damage your hearing. Use proper hearing protection if you will be exposed.
- The Microtubes 500 can deliver up to 750 Watts of output power for a short period of time. Be sure that your speaker cabinet is rated to handle the power.
- Do not cover the vent holes. The Fan and vent holes are part of the cooling system of the amplifier. Covering the vent holes can produce overheating of the power amplifier damaging it.
- Do not use an instrument cable as speaker cable. Instrument cables are not designed to deliver power signals going from the amplifier to the speaker. Using an instrument cable can cause damage to the amplifier and the cable.

For more information, frequently asked questions (FAQ) and troubleshooting, please visit: <http://www.darkglass.com/microtubes500-faq>

EMC / EMI

This equipment has been tested and found to comply with the limits for a Class B Digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in residential installations.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. There is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARRANTY AND SPECS

WARRANTY

Please register for your warranty at <http://mypedal.darkglass.com>. The Microtubes 500 is under warranty to the original owner for a period of three years against manufacturing defects.

If you experience a problem with the unit, please contact support@darkglass.com to receive a Return Authorization number or for information on the nearest authorized repair center. A copy of your original receipt must be included with all warranty repairs. You are responsible for all shipping charges. The unit must be shipped to us freight prepaid. We will return the unit freight collect. Darkglass Electronics Oy is not responsible for shipping damage either to or from our service center. Claims must be filed with the carrier.

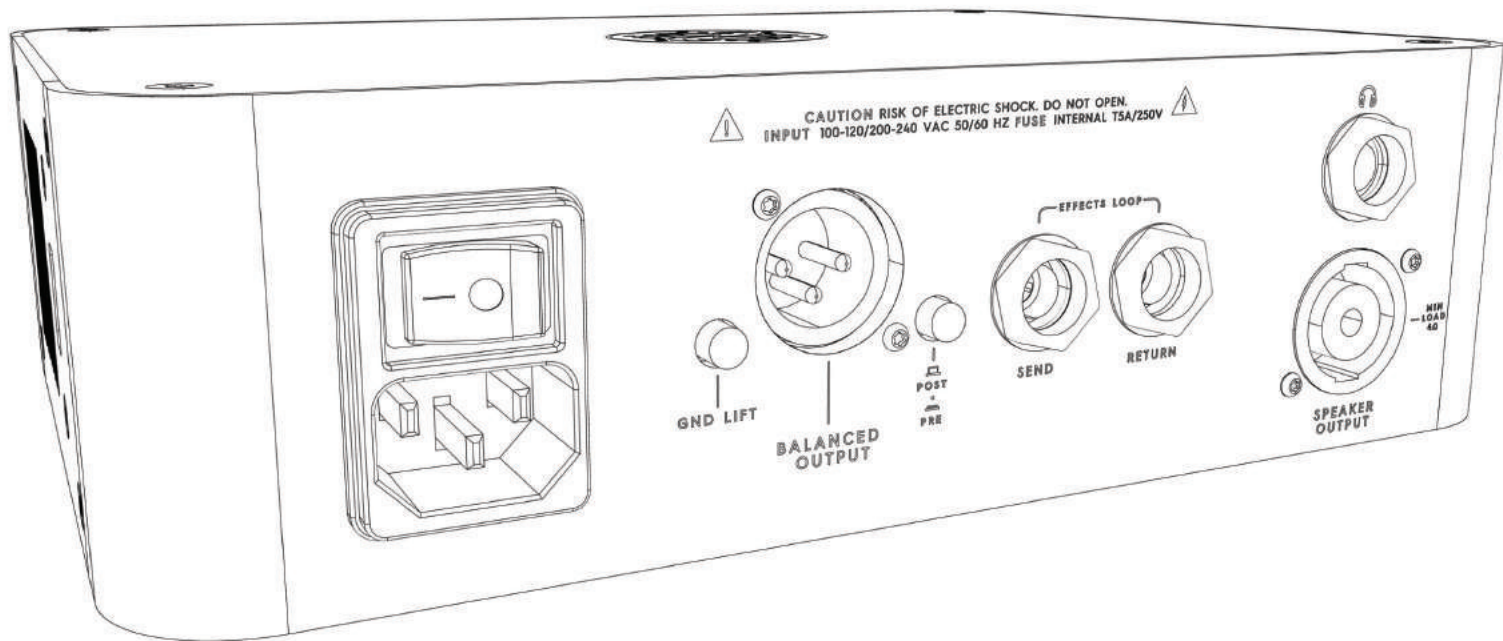
In case of equipment malfunction or other issues please contact your local dealer or distributor for your country's specific warranty period and repair procedures. Darkglass, Microtubes® and Microtubes Engine® are registered trademarks of Darkglass Electronics Oy, Tehtaankatu 27-29D, 00150 Helsinki, Finland.

SPECIFICATIONS

Input Impedance : $1M\Omega$
Minimum Load Impedance : 4Ω
Maximum Power Output : 500W (750W peak)
Power amplifier Input Impedance : $10k\Omega$
Power amplifier Nominal Input Level : +4dBu
Pre-Amp Output Impedance : $1k\Omega$
Pre-Amp Nominal Output Level : +4dBu

Standby Power Consumption : 15W
Maximum Power Consumption : 950W
Forced-air cooled
AC Input Power : 100-250 VAC (Via selector switch on left side panel).
AC Input Frequency : 50/60 Hz
Dimensions : 19.2 cm x 24.7cm x 7.1 cm (7.6" x 9.7" x 2.8")
Weight : 1.7kg (3.8 lb)

Built and Engineered in Helsinki, Finland.





Darkglass Electronics

Your vision, our gear.

DARKGLASS ELECTRONICS®
TEHTAANKATU 27-29 D, 5TH
HELSINKI, FINLAND
WWW.DARKGLASS.COM

FOLLOW US

