

EBASS (ARCO) DB 510



Instructions for Use

Congratulations on your new EBASS-DB510! (formerly ARCO)

Your new amplifier is hand built in Denmark.
It is built of quality components and is designed and built to serve you in a long time to come.

Our aim is to produce amplifiers giving very high performance for bassist in particular and musicians in general.

We combine the latest technologies with sound and proven principles, to give the user powerful quality sound from a small and lightweight amplifier.

We use knowledge and experience from across the audio business. Circuits that sounded good 50 years ago, sounds good today, but new techniques saves size and weight. Most important is the feeling, when you are playing.

We have designed an amplifier which is not filled with secondary features, but have concentrated on the basic needs for the pro bass player. Of course you can connect outboard equipment.

We have made the signal path from your fingers on the strings and

into the loudspeaker, as short as possible making the amplifier more vibrant and responsive. This improves your feeling of playing a great deal.

Some Tech:

Tone Controls in DB510 are soft, but effective, and you can use them to create the sound of your choice and to adapt to the sound character of the room and to the instrument used.

DB510 has a high and a low gain input so that all types of basses can be used. It has balanced and unbalanced line outputs for PA use or for sound recording. Line outputs can be selected before or after the tone controls and effects send/return.

There is output for a tuner, and you can "mute" the amplifier when you pause or for tuning.

We have chosen a custom 10 inch speaker with neodymium magnet system. It has a wide frequency range in a small enclosure, and can handle 250 watts continuously and 500 watts program material.

The Loudspeaker is driven by a high-tech class-d amplifier module with switch-mode power supply. This technology has an efficiency of 90% +, which gives lots of output and control but little or no heat. Environmental great sound! As an additional bonus overall weight is kept down to 9 kgs!. The amplifier can deliver 500 watts continuously.

The cabinet is designed so that the speaker is pointing slightly upwards, so that when the amplifier is on the floor, you can hear what you play with presence. We have used a bass reflex cabinet, to get a warm and vibrant sound, this small combo also works well with 5-string basses.

The Cabinet is constructed of 12mm Finnish birch ply, which is known for its great strength, and it is braced in a special way which makes it resonance free. Despite the thin material, the cabinet is very strong so it can withstand the powerful forces exerted by sound waves. We have chosen to give the cabinet a painted surface which can withstand the daily wear and which can be revamped if it is requested. The loudspeaker is protected by a metal grille, which is strong without weighing too much.

Features:

TOP PANEL



The DB510 is designed to have a good basic sound when the tone controls are at "12 o'clock". In this setting it is pretty linear. Tone controls are intended to color or adjust the basic sound, according to needs and taste.

INPUT 1: This input is designed for most types of passive electric basses, and acoustic basses with piezo pick-ups. Impedance is 2 Mohm.

INPUT 2: This input is designed for passive electric basses with very high output and active electric basses. The input impedance is 100 Kohm.

MUTE: This mutes the output to the speaker and to balanced output. There is still signal to tuner output.

GAIN: This button adjusts the input sensitivity so that distortion can be avoided. This active gain control also ensures lowest possible noise.

LO CUT: This switch activates a filter which attenuates the deepest frequencies, good to avoid rumble, in combination with bass control you can get a warm sound and still control low freq muddiness in the room.

HI CUT: This switch activates a filter that attenuates the highest frequencies. It softens the sound without it getting inaccurate or muddy. Especially for acoustic bass this is helpful in controlling the overtones of a piezo - pickup.

BASS: this button raises or lowers the very deepest frequencies. An electric bass will typically benefit from a boost these frequencies, while an acoustic bass has the opposite.

LO MID: this button raises or lowers the frequencies around 250 Hz. In this area, much of the basic frequencies are in this area. Attenuated you can achieve a sound that suits slap technique on electric bass. Raising lo-mid will suit fretless electric basses and acoustic basses and add more sustain to the sound as well. The filter is potent and should be used with caution.

HI MID: this button raises or lowers the frequencies around 800 Hz. This helps controlling the attack of the sound. You can use this to control also fingering sound and overall softness of the sound.

TREBLE: This button raises or lowers frequencies from 4000 Hz and up. You can use this to control overtones, transparency and openness of the sound, the controls interact, If, for example, you want a silky treble, you can dampen HI MID slightly and raise TREBLE.

PHASE: This switch is very important for amplification of acoustic bass - instruments. A double bass is in principle a great speaker, and it sends out sound waves, like a speaker. Sound waves from the amplifier and bass, should preferably be in phase so that they work in phase with each other. By locating the amplifier right next to the bass and turn up so that you barely have doubled the total volume, one can by using the phase soon hear whether there is or oppositional. Sound in anti-phase will be perceived as thin and distant. Phase can also be used to remove feedback if this is a problem with very high output levels.

MASTER: This button adjusts the overall signal to the output amplifier and speaker, and thus controlling overall output level. Any additional speakers are controlled from this button.

PRE POST: This switch determines whether the balanced and unbalanced line out signal is taken before or after the tone controls. With pre selected the line outputs will be taken before equalizing (and before effects send/return). With post selected the line signals are taken after equalizer and effects, so the sound engineer gets same signal as the bass player on stage.

Rear panel:



POWER: Power switch.

AC INPUT: ac input.

115/230 VOLTE: switch to select 100-115 V AC (Japan, North America ..) of 220/240V AC (Europe etc)

ARCO DB 510 can be used anywhere in the world.

WARNING! ! ! Must be used with care! ! ! !

Connect 230 volts to 115 volts switch in position, the amplifier can be damaged. Responsibility of the user, warranty! ! !

EXTSPKR: connectors for extra speaker. Jack socket and speakon connector (1- and 1+) are in parallel, lowest impedance for external speaker is 8 ohms. The built in speaker is not interrupted, and thus is always active.

TUNER: connection for tuner. (See MUTE).

INSERT: output and input for external effects unit, stereo jack, ring = send , tip = return.

LINEOUT: unbalanced line output to PA or recording.

BAL OUT: balanced line output with XLR jack for PA or recording. (See PHASE)

Technical Data:

Height 38 cm. Width 36 cm. Depth 30 cm/25 cm. Weight 9 kg.

Mains voltage: 100/240 volts AC 50/60 HZ. MAX 550 watts.

Output power 500 watts into 4 ohms, 250 watts into 8 ohms.

Speaker: 10 inch 8 ohm Neodymium 250/500 watts. RMS / PEAK.

Amplifier 500 watts 4 ohm class-d, switch mode power supply

Cabinet 12mm birch ply, special structures.

Input 1 high sensitivity 2 Mohm.

Input 2 low-sensitive 100 kOhm.

LOCUT - 12 db at 30 hz.

HI CUT - 12 dB at 10 Khz

BASS + / - 15 db at 70 Hz (quasi shelving)

LO MID + / - 20 db at 250 hz

HI MID + / - 15db at 800 hz

TREBLE + / - 15db at 4Khz (quasi shelving)

EXTSPKR jack / speakon parallel coupled minimum impedance 8 ohms

TUNER 0.775 volts

INSERT 0.775 volts

LINE OUT + 4db

BAL OUT +4 dB

WARNING!

ARCO DB510 contains components and circuits with high voltage. It is associated with life-threatening risk to remove the back panel, and warranty is void if doing so. Make sure to choose and connect correct ac voltage, in case of service repair, please have a qualified service technician perform this.

The amplifier should not be exposed to rain or liquid fluids. If this should happen contact the seller or service personnel.

We give full 2 year warranty on the DB510 combo, warranty is void in case of abuse etc.

Manufacturing:

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