



THREE BANANAS AMPLIFICATION

USER MANUAL

TO

EXCELSIOR

35W GUITAR AMPLIFIER HEAD
MODEL CB35-303

Dear customer,

we're honored that when it comes to tone, style and quality, you think of us. We just want to express how much we appreciate your business and your trust in us. We hope you're loving your new Excelsior Deluxe!

If you haven't started using it yet, check out the following tips below. Some of them are very, very important!

You can contact our support via mail:
service@threebananasamps.com



GENERAL SAFETY

For your personal safety and product liability we would like to highlight the following warnings and precautions:

1. Do not use or store the amplifier under wet conditions. Do not expose the amplifier to rain or moisture.
2. Do not operate the amplifier on voltages other than indicated on the rear panel respectively do not operate the amplifier on voltages other than selected.
3. Service the amplifier only by qualified personnel.
4. Do not remove or open the chassis. There are no user serviceable parts inside.
5. The amplifier must be earthed. Only use the supplied 3 prong chord or a suitable equivalent.
6. The amplifier should be transported and stored in its normal operating position, not upside down or on its side.
7. Tubes get very hot during operation. Do not cover the air vents.

GENERAL OPERATION

1. The amplifier may only be operated with a speaker cabinet or with a suitable load (e.g. a load box) connected. Please always select the matching impedance.
2. Always use a proper speaker cable to connect the amp with your speaker cabinet
3. After switching off the amplifier, a rest period of at least 10 seconds should be observed until the amplifier is switched on again.
4. The power amp section runs on a pair of cathode biased EL34 or 6L6GT power tubes. No bias adjustments required after changing power tubes.

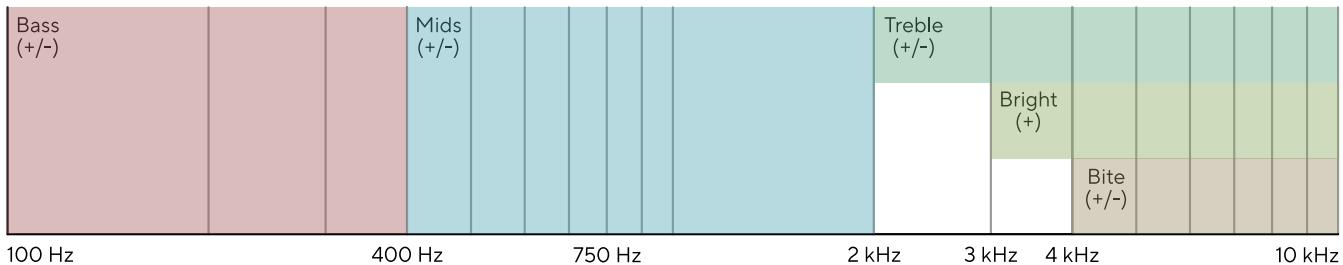
CHANNEL OVERVIEW



Input	Plug your instrument cable in here.
Volume	Sets the the volume of the preamp.
Bright	Adds additional top end above 3 kHz in two stages. Off in middle position.
Bass	Adjusts low frequencies below 400 Hz
Middle	Boost or cut the midrange at around 750 Hz
Treble	Adjusts high frequencies above 2 kHz.
Sensitivity	Changes how the amp interacts with your guitar. See next page for more details.

EQUALIZATION & DYNAMICS

Use the Bright, Treble and Bite controls to create detailed equalization curves. The frequency bands are overlapping as shown in the chart below. While the Treble and Bite knobs boost or attenuate high frequencies, Bright does only provide a boost.



The Sensitivity circuit changes the compression resp. the sensitivity with Normal (NORM) and Dynamic (DYNA) settings. "Dynamic" provides a more direct yet airy response. "Normal", on the other hand, produces more compression. You might notice a slight attenuation in this mode due to the compression.

REVERB SECTION OVERVIEW



This amplifier is equipped with an analog spring reverb. A powerful 12BH7 tube drives a three-spring reverb tank with a medium decay time of two to three seconds, depending on the signal strength. The reverb signal is fed directly back into the phase inverter of the power amplifier, where it is mixed with the dry guitar signal.

Drive	Controls how much signal is sent to the reverb tank. Larger signals will increase the decay time slightly and will also add rich saturation to the reverb tail.
Off / On	Turns the reverb effect on and off and is indicated by a light on the front panel. When this switch is on, remote control via footswitch is disabled.
Level	Controls the amount of reverb that is fed back into the signal chain.
Rev Tone	In addition to the Normal setting, Mellow provides attenuation and Bright emphasizes the high frequencies of the reverb signal. See also next page.

REVERBERATION

Footswitch: if you want to use the footswitch to turn the reverb on and off, the reverb switch on the front panel must be switched off. Turning the front panel switch on will effectively disable the footswitch. In this situation, the indicator light on the footswitch won't light up. However, if the reverb switch on the front panel is in "off" position, both reverb indicator lights will light up once the reverb has been switched on via footswitch.

Noise: a spring reverb tank mainly consists of an input and output transducer connected to the reverberation springs. The output transducer is basically a single coil pickup like in a guitar. Along with the vibrations from the three reverberation springs, it will also pick up any interferences inducted. At normal reverb levels the amount of noise in the reverb signal should be very low, meaning it should not be audible. However when we designed the circuit, we also found very high levels of reverb sounding too good to tame their amplification. Excelsior Deluxe allows for pretty extreme levels of reverb, but the price for this can be an increased noise floor in the reverb signal. Please keep this in mind.

TREMOLO SECTION OVERVIEW



Excelsior Deluxe features a tube driven tremolo effect by modulating the bias voltage of the power amp tubes. The modulation looks more like a sine wave, resulting in a soft or vintage characteristic.

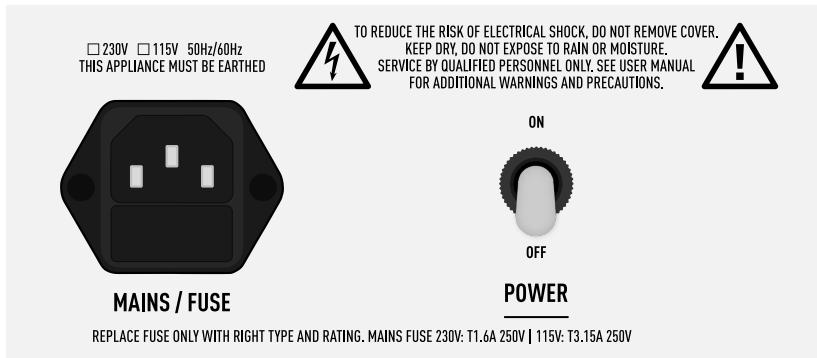
Speed	Controls the modulation frequency from slow to fast.
Intensity	Controls how much tremolo effect is applied to the guitar signal
Off / On	Turns the tremolo effect on and off, also shown via indicator light on the front panel. If this switch is on, the remote control via footswitch is disabled. In this situation, the tremolo indicator light on the footswitch will not light up. However, if the tremolo switch on the front panel is "off"-position, both indicator lights will light up once the tremolo has been engaged via footswitch.

MASTER SECTION OVERVIEW



Master	Sets the overall volume of the amplifier. The Master control allows a precise loudness control especially in the low to medium range.
Bite	Enables a very effective adjustment of high frequencies from 4 kHz upwards. See also the equalization chapter on how to use the Bite control together with the other equalization options.
Operate	Passes or mutes audio. This is not a traditional standby switch. If you plan not to use the amp for a while, simply use the Power switch to turn it off.
Power	Lights up once the Power switch on the back of the amplifier has been engaged

BACK PANEL POWER SECTION OVERVIEW



Please follow the instructions to general safety at the beginning of this document!

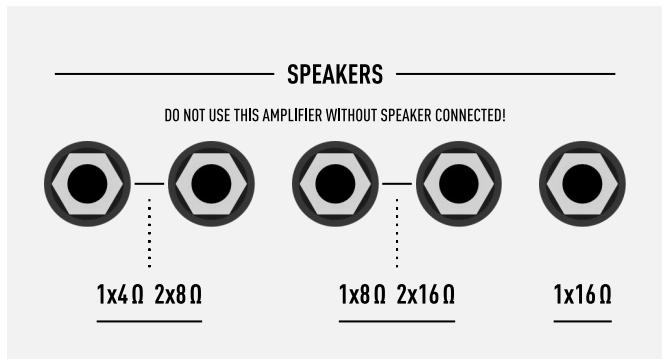
Mains	Connect the supplied power cable here. The mains voltage, that your amplifier has been set to internally, is marked accordingly above the connector. Only use the supplied 3 prong chord or a suitable equivalent.
Fuse	The mains fuse is an important part to ensure safe operation. Replace only with the right type and rating, as written on the back panel. In case the main fuse blows repeatedly, please contact us or a qualified technician.
Power	Turns your amplifier on or off. After switching off the amplifier, a rest period of at least 10 seconds should be observed until the amplifier is switched on again.

BACK PANEL SPEAKERS & FOOTSWITCH OVERVIEW



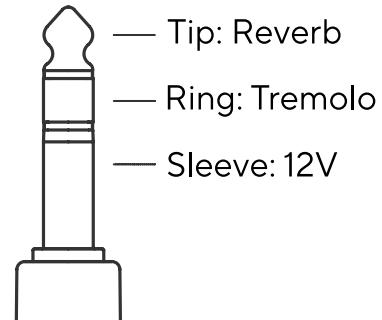
Speakers	Only operate this amplifier with a speaker cabinet or with a suitable load (box) using a proper speaker cable. Please always choose a matching impedance by connecting the speaker cable with a suitable output. See next page for further information.
Footswitch	Connect the supplied footswitch using the supplied TRS cable. See next page for further information.

SPEAKERS & FOOTSWITCH



Speakers: The 4 and 8 Ohms outputs feature double TR jacks wired in parallel. You can connect two speaker cabinets of the same impedance, for example two 8 Ohms cabinets on both 4 Ohms jacks or two 16 Ohms cabs on both 8 Ohms jacks.

Footswitch: The footswitch can be used with a common TRS cable, in case you want to replace the cable. You can also use third party footswitches or switchers. You need to use latching switches, while closing the switches is engaging the reverb respectively engaging the tremolo. See the connector layout to the right. Do not use the 12V rail to power external devices.



CONTACT

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is a brand by

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