Darkglass Electronics Luminal Ultra
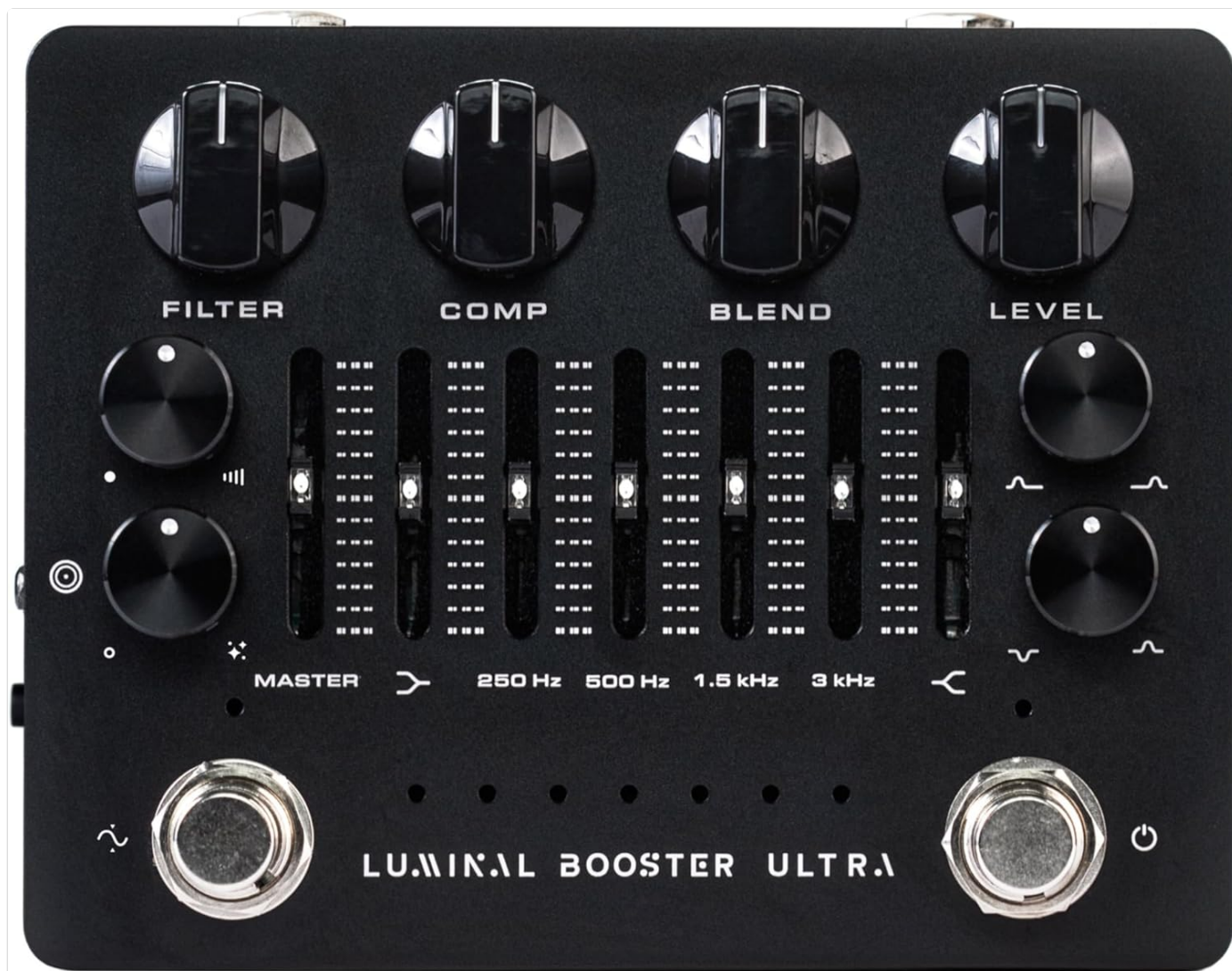
Darkglass Luminal Booster Ultra Bass Preamp Pedal
User Manual

INTRODUCTION

The Darkglass Luminal Booster Ultra is a versatile bass preamp pedal designed to provide high-precision dynamics control and extensive tone shaping capabilities. It integrates a studio-quality compressor, a 6-band graphic equalizer, and various tone-shaping controls to help bassists achieve their desired sound. This pedal also features an XLR DI output, a 7-slot Impulse Response (IR) loader for cabinet simulations, a built-in headphone amplifier, and a stereo auxiliary input for silent practice with backing tracks. A ground-lift feature is included for optimal signal integrity.

PRODUCT OVERVIEW

Front View: This image displays the top panel of the Luminal Booster Ultra, highlighting the Filter, Comp, Blend, and Level rotary controls, along with the six EQ sliders (Master, 250Hz, 500Hz, 1.5kHz, 3kHz, 6kHz). The two footswitches for Cut/Boost and On/Off are visible at the bottom.

Angled View (DI Side): An angled perspective of the pedal, showcasing the XLR Direct Output on the left side, which allows for direct connection to mixing consoles or audio interfaces.

Angled View (Connectivity Side): This view highlights the right side of the pedal, featuring the USB port for computer connectivity, the Aux In jack for external audio sources, and the headphone output for silent practice.

Rear Panel: A close-up of the rear panel, detailing the Input, Aux In, 9VDC power input, Headphone Output, and Main Output jacks.

SETUP

Power Requirements

The Luminal Booster Ultra requires a regulated 9VDC power supply with a center-negative barrel connector. Ensure the power supply provides at least 250mA of current for optimal performance. Using an incorrect power supply can damage the unit and void the warranty.

Connections

- **Input:** Connect your bass guitar or other instrument to this 1/4-inch mono jack.

- **Output:** Connect this 1/4-inch mono jack to your amplifier, audio interface, or the next pedal in your signal chain.

- **Aux In:** Use this 1/8-inch stereo jack to connect an external audio source, such as a smartphone or MP3 player, for practice with backing tracks.

- **Headphone Out:** Connect stereo headphones to this 1/8-inch stereo jack for silent practice. The headphone output level is controlled by the Master EQ slider.

- **Direct Output (XLR):** This balanced XLR output provides a direct signal for connecting to a mixing console, audio interface, or PA system. It includes a ground-lift switch to eliminate hum caused by ground loops.

- **USB:** Connect the pedal to your computer via the USB-C port for firmware updates, IR loading, and advanced control using the Darkglass Suite software.

OPERATING THE LUMINAL BOOSTER ULTRA

Controls

- **Filter:** Adjusts the frequency response of the Harmonic Booster section.

- **Comp:** Controls the amount of compression applied to the signal. This is a studio-quality multiband compressor.

- **Blend:** Mixes the clean input signal with the processed signal.

- **Level:** Sets the overall output volume of the pedal.

- **Graphic EQ Sliders:** Six sliders provide precise tonal control:

    - **Master:** Overall level of the EQ section.

    - **250 Hz:** Adjusts low-mid frequencies.

    - **500 Hz:** Adjusts mid frequencies.

    - **1.5 kHz:** Adjusts upper-mid frequencies.

    - **3 kHz:** Adjusts high-mid frequencies.

    - **6 kHz:** Adjusts high frequencies.

- **Mid Gain:** Controls the gain of the midrange frequencies.

- **Mid Frequency:** Selects the center frequency for the Mid Gain control.

- **Character:** Blends in the tone-shaping circuitry, adding harmonic richness.

- **Gain Reduction Meter:** LED indicators display the amount of gain reduction applied by the compressor.

Footswitches

- **Left Footswitch (Cut/Boost):** Toggles a flat +/-20dB cut or boost, providing an instant volume adjustment or solo boost.

- **Right Footswitch (On/Off):** Engages or bypasses the pedal's effects.

IR Loader

The Luminal Booster Ultra features a 7-slot IR loader for cabinet simulations. Impulse Responses can be loaded and

managed via the Darkglass Suite software, allowing you to customize your direct output tone with various virtual cabinets.

MAINTENANCE

To ensure the longevity and optimal performance of your Luminal Booster Ultra, follow these maintenance guidelines:

- Keep the pedal clean by wiping it with a soft, dry cloth. Avoid using abrasive cleaners or solvents.
- Protect the pedal from extreme temperatures, humidity, and direct sunlight.
- Avoid dropping the pedal or subjecting it to strong impacts.
- Disconnect power when not in use for extended periods.

TROUBLESHOOTING

Problem	Possible Cause	Solution
No sound output.	Incorrect power supply, cables not connected properly, pedal bypassed.	Verify 9VDC center-negative power supply. Check all cable connections. Ensure pedal is engaged (Right Footswitch).
Humming or buzzing noise.	Ground loop, faulty cables, interference.	Engage the ground-lift switch on the XLR DI output. Try different cables. Ensure power supply is isolated.
Unexpected tone or no effect.	Incorrect control settings, faulty unit.	Review control settings. Try resetting controls to a neutral position. If issues persist, contact support.

SPECIFICATIONS

Feature	Detail
Model Name	Luminal Booster Ultra
Dimensions (L x W x H)	4.92" x 3.77" x 2.24" (12.5 cm x 9.6 cm x 5.7 cm)
Weight	1.5 Pounds (0.68 kg)
Power Requirement	9VDC (center-negative), 250mA minimum
Inputs	1/4" Instrument Input, 1/8" Aux In
Outputs	1/4" Instrument Output, 1/8" Headphone Out, XLR DI Output
Connectivity	USB-C for Darkglass Suite
EQ	6-band Graphic EQ
IR Slots	7

WARRANTY INFORMATION

Darkglass Electronics products are covered by a limited warranty against manufacturing defects. For detailed warranty terms and conditions, please refer to the official Darkglass Electronics website or contact their customer support. Keep your proof of purchase for warranty claims.

SUPPORT

For further assistance, technical support, or to download the latest Darkglass Suite software and firmware updates, please visit the official Darkglass Electronics website:

www.darkglass.com

You can also find additional resources and frequently asked questions on their support pages.