

ELEMENT

cabsim · headphone amp

User Manual

Element

Cabsim · Headphone Amp

One comprehensive device, that out of the box offers a bank of 5 cabinet simulations, and the ability to change them through the Darkglass Suite, Bluetooth technology to listen to backing tracks while playing, rehearsing, or studying. Two headphone outputs to allow interaction among musicians. XLR output to connect the Element to your audio interface or PA system.

With a uniquely innovative approach, the Element provides in one device an immensely practical tool to empower modern musicians.

Warning

The Element has a current draw of 250mA. Only use a regulated 9V DC adapter with a center-negative plug. Due to ecological reasons, it does not accept batteries. Unregulated power supplies and/or higher voltages may result in suboptimal noise performance and even damage your unit, voiding the warranty.

Warranty

To activate the warranty, we encourage you to register your product on: http://mypedal.darkglass.com and enter the serial number on the back of your pedal.

Please contact us via email support@darkglass.com before shipping a product to us.

Controls

Phones: Two touch sensitive volume control sliders, one for each headphone output.
Blend: A touch sensitive slider to set the blend between the main input (Intrument/Amp in) and the backing track (Bluetooth/Aux in) for the headphone out mix.

Technical Specifications

Input Impedance	2 Mohm, 18 kohm, 12 kohm
Current Consumption	~ 250 mA
Voltage	9V-12V (Center Negative)

Dimensions

Width: 64 mm (2.95 in) | Height: 111 mm (4.37 in) | Depth : 35 mm (1,77 in) | Weight: 230 g (0.50 lb)

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. However, 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 into 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

Connecting the Element (Read carefully!)

The **Element** is loaded with flexible audio connection options

· Two 6.3 mm jacks that can be used as:

· Balanced/unbalanced instrument input and output

or

· Amplifier input and speaker (through) output

· 3.5 mm jack for aux input

· Bluetooth input for wireless backing/click tracks

· Two 3.5 mm headphone outputs

· Balanced XLR output with ground lift

Power: Use a 9-12V DC power supply (center negative 2.1/5.5 mm barrel plug)

USB: One USB-C port for transferring impulse responses and firmware XLR outputupdates

Bluetooth connection

You can playback Bluetooth audio through the **Element** into your headphones. For Bluetooth pairing press and hold the touch sensor on the **Element** until all 5 of the surrounding LEDs stay lit. It will show up as "**Element**" on your Bluetooth device list, unless the name has been changed by the user. Use the blend control slider to set the mix between the instrument/amp input and the Bluetooth audio for your headphones. The Bluetooth audio does not pass to the XLR output or the 6.3 mm instrument/speaker out.

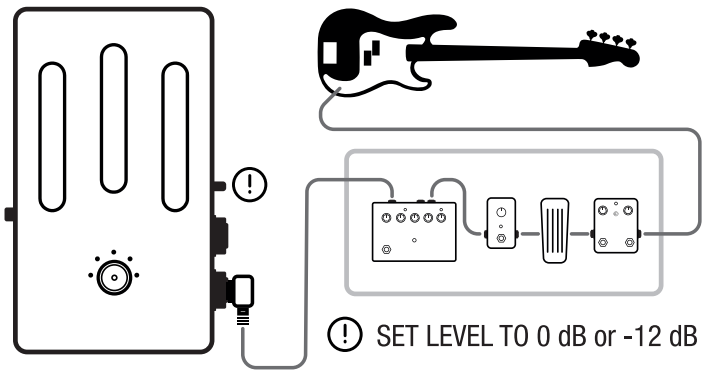
Aux Input

You can connect the line/headphone out of your laptop/keyboard/mixer etc. into the 3.5 mm aux input on the **Element** . Use the blend control slider to set the mix between the instrument/amp input and the aux in audio for your headphones. The aux in audio does not pass to the XLR output or the 6.3 mm instrument/speaker out.

Connection diagrams

Element with your pedalboard

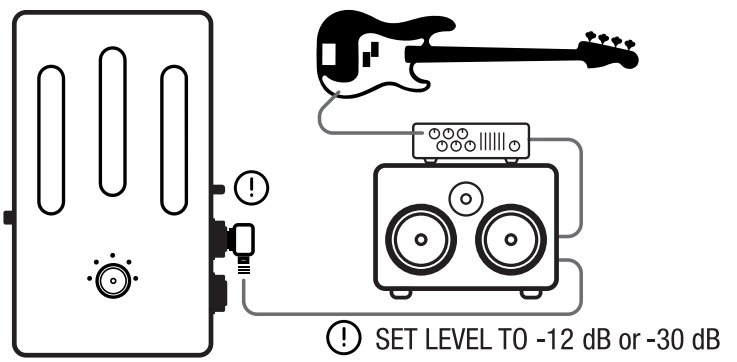
Connect your instrument to your pedalboard as you normally would and add the **Element** at the end of the signal chain. Use the input labelled ***"INSTRUMENT IN"*** on the **Element** You can now choose the impulse response from slots 1-5 or the bypass signal. From here the signal is passed through to the XLR output and via the blend and volume controls to the headphone outputs.



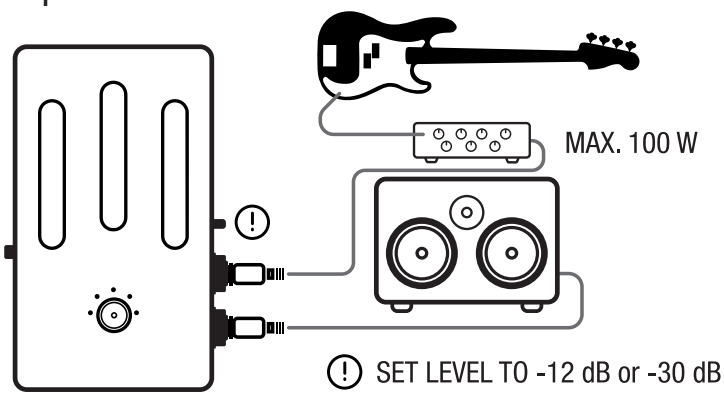
Element with your amplifier and speaker cabinet

Note: *The **Element** does NOT act as a loadbox! Always make sure your amplifier is connected to a suitable load!!!*

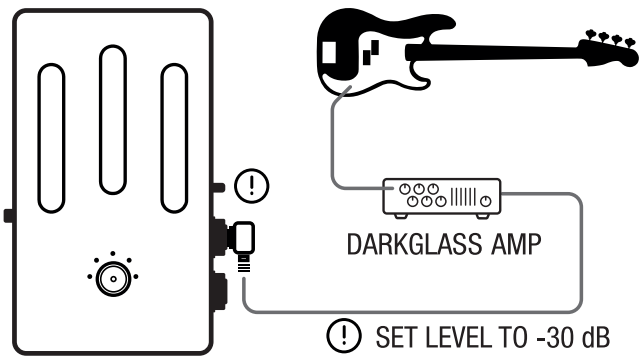
The **Element** is built to work with amplifiers with a maximum output of 900 Watts. For the safest operation it is advised to connect the **Element** after your speaker cabinet from your speaker cabinet's parallel output connector. Use the input labelled ***"AMP IN"*** on the **Element** . You can now choose the impulse response from slots 1-5 or the bypass signal. From here the signal is passed through to the XLR output and via the blend and volume controls to the headphone outputs.



In case the amplifier's output is maximum 100 Watts, the **Element** can be connected between the amplifier and the speaker cabinet. Use the input labelled ***"AMP IN"*** for the amplifier and the output labelled ***"SPEAKER OUT"*** to connect the speaker cabinet to the **Element** . You can now choose the impulse response from slots 1-5 or the bypass signal. From here the signal is passed through to the XLR output and via the blend and volume controls to the headphone outputs.

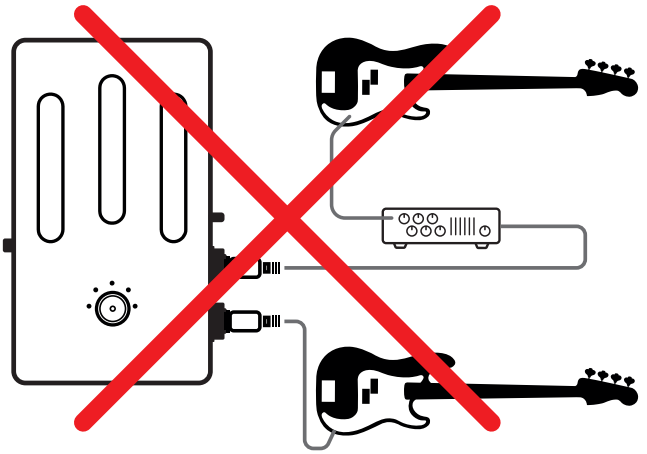


If you are using a Darkglass amplifier with a class D poweramp you have the option to connect the amplifier straight to the **Element** without using a speaker cabinet or an external load. Use the input labelled ***"AMP IN"*** on the **Element** . You can now choose the impulse response from slots 1-5 or the bypass signal. From here the signal is passed through to the XLR output and via the blend and volume controls to the headphone outputs.



WARNING

NEVER CONNECT AN AMPLIFIER TO AMP IN SIMULTANEOUSLY WITH AN INSTRUMENT TO INSTRUMENT IN!!! THIS COULD LEAD TO AN ELECTRIC SHOCK AND ALSO BREAK YOUR PRECIOUS EQUIPMENT!!!



Darkglass Suite

Download the free Darkglass Suite software from www.darkglass.com/suite to configure the pedal, load new impulses and download firmware updates. Darkglass Suite comes with a selection of cabinet IRs made by some of our artists. It also allows you to load your own IRs in WAV and AIFF formats and organize your IR files. See the online manual of Darkglass Suite for more information.

Disclaimer

In the interest of continuous improvement, specifications are subject to change without notice. If you have any questions, please don't hesitate to contact us at support@darkglass.com

The manufacturer claims that the above product fulfills the requirements as set by EN 62368-1:2014+A11:2017, EN 55032:2015, EN 55035:2017, EN 61000-3-2:2014, EN 61000-3-3:2013, EN 62479:2010, ETSI EN 300 328 V2.2.2 (2019-07), EN 62311:2008, ETSI EN 301 489-1 V2.2.3 (2019-11), ETSI EN 301 489-17 V.3.1.1 (2017-02), RoHS, WEEE.



Darkglass Electronics OY.
Helsinki, Finland
www.darkglass.com