



DARKGLASS Aggressively Distorting Advanced Machine Distortion Pedal Instruction Manual

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Quick Start Guide

Connect your instrument into the 1/4" INPUT.

Connect a compatible power supply (9V center negative, min. 500 mA) to the power connector.

- Connect at least one of the following:
- Headphones into the headphone jack
- USB-C cable between the USB connector and your computer*
- Instrument cable between one of the balanced 1/4" outputs and your amplifier's input
- XLR cable between DIRECT OUTPUT and your mixing desk or audio interface

The Aggressively Distorting Advanced Machine is pre-programmed with three presets, A, B, and C that are selectable via the dedicated footswitches. Press and hold one of the footswitches for two seconds to save your changes into a preset. Three additional presets can also be accessed via MIDI or the Darkglass Suite.

Adjust the level (and headphone volume, if applicable) to your liking and start playing!

*Using the Aggressively Distorting Advanced Machine as an audio interface may require some extra steps depending on your operating system

Connections

Input: This is the primary instrument input on the Aggressively Distorting Advanced Machine. Connect your instrument or output from your pedal board to the 1/4" mono jack.

Aux In: The stereo input of the Aggressively Distorting Advanced Machine enables the playback of backing tracks while practicing or recording. Connect your mobile phone, laptop etc. to the 1/8" stereo jack.

Headphone Output: The headphone output can handle headphones with an impedance of 16 – 600 ohms. Connect your headphones to the 1/8" stereo jack and set the desired level from the dedicated potentiometer next to the jack.

Balanced Outputs: The two balanced outputs add routing versatility and the option of using the Aggressively Distorting Advanced Machine as a fully equipped audio interface. Connect your studio monitors, amplifier or other effects to the 1/4" balanced jacks using a TRS connector (Tip +, Ring -, Sleeve GND).

If you feed an unbalanced input from these outputs, use an instrument cable with a mono 1/4" plug.

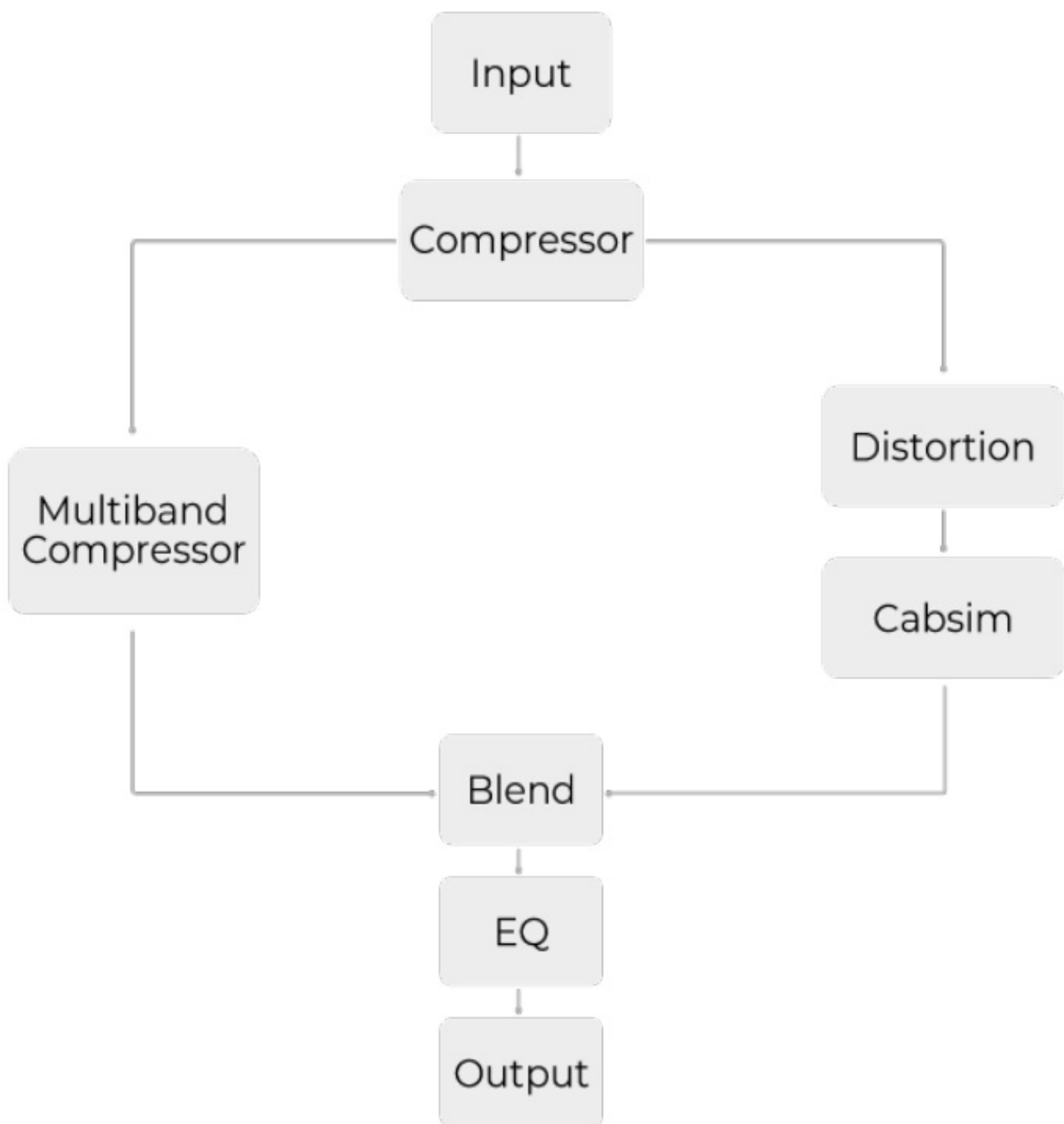
Direct Output: An XLR output with a ground lift switch provides a reliable standard connection to a mixing desk or an external audio interface for a guaranteed low-noise signal.

MIDI In: A standard 1/8" TRS jack allows connecting an external MIDI controller to the Aggressively Distorting Advanced Machine for even more flexibility. Read more about the MIDI capabilities at <https://www.darkglass.com/creations/AggressivelyDistortingAdvancedMachine/>

USB: The USB-C port unlocks the Aggressively Distorting Advanced Machine's USB audio interface capabilities and enables interaction with the Darkglass Suite desktop app, allowing for software updates and access to the Darkglass IR library, containing hundreds of cabinet simulations. USB MIDI is also supported.

Signal Chain

Block Diagram



Compressor: This control allows setting the input gain of the compressor that will translate into how much the signal is compressed while our intelligent make-up gain algorithm keeps the output of the compressor at usable

levels. The compressor has 5 ratios available: 4:1, 8:1, 12:1, 20:1 and ALL IN.

Distortion: At the heart of the distortion circuit is an accurate model of Nolly's favorite vintage distortion unit. In collaboration with Darkglass, he used that as a platform for developing 5 distinctive distortion modes ranging from mild and very articulate distortion to synth-like fuzz sounds. **Cabinet Simulation:** The Aggressively Distorting Advanced Machine supports Impulse Response (IR) cabinet simulations and has 5 cabinet slots on board. The default IRs have been captured by Nolly himself. New IRs can be assigned to the 5 slots using the Darkglass Suite (desktop or mobile).

Multiband Compressor: In the clean sidechain you will find a fixed multiband compressor. This multiband compressor incorporates Nolly's personal settings that have been developed with years of experience in the studio. There are no controls for the multiband compressor.

Blend: The blend control allows you to mix the distorted/preamp signal with the clean sidechain signal. Depending on the distortion/preamp setting the clean sidechain is either full-band or low-band signal.

EQ: Last in the signal chain is a programmable 6-band graphic equalizer that allows you to tailor your sound even further. The full description of this functionality can be found in the "Controls" section of the manual.

Controls

Smart Potentiometers

On the Aggressively Distorting Advanced Machine, you will find five smart potentiometers: Compression, Drive, Character, Blend, and Level. These potentiometers are the main interface for sculpting the signal chain and your overall sound on the Aggressively Distorting Advanced Machine.

The Compression potentiometer is the one-knob-solution for compression on the Aggressively Distorting Advanced Machine. This controls the amount of input gain to the compressor and intelligently applies the correct amount of makeup gain so that your signal is always driven at the appropriate level, no matter how much compression is applied.

The Drive potentiometer adds distortion and drive to your signal. Crank this knob to apply Nolly's favorite vintage distortion to the distorted part of the signal chain.

The Character potentiometer changes the tone of the distortion, adding brightness to the distortion signal.

The Blend potentiometer mixes between the distortion signal and the clean sidechain signal.

The Level potentiometer controls the master volume of the Aggressively Distorting Advanced Machine.

The smart potentiometers allow for their positions to be stored in each preset, with the stored position indicated by the ring of LEDs surrounding each potentiometer.

With this, you can get a glance at your signal chain settings when changing presets, regardless of the physical potentiometer setting.

Touch Sensitive Slider

At the center of the Aggressively Distorting Advanced Machine are the touch-sensitive sliders that control the 6-band graphic EQ at the end of the signal chain.

Each slider has a -12 dB to 12 dB range. From left to right, the frequency bands for each slider correspond to a low shelf, 250 Hz, 500 Hz, 1.5 kHz, 3 kHz, and a high shelf.

Controlling the touch sliders is easy – swipe upwards to boost a frequency band or swipe downwards to cut a frequency band.

When swiping, the position of the slider is also reflected on the potentiometer LEDs.

Double-tap the slider to reset the band back to 0 dB.

Hint: The sliders respond to the direction of your swipe on any part of the slider, so you can make small adjustments without your finger covering the actual position of the slider.

Rotary Footswitch Encoders

Below the touch sliders are three rotary footswitch encoders A, B, and C, which can be pressed or rotated. These footswitch encoders enable many of the Aggressively

Distorting Advanced Machine's functions. Simply press A, B, or C to switch to the preset stored in that footswitch. The rotational position of each encoder is displayed on the five LEDs under each encoder. Additionally, when rotating, the position is shown on the potentiometer LEDs

- this is a visual aid that does not affect the potentiometer configuration.
- Rotating A allows you to change the compressor ratio or bypass the compressor.
- Rotating B allows you to change the distortion mode or bypass the distortion.
- Rotating C allows you to change the active IR in the signal chain or bypass the IR.

When none of the five LEDs are lit, the respective compressor/distortion/IR is bypassed.

Basic Operation

Editing and saving presets

Editing and saving presets on the Aggressively Distorting Advanced Machine is remarkably easy. If any of the parameters are changed (i.e. potentiometers, sliders, encoder rotation), the color LED of your current preset will gently breathe, indicating that the edit or audition mode is active.

Auditions are an easy way to try new sounds and settings, which can be either saved or discarded. When you find a sound that you would like to save, the audition can be saved into any of the three presets by pressing and holding one of the preset footswitches for two seconds. All LEDs on the Aggressively Distorting Advanced Machine will flash rapidly a few times indicating that your edits have been saved into a preset. A new audition is always entered when changing any parameter from an unedited/saved preset. This will overwrite any previous unsaved auditions/edits.

During an edit/audition, you can change to any of the three saved presets by pressing the footswitch associated with that preset. After changing to a preset, pressing the footswitch again will swap between that preset and your active editing session

Presets can also be saved, edited, shared, loaded, and managed in the Darkglass Suite.

For instructional videos on editing and saving the presets, please visit <https://www.darkglass.com/creations/aggressively-distorting-advancedmachine/>

Tuner

To enter the tuner, press B and C simultaneously.

To exit the tuner, press B and C simultaneously or one of the footswitch presets. The Aggressively Distorting Advanced Machine will always return to the last active preset.

The Aggressively Distorting Advanced Machine will not output any audio when tuning.

The Aggressively Distorting Advanced Machine features a five-octave chromatic tuner, which can tune any note between A0 and A#5, allowing you to dial in any guitar or bass tuning that you desire. The tuning is derived from A4 = 440 Hz. Only one note can be tuned at a time.

When the tuner mode is entered and there is no input signal, two red LEDs on the two rightmost sliders are shown by default. When an input signal is received, the left section of sliders will update to show the note that you are tuning

A small indicator is displayed to the top right of the note if it is a sharp note.

When tuning, the two rightmost sliders will update to show how close your tuning is from the note's perfect pitch.

Distance below the center line indicates that the note is tuned flat, and distance above the center line indicates that the note is tuned sharp. The red LEDs will transition to green as you approach the perfect pitch, and the slider and preset LEDs will fully illuminate in green when you are on perfect pitch.

Bypass

To enter the bypass mode, press A and B simultaneously.

To exit the bypass mode, press A and B simultaneously or one of the footswitch presets

In this mode, the Aggressively Distorting Advanced Machine does not perform any processing on the input signal, and passes the unprocessed input signal through to the outputs. All LEDs are turned off during bypass mode.

Performance Lock

To enter or exit the performance lock, press A and C simultaneously.

In this mode, all LEDs will gently breathe on the Aggressively Distorting Advanced Machine to indicate that it has been locked.

This mode prevents any accidental parameter changes or edits to your presets. You can still change between the saved presets A, B, and C, and enter the tuner or bypass modes, but potentiometer updates, slider touches, or encoder rotations will not respond to any changes.

Tip: Enter the performance mode after the soundcheck while playing live gigs.

Bluetooth Pairing

To begin Bluetooth pairing with the Aggressively Distorting Advanced Machine, press and hold an encoder while simultaneously rotating the encoder. The five LEDs under each encoder will illuminate one-by-one, and pairing will begin when all five are lit. Look for

“Aggressively Distorting Advanced Machine” on your list of available Bluetooth devices.

USB Audio Interface

Whatever your DAW of choice is, it's compatible with the Aggressively Distorting Advanced Machine. You can record your processed signal to one track and simultaneously record an unprocessed copy to another track. Recording a stereo track at the same time from the Aux input is also possible.

The Aggressively Distorting Advanced Machine supports 48 kHz and 44.1 kHz sampling rates.

Setting up the drivers

If you are using a Mac, no additional drivers are required to use the Aggressively Distorting Advanced Machine as an audio interface. If you are using Windows, please download the latest USB audio drivers from <https://www.darkglass.com/suite/>. Please refer to the Darkglass website for more details regarding USB audio.

USB Routing

USB output (to Aggressively Distorting Advanced Machine)

- Output 1: Balanced left + Headphone left
- Output 2: Balanced right + Headphone right
- Output 3: Balanced left
- Output 4: Balanced right

- Output 5: XLR DI (mono)

Both Mac and PC send system audio to outputs 1 and 2 by default, so you can always use the Aggressively Distorting Advanced Machine's stereo output of choice without having to set up any extra routing

The level of these outputs is controlled by the small volume potentiometer at the top of the Aggressively Distorting Advanced Machine. The other outputs have no volume control on the Aggressively Distorting Advanced Machine. USB input (from the Aggressively Distorting Advanced Machine)

- Input 1: Processed signal
- Input 2: Unprocessed raw signal
- Input 3: Aux left + Bluetooth left
- Input 4: Aux right + Bluetooth right

Audio Routing

When the Aggressively Distorting Advanced Machine is not bypassed, the Level potentiometer always controls the volume of your instrument input at all four outputs, and has no effect on the USB/Aux/Bluetooth audio.

When the Aggressively Distorting Advanced Machine is bypassed, the Level potentiometer has no effect.

Your instrument, Aux input, and Bluetooth audio is routed to the headphone and balanced outputs. The media volume at these outputs can be controlled with the small potentiometer at the top of the Aggressively Distorting Advanced Machine.

When using the balanced outputs, the media volume and instrument volume level are separately controlled (small volume potentiometer at the top of the Aggressively

Distorting Advanced Machine and the Level potentiometer, respectively).

When using headphones, the volume is controlled in the same way, with one exception: the headphone volume potentiometer acts as an overall master volume for both media and your instrument input.

The XLR DI output is routed only with your instrument output and USB output 5.

The media playback volume level on the Aggressively Distorting Advanced Machine is not applied to USB inputs 3 and 4.

Darkglass IR Library

The Darkglass Suite software currently comes with an extensive library of IR files and hundreds more will be added in the near future. The library consists of both bass and guitar cabinets. Captures of Darkglass Elite Series and Neodymium Series cabinets are available, among others.

Technical Specifications

Input impedance: 1 MΩ


Output impedance: 220 Ω

Current consumption: ~500mA










Voltage: 9VDC (center negative)

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Documents / Resources

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|  | <p>DARKGLASS Aggressively Distorting Advanced Machine Distortion Pedal [pdf] Instruction Manual</p> <p>Aggressively Distorting Advanced Machine Distortion Pedal, Distorting Advanced Machine Distortion Pedal, Advanced Machine Distortion Pedal, Machine Distortion Pedal, Distortion Pedal, Pedal</p> |
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References

-  [Darkglass Electronics](#)
-  [Suite – Darkglass Electronics](#)
-  [Careers – Darkglass Electronics](#)
-  [Aggressively Distorting Advanced Machine – Darkglass Electronics](#)
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