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Aggressively Distorting Advanced Machine firmware v1.3 changelog

New in this update: Expanded MIDI control and customization, custom routing configuration for each output, input pad selection, drive range extensions (low-gain), adjustable compressor attack/release settings, selectable cabsim placement, EQ type, direct monitoring options, and three new preset slots.

To utilize the features introduced in this firmware, Darkglass Suite version 4.0.3 or greater on desktop (macOS/Windows) or Darkglass Suite version 4.0.3 or greater on mobile (iOS/Android) is required.

For the best USB interface performance, please use the latest Darkglass USB audio drivers.

MIDI

Using the MIDI input on the Aggressively Distorting Advanced Machine, you can change between your saved presets, different modes, update the smart potentiometers, touch sliders, and encoders, and save new presets.

Aggressively Distorting Advanced Machine responds to two main types of MIDI messages: **program change** (PC) and **control change** (CC) messages. The MIDI setup can be fully customized in the Darkglass Suite.

Channel selection

The MIDI channel Aggressively Distorting Advanced Machine responds to can be set to the following:

- Channel 1 to 16
- Omni (responds to all channels)
- MIDI disable (Aggressively Distorting Advanced Machine will not respond to or output any MIDI, regardless of channel)

Program change messages

PC messages no longer infinitely loop through preset changes, and there is now a unique PC message for each preset change. Overall, PC messages can now be used to:

- Change presets (one PC per preset)
- Change modes (one PC per mode)
 - Tuner, Bypass, Performance Lock
- Save presets (one PC for each preset)

Repeated preset change messages for the same preset will toggle between the audition, if it exists (equivalent to repeatedly pressing the same encoder to switch between a preset and an audition).



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Repeated mode change messages for the same mode will toggle between that mode and the last preset.

There is one PC message per preset-save instruction. PC messages for saving presets will save the active audition into the specified preset. If the audition is not active (preset LEDs are not breathing), nothing will happen

Customization settings:

- Each PC message can be set to a custom number in the MIDI tab in the Suite
- Each PC message can be individually disabled, if desired

Control change messages

CC messages are used to control the parameters of the Aggressively Distorting Advanced Machine. In this update, there are two main changes:

1. Control of the headphone volume potentiometer with MIDI is now possible. This changes the CC defaults slightly compared to previous firmware versions.
2. Encoder CC behavior is affected by the encoder rotation setting (detailed below).

Customization settings:

- Each CC message can be set to a custom number in the MIDI tab in the Suite
- Each CC message can be individually disabled, if desired

Encoder rotation setting

An additional customization option (encoder rotation type) has been added that changes the way Aggressively Distorting Advanced Machine responds to encoder CC messages. There are two options:

- **Full range** - Default, entire CC value range is mapped across the encoder position
- **Per-value** - Each CC message value sets a new encoder position, looping every 6 values
 - CC value 0 sets the bypass position
 - CC value 1 sets the first position (leftmost LED)
 - CC value 2 sets the second position (second LED from left)And so on...

Per-value mimics the way the encoders work on the actual device.

USB MIDI

USB MIDI (in/out) is now supported. The Aggressively Distorting Advanced Machine will respond to MIDI messages received over USB identically to those received at its MIDI IN port.

USB MIDI is also sent from Aggressively Distorting Advanced Machine to the host machine. Physically changing the potentiometers, sliders, and rotating the encoders will automatically send MIDI messages (using the same custom configuration) through USB.



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DSP configuration (per-preset)

The following DSP configurations can be set individually for each of the six presets on the Aggressively Distorting Advanced Machine.

Active/passive input pad

When active mode is set (such as when using an active bass), the instrument input is padded by -6dB.

The default is passive mode with no input pad. Active basses can safely be used with passive mode if more distortion is desired.

Compressor settings

The compressor attack and release time can be adjusted per-preset. Lower values correspond to slower settings, and higher values correspond to faster settings.

Distortion range

The low and high range of the distortion can be modified to reduce or increase the range of the drive potentiometer.

The range extensions at each end are from -12dB to 0dB. For lower gain drive sounds, the lower range can be extended. To limit the max drive, the higher range can be reduced.

Cabsim placement

The cabsim can now be placed in two locations in the signal chain:

- Before blend (default, only affects distortion chain)
- After blend (affects entire signal chain)

EQ mode

The EQ type can now be changed.

- Darkglass (default)
 - Left to right: low shelf, 250 Hz, 500 Hz, 1.5 kHz, 3 kHz, high shelf
- Generic
 - Left to right: 100 Hz, 200 Hz, 400 Hz, 800 Hz, 1.6 kHz, 3.2 kHz

DSP configuration (global)

The following configuration is set globally on the Aggressively Distorting Advanced Machine.

Output routing

Each output can now have a different audio routing. Listed below are the available options for each output.

XLR

- Normal (Nolly's signal chain)
- Bypass



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Balanced left and right

The balanced left and the balanced right can be individually configured.

- Normal (Nolly's signal chain)
- Bypass
- Cabsim bypass
- Distortion sidechain only with cabsim bypass
- Clean sidechain only with cabsim bypass

Direct monitoring options

Direct monitoring when recording over USB can now be configured.

- Always on (default)
- Off when connected via USB

Now, you can turn direct monitoring off when connected to USB. Within your DAW, you can mix your instrument signal and other DAW audio as you like, and only the USB audio output to the pedal will be played back through the physical outputs.

Additional preset slots

Three additional presets D, E, and F are now available. This can be accessed through MIDI control and through the DSP configuration tab in the Suite. Further Suite integration is coming soon!

FAQ

What does encoder rotation type mean?

It changes how the device controls the encoders when it receives MIDI messages. "**Per-value**" mimics the actual encoders on the device and "**Full range**" is how the control previously worked by default.

Can I save/store multiple sets of MIDI configurations in the Suite?

Not at the moment. The only MIDI map that can be saved is the one on the device.

I updated my firmware and now my MIDI setup doesn't work properly!

The default mapping for PC and CC messages have changed slightly. Check the MIDI config in the Suite to verify your setup and make changes if needed.

I don't want to save presets or change modes with MIDI!

PC/CC messages can be individually disabled in the Suite so that no MIDI will perform these actions.

How do I use USB MIDI?

You don't have to configure anything separately on the device. The Aggressively Distorting Advanced Machine's MIDI I/O should show up automatically as an option in your program of choice when it is connected with USB. Route MIDI IN/OUT as desired and you're in business!



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What does the active/passive mode do?

If you're using an active bass and find that the signal is too hot, or want to lower the input gain at the instrument input for a preset, select 'active' to pad the input by -6dB. Passive mode does not change the input gain.

How does the distortion range work?

If you're after a lower gain drive, then you can extend the lower range of the distortion to give you less intense distortion at low drive levels. If you don't want the maximum drive to be super heavy, you can also reduce the max gain of the drive.

How can I save to the additional presets?

There is one MIDI PC message for each preset you'd like to save to. These can be customized in the Suite. Your audition must be active (preset LEDs are breathing) in order to save it to a preset.

But I don't have a MIDI controller!

MIDI through USB is now supported! Enable the Aggressively Distorting Advanced Machine's USB MIDI OUT in any program that can be used to control MIDI over USB, and you're good to go! More control (saving/loading presets, etc.) will be added to the Suite in the future, stay tuned!

I updated my app and the MIDI mapping doesn't work!

On mobile, the MIDI map may incorrectly display when connected to a device with firmware v1.2. The MIDI mapping tab will be visible, but any changes made will have no effect within the app or the device. Please ensure that you have updated the firmware to v1.3.

Noise gate?

Not in this update. s o o n !