



# Heavy Pedal mkII

(AAX, AU, CLAP, VST2, VST3)

produced by Luca Capozzi (Audiority Srls), May 2019

**Current Manual version:** v2.1 (June 2023)

**Heavy Pedal** is an analog modeled simulation of the infamous \*BOSS® HM-2™, Swedish Chainsaw distortion stompbox introduced in the mid 80s and that sculpted the guitar tone of many metal guitarists.

Please, read carefully both product specifications and system requirements **before** purchasing any **Audiority** product.

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# Heavy Pedal mkII

produced by Audiority, May 2019.

## Credits

Code & DSP: Luca Capozzi (Audiority Srls), May 2019

GUI Design: Luca Capozzi

Published by Audiority Srls

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## Specifications

- Independent Tone, Distortion and Level controls
- Pre and Post effect gain
- Mix control
- Noise Gate
- 9 different pedal circuits
- Resizable interface

## System Requirements

### PC

- Windows 7 64bit or later
- Intel i5 or equivalent
- 4 GB RAM
- Screen resolution: 1024×768
- VST2, VST3, AU, CLAP 64-bit host
- PT11 or higher, AAX 64-bit host

### MAC (Intel)

- OSX 10.9 or later
- Intel i5 or equivalent
- 4GB RAM
- Screen resolution: 1024×768
- VST2, VST3, AU, CLAP 64-bit host
- PT11 or higher, AAX 64-bit host

### MAC (Silicon)

- macOS 11.0 or later
- M1 or higher
- 4 GB RAM
- Screen resolution: 1024×768
- VST2, VST3, AU, CLAP 64-bit host
- PT11 or higher, AAX 64-bit host

## FILE LOCATIONS

### Mac

All presets, license, IR files and settings are located in:  
/Users/Shared/Audiority/

AAX, CLAP and VST plugins will be placed in their own Audiority sub-folder located in:

AAX: /Library/Application Support/Avid/Audio/Plug-Ins/Audiority  
CLAP: /Library/Audio/Plug-Ins/CLAP/Audiority  
VST: /Library/Audio/Plug-Ins/VST/Audiority  
VST3: /Library/Audio/Plug-Ins/VST3/Audiority

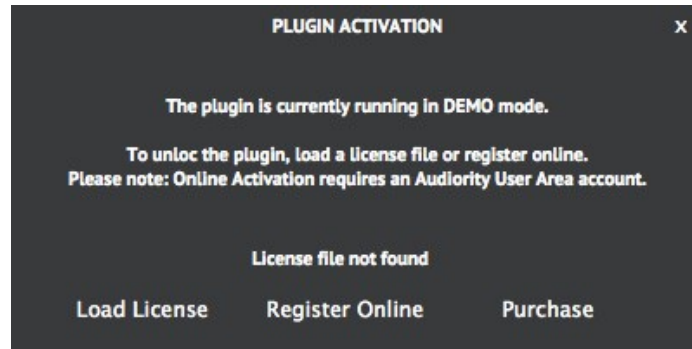
### PC

All presets, license, IR files and settings are located to:  
C:\Users\Public\Public Documents\Audiority

AAX, CLAP and VST plugins will be placed in their own Audiority sub-folder, usually located in:

AAX: C:\Program Files\Avid\Audio\Plug-Ins\Audiority  
CLAP: {Your CLAP Path}\Audiority  
VST: {Your VST Path}\Audiority  
VST3: {Your VST3 Path}\Audiority

## PLUGIN ACTIVATION



Once you install and open the plugin for the first time, it will be in **Demo Mode** until a license file is loaded. In Demo Mode the plugin will output 3 seconds of silence every minute.

You can activate the plugin either OFFLINE or ONLINE.

### OFFLINE ACTIVATION

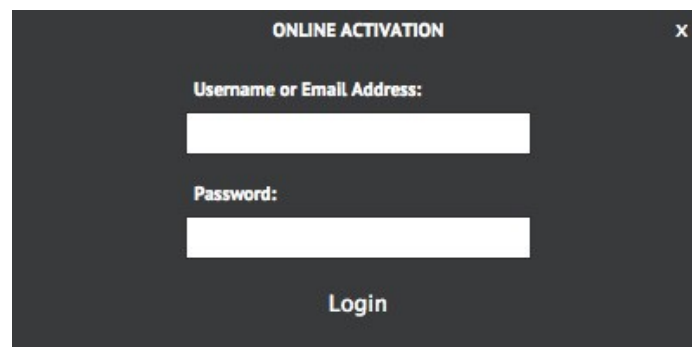
If you purchased the plugin from our site, you should have received an email to download the installers and the license file. Save the license file you got with your purchase email (or via our User Area) anywhere on your computer.

Then, to activate the plugin, click on the **Audiority** logo and select **“Register”**. The Registration window will pop up allowing you to load the license file you got while purchasing the plugin by clicking the **“Load License”** button. Alternatively, you can drag and drop the license file on the registration window.

**NOTE:** If you purchased the plugin from one of our dealers, please check the **“USER AREA AND REDEEM CODES”** section below.

### ONLINE ACTIVATION

If you are registered to our User Area, then you can activate the plugin online.



Insert your Username (or email address), your password and click the **“Login”** button. The license file will be automatically delivered in your computer and the plugin will be activated.

## USER AREA AND REDEEM CODES

If you purchased from one of our dealers, then you should have received an email with a redeem code. This code is required to deposit a license in your User Area account and let you download the license file or activate the plugin online.

If you don't have an User Area account yet, please follow these steps:

- 1) Go to <https://www.audiority.com/register> and fill out the signup form.

**IMPORTANT:** Please be sure to register with the **e-mail address you use for your purchases**, otherwise your products will not show. Since we use reCAPTCHA for registration only, please temporarily disable any ad blocker you are using.

**Username**

**First Name**

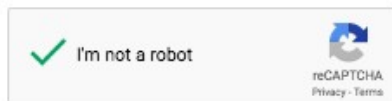
**Last Name**

**Purchase E-mail Address**

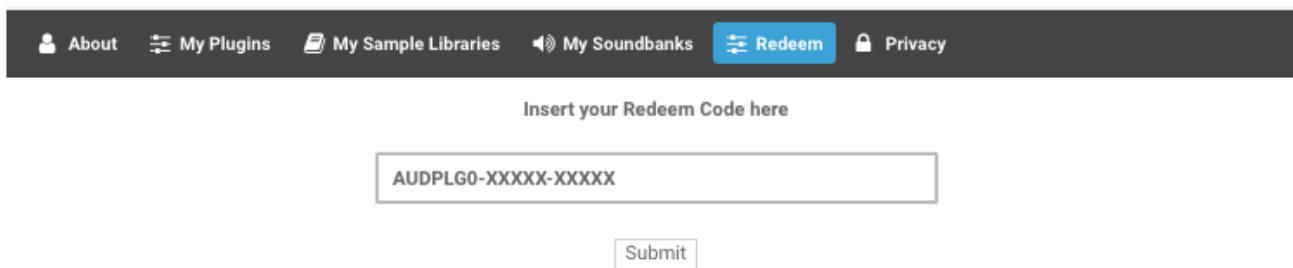
**Password**

**Confirm Password**

I read and agree to the Privacy Policy and Terms of Use

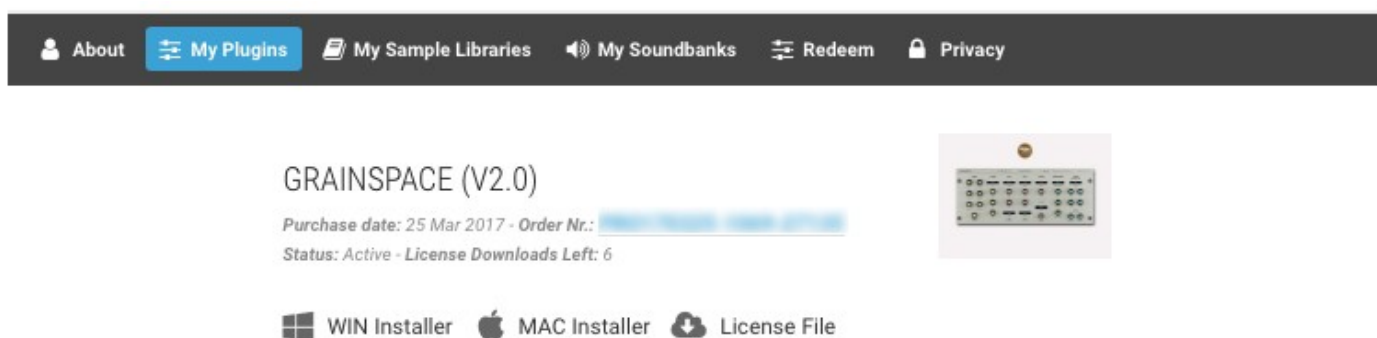


2) Once registered, log in to your account by clicking the User Area section of our site. Click the **REDEEM** section of your account and paste the code you received via email from our dealer.



The screenshot shows a dark navigation bar with links: About, My Plugins, My Sample Libraries, My Soundbanks, Redeem (highlighted in blue), and Privacy. Below the navigation bar, the text "Insert your Redeem Code here" is centered. A text input field contains the code "AUDPLG0-XXXXX-XXXXX". Below the input field is a "Submit" button.

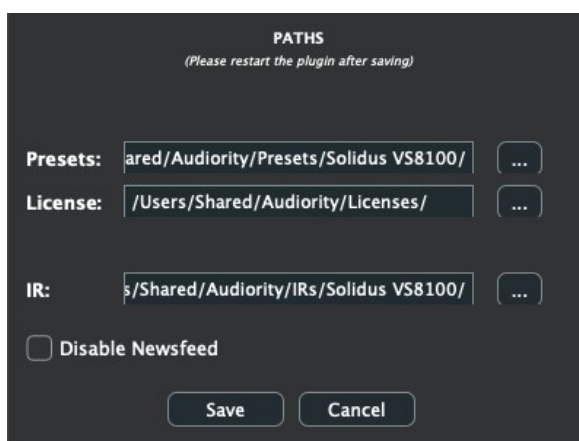
3) After submitting the code, a license will be deposited in your account and will be shown in “**MY PLUGINS**” section of your User Area.



The screenshot shows the "My Plugins" section of the user area. The navigation bar includes: About, My Plugins (highlighted in blue), My Sample Libraries, My Soundbanks, Redeem, and Privacy. The main content area displays the plugin "GRAINSPACE (V2.0)". Below the plugin name, it shows "Purchase date: 25 Mar 2017 - Order Nr.: [redacted]" and "Status: Active - License Downloads Left: 6". To the right is a small image of the plugin's interface. At the bottom, there are three download options: "WIN Installer" (with a Windows logo), "MAC Installer" (with an Apple logo), and "License File" (with a download icon).

4) Now you can click “License File” and save the license anywhere on your computer and ready to be loaded through the plugin registration window. You can also skip this part and activate your plugin online (see previous section of this manual).

## USER PATHS SETTING



The screenshot shows a "PATHS" settings dialog box with a dark background. At the top, it says "PATHS" and "(Please restart the plugin after saving)". There are three rows of settings, each with a label, a text input field, and a browse button (three dots):  
- "Presets:" with the path "ared/Audiority/Presets/Solidus VS8100/"  
- "License:" with the path "/Users/Shared/Audiority/Licenses/"  
- "IR:" with the path "s/Shared/Audiority/IRs/Solidus VS8100/"  
At the bottom, there is a checkbox labeled "Disable Newsfeed" which is currently unchecked. Below the checkbox are two buttons: "Save" and "Cancel".

By selecting “**Settings**” from the logo menu, you can change the path for **Presets**, **License** and **IR** folders. You can also disable our Newsfeed from here.

**Note:** Please do not move the **Settings** folder from its default location.

# Plugin Parameters



## TOOLBAR

The Toolbar allows you to manage the plugin presets, register the plugin and set some global parameters.

By clicking the **AUDIORITY** logo, in the top left corner of the Toolbar, you'll be able to visit our website and social profiles, register the plugin, change the interface size and customize the paths for license and preset files.

The **HQ** button will enable oversampling, useful to reduce aliasing when the signal saturates. Use the **Randomize** and **Reset** buttons to experiment with random presets or restoring it to its saved version.

## PARAMETERS

<b>LEVEL</b>	Controls the output volume of the pedal.
<b>L (COLOR MIX)</b>	Post distortion active low end tone control stage. Set it to minimum to cut the bass of the sound and to the max to boost around 85Hz.
<b>H (COLOR MIX)</b>	Post distortion active high end tone control stage. Set it to minimum to cut the highs of the sound and to the max to boost them.
<b>DIST</b>	Sets the distortion amount. Set it to the minimum to get a some light dirt to use the pedal as a booster, or to the max for a fully distorted tone.

## GLOBAL CONTROLS (bottom right)

<b>TYPE</b>	Switch between different circuit models. Check next paragraph for more details.
<b>GATE</b>	Noise gate threshold.
<b>IN</b>	Pre effect gain.
<b>OUT</b>	Post effect gain.
<b>MIX</b>	Dry/wet signal mixer.

### **RESIZING CONTROLS (Audiority logo menu)**

<b>Small Size</b>	Reduce the size of the plugin interface.
<b>Default Size</b>	Resets the plugin interface to its original size.
<b>Big Size</b>	Increase the size of the plugin interface.
<b>Resizing Corner</b>	You can resize from the bottom right corner of the GUI

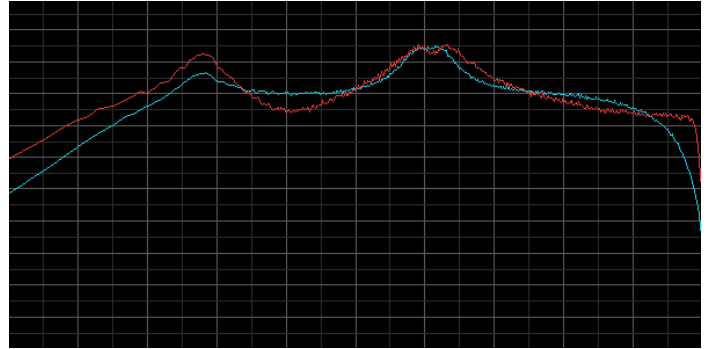


## Circuit Types (MODS)

We implemented different versions of the pedal circuit, each one with different tonal characteristics. Below you'll find a description of the circuit type, along with a spectrum of the original pedal (RED) and the simulated circuit (BLUE).

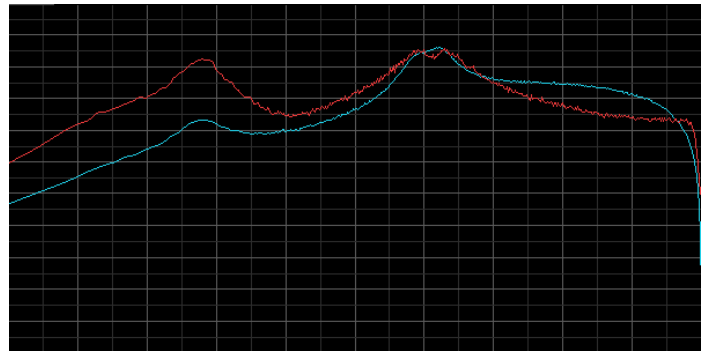
### DEFAULT

Our first circuit version follows the original schematic including some measurements done to the hardware.



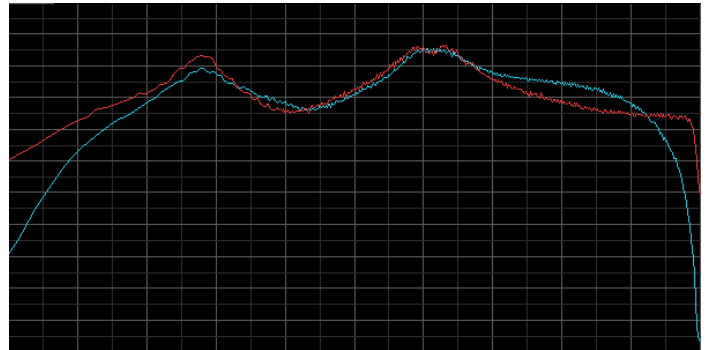
### 808 MOD

A brighter version of the circuit with less distortion. We removed D3, D4 and D5 from the first distortion stage and replaced D8 and D9 with a couple of MA150 diodes.



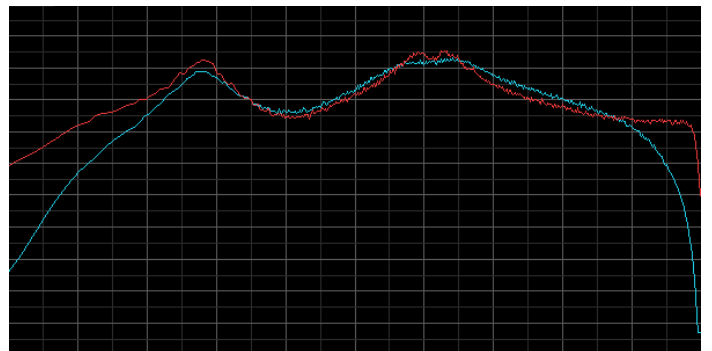
### MIJ Japan

A closer perceptive approach to the hardware pedal. We further tuned the component values to get better EQ shapes, coupled with an impulse response of the hardware on steady state (with both EQ knobs at noon).



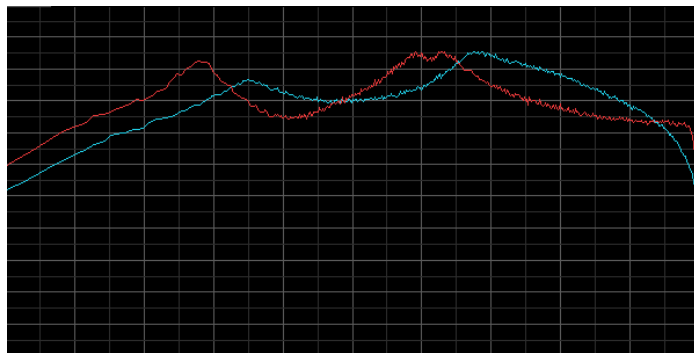
### SWEDE!

There's only ONE setting! This version of the circuit locks the EQ to its highest values while applying an impulse response of the hardware pedal with EQ knobs fully clockwise.



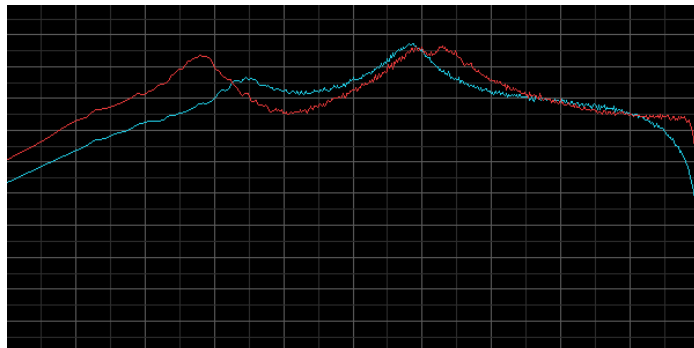
### WAMPLER

Mod based on Brian Wampler's book "How to Modify Guitar Pedals". Brighter than the original pedal circuit, with removed D4 and D5 diodes. D3, D8 and D9 has been replaced with an 1N4001 and two 1N34A respectively.



### ZED

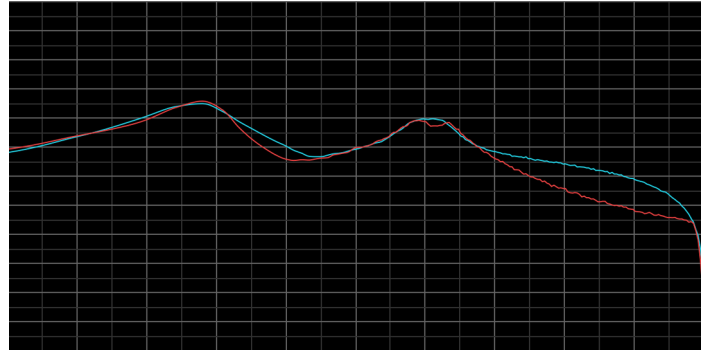
This version of the circuit feature different EQ configurations to get a warmer and a bit scooper tone compared to the Default circuit. Diodes D4 and D5 has been removed while D3, D8 and D9 has been replaced with an 1N4001 and two 1N4148 respectively.



## mkII New Mods

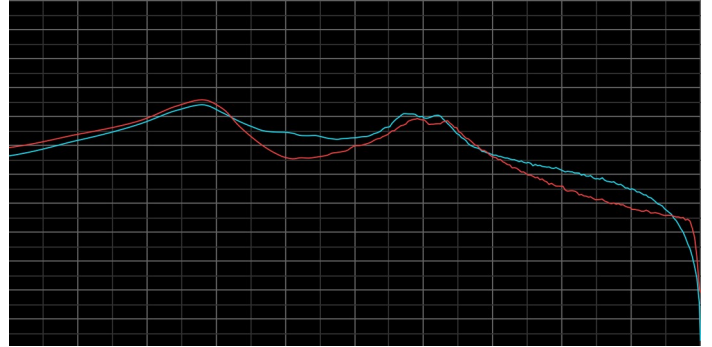
### FILTH

Custom modification based on the MIJ Japan, with increased bias and saturation on the gain stages. Diodes D3 and D4 has been replaced with DA90 germanium diodes, while D8-D9 has been replaced with an 1N4001 and two DA90.



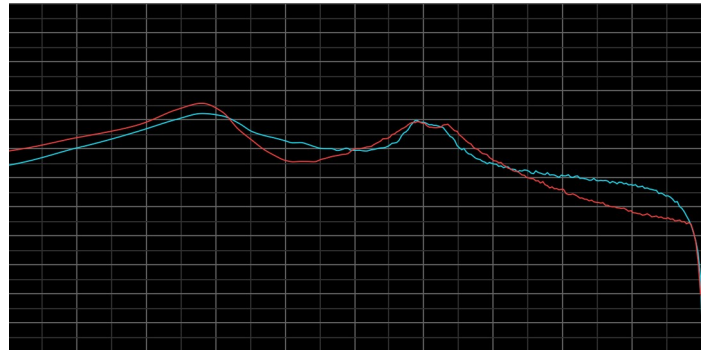
### FX-56

This mod has been based on a DOD FX-56B. Less scooped than the original HM2 and diodes used are 1N4148.



### SMM-1

This mod is based on the Arion SMM-1, which is very close to the original HM2. D8 and D9 has been replaced with DA90 diodes.



#### **TIPS**



To get best results, place this plugin BEFORE your amp simulator!

Use it as a booster by setting DIST to minimum and using LEVEL to control the outgoing signal volume.

Some artists place another distortion before this one, to retain its characteristic EQ while having a different saturation.

# CHANGELOG

## **v2.1** (June 2023)

- NEW: Framework update
- NEW: CLAP plugin format
- NEW: AAX Native Silicon

## **v2.0.4** (November 2021)

- NEW: Updated framework
- FIX: Value not shown while hovering on Dist knob
- FIX: VST3 version of the plugin silencing while activated

## **v2.0.3** (July 2021)

- FIX: Unexpected muting while activated

## **v2.0.2** (July 2021)

- FIX: Rare condition where licenses get invalidated

## **v2.0.1** (May 2021)

- FIX: Unwanted harsh artefacts on high gain values
- CHANGE: Updated framework

## **v2.0** (April 2021)

- NEW: Updated Framework
- NEW: Universal 2 Binary for Apple Silicon Macs
- NEW: Revamped GUI
- NEW: Corner Resizer (bottom right corner of the UI)
- NEW: New circuit models
- FIX: Silence triggered randomly in some configurations
- FIX: Footer labels now show parameter values when using mouse wheel
- CHANGE: HQ is now global (per session)
- BREAKING CHANGE: Improved non-linear models
- BREAKING CHANGE: New Noise Gate

## **v1.1** (November 2019)

- NEW: Mac OSX Catalina support
- NEW: Notifications system
- FIX: Edit command visible to end user
- FIX: Wrong VST3 category

## **v1.0.1** (May 2019)

- FIX: crash when enabling HQ with some circuit types
- FIX: volume loss when switching to HQ
- UPD: Performance improvements

## **v1.0** (May 2019)

- Original release

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Last updated on Jan 25th, 2023

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