Inear Display Amalgame

User Guide

Version 1.5



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Introduction

Thank you for using Amalgame!

To get the most out of it please take some time to read this manual.

Amalgame is a multi-effect plugin that aims to streamline the creation of complex signal processing chains. Offering an intuitive workflow with all the functions easily accessible and logically laid out, Amalgame makes mutating sounds beyond recognition a breeze.

Amalgame provides a library of 23 effects ranging from bread and butter filters and delays to more esoteric and glitchy processors, which are always accessible and ready to be dropped on 6 XY pads where their key parameters are mapped to each axis.

The X and Y parameters of each pad can be sequenced from within the plugin with independent rate and length for each sequence giving you the opportunity to create insanely complex modulations in a few clicks.

And for an instant creativity boost, a versatile randomizer lets you alter the parameters, sequences and effect selections of any slot, or even regenerate the whole processing chain at the press of a button.

Installation and First Launch

To use Amalgame, you need a VST3 or Audio Unit host such as Ableton Live, Logic Pro, Cubase, Bitwig, Reaper, FL Studio, Renoise, etc...

- **macOS:** The installer will automatically place the AU and VST3 files in the appropriate folders.
- Windows: The installer will automatically place the VST3 in the appropriate folder.

Once you have installed the plugin, open your host and you will find Amalgame in the effect plugins list.

> Amalgame is only available as a 64 bit plugin.

➤ Amalgame is a stereo-only plugin. It may not appear in the plugins list in some hosts if the selected track is a mono one.

➤ On macOS, if you encounter issues while saving presets, please refer to <u>this FAQ</u> to fix the folder permissions.

Interface Overview

The upper section of the panel hosts the effect library. Here you can pick an effect from the list and drag it onto a slot below to assign it to

THRU	PAN AMP	PEAK EQ	ΝΟΤCΗ ΕΩ
LPF	HPF	BPF	SCREAMO
PING-PONG	METALIZER	BOT DELAY	VERB
CHORE	PHASED	RING	VOWEL
SATURATE	FOLD	RING TRASHER	LOFI
PITCHA	DRILLA	TRANSIENT	SPECTRE

that slot. The effects are sorted by colored thematic groups. You can also access details about an effect by holding OPTION (macOS) or ALT (Windows) while clicking on it to get a description of the algorithm and the parameters.

Below the effect library you can find the chain zone which hosts 6 effect slots. The currently selected effect type for each slot is displayed below its



controls area. Clicking on the effect name will toggle the slot on and off. A small slider below the effect name allows you to control the dry/wet ratio of the corresponding slot.

Each slot has 3 tabs :

- The first tab named PAD brings the effect XY pad into view. Moving the pad will alter the parameters of the currently selected effect.
- The two other tabs named X and Y allow you to sequence the XY pad movement.

On the right side of each tab button, a dot can be clicked to toggle the corresponding sequence on or off. Once a sequence is selected, you can edit its data by clicking and dragging your mouse over the steps. You can also adjust the rate and length of the sequence using the dedicated controls below the sequence data. Below the effect slots sits the global controls section. The RANDOM section can be used to set



various aspects of the patch to random settings, and the MASTER section allows you to adjust the plugin input gain, the processing chain output gain and the processed signal mix amount.

Finally, the footer of the panel hosts the preset controls, letting you load and save patches, as well



as a button to open the configuration menu where you can access some general options.

➤ You can resize the plugin window using the handle in the bottom-right corner. The settings will be preserved the next time you launch the plugin.

Loading and Saving Presets

Amalgame offers a varied selection of factory presets to illustrate some of the possibilities of the plugin.

➤ While these presets make a good starting point, the main interest of Amalgame is to create your own patches.

To load a preset, click on the button which displays the current preset name at the center of the footer. A menu will pop up, listing all the presets in the preset directory. Select a preset in this menu to load the corresponding patch.



Alternatively you can use the arrow buttons on both sides of the preset name to cycle through the presets.

To save a preset, open the preset menu by clicking on the preset name button and choose the option SAVE PRESET... at the top of the menu (this function is disabled in the Demo version).

➤ To manage the presets, you need to access the presets directory in the Finder/Explorer by selecting the appropriate option in the configuration menu. Then you can just manage the files as you would do for any other files.

> Only preset files saved at the root of the preset directory will be detected by the plugin.

➤ On recent macOS versions, you may encounter an error when trying to save presets due to permission issues. Please see <u>this page</u> to work around this issue. The best way is probably to make the whole <u>Inear_Display</u> directory writable (and apply the same permissions to its child directories).

Effects

Occupying the upper part of the panel, the effect library gives you instant access to 23 sound processors (and an additional pass-through processor).

PAN AMP	PEAK ED	ΝΟΤϹΗ ΕΩ
HPF	BPF	SCREAMO
METALIZER	BOT DELAY	VERB
PHASED	RING	VOWEL
FOLD	RING TRASHER	LOFI
DRILLA	TRANSIENT	SPECTRE
	HPF METRUZER PHRSED FOLD	HPF BPF METALIZER BOT DELAY PHASED RING FOLD RING TRASHER

The effects are sorted by categories which are color coded :

- Utility processors
- Filter processors
- Delay processors
- Modulation/Timbre Alteration processors
- Distortion processors
- Special processors

The THRU processor is a placeholder effect that can be used to make an effect slot inactive (you can achieve the same by bypassing the slot).

To get more details about a processor, hold OPTION (macOS) or ALT (Windows) while clicking on it in the library to open a quick help panel with a summary of the effect algorithm and its parameters.

The best way to get a feel of what an effect can do is to try it out on a signal.

➤ These processors are all focused on one function and easy to grasp, but interesting things and way more complex sound transformations happen when you start chaining them and sequencing their parameters.

To add an effect to the chain, simply drag it from the library to the desired effect slot in the chain view below.

XY Pad

Below the effect library a set of 6 slots make the effect chain view. Everything mentioned below applies to any of the slots.

Once you have dragged an effect from the library onto a slot, its title bar (below the slot) will turn to the group color of the selected effect and will display the name of that effect.

Clicking on the title bar toggles the effect between active and inactive : this is useful to mute an effect and save some CPU power.

Below the title bar, a slider controls the mix of the input and output (processed) signal for the slot.



Above the title bar you can find 3 buttons that let you switch between the 3 available tabs for the slot :

- PAD
- X
- Y

Here we will focus on the Pad tab which is the default view for a slot.

When this tab is selected, the slot displays a colored circle which you can drag around to alter the parameters of the effect. You can get more information in the effect library about which parameters are exposed via the pad.

The X and Y parameters are automatable in your DAW so you can record the pad movements and edit them in your DAW arrangement.

As we will see in the next section of this manual, both the X and Y axis can be controlled using a dedicated sequencer.

If a sequence is active (dot indicator colored on the corresponding sequence tab button), the values from the sequence are used for the corresponding axis. In that case, lines will appear in the pad for each axis and display the currently used value.

If only one of the axes is sequenced you can still alter the other axis by moving the handle in the pad zone (the value of the sequenced axis will simply be ignored).

Right-clicking on a pad will bring up a contextual menu that allows you to access the internal clipboard to copy and paste data across slots, as well as configure MIDI controller mappings for the X and Y axes (see the MIDI section of this user guide for more info).

The internal clipboard is local to a single instance of a plugin. The available options are :

- COPY SETTINGS : will copy all of the slot data (effect type, X and Y position, sequences data)
- PASTE submenu
 - ALL SETTINGS : paste the full content of the clipboard to this slot
 - ALL SEQUENCES : paste all sequence data from the clipboard to this slot
 - X SEQUENCE : paste X sequence data from the clipboard to this slot
 - Y SEQUENCE : paste Y sequence data from the clipboard to this slot

➤ Holding the CTRL (on Windows) or COMMAND (on Mac OS) key down while dragging a slot allows you to alter the chain order. Dragging the slot onto another one that way will put the dragged slot at the place of the target slot and will move all the following effects by one slot accordingly.

Sequences

Clicking the X or Y buttons below an effect slot will bring the corresponding sequence into focus in place of the XY pad.

Sequences are inactive by default : to toggle a sequence on or off, you need to click on the dot indicator on the tab button.

The upper part of the sequence editor displays the values of each sequence step.

Click and drag on a step to change its value. You can drag your mouse over several steps to set their values in one move. An indicator overlay highlights the step that is currently playing.



Below the step editor, you will find several controls that let you alter the sequence :

- The RATE knob allows you to adjust the duration of one step according to the host tempo.
- The LENGTH knob controls the number of active steps in a sequence (from 2 up to 16). The steps that are currently in use are displayed using the effect group color in the step editor while the inactive steps are grayed out.
- The button in the bottom left corner lets you switch between different play modes for the sequence : -> plays the sequence from left to right, <- plays the sequence from right to left and ??? plays the sequence in random order.
- clicking on the FILL button will open a menu with various options to fill or process the sequence values (see next page for details).

The sequences in Amalgame have many uses : simple automation, LFO-like modulations, arpeggiator-like sequencing of some effects, probability tables...

➤ You can get perpetually evolving sounds by creating various sequences that play at different rates and with a different number of steps.

The timing of the sequences is sample accurate and will tightly follow the host position. When you alter the rate or length of a sequence the playback position is automatically recalculated so that it still maps to the host playhead, that is why it may sound like glitching while adjusting these parameters : the playhead may quickly jump around the steps or seem like stuck on one of them. This guarantees that you get predictable results and that the sound you hear will be the same every time you reopen a project.

➤ The sequencers will not work in a host software that does not pass a clock position to the plugin (wave editors for example).

Sequence fill options

- RAMP UP : fills the steps with values linearly increasing from minimum to maximum.
- RAMP DOWN : fills the steps with values linearly decreasing from maximum to minimum.
- TRIANGLE : combines a RAMP UP and a RAMP DOWN
- SINE : fills the steps with a sinusoidal shape
- MAX : sets all steps to the maximum value
- CENTER : sets all steps to the medium value
- MIN : sets all steps to the minimum value
- REVERSE : flips the step values horizontally
- MIRROR : flips the step values vertically
- SHIFT LEFT : moves the step values by one step to the left, wrapping around
- SHIFT RIGHT : moves the step values by one step to the right, wrapping around
- SORT : shuffles the positions of the existing steps to sort them in increasing order
- SHUFFLE : shuffles the positions of the existing steps
- RANDOM : sets all steps to random values

Master Parameters

These parameters affect the overall chain signal :

- IN AMP : sets the amplitude of the signal going through the chain.
- OUT AMP : sets the amplitude of the signal coming out of the chain.



• DRY/WET : mixes the original signal with the processed one (after it has been scaled by the Out Amp parameter). When set to the minimum, only the input signal will be outputted by the plugin. When set to the maximum, only the processed signal will be outputted by the plugin. The original and processed signals will be equally present in the output when this knob is set to its center value.

Randomizer

The RANDOM section offers several useful options for regenerating parts of a patch or the whole patch. This function is a great way to get surprising results that can be the starting point for a custom patch.



> The randomizer is not available in the demo version of Amalgame.

The row of numbered buttons at the bottom of the randomizer control if an effect slot will be affected by the randomization. When one of these buttons is engaged, the corresponding slot will have its settings regenerating when one of the randomizer controls is pushed. By default, all the slots are affected by the randomizer.

There are 4 randomization options available which are triggered by pushing the corresponding button :

- XY : randomize the X and Y positions of the slots
- FX : randomizes the effect type of the slots
- SEQ : randomizes the sequence settings and steps of the slots
- ALL : equivalent to pushing the 3 buttons mentioned above at the same time

Configuration Menu

This menu, where you can access various global functions/options of the plugin, is triggered by clicking on the hamburger button on the right side of the preset navigation controls.



- DEACTIVATE ALL SEQUENCES : selecting this option will toggle off all existing sequences (while preserving the sequence data).
- RESET SETTINGS TO DEFAULT : selecting this option will set all the parameters to their default values.
- SAVE CURRENT STATE AS DEFAULT : selecting this option will create a default preset from the current settings, that will be used as the default state the next time you launch the plugin.
- MIDI : use this sub-menu to manage your MIDI CC mappings.
 - SAVE MIDI MAP lets you save the current set of mappings to your hard drive
 - LOAD MIDI MAP allows you to restore a set of mappings by picking a file on your hard drive.
- OPEN PRESETS FOLDER : select this option to open the Finder/Explorer window at the presets directory location.
- GO TO PREFERENCES FILE : select this option to open the Finder/Explorer window at the preferences file location.
- The last line of the config menu displays the version of the plugin that is currently running.

MIDI Learn

You can assign MIDI CCs to Amalgame X and Y parameters for each XY pad. To do so, you need to route MIDI data to the plugin in your host.¹

➤ As Amalgame is an effect plugin, most hosts will not pass it MIDI data by default. The manipulation to allow this depends on the host you are using so you should refer to the host documentation to find more information on how to configure this.

Once you have properly routed MIDI to the plugin, you can quickly assign a CC to one of Amalgame's X and Y parameters by moving the desired control on your MIDI controller and then right-clicking on an XY pad on the Amalgame panel.

A menu will show up, in which a submenu named MIDI contains the options MAP LAST MOVED CC TO X and MAP LAST MOVED CC TO Y. Select the desired option and the MIDI control will now be mapped to the desired parameter.

You can easily cancel an individual mapping by using the same menu and selecting one of these options : CLEAR X CC MAPPING or CLEAR Y CC MAPPING.

A set of all the current mappings can be saved in two ways :

- If you save the current project in your host, the mapping set will be saved along with the regular plugin data. This allows you to pick up where you left without having to manually recall the mapping set.
- You can manually save a mapping set by going to the Configuration menu and selecting MIDI → SAVE MIDI MAP.

You can manually restore a mapping set by using the Configuration menu and selecting MIDI \rightarrow LOAD MIDI MAP.

¹ This function was originally implemented to be helpful in hosts which don't provide MIDI learning facilities, but most hosts do provide such functions nowadays, which are often much more complete than the simple system built into Amalgame. You should always prefer the host function if such a function is available. The built-in system will be deprecated in future versions of Amalgame.

Tips

- You can fine tune the value of a knob or slider by maintaining the COMMAND (on macOS) or CONTROL (on Windows) key while dragging the mouse.
- You can set one of the global parameters back to its default value by double-clicking the knob.
- You can easily go back to a clean state by selecting the appropriate option in the config menu.
- Apply randomization to only a subset of the chain to create variations of a patch.
- When using the Transient effect, if you are having trouble getting any sound out of it it is probably because its input signal is too low. Try putting a Peak EQ before the Transient effect to boost the desired frequencies. If the Transient effect is in the first slot of the chain you can also boost the input level of the plugin by using the IN AMP global parameter.
- Many of the effects have their Y parameter mapped to the mix or depth of the effect. By setting most of the Y sequence steps to 0 while keeping a few steps at high values and setting the sequence playback mode to ???, the sequence will act as a probability table for the effect mix.