



User Manual v1.1

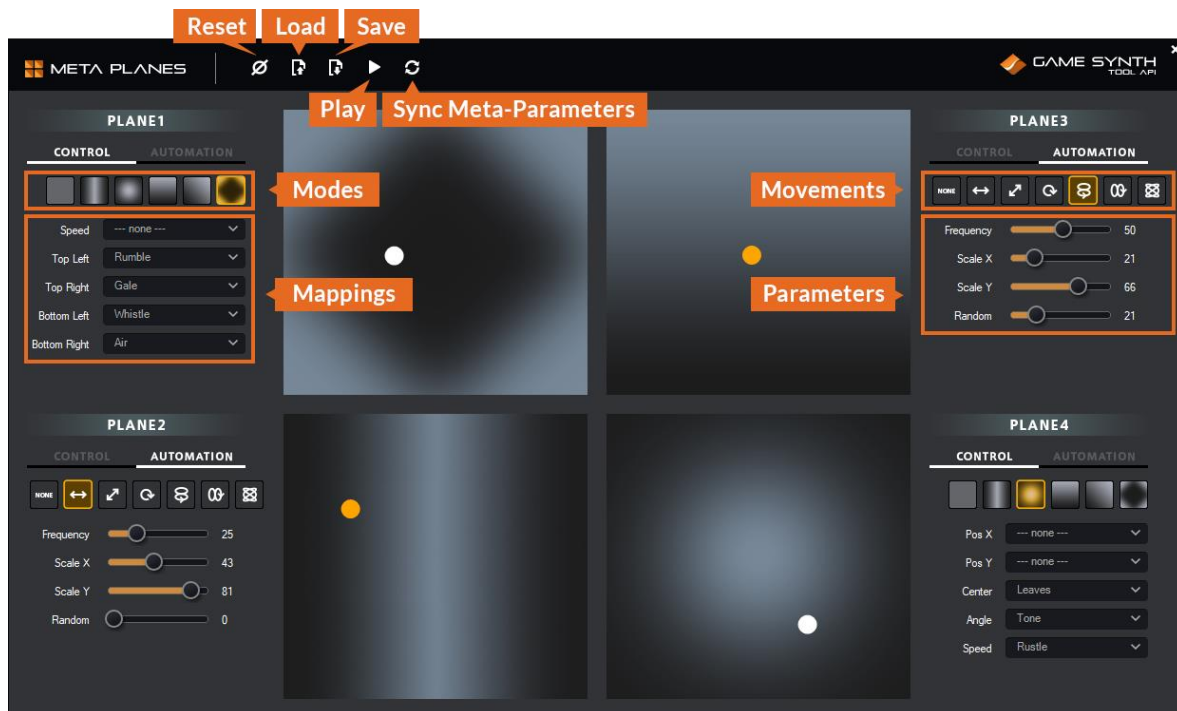
Last update 11/04/2024

1 - Overview

MetaPlanes is a standalone application offering 4 planes on which you can move your mouse to control the meta-parameters of the current patch in GameSynth. The [GameSynth Tool API](#) is used to control GameSynth remotely.

Based on the mode selected for each plane, various ways to map the meta-parameters to the mouse movements are available: using the position of the mouse, its angle and distance from the center of the plane, its speed, its distance from the plane's corners, etc.

MetaPlanes is especially useful to control ambient patches or musical layers over time.



2 - Plane modes

Here is some information about the mappings available for each plane mode.



Standard

The standard mode allows for the mapping of the mouse position and speed to the patch's meta-parameters.



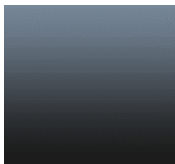
Vertical Line

This mode is well-suited to generate whooshes and trigger sonic events when the mouse crosses over the line. The value sent via the "Center" mapping quickly increase/decrease around the line.



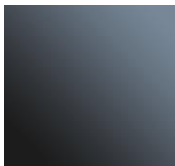
Circular

This mode is useful to create sounds based on circular movements, from tornadoes to mechanical wheels. It offers ways to send values based on the angle and distance of the mouse from the center of the plane.



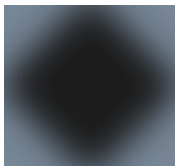
Up

This mode is similar to the Standard mode. Only the appearance differs, as it displays a gradient following the Y axis for reference.



Corner

In addition to the mappings from the standard mode, this mode can send the distance from the mouse to the top-right corner of the plane.



Mixer

This mode sends the distance from the mouse to the 4 corners of the plane. As its name implies, it is very helpful to mix up to 4 layers together.

If the target patch was designed in the Modular model, many control modules can be used to map the values sent to different scales and ranges, and logic controls can also be used to trigger sonic events from these values.

3 - Playback

There are 2 playback modes. You can click directly on one of the planes to start the patch's playback. Then, the position of the mouse, its angle and distance from the center or corners, and the speed of the movement can all be used to send values to the patch's meta-parameters. As soon as you release the mouse, the playback will stop. This is ideal for short sounds with a limited number of meta-parameters (e.g., hits on various surfaces).

For longer sounds, such as ambiances, press the Play button and then adjust the meta-parameters using all 4 surfaces while the patch is playing. When you are done, press the Play button again to stop the patch.

4 - Synchronizing meta-parameters

The GameSynth Tool API currently does not send a notification when a new patch has been loaded in GameSynth and the meta-parameters potentially changed (this will be added to the API in a future version). Therefore, press the Sync button in MetaPlanes if the meta-parameters list has changed in GameSynth (due to a new patch being loaded or to some editing).

When loading a MetaPlanes' configuration file previously saved, any meta-parameters that are not found in the current patch will be ignored and the corresponding mapping will be set to none.

5 - Automation

The movement of the dots on the planes can be automated. To do so, press on the Automation tab of a plane, and select a type of automation. When the movement is automated, the dot will be displayed in orange instead of white. The automation will start as soon as you press the Play button or start moving the mouse on a plane, and will stop when you press Play again or stop moving.

The types of automations are:



No automation is assigned



The dot will move horizontally



The dot will move diagonally



The dot will have a circular movement



The dot will move vertically following a sine curve



The dot will move horizontally following a sine curve



The dot will move following a Lissajous curve

For each automation, the following settings are available:

- **Frequency:** this value determines the time it takes to the dot to complete a full cycle of its movement.
- **Scale X:** this value determines the horizontal scale of the movement.
- **Scale Y:** this value determines the vertical scale of the movement.
- **Random:** this value determines the amount of randomization applied to the movement.

6 - Keyboard Shortcuts

Open configuration file (.mpf)	Ctrl + O
Save configuration file (.mpf)	Ctrl + S
Reset configuration	Ctrl + N
Synchronize meta-parameters	F5
Exit	Escape
Play/Stop	Space
Move dot to bottom-left of plane	1 (+ Ctrl to affect all planes)
Move dot to bottom-center of plane	2 (+ Ctrl to affect all planes)
Move dot to bottom-right of plane	3 (+ Ctrl to affect all planes)
Move dot to middle-left of plane	4 (+ Ctrl to affect all planes)
Move dot to middle-center of plane	5 (+ Ctrl to affect all planes)
Move dot to middle-right of plane	6 (+ Ctrl to affect all planes)
Move dot to top-left of plane	7 (+ Ctrl to affect all planes)
Move dot to top-center of plane	8 (+ Ctrl to affect all planes)
Move dot to top-right of plane	9 (+ Ctrl to affect all planes)