CODED MATTER(S) #1Visual Identity Software

Manual

Design by: Daan van Hasselt



Directory structure

The application has the following directory structure.

```
_ Coded Matter(s) – Main directory
_ Coded Matter(s).app – The application itself
_ data – Directory containing all data
_ exported
_ font
_ framedata
_ scripts
_ shaders
_ _ gameCameraPosition.xml
_ settings.xml
```

exported

This directory contains all the data that is exported from the application. See 'framedata' and 'scripts' for more information on how to export data.

font

The font used for the logo is located in this directory

framedata

When you record a movie or take a screenshot from the application, the data will first be put in this directory. The exporting is not finished yet, because all images are cut up into 25 pieces when exporting. You have to run a script to convert the images into a single image per frame / screenshot.

scripts

The script for converting all the exported data into frames / screenshots is located in this directory. After exporting from the application, double click the script in this directory. All the resulting files will be moved to the 'exported' directory.

_gameCameraPosition.xml

This file saves the current position and orientation of the camera. This is updated when you click the 'save settings' button in the application. If you want to reset the camera to the default state the next time you run the application, delete this file.

settings.xml

This file saves all the general settings in the application. It is updated when you click the 'save settings' button in the application. You can change values here instead of in the application menu if you like. If you delete some or all values, a default value will be used.

Settings

I will explain every parameter you can find in the application menu. All the same paramaters (except for triggers) can be found in the settings.xml file.

There is a single keyboard shortcut in the application. Use the space bar to export a screenshot. Also, ESC closes the application.

Save settings – save all the settings and camera position to the XMI files

Enable camera – If this value is 'on', you can change the camera position. Drag around with the mouse to look around you. Use the following keys for movement:

w – forward

s - backward

a – left

d - right

e – up

c – down

q – roll left

r – roll right

Base color rotation determines the rotation angle for the base color gradient.

Base color and **base color 2** determine the overall color of the shape. The color is interpolated from left to right.

Background color rotation determines the rotation angle for the background color gradient.

Background color top and **background color bottom** determine the color of the background gradient.

Export width and **export height** set the resolution of the exported frames. You can select any of the three presets **A2 320dpi**, **A5 350dpi** or **HD video**. You can also choose a custom resolution.

Recording

Enable recording - when this value is set to 'on', every frame is exported to disk. When it is turned off again, recording stops. Note: the framerate will be much lower when recording, especially using high export resolutions. **Cam speed** – The X, Y and Z cam speed values determine the movement of the camera without using the keyboard and mouse.

Wave in duration and **wave out duration** determine how long the 'wave in' and 'wave out' animations will take. This value is a number of frames.

Wave in and **wave out** set off the wave animations. Only one animation can be in progress at the same time.

Particles

Num rows and **num cols** determine the amount of particles. Whenever one of these values is changed, any offset on the x axis is reset.

Row spacing and **column spacing** set the spacing between rows and columns.

Direction amount determines the influence of the direction of the waves on the rotation of the particles.

Use cone - draw a cone instead of a small block

Use second cone – draw a second cone opposed to the first one

Use sphere in cone – draw a sphere in the base of every cone. Will decrease performance

Draw direction – draw a thin line in the direction of the particle

Particle length, **particle height** and **particle width** determine the size of every particle.

Particle speed – The amount of movement over the x axis by every particle. Set this to a negative value to move to the left.

Particle rotation – Rotate the particles with a certain speed.

Noise

Noise amount determines how much influence the noise field has on the height of the particles.

Noise X, **noise Y** and **noise Z** determine the coordinates of the noise. Higher value means bigger waves.

Noise speed X, **noise speed Y** and **noise speed Z** determine the amount of movement in the noise.

The parameters for **Scale noise** and **Color noise** work the same. **Scale noise** influences the scale of particles and **Color noise** creates color highlights in the particle field.

SSAO

Enable SSAO – Enables the use of Ambient Occlusion. This effect is not rendered in the preview window for performance reasons. It adds some shadowing to the shape.

SSAO radius – The radius of the shadows generated by SSAO.

SSAO min threshold and **SSAO** max threshold determine what darkness a shadow should have before it is shown.

SSAO exponent – The shadow falloff exponent.

SSAO num samples – The number of samples used in the shadowing process.

Shading

Enable shading – Enables the use of a phong shader. This reflects a virtual light from the particles.

Ambient amount determines the amount of ambient light used in the phong shading.

Diffuse amount determines the amount of diffuse light used in the phong shading.

Light X, **light Y** and **light Z** determine the position of the virtual light.

Filter

Enable filter – Enables the use of a vignette filter.

Vignette size determines the size of the vignette.

Vignette amount determines how much effect the vignette has. A negative value means that the vignette darkens, a positive value lightens.

Export settings

Enable AA (export only)– Enables antialiasing. This effect is not shown in the preview window for performance reasons.

Enable depth map (export only) – Enables the exporting of a depth map. This depth map can be used for depth of field effects in post processing.

Show depth map – Show the depth map in the preview window.

Depth near value and **depth far value** determine the scaling of the depth map.

Logo

Show logo - Enables the rendering of the logo on top of the shape.

Font size determines the font size used for the logo.

Logo color determines the color of the logo.

Logo position X, **logo position Y** and **logo position Z** determine the position of the logo. The logo is automatically centered after changing the font size.