

## Character Particle Setting Manual

Texture and setting file can be created with Bitmap Font Generator.

<http://www.angelcode.com/products/bmfont/>

Also, if it conforms to the format of Bitmap Font Generator, it is also possible to create files using other applications.

For example, the following applications are available.

Littera <http://kvazars.com/littera/>

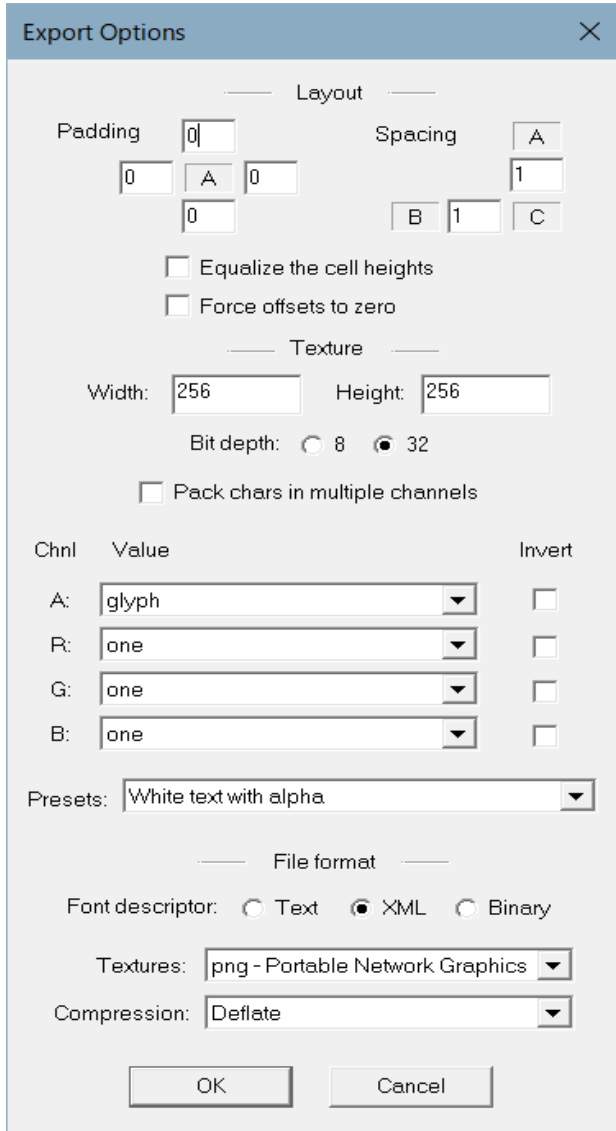
Glyph Designer <https://71squared.com/glyphdesigner>

ShoeBox <http://renderhis.net/shoebox/>

Please check the official site documentation on basic operation method of Bitmap Font Generator.

<http://www.angelcode.com/products/bmfont/documentation.html>

## Setting of Bitmap Font Generator



The 'Export Options' dialog box is divided into several sections:

- Layout:** Includes 'Padding' (0, A, 0) and 'Spacing' (A, 1, C) settings.
- Texture:** Includes 'Width' (256) and 'Height' (256) fields, 'Bit depth' (8 or 32, with 32 selected), and a 'Pack chars in multiple channels' checkbox.
- Channels:** A table with columns 'Chnl', 'Value', and 'Invert'.

| Chnl | Value | Invert                   |
|------|-------|--------------------------|
| A:   | glyph | <input type="checkbox"/> |
| R:   | one   | <input type="checkbox"/> |
| G:   | one   | <input type="checkbox"/> |
| B:   | one   | <input type="checkbox"/> |
- Presets:** A dropdown menu set to 'White text with alpha'.
- File format:** Includes 'Font descriptor' (Text, XML, Binary, with XML selected), 'Textures' (png - Portable Network Graphics), and 'Compression' (Deflate).

Buttons for 'OK' and 'Cancel' are at the bottom.

### Recommended settings for Export Options

#### -Layout-

Each item of Spacing should be 1 or more.

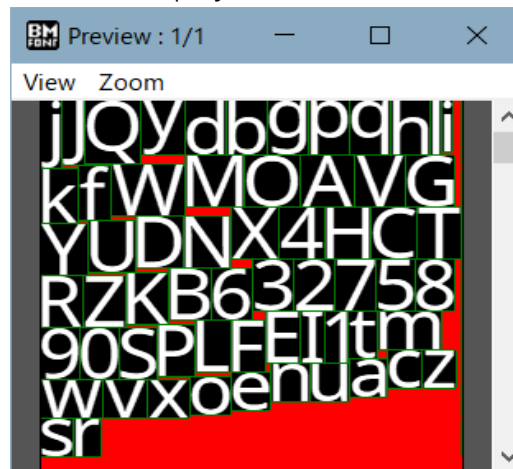
#### -Texture-

Please adjust so that all characters you want to use fit into one texture. (\*)

Both Width and Height should be set to a power of 2.

\* If Preview is displayed in "Options> Visualise"

and it is displayed as "1/1" in the title, it is within 1 sheet.



For Bit depth, please select "32".

For Presets please select "White text with alpha".(\*)

\* Particle's Color is multiplied by texture, so it is convenient to output the text in white.

#### -File format-

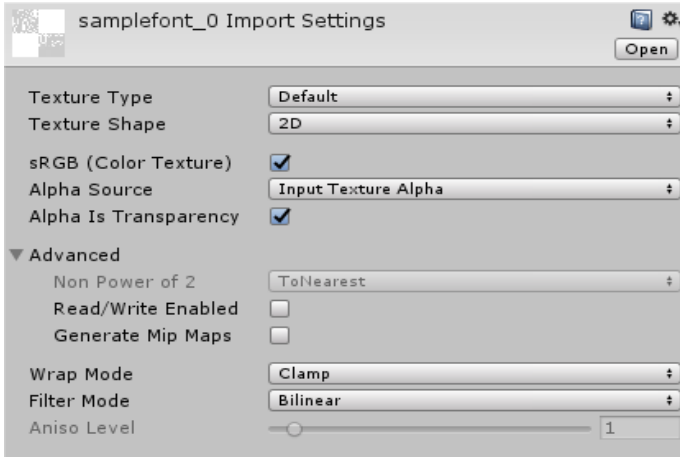
For Font descriptor, please select "XML".

After setting above, please output bitmap font and setting file (XML) to arbitrary location from "Options> Save bitmap font as ...".

Please import those files into Unity.

Even when using other applications, please output with settings similar to Bitmap Font Generator.

## Settings after importing into Unity

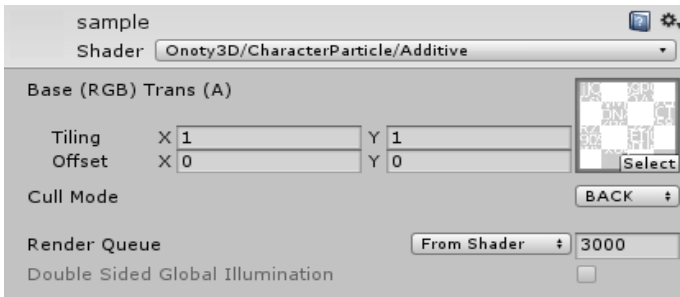


### Texture setting

Please uncheck "Generate Mip Map".

Please set Wrap Mode to "Clamp".

There is no problem without checking "Alpha Is Transparency", but it is easier to check the contents of the texture by checking it.



### Material settings

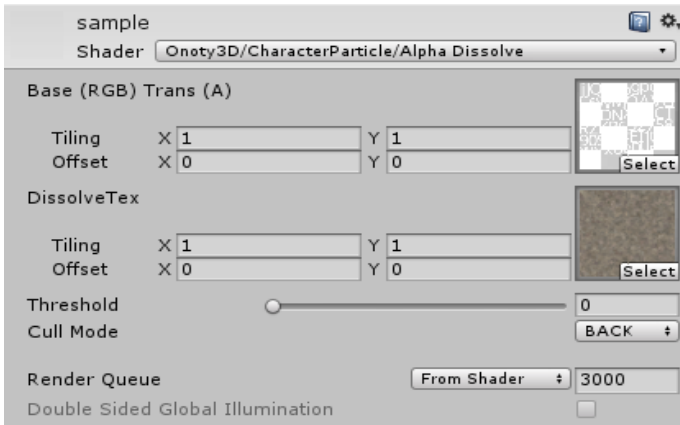
Shader should choose either Additive, Alpha or Alpha Dissolve in "Onoty3D/CharacterParticle/".

Additive: Alpha transparency, character part is added.

Alpha: Alpha transparency and character parts overlaid.

Alpha Dissolve: Alpha and effects like Character dissolved.

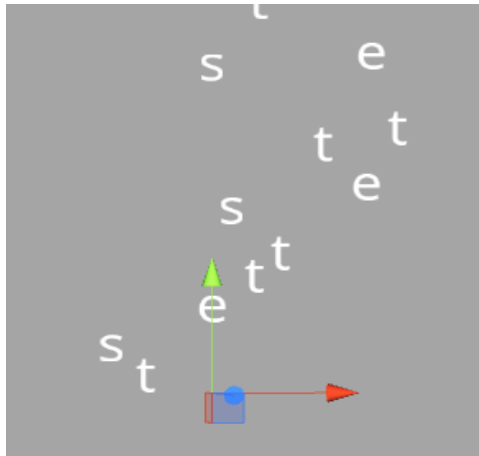
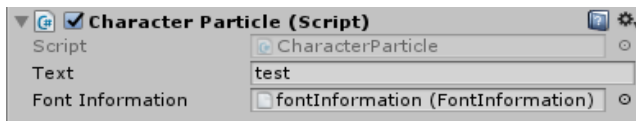
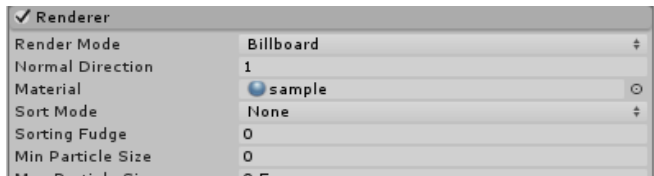
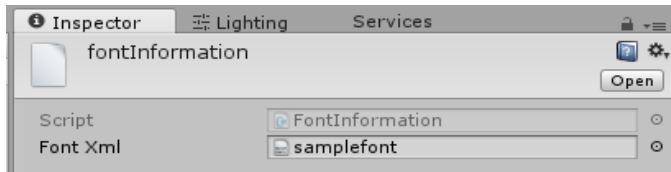
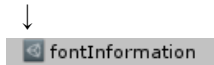
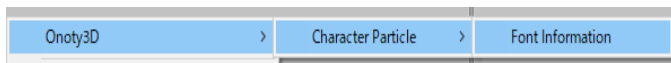
For the texture, please set the bitmap font you created.



When using Alpha Dissolve, please set a texture for Dissolve processing.

You can use the noise texture included in the asset.

With the Threshold parameter, you can adjust the degree of Dissolve's effect.



## Create Font Information Data

Click the Create button in Project view and select as follows.

"Onoty3D -> Character Particle -> Font Information"

When you click "Font Information", font information data is created.

Open inspector of the font information data,

and set the XML file output by Bitmap Font Generator to "Font Xml".

## Particle setting

After adding particles to the scene, please set the material in "Material" of Renderer module.

Please insert the Character Particle component in the particle.

Set a character string that you want to display in "Text".

Set the font information data to "Font Information".

When Successfully, character particle will be emitted.

After that please set freely like normal particles.