

Matchlock Corporation.

BISHAMON Introductory Manual

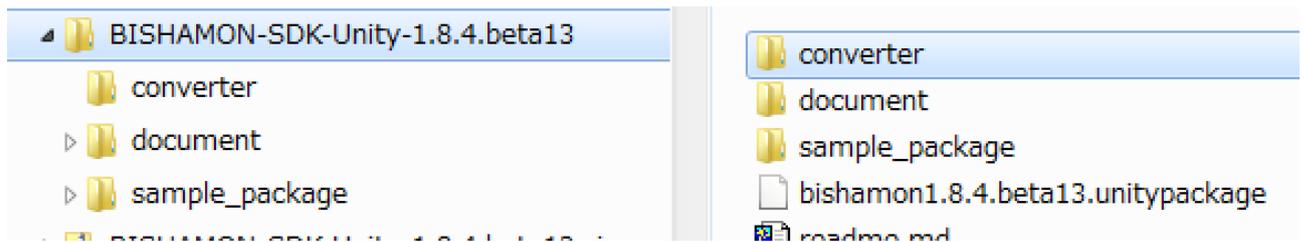
Package : BISHAMON SDK v1.8 for Unity iOS/Android



Update
September 4, 2017
July 28, 2017

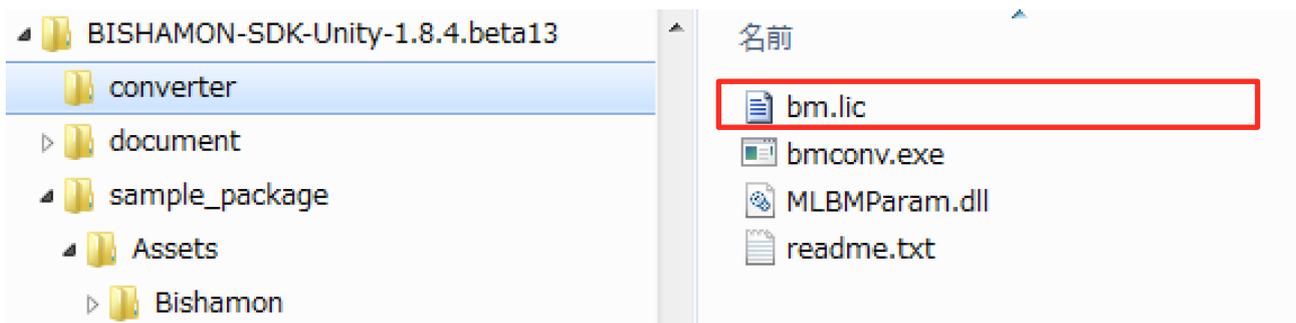
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■ Package Contents

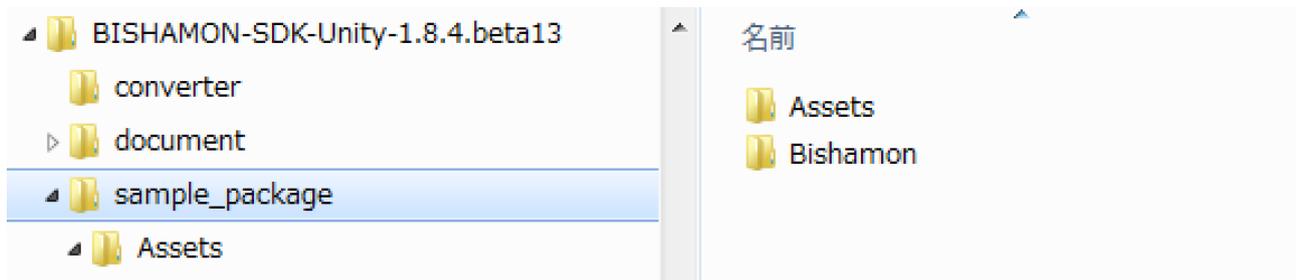


File/Folder Name	Description
converter/	This is a converter for generating binary files (BMB) from BISHAMON data (BMSLN) . The license file (bm.lic) is necessary to use it. Please copy the license file into this folder before the expiration date.
document/	Contains documentation for the release notes and converter.
sample_package/	This is the sample package for reading into Unity. After launching, go to project 「Open」 to select this folder. Sample projects may be checked.
bishamon1.8.4.beta13.unitypackage	This is a Unity package that contains BISHAMON scripts, plugins, and icons. Only the files within the Assets folder that are necessary to display BISHAMON data are packaged together.
readme.md	Read this file first.

Please copy the **license file (bm.lic)** into the /converter/ folder **before the expiration date**.

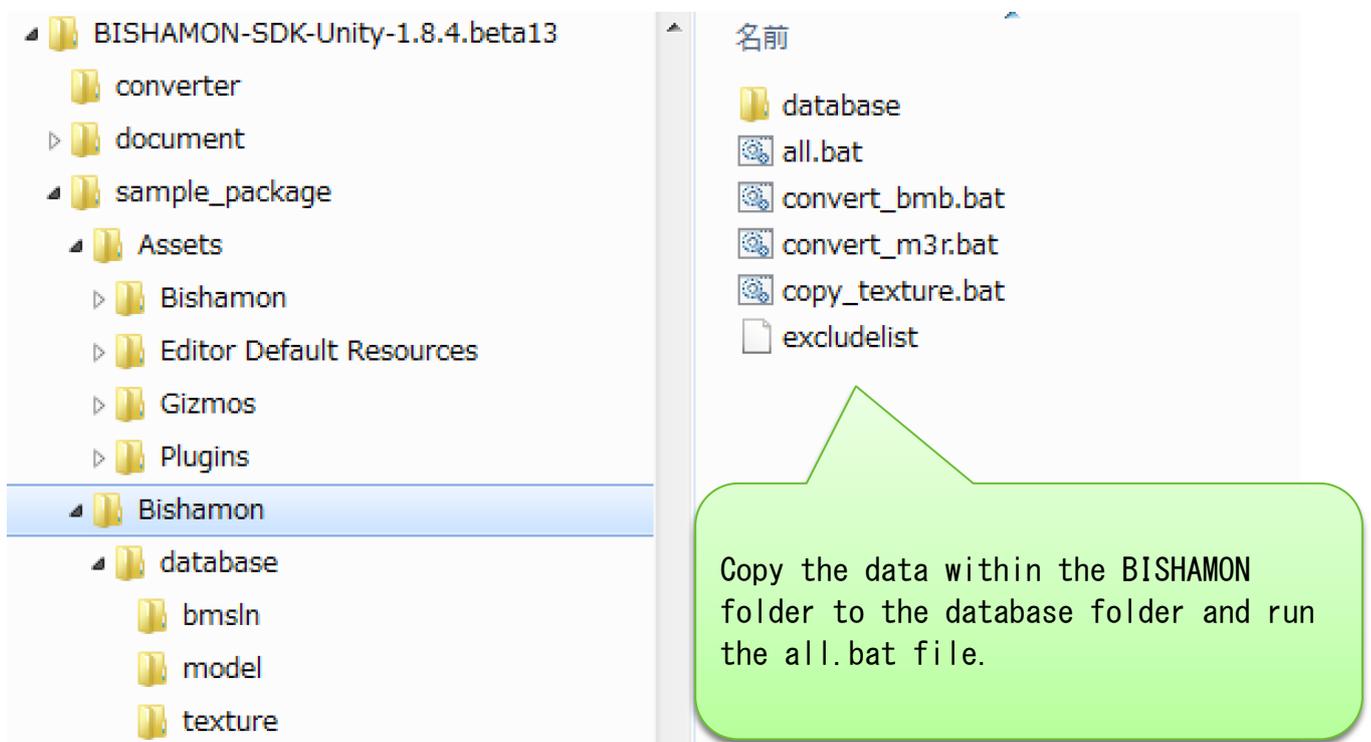


■ About BISHAMON Data Folders and Converter



Sample packages have the following folder structure.

The BAT files that convert BISHAMON data, cash folders, and database folders are located in the /Assets/folder and the /Bishamon/folder at the same hierarchical level.

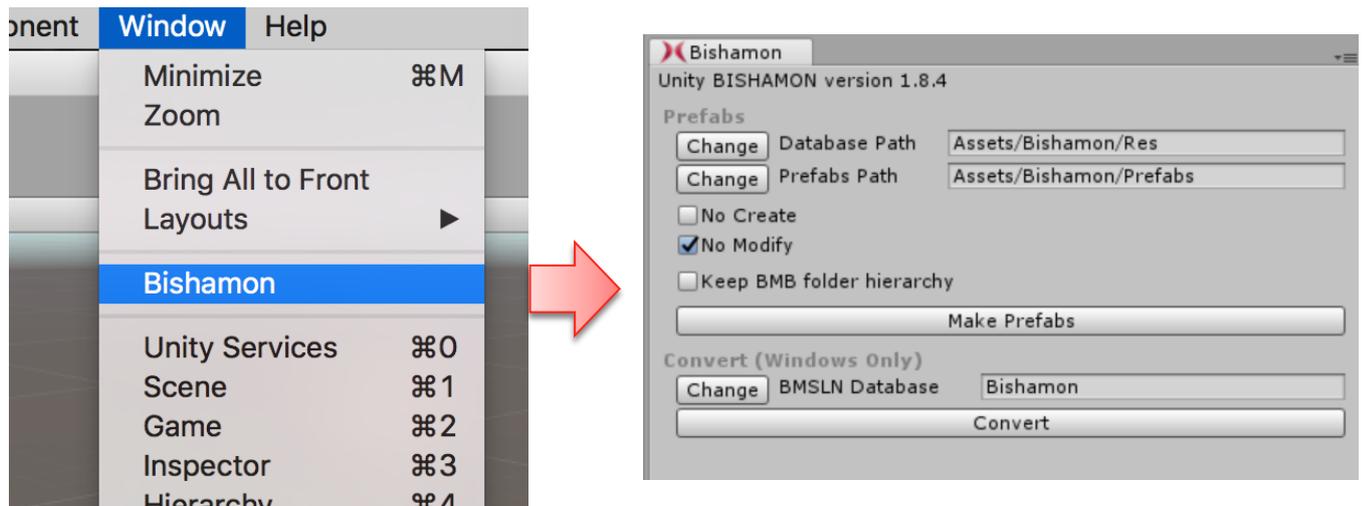


Put the **data created with BISHAMON** (bmsln/, texture/, model/) into the **/database/folder**. It's recommended to copy to the database folder designated by the BISHAMON tool.

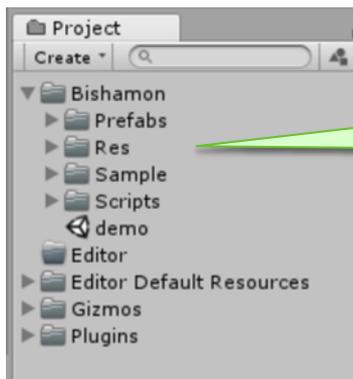
Then, run the **all.bat file**. This will automatically generate a binary file and copy it to the designated location /Assets/folder.

If this folder location is moved, please correct the relevant path in the BAT file.

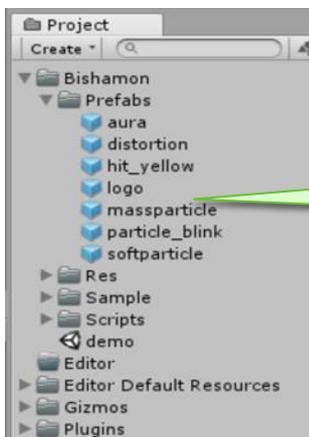
■ Creating Prefabs



After launching Unity, select 「Windows」 → 「Bishamon」 from the menu to view the BISHAMON window. From the window, click on the 「Make Prefabs」 button. Then wait a moment for the Prefab file to be generated from the BMB file.

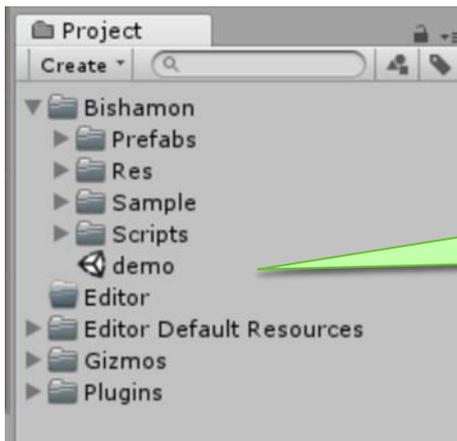


Created prefabs go into this Prefabs folder. The necessary binary files like BMB files go into the 'Res' folder.



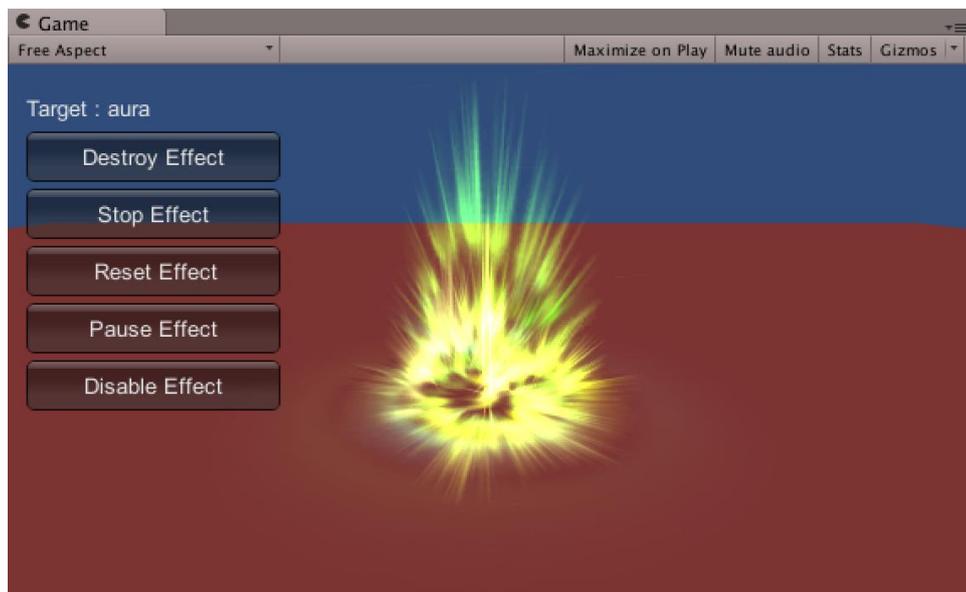
Then, these Prefabs are instanced to display BISHAMON effects.

■ Demo Samples



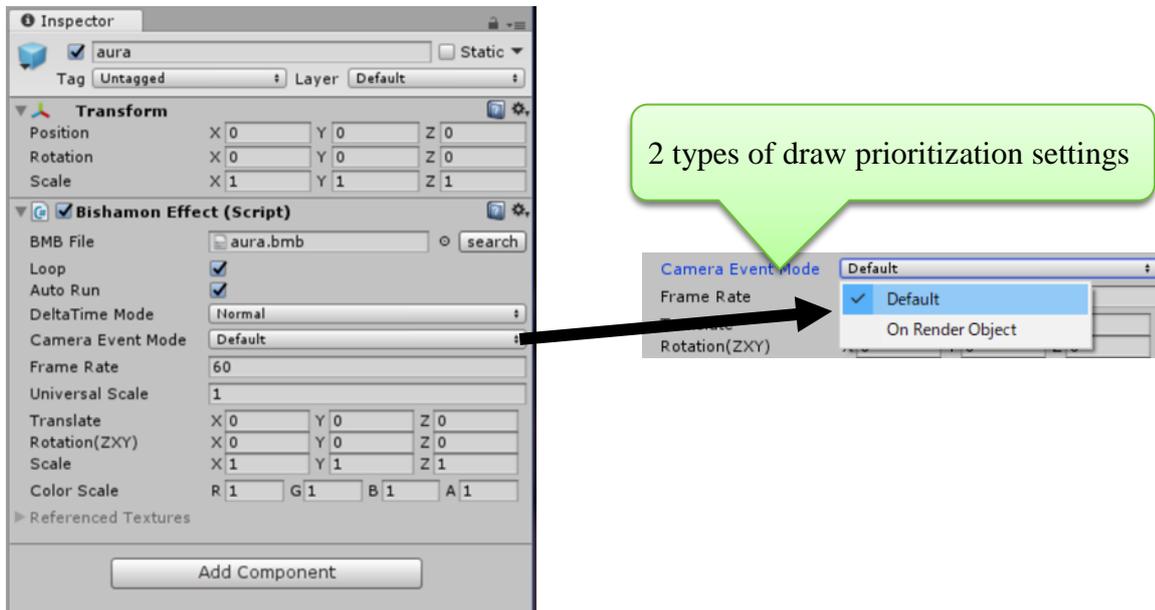
Run the demo sample to check, generate, delete, start, and stop scripts for BISHAMON Prefabs.

Run the demo sample to check, generate, delete, start, and stop scripts for BISHAMON Prefabs.



■ Draw Prioritization for Unity Objects

There are currently 2 methods to set draw prioritization for Unity objects and BISHAMON effects.



◆ 1) CommandBuffer Settings (Camera Event Mode: Default)

This mode draws at the timing from the Unity CommandBuffer. When the CameraEvent.BeforeForwardAlpha definition is valid, the following draw settings are possible.

○ When the BISHAMON effect is in front and the Unity draw object is drawn afterward, the rendering queue for the game object or UI is set to Geometry+501 or under.

○ When the Unity draw object is drawn before the BISHAMON effect, the rendering queue for the game object or UI is set to Geometry+501.

(Depending on the place number in the rendering queue, either the Unity semitransparent object or the BISHAMON effect is drawn, whichever is in front in the queue.)

◆ 2) OnRenderObject Settings (Camera Event Mode : On Render Object)

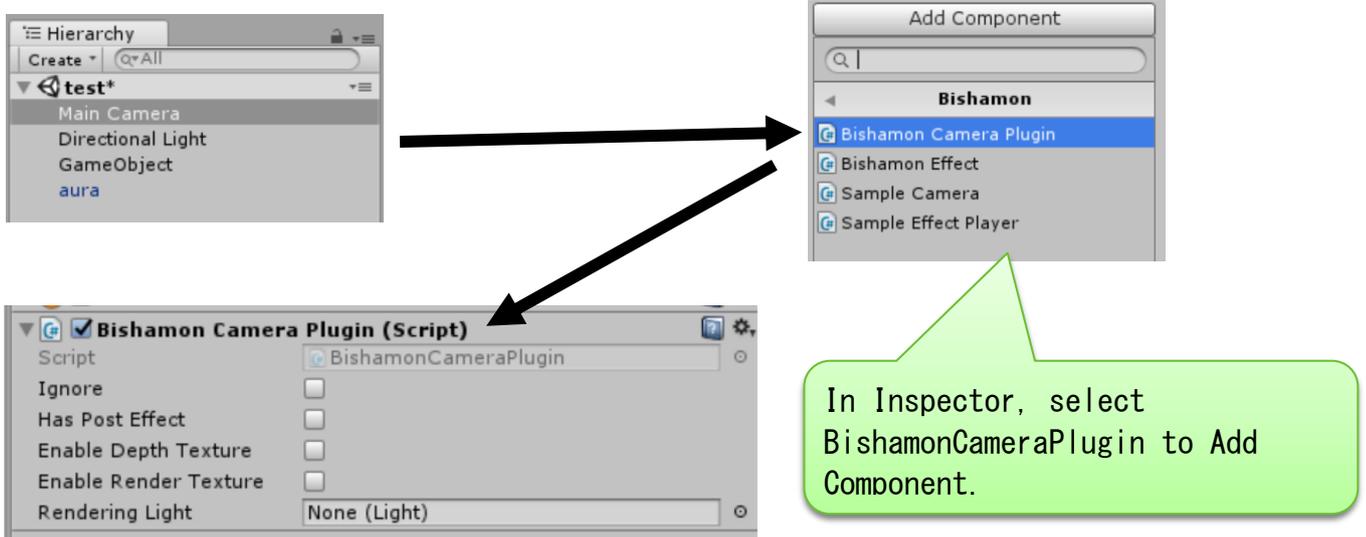
After the Unity object is drawn, the BISHAMON effect is drawn.

(The BISHAMON effect in front is drawn before the Unity semitransparent object)

Regarding the draw prioritizations described above, since the BISHAMON SDK is embedded as a Unity native plugin, draw prioritizations are set and hard-coded between Unity semitransparent objects.

■ Settings for BishamonCameraPlugin

Please attach the BishamonCameraPlugin script to the camera that displays the BISHAMON effect within the Unity scene.



This will make the following settings possible.

○1) Ignore

This will disable displaying of BISHAMON effects with the camera.

○2) Has Post Effect

If using post effects (ImageEffect) , please check ON. This will avoid the inverting problem in environments other than OpenGL (DirectX9／11, etc.) . (However, there is still the known issue of inverting rendered textures due to Unity specifications.)

○3) Enable Depth Texture

This will enable use of the depth buffer function (soft particle function) .

○4) Enable Render Texture

Graphics drawn in Unity can be used as rendered textures in BISHAMON effects. Inputting “@” into the texture column for the BISHAMON effect applies the render texture. In this case, it is necessary to set On Render Object for the Camera Event Mode of the BISHAMON effect. This makes it possible to distort backgrounds.

○5) Rendering Light

Model emitters in BISHAMON effects for which Lighting is checked can be influenced by the indicated light.

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■Using the Support BBS

Please post technical questions on the Support BBS.

■Supported Versions

Versions for Unity 5.3.x and under are currently not supported. We would appreciate your understanding regarding this matter.

■Inquiries

For non-technical inquiries, please send them to the following e-mail address.

Inquiries : info@matchlock.co.jp

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