

Camera System - Gaskellgames

Package made for the Unity 3D game engine

USER GUIDE

Release 1.5.0

February 2025

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Getting Started:

Overview

This user guide was created to provide a basic overview of the features functionality of the asset.

Installation

Once you have downloaded the asset from the Unity's Asset Store, go to: "Assets > Import Package > Custom Package...". In the Import Asset Window, find and select the package's name. After the 'import package' window appears in Unity, verify that all items to import are selected and then click the import button in the bottom right of the window.

Quick Start

The content of the asset will be found in the project window, under assets and within the toolbar options under sub-heading of **Gaskellgames**.

All content that you as the end user are expected to interact with, are components under the component sub menu of Gaskellgames, and any prefabs contained within the project files folder named Prefabs. An up-to-date copy of this guide can be found under the sub folder with the name **Documentation**. All back-end files and resources that are required to make the assts work can be found within the sub folders with the names **Editor** and **Runtime**.

Any Gaskellgames components added as part of a package can be found under the **Component** toolbar menu and the inspector's **Add Component** button. Some components will also be available to create under the **Right Click** menu under sub-heading of **Gaskellgames**.

Any Gaskellgames editor windows added as part of a package can be found under the **Tools** toolbar menu and **Window** toolbar menu options under a sub-heading of **Gaskellgames**.

Support & API documentation

Should you have any questions or require assistance, please join the official Gaskellgames Discord:

https://discord.gg/nzRQ87GGbD

In the event you are unable to find the information you seek on the forums or discord, you can contact Gaskellgames via the weblink:

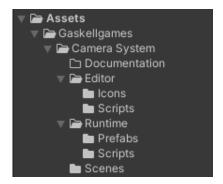
https://www.gaskellgames.com/contact



Package Content:

File Structure

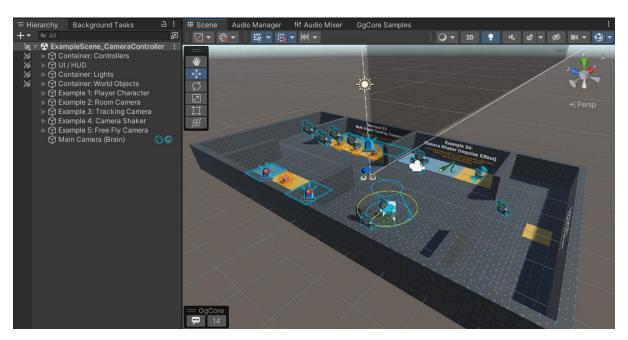
The files and content within the asset are laid out in the same way as all Gaskellgames assets. You will find the asset name under the header file of **Gaskellgames**:



The asset version's up-to-date copy of this guide can be found under the sub folder with the name **Documentation**. All editor-only content within the folder named **Editor**, and all runtime content under the folder **Runtime**. There are example scene(s) within the subfolder named **Scenes**.

Example scene

The example scene, found within the subfolder named **Scenes**, can be viewed to see a working version of the asset. For this asset it looks as follows:



Within the scene, you will find a scene camera and directional light source, along with examples of component setups. **Please note:** not all example scenes are 'playable' via the play button, and may instead be examples of setup in the editor.

How to use / setup guide

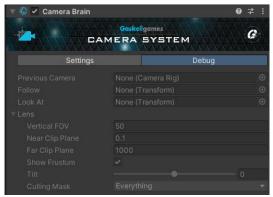
The camera controller is split into modular components: The camera brain, the camera rig, and the supporting scripts:

Camera Brain:

The Camera Brain script should be added to the main camera gameobject that you want to control. To preview a camera view, you simply add the chosen 'CameraRig' into the 'Active Camera' inspector slot on the camera brain. This will also be the default camera view when the game is started.



(Settings Tab)



(Debug Tab)

Camera Switcher:

You can use the Camera Switcher to quickly and easily switch between all registered Camera Rigs, or a custom list of Camera Rigs, by assigning a change camera input reference. By default, it is *C on keyboard (north action on gamepad)*



Note: Input is using the new input system

Camera Rig:

The Camera Rig script allows you to define a virtual camera position for the 'Camera Brain'. This allows you to update the main camera's settings and position to match a pre-defined setup. The 'Camera Rig' script can be configured to follow another gameobject, look at another gameobject or be controlled by a 'Freelook Rig'. The camera rig can be set to receive camera shake, be set up as a free fly camera or used alongside a spline package to set up cinematic camera shots.



(Settings Tab)

Camera Rigs are used in all camera types:

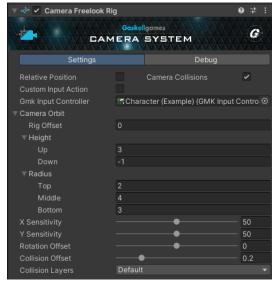
- First person,
- Third person: Follow,
- Third person: Freelook,
- Top-down,
- Room camera,
- Multi-Target Camera.
- Cinematic Camera.
- Free Fly Camera.



(Debug Tab)

Camera Freelook Rig:

The Camera Freelook Rig script allows the user to define an orbit and position that a Camera Rig will follow. Freelook Rigs allow you to adjust the height and radius of the camera orbit for three locations: Top, Middle and Bottom. The freelook rig with then blend between these 2D orbits to create a dynamic 3D orbit that a third person camera can follow.





(Debug Tab)

(Settings Tab)

Camera Freelook Rigs are used for the following camera types:

- Third person: Freelook,
- Top-down

Shadow Transform:

The Shadow Transform script allows you to assign some of the features of the camera rigs to other game objects. The script allows quick and easy parent-child relationships without having to parent a GameObject to another GameObject. With the script you can assign a follow, look at and/or rotate with object. You can toggle constraints so that the object only inherits properties in set axis.



(Settings Tab)



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Camera Trigger Zones:

The camera trigger zones work in unison with the camera target component. The camera trigger zones are defined areas that will trigger the on enter and on exit events on the camera target.



(Settings Tab)



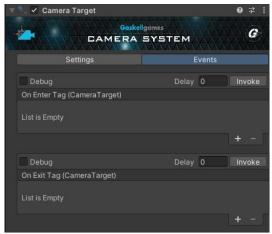
(Debug Tab)

Camera Target:

The camera targets work in unison with the camera trigger zone component. The camera trigger zones trigger the on enter and on exit events on the camera target.



(Settings Tab)



(Events Tab)

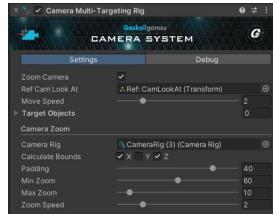
Alternatively, the camera targets can be set to target type 'OnEnable' and they will automatically register themselves to the camera multi-target component.

Note: if using target type 'OnEnable' you should only have one camera multi-target component in the scene.



Camera Multi-Targeting Rig:

The camera multi-target rig is used to control the settings on a cameraRig, to keep multiple target objects in view at any one time.



(Settings Tab)



(Debug Tab)