Security Camera System – Four Camera External

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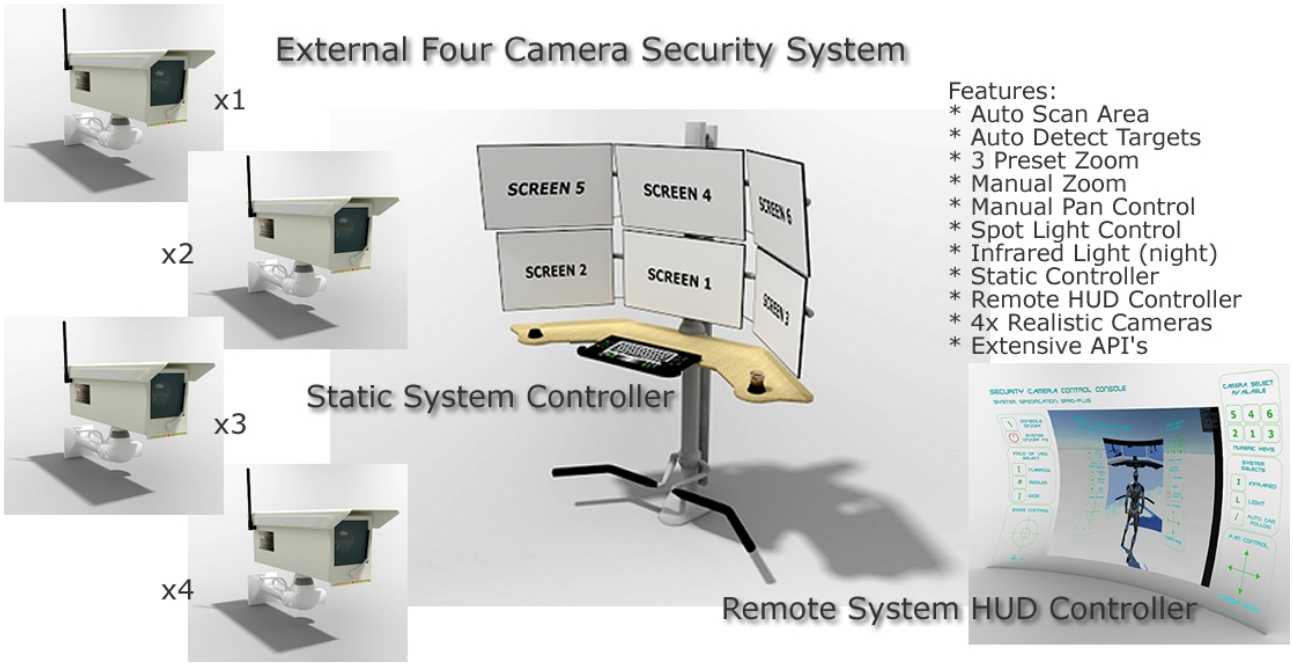

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Outline of Features and System Description

An Authentic External Camera Security System

Features:

- Auto Scan Area
- Auto Detect Defined Targets
- 3 Preset Zoom settings
- Manual Zoom
- Manual Pan Control
- Spot Light Control
- Infrared Light (night)
- Static Controller Console
- Remote HUD Controller
- 4x Realistic Cameras
- Extensive API's (see tech documentation)

Design includes 4 unique camera that can be individually controlled and set for a range of tasks, a Static System Controller Console with holographic display, a Remote HUD System Controller (worn by the player), System Shutdown for Static Controller and On/Off switching for Remote HUD Controller.

The system can function in unlit areas either using a built in switchable Spot Light, and or an Infrared switchable Spot Light (not visible to players in camera view).

Area Scanning and Auto Detect Target priority system, or static positioning.

Full manual control of each camera with Pan and Zoom functionality.

A multitude of API's exposed to the Dev.

Spend your performance/memory usage via the display textures (default settings achieve around 65-70 fps in the supplied scene, system dependant)

Also Available in:
Internal Four Camera Security System
External Six Camera Security System
Internal Six Camera Security System
A Freebie Single Camera system with Tablet

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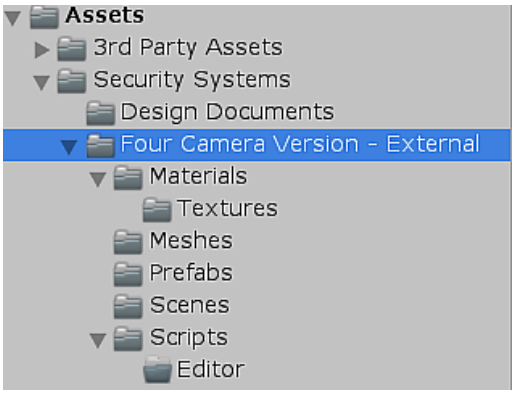
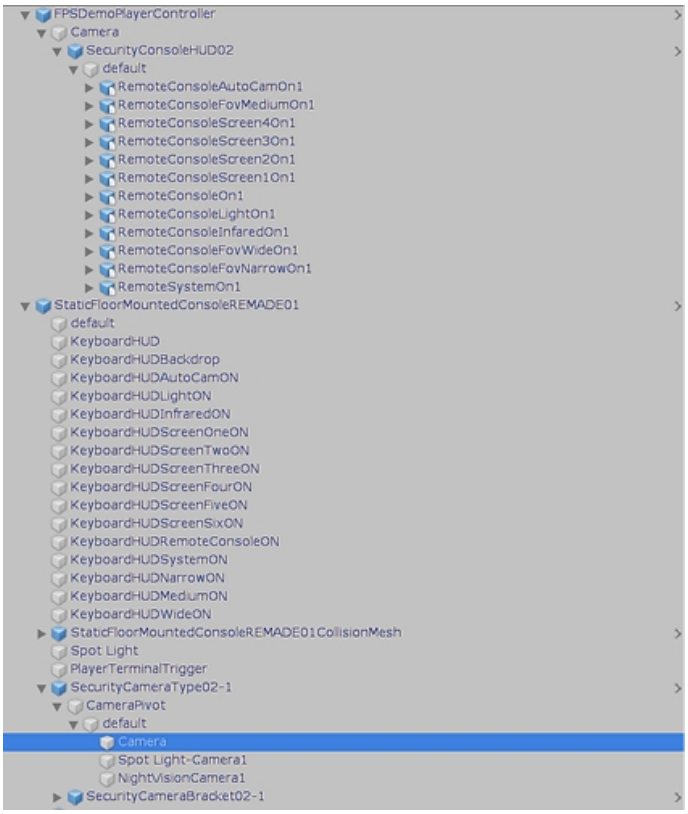
Project Files and Hierarchy Layout

Depending on which system you have imported, in the assets folder you will see the following set of nested folders, which are named to be self-explanatory.



When you have included the full system into your scene, you will have the following assets in the following folders in the Scene Hierarchy.



It is important to follow this layout and structure for the system to work as intended.

Camera Specification and Description

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The system consists of 3 main components:-

a) Static Floor Mounted Console 01

b) Security Console HUD 02

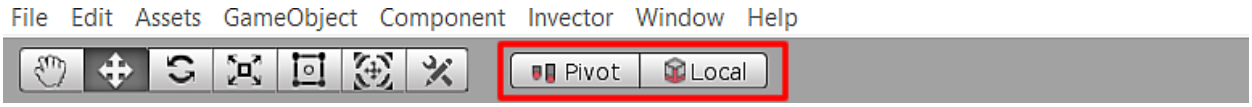
c) Security Camera (number of which in the scene depends on requirements and type of system purchased).

The Basic Minimum requirements for any scene are the Static Floor Mounted Console 01 and at least 1 Camera.

Do not duplicate a Security Camera, as this will cause conflicts with the rendering system and may result in poor performance and potential crashes.

Positioning within the scene of either the Static Floor Console 01 and or a Security Camera, must be carried out using the Root Asset, using Global and Center settings in the editor, to prevent misalignments.

Once the Security Camera is set within the scene, the cameras default static direction, can be done by selecting the **CameraPivot** asset within the nested folders of the Hierarchy, with an editor setting of **Pivot** and **Local**.



Keeping the Rotations within the bounds for the design of the camera will give better visual representations.

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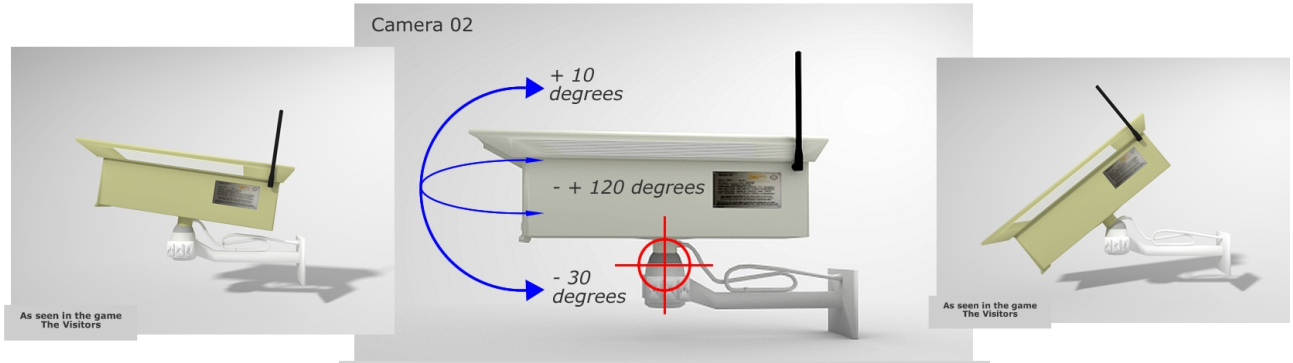
External Camera Design Rotations
and Scene Editing



The camera in located in ModelSpace and so must be the only component that rotates. The Bracket is in Worldspace. When moved, rotated, scaled, the whole model will transition.

For scene editing/positioning:
The whole model (bracket - root model) use Global and Center.
The camera body use Local and Pivot.

note: The scripted controller system is already set using these settings when operating.

Each camera has individual switchable features and settings, these include:

- Auto Scan Area
- Auto Detect Defined Targets
- 3 Preset Zoom settings
- Manual Zoom
- Manual Pan Control
- Spot Light Control
- Infrared Light (night)
- Extensive API's (see tech documentation)

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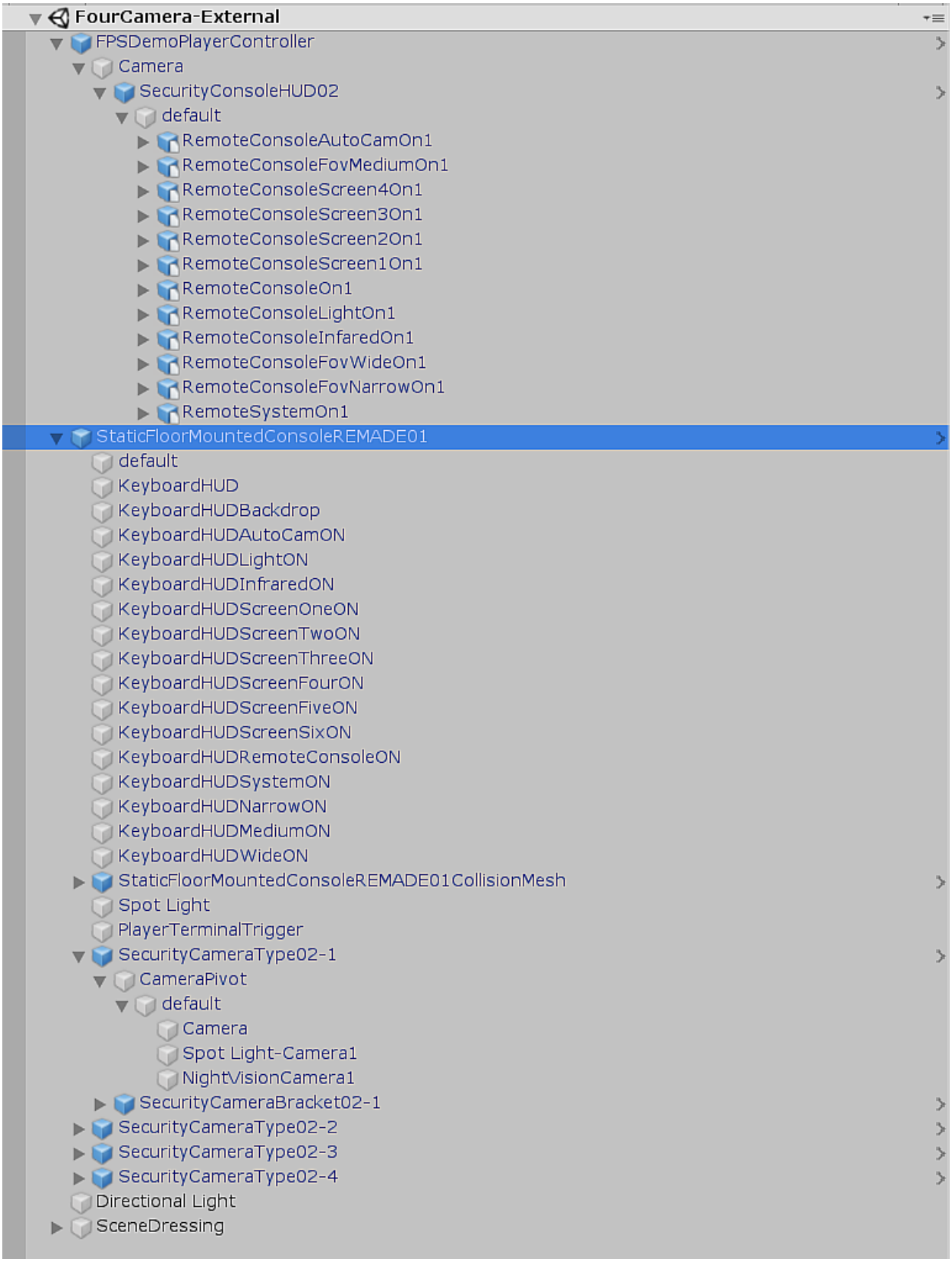

Selecting the StaticFloorMountedConsoleREMADE01 asset in the Hierarchy folder, reveals a set of scripts with User Settings.

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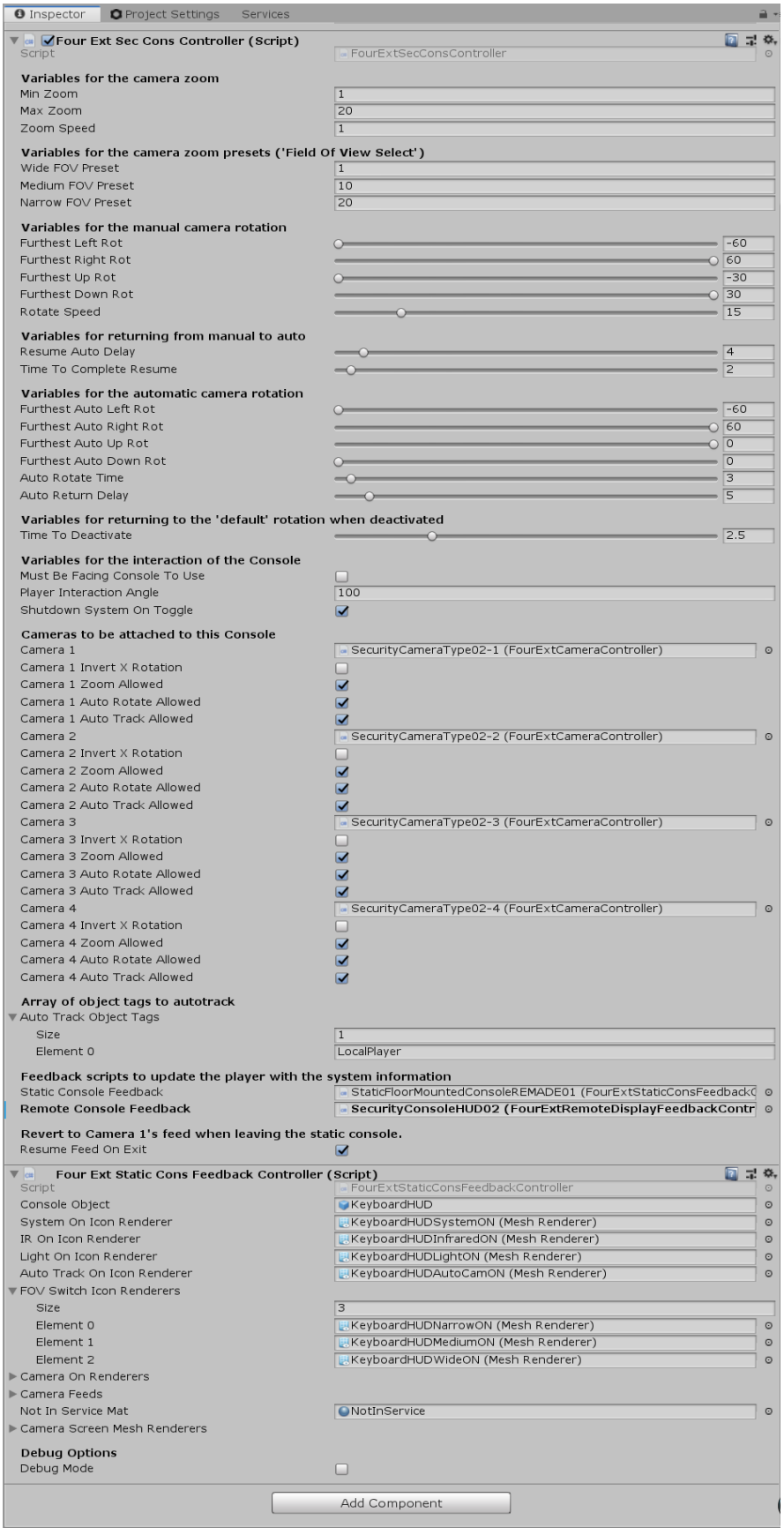
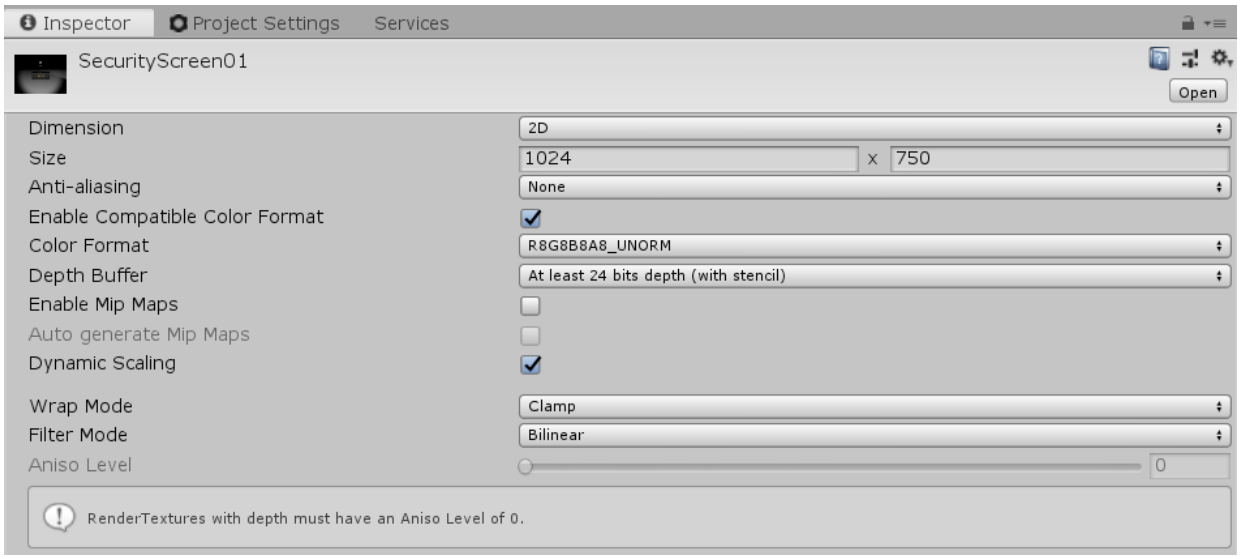


These API's allow for setting Global Defaults, based upon each Feature as listed, as well as some individual camera settings. More details on these settings can be found in the Technical Document. Use the above screenshot for default settings.

Performance Adjustments:

Using 4-6 rendering textures in a single scene will have an impact on Performance. However there are adjustments that can be made to the Rendering Textures individually to give high definition or performance on a sliding scale.

Selecting one of the Rendering Textures, will bring up this information Window in the Inspector Pane.



Size: This represents the Orientation and Rendering Size of the texture. The larger the size equals greater resolution at the cost of performance.

Anti-aliasing: This improves the sharpness of the picture at the cost of Performance.

Enable Mip Maps: If the screens are likely to be seen within your scene, It is less performance hungry to have Mip Map generation enabled. This works much the same way that LOD works for meshes.