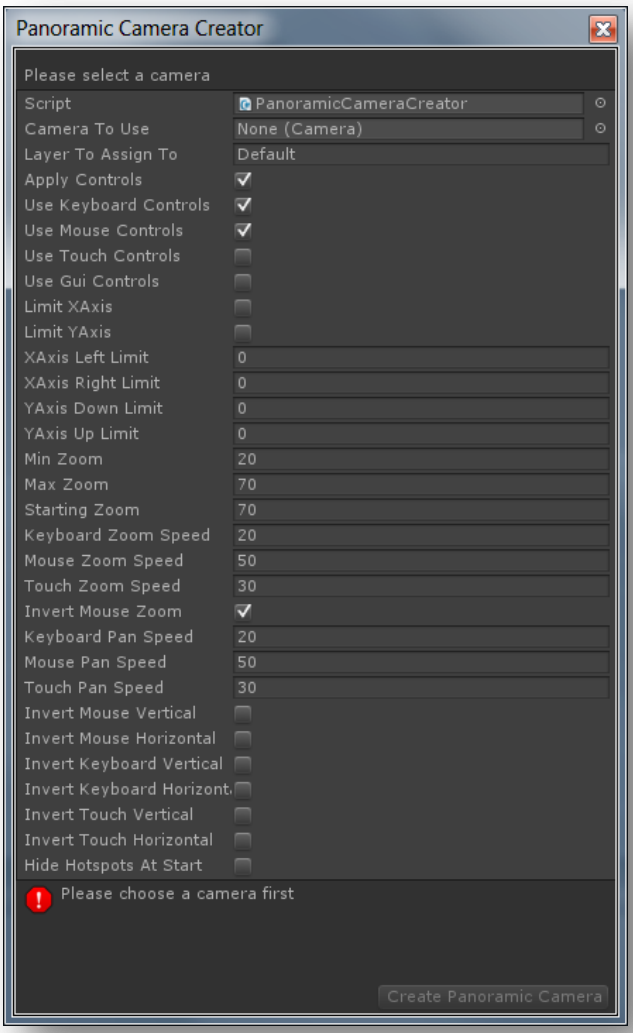
PANORAMIC FRAMEWORK MANUAL

PANORAMIC CAMERA CREATOR



The Panoramic camera creator is responsible for creating a full panoramic camera rig in your scene. Its only requirement is to be supplied a camera from your scene.

The panoramic camera creator window can be accessed by clicking on the Createch Interactive menu item (on the unity menu bar under Window), then Panorama framework, and then Panoramic Camera Creator.

Below are detailed descriptions of each of the fields listed on the panoramic camera creator window :

Camera to use

This is the camera in your scene that will be transformed into a panoramic camera. Please select the camera you wish to use by pressing on the circular button next to the camera field, or alternatively, by dragging a scene camera into the camera field. To make things consistent between unity and an external application such as 3dsmax, please ensure that your camera's position is set to (0,0,0,) before continuing.

Layer to assign to

This is an optional feature allowing you to assign the newly created panoramic rig to a specific layer. The layer to be used must first be defined in your projects layer settings. You can create a new layer in unity's tag manager by clicking on edit, project settings and then tags.

Once a layer is defined you can type the layer name into the layer name field in the Panoramic camera creator window. A warning will display if the layer is not found.

Apply controls

Enabling this feature applies a set of readymade controls to your panoramic rig, alternatively, should you wish to use your own controls, keep this setting disabled.

The supported control schemes include keyboard controls, mouse controls, and touch controls.

The control schemes can be used simultaneously or, depending on your projects needs and platform, one at a time. If both mouse and touch controls are enabled, touch controls will override the mouse controls, this is useful when testing with unity Remote.

This feature must be enabled in order to use any of the control fields that follow.

Use keyboard controls

Enable this feature to use the ready-made keyboard control scheme included with the Panoramic camera creator tool.

The keyboard control scheme uses the following keys for interaction :

- Arrow keys for panning horizontally and vertically
- Plus key for zooming in
- Minus key for zooming out

To activate a hotspot, the mouse controls must be added enabled as well.

Use mouse controls

Enable this feature to use the ready-made mouse control scheme included with the Panoramic camera creator tool.

The mouse control scheme uses the following keys for interaction :

- Right click and drag, for horizontal and vertical panning
- Mouse wheel up for zooming in
- Mouse wheel down for zooming out
- Left clicking for hotspot interaction

To activate a hotspot, the user must left click on the hotspot to execute it.

Use touch controls

Enable this feature to use the ready-made touch control scheme included with the Panoramic camera creator tool.

The touch control scheme uses the following gestures for interaction :

- Touch and drag, for horizontal and vertical panning (1 finger)
- Pinch and drag outwards for zooming in (2 fingers)
- Pinch and drag inwards for zooming out (2 fingers)
- One finger tapping for hotspot interaction

To activate a hotspot, the user must tap on the hotspot with one finger to execute it.

Limit X axis

Enabling this feature will activate horizontal panning limits on all control schemes. This is useful if your panorama isn't a full 360 degree panorama, and you want to limit the viewing angle on it. This feature requires a left and right limit to be set.

Limit Y axis

Enabling this feature will activate vertical panning limits on all control schemes. This is useful if your panorama isn't a full 360 degree panorama, and you want to limit the viewing angle on it. This feature requires a up and down limit to be set.

X axis left limit

This sets the left horizontal limit of the camera in Euler angles. This limit would normally be less than 0, for instance - 60 degrees. This feature requires the "Limit X axis option to be enabled".

X axis right limit

This sets the right horizontal limit of the camera in Euler angles. This limit would normally be more than 0, for instance 60 degrees. This feature requires the "Limit X axis option to be enabled".

Y axis down limit

This sets the downwards vertical limit of the camera in Euler angles. This limit would normally be less than 0, for instance -30 degrees. This feature requires the "Limit Y axis option to be enabled".

Y axis up limit

This sets the upwards vertical limit of the camera in Euler angles. This limit would normally be more than 0, for instance 30 degrees. This feature requires the "Limit Y axis option to be enabled".

Min zoom

This sets the minimum zoom value for your panoramic camera. It is recommended that this value be greater than 0, for instance 20.

Max zoom

This sets the maximum zoom value for your panoramic camera. It is recommended that this value be greater than 0 and greater than the minimum zoom value, for instance 70.

Starting zoom

This is the initial zoom level your camera will be created at. It is recommended that this level be in the bounds of the minimum and maximum zoom levels, for instance, if the minimum zoom level is set to 20 and the maximum level is set to 70, the starting zoom should be set between 20 - 70, and not less than 20 or higher than 70.

Keyboard zoom speed

This is the speed at which the keyboard control scheme will zoom. It is recommended that its value always be greater than 0, for instance 20. If you do not want the user to be able to zoom with the keyboard, set this to 0.

Mouse zoom speed

This is the speed at which the mouse control scheme will zoom. It is recommended that its value always be greater than 0, for instance 50. If you do not want the user to be able to zoom with the mouse, set this to 0.

Touch zoom speed

This is the speed at which the touch control scheme will zoom. It is recommended that its value always be greater than 0, for instance 30. If you do not want the user to be able to zoom with the touch device, set this to 0.

Keyboard pan speed

This is the speed at which the keyboard control scheme will pan, horizontally and vertically. It is recommended that its value always be greater than 0, for instance 20.

Mouse pan speed

This is the speed at which the mouse control scheme will pan, horizontally and vertically. It is recommended that its value always be greater than 0, for instance 50.

Touch pan speed

This is the speed at which the touch control scheme will pan, horizontally and vertically. It is recommended that its value always be greater than 0, for instance 30.

Invert mouse vertical

Enabling this option inverts the mouse's Y-axis that is used for panning

Invert mouse horizontal

Enabling this option inverts the mouse's X-axis that is used for panning

Invert keyboard vertical

Enabling this option inverts the keyboard's Y-axis that is used for panning

Invert keyboard horizontal

Enabling this option inverts the keyboard's X-axis that is used for panning

Invert touch vertical

Enabling this option inverts the touch control's Y-axis that is used for panning

Invert touch horizontal

Enabling this option inverts the touch control's X-axis that is used for panning

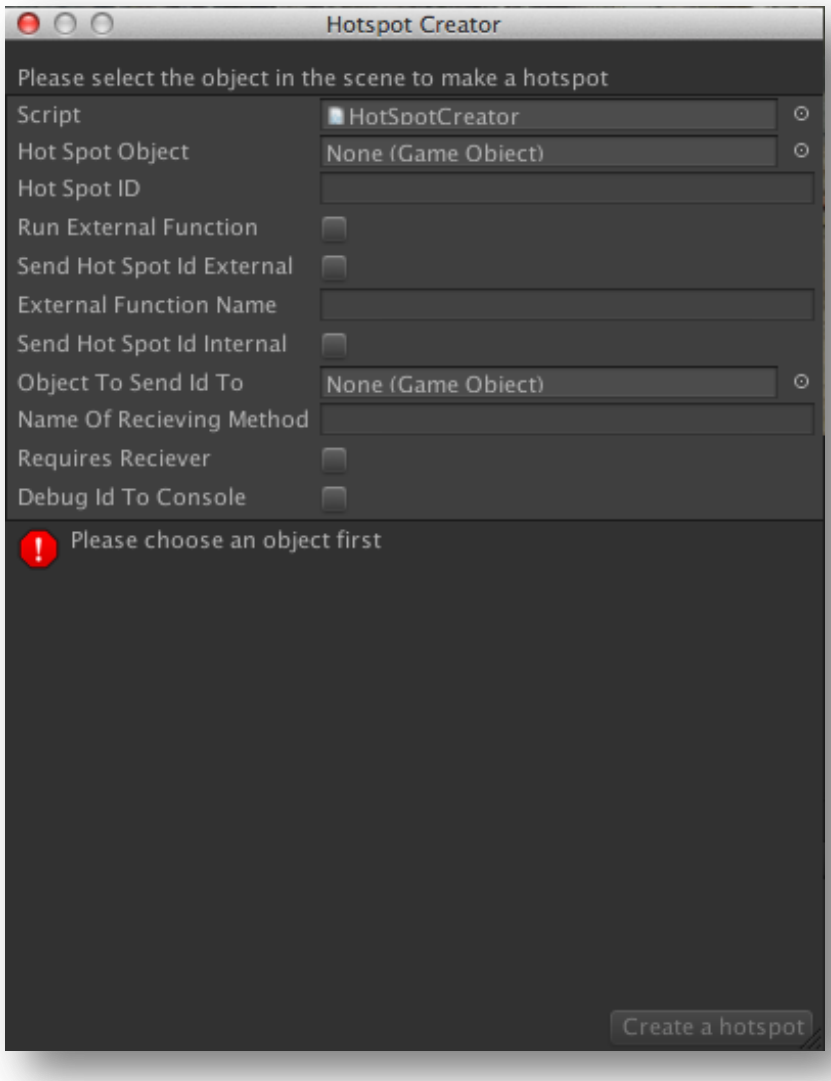
Hide hotspots at start

When this is enabled, all hotspots in the current scene will be hidden when play is pressed, or at the start of runtime.

Create panoramic camera

Once you are happy with all the settings, and all the necessary inputs have been assigned, the create panoramic button will become available. Press this button to create your new panoramic camera rig.

HOTSPOT CREATOR



The hotspot creator is responsible for creating interactive hotspots in your scene. Its only two requirements are to be supplied an object containing a collider from your scene, and then an action to be specified that will be executed on hotspot selection.

The hotspot creator window can be accessed by clicking on the Createch Interactive menu item (on the unity menu bar under Window), then Panorama framework, and then Hotspot Creator.

Below are detailed descriptions of each of the fields listed on the hotspot creator window :

Hotspot object

This is the object in your scene that will be transformed into a hotspot. Please select the object you wish to use by pressing on the circular button next to the hotspot object field, or alternatively, by dragging a scene object into the hotspot object field. Please make sure that the object contains a collider, otherwise you would not be able to select it. You can add a collider to an object by first selecting the object, then clicking on component in the unity menu bar, then physics, and then the by choosing the type of collider, for example, box collider. You will be warned if the object you selected doesn't contain a valid collider.

Hotspot ID

This is the ID of the hotspot, you can give it any ID you want, but it is recommended that it be a unique identifier, for instance, DoorHotspot01.

Run external function

Enabling this option will cause an external function, for instance on the webpage containing the unity3d object (web player platform), to be run when the hotspot is selected. The function that is specified in the "external function name" field, will be run as a consequence.

Send hotspot ID external

Enabling this option will cause an external function, for instance on the webpage containing the unity3d object (web player platform), to be run when the hotspot is selected, but with the added benefit of receiving the hotspot ID of the hotspot that was selected. The function that is specified in the "external function name" field, will be run as a consequence.

External function name

This is the name of the external function, for instance on the webpage containing the unity3d object (web player platform), that will be run if a hotspot is selected and the "run external function" or "send

hotspot ID external" option are enabled. It is recommended that only one external option is enabled. Please make sure that the external function name matches the name you input here.

Send hotspot ID internal

Enabling this option will cause an internal method, for instance in a script on a gameobject in your scene, to be run when the hotspot is selected, but with the added benefit of receiving the hotspot ID of the hotspot that was selected. The method that is specified in the " name of receiving method" field, will be run as a consequence. This option also requires that a object containing the method be specified. The object must be specified in the "object to send ID to" field. Optionally you can also specify if a receiving method is required or not by enabling or disabling the "requires receiver" option.

Object to send ID to

Specify the object in your scene containing the script you want to send a hotspot ID to, here (for use with the "send hotspot ID internal" option). Please select the object you wish to use by pressing on the circular button next to the "object to send id to" field, or alternatively, by dragging a scene object into the "object to send id to" field.

Name of receiving method

For use with the "object to send id to" option. Specify the name of the method that should receive the id of the hotspot that was selected. The method will consequently be executed. Please make sure that the method name matches the name you input in the field exactly.

Requires receiver

Enabling this option forces a receiver to be available when sending the hotspot id to a object internally.

If no receiver is found, an error is printed to the console.

Debug ID to console

For testing purposes.

Enabling this option will print the hotspot id of the selected hotspot to the console. Useful for checking if your hotspots are working and correctly set up.

Create a hotspot

Once you are happy with all the settings, and all the necessary inputs have been assigned, the "create a hotspot" button will become available. Press this button to create your new hotspot.

Contact Information

For all suggestions, comments, and queries, please visit our site at :

http://www.createchinteractive.com

and click on the contact link on the main menu.

Additional video tutorials are also available on our site, access them by clicking on the tutorials link in the Createch Interactive forum.