

### Overview

RTColorPicker is a runtime full featured color picker for the Unity3D Game Engine. It is designed to fit nicely with new and existing game/application projects. Whether you are making a level editor or need color selection for character customization, RTColorPicker can be a good fit for your project.

There are various configuration options to alter the appearance and functionality of the RTColorPicker. Slider sections, buttons and other features can be easily turned off and on. Need just a simple alpha slider? Just turn off everything except for the alpha slider and you've got a scaled down alpha color picker.

The RTColorPicker does not use Unity's readpixels to determine colors using the color selection area or the sliders, it's just good old fashion math. Readpixels is only used when using the eyedropper/sample color option to generate the effect of zooming into an area.

### **Features**

- HSV, RGBA and Hex input
- Color selection box and wheel
- Eye Dropper/Sample Color tool allows for quick and easy scene color selection
- Vertical and Horizontal orientation modes
- Includes custom skin (skin can be changed)
- Old Color and New Color
- Lots of configuration options displaying just the options you need
- Colors panel which can configurable default colors and user defined custom colors
- Save and Load user defined custom colors through easy to use function callbacks
- Separate scripts for C# and JavaScript compatibility

### **Demo Scene**

The Demo scenes included in the Unity package provides example usage of the RTColorPicker.

The DemoUI script shows the various ways RTColorPicker can be used including color selection and custom saving and loading of custom colors.

# Adding the RTColorPicker To Your Project

After importing the RTColorPicker Unity Package...

Drag and drop the RTColorPickerCS\_Prefab object under the RTColorPicker folder to your scene.

The prefab contains a GameObject with the RTColorPicker script attached and setup.

Clicking the prefab in the scene you'll notice there are a lot of inspector options. We'll cover these below.

# Using the RTColorPicker

Once the RTColorPicker Prefab has been added to your scene you will want to access it from your existing script(s). Simply add a public variable to your script for the RTColorPicker

public RTColorPicker ColorPicker;

Drag and drop the RTColorPicker from the scene onto your variable in the Unity Inspector panel. You'll now be able to access the RTColorPicker and start picking colors.

**NOTE**: You only need one RTColorPicker Prefab in your scene. This will allow for usage for multiple colors as seen in the DemoUI script. Should you need two color pickers open at the same time then you'll need to add an RTColorPicker Prefab more than once.

### RTColorPicker Public Variables

#### Skin

Type: GUISkin

Default: ColorPickerSkin

This is the gui skin used by the RTColorPicker. This can be swapped out with a different gui

skin.

### WindowTitle

Type: String

Default: "RTColorPicker"

This is the text that appears on the top header of the color picker window.

#### **ShowColorSelection**

Type: boolean Default: true

Toggles visibility of the ColorWheel/ColorBox area.

# **ShowHSVGroup**

Type: boolean Default: true

Toggles visibility of the HSV slider controls

### **ShowRGBGroup**

Type: boolean Default: true

Toggles visibility of the RGB slider group (does not include alpha slider)

### ShowAlphaSlider

Type: boolean Default: true

Toggles visibility of the Alpha slider

#### ShowHexField

Type: boolean Default: true

Toggles visibility of the Hex Value input area

# AllowWindowDrag

Type: boolean Default: true

Enables/Disables ability to drag color picker window

# AllowEyeDropper

Type: boolean Default: true

Toggles visibility of the Eye Dropper/Sample Color button

# AllowWheelBoxToggle

Type: boolean Default: true

Toggles visibility of the Wheel/Box selection buttons which are used to toggle

between wheel and box color selection modes

### AllowOrientationChange

Type: boolean Default: true

Toggles visibility of the Orientation button which is used to toggle between

vertical and horizontal display modes

#### AllowColorPanel

Type: boolean Default: true

Toggles visibility of the Color Panel button which is used to toggle visibility

of the Default/Custom Colors Panel

### **AllowCustomColors**

Type: boolean Default: true

If false custom colors will not be displayed or usable in the Colors Panel area

#### **DefaultColorsFile**

Type: TextAsset

Default: DefaultColors (located under Demo Assets)

This is a text asset object that defines what colors should appear for the Default Colors in the Colors Panel. Colors in the text asset should be in hex colors and should be one color per line. Open the DefaultColors file located under the Demo Assets folder for example usage.

#### **MaxCustomColors**

Type: int Default 24

The maximum allowable custom colors that can be added in the Colors Panel.

Does not effect Default Colors.

# ColorWheelBtnStyle

Type: GUIStyle Default: N/A

The button style for the Color Picker Wheel toggle button

### ColorBoxBtnStyle

Type: GUIStyle Default: N/A

The button style for the Color Picker Box toggle button

# EyeDropperBtnStyle

Type: GUIStyle Default: N/A

The button style for the Eyedropper/Color Sample button

# OrientationBtnStyle

Type: GUIStyle Default: N/A

The button style for the Orientation Toggle button

### ColorPanelBtnStyle

Type: GUIStyle Default: N/A

The button style for toggling the Color Panel open/closed

### **GroupToggleBtnStyle**

Type: GUIStyle Default: N/A

The button style for the HSV/RGB/Alpha slider groups header

### ColorBtnStyle

Type: GUIStyle

Default: N/A

The button style for the colors displayed in the Colors Panel

for default/custom colors

### **RTColorPicker Methods**

Show(c: RGBColor)

Make the colorpicker visible and defines the passed in RGBColor as the target for color selection.

# **Show(c : Color, tagStr : String)**

Function shows the color picker and sets unity color as active target. The tagStr is returned in the changeCallback function so that multiple colors can be handled from one RTColorPicker. The changeCallback function is called everytime the color changes in the color picker. See DemoUI.js for example usage.

### Show(m: Material)

Shows the color picker and set's the passed in material as the target for color selection. The materials main color will automatically be used by the color picker.

# Show(I: Light)

Shows the color picker and set's the passed in Light's color value as the target for color selection. The Alpha value of the color will automatically be used to adjust the lights intensity.

### Show(c : Camera)

Shows the color pciker and set's the passed in Camera's background color value as the target for color selection

#### Hide()

Hides the color picker

### IsOpen()

Returns true if the color picker window is currently visible.

# **GetCurrentRGBColor()**

Returns the currently selected color in the color picker as an RGBColor object.

# **GetCurrentUnityColor()**

Returns the currently selected color in the color picker as a standard Unity color

# SetPos(x:int, y:int)

Set's the Color Picker window position in screen coordinates

### LoadCustomColors(dataStr : String)

Loads custom colors from dataStr. dataStr should contain colors in hex format separated by line breaks.

# SetMode(mode : CPMODE)

Set's the current color selection mode: CPMODE.COLORWHEEL or CPMODE.COLORBOX

### **Events**

### OnColorChangeEvent

Called while color is actively being changed either via sliders, color wheel, or eye dropper

#### **OnColorCancelEvent**

Called when clicking cancel, pressing escape or clicking the X to close the color picker interface

#### OnColorOKEvent

Called when clicking the Ok button

#### **OnCustomColorSaveEvent**

Called when custom colors have changed and need saving

#### **OnCustomColorLoadedEvent**

Called when the custom colors have finished loading after calling the LoadCustomColors function