



Spectral

Manual – Spectral for Unity

Version 1.0.2

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Setup Guide

1. Download Spectral from the Unity Asset Store and add it to your Unity project.
2. Download the Corsair CUE SDK and add it to your Unity project.
 - a. The Corsair CUE SDK can be downloaded from:
http://downloads.corsair.com/download?item=Files/CUE/CUESDK_3.0.171.zip
 - b. The file at **CUESDK\redist\x64\CUESDK.x64_2015.dll** needs to be copied into the **Spectral\Plugins\x86_64** folder in your Unity project.
 - c. The file at **CUESDK\redist\x86\CUESDK_2015.dll** needs to be copied into the **Spectral\Plugins\x86** folder in your Unity project.
3. Implement functionality from Spectral in your project's scripts.

Important

Logitech Gaming Software must be running with the "Allow games to control illumination" setting enabled for Logitech devices to be controlled. Corsair Utility Engine (CUE) must be running for Corsair devices to be controlled.

Example Script

```
using UnityEngine;
using Spectral;
```

```
public class SpectralExample : MonoBehaviour
{
    void Start()
    {
        if (Led.Initialize())
        {
            Led.SetColor(Color.black);
            Led.SetColorForLeds(
                new [] { LedName.W, LedName.A, LedName.S, LedName.D },
                Color.magenta
            );
        }
    }

    void OnDestroy()
    {
        Led.Shutdown();
    }
}
```

Script Reference

Led Class

Namespace: Spectral

Performs operations for RGB LED Illumination.

```
public class Led
```

CorsairIsEnabled()

Checks if Corsair device support was enabled during initialization.

```
public static bool CorsairIsEnabled();
```

Returns

bool

True if Corsair device support is enabled.

Initialize()

Manually initialize the Spectral library. If Spectral is not initialized, this method will be called when trying to perform operations.

```
public static bool Initialize();
```

Returns

bool

True if initialization was successful.

LogitechIsEnabled()

Checks if Logitech device support was enabled during initialization.

```
public static bool LogitechIsEnabled();
```

Returns

bool

True if Logitech device support is enabled.

SetColor(byte, byte, byte)

Sets the color of all LEDs on enabled devices to the specified color.

```
public static bool SetColor(byte red, byte green, byte blue);
```

Parameters

red byte

The red channel value for the color to set. On monochromatic devices, only the highest channel value is used.

green byte

The green channel value for the color to set. On monochromatic devices, only the highest channel value is used.

blue byte

The blue channel value for the color to set. On monochromatic devices, only the highest channel value is used.

Returns

bool

True if LEDs on all enabled devices were successfully set.

SetColor(Color)

Sets the color of all LEDs on enabled devices to the specified color.

public static bool SetColor(Color color);

Parameters

color Color

The color to set. On monochromatic devices, only the highest channel value is used.

Returns

bool

True if LEDs on all enabled devices were successfully set.

SetColorForDevice(DeviceType, byte, byte, byte)

Sets the color of all enabled devices of the specified type to the specified color.

public static bool SetColorForDevice(DeviceType deviceType, byte red, byte green, byte blue);

Parameters

deviceType DeviceType

The type of devices to set.

red byte

The red channel value for the color to set. On monochromatic devices, only the highest channel value is used.

green byte

The green channel value for the color to set. On monochromatic devices, only the highest channel value is used.

blue byte

The blue channel value for the color to set. On monochromatic devices, only the highest channel value is used.

Returns

bool

True if LEDs on all enabled devices were successfully set.

SetColorForDevice(DeviceType, Color)

Sets the color of all enabled devices of the specified type to the specified color.

```
public static bool SetColorForDevice(DeviceType deviceType, Color color);
```

Parameters

deviceType DeviceType

The type of devices to set.

color Color

The color to set. On monochromatic devices, only the highest channel value is used.

Returns

bool

True if LEDs on all enabled devices were successfully set.

SetColorForLed(LedName, byte, byte, byte)

Sets the color of the specified LED on enabled devices to the specified color.

```
public static bool SetColorForLed(LedName ledName, byte red, byte green, byte blue);
```

Parameters

ledName LedName

The LED Name value for the LED to be set.

red byte

The red channel value for the color to set. On monochromatic devices, only the highest channel value is used.

green byte

The green channel value for the color to set. On monochromatic devices, only the highest channel value is used.

blue byte

The blue channel value for the color to set. On monochromatic devices, only the highest channel value is used.

Returns

bool

True if specified LED on any enabled device was successfully set.

`SetColorForLed(LedName, Color)`

Sets the color of the specified LED on enabled devices to the specified color.

```
public static bool SetColorForLed(LedName ledName, Color color);
```

Parameters

`ledName` LedName

The LED Name value for the LED to be set.

`color` Color

The color to set. On monochromatic devices, only the highest channel value is used.

Returns

`bool`

True if specified LED on any enabled device was successfully set.

`SetColorForLeds(List<LedName>, byte, byte, byte)`

Sets the color of the specified LEDs on enabled devices to the specified color.

```
public static bool SetColorForLeds(List<LedName> ledNames, byte red, byte green, byte blue);
```

Parameters

`ledNames` List<LedName>

The LED Name values for the LEDs to be set.

`red` byte

The red channel value for the color to set. On monochromatic devices, only the highest channel value is used.

`green` byte

The green channel value for the color to set. On monochromatic devices, only the highest channel value is used.

`blue` byte

The blue channel value for the color to set. On monochromatic devices, only the highest channel value is used.

Returns

`bool`

True if specified LEDs on any enabled device was successfully set.

`SetColorForLeds(List<LedName>, Color)`

Sets the color of the specified LEDs on enabled devices to the specified color.

```
public static bool SetColorForLeds(List<LedName> ledNames, Color color);
```

Parameters

ledNames List<LedName>

The LED Name values for the LEDs to be set.

color Color

The color to set. On monochromatic devices, only the highest channel value is used.

Returns

bool

True if specified LEDs on any enabled device was successfully set.

`SetColorForLeds(LedName[], byte, byte, byte)`

Sets the color of the specified LEDs on enabled devices to the specified color.

```
public static bool SetColorForLeds(LedName[] ledNames, byte red, byte green, byte blue);
```

Parameters

ledNames LedName[]

The LED Name values for the LEDs to be set.

red byte

The red channel value for the color to set. On monochromatic devices, only the highest channel value is used.

green byte

The green channel value for the color to set. On monochromatic devices, only the highest channel value is used.

blue byte

The blue channel value for the color to set. On monochromatic devices, only the highest channel value is used.

Returns

bool

True if specified LEDs on any enabled device was successfully set.

`SetColorForLeds(LedName[], Color)`

Sets the color of the specified LEDs on enabled devices to the specified color.

```
public static bool SetColorForLeds(LedName[] ledNames, Color color);
```

Parameters

ledNames LedName[]

The LED Name values for the LEDs to be set.

color Color

The color to set. On monochromatic devices, only the highest channel value is used.

Returns

bool

True if specified LEDs on any enabled device was successfully set.

Shutdown()

Manually shut down the Spectral library. If not called, the library should shutdown when the application exits.

```
public static void Shutdown();
```