

Unity plugin

- This project will help to integrate bHaptics' haptic devices into Unity environments.
- Current version is 1.4.4

1. Prerequisite

bHaptics Player needs to be installed (Windows 8.1, 10, Android)

- The apps can be found at
bHaptics webpage: <http://www.bhaptics.com>
- Android Appstore : <https://play.google.com/store/apps/details?id=com.bhaptics.player>

2. How to install

(1) Download from the Unity Asset Store

- <https://assetstore.unity.com/packages/tools/integration/bhaptics-haptic-plugin-76647>

(2) Download the package file, then import it into a Unity Project

- <https://github.com/bhaptics/haptic-library/releases>

3. Tutorial Videos

- Tutorials : https://www.youtube.com/playlist?list=PLfaa78_N6dlvd0Ha0s0Y_LT62-Oqp8N2A

4. How to use

(1) Default Test Scene

>Go to Assets > bHapticsManager > Examples > open 1. Simple Example with TactSouce.scene
Select the [bHaptics Manager] Prefab in the scene.
Some example feedback effects are automatically loaded, ready for testing.
You can check each feedback effect by pushing the corresponding button while playing in the editor.

(2) To apply to your own project, just add the [bHaptics Manager] Prefab to your scene.

(3) Then add TactSource to the GameObject in the inspector.

5. Options in [bHapticsManager]

(1) visualizeFeedbacks

- Enable/disable visualization of haptic feedback

(2) LaunchPlayerIfNotRunning (Windows only)

- Enable/disable launching bHaptics Player if it is installed and it is not running.

6. Android Issues

(1) Prerequisite

- Make sure that all the android setting with unity must be finished.
- <https://unity3d.com/kr/learn/tutorials/topics/mobile-touch/building-your-unity-game-android-device-testing>
- The version of the Android device must be higher or equals to 4.3(API level 18) - <https://developer.android.com/guide/topics/connectivity/bluetooth-le>

(2) If there is not a paired device, then the SDK will do nothing.

(3) setting for AndroidManifest.xml

- Please refer to AndroidManifest-bhaptics.xml
- If your project contains a custom AndroidManifest.xml file, copy

```
<service android:name="com.bhaptics.tact.ble.BhapticsService">
  <intent-filter>
    <action android:name="com.bhaptics.player.Service" />
    <action android:name="android.intent.action.MAIN" />
    <category android:name="android.intent.category.DEFAULT" />
  </intent-filter>
</service>

<activity android:name="com.bhaptics.tact.unity.HapticPlayerWrapper"
  android:label="@string/app_name"
```

```
        android:configChanges="fontScale|keyboard|keyboardHidden|locale|mnc|mcc|navigation|orientation|screenLayout|screenSize|smallestScreenSize|uiMode|touchscreen";
    </activity>
```

- Otherwise, copy this file to this location in your project:

Assets/Plugins/Android/AndroidManifest.xml.

(4) Checkout how unity manage AndroidManifest.xml

- <https://docs.unity3d.com/2018.1/Documentation/Manual/android-manifest.html>

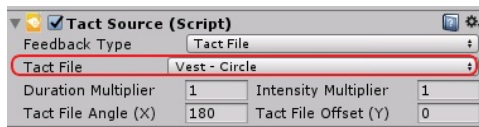
(5)How to install the bhaptics Player at Daydream standalone devices.

- <https://uploadvr.com/android-daydream-app-standalone-how-to/>

7. Notes

(1) Migration to 1.4.4

- Tact File setting will be broken. Please reconnect tact file in TactSource.



(2) Migration to 1.3.1

- namespace changed from Bhaptics.Tac to Bhaptics.Tact

```
Bhaptics.Tac --> Bhaptics.Tact
Bhaptics.Tac.Unity --> Bhaptics.Tact.Unity
```

(3) Migration to 1.3.0

```
// from
BhapticsManager.HapticPlayer.SubmitRegistered("BowShoot");

// to
BhapticsManager.HapticPlayer.SubmitRegistered(BhapticsManager.GetFeedbackId("BowShoot"));
```

(4) Migration to 1.2.2

```
// from
SubmitRegistered(string key, TransformOption option)

// to
SubmitRegisteredVestRotation(string key, RotationOption)

// from
SubmitRegistered(string key, float intensityRatio, float durationRatio)

// to
SubmitRegistered(string key, ScaleOption option)
```

(5) Migration from 1.0.3 to 1.0.4

```
var hapticPlayer = FindObjectOfType<BhapticsManager>().HapticPlayer();

// To
var hapticPlayer = BhapticsManager.HapticPlayer;
```

Last update of README.md: Apr 12th, 2019.

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