## **Real Asset Size Documentation**

## Why I made this Asset

This asset, I hope, should make your life easier when designing levels by being able to see how big objects are. I think this'll especially be useful if you didn't make the assets yourself (such as if you're working as part of a team or prototyping) as you might not know exactly how big something is.

I wanted a way of seeing the size of the asset without affecting the scale of the object (as it can cause physics issues when objects are not 1,1,1 in scale). So I decided to make this asset so you can see the size of the object without it affecting the scale or having any impact on the game.

The result is this asset, which shows you the size in units of any mesh or sprite, and works all the way from Unity 3.4 until Unity 2020 (and probably beyond!).

## **Installation & Setup**

Via Package Manager (Unity 2019+; Required Unity 2020+)

Click **Window > Package Manager**, click the dropdown that says **Packages**: and select **My Assets**. A list of all the assets you bought from the Asset Store (and maybe some Unity ones) will appear. Scroll through the alphabetical list and click on **Real Asset Size**. Click **Download** and wait for it to finish, then click **Import**. Another dialog will appear, leave everything ticked and click **Import** again.

#### Via Asset Store (Unity 5 → Unity 2019)

Click **Window > Asset Store** or **CTRL+9** on your keyboard, and search **Real Asset Size** to find it again, it should show as Purchased. Click on it and click **Download** and wait for it to finish, then click **Import**. Another dialog will appear, leave everything ticked and click **Import** again.

#### Note for Unity 3 & 4

Unity ended support for "Asset Store Version 1" in 2019 meaning you can no longer use the Asset Store in the engine. It also doesn't have a package manager, and using Asset Store Version 2 website just prompted me to open it in the game engine, which failed. I'm going to ask Unity for clarification on how Unity 3 & 4 users install assets from the Asset Store (and even if they can anymore). Until then, if you do still need to use Unity 3 or 4 for a project you're working on, you can use this work around to get it in:

#### Unity 4

Download any version of Unity that is Unity 5 or newer and follow the instructions above to import the asset into it. Now right click on the Real Asset Size folder in your Project window, and select **Export Package** and save it.

Now open Unity 4, right click your Project window and select **Import Package > Custom Package** and select the package you just exported.

#### Unity 3

Download any version of Unity that is Unity 5 or newer and follow the instructions above to import the asset into it. Now right click on the Real Asset Size folder in your Project window, and select **Export Package** and save it.

Now you need to Download Unity 4 (any sub version is fine, I tested with 4.6) - this is because Unity 3 fails to read the package if it was exported from any Unity version newer than 4.

Right click on your Project window and select **Import Package > Custom Package** and select the package you just exported. When it's done importing, right click on the Real Asset Folder and select **Export Package** again.

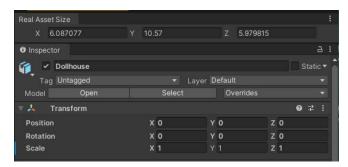
Now open Unity 3, right click your Project window and select **Import Package > Custom Package** and select the package you just exported (make sure you select the one you exported from Unity **4**, not the other one).

#### Setup:

Setup is really simple. Just click **Window > Real Asset Size** and a box will appear called Real Asset Size. And that's it! Click on an object in the Hierarchy or the Project and it will tell you its real size (or tell you that it's not an appropriate asset, we'll get to that in the next section).

The window can be docked and resized. To dock the window, simply grab it by the name and drag it where you want it to go, you'll see grey boxes appear showing you where it'll snap to. Once snapped, you can resize it by dragging it from the edges. Since it doesn't need much space, we recommend dragging it to the minimum height it'll let you go.

I recommend having the Real Asset Size window above your Inspector window, but it is up to you.



## **Supported Asset Types**

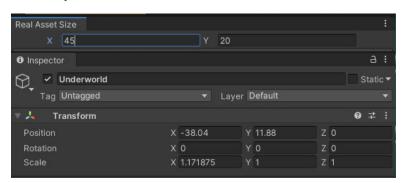
In The Scene / Hierarchy:

In the scene, it'll show you the size of any gameobject with a:

- A) Sprite Renderer
- B) Mesh Filter
- C) Skinned Mesh Renderer

Simply click on the asset and it'll tell you its size in Units / Meters (m).

As aforementioned, I do **not** recommend resizing assets as it can cause physics problems, but if you do decide to resize an asset, you can use the **Real Asset Size** window to specify the size you want it to be in Units / Meters, and it'll set the scale accordingly.



Please note that you cannot resize **Skinned Mesh Renderers**. This is because the joints of the Skinned Mesh Renderers affect its size (**not** the Unity Scale function). So instead, it displays the size of the mesh as it was imported.

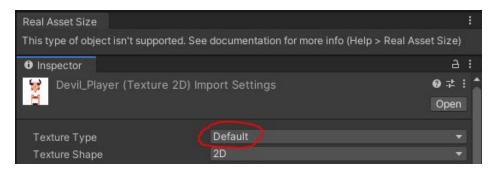
#### In The Project:

In the project, if you click on any of the following, it'll show you the size:

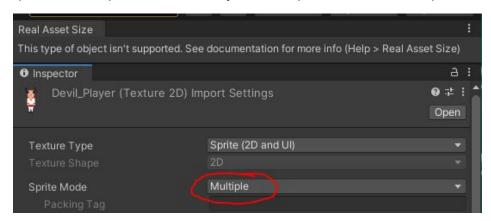
- A) A Mesh
- B) A Sprite
- C) A Texture that is of type Sprite and has the Sprite Mode of Single.
- D) A Prefab which contains a:
  - a) Sprite Renderer
  - b) Mesh Filter
  - c) Skinned Mesh Renderer

## I've clicked on a Texture2D and it says it's not supported.

It only supports Sprites, so first things first, check that it is of type Sprite.



If it is, another issue might be if you have it as Sprite Mode Multiple, but have not yet split the sprites in the Sprite Editor. Once you have split it, it will find the sprites.

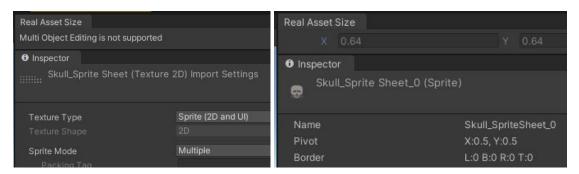


# I've clicked on one Texture2D and it says I've selected multiple.

If you have a Texture2D with the Sprite Mode **Multiple** (i.e. you imported a Sprite Sheet and split it into multiple sprites in Unity) it will show as Multiple when you click on the Texture, as

it doesn't know which Sprite you want to know the size of - while the grids are typically the same size, they don't have to be (such as when you use Automatic grid splitting, or do it yourself).

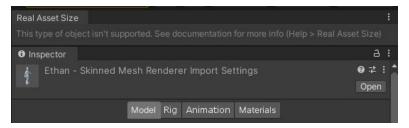
To see the size, click on the dropdown arrow next to the Texture and **click on the Sprite** you want to know the size of.



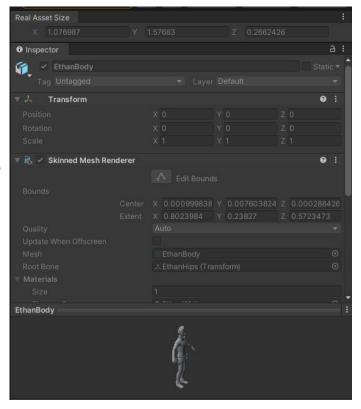
## I've clicked on a model but it says it's not supported.

It is most likely that you're clicked on an empty object.

For example: a Player might have an empty at the top, then underneath have Body and Glasses (as is the case for Ethan, the default Unity character that comes in Standard Assets).



In this scenario, if you click on the root object Ethan, it will tell you the object is not the right type and won't show you sizes. That's because there is no mesh on this object, but if you click the dropdown arrow and select Body, it'll now show you the size of Ethan's body (which is all of him minus his glasses).



# **Any Questions?**

This is a very simple asset, so chances are everything is covered in this documentation. But if you do have any questions, you can email <a href="mailto:steven@patternassembled.com">steven@patternassembled.com</a> and I'll be happy to help!