4-Directional Character Editor

By Hippo Games

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1 ONLINE HELP

You can find the latest manual version in our wiki:
https://github.com/hippogamesunity/HeroEditor4DHub/wiki

There are general asset information, FAQ, tips and other helpful materials. Moreover, you can request new features, submit bugs and get online help in our tracker:
https://github.com/hippogamesunity/HeroEditor4DHub/issues

Join our Discord channel for fast support:
https://discord.gg/4ht2AhW

2 ABOUT

With 4-Directional Character Editor you can create amazing human characters for your mobile games. Create role playing games, arcades, platformers, quests and even strategies!

It contains awesome sprite collection, character editor and all general animations. Our built-in editor will help you to customize your characters and play animations. You even don't need to write a line of code!

3 DO YOU LIKE IT?

If so, please support us on Unity Asset Store. You can rate ★★★★★ our asset and leave your feedback!

4 CONTACTS US

Here is our email hippogamesunity@gmail.com, so feel free to ask your questions and request new features!

5 HIRE ARTIST

Need exclusive art work? Our artist is ready for hire! Please email to hippogamesunity@gmail.com!

6 FEATURES

- 4-directions (front, back, left, right)
- Create and customize human characters
- Change body parts and equipment
- Change body parts color
- Mix armor parts
- Face expressions
- Play animations
- Save and load characters as prefabs
- Save and load characters as JSON
- Mobile friendly
- Ultimate performance (with Unity Sprite Packer)

7 TECH SPECS

- Unity 2020+
- Clean C# source code with comments
- Service code loaded from DLL
- Mobile friendly
- Any platform (PC, Android, iOS, WebGL)

8 SETUP & TEST GUIDE

1. Download and install unity package
2. Make sure you have HeroEditor4D folder added to your project
3. Open the editor scene from the root asset directory
4. Run the scene

9 EDITOR USAGE

- Use tips to play animations

- Use dropdowns to change body parts and equipment
- Use palette to change body parts
- Use [Save]/[Load] buttons to save and load characters prefabs

10 WEAPON TYPES

- There are different weapon types: one-handed melee, two-handed melee, bows and firearms
- Please refer to WeaponType enum
- You can use only one weapon type at the same time

11 ANIMATION

Select Dummy/Animator from scene or Human.controller from Project window. Then open Window/Animator. You will see all our animations.

There are three layers: Upper, Lower and Head. Each of them is independent. It means you can play any animation available for each layer simultaneously.

On Parameters tab, you will see all parameters that control animation transitions.

Select each layer to see animation flow.

You can switch animations with the following ways:

- Most simple way. Just call Character.Animator.Play. This will immediately play animation clip by its name, without any transition and smooth.
- More advanced way. Call Character.Animator.CrossFade, this will fade new animation in over a period of time seconds and will fade other animations out.
- However, the best way is to use animation parameters to control animation transitions. It can take time to learn animation parameters effects.

12 HOW TO EDIT AND CREATE ANIMATION

We made all our animations with built-in Unity animation system. Therefore, you can edit them and create your own.

- You can find all animations in Animation folder
- Human.controller contains all animation data
- Use Animation window to edit and create animations
- Use Animator window to edit transitions

13 LAYERS AND LAYER MANAGER

There is LayerManager attached to all Characters. It contains ordered character sprite list and handles sprite overlapping. All sprites have Sorting Layer as multiples of ten: 0, 10, 20, 30 and so on. That way we'll be able to insert new layers in future.
If your character is moving by Z axis, then you'll better use Z coordinate for layers instead of Sorting Layer. LayerManager has two checkboxes: UseLayer and UseZCoordinate. Simple check what you want and then press SetOrder button. Now your sprites are ordered by Sorting Layer or Z coordinate. You can also change Z accuracy by editing SetOrder method.

14 HAIR MASK

We don't use hair masks. The default hair sprite will be applied when a helmet is equipped.

15 WEAPON TRAILS

We don't use weapon trails in this asset. You can add any trail effects available on the Asset Store.

16 OPTIMIZATION TIPS

- Enable Texture Compression for all sprites to minimize build size
- Use Crunch Compression for all sprites to minimize build size
- Use Sprite Mode > Mesh Type = Tight because all sprites are 512x512 px and are not cropped
- Set Sprite Mode > Extrude Edges = 2 or more if you have crop artefacts
- Use Packing Tags for sprite groups to improve performance (legacy feature, but preferred)
- Enable Legacy Sprite Packer from Editor settings
- Refer to Unity docs for details about Texture Compression and Packing Tags
- Consider to use Sprite Atlas (replacement for Legacy Sprite Packer)
- Read more about sprite packing in Sprite Atlas (Packing) section below
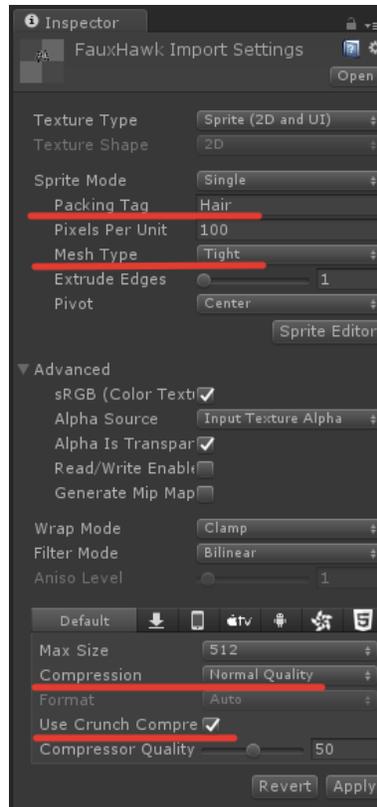
17 FRAME-BY-FRAME ANIMATION

This feature may be under development. Contact us if you need it!

Do you want to use our awesome characters outside of Unity? Maybe in other game engines? Simply open SpriteSheetMaker scene and "dump" any animations you want to sprite sheets!

18 SPRITE ATLAS (PACKING)

In order to reduce memory usage and improve game performance sprites can be grouped into combined textures called Atlases. As well as out sprite collection is very large, we advise you to use packing features available in Unity 2017 and later: Sprite Packer and Sprite Atlas.

It is preferred to use Legacy Sprite Packer, read more here:
https://docs.unity3d.com/Manual/SpritePacker.html

Alternatively, you can use Sprite Atlas, read more here:
https://docs.unity3d.com/Manual/SpriteAtlas.html

When using Sprite Atlas, please:

- Enable Sprite Packing (refer to Unity docs for more info)

- Group sprites and make sure that each atlas size is no more than 2048x2048 to avoid issues on different platforms
- Create a sprite atlas for each sprite group

19 SCRIPT REFERENCE

Please refer to ScriptReference.chm if you have any questions about code samples.

20 FAQ

Please visit our project wiki:

https://github.com/hippogamesunity/HeroEditor4DHub/wiki/FAQ-&-Troubleshooting

21 ACKNOWLEDGMENTS

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