



# Military Heroes: Character Editor

By Hippo Games

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## 1 ONLINE HELP

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You can find the latest manual version in our wiki:

<https://github.com/hippogamesunity/HeroEditorHub/wiki>

There are general asset information, FAQ, tips and other helpful materials. Moreover, you can request new features, submit bugs and get online help here:

<https://github.com/hippogamesunity/HeroEditorHub/issues>

## 2 ABOUT

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With **Military Heroes: Editor** you can create amazing human characters for your mobile games. Create 2D shooters, arcades, platformers, quests and other genres!



It contains amazing 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?

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

## 4 CONTACTS US

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Here is our email [hippogamesunity@gmail.com](mailto:hippogamesunity@gmail.com), so feel free to ask your questions and request new features!

## 5 HIRE ARTIST

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Need exclusive art works? Our artist is [ready for hire](#)! Please email him directly: [bushwacker2150@gmail.com](mailto:bushwacker2150@gmail.com)!

## 6 FEATURES

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- Basic sprite collection
- Full sprite collection [[Pro](#)]
- Create and customize human characters
- Change body parts and equipment
- Change body parts color
- Mix armor parts [[Pro](#)]
- Face expressions
- Upper and lower body animation
- Basic firearm visual effects
- Basic firearm sound effects
- Save and load characters
- Test Room [[Pro](#)]
- Sprite Sheet Maker [[Pro](#)]
- Ultimate performance
- Quick support
- Extend sprite collection with our [paid bundles](#) (available on the Asset Store)
- Asset manual and script reference included

## 7 TECH SPECS

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- Unity 2017
- Clean C# source code with comments
- Mobile friendly
- Any platform (PC, Android, iOS, WebGL)

## 8 SETUP & TEST GUIDE

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1. Download and install unity package
2. Make sure you have [SciFiHeroes](#) folder added to your project

3. Open [CharacterEditor](#) scene from Scenes
4. Run scene

## 9 EDITOR USAGE

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- Use arrows to play animations
- Use dropdowns to change body parts and equipment
- Use palette to change parts color
- Press [Save]/[Load] buttons to save and load characters
- Press [Test] button to enter Test Room

## 10 WEAPON TYPES

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

## 11 ANIMATION

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Select [Dummy/Animation](#) 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

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We made all our animations with built-in Unity animation system. So 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 FIREARM PARAMETERS

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[FirearmCollection](#) contains the full list of firearm parameters. Parameters must have the same names as firearm sprites! Please refer to [FirearmParams](#) class to see all available params.

## 14 FIREARM SOUNDS

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[FirearmParams](#) contain links to audio clips. Just drag and drop them!

Note that our asset doesn't provide you with the full sounds collection. Anyway, you can find all required sounds on the Asset Store!

## 15 FIREARM EFFECTS

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Our asset has only minimal effects included. Anyway, you can find all required effects on the Asset Store!

We can advise you [Sci-Fi Arsenal](#) by Kenneth "Archanor" Foldal Moe:

<https://www.assetstore.unity3d.com/en/#!/content/60519> as it fits perfectly with our weapons!

## 16 LAYERS AND LAYER MANAGER

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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'd better use [Z coordinate](#) for layers instead of [Sorting Layer](#). LayerManager will help you to switch your sprite order by Sorting Order or Z coordinate.

## 17 HAIR MASK

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Hair mask is attached to [Hair](#) sprite renderer. It is used to partially hide hair.

There are 3 types of masks defined in [HairMaskType](#) enum:

- [None](#) - don't crop, show full hair sprite
- [HelmetMask](#) - use helmet mask if exists, sprite will be visible outside the mask
- [HeadMask](#) - use common head mask, sprite will be visible inside head outline only

Helmet masks are located in [HelmetMasks](#) folder. When you equip a helmet, linked helmet mask will be automatically added to hair sprite.

You can read more about sprite masks here: <https://docs.unity3d.com/Manual/class-SpriteMask.html>

## 18 PAID EXTENSION ASSETS

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We provide additional editor extension assets, such as new sprite collections. Please visit our page on the Asset Store to find our extension assets: <https://assetstore.unity.com/publishers/11086>

## 19 WEAPON TRAILS

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Each melee weapon is linked to its trail sprite (by hash). [SpriteCollection](#) contains both weapon and trail sprite lists. For more info, please visit our wiki:

<https://github.com/hippogamesunity/HeroEditorHub/wiki/Melee-weapon-trails>

## 20 OPTIMIZATION TIPS

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- 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
- Refer to Unity docs for details about [Texture Compression](#) and [Packing Tags](#)

## 21 FRAME-BY-FRAME ANIMATION

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

Wanna use our awesome characters outside of Unity? Maybe in other game engines? It's no problem anymore as we made sprite sheet generator! It comes with [Sci-Fi Heroes: Editor Pro](#). Simply open [SpriteSheetMaker](#) scene and "dump" any animations you want to sprite sheets!

## 22 SPRITE ATLAS (PACKING)

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In order to reduce memory usage and improve game performance sprites can be grouped into combined textures called [Atlases](#). As well as our sprite collection is very large, we advise you to use packing features available in Unity 2017: [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:

- group sprites and make sure that each atlas size is no more than 2048x2048 to avoid issues on different platforms. Use different packing tags: Weapon, Armor, Shield and so on.

## 23 SCRIPT REFERENCE

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Please refer to [ScriptReference.chm](#) if you have any questions about code samples.

## 24 FAQ

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Please visit our project wiki:

<https://github.com/hippogamesunity/HeroEditorHub/wiki/FAQ-&-Troubleshooting>

## 25 ACKNOWLEDGMENTS

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[Mike Jakubowski](#) – help with character eyes colorizer shader and editor UI suggestions.