



Table of contents:

- 1 About this package
 - 1.1 Version history
 - 1.2 Controls
 - 1.3 What does this package feature?
- 2 Getting started
 - 2.1 Creating an extra input
 - 2.2 Creating the "PlayerChar" object, adding the "Character Controller" component and attaching the "RPG_Controller" script
 - 2.3 Placing your character model and changing its material shader
 - 2.4 Placing a "cameraPivot" and setting the right tagging
 - 2.5 Attaching "RPG_Camera" and "RPG_Animation"
- 3 Overview of the scripts' variables and the animation clips
- 4 Got questions?

1 About this package

1.1 Version history

Version 1.1

- * added the "RPG_Animation" script
- * added a capsule model with animation clips attached to it
- * changed object hierarchy of the "PlayerChar" object
- * the cursor is not locked anymore if you press the left mouse button (in case you want to have the locked cursor back, just open the "RPG_Camera" script and scroll to line 108)
- * setting the layer of PlayerChar to "Ignore Raycast" is not necessary anymore
- * some code and names improved/edited for clearer understanding

1.2 Controls

LM (left mouse button)
RM (right mouse button)

W/S - walk forward/backwards
A/D - turn left/right
Q/E - strafe left/right
LM - (holding) free look around the character
RM - lets the character look in the same direction as you do

(holding) lets the character rotate with the camera having half free look
LM & RM - (holding) walk forward additional RM actions
Scroll wheel - zoom in/out
Space bar - jump

1.3 What does this package feature?

- the camera stays above the terrain and in front of other game objects
- if character isn't in line of sight, the camera moves forward to the point where the character is visible again
- if the camera was forced to go closer to the character but isn't constraint anymore by objects in its back, it zooms out to the last user set distance
- if the player can't scroll out because objects block the camera, the last set distance increases for the next time the camera zooms out automatically
- if the camera height is lower than the character, it stays on the ground instead of moving closer
- walking with WASD without pressing LM, the camera movement locks to the character
- switching to first person if the camera comes too close
- coming closer to first person view, the character fades
- walk and rotate the camera around the target individually by holding LM
- 10 basic example animation clips and animation scripting

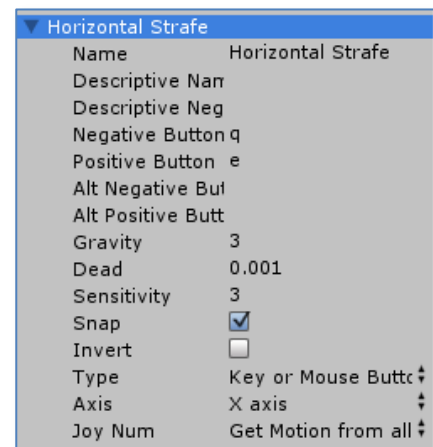
2 Getting started

2.1 Creating an extra Input

Go to “Edit → Project Settings → Input” and increase the “Axes” size by one. Click on the new created Input and name it “Horizontal Strafe”.

Set all values to the same as the “Horizontal” input except “Negative Button”, “Positive Button”, “Alt Negative Button” and “Alt Positive Button”.

The “Negative Button” should be set to “q” and the “Positive Button” to “e”.

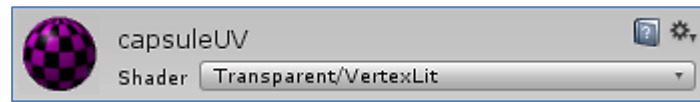


2.2 Creating the “PlayerChar” object, adding the “Character Controller” component and attaching the “RPG_Controller” script

Navigate to “GameObject → Create Empty” (or Ctrl+Shift+N) and rename it to “PlayerChar”. Now add the “Character Controller” component to “PlayerChar” by going to “Component → Physics → Character Controller”. Last thing missing here is the “RPG_Controller” script. Just attach it to “PlayerChar” via drag-and-drop.

2.3 Placing your character model and changing its material shader

Make your character model a child of “PlayerChar” by holding the left mouse button and dragging it on “PlayerChar” (if you do not have your own model, take a Unity game object). Select your model and set its position to (0,0,0). This will set its Position to the same the “PlayerChar” object has. To ensure that your character fades because of certain circumstances, set its material shader to “Transparent → VertexLit”. Now it is time to adjust the “Character Controller” component of “PlayerChar” so it fits to your model.

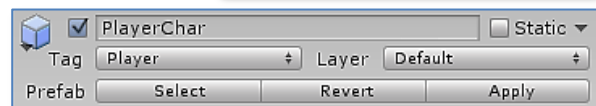
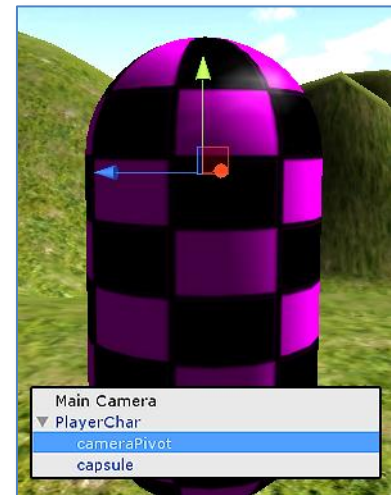


2.4 Placing a “cameraPivot” and set the right tagging

The camera needs the “cameraPivot” to interact with the character, so it is essential to have one! To create one, navigate to “GameObject → Create Empty” (or Ctrl+Shift+N). Rename this object to “cameraPivot” in the project hierarchy. Make the “cameraPivot” a child of the “PlayerChar” object by holding the left mouse button and dragging it on “PlayerChar”. Go to the Inspector and set the position of “cameraPivot” to (0,0,0).

Adjust the Y value to the height you want your camera anchor at (I like to have it in the character's neck, for example).

Now click on “PlayerChar” in the hierarchy and change its “Tag” to “Player”. Repeat this for all of its children. The right tagging is essential for the camera to work properly!



2.5 Attaching “RPG_Camera” and “RPG_Animation”

If you have a “Main Camera” in your scene yet, attach the “RPG_Camera” script via drag-and-drop to the “Main Camera”. In case the game starts and the camera does not have the script attached, the game will automatically attach one. The only difference is that you cannot change the variable values of the script without opening the scripts themselves.

If you want to implement the animations your model has, attach the “RPG_Animation” to it, open the “RPG_Animation” script and read the comments for further instructions.

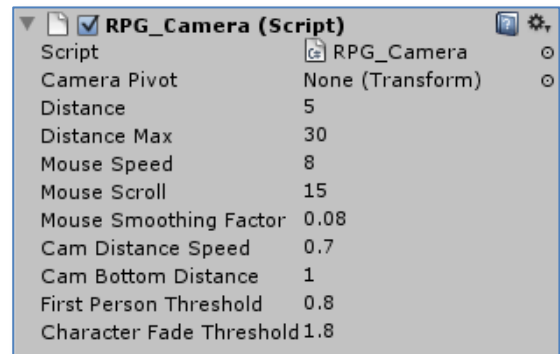
Note:

In case you do not have “RPG_Animation” attached, your character will not fade if the camera comes closer to first person view. Assuming that you do not want to use my script for your character animation but like to have the character fading, delete the “RPG_Animation” script, rename the “RPG_Animation_CharacterFadeOnly” script to “RPG_Animation”, open it and change every appearance of “RPG_Animation_CharacterFadeOnly” to “RPG_Animation”, and attach this instead of the original “RPG_Animation” script. In addition open the “RPG_Controller” script and delete lines 60 and 73.

3 Overview of the scripts' variables and the animation clips

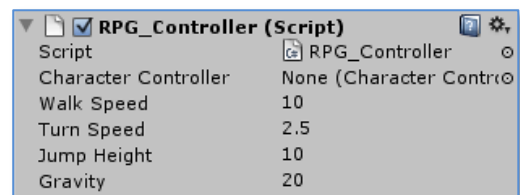
Public (adjustable) variables of "RPG_Camera":

- distance (and also the starting distance)
- distanceMax
- mouseSpeed
- mouseScroll
- mouseSmoothingFactor
- camDistanceSpeed
- camBottomDistance
- firstPersonThreshold
- characterFadeThreshold



Public (adjustable) variables of "RPG_Controller":

- walkSpeed
- turnSpeed
- jumpHeight
- gravity



All animation clips within this package:

| Name | Star | End | WrapMode | Loop | |
|------------|------|-----|------------|-------------------------------------|---|
| idle | 0 | 123 | Loop | <input checked="" type="checkbox"/> | - |
| walk | 125 | 127 | Loop | <input checked="" type="checkbox"/> | - |
| walkback | 129 | 131 | Loop | <input checked="" type="checkbox"/> | - |
| strafeleft | 133 | 135 | Loop | <input checked="" type="checkbox"/> | - |
| strafeleft | 137 | 139 | Loop | <input checked="" type="checkbox"/> | - |
| strafeleft | 141 | 143 | Loop | <input checked="" type="checkbox"/> | - |
| strafeleft | 145 | 147 | Loop | <input checked="" type="checkbox"/> | - |
| strafeleft | 149 | 151 | Loop | <input checked="" type="checkbox"/> | - |
| strafeleft | 153 | 155 | Loop | <input checked="" type="checkbox"/> | - |
| jump | 157 | 186 | Clamp Fore | <input type="checkbox"/> | + |

4 Got questions?

Still got questions? Send me an email to JohnPStairs@gmail.com

The best way to solve your problem as fast as possible, please attach a screenshot!

Best regards,

John Stairs