How to use the new Blender Scene

(Generic)

By Cahalan.

Required Add-ons:

- Render Button & Camera Manager
- Loom

Notes:

The Render Button / Camera Manager add-on served as the basis for the Auto Cropper Add-on developed by MetalLegacy, Radzo, & Tyleto. I opted to use the original because the Auto Cropper has additional Python Coding that conflicts with the additional cameras introduced.

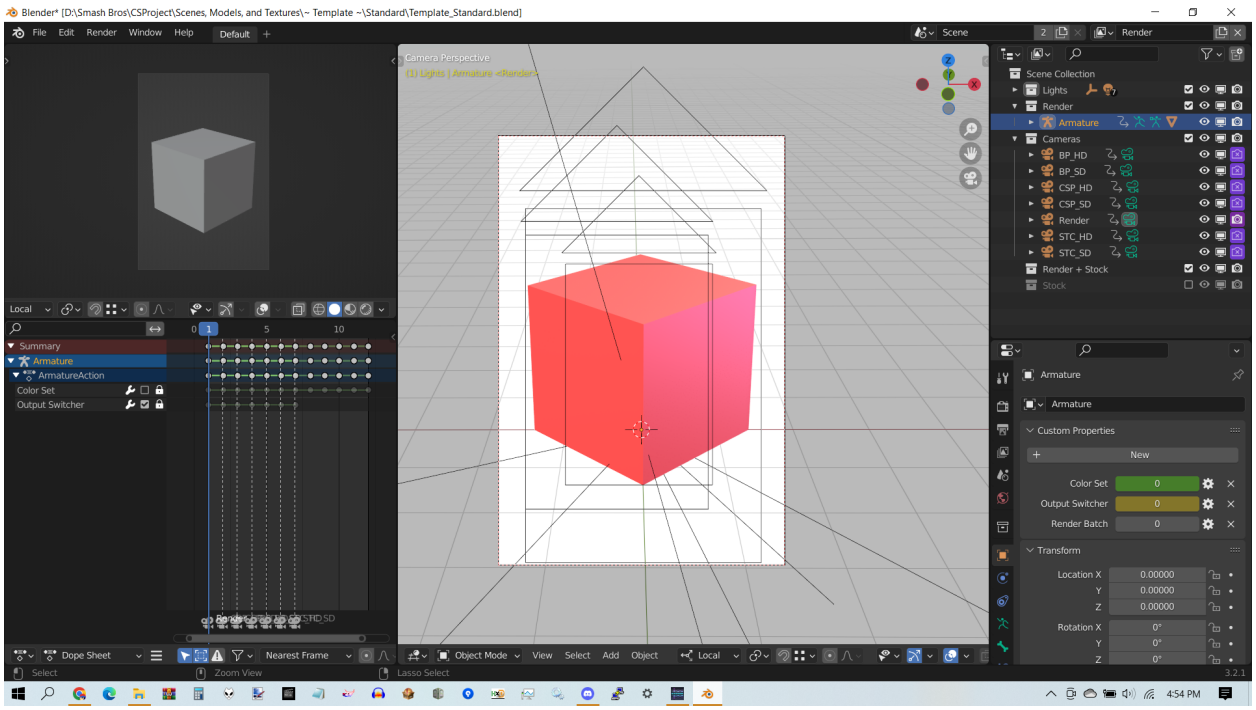
Loom is a huge quality of life improvement for rendering animations; it ensures that each and every frame is rendered and you can define a custom range of keyframes to render (even skipping keyframes!). I used Loom because I was running into issues with rendering "animations" in vanilla Blender and with the Camera Manager's "Render Animation" tool. Smaller batch renders of a single UI for multiple recolors may work in vanilla, ***but your mileage may vary without using Loom.***

Features:

- Technically, this is an unofficial update to the Blender Cube scene for Jiggs
    - 12 "costumes", one for each internal color found in Brawl's code
        - The stuff that makes the Yoshi Event Match work, fyi
- Simplified scenes so you can learn how I do things without dealing with nonsensical BS relating to a certain **blue hedgehog**.
- Mach 7's Brawl Lighting Setup with edited color management.
- Return of the Stock Layer! (I'll never understand why the OG PMHD scene avoids it)
- A "Sphere" shape exclusive to the Stock Layer, used to demo said feature.
- Simplified a lot of stuff basically.
- No Cosmetics, but the directories are present.
    - Treat this as your exercise to demo your mastery of the setup.

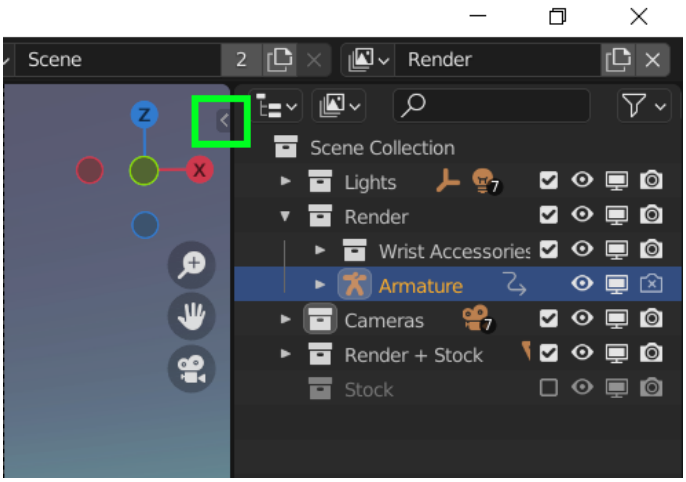
Navigation:

When you open the Blender Scene, this is how it will look.

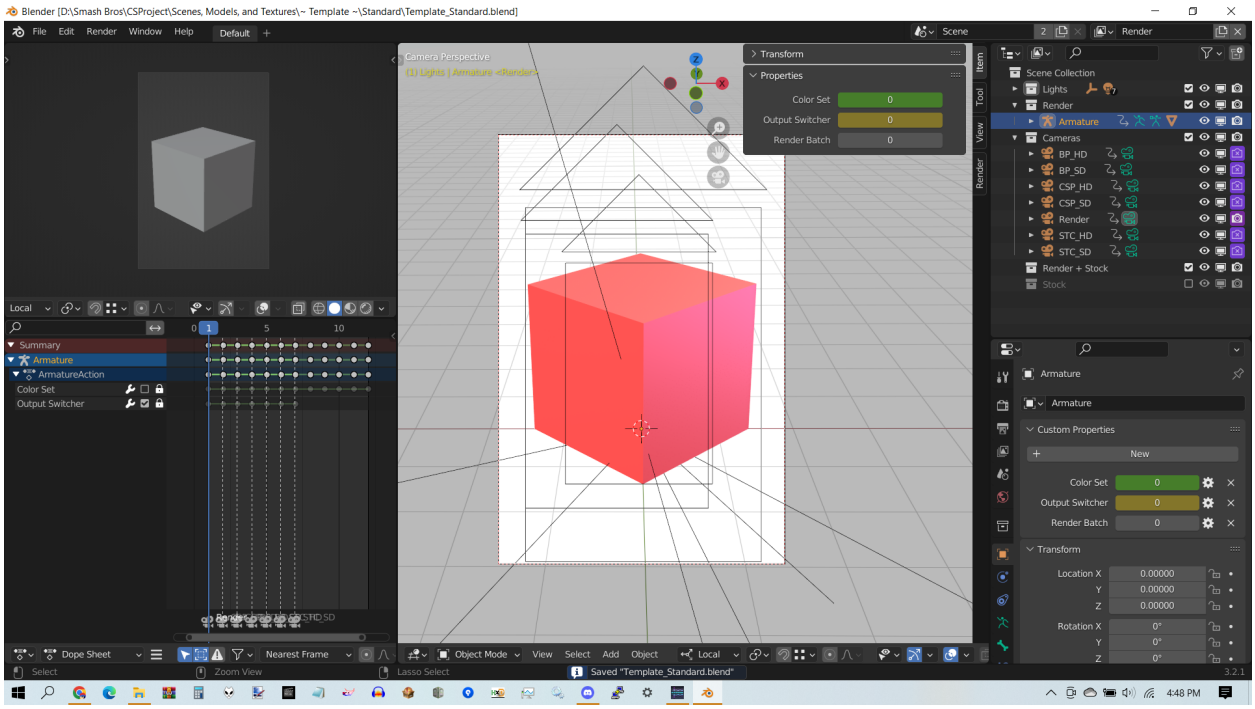


For all of the animation channels in the bottom-left to properly work, you must select the armature first as shown in the upper-right of the image. The current combination of muted channels allows you to move the slider (or use your arrow keys) to select the “Color Set”.

You can view the camera manager and a shortlist of the armature’s properties by selecting the arrow tucked in the material view window.



Here’s the expanded list of options once you click it:



The “Render” tab that appears on the side will only appear when you enable / install the Camera Manager Community Add-on.

You can install add-ons by going to: Edit > Preferences > Add-ons.

Compared to the Sonic Scene, many of the expression controls are removed so that you only see the bare essentials that make everything work. ***You will need to dive into the compositor and its node groups to re-parent the drivers should you choose to use a different armature or differently named properties. This also applies to anything related to batch rendering recolors and object visibilities.***

The important stuff for multiple cameras is the Output Switcher which has their own animation channel. The output switcher synchronizes the rendering of cameras in time with the camera views in the animation: crucial for properly naming the camera views in the final output as well.

The Render Batch property controls which system of batch rendering is used in the compositor for file naming outputs. This used to be its own animation channel so that users can control all settings within the dope sheet, but this has been removed for simplicity and to highlight the importance of this setting.

How to Set the Render Batches in Preparation to Render Images:

- Render Batch 0: *Renders all Cameras for the currently selected costume.*
    - The Color Set Channel must be **MUTED** (no checkmark)
    - The Output Switcher Channel must be **UNMUTED** (checkmarked)
    - The Render Batch property is set to “0”.
    - File output (see output pane in bottom-right):
      *//..\..\..\Renders and Cosmetics\~ Template ~\Fighter_Standard_**XX**_*
      (**XX** being your own choice of numbering.)
    - For the Shadow Scene, leave out the ***XX**_*

For Batch Setting 0, use the Camera Manager’s “Render all Cameras” button.

The camera manager will also let you select which cameras to render by using the arrow-esque button to the right of the “Render all Cameras” button in the camera manager pane. This is akin to using Loom to do the same thing.

- Render Batch 1: *Renders a specific UI for a user defined set of recolors.*
    - The Color Set Channel must be **UNMUTED** (checkmarked)
    - The Output Switcher Channel must be **MUTED** (no checkmark)
    - The Render Batch property is set to “1”.
    - File output (see output pane in bottom-right):
      C:\$Recycle.Bin\ (Your System’s Recycling Bin Directory)

For Batch Setting 1, use Loom’s Render Animation feature.

By default, the shortcut is Ctrl + Shift + F12. A new dialogue box will appear and you can define the set of keyframes you want to render, including skipping certain keyframes. The specific name changes are also listed above and you **DO NOT** need to change the names in the file output nodes that are listed below in that same area. The only reason you’d need to change the names is if you are using this specific scene for your own rendering. The number of “..\” present in the file output for Batch 0 depends on how many folders you need to dig out of the get to the base CSProject location where you see “Renders and Cosmetics” and other folders.

IMPORTANT:

NONE OF THE ANIMATION CHANGES WILL PROPERLY TRIGGER OR TAKE EFFECT IF YOU ARE ***NOT*** SELECTING THE ARMATURE AS HIGHLIGHTED IN THE MAIN IMAGE.

SELECTING A CAMERA TO BATCH RENDER THAT VIEW FOR MULTIPLE RECOLORS WILL ***UN-SELECT*** THE ARMATURE.

THIS SCENE IS MADE FOR ***BLENDER 3.2*** AND UP.

Render Layers:

Unlike the original PMHD scene, I use render layers to control the modifications made for stock icons in the compositor (the outlines). The main controls of the Blender scene are in the default “Render Layer”. The “Stock Layer” is mainly for stock heads so there is no need to drive or animate the visibility of the stock head elements as if you were only using a single render layer. Both layers are actually rendered at the same time if you poke around in the layer settings, **but the stock layer only outputs / renders when the stock cameras are active.**

File Output:

The file output has a junk directory that routes to your system’s Recycling Bin; the one used in the scene is for Windows. You will need to adjust the Recycling Bin location to fit your system if it is on a different drive or an entirely different operating system (Mac, Linux, etc). Turns out that by setting an output directory in the main output pane or in a file output node to the recycling bin, the images won’t render at all. You can view the inner workings of this system in the compositor window. It should be enough to give a general idea of what each section of nodes is doing.

If you are editing the future generic scene that will be released, the names are structured as “_Fighter_Costume_”. You will need to edit the file outputs to your desired locations for different fighters.

Use a Bulk Renaming Tool that you trust if you want the first costume to start at 01 rather than 00. The scene’s animation for rendering recolors starts at 00 for the template setup.

Shadow Scene:

The shadow scene is even more simplified than the standard scene. Since you’re rendering the shadow for the main render, only one camera is present and the compositor is heavily simplified to the bare essentials. What’s important is the transparent and shadow catcher materials that make it all work without cutting out the model. You *could* integrate this into the standard scene for an all-in-one system, but this will either require a duplicate model or a driver control for edited materials to switch to the transparency when called for ***in addition*** to editing the compositor and the dope sheet. Pick your poison if you go down this route.

For all other questions, refer to the Blender Manual of your installed version. Google/Bing/YouTube/Blender Discords are also your friends.

For specific questions about the Sonic Scene, please refer to the video included in the updated PMHD Scene.

Credits

Mach7 for his light setup
MetalLegacy, Radzo, & Tyleto for their Cropper Tool
Tyleto & VirtualBeef for Sonic's PMHD Scene
Hokuss Pokuss for the Camera Manager Add-on
P2OR for the Loom Add-on