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Using Blender 2.7 for Animation - **Part 9 - Adding a Music Track Using Video Sequence Editor**

Make a 1-scene dramatic animation. Come up with an idea and choose music that goes with it. You can get music at <http://freesound.org> (login to be able to download), or <http://freemusicarchive.org> (you can also use <http://freeplaymusic.com> but you cannot use the music on a business channel or certain TV networks without paying, and YouTube or Freeplay music may insert ads into your video automatically). For those sites you can browse by category, or often type in an emotion (such as happy or exciting) or genre (such as rock or action). You can also get music at <http://ocremix.org> if you type in the name of a game. All of these sites provide music that is openly licensed. If it says to attribute the author (such as CC-BY license) you must write the author in the credits if you put your movie online or sell it. If the music license has “NC” (non-commercial), such as CC-BY-NC then you cannot sell your movie or monetize it with that music included.

Add Music:

* Make a new scene or open an existing scene that you want to work on more so it has a dramatic event
* Change the view to a **Video Sequence Editor** panel
* At the bottom of the Video Sequence Editor, click “Add”, “Sound”, then choose the music file you downloaded.
* It will appear on the current frame
* Click the music on the timeline then press ‘g’ then move the video to the beginning (0.0) or to whatever second you want the sound to start, then click to drop it.

Rendering the video using standard H.264 [or MPEG2 (MPEG2 is same compression as DVD; use this or any other format as long as you make a **rendered video with sound**)]:

* Click on the Scene  button, then under “Audio” click “Update Animation Cache” (you may have to do this if changed position of audio since last render if rendered video’s audio is incorrect). NOTE: this may bake smoke too, so if you have smoke, in the Outliner find domain, & on right of it, turn off eye & camera to make this faster.
* Click Render button tab. For widescreen 720p set resolution to 1280 by 720, 100% [even number is required by most compression methods—you can squeeze it down to DVD width in a DVD authoring program later—so although target would be 720x480 you must render at 854 x 480 to make it 16:9 for widescreen TVs at DVD resolution—or 848x480 to make it divisible by 16 for better compression].
* Choose an output file using the browse button , choose location (home drive), type a filename, click Accept
* Under “Output” category, click the drop-down box & choose H.264 [or MPEG file format].
* Click to expand the “Encoding” category at bottom & for Preset choose H.264, and for Audio Codec choose AAC [or if you chose MPEG format above, go under Format and choose MPEG-2, then for Audio Codec choose MP2]
* In the Scene button  tab, click the Format drop-down box & choose “Stereo”

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| Tips   * If rendered file still has no audio, try playing using R:\PortableApps\Video\vlc\VLC * Keep in mind, if you choose DVD for Preset, besides changing the compression, that will automatically chooses MPEG-2 Format, **AC3** Audio Codec, and in the Scene button tab the Format will be changed to “5.1” surround sound, so change it back to “Stereo” & change resolution. In the Render button tab, change Encoding Preset to H264, Output drop-down to H.264, & change Audio Codec to **PCM** (which is uncompressed), MP2, FLAC, or Vorbis. Then under Resolution category (near top) change X to 854, Y to 480. * If still no audio, open each sound effect in Audacity (free program) and Export each as WAV (as 44.1KHz, Stereo, PCM). Then in Blender, for each speaker click Object Data button tab (looks like speaker) then Open the new WAV file you made (do this for every speaker). * If still no audio, click the Scene button tab then click “Mixdown” button, for “Container” choose “WAV”, name your file ending in .wav using the second box, press enter twice. This saves the 3D audio. Now you can import the resulting file back into the Video Sequence Editor (put it on a new track at frame 0, then Blender will mix it with anything else that is in the Video Sequence Editor, which you’ll have to delete). |

Before “Render Animation,” choose an audio codec (compression-decompression). Otherwise, the rendered video will have no audio. Go to the render button tab & pick a codec that is compatible with your video, for example:

If you chose H.264, then under Encoding, change Audio Codec to “AAC” (standard HD audio compression)

If you chose mp2, then try mp2 audio. For other formats, you can use PCM (standard uncompressed audio) if necessary.

Remember to choose a filename under Output (In the Render button tab) **then** Click Render, Render Animation

Using Blender 2.7 for Animation - **Part 9b - Dramatic Scene**

GOAL: Make a 1-scene dramatic animation (at least one thing dramatic happens).

**You will be rated by the whole class** in a live electronic (vote 1-5 stars) and people will comment.

***You can use premade objects & characters (File, Import, 3D Studio, R:\Meshes then find one you want)***

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| TIPS: (if there is no file in the folder, try File, Import, **Wavefront (.obj)**.  If there is still no file in the folder, try File, User Preferences, *Import-Export, check Import-Export: Import Lightwave Objects, then File, Import, Save As Default*, then from then on you can do File, Import, **LightWave Object (.lwo)**) |

Requirements

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| TIP: You can use premade characters:  If you have a scene open, click File, Save, then click File, Open, R:\Meshes\Characters\Complete Rigged\Blender\Mega Pack Rig 2 (Bubles Studio at turbosquid)\2.5\ (append doesn’t work well since the scenes may have layers or otherwise-hidden rig parts)  Then choose a character, go to Objects category, then draw a box to select all (so they are all highlighted in orange), then click Link/Append Library |

* You can use your character, creature, or other scene or make a new one, then Save As, choose your home drive on the left (username or H:), then 3da9 scene
* Make an animation that is at least 3 seconds. It must have a floor, at least two objects *(one or more can be rigged characters [see premade humanoid rig or creature rigging project] or IK characters [see childof project]])*, and good lighting.
* At least 2 objects must have 3 keyframes each
* The camera  must be aimed well so the animation is presented well (push 0 on the numpad to test it, and 0 again to leave camera view—camera view is what is used when you render a video file)
* The lights  must light the scene well (try Render, Render Image to preview lighting at a certain frame)
* **Graded on whether it meets the requirements, and how well it dramatically communicates what happened**
* Render to a video file:
  + Click World button
    - Make sure you check **Ambient Occlusion** *(and if you use any glow, also check Approximate)*
    - *You can change background by clicking the gray rectangle under Horizon Color*
  + Click Render button 
    - Change the settings so it is HD resolution, saved on home drive (such as T:\yourname) as drama, and uses HD compression (to set all that up, make changes circled in red in picture on right)
  + At the top, click Render, Render Animation