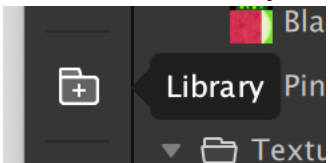
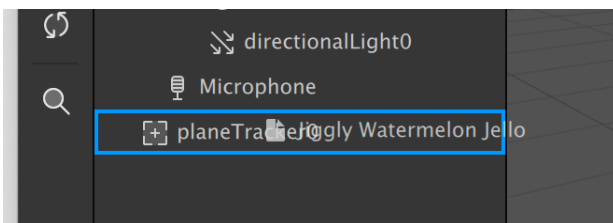


## Spark AR Studio Instructions:

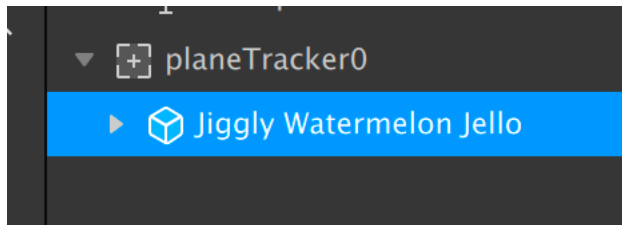
1. Open the Spark AR Studio application on your Mac. Login to Facebook when prompted, and choose Create Project
2. Go to Project...Edit Properties, and un-check Instagram
3. From the Scene panel on the left, choose + **Add Object**, and choose either “Fixed Target Tracker” or “Plane Tracker”. The “Fixed Target Tracker” allows you to create an AR experience once your phone detects an image, logo or label. The “Plane Tracker” will place AR objects around you as soon as it detects a plane. If you chose “Fixed Target Tracker”, once it is added, you must click on it, and click on Texture...and upload an image file for it to detect to add the asset.
4. Create an account at sketchfab.com. This will allow you to have access to a large library of free 3D objects, audio files and more! When finished, go to Spark AR, and click on File...Preferences...Library, and then sign in to Sketchfab from there. If you do not want to do this, you can find free 3D objects to add to your scene by going to sites like Turbosquid.com or free3d.com. File types that are accepted are: .dae, .fbx, .glb, .gltf, or .obj. Sometimes 3D objects will come with texture files associated with them. Download those as well, so you can compile them later in AR Spark. If everything comes in a .zip file, unzip those files
5. Click on the Library icon on the bottom left of your panel, like so:



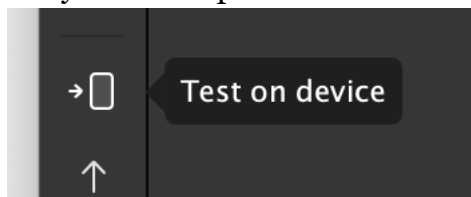
6. From the Library, you should be able to search and import tons of free 3D files. If you do not use sketchfab, you will have to install 3D objects manually. To do this, go into Spark AR and choose + **Add Asset**, and then choose **Import From Computer...** Find the appropriate 3D file, and open it.
7. Once your items have been imported to the Assets area, click on the asset and drag it ONTO the **planeTracker** (or **fixedTargetTracker**) item in your Scene, like so:



- It should now be a “child” of the planeTracker (or fixedTargetTracker) item and should look like so:

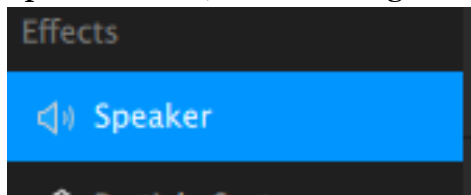


- When you are ready to test your file, click on the bottom left to Test on Device, and then choose Facebook Camera. You should get a mobile notification to test out your AR experience!



## ADDING AUDIO IN SPARK AR:

- To add audio, click +Add Object, and then scroll all the way down to add the Speaker effect, like the image below:

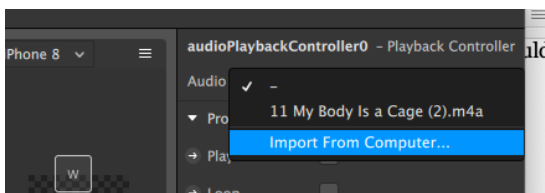
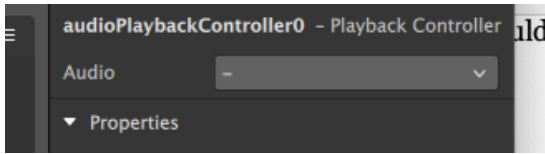


- Drag your new speaker0 layer overtop the planeTracker (or fixedTargetTracker) item so it is a child
- Add a new audio file by converting an mp3 or other file. To do this, go to [audio.online-convert.com/convert-to-m4a](https://audio.online-convert.com/convert-to-m4a), and setting the sampling rate to be **44100 Hz** and audio channels to be **mono**. The final audio file must be around 2mb at most, so you may have to trim the audio to make it small enough. It should look like the image below:

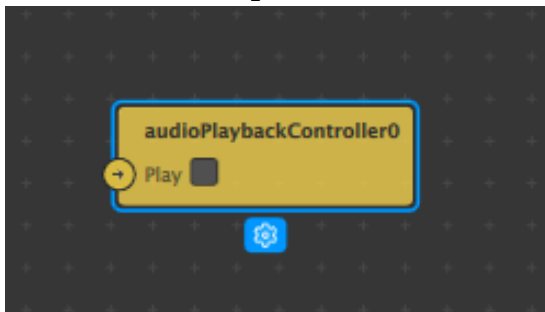
Optional settings

Change sampling rate:	44100 Hz
Change audio channels:	mono
Trim audio:	<input type="text"/> to <input type="text"/> 00:00:00
Normalize audio:	<input type="checkbox"/>
Select audio codec:	alac (default)

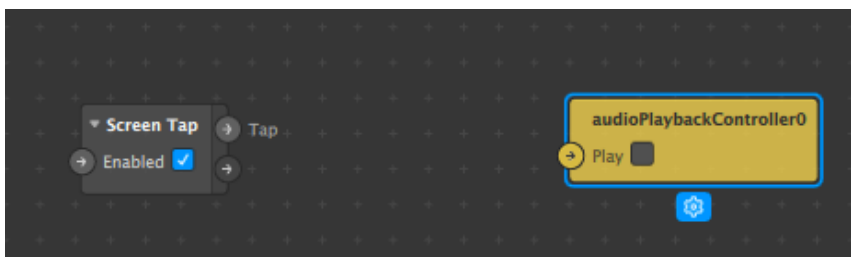
4. Click “start conversion” and then download your new file.
5. Add a new Asset by clicking on + **Add Asset** and then choose **Audio Playback Controller**. It should add a Playback Controllers folder, along with your new audioPlaybackController0.
6. Click on **audioPlaybackController0**, and in the top right, you should see a dropdown allowing you to import a new audio file. Choose your newly created file, and select it in the dropdown. It should look like so:



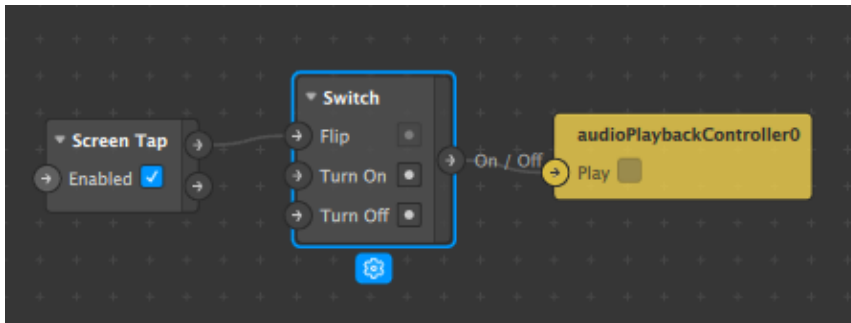
7. Once you audio file is selected, click the **Play arrow** directly below it, and you should see a new patch created in the Patch Editor, like so:



8. Add another new patch by clicking + **Add Patch** in the bottom right, and find some interaction, such as a Screen Tap and press Add Patch. You can then click on the upper arrow of the Screen Tap patch, and drag it to the Play arrow on your audioPlayBackController0 patch, like so:



9. Once you drag the arrow, it should create a connection, as well as a new Switch button. Be sure the upper **Screen Tap** arrow is connected to the **Flip** option on the Switch, and then the **On / Off** output of the Switch is connected to your **audioPlaybackController** patch. It should look like so:



10. Finally, click back on the **speakero** layer in the top left (Scene panel), and then choose the audioPlaybackController as your audio input, like so:

