

flickerSong - Compose

Compose a new light show

Music light shows are composed on your Macintosh using a suitable Digital Audio Workshop (DAW) such as Apple's **Logic Pro X**, Avid **Pro Tools**, or **Ableton Live**. The only requirement is that the DAW can send MIDI to a MIDI Port on the Mac MIDI Studio IAC Driver.

IAC Driver Setup

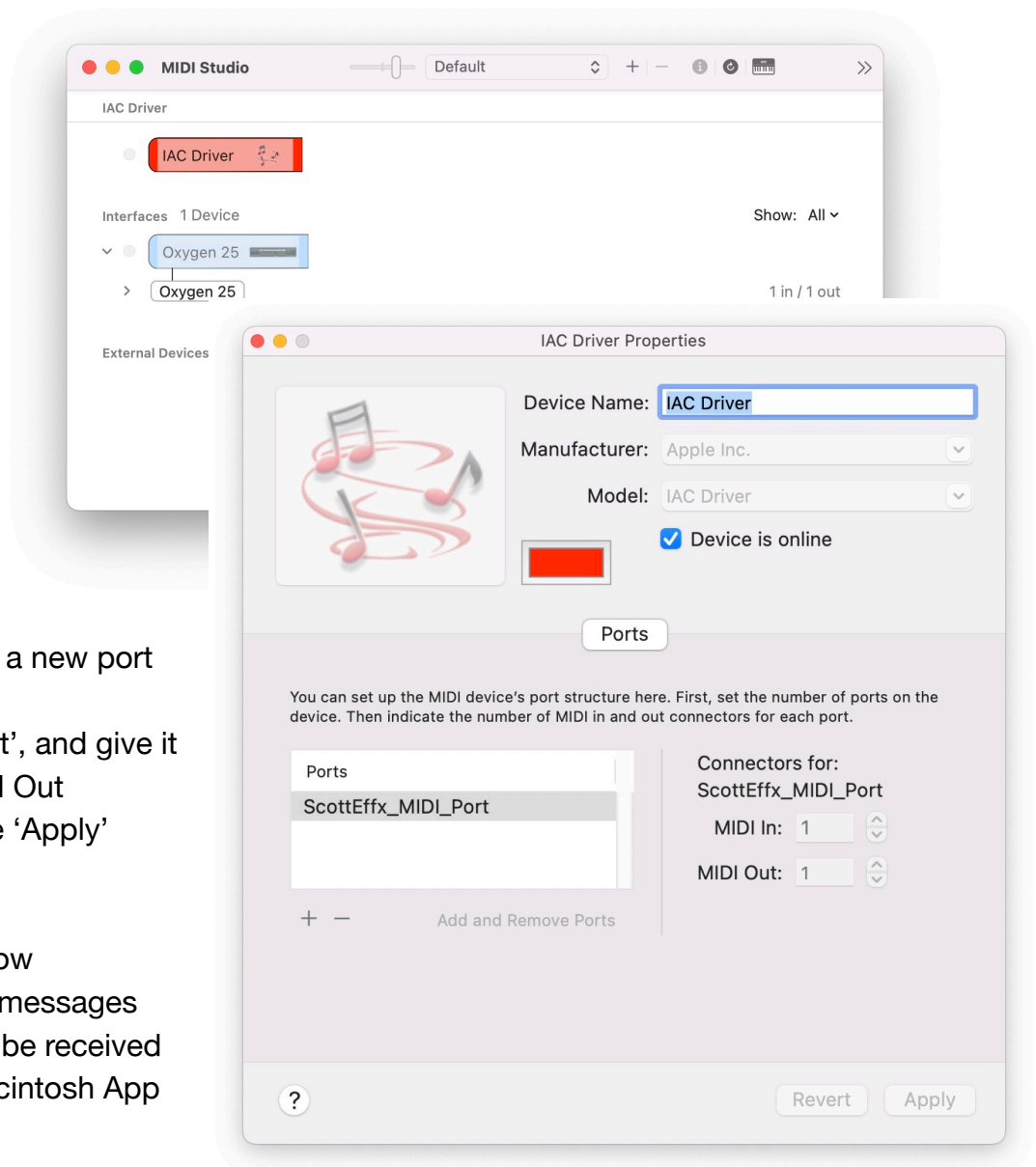
On your Macintosh, find the Audio MIDI Setup application. Open it and you'll see the MIDI Studio Home View.



Double click on the 'IAC Driver' to bring up that view

In the IAC driver, press the '+' symbol in the 'Ports' section of the view, and create a new port named exactly 'ScottEfx_MIDI_Port', and give it 1 MIDI In and 1 MIDI Out connector. Press the 'Apply' button

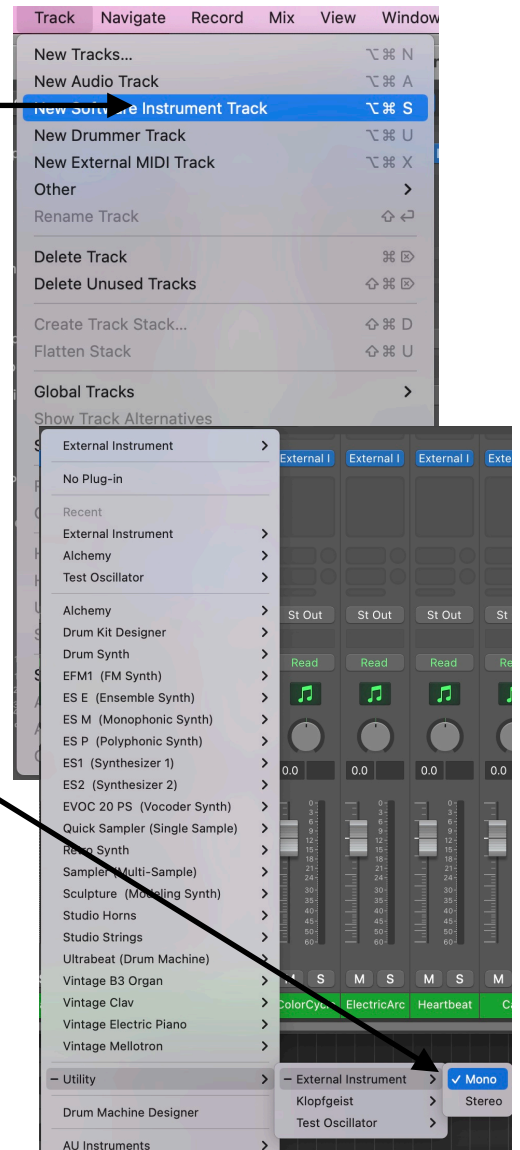
Your Macintosh is now configured, all MIDI messages sent to this Port will be received by the ScottEfx Macintosh App



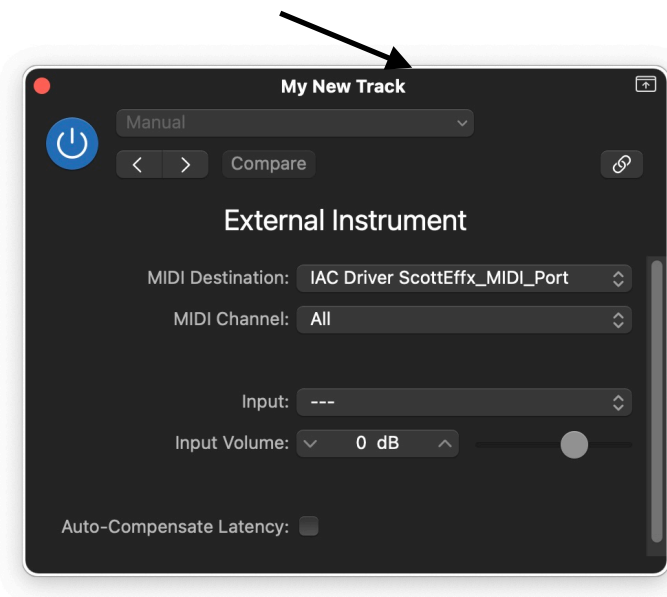
MIDI Out, DAW Configuration - Logic Pro X

Setting up your Software Instrument to export MIDI to the ScottEffx Application

For Logic Pro X, in top menu item **Track** select **New Software Instrument Track**, and you will get some default Software instrument like **Electric Piano** unless you've changed Logic Pro's defaults.



Then, in the window presented select **Utility**—>**External Instrument**—>**Mono**, and you will get this window

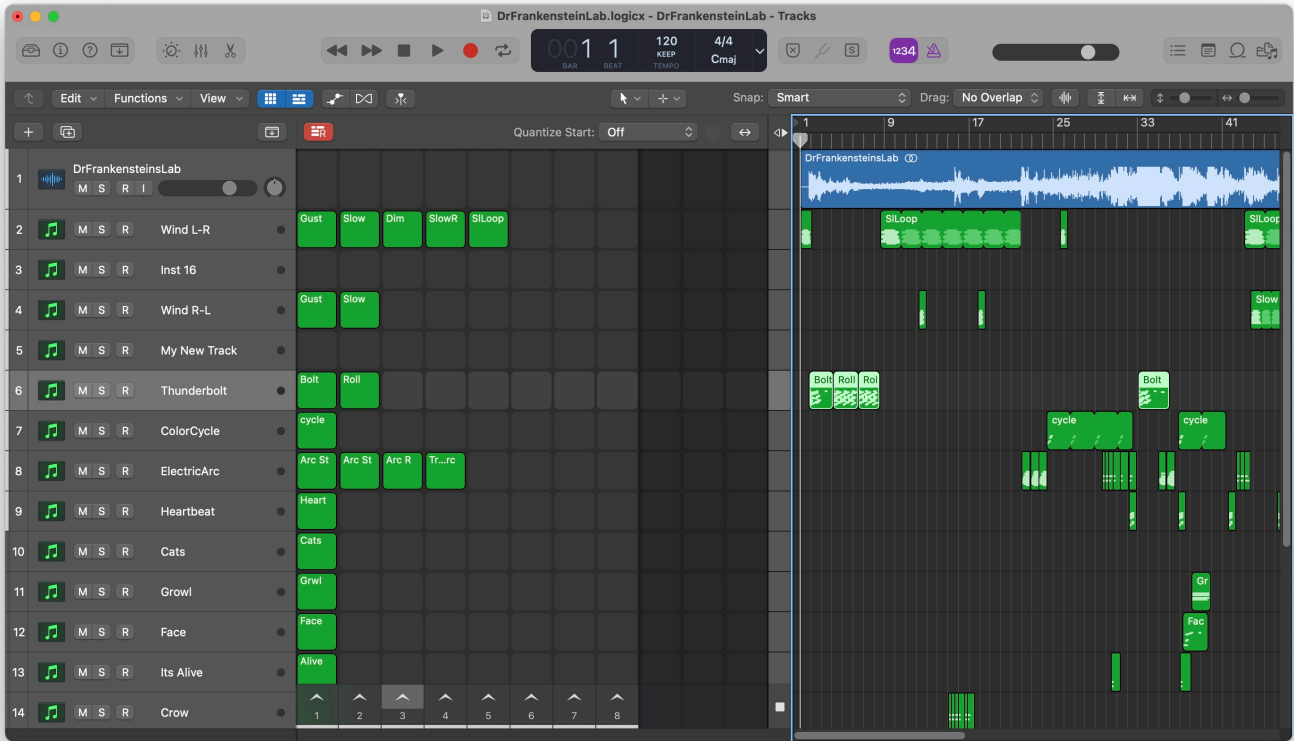


Under **MIDI Destination** select the **IAC Driver ScottEffx_MIDI_Port**, and 'MIDI Channel' **All**. If the **ScottEffx_MIDI_Port** is not available, repeat the 'IAC Driver Setup' above.

All done!

Compose MIDI into your MIDI Track just like any other music composition.

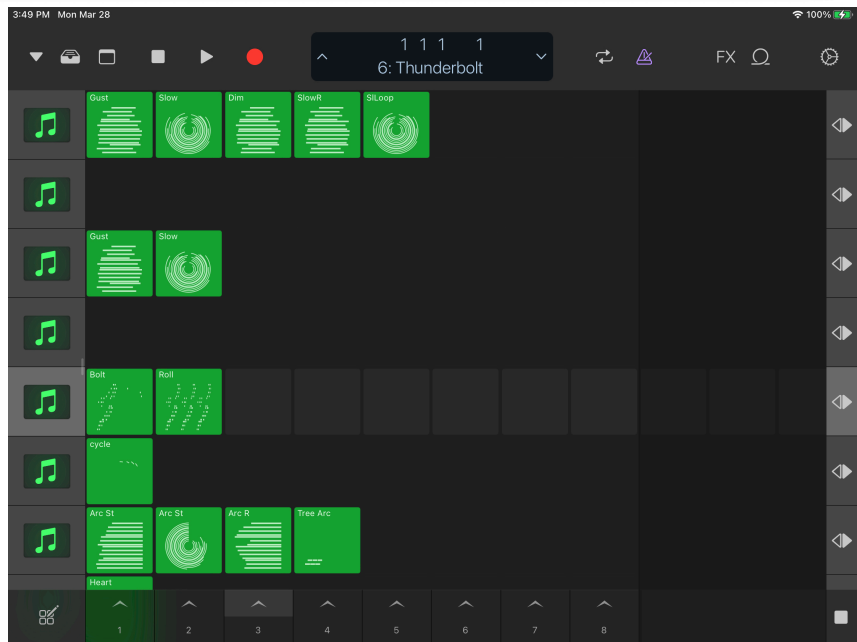
Here is the Logic Pro X 'Tracks' view of a light show composition with the 'Live Loops' grid. The music is at the top, and all the External Instrument MIDI tracks are below.



It is particularly useful to compose interesting light show effect sequences and put them into Live Loops for convenient re-use.

Here we use the iPad Logic Remote as a Live Loops user interface during light show composition.

As long as the **ScottEfx** application is running and in the **Compose** mode, all MIDI events from Logic Pro will be expressed as light effects according to the MIDI Maps, Effects, and Output Channel assignments



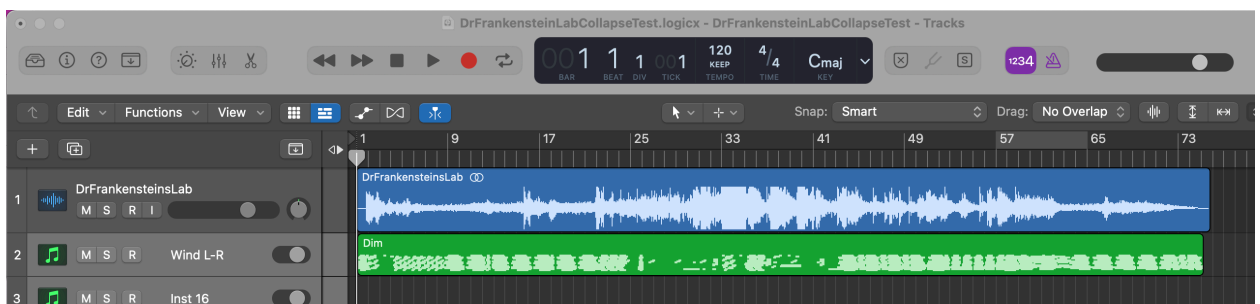
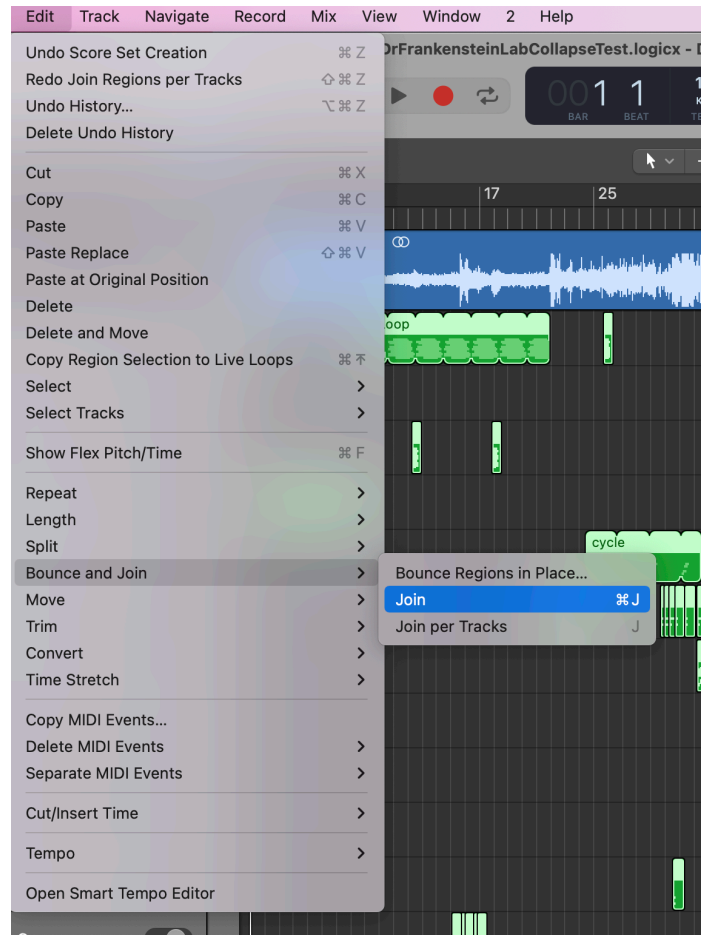
Bounce Music Light Show to an MP3 file - Logic Pro X

When you have a completed a light show, you can ‘Bounce’ it to be recorded into ID3 tags within the MP3 file. The light show and all configuration is recorded as a ‘Text’ tag.

The first step is to collapse all your MIDI tracks into one track which simplifies the subsequent MIDI file. In Logic Pro X select all the light show MIDI Tracks. **Be sure at least one of the tracks starts precisely at the same time as the Audio** which should be at 1 1 1 1.

Then under the **Edit** menu item select **Bounce and Join—>Join**. You may want to perform this operation on a copy so you don’t lose the individual tracks for editing later.

This will combine all selected MIDI tracks into one contiguous MIDI Track.



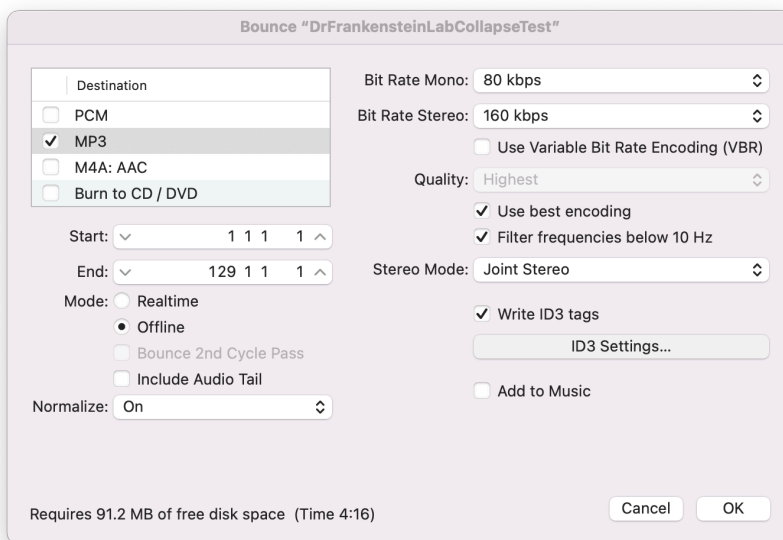
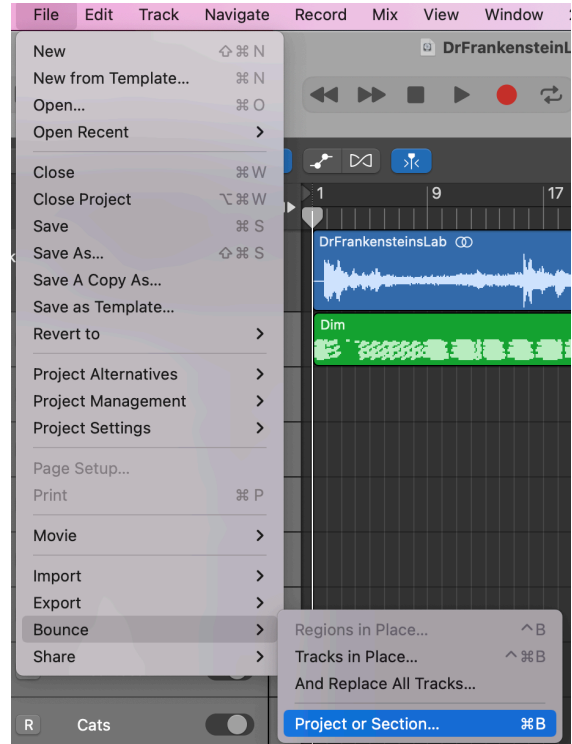
Finally, right click on the combined MIDI track and select **Export—>Export as MIDI File** and you can store the .mid file in a location convenient for you. The .mid file will be combined below with the MP3 music file and the ScottEfx light show configuration

Bounce the Music to an .mp3 format Audio file - Logic Pro X

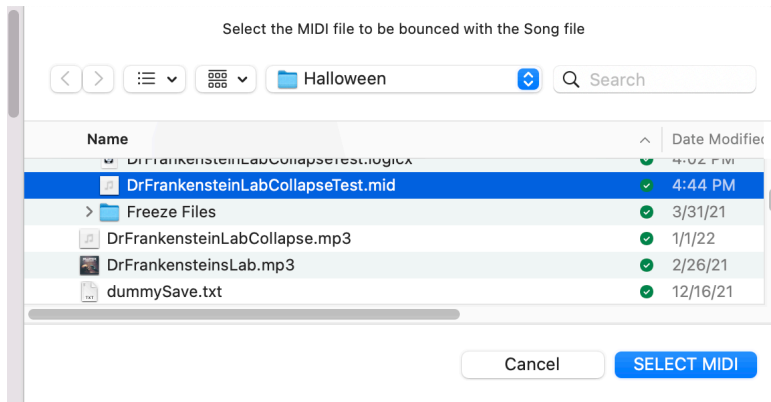
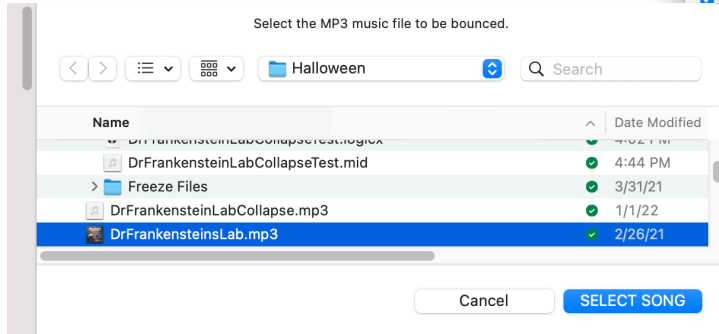
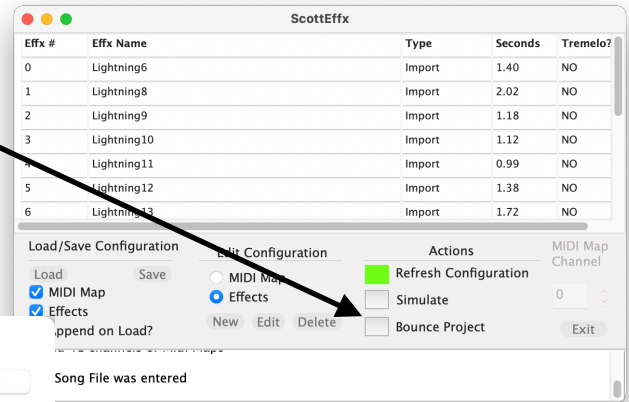
To bounce the light show you need an MP3 Audio file (the music) which **must contain at least one ID3 tag**. Bouncing a Light Show requires that the ID3 tag structure has already been created. The ID3 tags contain information such as 'Title', 'Author', 'Album Art' etc, and after we are done with the Bounce, the ID3 tags will include all the information necessary for the light show including the MIDI file you just saved and all the light show MIDI Maps and Effects.

But first we need an ID3 tagged MP3 Audio file. To create one in Logic Pro X, bounce the Audio under the top menu **File—>Bounce—>Project or Section**.

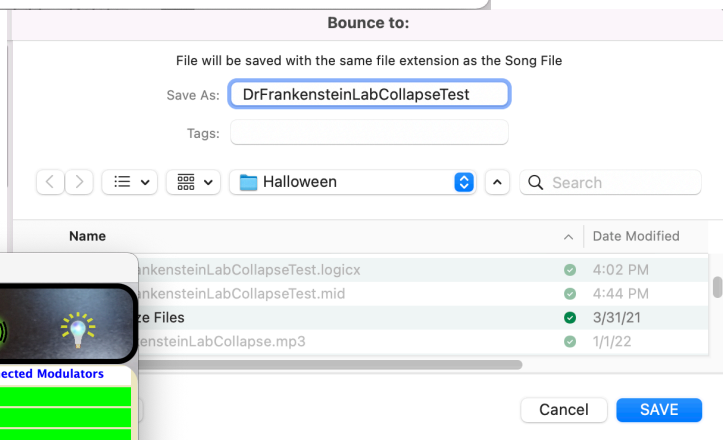
This will bring up the view below. Select destination **MP3**, check the box **Write ID3 tags**, and any other Audio file bounce options important to you. Then select 'OK' to save the file name and location as you want.



Bounce the Light Show to the MP3 file
 With the MIDI Maps and Effects all correct in the ScottEfx App, select **Bounce Project** while in the **Compose** mode.



In sequence, select the Audio MP3 'Song', the MIDI file, then a file name and location to save the bounced MP3 Music Light Show.



Then you can select and play the light show exactly as composed.
Bounce completed!