

Piano Effect in xLights (using version 2017.6)

Additional programs required:

Audacity <http://www.audacityteam.org/>

Queen Mary Vamp Plugins (for Audacity and xLights) <http://isophonics.net/QMVampPlugins>

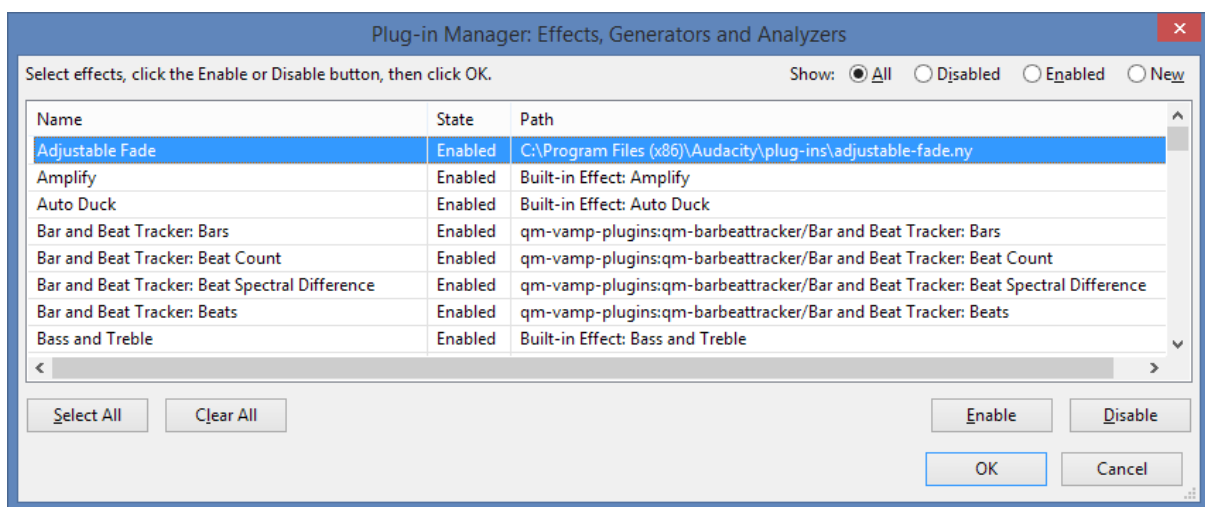
Note: use version 1.7 (version 1.7.1 has issues)

This guide assumes you have xLights and an existing sequence.

Open audio file in Audacity

Ensure plugins are enabled, if not select Analyze then Add / Remove Plug-ins...

Select All then click Enable

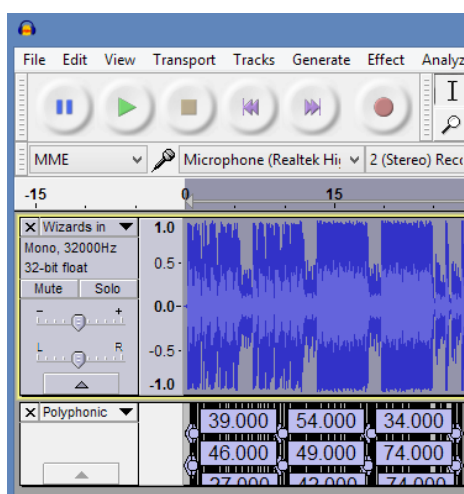


Select Analyze then select Polyphonic Transcription

Note: some songs may cause audacity to crash, if this occurs skip this step

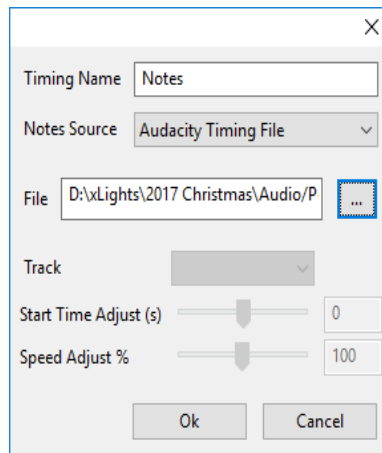
Once completed you'll get an extra row as per screen shot.

Select File – Export Labels and save the text document



Open xLights

Right click on a timing track and select Import Notes. You'll get a dialogue box like below, fill in as required:



Timing Name: Notes - this is default, change if required

Notes Source: Audacity Timing Track (see below for alternate method)

Using the box with the three ... select the Polyphonic Transcription text file saved earlier

Click OK when done.

You'll get a new Timing track in your sequence (takes a moment or two), unselect it.

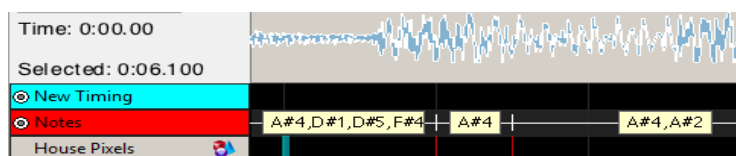
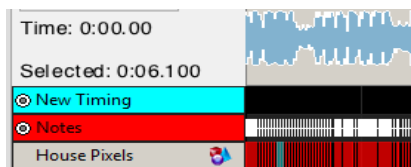
Alternate Method:

Don't use Audacity, just select: Notes Source – Polyphonic Transcription.

You'll get a warning that xlights might not work but I've used it OK (even on a music file that crashed audacity)

Example of the new Notes timing track shown in below two screen shots. Second one is zoomed in, you can see the notes it worked out.

Note: I have no idea how accurate this is, I'm not a musician.



Drop a Piano effect as desired onto your sequence.

Note: this is really only effective on a matrix or maybe a megatree

In Effect Setting select

Type: True Piano

Start MIDI Channel: 60

End MIDI Channel: 72

Tick – Show Sharps and Flats

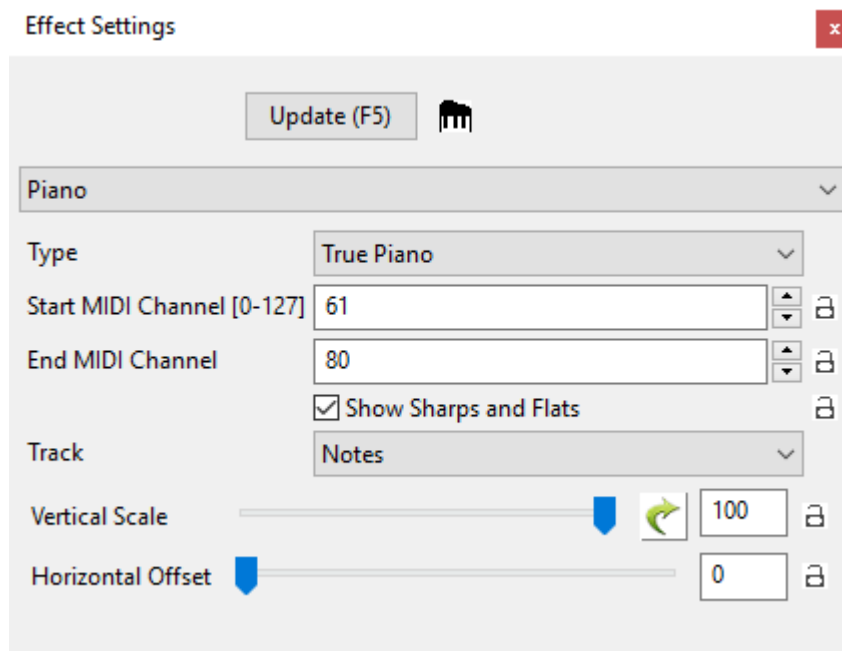
Track: Notes (or whatever you called the new polyphonic timing track)

Note: start and end MIDI channel are dependent on

a) notes in the selected section the effect is on

b) size of you matrix

Adjust to your liking, 61 and 80 worked nice for me



Select 5 colours to represent the white and black piano keys, their colours when depressed and a gap colour, as per this chart:



1st colour = White keys

2nd colour = Black keys

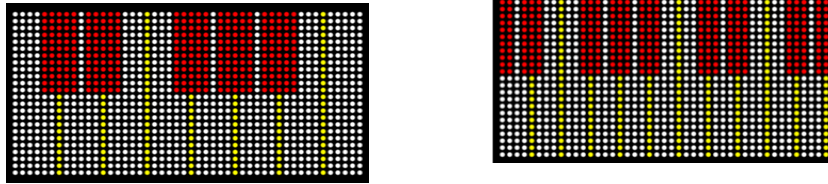
3rd colour = White key depressed

4th colour = Black key depressed

5th colour = gap between white keys (this isn't necessary)

Play the track and watch the magic happen

First picture below is Start MIDI/End MIDI values 60/72 (default) second is 61/80



Following a few questions here's a few answers:

Unless you have a very long matrix able to display all 88 piano keys (including sharps/flats) then you're not going to see all notes the Polyphonic Transcription finds.

I'm guessing if you did have a very long matrix you could select 0 as Start MIDI channel and 127 as End MIDI channel in the effect settings and it would display all keys and thus all notes played. With the proviso that a piano can play all notes.

Below is an image (from instructables.com) showing the MIDI numbers to actual notes. If you are musically inclined and know pianos you could probably work out the best MIDI range for the particular song you're using the piano effect on.

Updated 15/03/2017

Via ACL Forum user Boof63 (paraphrased) - Using Piano effect on a MegaTree or trees.

If you turn the piano effect 90 degrees CW or CCW then a lot more notes can be displayed.

Go to Layer Settings box > click on Buffer tab> click on Transformation and choose your rotation.

In my (Boof63) case I have split the music across two trees. Set the midi channels on the piano effect for low ranges ie 30-55 on one tree and high ranges ie 56-81 on the other.

Great idea Boof63

As I said earlier this effect may not produce accurate results using the automatic polyphonic transcription. Keith noted in the ACL Forum you can always manually adjust the notes. Do this by zooming in on the timing track, double clicking the note(s) in a timing mark and editing the label accordingly.

Disclaimers:

I'm not a musician or musically inclined

I'm not an xLights guru, just picked up a few tips here and there (thanks again Keith)