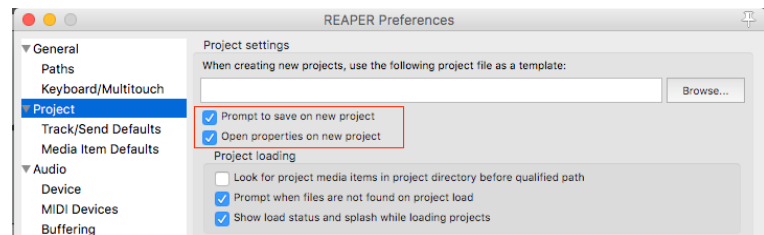


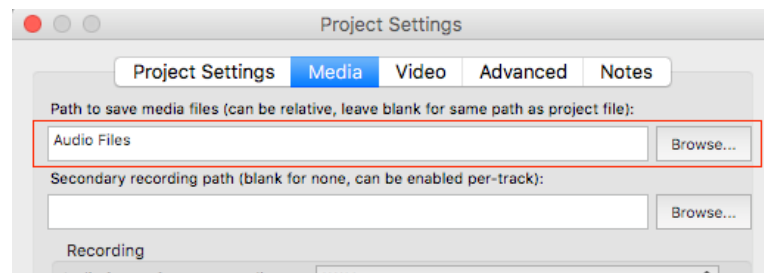
MUS421 Reaper Overview

SETUP

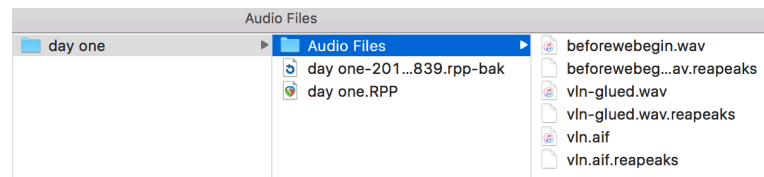
Open a new project, go to the **Preferences**, and select “Prompt to save on new project.” “Open properties on new project” can be helpful, but may not be necessary.



Open Project Settings (under File menu or click the corresponding icon on upper left, or ALT+ENTER/OPT+ENTER) and under **Media tab**, type “Audio Files” in the “Path to save media files” field.



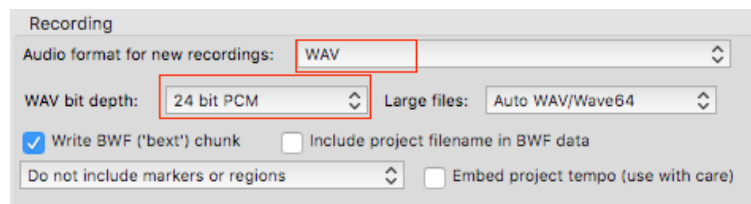
This will create a folder with the file name you chose. Within it there will be the NAME.rpp (Reaper project file) and a folder “Audio Files” that includes the media, like my project “day one” below.



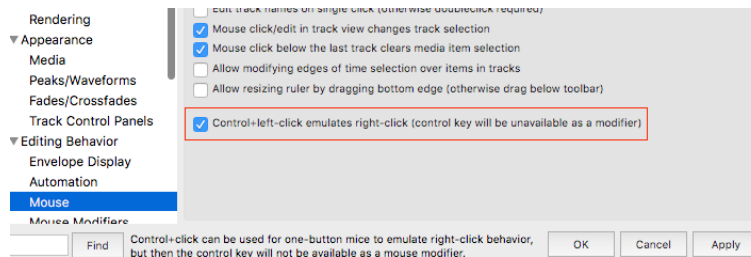
Last updated: 3/4/18

You can ignore the .reapeaks files. rpp-bak is a backup file, which is created every X minutes (default is 15 minutes, but you can change it in Preferences, Project)

While you’re in this menu, make sure your file type is set to .WAV and you’re working in 24 bit.



RIGHT CLICK: If you’re using a Mac and want to be able to use CTRL+click for a right-click... Go to **Preferences, Mouse**, and click “Control+left click emulates...”



Now let’s make some music...

ZOOM: Zoom out (-) and zoom in (=) horizontally — up/down arrows + mouse scroll wheel do this, too.

Scroll up and down: Hold OPT+CMD (ALT+CTRL on windows, I think) and mouse wheel
Make track taller vertically (important for volume automation): Click and drag bottom of track up/down or hold CMD (CTRL) and mouse wheel

TIP: Place cursor before zooming and it will center your view around that spot.

ADDING TRACKS: Double-click the dark column on the left and a track should appear. You may also select Track, New.

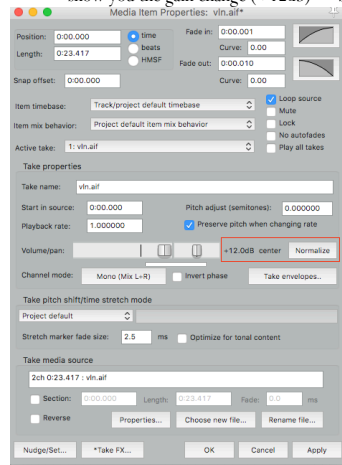
IMPORT AUDIO: To import audio, either drag your sound file into a track or select “Insert, Media Item”

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NORMALIZE AUDIO: Make that sound wave as strong as it can be first! Get rid of any loud bumps/anomalies (applause) first, since the highest amplitude (loudest sound) will be bumped up to **80% or -0.6 dB** and everything else increases proportionally.

—in Audacity (more control), **File, Import, Audio**. Select your audio file and selected **Effect, Normalize**. Set it to **-0.6 dB** and hit OK. Double check for any clipping (if clipping, turn down, e.g. -1 dB and see if it still clips).

—in Reaper, right-click sound file in track, choose **Item Properties (F2)**. Click **Normalize** and it will show you the gain change (+12db) — select **Apply** to make change take effect.

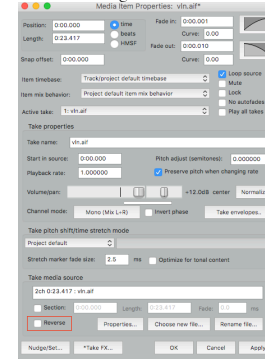


WORK IN MONO: Record individual tracks in mono.

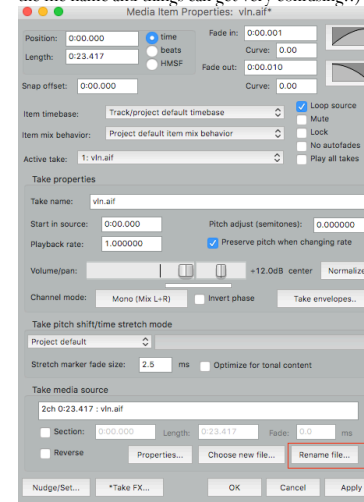
To split your stereo sound file into L and R: If you want two separate channels with different info on each copy the file onto two tracks, make one only L and one only R; or **downmix** (mixes L and R). To change this setting, **Right-click sound file** in Reaper track, go to **Item Settings**, and choose **Take Channel Mode** (downmix, L, R, whichever you choose).

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REVERSE: Right-click sound file in track, choose **Item Properties (F2)**. Click **Reverse** box and OK.



RENAME FILES: Right-click sound file in track, choose **Item Properties (F2)**. Click **Rename file...** as this will name the file on your drive and your session (if you change "Take name" above, it doesn't change the file name and things can get very confusing!!)

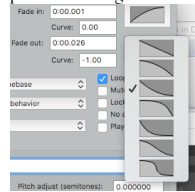


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SPLICING:

Drop cursor where you would like to cut the sound file and hit **S** for “Split”

FADES: Reaper automatically fades the start/end of files for you, but you can change/adjust them. Zoom in close enough to see the fade, hover cursor in top right corner until you see cursor change and you can drag the fade L/R. If you want to change the shape, right-click to **Item Properties (F2)** and click the fade picture to change it.



To make a **crossfade**, drag one sound file over another on one track so they overlap (a crossfade will automatically be generated, but always listen and tweak it so it sounds how you want it to sound).

NON-DESTRUCTIVE EDITING of LENGTH: Hover your **cursor** over the end of the file in the center and you will see a **bracket with arrows**. This allows you to pull the edge L or R to extend or shorten the sound file without deleting anything (it just hides it).

VOLUME AUTOMATION

Select track and type “V” for volume automation to appear/hide. **CMD+click (CTRL+click)** to add point on line, **OPT+click (ALT+click)** to remove point from line, drag to move. **ZOOM IN** so you can control your curve with some finesse and always listen for the results.

PANNING AUTOMATION

Same as volume, but “P” opens panning lane.

OTHER AUTOMATION

View other automation lanes by clicking the icon on the track...



MUTE or SOLO track: the M in picture above is MUTE and S = SOLO

MIXING LEVELS = CMD+M (CTRL+M) shows/hides the mixer window

Make sure your individual track levels are not clipping (not going above 0 dB, turns red!)
Make sure your overall mix is not clipping (stereo output, master fader) — if it is, change your individual tracks to fix it.

BOUNCING DOWN — How all of this turns into a stereo WAV file to play in your car

Select TIME and SOUNDS INVOLVED

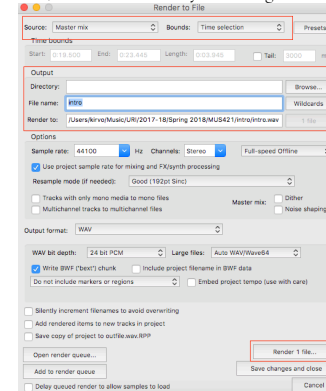
TIME: Select with the cursor on the timeline at the top — a white highlight with brackets will appear.

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NB: If it keeps skipping to grid lines instead of the space between, turn off the snap function (magnet icon in menu top left)

SOUND: Make sure your tracks are solo'ed appropriately if not bouncing the entire mix.

File, Render — check your settings first...



Make sure you're source and bounds are “Master Mix” and “Time Selection.”

Output: **Choose where to save your file and what to name it** (audio files directory is best)
44.1 Stereo WAV is fine... click **Render 1 file** and it will appear where you saved it.

TIME COMPRESSION / EXPANSION

ALT+drag the edge of the file to make smaller or larger (will compress/expand sound file).

Click on/off the “preserve pitch” function in **item properties**.

PITCH SHIFT

To change pitch of entire audio file: Double-click / Go into Item Properties, click *Take FX, choose Add, VST: ReaPitch. A plug-in will show up where you can change semitones or cents to change pitch.

To change pitch of entire track or to automate changes: Select Fx on trackchoose Add, VST: ReaPitch. A plug-in will show up where you can change semitones or cents to change pitch. You may also select various parameters to automate in the track automation menu.

AUTOMATE PLUG-INS USING FX ON TRACK

If you go into automation menu at left of track (where you can choose volume, panning, you should see all the other parameters of each plug-in listed — arm and make visible and you'll see a lane appear under the track for you to control that parameter.

ONLY FX ONE FILE, NOT ENTIRE TRACK

Double-click or open Item Properties and choose *Take FX to change parameters there — this is one shot, not automation, and only affects that file. Your effected version should appear as a second “take” below the original sound.

Last updated: 3/4/18