

Study Questions - Studio One & other DAWs

What is the difference between a Studio One *song* and a *project*? *Project is a CD-type collection, or any set mastered to share audio characteristics.*

Why would anyone want to set a tempo in New Song dialog before starting to record? *1) Tools for editing music are oriented to snapping to tempo counts 2) DAW will give the musicians a metronome or "click track" to perform to.*

✓ What are two ways to move between panels such as Arrange, Edit, Console, Inspector?
F2 F3 F4 etc., OR us the buttons bottom right

✓ How do you *bring in sound files* to a Studio One project? (ones that you didn't record in Studio One)
Drag or Song > Import

✓ What is an **event**? *Audio clip, or MIDI clip, or Loop*

✓ What are two ways to switch mouse tools? (Arrow, Range, Split, Erase, Paint, Mute, Listen)
• Icons above Arrange, OR Rt-Click+ choose 1/2/3



✓ How do you slip an event to another start time?
• Use the Arrow tool drag bottom of event

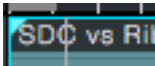
How do you move quickly back and forth on the timeline? *• Press Shift + roll the scroll wheel*

✓ How do you zoom in to a track?
• Shift+Command+ Scroll wheel
• Drag down from the numbered strip (the Arrange or Edit Timeline) above the tracks. Or drag up!

✓ How do you cut a clip into two clips?
• Use the slice mouse tool. (Xacto blade icon)

✓ How do you fade in or fade out a clip?

• Drag the gray fade handle in the clip



✓ How do you change the level of an individual clip or event?

• Drag small tab at top middle of event up or down
• Level of the whole track is set by 1) adjustable gray bar to left of track 2) vertical fader in the Inspector 3) Vertical fader in the Console (mix) view

✓ How do you change the pan (L to R stereo placement) of a track?

• drag the vertical blue bar under "Main" in the inspector, or the same bar in the mix view.

✓ How do you bring in an effect or plug-in to a track?
• In the Inspector or Mixer, click on Insert +

✓ In Studio One Prime, what is the EQ and Compressor plug-in called? *Channel Strip*

What is the fastest way to pause/restart playback?
• Press the spacebar

✓ What is meant by *solo*? Where is it?
• S button in Inspector, Mixer, Arranger track

✓ What is meant by *mute*? Where is it?
• M button in Inspector, Mixer, Arranger track

✓ How do you create and name a new track?
• Press + in Arranger, or Track > Add Track

✓ How do you move an event to a different track?
• Drag the bottom of the event with arrow tool

✓ How do you create/export a WAV or AIFF or MP3 version of your mix?
• Song > Export Mixdown
• In S1 Prime, you will have to export as .WAV
Then re-open and save as .MP3 in Audacity

How do you assign a microphone or mixer input to a particular track for recording? *See the Song > Song Setup options from the upper menu.*

What is a *click track*?

• A metronome sound that performers can hear as they add new tracks. Keeps the timing perfect and allows the sound editor to easily move musical events to different places in the song.

✓ What is a *crossfade*? How do you make one in S1?
• One event blends perfectly into another without any pause. In S1 drag one event slightly over another (drag the bottom of the event with the arrow tool) and use the fade out and fade in handles to make the fades cross.

✓ What is *automation*? Where do you find it in Studio One?

• The ability to program the amount or level of any variable in the mix or plugin, using a simple line interface.

Rt-click on the left of a track (the box with mute-solo ect.) and choose Show/Hide Automation. Then pick which variable you want to automate. A line appears over the track. OR you can add a separate track with the automation (good idea if you have room on the screen!) From the upper menu, Track > Add Automation Track

What are *plug-ins*? And what are the common ones mentioned by your instructor? *These are add-on software that provide new tools. Also called "effects."*

EQ, Compressor, Limiter, Gate, Reverb, Chorus, and so on.

What does *bouncing* a track mean?

• *Rendering a string of little events into a single large event. For audio, it creates a new file that replaces the string of little events.*

√ Where do you find an equalizer or a compressor in Studio One?

In either the Inspector or mix views, click the + sign in the Inserts section. Then choose.

General Editing and Mixing Questions

√ What is dynamic range?

• *The amount of variation from loud to quiet in a track or mix. Example: if the level varies from -10dB to -50dB, the dynamic range is 40 dB.*

√ How does a *compressor* work?

• *Reduces dynamics above a threshold level • Then usually increases gain to make up for the apparent drop in level.*

√ In a compressor, what do 1) threshold, 2) ratio, 3) gain makeup, 4) attack, and 5) release variables do?

- *1) the level above which compression will happen*
- *2) how severe is the compression*
- *3) average levels brought up after compression*
- *4) how quickly the compression starts after the level has risen above the threshold*
- *5) how slowly the compression stops after the level has dropped below the threshold*

What is a 1) *limiter* and a 2) *gate*?

- *1) Compressor that simply keeps a lid on levels, used to avoid clipping, or to make pop music to be mixed louder without transients causing clipping.*
- *2) Compressor that only works below a threshold, used to automatically reduce steady-state noise in quiet passages*

How does a *low-pass* or *high-pass* filter work? What do the numbers mean?

What are "buss effects"?

• *Plugins put on the overall mix after it has been mixed ("Main")*

What are four good reasons to use compression?

- 1) taming peaks, 2) keep a track audible all the time, 3) making a voice warm and even-sounding
- 4) making a mix sound more energetic
- 5) making a commercial harder to ignore

What does a multi-band compressor do that a regular compressor cannot do?

What does a soft-knee compressor do?

Mechanics of Mixing

√ What levels would you start with for each track as you begin to build a mix? • *-6dB*

How do you pick which track to begin your mixing adjustments?

• *What is most important for communication?*

What are a couple of elements that most mixers generally agree they start with?

• *Bass + Drums or • Vocal/lead*

What is a *foundation* in pop music? • *Usually bass and drums*

What are general rules for arrangements?

- *3-5 elements heard at once are enough usually*
- *Everything in its own frequency range and/or place in the panorama*

What is a *pad*?

• *Long duration holding instrument Synth, horns, vibe chords etc*

What is a *lead*? What is a *fill*?

- *The main vocal or instrument to listen to.*
- *Something interesting you put into the pauses in the lead*

What do "tall, deep, and wide" mean in a mix?

Low to high frequencies are represented

• *Reverb places elements front to back • Stereo pan left to right*

√ What are the signs of an amateur music mix?

- *No contrast (nothing changes verse to verse)*
- *Holes without fills (focal point)*
- *Noisy mixes - breaths, clicks, rattles • No clarity nor punch - not distinct*
- *No intimacy - too much reverb*
- *Inconsistent levels*
- *Everything at the same level - nothing featured*
- *Boring elements - overused stuff - If a track is not contributing something unique, why is it there at all?*
- *tracks masking each another*

Balance

√ How can two elements "fight one another"?

• *Same freq range + same pan position*

√ How do you keep elements from fighting?

- *Turn one off • move apart in pan • EQ uniquely*
- *Limit the number of elements*
- *Turn one down*