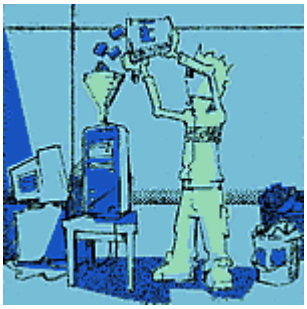
20 Sequencing Tips



Get the most from your sequencing with this guide

Sequencing has become much more complex over the past ten years. Originally there was simply MIDI but with audio recording added with the ensuing plug-in effects and virtual instruments, synths and samplers the sequencer is literally a studio on screen. So, here are 20 tips which should help any sequencer user.

Starter sequencer

Plug in and go. Plug-ins put a strain on any computer's brain. Plan carefully how you are going to use the plug-ins. Use the aux/bus wherever possible especially for effects like reverb so you are only using one plug-in as opposed to one inserted per audio track.

Who's driving? Quite often the first batch of drivers released for a soundcard isn't great. Always keep up to date and check for the latest drivers from manufacturers' Web sites. More recent drivers usually run faster and have less inherent problems. In some cases it means the soundcard actually works properly!

It's a set-up. If you are preparing sequencer files to be taken into a studio or even, gulp, used on stage then do like the professionals do. On a pro's song file you'll notice the starting and ending bars will set up the synth in terms of voice, volume, reverb and any effects. The end bars will reset the synth back to factory setting (or they should). Many people forget the last step and wonder why the ensuing song sounds like a pile of crap! Studios won't thank you for leaving their gear in some esoteric set-up which requires a factory reset.

Program Changes

Consistency is best. Ever wondered why your song doesn't sound the same two days running? I'll bet it is because you changed the sounds on the synth and not on screen. This means the sequencer cannot possibly know what sounds you are using and hence won't recall them. Always set the sounds from the sequencer and then save the song. If you can, extend this to any reverb, pan and other basic control changes you may use.

Seeking sounds. OK, you've programmed your soundcard/synth from within the sequencer but it still won't call up the sounds you want. In any of the main sequencers try hitting the Stop button a few times. If that doesn't work then look under the relevant MIDI menus and find commands like 'send all MIDI', 'recall initial set-up' and the like. That should awaken the program and send the commands.

In the bank. Not so much program changes but that murky world of bank changes. This is an area blurred by individual manufacturers' methods of using the two control changes (0 and 32) required to kick the ensuing program change into the correct bank of sound. Even within the same synth, the way the LSB and MSB (Least/Most Status Byte) data is used can change the bank from ordinary sounds to drums or sound effects. This jolly piece of information also explains why sometimes drum tracks mysteriously turn into idiotic pianos (see tip 7). Check the card/synth manual carefully and look up how bank changes are implemented. Copy them exactly and, if necessary, insert them in a List Edit window.

Ch-ch-ch-changes. If your drum track keeps turning into pianos, chances are you have an XG card/synth, as this is one of its favourite tricks. Not a lot of people know a Yamaha XG synth can have drums on any or all of its MIDI channels (it's all in the bank change commands). The easy way around the unwanted mystery is to hit Reset in the MIDI menu. In some versions of Cubase the little GM/GS/XG mixer can also do this. Reset into GM mode and then into XG or GS to be certain of resetting the sound chip. If it's still at it you may have to resort to a factory reset of the card or synth.

Trouble shooting

Feeling shaky. "My audio falters when I play it back." This is a perennial favourite. The most usual cause is the hard drive needs defragmenting. Pick a time when you have lots of hours to kill without needing the computer. Disable all auto functions, including screensavers, then use whatever defragment routines your operating system provides.

Lost and found. "I've lost the audio files for my song". Either follow the tip 8 advice or check how you are organising your files. The favourite blunder is to start saving either the audio or song files into the same folder as your program. Then, realising your error, you save files into a newly created folder for your songs.

This duplicity often results in important files getting wiped or tucked away inside another folder. When files are moved around, the sequencer has no way of knowing that this has happened. Consequently when it can't find them by referring to their last known position, it sulks and tells you that it can't find the file. Usually, however, it will offer a manual search. It might take time but at least you might be able to piece some music back together again.

Start by setting up an easy hierarchy of files within a general My Music folder. This can be separated either by song files or by having independent audio and MIDI folders. Having set up a file system don't mess with it or else you risk losing your data.

Keep in control. If you are applying pitchbend or control data - resonance, volume, etc - to a track, then the best way to go about it is to record the notes on one track and then record the note altering data in another take on an identical but separate track, if that is possible. Often the control data and pitchbend needs editing or redoing and having it on a separate track makes that so much easier.

If it is only possible to record things in one take, then it may be worth copying the track after recording and then pruning the relevant data out so you end up with two independent tracks. It is a way of getting around problems that can occur if data is misedited as it doesn't mean the whole track has to be scrapped.

Panic attack. Most sequencers have a 'panic' feature somewhere that will unstick hanging MIDI notes. Double-click on Stop or even look in the manual. There will be one somewhere. Best learn where that command is now before it happens when you least want it to.

Auto eject. Auto save is a musician's worst enemy so turn it off now! The last thing you want is the hard drive being over-
ridden by an auto routine in the middle of recording. It will crash, sulk and generally not want to play again for a while.

Audio loops
Accurate audio. Make sure you edit the shortest section possible to ensure timing accuracy. Also be certain the sample starts on the first beat of the bar. It's very easy to loop a sample in the Edit page and come up with an excellent loop only to find it doesn't start on the main beat. The result is a very awkward track to work with indeed.

Copy this. Once you have the loop sorted make one copy to the selected audio track. Don't copy it end to end (no sample loop is that accurate), rather copy it either by cut-and-paste or by drag-and-drop so the start of each loop is smack on the beginning of the bar. Assuming, of course, you have calculated the tempo of the sample correctly!

Loop loopy. If the audio loop track sounds fine on its own but doesn't work with other tracks, audio or MIDI, the 'feel factor' has come into play. With some beats, the musicians playing naturally either push before the beat or lay back after it. Hence the result is messy. Solution? Use an overall track delay, either a negative or positive figure, and the chances are your track will magically fit into
the groove.

No one's normal. Normalising is a
feature available for all audio recorded in a sequencer but is often ignored. It maximises the volume of the recorded track and makes it appear punchier. Use it wherever possible, even if only as a means of keeping background noise to a minimum.

Finishing touches
Put on some weight. You can fatten
up MIDI sounds by the simple trick of copying the required pattern to the next track, using the same sound but a new MIDI channel. Then use track delay so that the duplicated notes are played fractionally apart. Voilà, a much fatter sound.

Delay... delay. The 'latency' phenomenon occurs when virtual plug-in instruments are used within the sequencer. It refers to the delay time between striking the note on the keyboard and it sounding. There will be a window in the audio set-up where latency times can be adjusted but the lowest latency time will depend on the speed of your processor.

If the latency is set too low, a distorted sound is the result. It's worth experimenting with so you can get a feel for what sounds best.

Time for a springclean. All of us should always be striving to make our computers run more efficiently. And basically all the usual rules apply. Don't have other applications open, kill some of your wacky auto routines, don't use fancy on-screen wallpaper for the sequencer and don't expect miracles from underpowered processors.

The biggest single improvement you can make is to dramatically increase the amount of RAM. Go for as much as you can afford. You will be surprised just how much difference it will make; the more RAM the less routine work the processor is asked to do.

Magic markers. Many sequencers now provide a 'marker track'. This enables you to segment a song into sections: verse, intro, and chorus, for example. This makes editing and assembling the song much easier.

However, not all marker tracks are easy to use and older or cut-down sequencers may not have one at all. To overcome this, all you have to do is create a dummy track at the top of the main track screen. Assign it to a MIDI track or output that you are not using and draw in the sections by hand, creating the parts and labelling them appropriately. I find it this is actually easier to use than a marker track and certainly more legible.

Jon Bates 10/00