

8 Working with Audio in the Arrange Window


This chapter deals with the audio tracks of the arrange window. See [Arrange Window section, on page 63](#) for the MIDI tracks.

8.1 Regions

8.1.1 Generating Regions

A region is to an audio track what a sequence is to a MIDI track, so a region could be referred to as an “Audio Sequence”. The Logic Hit Kit concept allows regions to be manipulated in the Arrange window in the same way as MIDI sequences. Nonetheless, there are unavoidable differences between the two, by their very nature. A sequence contains MIDI data, and a region refers to audio data on the hard drive.

When you record audio, a region based on the recording is automatically created in the Arrange window.

Audio files from other songs or other programs can be imported into a Logic Hit Kit song. Simply click at the desired location for the imported file in the audio track, with the pencil tool, while holding down the  key. Select the desired audio file from the File Selector dialog box, and the process is complete.

To play an audio file at a specific Song Position, it must be set as a region in the Arrange window and placed on an audio track.

Important: Remember that the tracks that contain regions should be assigned as audio tracks. More information can be found in the section entitled “*Arming Tracks*” Chapter 8, p. 163 ff.

Dividing Regions

The Scissors tool used to divide MIDI sequences can also be used for regions. When a region is cut, two new regions will be generated. The new regions will then be numbered consecutively.

Important: When you click on a region with the Scissors tool, you can precisely position the Scissors while click-holding the mouse button. If a finer resolution is needed, click-hold the region with the Scissors tool and press **Ctrl** (Mac) or **Alt** (Windows). To obtain maximum resolution (ticks), hold down **Cmd** while holding down the modifier key. The cut will be made when you release the mouse button.

Deleting Regions

Regions can be deleted the same way as MIDI sequences. Select the region, and press the **Cmd** key, or click on the region with the Eraser tool.

Deleting a Recording

If a region from a new recording is deleted, (any recording made since the song was opened for the current session), Logic Hit Kit will ask if the corresponding audio file should also be deleted. By allowing you to completely delete unwanted takes, space on the hard drive is saved.

If you delete regions from files recorded in previous sessions, then this question will not be asked. This prevents any valuable recorded material from being accidentally deleted. If you want to delete any of these older files from the drive, first remove the regions from Logic Hit Kit Song, and go through the computer’s operating system to delete the files.

8.1.2 Copying Regions

Creating A New Region

Regions can be copied and moved in the same way as MIDI sequences. To move a region, simply grab and drag it. To copy a region, press the **⌘** key (Mac) or the **ctrl** key (Windows), while dragging the original. The new region will have the same name as the original region, and will be numbered consecutively.

The boundaries of the copied region can be changed, independent of the original. This can be compared to a real copy of a MIDI sequence, created in the same way.

Looping Regions

As with MIDI sequences, the *loop* parameter causes the region to play repeatedly within the track (see *Loop*, Chapter 8, p. 162). It is important to note that the repetitions are guided by the region's precise length. This means that even if the song tempo matches exactly, after a time, the repetitions may drift out of sync.

8.1.3 Moving Regions

Just like MIDI sequences, regions can be moved with the mouse in the Arrange window. When dragging a region, it will move in quarter note steps.

By pressing **⌘** (Mac) or **alt** (Windows), regions can be moved in display format steps (e. g., sixteenths).

By pressing **⌘** **⇧** (Mac) or **alt** **⇧** (Windows), the regions can be moved by single clock ticks.

The delay parameter in the sequencer parameter dialog box can also be used (see *Delay*, Chapter 8, p. 162).

Fine Movements

Usually, a resolution of one tick will be enough. If not, you can edit audio regions even more precisely in the Sample edit window.

Edits accurate to a resolution of a single sample word can be achieved by moving the anchor in in the Sample Edit window.

8.1.4 Changing Borders

Regions can be lengthened or shortened by dragging the lower right corner. However, it is impossible to lengthen a region beyond the limits of the underlying audio file.

The same process, dragging the lower left corner, is used to adjust the start point of a region.

The Sample Editor can change the region boundaries more precisely. The Sample Editor can be opened by double clicking on a region.

Tip

8.1.5 Region Parameter Box

Name

The name of the region is displayed in the top line of the parameter box, (as with MIDI sequences). Several selected regions can be named at the same time, and a number at the end of the name will be appended to the sequences, to discriminate between them.

Loop

The Loop Parameter causes a region to repeat within the track, (as can MIDI sequences). The region will continue to repeat until it encounters another region in the same track, or the end of the song.

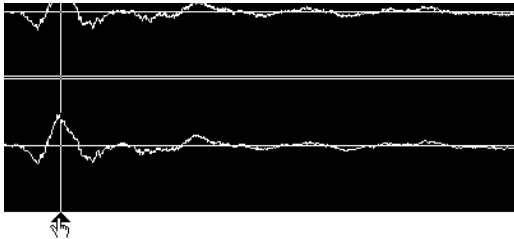
Delay

Regions can be advanced or delayed with the Delay parameter. The delay is calibrated in increments of clock ticks.

8.1.6 Region Anchor

The anchor is a positioning reference point in the region. When a region is moved, the display will show the anchor point in the information line, instead of the start point, as with MIDI sequences.

To guarantee perfect synchronisation with the sequencer, the anchor may need to be positioned within the region, and this position should be a peak, in most cases. Especially with drum recordings, this will allow you to move sections in the Arrange window so that the peaks fall on rhythmically logical points.



Some functions and parameters that are used for MIDI events, can not be used for audio recordings.

Adjusting the anchor and destructive processing of audiofiles can only be done in the Sample Edit window.

Many important functions are the same for both audio and MIDI, such as automatic naming of sequences, ability to change position and length, mute, solo playback, delay, loop etc.

8.2 Recording

8.2.1 Setting Tracks to Record Audio

1. In the Arrange window:

Click on the round “Record Enable” button (R) in the track list in the Arrange window. This shows the status of the REC button on the audio track.



2. In the Mixer:

- Open the mixer with the audio objects by selecting *Windows > Open Mixer*.

- Click on the REC button of the audio object you wish to record to.

Audio will be recorded only on tracks that are armed, regardless of which track the cursor happens to be on in the Arrange window.



- If a MIDI track is selected, MIDI will be recorded.
- If an audio track is selected, audio will be recorded on the track that is activated as Record Enabled (armed).
- A MIDI track and up to two audio tracks can be recorded simultaneously by clicking on the MIDI track, and then the audio track while pressing \square (Mac) or with the right mouse button (Windows).

If more tracks in the Arrange window are assigned the same armed audio instrument (e. g., “Audio 1”), then the new audio file (or audio region) is recorded to the selected track.

8.2.2 Recording Modes

Logic Hit Kit offers several ways to start audio recording at a particular song position.

Standard Recording with Count-in


Recording can be started at any song position. Place the Song Position line to the desired spot, set your input level, and click on Record.



Depending on the number of tracks that must be played back, there may be a small pause between clicking on the record button, and the start of audio recording.

Logic Hit Kit automatically creates a region, based on the new recording. As audio is recorded, the waveform will be drawn into the Arrange window in real time. You can also get an idea of the input levels in meters to the left of the track icon.

Manual Drop Recording

During playback, it is possible to jump into record mode. Start playback, and at the desired point, press the  key (this is the pre-set Key Command for *Record*). Audio recording then will start, and can be stopped by pressing or clicking Play or Stop. Keep in mind that an audio track must be armed, for audio recording to take place.

After Recording, Please Note...

After audio has been recorded, it is not a good idea to change the tempo. The Tempo should be determined before the first audio recording. Audio recordings have a constant playback rate, and it is very difficult to adapt them to a new tempo. Time Compression or Expansion Algorithms in other programs may affect the sound quality of the audio files negatively.

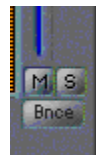
It is not generally recommended to move the anchors of regions recorded into a pre-existing MIDI arrangement. (The *Delay* parameter can be used for fine movements of regions.)


Tip

8.2.3 Bounce to Disk

In many cases, the Bounce to Disk function is better for accomplishing digital mixdowns. Automation, and effects are reflected in the audio material resulting from a bounce.

A *Bounce* button on the Output object of the Mixer (Master) will execute this function. A window will open, where you may name the bounced file, and set a destination for it on the hard drive.



 Tip: When only dealing with a few regions or tracks (or only a certain area), the regions or tracks affected should be switched to solo, or the locators should be set to the respective area. This will limit the bounce to just the part of the song you wish to mix.

You may save bounced files in either interleaved or split stereo format.