

TRACKTION

MUSIC PRODUCTION SOFTWARE



QUICK START GUIDE

www.tracktion.com

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Welcome to Tracktion

Welcome to Tracktion: a powerful audio and MIDI sequencer, designed with simplicity and ease of use in mind.

Tracktion sports a clean and uncluttered interface, but don't be fooled; ease of use in this case does not equate to a lack of features. Tracktion is capable of delivering professional results that only a few years ago would have required a significant investment in expensive hardware. When you open Tracktion, you have at your disposal all of the tools necessary to turn your musical ideas into great sounding mixes.

Section 1: Launching Tracktion for the First Time

When you first launch Tracktion you will be presented with Tracktion's project page. Here is where all of your current projects are listed. You can think of this page as a library for your ideas, as well as a great way to keep track of the recordings and mixes for your songs.

Generally Tracktion will be ready for business from the very first time you launch it, and indeed in most cases you can jump right ahead to section two of this guide where you'll learn how to open and play one of the demo songs. However, there is a lot of power here, and taking a few moments to optimize your Tracktion environment to your needs will pay dividends in the long run!

Upon first launching you will see two tabs at the top of the Tracktion interface (Fig. 1-1). The first of these tabs is for the **projects** page, which is where you are currently. The other tab is for the **settings** page. There is a third tab that will appear when you open a song for editing. That page, not surprisingly is called the **edit** page, and it is where you'll spend most of your time. For now though, click the second tab to switch to the **settings** page.



Figure 1.1

On the **settings** page you will see a column of vertical tabs. Each of these tabs corresponds to a specific aspect of Tracktion. Start by selecting the Audio I/o tab. On this tab you can specify which audio device(s) will be used by Tracktion for recording and playback. For example if you have a laptop that is connected to a USB audio device, you may see both the internal audio and the external USB audio devices listed. In this case you'll want to select the external audio device (Fig. 1-2).

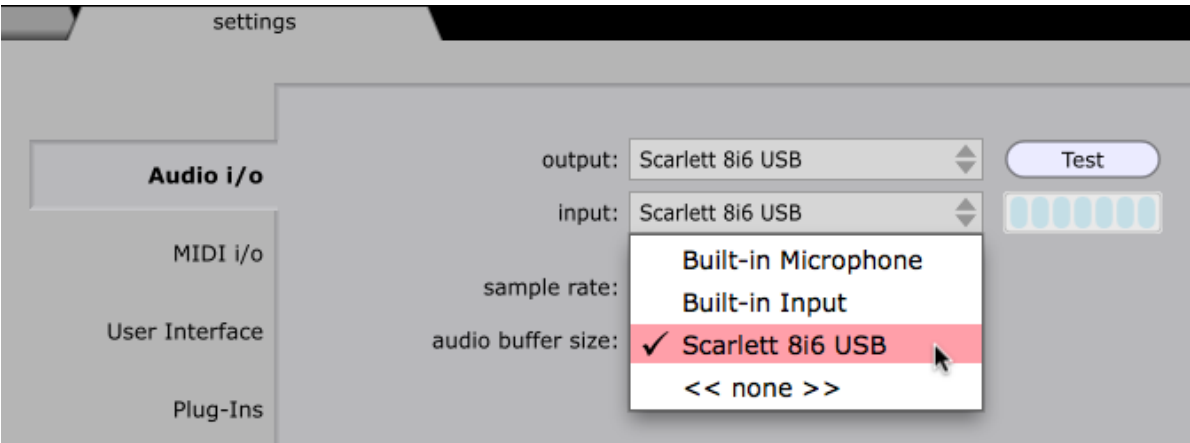


Figure 1.1

With your preferred audio device selected, you can choose which inputs and outputs (Fig. 1-3) you wish to make available to Tracktion. Input and output devices can be toggled on or off by clicking the enabled / disabled column to their left. If you know that you won't be using some devices you can disable them. If you're unsure then just leave them enabled.

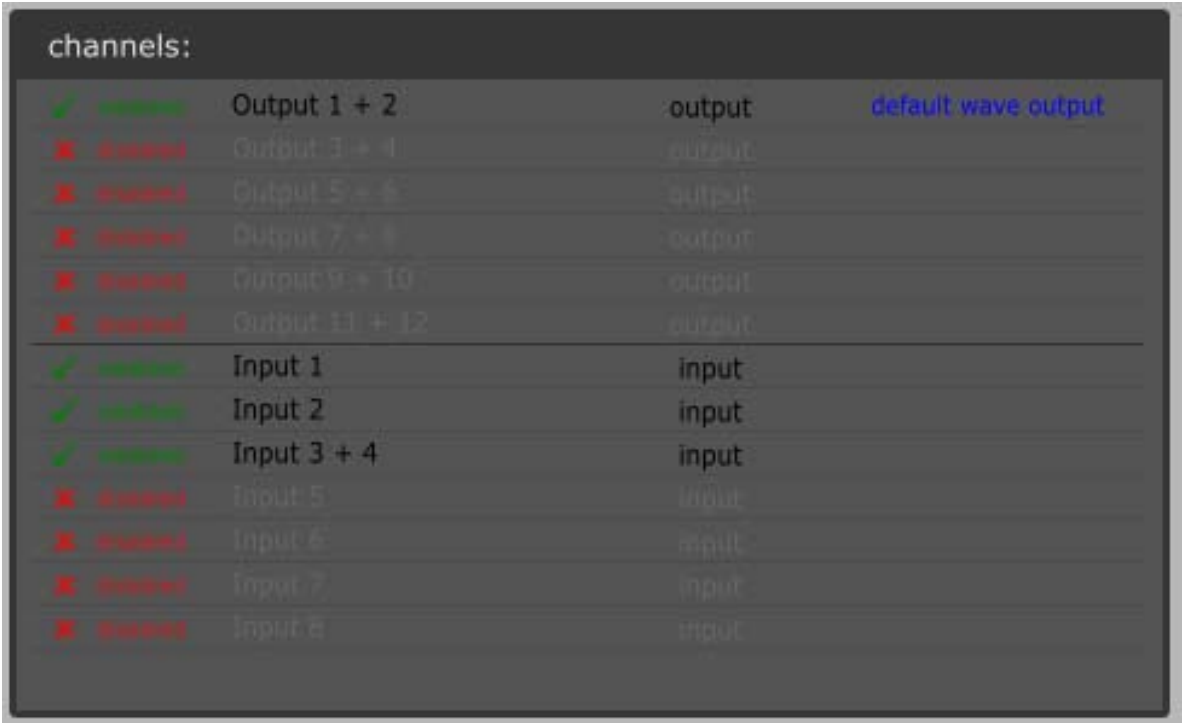
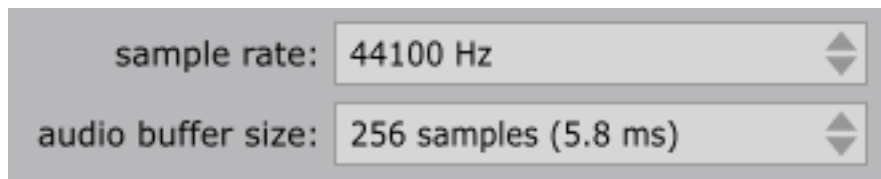


Figure 1.3

The last thing you'll want to check on this page is the sample rate and latency (Fig. 1-4). The sample rate will typically be 44100, which is CD quality, and a safe choice for most purposes. If you wish to choose another rate, simply select your preference from the drop down list. The latency control defines the size of the buffer used by Tracktion when transferring audio to or from your audio device. A buffer is necessary to achieve reliable recording and playback performance. If your computer is temporarily unable to keep up with the demands of real-time audio and there is no buffer or the buffer size is too small, data loss is likely to occur. This data loss will be audible to you as pops and clicks.

**Figure 1.4**

Setting the ideal buffer size unfortunately requires a trade-off; on the one hand you need a buffer large enough to provide error free performance, but on the other hand, if the buffer size is too large, you may begin to notice a delay between Tracktion processing a sound, and the sound being audible through your monitors. This delay is called “latency,” and it is this latency that is being referred to above. Too much latency may be noticeable to you when playing live, so ideally latency should be set as low as your computer can handle without introducing errors into your recordings.

Perhaps the best strategy for determining the ideal latency setting is to start high, say 11ms or so, and over time, adjust the value downwards until you reach a level that is comfortable when playing live, and yet yields reliable, error-free playback and recording.

Note: All of these settings can easily be changed at a later stage, so don’t worry if you are unsure what to do. The default settings are normally good enough to get you started. All settings for this page are also described in detail in the reference manual.

When you have finished with this page, click the **MIDI I/O** tab to review the settings for your MIDI devices. On this page you can select which MIDI inputs you wish to use with Tracktion. Simply click the enabled / disabled column on the left to toggle an input on or off.

As only one application may use a given MIDI device at any time, it can sometimes be useful to disable MIDI inputs or outputs if you intend to have Tracktion and another MIDI application open together. As with your audio inputs, if you are unsure, leave the inputs enabled for now.

Note: Other settings for this page are described in detail in the reference manual.

If you’ve ever used an audio editor or another sequencer on your computer, you may have some VST or AudioUnit plug-ins installed. If so, Tracktion can take advantage of them. All you need to do is let Tracktion know where they can be found. Select the Plug-Ins tab, and click the Scanning and Sorting button. You will be presented with a pop-up menu (Fig. 1-5), from which you should select the option Scan for new or updated VST plug-ins. A dialog window will be shown with a path where Tracktion will look to find any installed VST plug-ins. The default path is normally correct, but if you know you have installed plug-ins to another path, you can add that path to the search by clicking the + button.

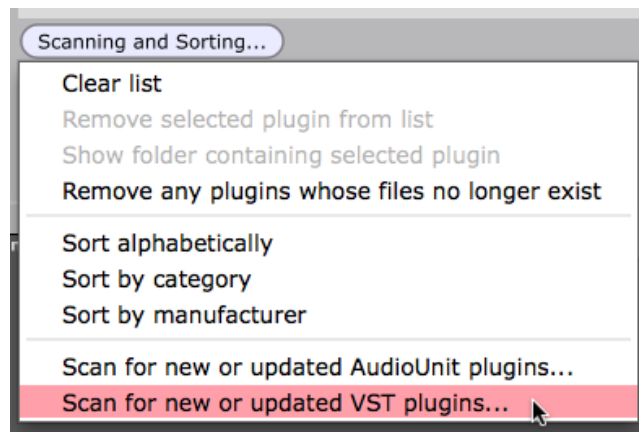


Figure 1.5

When you're ready, just click the scan button and Tracktion will begin searching for plug-ins.

Mac users should repeat this step for AudioUnits; you won't be prompted for search paths when updating AudioUnits as the install path is defined by OS X.

As with plug-ins it is possible that you have some loops installed on your computer. Mac users in particular will have access to the loops that ship with GarageBand. Tracktion supports audio loops in the Acid, Apple, and Rex formats.

If you have a collection of loops already installed on your computer that you would like to use within Tracktion, simply click on the **Loop Settings** tab, and click on the **add path...** button (Fig. 1-6). A file requester dialogue box will be shown. Navigate to the directory where your loops are located. If your loops are organized into sub-directories, you need only select the parent directory; Tracktion will search through the subdirectories of the specified directory to find your loops.

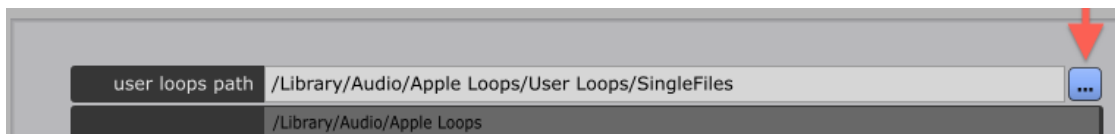


Figure 1.6

You can repeat the previous step if you have more than one directory to add. When your new directory(s) have been added, and are visible in the loop directories list (Fig. 1-7), click the **scan for loops** button, and select the option scan for new or changed loops.



Figure 1.7

Your loops will now be available in Tracktion's loop library, making them a snap to locate and use in your music.

Section 2: Playing one of the demo songs.

This section will walk you through opening one of the demo songs and playing it. This will give you a chance to test that everything is working as it should be. You will also learn a little about Tracktion's **projects** page, and will become familiar with the concepts of projects, items, and edits.

To get started, switch to the **projects** page (Fig. 2-1) by clicking on the projects tab at the top left hand corner of the Tracktion window.

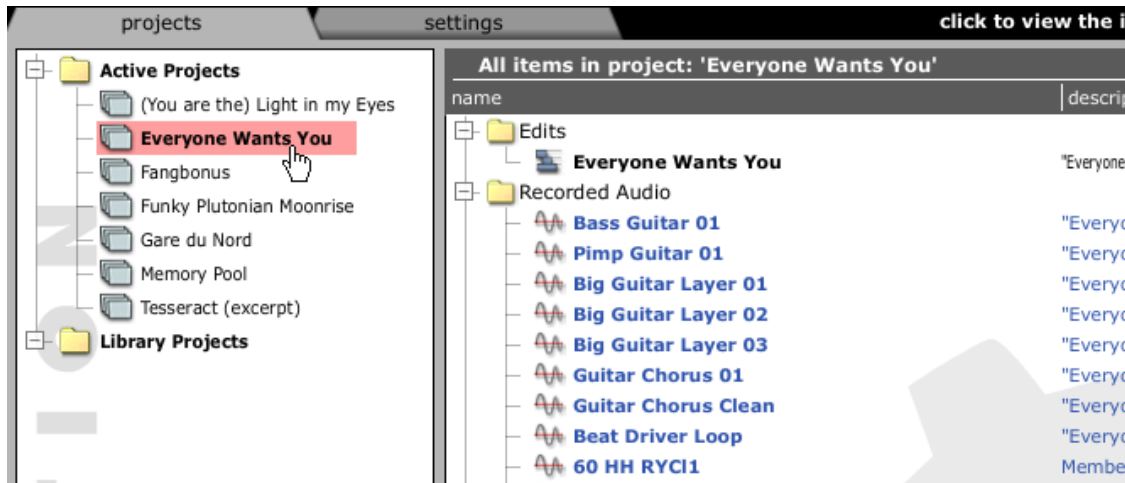


Figure 2.1

There are two main parts to this page. On the left there is the projects list, and on the right, there is the items list.

A project can be thought of as a container for a complete song. It will always consist of at least one arrangement, or version of the song, referred to as an edit in Tracktion. In addition it may contain audio recordings, MIDI files, and movie files. Collectively, these project contents are referred to as items, and it is these items that are shown in the items list on the right hand side of the **projects** page.

Note: The **projects** page is an extremely powerful aspect of Tracktion. It can greatly ease the task of organizing your work, and offers many tools for making backups, finding lost material, and charting changes to a project over time. If you would like to learn more, the reference manual covers the **projects** page in detail.

When Tracktion is first run, the projects list will contain two folders. The first of these is called the **active projects** folder. We'll be looking at this folder in more detail below. The second folder, the **library projects** folder, is a special folder that is used to store resources that may be shared between projects.

You'll notice that the **active projects** folder already contains a number of entries. These are the demo songs that are included with Tracktion. In time your own projects will be listed here too.

To open one of the demo songs, click on the project entry in the projects list. Notice how the items list updates to show the contents of the selected project.

At the top of the items list, you will see a folder called **edits** and inside this folder will be one or more edit items. You can open one of these edits by double-clicking on its item, or by clicking once to select it and then clicking the **open for editing** button (Fig. 2-2).

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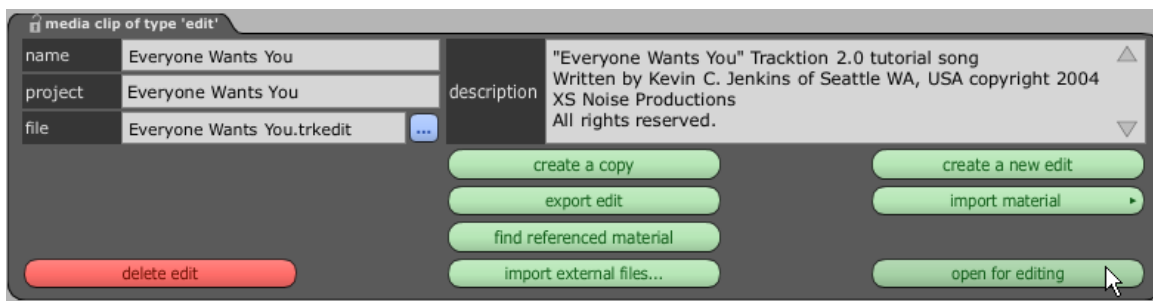


Figure 2.2

In short, to open an edit:

- Switch to the **projects** page.
- Select a project in the projects list.
- Double-click on an edit in the items list.

Depending on the size of the edit, it may take a few moments to open, but once it is fully loaded, Tracktion will switch you to the **edit** page, and you will see the edit laid out as a series of horizontal tracks. You can think of a track as being a single part or instrument within a song. We will look more closely at this page later, but for now we'll just skip straight to playing the demo song we've just opened.

If you look to the bottom right of the **edit** page, you will see the transport section (Fig. 2-3). Click the play button to start playback of the demo song.

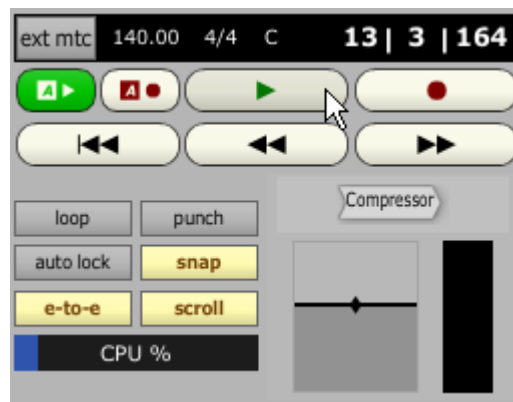


Figure 2.3

If all has gone well, you will be hearing the demo song. Click the play button again when you wish to stop the demo.

Note: The reference manual has a troubleshooting section. If for some reason things are not working as expected, you may find a solution there.

It can be useful to watch Tracktion's user interface while an edit is playing, as this can help to familiarize you with some of the core elements of the edit page. Notice for example the blue vertical line that scans through the edit. This is the playhead cursor. In addition to marking the current playback point, you will use this when editing clips and inserting content. On the right hand side of the **edit** page are a number of level meters that let you see at a glance the level for a given track. Near each track's level meter you will see a volume and pan control. As the playback cursor progresses though the edit, you may see a horizontal level line, and/or the diamond pan marker changing. Changing the parameters of a plug-in over time is called automation. You'll find an in depth look at mix automation in the reference manual.

When you're done, try out some of the other demo songs to get a feel for what you can do with Tracktion!

Section 3: Creating A Simple Demo Song.

The best way to get started with Tracktion is to jump right in. To do this we're going to make a simple demo song. While it's not going to win you a Grammy, by the time we're done here, you'll know how to manipulate audio and MIDI, work with plug-ins, and perform basic mixing. So let's get started.

Start Tracktion and switch to the **Projects** page. To create a new project you'd normally just click the **new project...** button, enter a name for your project, and click the **OK** button. For the purposes of this Quick Start Guide however, we're going to use one of the included projects as a base. If you look at the list of projects in the tree-view on the left hand side of the screen, you'll see one called "Quick Start Project." Select this project and the items list will update to show the contents of this project (Fig. 3-1).

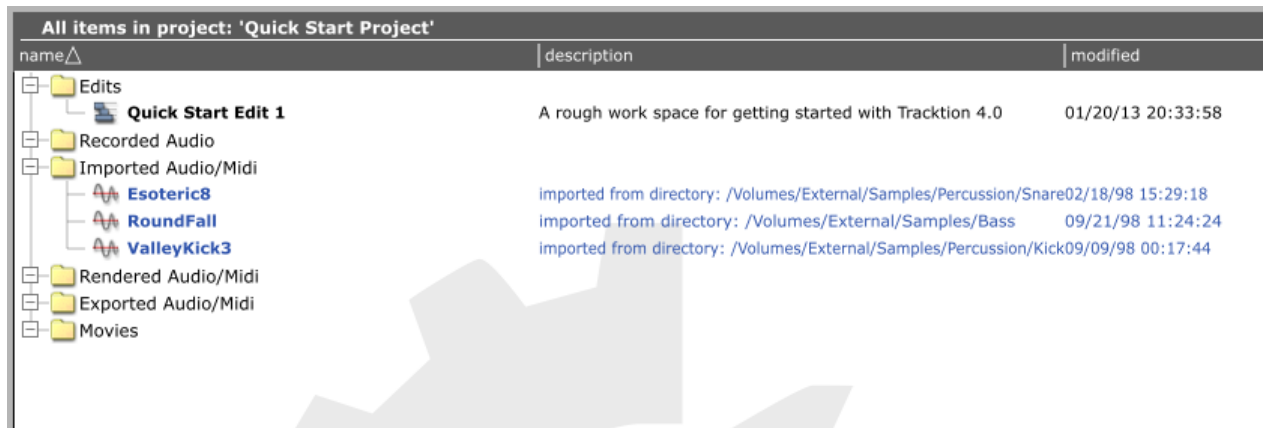


Figure 3.1

Select the edit called "**Quick Start Edit 1**" and look down toward the properties panel. There you'll see some information about the edit, and various tools (all of which are explained in the reference manual). Click the button marked **create a copy**. If you look at the items list, you'll see a new edit has appeared. Let's give it a better name. Select the new edit, and in the properties panel, type "Getting started" into the box labelled **name** (Fig. 3-2).

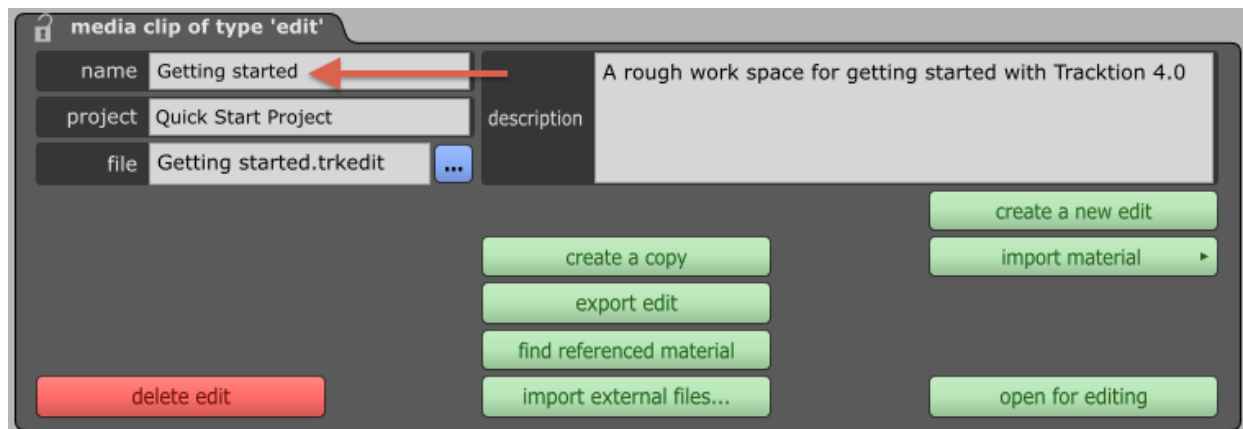


Figure 3.2

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To open this new edit, either click the **open for editing** button, or double click the item in the list above. After a few moments the edit page will be shown.

When the edit page first opens, you'll be presented with a pretty bare edit (Fig. 3-3). The first three tracks have samplers ready installed. We'll use these to build the kick and bass parts of our quick demo. In fact the kick MIDI pattern is already in place on tracks two and three. Track four contains an audio clip which is our snare part.



Figure 3.3

Let's start then by laying down our (very) simple bass-line. The first thing we're going to do here is to create a looped region. Double click the return to zero button (Fig. 3-4) to return the playhead cursor to the beginning of the edit, and then press the I key on your keyboard. This will set the start or 'in' marker to the current location of the playhead cursor (i.e. the start of the edit). Now move the playhead cursor to the start of bar five. To move the playhead cursor you can either use the left and right arrow keys on your keyboard, or you can simply click the point to which you'd like the cursor to move. Take a few moments to experiment with this. When you feel you've got the hang of it, click at the start of bar five and press the O key on your keyboard. This will set the position of the out marker. Notice now there are two markers (Fig. 3-5) one at the start of the edit, and one at the start of bar five.

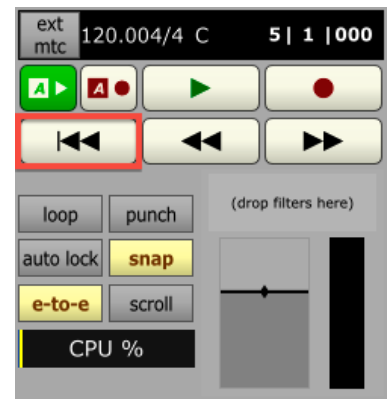


Figure 3.4



Figure 3.5

Now we've marked out a work area for ourselves, we can begin to create a bass-line. Select the first track (named "Bass") by clicking on its name. The track will change colour to indicate that it is highlighted. Now in the properties panel below, click the button marked **Insert a new clip** and choose **Insert a new MIDI clip** from the popup menu (you can also use the keyboard shortcut **G**). A new MIDI clip will be placed on the selected track between the in and out markers. You can see this in Figure 3-6, though for clarity the kick clips on track two have been removed in that image.

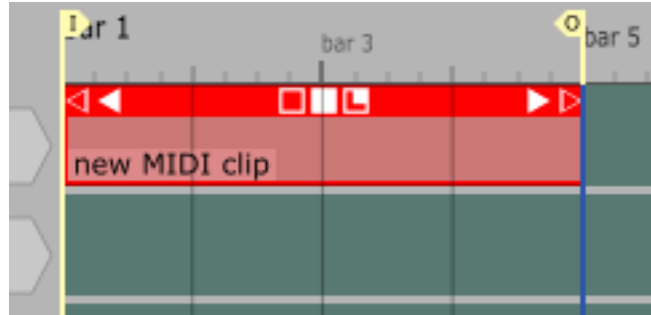


Figure 3.6

Double-clicking on a MIDI clip will bring up the MIDI editor. When the editor is showing, double-clicking on its title bar (the bold coloured stripe along the top of the clip) will return it back to normal height. Try showing and hiding the MIDI editor a few times. When you're ready, open the MIDI editor again, and take a few moments to familiarize yourself with its layout. Along the top of the editor is a tool bar, and along the left edge is a piano keyboard. The clip itself will be showing as a gridded area. It is here that your MIDI notes are placed.

Right-click on the piano keyboard and select 2 octaves from the popup menu. This menu controls how many octaves are displayed in the editor at one time. For our purposes two will work well. Now, using the left mouse button, drag the piano keyboard up or down until C5 is shown centrally. At this point our editor is showing the octave either side of C5.

Activate the **pencil** tool (Fig. 3-7). When this tool is selected, clicking anywhere on the editor grid will place a note at that point. The **eraser** and **pointer** tools allow you to delete and manipulate existing notes. Try adding, deleting, resizing, and moving some notes using the tools. You may also notice that many operations can be performed switching away from the pencil tool; try double-clicking on notes, or dragging them for example.



Figure 3.7

Once you have familiarized yourself with the MIDI editor, try to recreate the pattern shown in Figure 3-8.

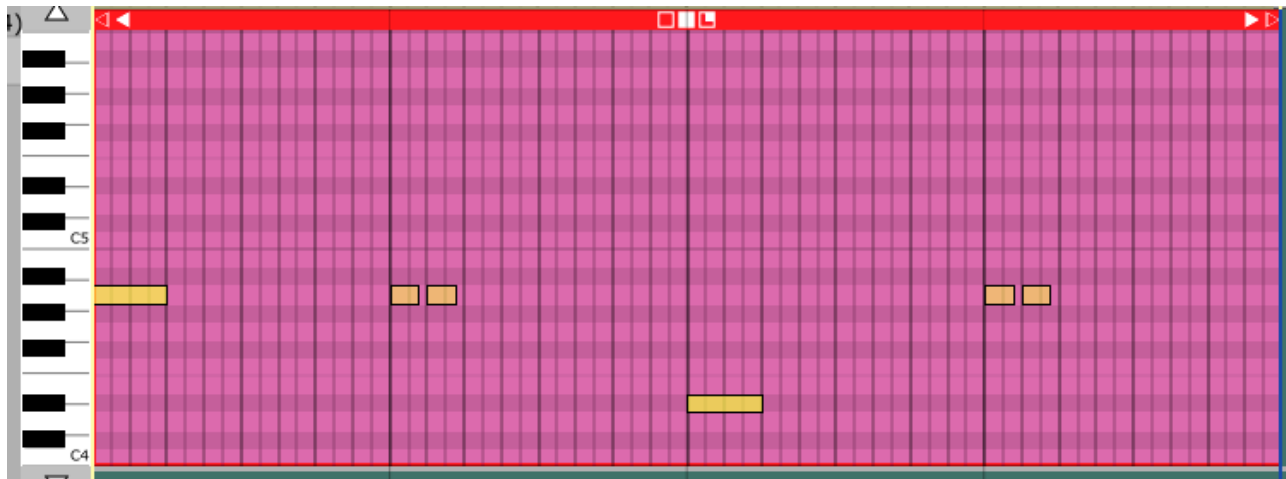


Figure 3.8

With the bass-line complete we can start adding a few more elements. This project includes an audio clip which we will use. To bring the clip into the edit, switch to the project page, and select the item named 'QuickStartArp' (Fig. 3-9). With the item selected, just press **CTRL+C** (**CMD+C** for Mac users) to copy the audio to the clipboard.

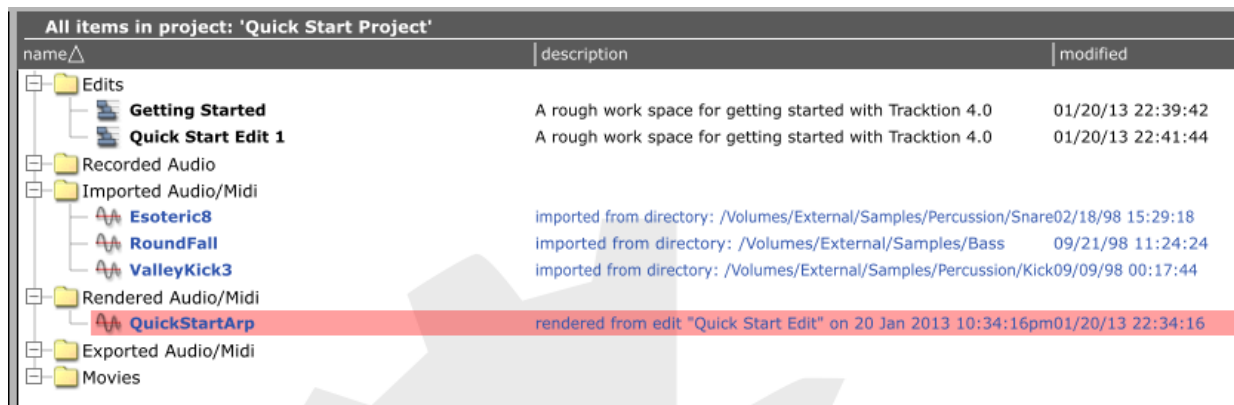


Figure 3.9

Switch back to the edit page, and select the fifth track (the one named 'arp'). When the audio is pasted it will be placed on the selected track at the location of the playhead cursor. We want the audio to be placed at the start of the edit, so move the playhead cursor to the beginning of the edit, and press **CTRL+V** (**CMD+V** for Mac users). You should see the audio clip on the track. This might be a good time to preview the edit. Try it out by pressing the play button in the transport area.

Well it's not much, but it's a start. Let's see if we can't liven it up a little. We've looked a little at the project page and the project management tools. One great feature aspect of Tracktion is that it is extremely easy to move material between projects. Let's try that out by borrowing some material from one of the other demos that ship with Tracktion.

Switch back to the project page, and select the project called Woody's Session. In the item list, you'll see the various audio files that were used to create this project. Look for the item called 'Picked Steel String 01' and select it. With the item selected, copy it to the clipboard using the **CTRL+C** (**CMD+C** for Mac users) keyboard shortcut. Switch back to the edit page, and paste the clip at the beginning of track eight (named 'Guitar Left'). Notice that after pasting, the playhead cursor is located at the end of the clip. This allows you to quickly paste multiple copies of the clip. Go ahead and paste the clip three more times to create a four bar repeat. Now repeat the same steps for the audio file 'Picked Steel String 03' to create four bars on track nine (named 'Guitar Right').

Press the play button to make sure everything sounds OK. Already things are starting to take shape, but it lacks movement. Let's try transposing those guitar parts on the third bar. Select the clip you want to edit, in this case the third clip of either of the two guitar tracks (Fig. 3-10).

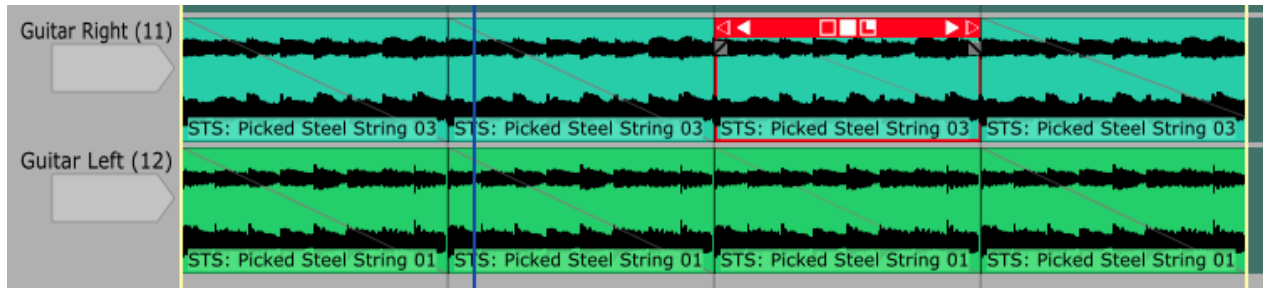


Figure 3.10

When an audio clip is selected, the properties panel will show various options related to that clip. Click the **change pitch** button in the properties panel, and from the popup menu select '**-2 semitones**'. This will cause the audio file to sound transposed with affecting its length. This technique is called time-stretching, and is a very powerful technology that can be used to fix slight timing errors in recorded performances, or correct off-key vocals. It can also be used in many creative ways, as we are doing here.

By default Tracktion will use transient time stretching for audio. This means that priority is given to maintaining the clarity of transients in the source audio when re-pitching or stretching. This sounds good on percussive loops, but is often less ideal for melodic parts. Adjust the stretch type to 'tonal'. Repeat this process for the other guitar track.

Now when you play the edit you should hear the guitars transposing, which provides the loop with a little life.

At this point you've already learnt how to work with audio and MIDI clips as well as the basics of laying out an edit. The last thing we really need to look at is the filter section, and how to mix edits. Before we do though, let's just visit one more aspect of working with clips, splicing and resizing.

For this we are going to use one more audio clip from the Woody Session project. As you did for the guitar parts, switch to the project page and copy the item called 'Orchestra Harp Pattern 34'. Switch back to your edit, and select the track named 'Orchestral.' As before, paste the clip at the start of the track. The new clip will span about two thirds of your loop.

If you select the new clip, and look at its title bar, you'll see various tools. These allow you to perform a number of resizing/slip-editing and looping operations. For now we're only interested in truncating the clip. On the right hand side of the clip is a hollow, rightpointing triangle. Click this and drag it to the left. As you drag, the clip will shorten. Keep dragging until the clip looks like Figure 3-11.

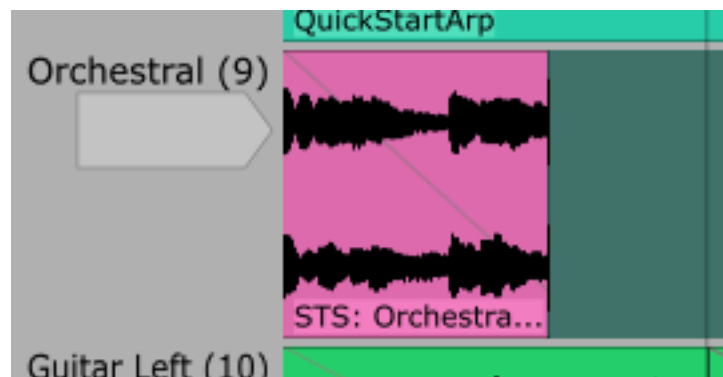


Figure 3.11

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Copy this clip and paste it at the start of bars two, three, and four. Select the clip for bar two, and further shorten it until it looks like Figure 3-12. Finally, select the clip for bar four, and by dragging to the right, lengthen it until it touches the start of bar five.



Figure 3.12

Your final edit should look like Figure 3-13.

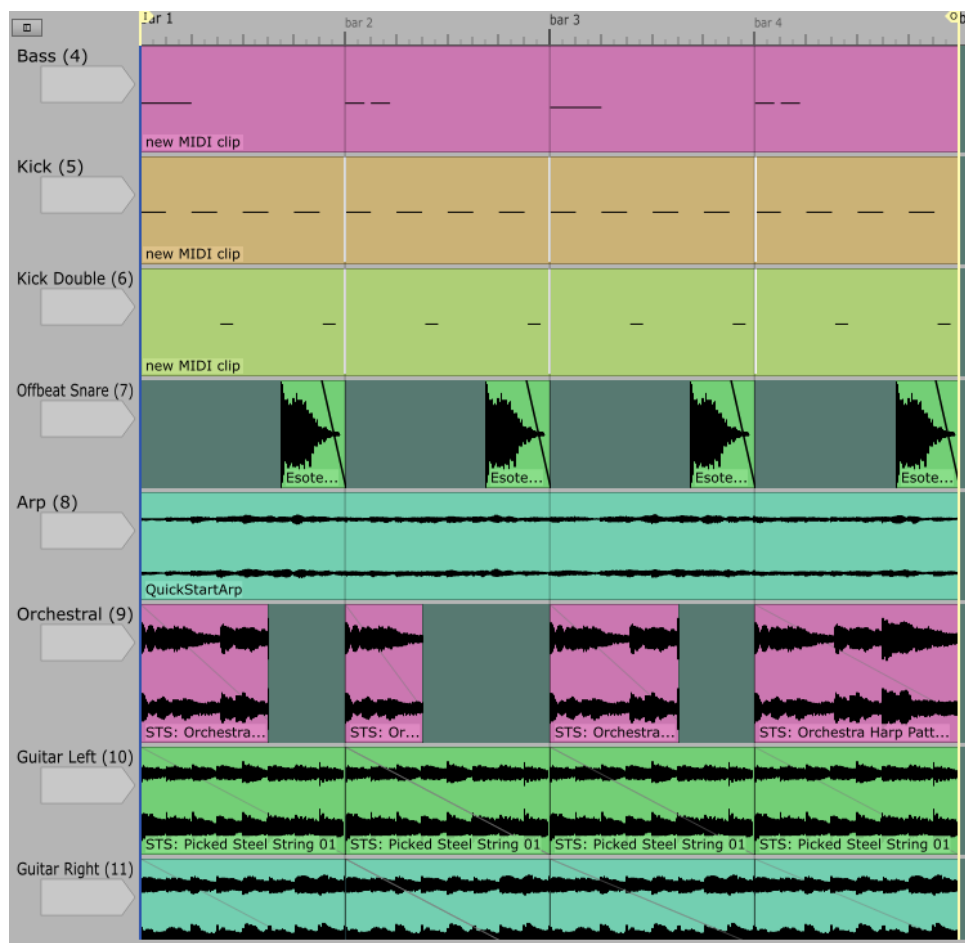


Figure 3.13

The guitar on track nine seems a little bright. We can easily solve this by applying a little EQ. Tracktion has two built in EQ filters. The first is a simple low pass/high pass type, which we will use here. The other is a powerful multi-band parametric EQ which can be used to perform detailed EQ work on specific frequencies. Since all we need to do is roll a little high end off of a track, we can use the 'Low / High pass filter'.

To add a filter (Tracktion's terminology for all effects and plug-ins) to a track, drag the new filter icon to the place where you wish to insert the plug-in (Fig. 3-14).

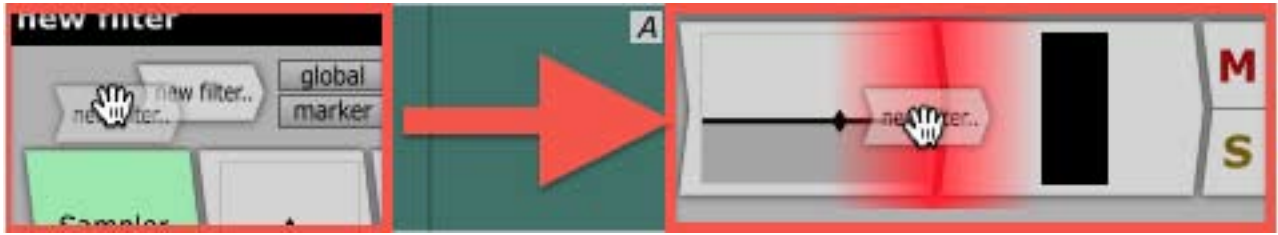


Figure 3.14

With the glowing red insert indicator located somewhere in track nine's filter area, release the mouse button. You will be presented with a list of installed filters. Select the '**Low / High pass filter**' option from the Tracktion sub-menu to create your new filter. Once the new filter has been created, select it by clicking its icon in the filter area and in the property panel adjust the slider until the frequency is somewhere around 2400 Hz.

At this point you are free to adjust levels and panning for each of the tracks to balance the mix to your taste. The volume/pan filter (Fig. 3-15) can be manipulated directly from its surface, or you can use the properties panel for greater control.



Figure 3.15

Section 4: Recording MIDI and Audio parts.

We've seen the basics of working with clips and tracks in Tracktion, so it is time to dive into recording. Tracktion allows you to record both audio and MIDI performances, and as you will see in this section, doing so couldn't be easier.

Recording is in essence a three-step process. The first step is to assign an input device to the track on which the recording will be made. The second step is to select the song position at which you wish to start recording. The third and final step is simply to start the recording.

We will start by creating a new project for the recorded material. Creating projects is extremely easy: just switch to the projects page, click the **new project...** button (Fig. 4-1), enter a name for your project (in this case, enter "tutorial") when prompted (Fig 4-2), and click the OK button.



Figure 4.1

When you create a project, Tracktion will create a folder with the same name, and write the new project into it. The project will contain a blank (default) edit ready for you to start working. In addition the project will be added to the projects list.

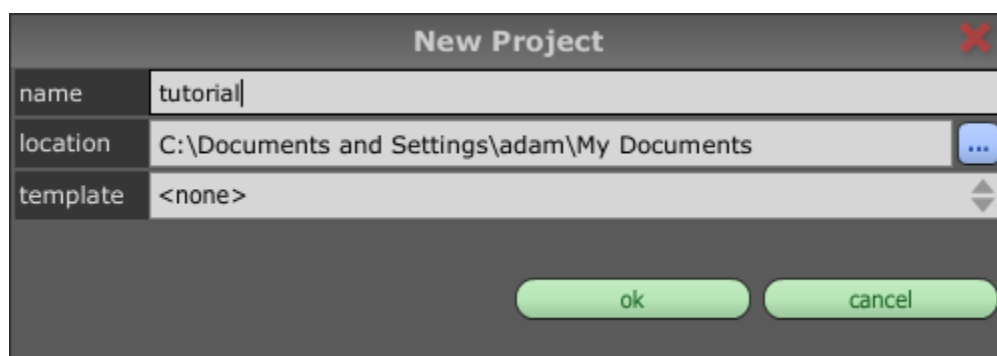


Figure 4.2

Note: You may have noticed that in addition to the project name, you were also prompted for a location, and template. For the purposes of this tutorial we can ignore those options, but if you would like to know more, they are covered in the reference manual.

Now your project has been created, all that remains to do is to open the default edit. When the edit has opened you will notice that Tracktion has helpfully pre-assigned your input devices to tracks (Fig 4-3).

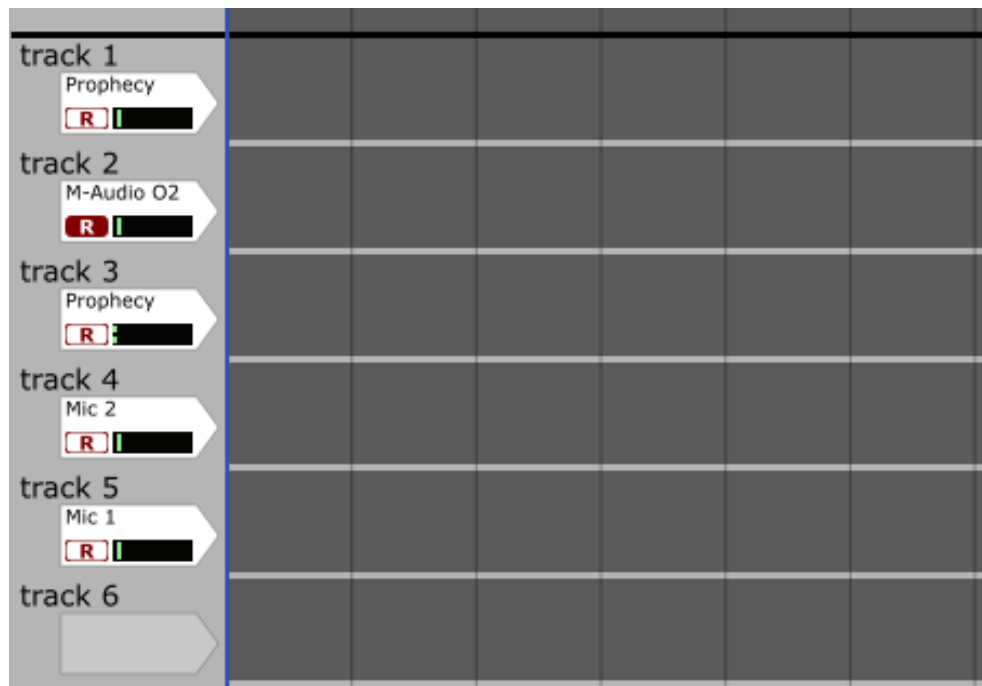


Figure 4.3

Most likely you will have both MIDI and audio input devices available. It is up to you which of these you choose to record from at this stage. Later in this section we will look at both of these input types individually, but the next few paragraphs are applicable to both audio recording and MIDI recording.

Before recording, it is always a good idea to check signal levels, and verify that the correct input has been chosen. A few seconds here can save you from losing a perfect vocal performance because you were recording from the wrong microphone, or because the level was set too low!

The input device surface has an arm/unarm control, represented by a toggle button with the label “R”, and a level meter.

The meter will respond to any signal that is received by the input device. For audio devices the meter shows a dB scale, and for MIDI devices it shows note velocity. This allows you to quickly check whether signal is reaching the input, and in the case of audio, whether the levels are too high, or too low.

The arm/unarm control allows you to quickly toggle whether the input device is armed. When an input is unarmed, it will receive input but will block it from passing on. This allows you to effectively mute an input, while still being able to monitor the signal through the meter. When an input is armed, the signal arriving at the input will be available to Tracktion, and as such will be both audible and will be recorded when the record mode is active. Being able to hear a signal at an input without actively recording it is useful in that it allows you to use Tracktion as a real-time effects processor, or to try out ideas without committing them to a recording.

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Note: When a new edit is created, Tracktion will automatically arm MIDI inputs. Audio inputs will be unarmed.

For our purposes here, ensure that your input is armed, and check that the meter to verify that the input is receiving an input. If it is not, check that you have selected the correct input, and that your cables are connected to your audio/MIDI interface.

Recording from an audio input.

If you are recording from an audio input, you will typically want to spend a few moments adjusting the recording levels to obtain a low noise floor, while not introducing digital clipping into your recordings.

Select the input device by clicking on its surface. The device will become highlighted to signify that it is selected, and the properties panel (located directly below the arrangement area) will update to show related information and settings (Fig. 4-4).



Figure 4.4

The first thing you will most likely see is the large input meter. You can use this to set your recording levels. In addition to the meter, you will see a number of other options that can be adjusted. The default settings for these options is normally fine, so we'll only look at two of them here. The others are described in the reference manual.

The option labelled “**treat as stereo pair**” controls whether the input should be treated as one channel of a stereo pair, or as an individual mono input. If you want to record in stereo, toggle this option on, otherwise toggle it off.

The input gain control sets how much the audio is amplified before being written to your hard-drive. Ideally this value should be set to zero, so that the input meter shows the actual incoming signal level. Also, gain make-up/reduction should be applied at source wherever possible, as this helps to avoid both raising the noise level, and clipping the inputs.

Tip: With modern 24 bit input devices, setting the input levels such that peaks in the signal register around -5dB on the input meter, gives a good trade off between audio quality, and headroom.

Recording from a MIDI input.

The MIDI input device has a few settings that are worth checking before making recordings. To access these settings, select the MIDI input device by clicking on its surface. The device will become highlighted to signify that it is selected, and the properties panel (located directly below the arrangement area) will update to show the available options (Fig. 4-5).



Figure 4.5

The MIDI input properties are described in detail in the Reference Manual. For now, just ensure that all 16 of the numbered midi filter toggle buttons are active.

Making the Recording.

Now we have selected our input, all that remains to do is to make a recording. With Tracktion you have access to a number of recording modes, including looped, and punch in. For now, we will just look at the most simple record mode.

Note: If you would like a count-in period before the recording starts, click on the **click track** button at the bottom left of the edit page, and select a count-in length from the prerecord count-in length sub-menu.

If you recall from the beginning of this section, the second step when making recordings is to select a suitable start point. For our purposes, we will start our recording at the beginning of our edit. To quickly return the play-head cursor to the start of the edit, click the **Return To Zero (RTZ)** button (Fig. 4-6).



Figure 4.6

The final step is simply to activate the record mode, and play a live part. To do this just click the record button (Fig. 4-6). The record button automatically activates the playback mode, and begins recording. While recording is in progress, a recording strip will show the recording progress (Fig. 4-7). When you are ready to stop recording, click either the record button or the play button.

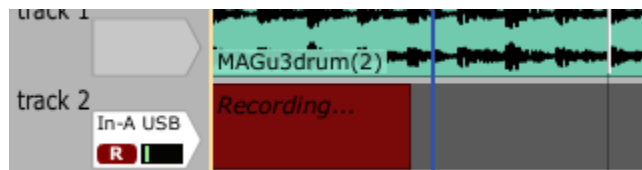


Figure 4.7

Tracktion 4 Quick Start Guide

This concludes our whirlwind tour of Tracktion. We've barely scratched the surface of Tracktion's power and flexibility, of course, but hopefully this has been enough to whet your appetite. If you are hungry to learn more, there is a full reference manual in PDF form included with your Tracktion install.

All then that is left to say at this point is that we hope you enjoy using Tracktion as much as we enjoyed creating it.



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