Master the Launchpad with Ableton Live

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INTRODUCTION

The Launchpad is one of the most famous controllers in the world. It has become an essential tool for playing live in concert but also for composing in the studio. A lot of DJs use it regularly during concerts and live performances. We can mention examples, like Conte or Madeon who are using the Launchpad as a scene object. The success of the Launchpad comes from these artists who have known how to use creativity and talent to get the best out of this tool. Madeon is mainly responsible for the democratization of the Launchpad when he released Pop Culture in 2011, a mashup of 39 musical compositions, played live on a Launchpad (his video reached 30 millions views on YouTube).

Many people have discovered the Launchpad, because of the live performances from artists like Madeon, M4SONIC or Nev. The advantage of the Launchpad is that the simplistic look makes producing more affordable (after all it has just buttons). Even amateur musicians like to use it. While it’s true that the Launchpad can be used in a very simplistic way, it is still a real challenge to control all its aspects. That is the whole purpose of this book.
The Launchpad has several characteristics that make it a great controller. But what makes it unique above all is that the possibilities of creations and musical performances are endless.

At first, the Launchpad is a simple grid of backlit buttons. But its real strength is that it was designed especially for Ableton Live, music production software that is well known for its robustness and its unique Session mode. The way to play music is totally rethought.

The classic way to produce music is thinking horizontally, as a superposition of layers, each layer generally representing an instrument. But with the Ableton Live Session mode, you can produce your music in a vertical vision, i.e. as a succession of sounds in time, some can be looped, others stopped at any time. Rather than designing the entire song, you can organize your set by simply creating the building blocks of sounds you want to use. Then you are free to play with these bricks without interrupting live music, which can be extremely powerful to improvise and create a live session, hence the session view. You can also save your live performance at any time and even come back to it later, in the arrangement view to improve it.

Another big advantage of the Launchpad is that it allows you to have a visual feedback of the sounds you are hearing. The classic way to use these lights is to illuminate a key of the Launchpad when the sound associated with it is played.
You can also create more complex effects by varying the rhythm, colors... you can even create sequences of lights. These effects greatly enhance the live performance but it also provides a better understanding of the music.

In this book, you will learn how to do what the pros have done with the Launchpad. At the end of this book, you will be able to compose with the Launchpad, create your own mashups, play your performances with impressive visual effects, and you will also be able to hold a live concert with only your computer and a Launchpad. You will discover innovative producing methods, amongst others the sampling, which will radically change the way you produce music.

In the first part of this training, we will go over all the features that are available on the Launchpad, in particular its 4 modes: Session, User1, User2 and Mixer. If you are new to the Launchpad, this part of the training will be essential because it will help you to understand how the Launchpad works and you will learn about everything that you can do with it. If you are already familiar with the Launchpad, I would still recommend to take a look at this part, because it will make you familiar with a lot of tricks and details you may not have known about otherwise.

In part two, we will look at how we can create lightshows with the Launchpad. If the concept sounds simple, think again because Ableton Live allows you to do a lot of incredible and
complex things regarding lightings. If you are also equipped with Max for Live, your only limit is your imagination...

Then we will discuss the most delicate but probably the most important subject: Sampling and producing Mashups. We will look at how famous electro producers are working with Ableton Live and dive into their Sampling techniques. I must insist on the fact that this part is not limited to experienced musicians and composers. We will not work with real instruments or with any sheets. In this case Sampling is working with the existing sounds. We will look at where we can find the best samples, how to extract them, how to mix and use them to create your own music. At the end of this part, you will be able to create your own mashups. If you also have some more traditional production skills, you will be able to make your original musical pieces by using Sampling as a basis, and you might become the new Daft Punk!

In the fourth and final part, we will look at preparing your project for a live performance. We will see how you can record your performance and make it amazing. I will also show you how to share your project if you want to work with other producers.

To follow this course, you only need a Launchpad and a computer with Ableton Live. If you’re just curious and do not have a Launchpad, this book will probably make you want to buy one!
LAUNCHPAD: THE BASICS

Compatibility and Requirements

All the following demonstrations are compatible with any version of the Launchpad and any version of Ableton Live. I personally use a Launchpad S and Ableton Live Suite 9 but you can do everything I do with a Launchpad mini and Ableton Live 8 for example.

Please be aware that if you have purchased a Launchpad, you probably have the version of Ableton Live 8 or 9 called Launchpad edition (or Lite). This version is a limited version of Ableton Live, you will be limited to 8 scenes (equivalent to 8 lines on the Launchpad), a limited number of sends and FX, fewer instruments, no management of loops and no Complex/pro warping mode, which is unfortunately frequently used in project files.
Each of the examples in this book can be followed with the Live Launchpad edition and with Ableton Live 8. You won’t have any surprises, but it is possible that you will not be able to reproduce some manipulations because of the limitations of your software. To compare different versions of Ableton Live, visit the official website at:


The Launchpad is connected to your computer via USB port. In case you don’t know: the Launchpad cannot work alone, you must have music production software to play with it. The best software for the Launchpad is obviously Ableton Live, since it was designed for this. You can also use it with any production software, such as Fruity Loops, Logic Pro, Cubase, etc. However, some features of the Launchpad may not be fully compatible. For the purpose of this book, the best choice will be to use the Launchpad Live Edition that comes with your Launchpad - or a more advanced version if you bought Live.

Session mode

Configure the Launchpad

Once you’ve connected the Launchpad, start Live. Your Launchpad should light up and open in session mode. If this is not the case, check if everything is setup correctly in the Live preferences by following these instructions:
Open the Live preferences with keyboard shortcuts **Cmd +** on Mac (on Windows this is done with Ctrl). Go to the tab **MIDI Sync** and check all the following sections:

1. In the **Control Surface**, Input and Output should be set to **Launchpad** (or Launchpad S, or Launchpad mini, ...)

2. In the **MIDI ports**, Input should be set to **Launchpad Input (Launchpad)** with **Track On** and **Remote On**.

3. In the **MIDI ports**, Output should be set to **Launchpad Output (Launchpad)** with **Track On** and **Remote On**.
If you wonder why the colors in your version of Live are not the same, you must know that you can easily change this in the Live preferences. Go to the **Look Feel** menu, and then select your theme (the one I use is **Disco**).
In Ableton Live, there are 2 view modes: the **Session** mode and the **Arrangement** mode. The Launchpad has been designed to work with the Session mode, the default mode when you start Live. To switch from one view to another, click on the icons at the top right corner of your screen, or press **Tab**.
To understand the following part, make sure to be in Session mode.

Session view
Arrangement view

**MIDI/Audio track**

When you create a new project in Live, two tracks are created by default: a **MIDI** track and an **Audio** track (in Live 9 this is two MIDI tracks and two Audio tracks).

A MIDI track (Musical Instrument Digital Interface) allows you to play virtual instruments or to associate sounds to each note of the keyboard, or a Launchpad or any MIDI controller. It is a simple interface between a note pitch and sound. You can use a MIDI track to play the piano, the violin, a guitar solo or even the drums (by mapping each drum sound to different notes).
An audio track allows you to play sounds by loading raw audio files. The difference from a MIDI track is that you cannot associate a different sound per note, and you cannot load virtual instruments.

**Session interface**

If your Launchpad is connected, you will notice blue frames in the Live Session mode. They define the accessible areas from your Launchpad, i.e. elements that you will be able to trigger in Session mode. The Launchpad contains a grid of 8x8 buttons. In Session mode, the columns correspond to the **tracks** (MIDI or audio) and lines correspond to the **scenes**. First, we will create some new audio tracks: **right click** and **Insert Audio Track** or use the shortcut **Cmd + T**.

Delete the first MIDI track and create 8 audio tracks. It will appear on the Launchpad grid, with one column per track. On the right are the **scene launch triggers**, numbered from 1 to 8. They correspond to the 9th column on your Launchpad, the one with round buttons. They allow you to trigger all buttons of one row at once, as if you would press all the buttons of a row.
at the same time, but we will come back to that later.

Do you recognize the Launchpad grid?

Adding samples

Let's start by adding some samples to our grid. Open the Live browser by clicking on the arrow in the top left corner of your screen, or by using the shortcut Alt + Cmd + B. Open the Tutorial samples folder of your package. If you have Ableton Live 9, you can add shortcuts to this folder from the browser. Select the vocoder 1.aif up to vocoder 8.aif files, and drag them into the Audio 1 track. Live will load the files and automatically place them inline.
Drag your files from the Live browser (or Windows / Mac browser)

**TIP:** When you drag your files, hold down **Cmd** to place the samples in a column.
In column: drag and drop by holding down **Cmd**

This way you can load any audio file in Live (.wav, .mp3, .aif, ...). The .aif format is the format used by Live when recording. Each .aif file is often associated with an .aif.asd file that contains information about how Live will play the sound. We will see this point in details later.

**Headphone and master output**

Using the Live Browser, you can preview the sounds by clicking your files. Just make sure that the **headset** icon is activated.

If you hear no sound at this point, check your output settings in the **Audio** by going to the **Audio Output Device** in **Preferences**, **Audio** tab. Near the master track are two Outputs: **Cue Out** and **Master Out**.

Cue Out corresponds to the headphone output (to preview
sounds and the metronome for example). Master Out is the Master output. If you use the default stereo output from your computer, Cue Out and Master Out should be set to 1/2.

Clip and global quantization
When a clip (audio or MIDI) is loaded in the Session mode, the button lights yellow on your Launchpad. Press these buttons to trigger clips. When the clip is playing, the button turns green. Try the Daft Punk samples that you just loaded.

You notice a significant lag between the time you press the button and the moment the sound is actually played. This is related to the global quantization of the project. Live informs you that the clip will be played soon by making the green button blink.

By default, Live forces you to play your rhythm clips. I.e. it will wait for the next step to play each clip. Thus, you are assured that your clips are triggered precisely in time. You can apply this "precision" setting either to the whole project or to an independent clip. This is called quantization. By default, it applies to all your project. In our example, quantization is not precise enough in a way that we can play the samples after each other. To solve this we will set the overall quantization of the project to a measure of 1/4 step in the menu at the top left of your screen.
You can also use the shortcut **Cmd + 8**

You can now play samples one after the other without interruption.

**Looping clip**
Load beat1.aif file in the second audio track and trigger it with your Launchpad. This is a drum loop. Now I would like this drum loop to play repeatedly, so I do not have to restart the clip at each bar. To do this, select the Loop button in the Sample panel. If you are unable to activate it, make sure the Warp option is on, we will later take a look at what this is. If the Sample panel is not visible, click the icon at the bottom left corner of the middle panel under the Clip.

The drums will now play in loop

Stopping a clip

Once the drums have been launched, they will not stop. There are several ways to stop the loop. The first method is to press
one of the empty buttons on the track. Wherever there is no clip, there is a stop button that has the effect of stopping any active clip of the corresponding track.

You can also use the stop buttons at the bottom of each track or use the global stop button at the bottom of the master track that has the effect of stopping all active clips in the project. We will later look at how to activate these buttons from the Launchpad in Mixer mode.

**Custom quantization**

By repeatedly pressing on the drum clip, you notice that you can loop on the first time that you press. This is because your clip is set to the global quantization that has just been set to 1/4. To trigger the clip only at bars, adjust its quantization to 1
Bar in the **Launch** Panel. You can hide / open this panel by clicking on the first icon at the bottom right corner under the panel **Clip**.

Note that this does not affect the quantization of the first 8 samples as they are synchronized to the global quantization. You see that you can set each sample independently while applying a global rule for a majority of your clips.

**Speed and transpose**

Add a new sample. Slide the intro file 1.aif in audio track 3. Repeat the same operations on this clip: Activate the Loop function and set the quantization to 1 Bar. Play this new clip together with the drum clip and make sure everything works as
expected.

The melody is a bit slow compared to the rhythm of the drums. Select the clip of the song and click on the button :2 in the Sample box. This has the effect of dividing the BPM reference clip by 2 and so multiplies the playback speed in our project by 2. If you are a little lost here, do not worry, we will come back to these concepts in the Sampling section.

![Sample](image)

*The speed rate of the sample is now 2x faster*

If you try to play 3 tracks together, you find that the vocoder on track 1 does not quite work with the melody of track 3. This is because they are not playing in the same key. The key could be seen as the language that music speaks. There are
approximately 12 of these (such as 12 separate notes of a piano). Changing the tone of music is called **transposition**. In Live, there is a specific setting for it. Push the transposition cursor (always in the Sample panel) to 11 st - st for semi-tone - this has the effect of shifting up all the notes of the sample.

![Sample](image)

*The sample has now been transposed*

Try to play the melody with the vocoder, the two tracks are now working much better together!

**Follow actions**
Let's add variations to our drum clip in a somewhat repetitive way. Load the files beat 2.aif, beat 3.aif and beat 4.aif and place them in channel 2, just below the first beat1 clip. Your Live interface should look like this:

You can now make variations in the rhythm of the drums.
Since we start to have a lot of samples, it would be good to automate some sequences. In Live, you can create an automated path among the clips on the same track. Here we will look at a way to make sure that Live automatically plays beat1, then beat2, then beat3, then beat4, then goes back to beat1, and so on.

Select beat1 and locate the **Follow Action** section in the **Launch** panel. Click on the first box in the second row below
Follow Action and choose Next as in the picture below:

At the end of beat1, Live will automatically play the next clip (beat2)

Do the same for the beat2 and beat3 clips.

**TIP:** Instead of repeating the same operation three times, you can select beat1, beat2 and beat3 and implement the Follow action on these clips.

For the beat4 clip, choose First as follow action like in the picture below:
At the end of beat4, Live will automatically switch back to the first clip of the track (beat1)

Play the clip corresponding to beat1 and you should see and hear the 4 clips play one after another and repeat without any action needed on your side. This kind of automation can be very useful sometimes. There are other kinds of action that you should try, for instance: the Any action allows you to let Live choose a random clip each time.

Playing with randomness can be very interesting when you are producing, Live can suggest sequences that you would have never imagined.
**TIP:** Here is an advanced feature in the Follow action panel: you can set 2 different sequences for a given clip and assign a probability of each of these sequences. In the example below, at the end of the clip, there will be one chance to move to the next clip and one chance to move to the previous one. The first line shows the time after which the action should be executed: 1 Bar in this example, i.e. at the end of the clip.

![Follow Action Panel](image)

*Go to the next or previous clip...*

**Conclusion**

If you are already impressed by the potential of Ableton Live and the Launchpad, you must know that there are more incredible things that we can do! With all the basic concepts we’ve covered in the Session mode part, you will be able to do many interesting things. I invite you to download the remake project **Pop Culture - Madeon** and look at the settings for each clip, you will be able to understand the essence of the
project.

http://launchpad-pro.com/launchpad/videos/remake-pop-culture-madeon

We will now work in a completely different way.

Continue?

Visit http://launchpad-pro.com/training