

GETTING STARTED GUIDE

Welcome to Bitwig Studio!

This guide will help you take your first steps into the world of Bitwig Studio and introduce you to some of the key concepts of the software.

By going through this document, you will gain a basic understanding of the application that you can build upon through additional exploration of your own.

The **Bitwig Studio User Guide** is a separate PDF document that takes a comprehensive look at Bitwig Studio, examining all parts of the program in the relative order that you would need them. The User Guide can be found in the application's **Dashboard** under HELP. There are also a wide variety of video tutorials, blog posts, and other online resources, many of which are collected at **www.bitwig.com/learning**.

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1. Introduction

1.1. Bitwig Studio Concepts

Bitwig Studio is a modern digital audio workstation (DAW) that allows you to seamlessly compose, produce, perform, and expand your music.

Any session that you create in Bitwig Studio is called a *project*. You can have multiple projects open at once, but audio will only be active for one project at a time.

Bitwig Studio projects are organized into *tracks*. Each track contains a signal path that results in audio and has common mixing board controls (such as volume, panning, solo, and mute).

Clips are containers for individual musical ideas. Clips store either notes or audio, as well as control and automation data.

Devices are either virtual instruments or audio effects, and they are usually added to your tracks to generate or manipulate sound. Bitwig Studio comes with a large selection of devices.

Music is made in Bitwig Studio by creating a project and populating its tracks with clips, which you can then refine, arrange, and trigger.

1.2. Registering & Downloading Bitwig Studio

The first thing to do before getting started is to create a user account and register your license:

Go to www.bitwig.com/register and create a user account.

Activate your user account by clicking the link in the activation email.

Log in to your user account and register your license.

Go to **www.bitwig.com/download** to download the latest Bitwig Studio installer. Bitwig Studio exists for Windows, Mac OS X, and Linux, and the process of installing it on your computer depends upon the platform you are using. Each installer package contains either an installer that guides you through the process or instructions for copying the application onto your computer.

1.3. Opening Bitwig Studio for the First Time

After you launch Bitwig Studio for the first time, the program's splash screen will pop up. In a moment, it will disappear, and then a new window will appear taking you through the steps to activate your copy of Bitwig Studio.

Authorization

If you already set up a user account online and registered your license, choose *Login to activate* from the activation window. This requires an internet connection.

If you do not have internet access on this computer, *Activate offline* is the right choice for you. Clicking this option will provide additional steps to follow.

Run in demo mode is for trying out Bitwig Studio. Note that starting the program this way will disallow saving and exporting.

Once you have made it through one of the above paths, click through any successive dialogs to continue on to the program.

1.4. Setting Up

When Bitwig Studio is launched, the **Dashboard** is the first window to appear. The **Dashboard** can also be called up by clicking on the Bitwig logo in the top center of the application window.

This is a good time to visit the *Settings* page and configure a couple things:

- > The Audio tab allows you to select your audio interface and adjust related settings.
- If you have a MIDI keyboard or controller, first make sure it's connected to the computer. Then go to the Controllers tab and click the *Detect available controllers* button.



For issues with any outboard gear (such as audio interfaces or controllers), consult the equipment manufacture's website for any required drivers, etc. And if you run into unexpected software issues, please consult the full Bitwig Studio User Guide. And remember, you can always go back to these settings by clicking the Bitwig logo in the application window's header.

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Berlin Mornings 🗙				:
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2. First Steps: GUI Overview

Looking at a demo song is a great way to get a quick overview of Bitwig Studio and see some of what is possible.

The first page of the **Dashboard** has a Demos tab filled with good example projects. Navigate there and open the demo song "Berlin Mornings."

2.1. Anatomy of the Bitwig Studio Window

The user interface of Bitwig Studio consists of various viewers and editors called panels, many of which can be resized and hidden/shown. These panels are assembled into views, each of which gives you access to a set of panels chosen to help you carry out a particular musical job. The bottom left of the window footer allows you to switch between the available views.

The primary choices are:

- Arrange View: Primarily for working in the Arranger Timeline Panel and/or Clip Launcher Panel
- > Mix View: Primarily for working in the Mixer Panel
- > Edit View: For making detailed edits to your clips with the Detail Editor Panel

Depending upon which *display profile* you have selected, these views may be rendered in slightly different ways, but the general principles remain the same. So let's stay in the Arrange View and get a quick overview of the Bitwig Studio window.

In the middle of the screen is the **Arranger Timeline Panel (A)**. This is where you arrange clips into songs. The project's tracks are displayed horizontally [B] with each track's name coming first (this song includes tracks named "PLAY ME," "Drums," "Keys," and so on). Beside each track name are controls, such as volume, record arm, solo, and mute.

To the left is the **Inspector Panel (C)**, which will show you different options depending on your current selection.

To the right is the **Browser Panel (D)**, where you will find clips, audio files, devices, and other content that can be dragged into your project.

On the top of the screen are the transport controls (such as play, stop, and record) **(E)**. To the right of those controls is a blue numeric section which starts with your project's tempo. And between the transport controls and the first track is a drop-down menu to select the tool you'd like to edit with.

In the image above, the **Arranger Timeline Panel** is loaded in the window's central panel area. Below this is a secondary panel area **[F]** where either the **Device Panel** (for working with each track's device chain; shown in the picture above), the **Detail Editor Panel** (for editing the audio and/or notes contained in your clips), a **Mixer Panel** (for adjusting the relative volume and placement of track), or the **Automation Editor Panel** (for working with parameter changes over time) can be loaded. Click one of the panel icons (to the right of the view buttons) to select which panel appears. You can also double-click any clip to display its contents in the appropriate panel, or even double-click any track header to show its devices in this area.

2.2. Tools, Navigation, and Panels

When moving your mouse around in the Arranger Timeline or Detail Editor panels, you'll notice that the cursor changes.

Some tools in Bitwig Studio are "smart" and will change function depending on where you move your mouse:

- > To zoom in and out, move the mouse cursor to the header of the timeline (along the bar numbers). While here, the cursor turns into a magnifying glass, and by clicking and then dragging up or down, you will adjust the horizontal zoom of the window.
- > Single-click in the same area to move the Play Start Marker. Or you can double-click here to move the Play Start Marker and immediate start playing.
- > When the mouse cursor appears as crosshairs, you can select multiple objects by clicking and dragging. When the mouse cursor is an I-beam, you can make time selections.
- > You can scroll horizontally and vertically within panels by using that panel's scroll bars or your mouse's scroll wheel.

3. Tracks, Devices and Clips

Click on the first track (named "PLAY ME"). Then click the Create menu beside the transport, and select the Create Instrument Track option. A new track will be created, called Inst 2. Double-click the name of the track, and you'll see the empty **Device Panel** below.

3.1. Your first device chain

Let's start adding devices. By clicking the plus (+) button in the **Device Panel**, the **Pop-up Browser** will appear. In its far right column is a full list of the available devices and plug-ins. Scroll down in this list until you find *Polysynth*, then select *Polysynth*, and click the *Ok* button to close the **Pop-up Browser**. Now that the **Polysynth** device is shown, click the plus button to the right of **Polysynth**, select *Delay-2* in the device list, and click *Ok*. And now you have your first device chain!

We have seen two different browsers in Bitwig Studio: the **Pop-up Browser** and the **Browser Panel**, both of which will appear again. They work in different ways, but both can be used to add devices, samples, and other content to your project.

Signal flows from left to right through the device chain so an instrument device (that is generating audio) should generally go before audio effect devices (that are processing audio). You can move devices around freely in the chain by clicking and dragging them.

3.2. Introducing Note Clips

For our current device chain to produce sound, we need to send notes to it, and one way to do that is by putting *note clips* on this track. Go ahead and select a number of

clips from another track in the timeline, and drag them onto your track. Then hit play on the transport (or press the [SPACEBAR] key). As the playhead passes over each note clip, the contained notes will trigger **Polysynth** and output audio. Go ahead and try tweaking some parameters of **Polysynth** to change the current sound. And realize that you can solo the track to make everything else quiet

Now let's create a note clip from scratch. In the timeline, double-click any blank area to create an empty clip. You can then make the clip longer or shorter by clicking and dragging on the clip's right or left upper boundaries.

Double-click the clip to open the **Detail Editor Panel**, which will appear where the **Device Panel** was a moment ago.

3.3. Detail Editor Panel (with Notes)

As with clips in the **Arranger Timeline Panel**, in the **Detail Editor Panel** you can click on notes to select them, and drag notes to move them around. You can also doubleclick in an empty area to create new notes (and even hold down the mouse and drag to adjust the new note's length).

There are actually two edit modes for this panel, and they are named on the far left. *Track* mode allows you to edit the contents for the entire track at once, whereas *clip* narrowly focuses on the current clip. Click the *TRACK* or *CLIP* button to engage that respective mode.

3.4. A Look at Audio Clips

Audio clips are used to play back audio samples. Have a look at the **Browser Panel** on the right side of the screen, and navigate to the Samples tab by clicking the audio waveform icon. The list at bottom of this panel shows all the audio samples located across Bitwig Studio's library.



Sound content can be downloaded and installed from within Bitwig Studio. For more information on installing content packages, please see chapter zero of the full User Guide.

Clicking on any sample displays a miniature preview player at the bottom of the **Browser Panel**. You can use this player to preview samples before adding them to your project. Find a sample you like, and click and drag it into the timeline of the

project. If you drop it on the timeline, Bitwig Studio will create an audio clip to contain the sample. And please realize that if you drop the sample onto an existing track, the sound will pass through that track's audio effect devices when played back.

Double-click the audio clip and the **Detail Editor Panel** will open.

3.5. Detail Editor Panel (with Audio)

In the **Detail Editor Panel**, you can change a sample's start time, cut it up, change its pitch, and much more.

An individual sample or section of an audio clip is called an *event*. Click and drag an event's header (just above the waveform, beneath the timeline) to move it within its clip, or double-click this area to split the event in two. Select an event and explore both the parameters of the event in the **Inspector Panel** and the commands that can be executed on the event in the Event menu.

3.6. Automation

Automation is the movement of parameters (such as volume, pan, or tempo) over time. Automation can be edited in the **Arranger Timeline Panel** by clicking the *Automation Lane button* (shown with three horizontal lines) in any track's header.

You then select which parameter you want to automate and create individual points to form an automation curve.

4. Arranger Timeline vs Clip Launcher: Two Ways to Play

So far we've had a look at the Arranger Timeline (or arranger) in Bitwig Studio, but the Clip Launcher (or launcher) provides another way to work.

Each track possesses a Clip Launcher (and its associated **Clip Launcher Panel**). This launcher allows you to trigger clips and *scenes* (sets of clips) in a freeform, nonlinear way. Only the arranger or the launcher is active on each track at any given time. Accordingly, launching and stopping clips in the launcher overrides whatever is happening on the arranger. No data is lost in this process; control is simply given over.

You can jump seamlessly between the launcher and arranger. To give control to the launcher, simply trigger a clip in the launcher by clicking its play button. To restore control to the arranger, click the track's *Switch Playback to Arranger button*, found at the far right of the **Clip Launcher Panel**.

You can also drag clips and scenes between the **Clip Launcher** and **Arranger Timeline** panels.

5. Let's Record Something

To record an incoming signal, you will need either a controller or an audio input. For more guidance on setting either of these up, please see the Bitwig Studio User Guide.

5.1. Recording Notes

First click the record arm button of an instrument track. Now click the Global Record button in the transport controls section, and then click the Global Play button. Once the playhead is moving, start triggering notes from your controller. You'll see a note clip is created on the Arranger Timeline, and the notes you play on your keyboard are recorded into the clip.

5.2. Recording Audio

Create an audio track, and make sure your intended audio input is selected from the track's input chooser menu. Click the track's record arm button, and then click the Global Record and Global Play buttons. Bitwig Studio will now record any incoming audio into an audio clip on the armed track.

5.3. Recording Automation

Similar to notes, Bitwig Studio can record incoming control messages as automation onto any armed tracks. You can also use the mouse to adjust parameters while recording and capture these actions, regardless of whether a track is armed or not. Finally, you have the option to record only automation (effectively ignoring any note or audio input) by clicking the Automation Write button, immediately to the right of the Global Record button within the transport controls section.

6. Modulation

While automation is drawing in a parameter curve, *modulation* is using a signal to automatically manipulate a parameter (for example, making the cutoff of a synthesizer "wobble").

Bitwig Studio allows for truly advanced modulation with just a few well placed mouse clicks.

6.1. Assigning a Modulation

In this example, we'll use an LFO modulator device to control a number of synthesizer parameters.

First, add a **Polysynth** device to a new instrument track's device chain (as we did in section 2.1). **Polysynth** contains a number of modulator cells, shown just inside the device as three vertically stacked plus (+) buttons. Click the plus sign of a modulator cell, and a **Pop-up Browser** will appear with a list of available Modulators. Select the device called *LFO*, and click the *Ok* button.

The **LFO** now appears in the cell, and you will see a moving yellow wave to represent the modulation (A). Click the wave to unfold the device cell, and parameters for the Modulator will appear (B).

To connect this Modulator, click the *Modulation Routing button* (a dot with an arrow coming out of it) just below the waveform (C).

You'll see that all parameters of **Polysynth** change color, indicating that they can be modulated. While colored, click the cutoff knob (D) and drag downward while holding the mouse button. The indicator around the cutoff knob should now start moving, indicating that setting's current value as influenced by the LFO.

If you play a note, you will hear the sonic effect this has. You can assign the same LFO to as many parameters of Polysynth as you like. Click the modulation assign button again to exit modulation routing mode.

7. Touch

Bitwig Studio has a number of features and adaptations for anyone using a Microsoft Surface or other touch screen-equipped computer. The reworked interface is optimized for touch and pen interactions.

From the Dashboard, go to *Settings > General* and change the Display Profile setting to Tablet.

Once you exit the Dashboard, you'll notice that the interface has changed, including the four views that are now available: PLAY, EDIT, ARR(ange), and MIX.

You can scroll panels by using two fingers to drag in any direction, and you can zoom in and out by pinching your fingers. In some panels, additional gestures have been defined (see <u>Section 7.2, "Edit"</u>).

7.1. Play

The lower part of the screen is now a touch-friendly Touch Keyboard Panel that you play by tapping with your fingers. Keeping your finger(s) held down and dragging creates pitch bend and other effects.

The interface here is stacked vertically. Above the Touch Keyboard Panel, you'll see the current device chain in the Device Panel, and above that is the current track in the Arranger Timeline Panel.

The track header buttons (mute, solo, etc.) have been replaced by a touch-friendly gesture button: try tapping it and then swiping in any cardinal direction. For example, tapping and swiping right will toggle the mute switch, while tapping and swiping left will solo the track.

7.2. Edit

A version of the Detail Editor Panel is here for editing note and audio events. When working with notes, the Radial Gestures Menu will be your great good friend, appearing on the screen whenever you hold your finger down (or not appearing if you start executing gestures quickly). For example, you can simply tap anywhere in the editor and swipe right to create a note, or tap to the right of a note and swipe left to delete it. Moving notes is done by tapping them and then swiping any direction.

If you tap on a note and continue holding down, a secondary, outer ring will appear. You can now access additional options with a second finger, such as dragging to change the length of a note.

7.3. Arrange

This view is very similar to the Arranger Timeline of Bitwig Studio, allowing you to play clips from the Clip Launcher Panel or to work on your arrangement in the Arranger Timeline Panel.

Here too you'll find the Radial Gestures Menu for creating, moving, and changing the length of clips.

7.4. Mix

In this view you'll find the Mixer Panel along with the Device Panel for easy access to the selected track's device chain.

Parting Words

Thank you for making it through this quick start guide! You should now be able to get around the Bitwig Studio environment and start using it for your musical purposes. We can't wait to hear what you come up with...

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