THE PLAYBACK METHOD℗ WORKBOOK

Play the songs you've always dreamed of, book better gigs, and have more fun on-stage.

INSTRUCTOR

WILL DOGGETT

Founder of From Studio to Stage and Ableton Live Certified Trainer

Will Doggett is a musician, sound designer, and Ableton Live Certified Trainer. After years of using Ableton Live with bands, Will now focuses on helping people get from the studio to the stage. His expertise includes integrating Live with a band for backing tracks, creating keys sounds, and controlling lights, lyrics, and video.

He's been teaching others how to integrate Ableton into their setups since 2008, and he's served as a Music Director, Creative Director, and Director of Production in various locations. He's passionate about making complex things simple and showing musicians how to integrate Live into their workflows.
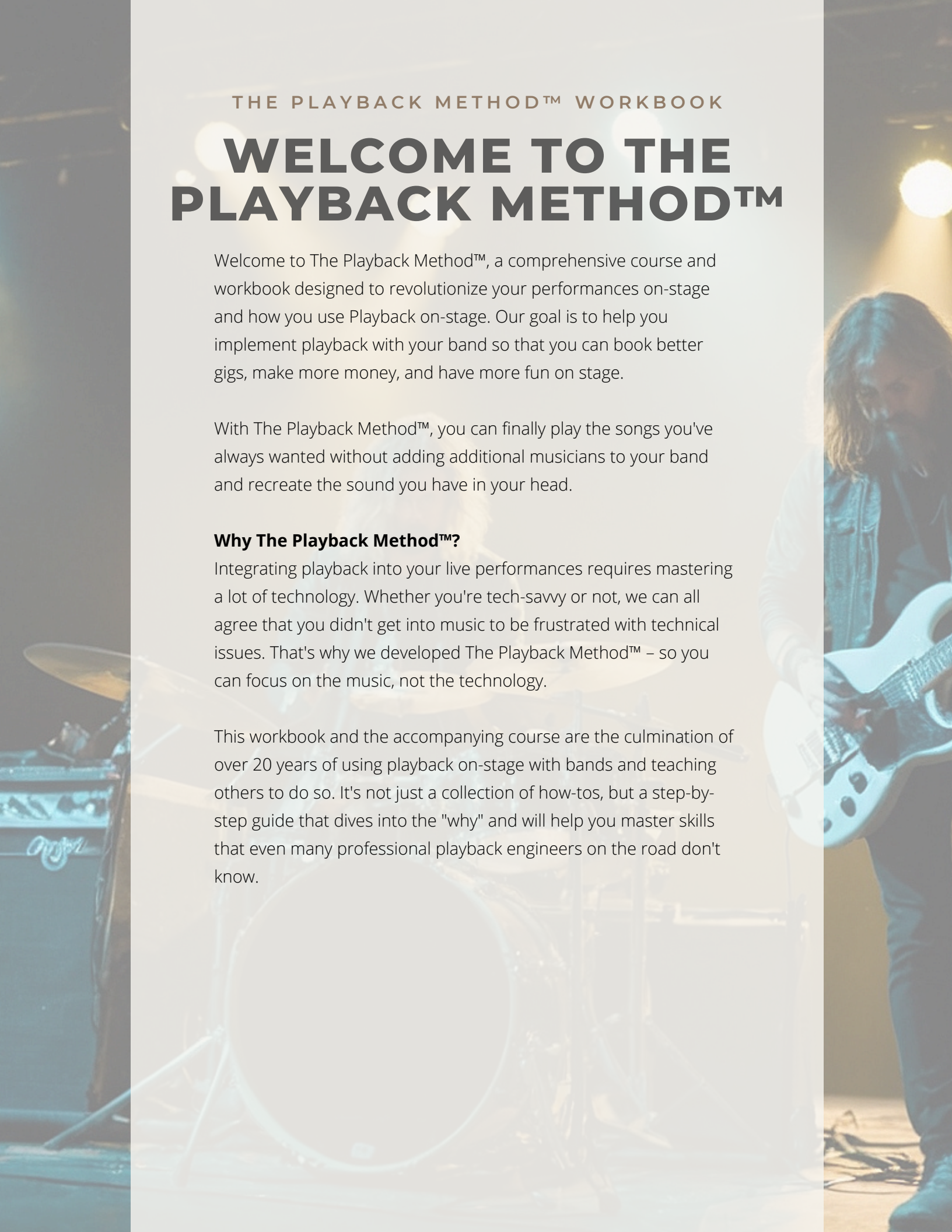
WELCOME TO THE PLAYBACK METHOD™

Welcome to The Playback Method™, a comprehensive course and workbook designed to revolutionize your performances on-stage and how you use Playback on-stage. Our goal is to help you implement playback with your band so that you can book better gigs, make more money, and have more fun on stage.

With The Playback Method™, you can finally play the songs you've always wanted without adding additional musicians to your band and recreate the sound you have in your head.

Why The Playback Method™?
Integrating playback into your live performances requires mastering a lot of technology. Whether you're tech-savvy or not, we can all agree that you didn't get into music to be frustrated with technical issues. That's why we developed The Playback Method™ – so you can focus on the music, not the technology.

This workbook and the accompanying course are the culmination of over 20 years of using playback on-stage with bands and teaching others to do so. It's not just a collection of how-tos, but a step-by-step guide that dives into the "why" and will help you master skills that even many professional playback engineers on the road don't know.
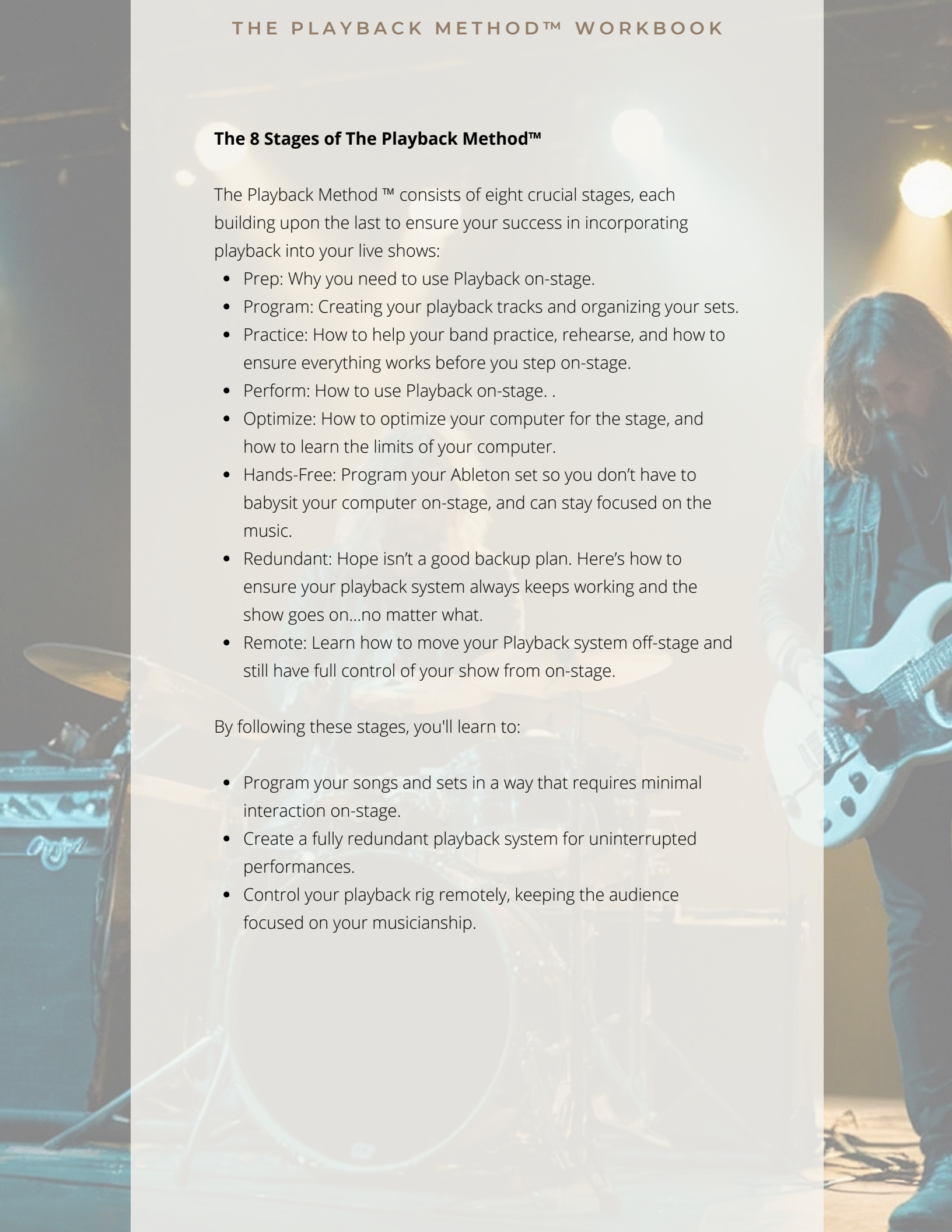
THE PLAYBACK METHOD™ WORKBOOK

The 8 Stages of The Playback Method™

The Playback Method ™ consists of eight crucial stages, each building upon the last to ensure your success in incorporating playback into your live shows:

- Prep: Why you need to use Playback on-stage.
- Program: Creating your playback tracks and organizing your sets.
- Practice: How to help your band practice, rehearse, and how to ensure everything works before you step on-stage.
- Perform: How to use Playback on-stage. .
- Optimize: How to optimize your computer for the stage, and how to learn the limits of your computer.
- Hands-Free: Program your Ableton set so you don't have to babysit your computer on-stage, and can stay focused on the music.
- Redundant: Hope isn't a good backup plan. Here's how to ensure your playback system always keeps working and the show goes on...no matter what.
- Remote: Learn how to move your Playback system off-stage and still have full control of your show from on-stage.

By following these stages, you'll learn to:

- Program your songs and sets in a way that requires minimal interaction on-stage.
- Create a fully redundant playback system for uninterrupted performances.
- Control your playback rig remotely, keeping the audience focused on your musicianship.

THE PLAYBACK METHOD™ WORKBOOK

What You'll Achieve

With The Playback Method™, you'll be able to:

- Have confidence that your playback will work, no matter what.
- Use playback on-stage without letting the audience in on your secret.
- Feel like a musician again, not a technician.
- Move your playback system off-stage and control it remotely.
- Stay focused on the music and your performance.

Whether you're new to playback or looking to advance your skills, this course will guide you from the basics through to advanced techniques. You'll learn to create the perfect performance, reducing on-stage effort while improving your overall show. Remember, you're not on your own. This workbook, the accompanying course, and the weekly coaching calls included in the All-Access community provide everything you need to master The Playback Method™ and elevate your live performances.

To The Perfect Performance!
Will Doggett

CONTENTS

STAGE 1

PREP

During the prep stage, we're talking about gear. In this stage, you'll learn the four things every Playback System needs to accomplish, and you'll learn how to optimize your computer, before you hit the stage, so that you're confident things will work.

STAGE 2

PROGRAM

Once you have your gear in place, it's time to start programming your songs and sets. You'll learn the 3-Part Playback Framework and learn how to use templates to program your songs and sets. In this stage we optimize for quick set building, sets that won't crash, that are easy to understand on-stage, and sets that are easy to edit and change structure on the fly.

STAGE 3

PRACTICE

What does playback have to do with practice? A whole lot, and in fact you'll learn how a simple shift in terminology, and using Playback, could drastically improve your rehearsals. Get more done, and keep rehearsal from dragging on. Plus, you'll learn a new strategy that will insure your entire rig functions and works perfectly before you step on stage.

STAGE 4

PERFORMANCE

Finally, it's time for the performance. If we do our job right, there's not a whole lot to do here. Now we get to enjoy all our hard work. You'll learn how to easily navigate your Ableton Live Set on stage.

CONTENTS

STAGE 5 — OPTIMIZE

Learn to maximize your computer's performance for live playback without compromising stability. Discover how to determine CPU limits, optimize track counts, and develop pre-show processes to prevent performance issues, ensuring flawless shows every time. Copy

STAGE 6 — HANDS-FREE

Learn how to program songs and sets to be "hands-free," freeing you and your band from constant computer interaction during performances. Master Custom Cues for better on-stage communication and implement seven advanced programming skills using the Advanced Playback Template or a setlist management solution.

STAGE 7 — REDUNDANT

Don't rely on hope; learn to create a 'redundant' playback system that serves as an automatic backup plan. Master both audio and MIDI redundancy techniques to ensure the show always goes on, setting you apart from most professional Playback Engineers.

STAGE 8 — REMOTE

Master the art of remotely controlling your off-stage Playback system using MIDI controllers, smart devices, or even your phone. Learn to avoid common pitfalls, maintain control from anywhere on-stage, and keep your Playback setup discreet, allowing you to focus on the music without revealing your secret to the audience.

THE PLAYBACK METHOD™: PREP

Before you hit the stage, you'll need to learn why playback is important, what you need for a playback system, and how to start setting up your playback system.

- Learn why using Playback is important
- Learn how to convince the rest of your band to use Playback
- Learn the four things a playback system will need to do (Play, Hear, Control, Communicate)
- Learn how to build a rock-solid, reliable playback system
- Learn how to configure your playback template
- Learn how to setup your audio interface with the playback template
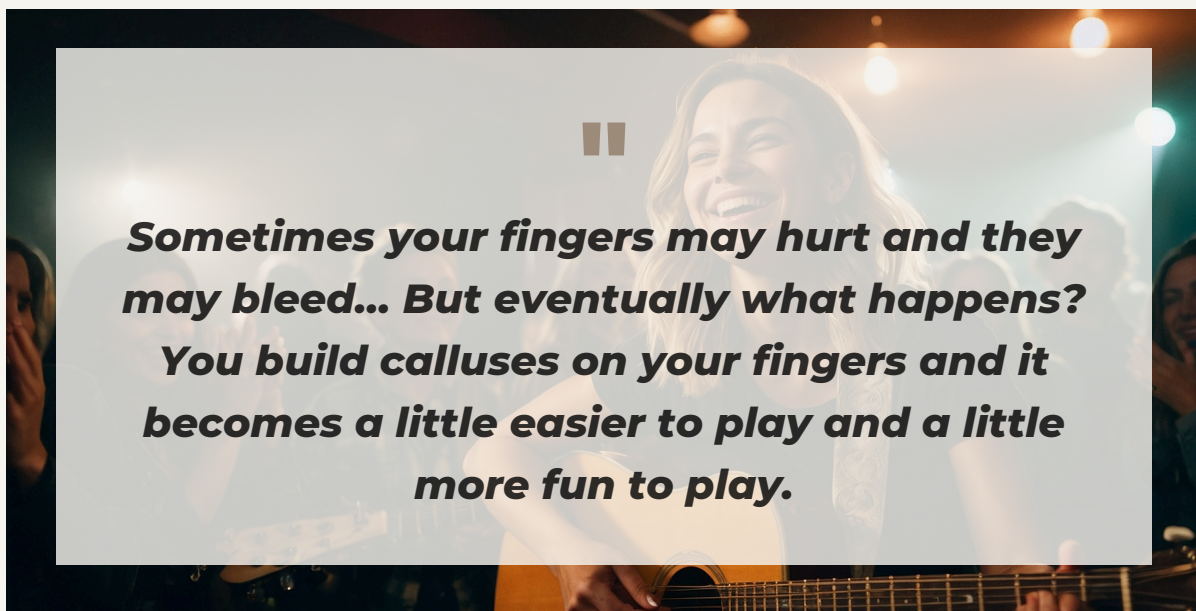- Learn how to setup your MIDI controller with the playback template

WHAT, WHY, HOW

INTRODUCTION

Before we get started, you've got to agree with me on this, **Ableton and Playback is an instrument**. Using Playback is like adding another instrument into your band. If we agree on that statement, there are a few implications.

It is not something that can be mastered overnight. As with playing the guitar, it takes time to build calluses on your fingers and develop the necessary skills. You've got to devote the time to build the skills needed to learn your instrument. You don't buy a guitar on Thursday and play the solo to Freebird during your first show on Saturday. It won't go well.

It also means, if you devote the time to putting in the reps, and practicing it will pay off. You'll get better at this instrument. You'll feel more comfortable on-stage. You'll understand how to get it to do what you need it to do. The more time you devote, the better you'll get at this instrument.

> **Sometimes your fingers may hurt and they may bleed... But eventually what happens? You build calluses on your fingers and it becomes a little easier to play and a little more fun to play.**

5 REASONS TO USE PLAYBACK

Playback has the power to transform your live performance. Here's 5 reasons why you should learn this instrument:

Booking Bigger & Better Gigs

By utilizing playback, you can elevate your live performances to a whole new level. This enables you to book bigger and better gigs, ultimately leading to increased income.

Creating a Better Product

Playback allows you to produce a superior sound that sets you apart from other musicians. By replicating the original record, you can deliver a high-quality performance that captivates your audience.

Fun and Freedom on Stage

One of the most significant advantages of using playback is the freedom it provides on stage. With automation and click tracks, you no longer have to worry about counting in every song or changing presets on your gear. It's like hiring multiple, un-paid, invisible techs to help you pull of the perfect show.

Playing Songs Beyond Your Capabilities

Playback opens up a world of possibilities by allowing you to play songs that require additional musicians or instruments. Whether it's a pop tune with intricate synth parts or a classic track with a horn section, playback enables you to bring these elements to your performances without the need for extra musicians.

High-Level, Low-Cost Production

With playback, you can achieve a professional production without breaking the bank. By syncing lights, videos, and lyrics with playback, you can create a visually stunning performance without the need for additional personnel.

CONVINCING YOUR BAND TO USE TRACKS

While you may be convinced of the benefits of playback, it can be challenging to convince your bandmates to embrace playback. I've found the best approach is to sell the vision of what playback allows you to achieve, instead of selling the idea of Playback. You've got to remember, we're all selfish. What's in it for me? Why am I going to spend time, money, and effort to start playing with a click and using playback? By focusing on how playback can enhance their experience and contribute to their success, you can win them over.

✔ ### Have More Fun on Stage

Highlight the joy and freedom that playback brings by eliminating the technical distractions. Emphasize that using playback allows everyone to focus on the music and enjoy the performance.

✔ ### Book Better Gigs

Illustrate how playback can lead to better gigs and higher-paying opportunities. By producing a superior sound and impressive production, you can book better gigs. Don't just be another band in a bar. Become one of the top bands in your area.

✔ ### Play Songs with Instruments You Don't Have

Explain how playback enables the band to play songs that were previously out of reach due to the lack of specific instruments or musicians. By using playback, you can recreate the desired sound without adding additional members.

✔ ### Create Your Dream Show

Emphasize the creative possibilities that playback offers. By incorporating original sounds from the studio recordings or creating unique arrangements, the band can bring their artistic vision to life on stage. Finally, create the show of your dreams.

✔ ### Recording your own parts

A student of mine, Dave, mentioned that he won his band over to the idea of playback when he convinced them, they could record and create their own tracks.

This allows your band to explore their creativity and make unique arrangements. This approach eliminates the need to purchase pre-recorded parts and gives the band full control over the additional sounds they use on stage.

WHAT IS PLAYBACK'S ROLE ON-STAGE?

Before we dive into the individual pieces of gear needed to build a playback system, it's important to understand Playback's role on stage. If you've never stepped on stage before, this is massive. If you've only used interfaces and computers in the studio, this will take a massive shift in thinking. If you don't have a proper perspective you'll end up creating an unnecessarily complicated and un-stable Playback system.

HOW DOES THE AUDIENCE HEAR DURING THE SHOW?

To understand the role of playback on stage, we must first consider how the audience experiences a live performance. We have speakers (at least two) that are used to amplify the sound for the audience. This sound is mixed and controlled by a front of house (FOH) audio console, which receives inputs from the instruments on stage. This allows the audio engineer to create the perfect blend of instruments and vocalists on-stage, to create a great experience for the audience.

However, since FOH is often located far away from the stage, a stage snake is used to connect the instruments to the console. This stage snake acts as a conduit, allowing the inputs from the stage to reach the front of house console via one large cable or ethernet cable, instead of plugging multiple mic cables into the console.

Before we move on, it's important to grasp that concept. All inputs on stage (instruments and vocals) get plugged into a stage snake. But what do we do with Playback? The answer lies in a key concept we discussed earlier...

What is Playback? Playback is an instrument. What do we do with our instruments on stage? We connect them to our stage snake. Just like any other instrument, Playback needs to be connected to the stage snake in order for its sound to reach the front of house console. We use an audio interface to take the outputs of our computer and connect it to our stage snake.

Based on your specific setup, you may connect to direct boxes, or simply connect multiple XLR cables in a "loom" together to the snake, but the big idea to grasp is that we're taking the outputs of our interface and connecting to our snake, just like we take the cables from our drum mics, or output of our bass, to the stage snake. Don't overcomplicate, or over-think this.

Instrument --> Stage Snake.
Playback = Instrument, therefore....
Playback --> Stage Snake.

HOW DOES THE BAND HEAR DURING THE SHOW?

We've discussed how the audience hears the band, but how does the band hear themselves?

In-ear monitors.

In-ear monitoring is a separate aspect of live performances that allows musicians to hear themselves and the rest of the band more clearly on stage.

Typically that stage snake we plugged into, is also a "split-snake". That means the instruments we plugged into the snake, don't just go to FOH, but also to a monitor console.

This allows another audio engineer to create a separate mix for each band member of exactly what they need and want to hear in their in-ears.

There are two, very important concepts you've got to understand with this.

1. In order to use playback, it is necessary to have in-ears,
2. Playback has nothing to do with in-ears.

You have to have in-ears and a monitor mix, in order to use playback. You'll need in-ears to hear the click track to keep everyone in time, and the cues in order to keep everyone on the same page.

Don't try and skip in-ears and use floor wedges, and think you can make the click a shaker and no one will know. The entire audience will know and will be annoyed by the constant shaker that adds no musical value.

You need in-ears.

But, it's important to understand, Playback has nothing to do with in-ears. This is where you've got to leave your studio mindset in the studio.

While you probably use your interface in the studio to hear what you're doing, your interface on stage is just that, an interface.

It's not a mixer or console. We use it to connect Playback to our sound system, because remember, **Playback is another instrument.**

CREATING AN IN-EAR MIX WITH YOUR COMPUTER

I know I said don't do it.. But I know some of you.. you're different. You're a unique little snowflake. Will.. because of budget, skill-level, we're going to also create in-ear mixes with our computer. Okay fine, here's a list of what you'll need to do, then let's chat at the end...

- Connect every input on stage to a split snake. If the venue you're in doesn't have a split snake, you'll need to buy one.
- One side of that snake will go to FOH to be mixed. Please, for the love of everything holy tell me you weren't also going to mix FOH with your computer were you??
- Then the other side of all those inputs needs to go to your interface. If we're talking about a 3-4 piece band, vocals, drum mics etc.. we're talking 16 inputs minimum to your interface.
- Then you'll need to create multiple in-ear mixes, all using multiple outputs from your interface, to send to each band member on stage. So for our hypothetical 3-4 piece band, we're looking at 8 stereo outputs (for four stereo in-ear mixes).
- Remember, we also need to get playback to FOH, so make sure you've got enough outputs left over to get Playback to FOH. The most standard output configuration I see is 8 outputs. So we need an interface with at least 16 outputs.
- Each band member will want a different mix, consisting of different levels, EQs, and panning. Since you're using your computer for this, you're in charge of that mix buckaroo....get to mixing.
- Oh yeah.. effects. You'll need to create separate EQs for each mix, add different compression, reverb, and delay to make sure each band member feels comfortable, and make sure we don't effect the connection to Front of House. They'll apply separate effects there.
- Make sure the latency of your setup is imperceivable. This means you'll need to lower your buffer size as low as possible, so you don't add any delay to the signal going to the band.
- And then we've also got to use our computer for Playback....

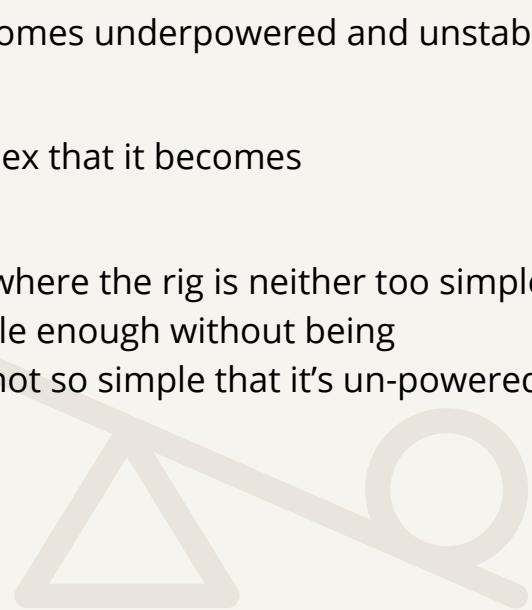Press play, and watch your computer melt down on stage.

Or heed my advice.

Playback is another instrument on-stage.

You have to have in-ears to use Playback, but Playback has nothing to do with in-ears.

BUILDING A PLAYBACK SYSTEM IS ALL ABOUT BALANCE

A good mental image to keep in mind while building a Playback system, is a seesaw. You know, the balancing game you played on the playground as a kid. This is the perfect picture of what we have to keep in mind when designing our systems. Here's eight concepts that will help you understand the importance of balance in your Playback system.

1 Think of building a playback rig like balancing a seesaw, where each side represents simplicity and stability.

2 Aim to find the right balance between simplicity (ease of use and setup) and stability (reliability and robustness) in your rig. You want a rig that's simple to use, but is reliable and stable.

3 Be cautious of making the rig too complex, leading to convolution which can make troubleshooting and setup difficult. Just because it looks good for Instagram doesn't mean it's a good setup.

4 For professional-level artists, prioritize stability slightly over simplicity, resulting in a slightly more complex, but stable rig.

5 Beginners should focus more on simplicity, avoiding over-complication, and accepting a slight compromise in stability.

6 Don't make the rig so simple that it becomes underpowered and unstable.

7 Similarly, avoid making the rig so complex that it becomes convoluted and hard to manage.

8 The goal is to achieve an ideal balance where the rig is neither too simple nor too complex, ensuring it is just stable enough without being convoluted, and is simple enough, but not so simple that it's un-powered.

THE SECRETS THE PROS KNOW ABOUT BUILDING A PLAYBACK SYSTEM

Pros approach building a rig differently than the rest of us. Because pros have specific scenarios they encounter, we can learn and integrate their practices into our rigs, no matter how big or small are performances are.

- Focus on setups that allow rapid changeovers, crucial for festival performances or scenarios with back-to-back bands. If you can't setup your system in less than 5 minutes, it's too complex, or disorganized.

- Utilize separate, dedicated computers or devices for each aspect of the playback system (e.g., playback, lights, video, vocal processing, keys).

- Each task should be handled by a dedicated machine to reduce stress on any single system.

- Opt for rack mounting gear for an organized, protected, and portable setup.

- Consider various options like drop-in racks for Pelican cases, modular racks, or specialized racks like the Strange Electronic Strange Rack.

- Use custom rack panels for personalized configurations and simplify connections.

- Panels from companies like Redco can include pass-through or wired connections, such as TRS to XLR.

- Implement redundancy by having a secondary computer (B) mirror the primary (A) playback computer.

- Use an interface, like the PlayAUDIO1U to manage MIDI and audio outputs and ensure a seamless switch in case of failure.

- Ensure the setup balances simplicity with meeting all functional performance requirements, including flexibility in controlling different aspects.

- Apply redundancy to other rig components like keys, vocal processing, video, and lighting for a full-scale professional setup.

- Adapt the rack setup based on the specific performance scenario, considering the difference between permanent setups and mobile 'run and gun' situations.

- I know you've designed the "Perfect" Playback System.. but trust me.. your needs will change. Make sure your rig is modular and expandable to accommodate any future changes or needs. It will happen-trust me.

BUILDING A PLAYBACK SYSTEM: **PLAY**

The first thing we need our playback system to do is Play. Let's take a look at:

- The best type of content to choose
- What Playback Software we should choose
- Choosing a computer for playback
- And finally, how to back-up and manage our files successfully.

CHOOSING CONTENT FOR ON-STAGE

CHOOOSE MULTITRACKS/STEMS:

Use multitracks or stem files rather than stereo files, or split tracks. This allows you to adjust the mix of your song in real-time based on your scenario, and allows for the flexibility to un-mute a part when needed.

LIMITATIONS OF SPLIT TRACKS/2-TRACKS

Split tracks, where the click and guide might be on one side and the rest of the content on the other, are limited in flexibility. They do not allow for the removal or adjustment of individual instruments or vocal parts.

AI SEPARATION TOOLS

While AI tools exist for separating parts from a stereo mix, they may not always provide optimal results. Using original stems or re-recorded covers of songs in multitrack format.

SOURCES OF MULTITRACKS

- For cover or tribute bands, or if playing popular songs, you can purchase multitracks from websites like Karaoke Version and Song Service.
- Karaoke Version requires soloing and downloading each part individually.
- Song Service offers a more straightforward approach, providing a folder with all individual stems.
- Worship Leaders will find original master multitracks at LoopCommunity and Muiltitracks.

CREATING YOUR OWN CONTENT

If you're producing your own music, export stems from your recording to use in Ableton Live. Keep parts separated, but not too separate. Think about how much flexibility you'll need, and if they parts will ever need to be played live. Err on the side of more separation, and flexibility with more stems.

CHOOSING PLAYBACK SOFTWARE

Now that we've got our songs to work with, we need a playback software to use them. Perhaps unsurprisingly I suggest Ableton Live. But what version should you choose? Let's talk a bit more about the best decision for Playback:

★★★★★

VERSIONS OF ABLETON LIVE

There are three main editions of Ableton Live: Intro, Standard, and Suite. Additionally, there's a version called Live Lite, which is a simpler version often bundled with hardware purchases.

★★★★★

ABLETON LIVE INTRO LIMITATIONS

The Intro version has limitations that may affect live performance, particularly with the number of audio/MIDI tracks and outputs. It is limited to 16 audio/MIDI tracks and 8 outputs.

★★★★★

ABLETON LIVE STANDARD FOR PLAYBACK

For live playback, I recommend Ableton Live Standard. It removes track limitations and offers up to 256 audio outputs.

★★★★★

COMPATIBILITY AND REQUIREMENTS

Ensure your computer meets the minimum system requirements for the chosen Ableton Live version, especially for live performance reliability.

★★★★★

STANDARD VS SUITE DECISION

The decision between Standard and Suite should be based on your specific needs, particularly if you require advanced features like Max for Live or additional instruments and effects included in Suite. If you're using Setlist, TAZ, or Conductor, you'll need Max4Live.

CHOOSING PLAYBACK SOFTWARE

★★★★★

ABLETON LIVE SUITE FOR ADVANCED FEATURES

The Suite version is suggested for users who plan to utilize Max for Live, which allows for custom instrument and device creation, and for using specific plugins that require Max for Live.

★★★★★

STARTING WITH ABLETON LIVE LITE OR INTRO

For beginners, starting with Ableton Live Lite or Intro is advised. These versions are more affordable and suitable for testing the waters before committing to a more advanced version. But.. keep in mind that you'll need at least Ableton Live standard to do Playback well.

★★★★★

EDUCATIONAL DISCOUNT

You can purchase Ableton Live with an EDU discount if you're a From Studio to Stage student, or a teacher, student in a education scenario.

★★★★★

UPGRADE PATH

Starting with a simpler version like Lite or Intro and then upgrading to Standard or Suite is a cost-effective strategy. This approach is especially useful if you're new to Ableton Live.

CHOOSING A COMPUTER FOR LIVE PERFORMANCE

MAC OR WINDOWS?

I'm completely biased towards MacOS. Ableton runs on Windows and Mac, but I suggest macs for audio production. While you'll see lots of Windows PCs involved in video production, it's less common to see Windows machines for live audio use. If you've already got a Windows machine, install Ableton on it and use it, but if you're looking for a new machine-consider a Mac.

ABLETON LIVE'S MINIMUM SYSTEM REQUIREMENTS

It's crucial to ensure that any computer you choose meets at least the minimum system requirements set by Ableton Live. This includes the type of processor, operating system version, RAM, and disk space.

INVESTMENT STRATEGY FOR COMPUTERES

The biggest mistake to avoid is over-investing in a single, super-powerful computer. Instead, follow a 'division of labor' approach, which means purchasing multiple well-spec'd machines, each dedicated to a specific task (e.g., keys, playback, video, lighting).

BUDGET FRIENDLY OPTION

Even a baseline Apple Silicon MacBook Air, is powerful enough for running tracks. The M1 MacBook Air is a very cost-effective solution.

MACBOOK PRO VS. MACBOOK AIR

While a MacBook Pro is more powerful, for a playback scenario, a MacBook Air is often sufficient. It's more about meeting the specific requirements of your use case rather than just choosing the most powerful option.

MAC MINI FOR RACK MOUNTING

The Mac Mini, especially when used with a rack mount solution like the Sonnet Technologies Rack Mac Mini, is highly recommended for its versatility and cost-effectiveness. This setup is ideal for creating a redundant rig.

REDUNDANCY AND MULTIPLE MACHINES

It's better to have two less powerful machines for redundancy than one very powerful machine, but a single point of failure.

RAM AND STORAGE CONSIDERATIONS

While more RAM and storage are always beneficial, prioritize redundancy and division of labor over maximum specs. If budget allows, opt for higher RAM, but not at the cost of foregoing a backup machine.

UP-TO-DATE MODELS

Stay current with the latest models (e.g., M1, M2, etc.) if budget permits. Buying last years "new" computer, is a great way to save money, but don't buy something more than 2 years, or 2 models behind the current version.

AVOIDING OVERKILL

Do not overspend on a extremely high-spec'd machine if the primary use is running playback. Allocate resources wisely across multiple machines for different tasks.

MEETING SOFTWARE REQUIREMENTS

Make sure the computer meets Ableton Live's minimum system requirements.

FILE MANAGEMENT, BACKUPS, AND HARD DRIVES

Now, we've got our content, Ableton Live Standard, and a killer computer to run playback. The most important piece of this is making sure the show can always go on. That's where file management comes into play. Let's discuss a few strategies we should implement in order to make sure we always have what we need, when we need it.

IMPORTANCE OF BACKUP

You've got to back-up your files. It's not a matter of if something will go wrong, it's a matter of when. Don't email companies after hours on the weekend, with the need for emergency downloads of files. It's time to be an adult and backup your files. We have full control of this situation….It's time to step it up!

INTERNAL DRIVE MANAGEMENT

Store only the most essential files on your internal drive, like templates and the current set for a specific show. Avoid storing every set you've ever built or all formatted songs on the internal drive.

EXTERNAL STORAGE

Use an SSD (solid-state drive) as an external storage device for all your songs, the most recent set, and templates. This should be treated as a working drive.

THUMB DRIVE

Keep a thumb drive with your templates and the most recent set. This serves as an emergency backup in case your main system fails and serves as "sneaker-net" to transfer files between computers.

CLOUD BACKUP

Use cloud storage services for an additional layer of backup. Be cautious about relying solely on cloud storage, especially in venues without reliable internet.

AUTOMATIC SYSTEM BACKUP

Utilize services like Backblaze for automatic backups of your entire system, including internal and connected drives.

COLD STORAGE ARCHIVE

For long-term storage of less frequently accessed files, consider using larger, cheaper hard drives. This is especially important for files related to multiple artists or for security-sensitive content.

THE RULE OF THREE

Ensure that your files are backed up in at least three different places for them to be fully secure. This can include a combination of cloud storage, hard drive backups, and system backups.

DISTINGUISHING BETWEEN STORAGE AND BACKUP

Understand the difference between cloud storage (like Dropbox) and cloud backup services (like Backblaze), and how they serve different purposes.

RESPONSIBILITY AND PREPAREDNESS

Take personal responsibility for backing up your files to avoid panic situations like computer crashes or theft, especially when you are on the road.

INVEST IN MULTIPLE BACKUP SOLUTIONS

Invest in various backup solutions (hard drives, cloud services) to ensure comprehensive protection of your content.

BUILDING A PLAYBACK SYSTEM: HEAR

The next thing we need, is the ability to hear. Here's a look at what we'll dive into in this section:

- Choosing In-Ear monitors for the stage
- Choosing an In-Ear monitoring System
- Choosing an audio interface for live performance

CHOOSING IN-EAR MONITORS

Earlier, we discussed Playback's role on the stage. One of the important concepts we learned was that to use Playback, you've GOT to use in-ears, but that Playback has NOTHING to do with in-ears. Let's dive into some specifics that will help us choose the right pair of in-ears.

IN-EARS VS. MONITOR WEDGES

In-ear monitors are better than monitor wedges for better sound control and reduction in stage volume. Wedges can be used for monitors, but they can't be used if you're planning on using playback. If you're not planning on using playback, not sure why you're in this course, or reading this workbook.. But welcome!

HEADPHONES AS AN ALTERNATIVE

Headphones can be used instead of in-ear monitors, especially for musicians who are not at the front of the stage, like drummers or keyboard players. However, they may look awkward for front-stage performers. Headphones also let people "into the secret" that there's more going on than they first thought. In-Ears can help function a bit more discreetly.

ISOLATION

One of the main advantages of in-ear monitors over headphones is better sound isolation. This helps cut out stage noise, which allows you to hear your mix better, without having to turn up the level to compensate. This ultimately, helps protect your hearing.

CUSTOM VS. UNIVERSAL IN-EARS

Custom in-ears are molded to fit an individual's ears, offering superior isolation and comfort but at a higher cost. Again, minimizing stage volume, and being discrete are the two big factors here.

Universal in-ears are less expensive and can fit any ear, but they may not provide as much isolation.

FREQUENCY RESPONSE AND DRIVERS

More drivers generally provide better sound quality, with separate drivers dedicated to different frequency ranges (low, mid, high).

The choice of the number of drivers should be based on the role within the band and personal preference. Vocalists might be fine with fewer drivers, while drummers or bassists might prefer more drivers for better representation of the full frequency spectrum.

ROLE-BASED RECOMMENDATIONS

Different musicians may benefit from different types of in-ears. Companies often suggest specific models based on the instrument or role (e.g., vocalists, drummers).

For example, my in-ear company of choice Alclair, does a great job of sharing charts and suggestions based on each role on the stage.

LONG-TERM COMFORT AND FIT

Custom in-ears might be a better long-term investment for comfort and sound isolation, especially for musicians who use in-ears frequently.

SOUND QUALITY VS COST

Evaluate whether the increase in sound quality with more expensive, multi-driver in-ears justifies the higher cost for your specific use case.

CHOOSING AN IN-EAR MONITORING SYSTEM

Getting in-ear monitors is only one part of the equation. How do we get sound to them? Earlier, we mentioned the idea of a monitor console. Often you'll have a completely separate audio engineer whose whole job is to mix for the band. Because of budget reasons, or simply because you're self-sufficient, you might not have a monitor engineer, but it's still worth looking at how to get your own mix.

Choosing an in-ear monitoring solution comes down to answering two questions:

WHO WILL MIX OUR IN-EARS?

Will you hire a separate engineer using a separate console to mix your ears? Or, will you mix your own ears using an iPhone app, or personal monitoring system?

WILL YOUR CONNECTION BE WIRED OR WIRELESS?

How will your in-ears connect to the console? Wireless gives you alot more flexibility, but can become pricey, while a wired system is easy to piece together affordably, but often at the cost of not having as much mobility.

Let's dive a little deeper:

MONITORING SCENARIOS

Decide if your ears will be mixed by an audio engineer, either at FOH or at a separate monitor console, or if you'll do it yourself. In short, a digital console, and using an app to create your own mix, can yield some amazing results, without extra budget or personnel. But, it's hard to beat a talented engineer creating the exact mix you've always dreamed of.

CONSOLE OUTPUTS FOR IN-EARS

Regardless of who is mixing your ears, it all has to start at a console. You'll utilize aux outputs on your audio console to create individual mixes for each band member. Using the "Sends on Fader" option you can adjust mixes for each band member.

WIRELESS VS WIRED CONNECTION

Decide between a wireless in-ear monitoring system or a wired setup. Wireless offers mobility, while wired can be more reliable and less expensive. Don't be afraid to mix and match. For members that won't be moving (drummer, keyboardist) putting them on a wired mix, might save some money.

BUDGET-FRIENDLY WIRELESS OPTIONS

Consider low-cost wireless solutions like the Xvive U4 system for basic needs, but be aware that they offer mono mixes and limited features.

ADVANCED WIRELESS SYSTEMS

For more demanding setups, look into higher-end wireless systems from brands like Sennheiser or Shure, which offer stereo mixes and more robust performance.

For a wired setup:

- Connect XLR cables from aux outputs on your soundboard. If at all possible, choose stereo outputs, and create separate mixes for each member of your band.
- Connect the XLR to a headphone mixer (like the Behringer Power Play P1).
- Connect a headphone extension cable to your headphone mixer. Make sure the cable is the right connection for the mixer and your in-ears.
- Connect your in-ears to the headphone extension cable.

For a wireless setup:

- Connect XLR cables from aux outputs on your soundboard. If at all possible, choose stereo outputs, and create separate mixes for each member of your band.
- Connect the XLR to the wireless transmitter included with your system. Make sure the antennas with your transmitter, are clearly in view and have line of sight to the band member that will be using them. If your system includes external antennas or RF paddles, use them, and place them in clear view of the stage.
- Use the receiver or wireless pack included with your system and make sure that you're on the correct RF frequency and channel.
- Connect your in-ears to the wireless receiver.
- Adjust and build your mix using your audio console.

MIXING IN-EARS YOURSELF

Utilize apps associated with your digital console (like the X32 edit app) to mix in-ears yourself. Ensure the console is connected to a wireless router for this functionality.

PERSONAL MONITORING SYSTEM

Consider personal monitoring systems like Live Mix, or Behringer P16 for individual control over mixes. These systems require a central hub (brain) connected to the console.

INTEGRATION WITH DIGITAL CONSOLES

If using a digital console like the Behringer X32, explore compatible personal monitoring systems (e.g., Behringer P16) that can directly connect via an Ethernet port (Ultranet).

HIGH-END MONITORING SOLUTIONS

For sophisticated needs, systems like Klang for immersive IEM experiences or Live Mix for Dante integration offer advanced features and flexibility.

DIGITAL CONSOLE BENEFITS

Investing in a digital console provides the flexibility to mix in-ears via an app and the potential to expand to a personal monitoring system.

CHOOSING AN AUDIO INTERFACE FOR PLAYBACK

Now we've got our in-ears and an in-ear monitoring setup. How do we get audio out of our interface and connected to our soundboard?

BASIC SETUP WITH MINIMAL OUTPUTS

For a simple setup, use a basic cable (like the HOSA CMP 153) that splits the computer's headphone output into two separate outputs - one for the click and cues, and another for the tracks.

DIRECT BOXES

For a basic setup (like mentioned above) utilize direct boxes (DI's) to convert TRS connections to XLR, allowing you to connect to the stage snake or soundboard.

ADVANCED SETUP WITH MORE OUTPUTS

For more complex needs, consider an audio interface that offers more outputs. Avoid 2 channel interfaces, and buy an interface with 4 or more outputs. An 8-output interface like the Track Rig from Loop Community is recommended for beginners due to its straightforward design and rack-mountable feature.

HIGH OUTPUT NEEDS AND REDUNDANCY

For setups requiring many outputs or redundancy, the iConnectivity PlayAUDIO1U or a similar interface with multiple discrete XLR outputs and computer connections is ideal. This setup allows for backup in case the primary computer fails.

NETWORK-BASED SOLUTIONS (DANTE)

For high track count requirements, Dante and DVS (Dante Virtual Souncard) offers a powerful solution, allowing for up to 64 channels from a computer via an Ethernet connection.

REDUNDANCY IN NETWORK-BASED SOLUTIONS

Don't let the simplicity of Dante make you skip redundancy. Implementing redundancy with the EXbox.MD when using Dante is crucial to switch automatically to a backup computer in case of failure.

BUILDING A PLAYBACK SYSTEM: **CONTROL**

Next, you'll need to consider control options for your Playback System. In particular, we'll discuss:

- Who should be in charge and in control of Playback?
- How do we control playback, without looking like we're checking our email on-stage?

WHO SHOULD BE IN CHARGE OF PLAYBACK?

Behind every great artist, is a talented (and patient) Playback Engineer. The Playback Engineer is in charge of running playback, making last minute edits, and following changes and cues during the show. In many scenarios, they're also responsible for sending MIDI and timecode to control the entire show and automate production.

To be perfectly honest, besides the artist, they are the second most important role! But, with great power, comes great responsibility! So who should be in charge of playback for you and your band?

Maybe you've got a large enough budget to hire a dedicated playback engineer? Maybe you're a muaisicn on-stage AND a playback engineer. Or, maybe you're a solo artist, who is doing it all.

No matter your budget or personnel setup, we've got to make a decision on who is in charge of playback ultimately. Let's walk through a few things to consider.

ON-STAGE VS. OFF-STAGE

Decide whether the playback engineer will be an on-stage musician (like a drummer or guitarist) who also handles playback, or a dedicated off-stage playback engineer.

EXPERIENCE WITH PLAYBACK SOFTWARE

Prefer someone experienced in using specific playback software (e.g., Ableton) and capable of making real-time edits or changes.

BUDGET CONSIDERATIONS

Consider the additional costs of having an off-stage playback engineer, including salary, travel, and accommodation expenses.

COMBINING ROLES

Evaluate the possibility of existing crew members (e.g., monitor engineer) taking on playback responsibilities to save costs.

TECHNICAL EXPERTISE

The ideal candidate should be tech-savvy, capable of handling and troubleshooting technology issues, while keeping a cool head.

ROLE FLEXIBILITY

Consider if the playback engineer role will be combined with other roles, like a music director, and whether they can handle the additional responsibilities. For example, managing the emotions and temper tantrums of a diva (or divo) artist and managing and communicating with the band, means someone other than the Music Director should be in charge of Playback. But, if you're in the band (and functioning as the band's MD or in-band producer), you might simplify and speed up things if you can be in charge of Playback also.

BAND DYNAMICS AND COMMUNICATION

Assess how the playback engineer's role fits within the band's dynamics, especially if they also serve as a music director or band member.

DIY VS. PROFESSIONAL APPROACH

Determine whether a DIY approach (where a band member takes on the role) or a professional dedicated playback engineer is more suitable for your needs.

PROGRAMMING VS. PLAYBACK OPERATION

Acknowledge that programming the set and running it on stage can be separate roles and decide if they should be combined or split between individuals. For example, a student of mine, Nick (who plays with a famous pop artist), programs the set beforehand, and starts and stops songs on-stage (while playing guitar), but has a tech manage and cue up songs off-stage.

BUILDING A PLAYBACK SYSTEM: CONTROL

DON'T LOOK LIKE YOU'RE CHECKING YOUR EMAIL ON STAGE

You've decided who will be in charge or Playback, now it's time to talk how. How will they control their computers? If they're on-stage, it becomes even more crucial to chose the right MIDI controller, so you don't look like you're checking your email on stage. Let's look at some considerations for choosing the right MIDI controller.

FOR DRUMMERS
Consider something like the Roland SPD-SX to control playback without putting down your sticks. Drummers might also find success with a foot-switch like the Looptimus or Morningstar MC-8.

FOR GUITAR PLAYERS
Highly consider a foot-switch like the Looptimus, Morningstar MC-8 or for a more integrated experience, choose the Oaktone FloorVista.

FOR KEYBOARDISTS/OFF-STAGE PLAYBACK ENGINNERS
The Oakboard mini or Slide Duo are great. The LIOBOXv2 is a one of a kind solution that allows you to control Ableton and build setlists directly on the controller.

BUDGET FRIENDLY OPTION
The AKAI LPD-8 is a great solution that can be purchased at almost any music store in the world.

ADVANCED SETUPS
For advanced setups, especially in larger venues, consider routing your MIDI controller through a mioXM or mioXL from iConnectivity. This setup allows you to keep computers off-stage while maintaining control from your MIDI controller on-stage.

Select a MIDI controller that aligns with your role and setup requirements, and consider upgrading as your needs evolve.

BUILDING A PLAYBACK SYSTEM: COMMUNICATE

The final part of our playback system is the ability to communicate. In this section we'll discuss:

- Why is it so difficult to communicate on-stage?
- How can we easily communicate on-stage, while still wearing in-ears?
- How can we communicate on-stage, to a playback engineer located off-stage?

HOW TO IMPROVE COMMUNICATION ON-STAGE

I NEED MORE GUITAR IN MY EARS!!!! I'm not yelling at the Front of House audio engineer because I'm mad, but because I've got these sound isolating ear plus in my ear, that lead me to not realize how loud I'm talking.

Have your friends ever laughed at you when they ask you a question while you're wearing headphones and hear you screaming back your response? Imagine how much more that's intensified when we're playing loud instruments amplified through speakers.

No wonder so many bands break up! A stage full of people yelling commands at each other, doesn't always promote unity, and a supportive environment. If we're going to be using playback, we've got to use in-ears, and using in-ears makes it really difficult to communicate on stage. Here's a few ways to improve that experience.

EQUIP EACH BAND MEMBER WITH A TALKBACK MIC

This allows everyone to communicate with each other and the sound engineers. A talkback mic is simply a microphone that is only routed to the in-ears, and not heard in the front of house, main mix.

SETTING UP A MIC MUTE

If we're using in-ears to lower stage volume, and create our own mix, the worst thing we can do is turn on a bunch of mics and leave them on in our mix. So how do we allow band members to communicate, but turn their mic off when not needed? You can easily use a footswitch like the Radial HotShot DM-1 to un-mute your mic when you step on the footswitch. When the mic isn't active, it is off, and you'll only hear it when you step on the footswitch. There are also other solutions like an Optogate, which enables the mic when you're near it, or a mic with a on/off switch, but I tend to prefer a simple footswitch solution like the DM-1.

BUT WHAT IF I'M ALSO SINGING?

If you're also singing, then you can use the DM-1 to toggle between two different outputs, one that goes to front of house by default, and the other output that goes to in-ears only.

BUT WHAT IF I'M USING A WIRELESS MIC?

If you're using a wireless mic, check out the Relay XO from radial that allows you to connect the RelayXO to the wireless receiver and you can remotely toggle between channels using a footswitch.

FOLLOW THIS TIMELINE TO INTEGRATE PLAYBACK WITH YOUR BAND

No matter your budget, or the skill-level of your band, you'll need to follow a specific timeline in order to integrate playback. If you try and skip the order of the transition, or try and rush the transition, you'll only end up frustrating your band and potentially causing your band to be frustrated and potentially give up on the idea of Playback altogether.

Before we talk about the timeline, remember that I suggest spacing out each transition by at least a week, if not even longer. If you're just getting started as a band and using playback, you may want to add a month between each transition. I remember teaching at a conference years ago, and I would run into the same person each year. Each year they would let me know they're transitioning to the next step that year. There's nothing wrong with each transition taking a year-it's all up to your band and their comfort level.

READ THIS BEFORE STARTING TO USE PLAYBACK WITH YOUR BAND...

1   Start by getting your band comfortable with in-ear monitors. Again, sell the sizzle not the steak. They'll be able to have their own mix-they won't need to share with anyone, they'll be able to save their hearing, and they'll have the best possible experience on-stage with monitoring.

Keep in mind, in most cases our band members aren't trained audio engineers. We tell our band mates to wear in-ears that isolate all outside noise, and put an untrained, in-experienced audio engineer (them) in charge of their mix. No wonder they hate it so much!

Give this time. Help them create the perfect mix. Hire an audio engineer to come in for a few hours during a rehearsal and help create a good starting place. Save that mix. Have them come back and teach a few basic principles to always start from a good place, and what to change, and how to change it when you need to make changes.

2   Once in-ears are adopted, introduce playing with a click track. I choose my words carefully here. We're playing "with" a click, not "to" a click. Playing to a click means we're being told what to do when. When we're playing "with" a click, it's apart of the band-it's not the leader. If we want to speed up or slow down, we can adjust the click.

In every band I've ever lead, coached, worked with, there's always at least one person that struggles to play with a click. In EVERY situation it is the person that is most resistant to playing with a click. "Real musicians don't use click!".. "A click is for the studio"..."I'm the drummer...and my job is to keep time, not the click.."

You've got to remember this is a self-preservation technique. They're willing to do everything to keep from using click, because they can't do it. They're embarrassed, which is why they're so resistant to this.

While you should be aware of this reality, instead of calling them out and embarrassing them further, you should go above and beyond to help them prepare.

- Post the click and tempo for every song you're performing beforehand.
- Slow the transition to click... again take time.
- Share rehearsal and play along tracks with your whole band, so everyone can practice beforehand.

Once you're comfortable with in-ears and playing with click, it's time to tackle the transition to Playback.

3 Finally, it's time to introduce playback. This requires both in-ears and a click track for proper timing and synchronization. We can't use playback without click, and we can't do that without in-ears.

This will take time. You'll want to find the balance of how many tracks are enough for you. You'll want to find what sounds sound right for your band, and what sounds sound too fake.

Again, remind your band that playing with pre-recorded tracks doesn't mean you're "faking it". Most bands using playback aren't simply faking that they're playing guitar while all guitar is coming from playback. They're using extra, additional sounds to supplement what they're doing.

Overall, give it time. Don't rush it. Don't give up. You'll get there. Your band will be won over. I've seen it in every band I've ever been a part of. The people that didn't get it, weren't humble enough or good enough musicians to make it happen. They didn't stick around.

But, it always works out. You'll always find the right musicians that get it, and you'll be one of the best bands in your area. Keep going.

SETTING UP
THE PLAYBACK
TEMPLATE

The fastest way to program songs and sets in Ableton Live, is to use a template. In order to speed up this process, let's setup our MIDI controller and audio interface with our template. We'll learn how to:

- Customize the Playback Basic Template.
- How to set up our MIDI Controller with our template.
- How to set up our audio interface with out template.

WORKING WITH THE PLAYBACK BASIC TEMPLATE

1   **SAVE A COPY OF THE TEMPLATE**

If you want to customize your template in any way, make sure to make a copy of your template and make sure to backup your file as well.

- Go to File -> Save Live Set As.

- Save in your templates folder, not the default location.

- Name the template as desired.

2   **COLLECT ALL AND SAVE**

Use the 'Collect All and Save' option to include all external samples in your template. Failing to do this will result in "missing samples" in your template.

3   **BACK UP THE TEMPLATE**

- Create a backup of your customized template in a separate location. I suggest backing up your file in at least 3 places, one of which should be cloud storage of some kind.

- In general, don't rely on being able to re-download the file from our site. You've now got the file, you can put it in multiple places. Time to be an adult and back it up Terry.. This one's on you.

- Here's the reality..the only person that will have access to this customized template is you. I don't have it. If you customize this template, make sure you back up the file, because no one will have access to it.

4 CUSTOMIZE RETURN TRACKS

Return tracks are for grouping instruments together. They have nothing to do with outputs on your interface. They are a final grouping tool before we route to our interface. I've made by best guess at a good general suggestion for return tracks, but you should customize this to fit your needs.

- Review the 12 return tracks (groupings).

- Delete unnecessary return tracks.

- Rename return tracks to match your instrument groupings.

5 GLOBAL TRACK CUSTOMIZATION

I've worked hard to create this template based on years of experience, and feedback from others. I suggest keeping it intact, but you do you. If you want to customize and adjust, go for it. Here's a few things you can change, and a few things you shouldn't change

- You can delete the 'Songs' track. I like this as a visual reference, but it isn't necessary to the function of the template.

- You can delete the cues track if you'll never use cues or slate tracks ever. Listen, I hate cues. I don't like them. I've seen them be abused by lazy musicians that rely on them, instead of learning their parts.. But they're helpful. They help your band stay on the same page and improve your performance. So trust me... I hate them, but I still suggest using them.

- You can delete the markers track if you want, but I highly suggest keeping it. This is a "pro-level" skill. Being able to start on any song section of your song, and know exactly where you are visually will keep rehearsal running smoothly. It will allow you to edit faster than anyone else. Having the markers track will allow you to work faster and with less stress than anyone else around you.

- You must keep a click track, and the tempo track. Do not delete these.

6 MODIFY CLICK TRACK (OPTIONAL)

If for some reason you like less flexibility or just find yourself a tweaker.. You can choose to use an audio click instead of my MIDI click. Keep in mind, you'll lose the ability to subdivide your click, lose the ability to keep all your clicks the same (which makes managing levels much easier) and you'll lose the ability to replace your click samples once, and have them change for all your songs at once. But again.. You do you. But don't say I didn't tell you :)

7 MODIFY CUES TRACK (OPTIONAL)

Again, if you'd rather use audio cues, you're welcome to convert my MIDI track into an audio track. You can use the audio cues you're used to instead of my MIDI, AI generated cues. Again, here comes the warning as to why you shouldn't' do this. If you stick with my AI MIDI cues player, you can update your cue sounds at any time, and you only have to update them in your set.

You don't have to drag them to each song you've programmed to have them use the new sounds. In addition you can clone your existing cues to make new cues using the AI service I used to generate the cues.

7 ADD NEW TRACKS BELOW MARKERS TRACK

For any new tracks added globally, place them below the 'Markers' track. This allows you to continually update and refresh your template, but allows you to do this without having to re-program previous songs.

8 CUSTOMIZE LOCATOR ASSIGNMENTS

Here's a checklist that helps guide you through customizing the basic playback template in Ableton Live, focusing on maintaining essential elements while tailoring the template to your specific needs.

- Add new locators as needed.
- Assign locators to keyboard keys for easy access.
- Use letter keys for locators beyond number 8.

HOW TO SETUP YOUR MIDI CONTROLLER WITH THE PLAYBACK TEMPLATE

01

CHOOSE THE RIGHT MIDI CONTROLLER

Avoid overly complex controllers. Aim for simplicity and something that fits your context. Need suggestions? Avoid grid based controllers for Playback, as they don't provide the visual feedback needed to navigate your song.

02

CONNECT YOUR MIDI CONTROLLER

Plug the USB cable directly into your computer or a powered USB hub.

03

AVOID USB EXTENDERS

Do not use USB extenders or USB to Ethernet extenders as they are prone to failure. Connect your MIDI controller directly to your computer. You'll learn in the advanced Playback method how to use a mioXM or mioXL to send your MIDI long distances across the stage to your computer.

04

CHECK MIDI CONTROLLER POWER AND COMPATIBILITY

Ensure your MIDI controller is powered and compatible with your computer. Install any necessary drivers.

05

OPEN ABLETON LIVE PREFERENCES
Press Command (⌘) + Comma (,) to open Preferences.

06

CONFIGURE MIDI SETTINGS IN ABLETON LIVE
- Go to Link, Tempo, MIDI tab.
- Avoid using pre-set control surface mappings.
- Set 'Takeover Mode' to 'Value Scaling' if your controller has faders.
- Enable 'Remote' in the MIDI Ports "IN" section for your controller.

07

MIDI MAP YOUR CONTROLLER
- Press Command (⌘) + M to enter MIDI Map Mode.
- Map four essential controls: Play, Stop, Next, and Previous.
- Assign each control to a button on your MIDI controller.
- Play is assigned to the play button in Live.
- Stop is assigned to the stop button in Live.
- Next is assigned to the next locator button in arrangement view
- Previous is assigned to the previous locator button in arrangement view.

08

TEST THE MIDI MAPPINGS
Verify that the mapped controls on your MIDI controller correspond correctly in Ableton Live.

09

SAVE THE TEMPLATE WITH MIDI MAPPING
- Exit MIDI Map Mode.
- Save your template.

CONNECTING YOUR AUDIO INTERFACE AND ROUTING AUDIO IN YOUR TEMPLATE

UNDERSTANDING TEMPLATE BENEFITS

Recognize that the template allows for routing tracks to groups (return tracks) once, saving time on future setups.

CONNECT AUDIO INTERFACE TO COMPUTER

Use a cable to connect the interface directly to your computer or a powered USB hub.

AVOID USING USB EXTENDERS

Do not connect the interface to a USB extender, make sure it's connected directly to the computer.

CONFIGURE YOUR AUDIO INTERFACE IN ABLETON LIVE

- Open Preferences in Ableton Live

- Go to the 'Audio' tab.

- Under 'Audio Output Device', select your interface.

- For Windows, use the correct driver as recommended by Ableton. Ableton recommends ASIO4ALL.

- On Mac, Core Audio is used by default.

CHANNEL CONFIGURATION

- In 'Output Config', enable all stereo and mono outputs.

- Leave output names as default for flexibility.

SET SAMPLE RATE

Generally, set the sample rate to 44.1 kHz. While higher sample rates in theory are "better quality", keep in mind that they sound exactly the same when amplified and a band playing on top of them.

ADJUST BUFFER SIZE

- For Apple Silicon Macs, use a buffer size of 256 or lower.

- For Intel Macs, start with a buffer size of 256 samples and adjust as needed.

ROUTE GLOBAL TRACKS (CLICK AND CUES)

- Route the click track to a specific output.

- Separate click and cues if possible for volume control.

- Don't route global tracks to return tracks.

ROUTING TRACKS TO INTERFACE

- Route groups/return tracks to different outputs based on needs and interface capability.

- Save your routing settings in the template.

FINAL SETUP ON STAGE

- Connect the interface to your computer.

- Select the interface in Ableton Live's Preferences.

- Check that all tracks are routed correctly.

WHAT TO DO IF YOU NEED MORE THAN 12 AUDIO OUTPUTS

- Understanding Return Tracks: Return tracks are for grouping instruments, not for direct output tracks like click, cues, or vocals.

- Return Tracks vs. Interface Outputs: Return tracks are not equivalent to the outputs on your interface. You can route multiple groupings to the same output.

- Configuring More Than Twelve Outputs: For additional outputs, use direct routing tracks for specific elements like click, cues, timecode, or lead vocals.

- Routing Flexibility: Return tracks offer flexibility in routing, allowing for changes without affecting the entire setup and having to re-route every track for every song.

- Efficient Output Management: The approach allows for managing a large number of outputs (e.g., 33) with just twelve return tracks, by understanding their role in grouping instruments and using direct routing tracks for specific elements.

THE PLAYBACK METHOD™: PROGRAM

Learn how to program songs, step by step using the 11-step song programming process, how to quickly program a set of songs, all with a strong focus on efficiency, simplicity, and stability.

- Learn the essentials of song and set programming for live performance.
- Learn how to optimize your Ableton Live setup for efficient song and set programming.
- Learn the step-by-step process of validating tempos, cleaning up tracks, and adding programming elements.
- Learn advanced techniques for managing tempo variations and time signature changes in your music.
- Learn how to convert and manage different audio file types for a smoother Ableton Live experience.

THE PLAYBACK METHOD™ WORKBOOK

Welcome to the Programming stage of The Playback Method™. In this stage, we'll dive into the world of programming songs and sets in Ableton.

Our goal is to prioritize efficiency, simplicity, portability, flexibility, and stability. By following this process, you will be able to program your songs and sets quickly, easily, and with the ability to adapt to changes seamlessly.

PROGRAMMING SONGS:

Let's start by taking a quick overview of the song programming process.
The first step is to set up your song by opening your template and dragging in the stems. It is crucial to validate the tempo and downbeat of your song to ensure that it aligns perfectly with the click included in your stems. Having Live's grid perfectly synced with your song will allow you to navigate the song quickly and make edits on the fly. Once the tempo and downbeat are validated and Live's grid is perfectly in sync with your song, it's time to clean up your tracks. Group your stems together and rename them for simplicity. This keeps our set clean visually, and is the first step towards easily managing the volume of our songs.

In the next few steps, we'll start to add our song programming elements. We'll add a tempo track to save our tempo with our song, and our markers track to save our song sections. This allows for easy navigation of the song, and allows us to easily move our song in and out of sets. We'll also talk about adding additional song programming elements, like Foundations for Live (a MIDI click) and our AI cue player, and a song name track.

One of the biggest questions I get from Playback Engineers is, "How do I manage the volumes of my songs so they're all consistent in my set?". With the next step, you'll learn the dead-simple approach to creating a consistent level between your songs, that doesn't require any plugins or special skill.

Then we'll move into audio routing. This is perhaps the most impactful trick you'll learn. You'll learn how to route audio for your songs in your set in a way that, no matter how many outputs you're using-your routing is always the same, AND in using this technique, you'll get a fader for each song so you can easily adjust the volume of each song independently of each other. And, if you need to re-build your set, or move songs between sets, your routing comes with it.

Finally, before moving on, it's crucial to conduct a quality assurance (QA) check. This allows you to review everything you have done in your song to ensure it is correct and ready for performance. This final step, gives you the re-assurance that everything will work-before you hit the stage, and is how you can put your virtual "seal of approval" on your work.

BEFORE YOU BEGIN

MONITOR SETUP

- Ensure you have headphones or in-ears connected to your computer for accurate monitoring.
- Check and set your audio output device in Ableton Live's preferences (Command+comma or Control + Comma if you're on Windows).

FILE FORMAT

- When possible, choose files that are stems/multitracks, as opposed to stereo or 2-track files.
- Use stems with a click track whenever possible.
- Opt for WAV, AIFF, or M4A formats, avoiding MP3 stems.

USE AN EXTERNAL SOLID STATE DRIVE (SSD)

- Store and work from an external SSD to manage song files efficiently.
- Ensure the SSD is regularly backed up to a cloud service, and potentially another "archive" harddrive.

SETUP A RAW STEMS FOLDER

- Organize your original song content in a designated 'Raw Stems' folder for easy access.
- Store the raw stems file on an external hard drive (SSD)

SETUP A SONGS FOLDER

- Create a separate 'Songs' folder where the formatted and finalized Ableton Live song files will be stored. Avoid storing this on your computer's internal hard drive (since these files will be included in a Set), unless you need access to all songs, at any time (that aren't in an existing set) and have a large (greater than 1TB) hard drive.
- This folder should be distinct from the 'Raw Stems' folder and ideally on the SSD.
- Make sure to regularly backup your songs folder to a cloud service, and potentially another "archive" harddrive.

DETERMINE THE KEY, TEMPO, AND TIME SIGNATURE OF YOUR SONGS

- Find the key, tempo, and time signature of each song you're working with.
- Use online tools (like Tunebat) for key and tempo detection if necessary.
- Save this information in the folder name for easy reference.

ADD FOLDERS TO ABLETON LIVE'S BROWSER

- Use the 'Add Folder' option in the bottom portion of Live's browser, to add your 'Templates' and 'Songs' folders to Ableton Live's browser for quick access.

STEP 1: SONG SETUP

OPENING YOUR TEMPLATE

- Start by opening the template you've mapped to your MIDI controller and set up with your audio interface. Whether this was mapped to the Playback Basic template, or a customized template you've created.

GATHERING SONG INFORMATION

- Determine the tempo, time signature, and key of the song you're working on.
- Use a song key detection tool if necessary, and note down this information.

ADJUST A GLOBAL TEMPO AND TIME SIGNATURE

- Enter the song's BPM into Ableton Live's global tempo field.
- Set the time signature in Live's Global Time Signature, if it's different from the default 4/4.

IMPORTING STEMS INTO ABLETON LIVE

- Navigate to your raw stems in your Live's browser.
- Select all stems (click the first stem, hold Shift, then click the last stem).
- Hold Command (Mac) or Control (PC) while dragging to ensure stems are placed on separate tracks.
- Drag and drop the stems into Ableton Live, below your global programming tracks. Make sure you drag as far over to the left as possible, to have the stems start at 1.1.1.
- If you don't have stems but a 2-track stereo file, drag the file into Ableton, below your global programming tracks, and make sure you drag as far over to the left as possible, to have the stems start at 1.1.1.

ORGANIZING TRACKS IN ABLETON LIVE

- Locate the click track among the imported stems.
- Move the click track to the top of the tracks, below the global programming tracks.
- If you have a cues track, place it as the second track after the click track (and below all the global programming tracks).

STEP 2A: VALIDATING YOUR TEMPO

IMPORTANCE OF VALIDATING TEMPO

Ensuring the tempo in Ableton Live matches the song's tempo is critical for alignment. This will allow Live's grid to perfectly match our song, and allow us to quickly edit, and navigate our song easily. Incorrect tempo settings can lead to misalignment throughout the song.

BEFORE BEGINNING . . .

Make sure you've entered your tempo into Ableton Live's global tempo (*as done in step 1*). Be aware that certain sources might provide inaccurate tempo information, which is why we'll validate our tempo and time signature in this step.

VISUAL INSPECTION OF TEMPO

- Zoom into the click track to see if it aligns with Live's grid.
- Check different parts of the song (beginning, middle, end) for consistent alignment.

ADJUSTING METRONOME SETTINGS

- Navigate to 'Session View' (Tab key) to access metronome settings.
- Set 'Cue Out' to your preferred output to hear the metronome.
- Check the "Cue Out" volume to set the level of the metronome.
- Check the "Main Out" volume to make sure it's level isn't too loud.

LISTENING FOR TEMPO SYNCHRONIZATION

- Enable Ableton's metronome to compare the tempo of the stems with Live's grid.
- Listen at the beginning, middle, and end of the song to ensure the metronome and track are in sync.
- Adjust the metronome volume to be audible over the song.

TESTING DIFFERENT SONG SECTIONS

- Play different sections of the song while listening to the metronome.
- Listen for any discrepancies in timing between the song and metronome beats.

STEP 2B: VALIDATING YOUR TIME SIGNATURE

VISUAL INSPECTION FOR TIME SIGNATURE

- Look at the click track for a visual indication of the downbeat.
- Ensure the accent (stronger or higher-pitched beat) aligns with the downbeat of Live's grid.
- Check different sections of the song for consistent alignment.
- Use a fixed grid view (e.g., 1 bar) for easier inspection.

LISTENING FOR TIME SIGNATURE SYNCHRONIZATION

- Turn on Ableton's metronome and listen to the entire song.
- Pay attention to the song's pulse and feel for any irregularities.
- Listen for any deviations where the song feels out of sync with the metronome.

ADJUSTING GLOBAL TIME SIGNATURE

- If a time signature change is detected, add it to your Live Set.
- Right click in Live's scrub area and choose "Insert Time Signature Change" and enter your change (eg. 4/4).
- For songs with multiple time signatures, add remaining time signature changes throughout the song..

WHY LIVE'S GRID DOESN'T MATCH YOUR SONG

REASON #1 LIVE'S GRID DOESN'T MATCH YOUR SONG: STEMS AREN'T ALIGNED ON THE GRID

IDENTIFYING THE ISSUE

- Realize that stems may be off-grid even if the tempo is correct.
- Look for visual cues, like misaligned downbeats, in the click track.

SHIFTING STEMS TO ALIGN

- Select all stems by clicking the first and holding Shift to select the last.
- Use arrow keys to nudge stems left or right to align with the grid.
- If unable to move further, extend the song's start point and then nudge.

FINE TUNING THE ALIGNMENT

- For precise adjustments, hold Command (Mac) or Control (PC) to disable snap-to-grid.
- Nudge stems incrementally until they align perfectly with the grid.

VISUAL VALIDATION

- Check the alignment at the beginning, middle, and end of the song.
- Ensure the click track's accent (stronger beat) matches the grid's downbeat.

LISTENING FOR SYNCHRONIZATION

- Turn on Ableton's metronome and listen to the song.
- Validate that the click track is in sync with the metronome throughout the song.
- Adjust stem positions as needed based on auditory feedback.

FINALIZING THE ADJUSTMENT

- Once the stems are perfectly aligned, recheck the entire song.
- Listen to the song with the metronome to confirm perfect synchronization.

WHY LIVE'S GRID DOESN'T MATCH YOUR SONG

REASON #2 LIVE'S GRID DOESN'T MATCH YOUR SONG: THE WRONG TEMPO

IDENTIFYING THE ISSUE

- Recognize that the grid misalignment is not due to stem placement but due to an incorrect tempo setting.
- Understand that even if you're confident about the tempo, Ableton Live might require a different setting for accurate alignment.

INITIAL TEMPO ADJUSTMENT

- Focus on the click track and observe its alignment with the grid.
- Click on Live's Global Tempo.
- Use the up and down arrow keys to incrementally adjust the tempo.
- Look for the tempo that starts to bring the grid into closer alignment, and move more in that direction.

FINE TUNING THE TEMPO (IF YOUR TEMPO IS DECIMAL)

If close to the correct tempo but not perfect, consider the possibility of a decimal tempo.

- Start with a middle value (e.g., 113.50) if the tempo is between two whole numbers.
- Incrementally adjust in tenths (e.g., 113.40, 113.60) to find a closer match

NARROWING DOWN (EVEN FURTHER) TO THE CORRECT TEMPO

- If still not aligned, adjust in smaller increments (e.g., in fifths or ones).
- Each time you adjust the tempo, recheck the alignment at various points in the song.

LISTENING FOR SYNCHRONIZATION

- After each adjustment, listen to the song with Ableton's metronome to check for synchronization.
- If needed, shift your stems back on grid after every tempo change.
- Pay attention to the song's flow with the metronome to confirm the tempo is correct.

FINALIZING THE TEMPO ADJUSTMENT

- Once you find the correct tempo, recheck the entire song for consistent grid alignment.
- Listen to the song with the metronome throughout to ensure perfect synchronization.

WHY LIVE'S GRID DOESN'T MATCH YOUR SONG

REASON #3 LIVE'S GRID DOESN'T MATCH YOUR SONG: TEMPO FLUCTUATIONS IN ABLETON LIVE

IDENTIFYING TEMPO VARIATIONS

- Realize that the grid matches the song at some points but not throughout, indicating tempo fluctuations.
- Confirm that this is not an issue of incorrect tempo setting but actual variations in the song's tempo.

MANAGING TEMPO CHANGES

HOW TO MANAGE TEMPO CHANGES WITHOUT WARPING YOUR STEMS

PREPARING FOR ADJUSTMENT

- Focus on the Click track included in your song files.
- Ensure the Click track accurately reflects the tempo changes in your song.

WARPING THE CLICK TRACK

- Select the Click track and enable 'Warp' in the audio toolbox.
- Click on the first warp marker, right click and select "Warp From Here (Start at [Your Song's BPM])." This will add warp markers throughout the click track.

FROM FOLLOWER TO LEADER

- Change the warp mode from 'Follow' to 'Lead' in the audio toolbox. This action will make the click track dictate the tempo and adjust Ableton Live's grid to match your click track.

VERIFYING GRID ALIGNMENT

- Observe the grid alignment with your click track throughout the song to confirm synchronization.
- If misalignments occur, manually add warp markers at the downbeats where necessary and drag to match the grid.

TESTING WITH METRONOME

- Use Ableton Live's metronome to test the synchronization of the click track with the grid.
- Listen to the alignment, especially at the points where tempo changes occur.

FINAL ADJUSTMENTS

- If needed, refine the warp markers to ensure that every beat lines up precisely with Live's grid.
- Work through the song systematically, adjusting as needed for accurate alignment.

If you DO plan on changing your song's tempo (warping stems)

MANAGING TEMPO CHANGES

WARPING TO MANAGE TEMPO VARIATIONS IN ABLETON LIVE

INTRODUCTION TO WARPING

- Warping allows you to speed up, slow down, or change the key of a song.
- Downsides: Can impact CPU heavily, especially with complex warping, and may degrade audio quality if used excessively.

PREPARING FOR WARPING

- Select all stems in your Ableton Live project, ensuring the click track is the last one selected.
- If clips have different lengths, consolidate them first. Select all stems and press command J to consolidate.

WARPING PROCESS

- Enable 'Warp' for all selected tracks.
- With all clips still selected and the click track in view, add warp markers at every downbeat (start of each measure) where the tempo changes occur. Double click on the pseudo warp markers to create a warp marker.
- Adjust the markers to ensure all stems are aligned with the beat grid. While it feels counterintuitive, add warp markers and drag the warp marker to line up with Live's Grid.

STRAIGHTEN TEMPO (LOSING TEMPO CHANGES)

- If you want to straighten the tempo: Leave the tracks warped and ensure the warp mode is set to 'Follow'. This will leave your stems to follow the tempo of your Live Project, as determined by your Tempo track.

TO MAINTAIN TEMPO CHANGES (KEEP TEMPO CHANGES)

- To maintain tempo changes but synchronize with Live's grid: Select the click track, change from 'Follow' to 'Lead'.

TESTING & ADJUSTING

- Test the warping by listening to the metronome and observing the grid alignment.
- Make further adjustments to warp markers as necessary.

CONSIDERATIONS & CHOICES

- Straightening Tempo: Simplifies the song to a constant tempo, removing fluctuations.
- Maintaining Tempo Changes: Preserves the original tempo variations of the song but aligns them with Ableton Live's grid for better synchronization and editing.

STEP 3A: SONG CLEAN-UP

BEFORE BEGINNING . . .

- Confirm the tempo and time signature are validated and aligned.
- Ensure Ableton Live's grid lines up perfectly with the stems.
- Position the click track and cue tracks below the global programming tracks.

ADDING A COUNT-IN

- Position Ableton's playhead at the beginning (1.1.1).
- If needed, Insert space for the count-in (use Command + I on Mac or Control + I on PC) to add a one or two bar count-in.
- Opt for a consistent count-in length across all songs, if at all possible.

RENAMING TRACKS FOR SIMPLICITY

- Select each track and rename it for clear identification (Command + R or Control + R).
- Use simple, recognizable names for each track. Whatever is clearest and easiest to understand-instantly, is what you should use.
- If needed, solo each track to listen to it, and understand what content that track is.

GROUPING TRACKS

- Select all (non-global programming) tracks (not clips).
- Group the tracks (Command + G or Control + G).
- Rename the group track with the song name, key, and tempo.

SAVING THE PROJECT

- Create a new folder for the song in your song folder. By default, this should be the formatted song (not raw stems) folder on your external drive.
- Save the set with a consistent naming convention (song name, key, tempo).
- Use 'Collect All and Save' to gather all assets into the Live project folder.

CONVERTING MP3 TO WAV (IF NEEDED)

- If your files are in MP3 format, convert them to WAV format within Ableton before proceeding (see checklist 3b for this process).

STEP 3B: CONVERTING MP3 TO WAV

BEFORE BEGINNING . . .

Ensure all steps from steps (1-3a) like adding count-ins, renaming tracks, and grouping stems are completed. If your files are not in mp3 format, please skip this process.

SELECTING THE AUDIO CLIPS

- Select the top non-global programming clip (not track) in your set
- Hold Shift and select the bottom clip to highlight all clips/stems for your song.
- Include any additional space at the start if your stems are shifted,for example to make room for a count-in.

ADJUSTING ABLETON LIVE PREFERENCES FOR CONVERSION

- Open Preferences (Command + Comma on Mac, Control + Comma on PC).
- Under the 'Audio' tab, set the Sample Rate (44.1 kHz is standard).
- Go to 'Record Warp Launch', set the File Type to 'WAV', and Bit Depth to 16.

CONSOLIDATING AUDIO CLIPS

- With all clips selected, use the shortcut Command + J (Mac) or Control + J (PC) to consolidate.
- This process will convert MP3 files to WAV format.

DISABLING WARP

- Click "warp" to disable warp on your consolidated clips. All your (non-global programming) clips should be un-warped.

SAVING THE PROJECT

- Navigate to the desired location (within the song folder on your external drive) for your project.
- Save the set with an appropriate name, including key and tempo.
- Use 'Collect All and Save' to gather all assets into the project folder.

FINAL STEPS

- Verify that all samples are now in WAV format in the project folder.

STEP 4: SAVING YOUR TEMPO

3 WAYS TO SAVE YOUR TEMPO IN ABLETON

- Live's Global Tempo: While the default way to set the tempo in a Live Set, this tempo doesn't transfer between Ableton Live Sets. This means when you go to program an Ableton Live Set of multiple songs, your need to re-enter your tempo every time.

- Tempo Automation: While a bit more "precise" way to set and change tempo mid-set, using automation for tempo changes in the main track does not transfer between sets. Again, when you go to program an Ableton Live Set of multiple songs, you need to re-enter your tempo every time.

- Tempo Track: This allows you to use an audio clip to set the tempo of your Ableton Live Set and "write" the tempo into any Ableton Live set. This allows you to save, and transfer tempo between sets without having to re-automate and enter your tempo every time you program a new set.

FINDING YOUR TEMPO TRACK

- Navigate to your 'Playback Basic Template' (or your template of choice).
- Locate the 'Tempo Track' section within the template.

ADDING A TEMPO TRACK TO YOUR SONG

- Identify the BPM of your song.
- Drag the corresponding BPM tempo track into the global programming tempo track of your song.
- Drag the tempo track to cover the entire length of your song.
- Ensure the warp mode is enabled and set the clip to 'Lead' in the clip view.

HEADING SONGS WITH TEMPO CHANGES

If your song has tempo changes, use the click track included with your file as the tempo track.
- *Drag the click track into the tempo track.*
- *Ensure the click track is warped and then set the clip to 'Lead' in the clip view.*
- *Deactivate the audio of the click track by pressing '0'.*
- *Delete the original click track from its previous position.*

FINAL STEPS

- Save your project to ensure all tempo settings are stored.
Your tempo settings will now transfer with the song when moved to different sets.

STEP 5: SAVING YOUR SONG SECTIONS

PURPOSE OF MARKERS

Locators allow you to easily navigate between your song while playing audio and to visually see each section of your song. Sadly, like tempo, locators don't transfer between sets. To work around that, we'll use a "markers" track to save our song sections.

We'll use the markers track to visually identify different sections of a song (e.g., intro, verse, chorus). With our markers track we'll be able to facilitate easy navigation and editing within the song and to enhance efficiency during rehearsal and live performance.

PREPARING TO ADD MARKERS

- Open the song in Arrangement View.
- Change the grid view to fixed grid and 1 bar for easier editing.

CREATING A MARKERS TRACK

- Unfold the "markers" global programming track.
- Highlight the entire length of the song in the markers track.
- Use the keyboard shortcut (Command + Shift + M on macOS or Control + Shift + M on Windows) to create a MIDI clip that runs the entire length of the song.

ADDING MARKERS TO THE TRACK

- Listen to the song and identify different sections. If you have a cues track, unfold the cues track to visually see and audibly hear the start of a new song section. (Please note that while the cues track will happen a measure before each song section, the marker will run the length of the song section. Use the cue to let you know where a new section will be.)
- Split the MIDI clip at the beginning of each new section using Command + E (macOS) or Control + E (Windows).
- Rename each split clip to label the song section (e.g., Intro, Verse, Chorus).

SAVING YOUR WORK

- Save the project to ensure all markers are stored.

FINAL STEPS

- Save your project to ensure all tempo settings are stored.

Your tempo settings will now transfer with the song when moved to different sets.

STEP 6: ADDING A CLICK TRACK

ADVANTAGES OF USING MIDI CLICK

- Subdividable: Allows for changing the rhythm (e.g., adding more 8th notes) to songs by simply adjusting a macro.
- Multi-Sound: Enables changing the click sound without altering each song individually.
- Time-Efficient: Global changes affect all songs, saving time in editing. If you want to replace the click sound of every song in your set, you change the global sample/sound once, and you don't have to re-program each song.

BEFORE BEGINNING . . .

- Ensure the song's tempo and time signature are accurate.
- Confirm that Ableton Live's grid matches the song perfectly.

If Live's grid doesn't perfectly match your song, Foundations for Live WILL NOT be in time with your song. Please keep in mind that Foundations follows Live's grid (tempo and time signature) so if Live's grid doesn't match your song, Foundations won't match your song.

PROCESS OF ADDING THE MIDI CLICK

- Locate the 'Click' section in your playback template.
- Drag and drop the appropriate MIDI clip based on the song's time signature.
- Choose between clips that provide quarter notes only, quarters and eighths, or include sixteenth notes.
- Drag the MIDI clip to cover the entire length of the song.

ADJUSTING THE CLICK

- Adjust the volume of different note values (e.g., 8th notes, 16th notes) as required.
- Change the click sound as needed for different songs or preferences.

HANDLING TIME SIGNATURE CHANGES

- For songs with multiple time signatures, follow the changes with appropriate MIDI clips.
- Drag the MIDI clips corresponding to each time signature into the timeline at the correct positions.

SAVING YOUR WORK

- Save the project and use Collect All and Save after adding the MIDI click to ensure it's included in your set and all samples you need are also included.

STEP 7: ADDING CUES

PURPOSE OF CUE TRACKS

Cues, slates, guide cues act as an invisible, virtual, un-paid music director, providing guidance on song sections. It helps musicians stay on the same page, especially during live performances. It can also serve as a reminder for song structures and transitions.

THE PROCESS OF ADDING CUE TRACKS

- Start by selecting the 'Cues' track in your playback template.
- Navigate to the start of your song for the count-in.

ADDING COUNT-IN CUES

- Find the count-in length you want 1 or 2 bar.
- Find the time signature that matches your song.
- Drag that corresponding clip into the cues global programming track in your template.

MARKING SONG SECTIONS

- Use your markers track as a reference for each song section.
- Drag and drop the appropriate section cue (e.g., "Verse", "Chorus") into the cue track.
- Optionally, you can use the counts+ cues clips to also count into each section cue (e.g., "Verse 2, 3, 4").

SAVING YOUR WORK

- Save the project and use Collect All and Save after adding the cues to ensure it's included in your set and all samples you need are also included.

STEP 8: ADDING YOUR SONG NAME

PURPOSE OF A SONG CLIP

We can use our song name clip to make working with and navigating our song easier. It acts as a utility similar to a marker track but for the entire song. It allows us to easily identify the song within the set and for quick selection and reference to the entire song.

CREATING THE SONG NAME CLIP

- Navigate to your global programming "Songs" track.
- Unfold your "Songs" track.
- Select the region from the end of the song to the beginning.
- Use the keyboard shortcut (Command + Shift + M on macOS or Control + Shift + M on Windows) to create a MIDI clip.

NAMING AND DETAILING THE CLIP

- Rename the MIDI clip with the song's title (e.g., "Enough is Enough").
- Optionally, include key and tempo in the name.
- Add additional notes or reminders for the band within the clip name.

SAVING YOUR WORK

- After creating and naming the clip, save your work to ensure the clip is included in your set.

STEP 9: COLLECT ALL AND SAVE

WHY AND WHEN WE SHOULD USE COLLECT ALL AND SAVE

Collect All and Save ensures all files, including tempo tracks, cue tracks, MIDI files, and other imported elements, are collected and saved (hence the name) into the Ableton Live Project file for your song.

It allows for portability of our songs, and provides peace of mind that all necessary files for that song are gathered in one place.

You should Collect All and Save regularly through the programming process to ensure all samples are being added to the Live Project and after adding any additional programming elements to your project.

Even if you forgot at some point in the process, we'll ensure we always Collect All and Save at Step 9 of the Song Programming Process, so no sample will ever go missing.

HOW TO PERFORM 'COLLECT ALL AND SAVE'

- Navigate to the File menu in Ableton Live.

- Select 'Collect All and Save'.

- Confirm the action by clicking 'OK' on the prompt.

STEP 10: AUDIO ROUTING AND BASIC LEVEL CHECK

THE REVOLUTIONARY PROCESS OF AUDIO ROUTING & BASIC LEVEL CHECK

If you follow the playback method process of managing audio, you'll be able to route your audio once to your interface, and never have to re-route it again. You'll be able to quickly change the number of outputs on your interface, and never have to re-route your audio.

In addition, if you follow the new updates shared in this updated lesson, you'll be able to quickly balance the level of all songs-without any additional plugins or fancy methods, and incase any band members are there for rehearsal, or someone can't make a performance, you can click one button and you'll have their part available.

BEFORE BEGINNING . . .

- Don't delete tracks for instruments you have live (e.g., drums, bass). We'll keep them available for quick reference, to be able to practice and rehearse, and to use live in a worst-case scenario.
- We'll mute these tracks instead, to always have access to them.
- Mute instruments globally rather than at the song level for efficiency. This doesn't need to be done at the song level, but at the template level instead. This allows us to un-mute our bass globally across all songs.

MUTING THE ORIGINAL CLICK & CUES

- Unfold your song's group track.
- Identify and mute click and cue tracks within the group. Please note, we're not muting the click and cues in global programming tracks, but the click and cues track included with our file-if they exist.

BASIC LEVEL CHECK

- Establish an audio standard for levels (e.g., -4 dB).
- Press play to listen to your song.
- Adjust the level of your group track to match your standard, ensuring consistency across songs. If you need to adjust individual tracks, unfold your group track and adjust those levels as needed.
- Skip to the loudest part of the song and skip around your song, for a basic level check.

ROUTING AUDIO TRACKS TO RETURN TRACKS

- Use session view to manage return tracks.
- If needed, enable sends and return tracks in view settings, so you can view them while working.
- Turn the send knob to 100% that matches the return track you want to route your audio to.
- Assign instruments to specific return tracks based on their type.
- If needed, solo tracks to determine their appropriate return track assignment.

GROUP TRACK ROUTING

- Set the song's group track 'Audio To' section to 'Sends Only'. This enables separation and specific output routing of parts.

ADJUSTING OVERALL SONG LEVEL

- Use the group track fader to adjust the overall level of the song.

FINAL CHECKS AND SAVES

- After routing and level adjustments, perform a final check.
- Save the changes to solidify the setup.

TEMPLATE-LEVEL CHANGES FOR EFFICIENCY

Make global changes at the template level rather than song level. This ensures all songs inherit these changes, saving time in audio routing.

STEP 11: QA PROCESS

The Quality Assurance (QA) process is crucial for ensuring the quality of our song before we use it in practice, rehearsal, and live performance. Skipping this step can lead to errors, and these efforts reflect on you. Take the time to check everything now, so that things go smoother later.

At the most basic level, we're going to compare our song with the global programming tracks in our template and verify that the formatted song matches the template so we can seamlessly program our Set.

TRACK VERIFICATION

- Open the playback basic template and review all tracks. Compare the formatting and track order of your template to your programmed song.
- Ensure song tracks, cues, and markers are correctly placed and labeled.

GROUPED SONG REVIEW

- Inspect the grouped song; use the 'Tab' key for detailed view.
- Check audio settings (e.g., audio to sends only)

ROUTING AND LEVEL CHECKS

- Confirm the routing of all tracks.
- Verify that click and cue tracks are properly configured and routed.
- Perform another basic level check to ensure audio balance.

FINAL SAVING PROCESS

- Use 'Collect All and Save' again to make sure all samples are included in your Live Project Folder.

PLAYBACK AND ERROR IDENTIFICATION

- Play the entire song and listen carefully.
- Check guide cues, cue tracks, and song sections for accuracy.
- Ensure the click track is in time and stems are synchronized.
- Look for any audio discrepancies or timing issues.

FINAL APPROVAL

Confirm that the song meets your standards and is ready for performance. This is putting your 'seal of approval' on the song, symbolizing it's ready to go.

STEPS TO PROGRAM AN ENTIRE ABLETON LIVE SET

FILE MANAGEMENT

- Ensure proper file management and backups.
- Save a copy of the set in a designated folder, possibly backed up on different devices including a thumb drive, external SSD, and cloud storage.

OPEN AND SAVE TEMPLATE

- Open the template used for individual song programming.
- Save the set with a thoughtful naming convention that might include venue, city, date, or tour revision.

FILE MANAGEMENT AND BACKUP

- Save your set in a specific folder on your internal hard drive.
- Create backups on a thumb drive, external solid-state drive, and possibly the cloud.

OPENING AND SAVING YOUR TEMPLATE

- Open the template you'll use for building your set.
- Save a copy of the set (File > Save Live Set As).
- Choose an appropriate naming convention for the set.

PREPARING THE TEMPLATE

- Do a 'File Collect All and Save' to ensure all necessary files are included.

ADDING SONGS TO YOUR SET

- Add your programmed songs folder to Ableton's browser for easy access.
- Add the time signature of your first song to Live's Global Time Signature.
- Re-name your first locator with your song name, and optionally the order of the song in the set, ie. 1-SEPTEMBER.
- Start with your first song, adding it below the bottom-most global programming track in your set.
- Cut and paste all clips from the global programming tracks that came with the song into the appropriate place in your set.
- Delete the global programming tracks that came with the song.
- Rename locators and adjust time signatures as needed for each song.

ORGANIZING AND ALIGNING TRACKS

- Ensure all tracks and stems align correctly.
- Adjust the start and end of stems as needed to match the song's structure.

REPEATING THE PROCESS FOR EACH SONG

- Follow the same process for each additional song: add the song, align tracks, adjust time signatures, and delete redundant tracks.
- Make sure you add new songs on the downbeat of one.
- Rename locators and ensure each song starts on a downbeat.

FINALIZING SONG PLACEMENT

- Once all songs are added, go through each to ensure proper alignment and organization.
- Make any necessary adjustments to the song order or placement.

COLOR CODING AND KEY MAPPING (OPTIONAL)

- Assign a unique color to each song for easy visual identification.
- Use key mapping (Command K) to highlight group tracks for each song so that when you select a song locator, that songs group track is also highlighted.

ADDING LOCATORS FOR SONG SECTIONS (OPTIONAL)

- Add a locator for each song section to facilitate navigation during live performances.
- This can be done manually by clicking the song section and pressing "l" (using the pre mapped key in your template), pressing the add locator "set" button, or using tools like Ableset.

FINAL CHECKS AND SAVING

- Perform a final review of the entire set.
- Save the set (File > Save Live Set).
- Use 'Collect All and Save' again to ensure all components are included in the set.

FINALIZING TEMPO SETTINGS (CRUCIAL IF NOT WARPING STEMS)

- Right-click on Ableton Live's global tempo.
- Choose 'Unfollow Tempo Automation.'
- This step is crucial, especially if working with unwarp stems to avoid issues when editing.
- Note: The master tempo lane will still display all the tempo changes.
- By doing this, the set will follow the tempo information written in the track.

TIPS FOR EXPORTING YOUR OWN STEMS

If you're wanting to use your own songs live, here's a few considerations I have.

- Separation of Instruments: Keep individual instruments separated in stems, without combining them.

- Consideration of Live Elements: Only include parts in stems that won't be played live.

- Technical Aspects: Export stems as 44.1kHz, 16-bit WAV files, include a click track matching the song, and if possible, a cues track for easier navigation during performances.

- This approach ensures greater control during live shows, allowing for adjustments like muting certain instruments if needed.

THE TRUTH ABOUT WARPING YOUR STEMS: TO WARP OR NOT TO WARP?

When deciding whether to warp audio stems in Ableton Live, it's important to balance flexibility with technical limitations. Here's a concise guide to help you make an informed decision:

CONSIDER WARPING:

- When changing key and tempo often.
- For sets with fewer than 10-12 songs.

AVOID WARPING:

- For large sets with many songs.
- To maximize CPU efficiency.

TECHNICAL TIPS:

- Export stems as WAV files (44.1K, 16-bit).
- Include a click track and cues track.
- Consolidate clips after editing.
- Use 'Beats' warp mode for lower CPU usage.
- Disable 'Follow Tempo Automation' for non-warped tracks.

Remember, warping doesn't inherently degrade sound quality, but it does impact CPU usage. The decision to warp should be based on your specific needs and the capabilities of your computer. Warping offers flexibility but can be resource-intensive, so weigh your options carefully before proceeding.

THE PLAYBACK METHOD™: PRACTICE

Before we rehearse, let's discuss how to best prepare our band for practice, and how to make the most of Ableton Live in Rehearsal.

- Learn the foundations of song editing and rehearsal preparation in Ableton Live.
- Learn how to create effective rehearsal tracks and set up play-along tracks.
- Learn advanced editing techniques: clip editing, applying fades, and tempo adjustments.
- Gain practical insights into making precise edits and enhancing song arrangements.
- Master the art of clean and organized track management for efficient rehearsals.

PRACTICE VS REHEARSAL

- Practice: An individual activity where musicians learn their parts.

- Rehearsal: A group activity where the band comes together to integrate their parts and work on the overall performance.

This simple distinction is key to setting the right expectations for your band. Practice is where individual band members learn their parts separately, while rehearsal is where everyone comes together to work to create a cohesive sound. Each band member must take responsibility for practicing their parts individually to ensure a successful rehearsal together.

There are a few helpful things we can do as Playback Engineers (even if we're serving as the music director) to help our band practice well.

GENERAL REHEARSAL TIPS

- Don't Over-Practice One Part: Balance the need to perfect a part with keeping the energy and flow of the rehearsal.

- Provide Necessary Resources: Ensure everyone has access to the parts, tracks, and information they need for effective individual practice.

- Play Through Entire Songs: Ensure the band can play through each song completely at least once before performing live to build confidence and cohesion.

TIPS FOR EFFICIENT REHEARSALS

1 Create Rehearsal Tracks: Provide full arrangement tracks and play-along tracks for band members to practice individually.

2 Elevate or Solo Parts: Help musicians focus on their specific parts by elevating them in the rehearsal track.

3 Share Key and Tempo Information: Ensure everyone practices with the correct key and tempo.

4 Consistent Charts: If using charts, ensure they match the arrangement and are accurate.

5 Unmute Missing Parts:If a band member is absent, use the muted track for their instrument in Ableton Live for rehearsals.

6 Work with Individual Song Files: Initially rehearse with individual Ableton files for easy editing.

7 Locate Specific Sections Quickly: Use shortcuts to start playback from specific song sections, avoiding the need to start from the beginning each time.

8 Solo Parts as Needed: Utilize the solo feature to focus on specific instrument parts during rehearsals.

HOW TO PREP YOUR BAND FOR REHEARSAL AND HELP THEM LEARN THEIR PARTS

Creating rehearsal tracks for your band members offers several benefits. Firstly, it allows them to learn their parts at their own pace, reducing the time spent during rehearsals on individual practice. Secondly, it promotes consistency and accuracy in performances, as everyone is rehearsing with the same reference tracks. Additionally, rehearsal tracks facilitate the integration of new band members or substitutes by providing them with the necessary materials to learn their parts quickly.

TYPES OF REHEARSAL TRACKS TO CREATE

1 **FULL SONG RENDER**

Export the full arrangement of the song as it is in Ableton Live, including any edits made to the arrangement.

2 **FULL SONG WITH CLICK AND CUES**

Export the full song along with the click track and cue tracks. This helps band members practice with the same click and cues they'll hear during the actual performance.

3 **INDIVIDUAL PARTS EXPORT**

Export each band member's specific parts. This is particularly useful for them to focus on their individual part within the song.

4 **INDIVIDUAL PARTS WITH FULL SONG, CLICK, & CUES**

A comprehensive mix that includes the individual part elevated, along with the full song, click, and cues. This is ideal for practicing in context with the entire arrangement.

5 **PLAY-ALONG TRACKS**

Export the full song, click and cues, but minus their part, so they can rehearse anywhere-before rehearsal.

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EXPORTING PROCESS IN ABLETON LIVE

1 **SELECT THE APPROPRIATE TRACKS**

Depending on what you are exporting (full song, individual parts, etc.), select the tracks in Ableton Live.

2 **ADJUST OUTPUT ROUTING**

Ensure the tracks are routed correctly for the export. For example, route click and cue tracks to the main output when including them in the mix.

3 **RENDER SETTINGS**

Use the 'Render Track' option in Ableton Live to export the tracks. Choose 'MP3' for a convenient format and ensure the correct tracks are selected for rendering.

4 **FILING NAME AND ORGANIZATION**

Name the files clearly and logically, so band members can easily identify what each file contains. Organize them in a folder for easy access and consider uploading to a cloud service as a "band hub".

5 **COMMUNICATION WITH BAND MEMBERS**

Discuss with your band which types of tracks will be most helpful for them. This ensures you're providing the most useful resources for their individual practice.

WHY PLAY-ALONG TRACKS?

Creating play along tracks in Ableton Live is an effective way to prepare band members for rehearsals. It allows them to practice their parts in the context of the full arrangement, minus their specific instrument, providing a more immersive and focused practice experience. This method also ensures that all members are familiar with the song structure and their role within it, leading to more productive and efficient rehearsals.

By following these steps, you can tailor the play along tracks to the needs of each band member, enhancing their ability to learn and perfect their parts independently. This approach not only saves time during group rehearsals but also contributes significantly to the overall cohesiveness and quality of the band's performance.

CREATING PLAY ALONG TRACKS IN ABLETON LIVE:

INITIAL SETUP:

- Open your song file in Ableton Live.
- Set the song track to 'Sends Only'.
- Adjust the Click and Cue tracks to route to the main output.

ROUTING RETURN TRACKS:

- Select all return tracks.
- Route them to the main output.

MUTING THE PART FOR PLAY ALONG:

- For creating a bass play along track, mute the bass part. This principle applies to any instrument you're creating the track for.

ADJUSTING LEVELS:

- Boost the click track level for clarity.
- Adjust the levels of other parts as needed. For example, if the bass player wants to rehearse with the drums more prominent, boost the drums in their mix.

EXPORTING PLAY ALONG TRACKS:

Select the full song track to ensure the entire arrangement is included in the export.

INITIAL SETUP:

- Open the 'Export Audio/Video' window (Command + Shift + R or Control + Shift + R on PC).
- Set 'Render Track' to 'Main'.
- Choose MP3 encoding for a convenient file format.
- Name the file appropriately, like 'Bass Play Along' or 'Full Song No Bass', and export.

THE BURN IN: YOUR SECRET WEAPON TO ENSURE EVERYTHING WORKS PERFECTLY

The concept of a "burn-in scenario" is a critical practice for playback engineers and musicians, which involves thoroughly testing and familiarizing yourself with your entire setup in a controlled environment before a rehearsal or live performance. This process ensures that all equipment functions correctly and that you're comfortable with the setup. Here's how to effectively implement a burn-in scenario.

Recreate Your Performance Setup: Set up all your gear as you would for a live performance. This includes computers, MIDI controllers, audio interfaces, and any instruments you use.

Test in Private: Choose a space where you can work undisturbed for a few hours. The more private and quiet, the better, as this will allow you to focus on the task at hand.

Allocate Sufficient Time: Especially when you're new to playback engineering or have added new gear to your setup, allocate several hours or even days for the burn-in process. This time investment will decrease as you gain experience.

Run Through Your Set: Perform your entire set as if it were a live show. Pay attention to every detail, from song transitions to MIDI controller response.

Check for Physical Comfort: If you use instruments or controllers (like a MIDI foot controller), ensure they're positioned as they would be during a live performance. Comfort with your physical setup is as crucial as technical proficiency.

Troubleshoot in Real-Time: Identify and resolve any technical issues. Whether it's a cable malfunction or a software glitch, addressing these issues in a burn-in scenario prevents unexpected problems during actual performances.

Rehearse Multiple Times: Go through your entire set multiple times. This repetition helps solidify your familiarity with the setup and boosts your confidence.

Simulate Live Conditions: If possible, include elements like lighting and sound systems in your burn-in scenario. This approach gives you a more realistic feel of the live environment.

Document and Adjust: Take notes on any challenges or adjustments you need to make. This documentation will be invaluable for future reference and improvement.

Mindful Packing and Setup: After the burn-in, when packing your gear, be mindful of how everything fits together. This awareness will make setting up for the actual performance more efficient.

Practice Regularly: Even as you become more experienced, regular practice remains crucial. However, the focus may shift more towards refining performance rather than basic setup familiarity.

Involve the Band: If you're part of a band, involve them in the later stages of the burn-in process. This collaboration ensures everyone is on the same page and comfortable with the technical setup.

NAVIGATING YOUR SET WITH EASE DURING REHEARSAL

During rehearsal, efficiently navigating and editing your Ableton Live set is crucial to keep things running smoothly. Here are some key strategies for managing your set during rehearsals:

Starting Specific Songs: Utilize the locators in your set to quickly start playing from a specific song. Clicking on the song title in the session view or pressing the corresponding number key on your keyboard will start the song.

Skipping Songs: To skip a song, use the number keys to jump to the next song's locator, then press spacebar to start playing.

Restarting Sections: If you need to repeat a particular section during rehearsal, click on the desired section and press 'C' (which is key-mapped to the record button for a one-bar count-in). This ensures everyone starts together at the right tempo.

Adjusting for Missing Band Members: If a musician is absent, you can enable their instrument's track in the set to fill the gap. For example, unmuting the drum or bass track will play these parts through the playback system.

Soloing Parts for Practice: To help band members focus on their parts, use the solo function on their instrument's track. This isolates their part, allowing them to hear it clearly over the rest of the mix.

Making In-Rehearsal Edits: For quick edits during rehearsal, such as adjusting levels or muting/unmuting tracks, use the mixer in Ableton Live. You can also make more significant changes if necessary, but remember to save these changes for future rehearsals.

Using a Count-In for Start Points: Utilize the count-in feature for rehearsing specific sections. This helps in synchronizing the start, especially in complex parts of the song.

Quick Navigation with Key Mappings: Make use of key mappings for fast navigation during rehearsal. Map keys to functions like play, stop, record, and count-in for quick access.

Checking Levels and Mixes: Regularly check and adjust the levels and mixes to ensure that every element of the set is audible and balanced.

Saving Changes: Always remember to save any changes you make during the rehearsal to avoid losing them.

MASTERING QUICK EDITS TO KEEP REHEARSAL RUNNING SMOOTHLY

In rehearsal, being able to swiftly make edits in Ableton Live is a key skill that can greatly enhance the efficiency and effectiveness of the session. Here are some of the common edits and maneuvers you might need to perform:

Doubling Intros or Other Sections: Use the Command + Shift + D shortcut to duplicate sections like intros. Remember to adjust or deactivate cue tracks if necessary to match the new arrangement.

Inserting New Cues: Adding new cues can be done by simply dropping them into the timeline where needed.

Applying Crossfades: To blend two sections smoothly, select the areas where you want the crossfade and use Command + Option + F.

Volume Adjustments for Individual Songs or Parts: If a song or specific part like drums is too loud, adjust the volume directly in the mixer. Group tracks can be helpful for making these adjustments efficiently.

Soloing Parts for Clarity: If a band member needs to focus on a particular part, use the solo function on their instrument's track.

Warping for Tempo and Key Changes: If there's a need to change the tempo or key of a song, enable warping on the tracks, adjust the tempo and key, and then consolidate the tracks to 'print' these changes. Remember to disable warping afterward to save CPU resources, especially for large sets.

Handling Edits in Rehearsal: Be prepared to make quick edits based on feedback during rehearsal. This includes adjusting arrangements, volumes, and even song keys or tempos.

Saving and Extracting Edits: After making edits during a rehearsal, ensure to save these changes. If these edits need to be applied to individual songs outside the set, use the extraction process to update the individual song files.

TRANSFORMING TRACKS ON THE FLY: THE TOOLS NEEDED FOR QUICK EDITS

Here's some of the powerful tools and techniques available in Ableton Live for editing songs quickly-particularly in a rehearsal:

Edit Time Commands: Remember keyboard shortcuts for editing time (found in the Edit menu). These commands, like cut time (Command + Shift + X), are essential for efficient editing.

Editing Clips: You can adjust the start and end points of clips, split clips, duplicate, and delete. Use shortcuts like Command + D for duplicating and Command + X for cutting. Deactivating clips (using '0') is also a useful feature.

Applying Fades and Crossfades: Use fades to smoothly transition between parts of a song. You can apply fades in and out on individual clips and create crossfades between sections for seamless transitions.

Editing Cues: Adjusting cue points is crucial, especially if you have changed the song structure. Ensure your cues match the new arrangement for clarity during playback.

Changing Key or Tempo with Warping: Warping allows you to change the key and tempo of your tracks. Remember to select the appropriate warp mode (like Complex Pro) for best results, especially when changing pitch.

Song Programming Consolidation: After making edits, consolidate your programming clips to ensure they are easy to manage and use. This step involves combining multiple smaller clips into one larger clip for each track.

Consolidating Stems: If you've made significant changes, consider consolidating the stems. This process essentially 'prints' your edits into the audio files, ensuring they remain consistent.

TRANSFORMING TRACKS ON THE FLY: THE TOOLS NEEDED FOR QUICK EDITS

Saving and Managing Edits: Save your edited version as a new project within the song folder. This keeps your original and edited versions separate but organized. Always use the "Collect All and Save" feature in Ableton Live to ensure all necessary files are included in your project.

By mastering these editing techniques in Ableton Live, you can transform and tailor your music productions to fit specific needs or creative visions. These tools provide the flexibility to make quick changes during rehearsals or to experiment with different arrangements and sounds. Whether you're a producer, music director, or performing artist, these skills will enhance your ability to work effectively with music tracks in Ableton Live. Remember, practice and experimentation are key to becoming proficient with these tools and applying them creatively in your music projects.

Keyboard Shortcut	Action in Ableton Live
Command + Shift + X (Mac) / Ctrl + Shift + X (Windows)	Cut Time
Command + Shift + V (Mac) / Ctrl + Shift + V (Windows)	Paste Time
Command + D (Mac) / Ctrl + D (Windows)	Duplicate
Command + X (Mac) / Ctrl + X (Windows)	Cut
Command + V (Mac) / Ctrl + V (Windows)	Paste
Delete	Delete Clips
0 (Zero)	Deactivate Clips
Command + Option + F (Mac) / Ctrl + Alt + F (Windows)	Apply Fades/Crossfades
Command + J (Mac) / Ctrl + J (Windows)	Consolidate Clips
Spacebar	Start/Stop Playback
c	Count-in for Playback

THE PLAYBACK METHOD™:
PERFORM

Now it's time to step on-stage.

Learn how to transform sound checks from chaotic to blissful, tailor and save unique song arrangements, and efficiently reorder setlists on the fly.

Learn the skills needed for a flawless performance, so you can stay focused on the music-and having fun.

OPTIMIZING YOUR COMPUTER FOR THE STAGE

- **Disable iCloud Optimized Mac Storage**: If you're using iCloud Drive on a Mac, ensure that the "Optimized Mac Storage" feature is turned off to prevent files from being automatically moved to the cloud.

- **Use "Local" Files Only:** All necessary files for the show should be stored locally on your device, not just in cloud storage like Dropbox.

- **Turn On 'Do Not Disturb':** Activate 'Do Not Disturb' on your Mac to prevent distractions from messages and calls.

- **Disable Sound Effects:** Turn off sound effects and change their output to prevent them from being broadcast through your main audio output.

- **Energy Saver Settings:** Turn off all energy-saving features like sleep mode, hard disk sleep, etc., to ensure continuous operation.

- **Screen Saver Settings:** Set the screen saver to 'never start' and adjust display turn-off settings to ensure your screen stays active.

- **Hot Corners:** Disable 'Hot Corners' to prevent accidental activation of commands by mouse movement.

- **Disable Bluetooth and Wifi:** Turn off Bluetooth and Wifi to prevent interference and unauthorized connections (like Airdrop).

- **Close Unnecessary Programs:** Ensure that only Ableton Live is running during the performance. Close all other applications.

- **Turn Off Syncing Services:** Disable any automatic backup or file syncing services, like Backblaze, that may interfere with the performance.

- **Plugged-In Power:** Always make sure your laptop or device is plugged into a power source to avoid running out of battery during the performance.

SOUND CHECK CHAOS TO SOUND CHECK BLISS: PERFORMING A LINE CHECK

A line check is a crucial step in the process that ensures the accuracy and consistency of your audio setup. Conducting a thorough line check can significantly improve the efficiency of sound checks and rehearsals, leading to a smoother performance overall. It ensures all technical aspects are correctly set up and functioning before the performance begins.

- A line check is a process to verify that each input corresponds to the right channel on the soundboard. This involves checking each microphone, instrument, in-ear pack, and other inputs to ensure they are correctly connected and functioning as intended.
- **Implementing a Line Check for Playback:** I suggest using the Line Check Template included with this lesson. This will give you all the tools you need to properly line check your playback system.
- **Adding the Line Check Template to Your Set:** Drag the appropriate line check file (based on the number of outputs you use) into your Ableton set. I demonstrates this with an example of a 12-output setup.
- **Using Test Tones and Samples:** The template includes options like white noise and a 1 kHz test tone, which provide a consistent level for checking each output. These tones can help identify any issues with levels or faulty cables.
- **Checking Each Output Individually**: You can either run all line check samples simultaneously and solo/unmute channels accordingly or stagger them to play sequentially. This helps ensure that each output is correctly labeled and functioning.
- **Customizing the Line Check Process:** Depending on your setup, you might want to create your own samples or modify the existing ones in the template.
- **Organizing and Safeguarding the Line Check in Your Set**: It's important to place the line check at a point in your set where it won't be triggered accidentally. Consider grouping the line check tracks and moving them to the end of the set for this purpose.

MASTERING PLAYBACK ON STAGE: TIPS & TRICKS FOR A FLAWLESS PERFORMANCE

The performance stage is where everything matters. As a playback engineer, this is the moment we've been working towards. The countless hours of preparation and effort we've put in up to this point allow us to focus on the performance itself.

Because we've put in all the work, this step in the process is the easiest.

By maximizing your screen real estate, using follow mode, and mastering the art of transitioning between songs, we can ensure a seamless and successful performance.

Optimizing Screen Real Estate:

- Maximize the screen space by closing unnecessary views in Ableton Live, like the browser, info view, clip view, arrangement track controls, and return tracks.

- Stay in Arrangement View for an overview of the set and individual songs.

- Zoom in on specific songs by click on the song title clip and typing 'Z' for detail and use 'X' to zoom out for a broader view.

- Enable Follow Mode to keep the screen moving in real time with the playback.

Starting and Transitioning Between Songs:

Use a MIDI controller with mapped buttons for Play, Stop, Previous, and Next.

- Double-click Stop to go to the beginning of the set.
- Use the Play button to start songs and the Next button to skip to the next song.
- You can let songs roll into each other or stop between songs, depending on the performance needs.
- Optionally, use keyboard shortcuts to select and start specific songs. For example, press 1 to select song one, and spacebar to start the song.

- **Looping Sections During Performance**:
  - In cases where you need to loop a section (like an intro), use the Previous Locator button on your MIDI controller in the last measure of the section.
  - Ableton's global quantization (set to 1 bar) ensures that actions like looping happen at the correct musical time.
  - Be mindful of cues and communicate with the band during these moments

- **Handling Unexpected Situations:**
  - In case something goes wrong, you can solo the click track or cues to keep the song going.
  - Use the Previous Locator button to jump back to the correct section.
  - Advanced techniques can help fade out and fade back in, or realign the beat if the band and Ableton fall out of sync.

- **General On-Stage Strategy:**
  - Keep the approach simple and flexible, allowing for real-time adjustments.
  - The preparation done beforehand in Ableton sets the stage for a smooth performance.
  - Consider adding a button for soloing the click track or managing faders in case of emergencies.

EXTRACTING & SAVING CUSTOM ARRANGEMENTS

Throughout the course, we've stressed the importance of maintaining a separate songs and sets folder. This is easy to do if you're programming songs and sets separately. But what do you do if in the moment, you've created a unique arrangement of a song within your set? How do you "extract" that new arrangement from your full set?

Here are the key steps:

- **Save the Set with the Edited Song:** Start by saving the entire set that contains the edited song. Choose a specific name that reflects the edit (e.g., "Imagination - Double Intro") to make it easily identifiable.
- **Locate and Isolate the Edited Song:** Open the set and find the song you have edited. You will isolate this song by removing other elements from the set.
- **Delete All Other Songs:** Select and delete all songs and elements to the left and right of the edited song. Use Delete Time (command shift delete) to remove these tracks, ensuring that you are only left with the edited song.
- **Consolidate the Edited Song:** If you have made any changes to the arrangement of the song (like duplicating sections, cutting parts, etc.), you should consolidate these changes. Select all parts of the song and use (command J) to consolidate them into a single, continuous clip.
- **Rename and Clean Up Song:** Ensure that all cues and markers are correctly labeled and match the edited arrangement.
- **Collect All and Save:** Once you have your edited song isolated and consolidated, go to File > Collect All and Save. This step is crucial as it gathers all the necessary files and samples related to the edited song into one folder, making the file self-contained and portable.
- **Check the Saved Folder:** Locate the folder where you saved the edited song on your computer. It should contain all the necessary files and samples, making it easy to import or use in different sets or performances.

By following these steps, you can efficiently extract and save any specific song edits from a larger Ableton Live set. This process allows you to maintain an organized library of song versions and arrangements, ready to be used in various performance contexts.

THE QUICK & EASY METHOD TO REORDER SONGS ON STAGE

The only thing that doesn't change when working with artists, is the fact that everything will change! One of the most common requests is to re-order songs in your set, after you've already programmed it. Here's a few quick ways to re-order songs

Quick Manual Reordering:

If the songs don't flow into each other, simply change the order of triggering the songs using the MIDI controller or keyboard shortcuts.

- For instance, if you need to swap the second and third songs, finish the first song, then select and play the third song instead of the second.
- This method doesn't require changing the actual arrangement in Ableton Live. This is the easiest and simplest way to to re-order songs.

Reassigning Keyboard Shortcuts:

If you have a little more time (a few minutes before the show), you can reassign the keyboard shortcuts for each song.

- Use Command + K to open key mapping mode in Ableton Live.
- Reassign the locators for each song according to the new order (e.g., change the locator for the third song to 2, and the second song to 3).
- Rename the locators for clarity. If you changed locator 3 to 2, rename it to 2-SONG NAME, so that it's clear which song is which.

Actual Reordering in the Set:

For a more thorough reordering with some time beforehand (around ten minutes before the set), you can rearrange the songs in the set itself.

- Use Command + Shift + X to cut time (the song) and Command + Shift + V to paste it in the new position. You can click anywhere in the timeline to choose that time and use the paste time command to split the songs and paste the clip in.
- Readjust any stems that may have moved during the process and ensure the tempo is correctly set (using Lead and Unfollow Tempo Automation).
- Re-add any locators that were lost in the process and remap them using keyboard shortcuts.
- Swap the stems around for visual clarity and remap the song shortcuts.

These manual methods in Ableton Live are handy when you need to make a few small changes, but if you're planning on doing this often, you need to consider a setlist management solution. We'll cover these in-depth in The Advanced Playback Method.

THE PLAYBACK METHOD™: OPTIMIZE

Imagine if you were able to know the true "limits" of your computer before you step on stage.

In this stage you'll learn:
- What the CPU Limit of your setup is.
- How many tracks your songs can have.
- How many songs you can have in one set.
- What the CPU usage of all your MIDI devices is.

OPTIMIZING YOUR COMPUTER FOR LIVE PERFORMANCE

WHAT'S OUR CPU LIMIT

Discover the CPU limit of your computer and optimize for latency or CPU usage. Learn how to use the CPU usage simulator to find the highest CPU level before audio issues arise. Learn how to adjust your settings for optimal performance and low latency. Whether you're a live looping artist or focused on processing, find the right balance for your setup.

FINDING YOUR CPU LIMIT PROCESS

1 CONNECT AUDIO INTERFACE & HEADPHONES

Connect the audio interface that you'll use and connect headphones so you can monitor audio through your interface.

2 CLOSE ALL OTHER APPS

Close all other apps on your computer, so that only Ableton Live is open.

3 CHOOSE SAMPLE RATE

Start by setting the sample rate. I suggest 44.1 kHz. If you're processing audio in realtime (live looping or virtual keys), choose the highest sample rate for the lowest latency.

4 CHOOSE BUFFER SIZE

For Apple silicon Macs, buffer size can't exceed 256. Start with the lowest possible buffer size for lower latency, then increase if necessary.

5 USE CPU USAGE SIMULATOR

Set the simulator to 80% and listen for audio issues like clicks, pops, or dropouts.

6 ADJUST CPU LIMIT OR BUFFER SIZE

If experiencing audio issues, either lower the CPU limit to optimize for low latency or increase the buffer size to optimize for CPU usage.

7 ADJUST CPU LIMIT OR BUFFER SIZE

Continuously test the setup by adjusting buffer size and sample rate to find an optimal balance between CPU usage and acceptable latency.

CPU LIMIT DATA

SAMPLE RATE	
BUFFER SIZE	
TOTAL LATENCY	
CPU LIMIT	

HOW MANY SONGS CAN YOU LOAD IN ONE ABLETON SET?

Discover how many songs you can have in your Ableton set without overloading your CPU. Learn the math and estimations to determine the approximate CPU usage for different song sets. No matter what sample rate and bit depth your stems are or if you're warping your stems, find out how many songs you can comfortably run in your set and ensure you have enough headroom for other elements. Plus, learn how to adjust your file quality to accommodate larger song sets.

Use your CPU Peak and the chart below to estimate how many total songs you can load into one Ableton Set at a time.

Clip CPU Peak	Estimated CPU Usage	Number of Songs	Song CPU Peak	CPU Headroom (CPU Limit-Song CPU Peak)
	2 x Clip CPU Peak %	10		
	4 x Clip CPU Peak %	20		
	8 x Clip CPU Peak %	40		
	16 x CPU Peak %	80		
	(Estimated between 40 and 80 song CPU usage)	50		
	50 song CPU x 2	100		

1   ESTIMATE CPU FOR 10-SONG SET

Double the CPU peak percentage to estimate the CPU usage for a 10-song set.

2   CONSIDER CPU FOR LARGER SETS

Continue doubling the CPU estimate to calculate the usage for 20, 40, 50, and 100-song sets.

3   CONSIDER CPU THRESHOLD & HEADROOM

Ensure the calculated CPU percentages fall within your system's CPU threshold and leave enough headroom for other processes.

4   ADJUST FOR WARPED TRACKS & SAMPLE RATES

If using warped tracks or different sample rates, adjust your calculations to reflect the increased CPU usage.

SAMPLE RATE	
BUFFER SIZE	
TOTAL LATENCY	
CPU LIMIT	

MAXIMUM TRACK LIMIT	
TRUE TRACK LIMIT (IF USING TRANSITIONS)	
CLIP CPU PEAK	
CPU HEADROOM (CPU LIMIT- CLIP CPU PEAK)	

10 SONG ESTIMATED CPU PEAK	
10 SONG CPU HEADROOM	
20 SONG ESTIMATED CPU PEAK	
20 SONG CPU HEADROOM	

40 SONG ESTIMATED CPU PEAK	
40 SONG CPU HEADROOM	
80 SONG ESTIMATED CPU PEAK	
80 SONG CPU HEADROOM	

50 SONG ESTIMATED CPU PEAK	
50 SONG CPU HEADROOM	
100 SONG ESTIMATED CPU PEAK	
100 SONG CPU HEADROOM	

FINDING THE CPU LIMIT OF OUR MIDI DEVICES

If using MIDI devices of instruments in your set, you'll need to find the CPU usage of your MIDI devices in your set and add that to your calculations.

1 **OPEN YOUR SET WITH MIDI DEVICES**

Open an Ableton Set with only your MIDI devices loaded in.

2 **MAX OUT ALL POSSIBLE CPU USAGE**

Max out the CPU usage of your devices. For example, with instruments, sustain the max number of keys that will take advantage of all possible polyphony, and increase and use all available effects you would typically use.

3 **NOTATE YOUR MIDI CPU LIMIT**

Using the chart below, notate your MIDI CPU limit.

4 **FOUNDATIONS/CUE PLAYER CPU USAGE**

As a placeholder, use 5% as the CPU Usage of Foundations and the cue player usage, or test on your actual machine to find more accurate values.

Sample Rate	
Buffer Size	
Total Latency	
CPU Limit	
Maximum Track Limit	
True Track Limit (If Using Transitions)	
Clip CPU Peak	
CPU Headroom (CPU limit- Clip CPU peak)	
10 Song Estimated CPU Peak	
10 Song CPU Headroom	
20 Song Estimated CPU Peak	
20 Song CPU Headroom	
40 Song Estimated CPU Peak	
40 Song CPU Headroom	
80 Song Estimated CPU Peak	
80 Song CPU Headroom	
50 Song Estimated CPU Peak	
50 Song CPU Headroom	
100 Song Estimated CPU Peak	
100 Song CPU Headroom	
MIDI Device CPU Usage	
CPU Headroom	

THE PLAYBACK METHOD™:
HANDS-FREE

Learn advanced programming skills to use Playback "Hands-Free" on stage, allowing you to focus on the music and stay in the moment.

- Master custom cues and the Custom AI cues player for improved on-stage communication
- Implement advanced song and set programming skills for hands-free operation
- Learn to use these skills with Setlist management solutions and The Advanced Playback template

INTRO TO ADVANCED PROGRAMMING SKILLS

Welcome to Stage 6 of The Advanced Playback Method ™. The goal of this stage is to simplify our live performance setup with advanced programming techniques. This stage is designed for those who have mastered the basics of song and set programming and are ready to make their set fully "hands-off". We'll explore custom cues, advanced song and set programming, and look at implementing these skills with both setlist management solutions, and using the Advanced Playback Template.

USING THE ADVANCED PLAYBACK TEMPLATE

- Learn when to use the Advanced Playback template, and when to use a Setlist management solution instead.

- Use the playback advanced template in conjunction with a virtual MIDI driver (LoopBe1 for Windows or IAC Driver for Mac) for pre-configured control setups.

CREATING CUSTOM CUES

- Learn how to design custom cues, song titles, and song sections, including the creation of completely custom cue voices.

- Understand the importance of having separate cue players for different members of the performance, such as the artist, band, MD, and others.

ADVANCED SONG PROGRAMMING

- Set up one-button loops and repeats for effortless control during performances.

- Pre-program loops to automatically repeat song sections.

- Implement dynamic cues to change your cues when repeating song sections.

ADVANCED SET PROGRAMMING

- Set up Ableton to stop automatically after each song.

- Set up Ableton to pause and then go to the next song, allowing you to navigate your set by simply pressing play.

- Learn how to reorder songs in your setlist quickly, without building a new set.

- Learn how to fade in and out tracks using only one button on your MIDI controller.

SETLIST MANAGEMENT SOLUTIONS

- Explore setlist management solutions like Setlist, AbleSet, LIOBOX, Taz SP and Conductor for advanced level programming.

- Integrate plugins or hardware devices (such as the LIOBOXv2 or the Floor Vista) for enhanced song and set programming capabilities.

ADVANCED SONG PROGRAMMING SKILLS: PLAYBACK ADVANCED TEMPLATE

If you don't have a setlist management solution, you can choose to use the Playback Advanced Template.

- Learn what's included in the Playback Advanced Template and if it's right for you
- Learn how to transfer files programmed with the playback basic template to the advanced template
- Learn how to customize the Playback Advanced Template

WHAT'S THE ADVANCED PLAYBACK TEMPLATE & IS IT RIGHT FOR ME?

Let's take a quick look at The Advanced Playback Template, so you can decide
if it's right for you.

1 **UNDERSTANDING THE TEMPLATE:**

- The Advanced Playback Template in Ableton can be used with just a virtual MIDI driver (LoopBe1 on Windows or IAC Driver on Mac).

- The template includes advanced programming features that work with any version of Ableton Live.

2 **TEMPLATE OR SETLIST MANAGEMENT:**

- Decide on either using a Setlist management solution, or the Advanced Playback Template.

- If you're using AbleSet, LIOBOX, Conductor, or Taz SP/Pro you can use the advanced playback template as well, without causing any conflicts.

- If you're choosing Setlist as your setlist management solution, you can not use the Advanced Playback Template because the IAC Driver will create a MIDI feedback loop and cause issues with Setlist.

- If you're using the template with your setlist management solution, only use the template for features unavailable in your setlist management tool.

3 **TEMPLATE CUSTOMIZATION:**

- Consider leaving the "dynamic cues" track if you want to have your cues reflect the fact you're looping a song section.

- You can use the song, click, tempo, cues, and markers track whether you're using the advanced features of the template or not.

4 **ELIMINATE UNUSED FEATURES:**

- Remove features like "stop", "select next song", and "repeat control" if they are replicated within your setlist management tool.

- Delete any unused MIDI mappings, found in the MIDI mappings browser, to avoid any conflicts with MIDI mapping.

5 **TEMPLATE ONLY FEATURE:**

- The one-button fade in/out is the only feature of the Advanced Playback template that can only be accomplished with the Advanced template.

- You can use the Advanced Playback template and this feature with any compatible setlist management solution like, AbleSet, TazSP, Conductor, or LIOBOX.

6 **STARTING POINT:**

- Use the advanced template as a starting point to develop your programming skills in Ableton.

- Gradually transition to using setlist management tools as you become more comfortable with the template and need more complex features.

7 **FINAL CONFIGURATION:**

- Adjust the template by keeping essential elements and removing incompatible features based on your chosen setlist management tool.

- Review MIDI mappings and delete any unused mappings.

- Delete any extra tracks or MIDI clips that you aren't planning on using.

- Disable the virtual MIDI driver if your using Setlist, due to the incompatibility with Virtual MIDI drivers.

PLAYBACK ADVANCED TEMPLATE INTRO & WALKTHROUGH

Let's take a look at what's included with the template.

1 **PREPARATION:**

- Ensure you have completed The Playback Method™: Program stage, to understand how to properly program songs and sets.

- Gain experience with the basic playback template, as the advanced template builds on these foundational skills.

2 **UNDERSTANDING THE TEMPLATE:**

- Recognize that not all features in the template need to be used. Customize the template based on your specific needs in upcoming sessions.

- Delete any additional MIDI mappings or clips and tracks you're not planning on using.

3 **NAVIGATING WITH LOCATORS:**

- Learn to use the increased number of locators (20 instead of 8). These are pre-mapped to your keyboard (1-9, Q-left bracket) to facilitate easy navigation through songs in a setlist.

4 **GLOBAL PROGRAMMING TRACKS:**

- The song and markers tracks are exactly the same in the basic and advanced templates.

- The dynamic cues track allows you to hear the correct cue when repeating song sections.

5 | MIDI DRIVERS AND SONG TRANSITIONS:

- Use the IAC Driver (Mac) or LoopBe1 (PC) to handle song transitions. Learn to set up MIDI clips that can stop a song or select the next song automatically.

- This can allow you to treat the Advanced Playback Template as if it's a setlist management solution.

6 | ADVANCED TRACK USAGE:

- Repeat/Loop Track: Set up loops within songs without using Ableton's built-in loop brace.

- Control Track: Explore various control options like adding locators dynamically during a set.

- Fade Track: Create fades based on song tempo using a single button on your MIDI controller (pre-mapped to return tracks).

7 | RETURN TRACKS:

- Rename and reorder return tracks as needed. Review The Playback Method™: Prep stage to learn more about how return tracks are used.

- In the advanced template, the return tracks have been automatically mapped to the one-button fade in/out control, to easily fade out all "tracks" in case of emergency with only one button on your MIDI controller.

TRANSFERRING FILES TO THE PLAYBACK ADVANCED TEMPLATE

If you're working through the course in order, you've likely committed time to programming songs with the basic Playback template. In this lesson, we'll discuss the differences between these templates, if you should use the advanced template, and how to transfer songs between templates.

1 **UNDERSTANDING ADVANCED / BASIC DIFFERENCES**

- The advanced playback template is designed to build upon the skills and structure used in the basic template, making it easy to transition without reprogramming songs from scratch.
- The main difference between the advanced template and the basic template, is the addition of functionality using a virtual MIDI driver. This allows you to accomplish the advanced song and set programming techniques covered in the "Hands-Free" section of the course using only the template.
- If you're using a setlist management solution to accomplish these advanced programming techniques, stick with the basic template.

2 **USING BASIC TEMPLATE SONGS IN THE ADVANCED TEMPLATE**

- Duplicate the advanced template set for safety.
- Open the advanced template and save a new copy using "File > Save Live Set As" and then use "Collect All and Save" to ensure all files are included.
- Drag and drop songs formatted in the basic template into the advanced template set.
- If you haven't customized the structure of the global programming tracks in your basic template, the files are compatible and will fit seamlessly into the advanced template structure.
- Reorganize tracks as necessary, following the same steps as building a set with the basic template.

3 **ADVANTAGES OF UPGRADING TO THE ADVANCED TEMPLATE**

The advanced template offers additional functionalities like stopping playback at the end of each song or setting up one-button repeats. These features require the advanced template for proper execution.

HOW TO CUSTOMIZE THE PLAYBACK ADVANCED TEMPLATE

If you're going to use The Playback Advanced Template, there's likely some things you'll want to tweak and change. I don't even use every feature of this template. Let's take a look at some of the things we have the flexibility to change, and the things that must remain the same.

1 DON'T CHANGE

- Keeping your "tempo track" is essential to be able to "save" your tempo with each song.
- Consider keeping your "markers" track so you can store your song sections with each song, and easily navigate your song while on-stage.
- While you can use an audio click instead of Foundations, consider keeping the click track as a MIDI to maintain flexibility in adjusting click sounds and subdivisions.
- While you can use audio cue files instead of the cue player, consider keeping the cue player in its original MIDI format to avoid losing flexibility.

2 DELETING UNNECESSARY TRACKS

- If using third-party tools like Setlist which interfere with MIDI drivers, remove incompatible tracks (e.g., stop track, select tracks, next song, repeat control) and disable any virtual MIDI drivers, or stick with the Basic Playback template.
- If you're using AbleSet, TAZ, LIOBOX, or Conductor, consider deleting tracks that the plugin handles instead of relying on a virtual MIDI driver. For example, repeat, stop, control tracks or you can use the Playback Basic Template instead.

3 CUSTOMIZING RETURN TRACKS

- Review and rename return tracks to match the instruments in your set.
- Group tracks according to your needs, excluding any instruments not needed (e.g., lead vocals).
- If the number of return tracks (limited to twelve) is insufficient, review our lesson in The Playback Method™: Prep stage that explains how to work around this limitation.

4 ADDING AND MAPPING LOCATORS

- Add more locators as needed for your template setup. For example, insert a locator at a specific measure and map it for quick access.

5 SAVING THE CUSTOMIZED TEMPLATE

- Navigate to File > Save Live Set As.
- Save the customized template in a specific folder, ideally in a templates folder as previously discussed.
- Name the file in a way that you can distinguish it from the template you've downloaded from the site.
- Use the "Collect All and Save" function in Ableton to ensure all elements, such as samples from the cue player or click track, are included in your template.
- Make sure to backup your template in multiple places, as it's the only copy of your customized template available.

HOW TO SETUP AND CUSTOMIZE YOUR TEMPLATE FOR REDUNDANCY

If you're planning on using the PlayAUDIO1U, there's a quick addition you should make to your template .

1 **OPEN YOUR TEMPLATE:**

- Start by opening the playback template you've customized for your needs.

2 **LOCATE LIFESINE PLUGIN:**

- If you haven't installed LifeSine yet, download from the iConnectivity site and install in Ableton.
- Find the LifeSine plugin within your software tools.

3 **INSERT LIFESINE BELOW GLOBAL PROGRAMMING TRACKS:**

- Drag and drop the LifeSine plugin into your template.
- Place it specifically below the last global programming track to avoid conflicts with other tracks. In the Playback Advanced Template, we'd add it below the "fade" track.

4 **RENAME THE TRACK:**

- Rename the newly added track to something easy to understand, like "Tone" or "LifeSine".

5 **CLOSE THE PLUGIN WINDOW:**

- After placing and naming the LifeSine plugin, close the plugin window.

6 **CONFIGURE AUDIO ROUTING:**

- Navigate to Ableton's Preferences (CMD + ,)
- Navigate to the audio page and enable outputs 15/16.
- Navigate to the track that contains the Lifesine plugin and set the output to channels 15 and 16 to arm the interface automatically.

7   **COLOR CODE THE TRACK:**

- Apply a color to the LifeSine track to ensure it matches the aesthetic of your existing template setup.

8   **SAVE THE UPDATED TEMPLATE:**

- Perform a "Save As" operation to save the modified template with a new name.
- Navigate to File > Save Live Set As
- Save the customized template in a specific folder, ideally in a templates folder as previously discussed.
- Name the file in a way that you can distinguish it from the template you've downloaded from the site.
- Use the "Collect all and Save" function in Ableton to ensure all elements, such as samples from the cue player or click track, are included in your template
- Make sure to backup your template in multiple places, as it's the only copy of your customized template available.

9   **COLLECT ALL AND SAVE:**

- Use the "Collect All and Save" function in Ableton to ensure all elements, such as samples from the cue player or click track, are included in your template.

10   **BACKUP YOUR TRACK:**

- Save the updated template both locally and in cloud storage.
- Ensure you have multiple backups in different locations to secure your work.
- Navigate to File > Save Live Set As.
- Save the customized template in a specific folder, ideally in a templates folder as previously discussed.
- Name the file in a way that you can distinguish it from the template you've downloaded from the site.
- Use the "Collect All and Save" function in Ableton to ensure all elements, such as samples from the cue player or click track, are included in your template.
- Make sure to backup your template in multiple places, as it's the only copy of your customized template available.
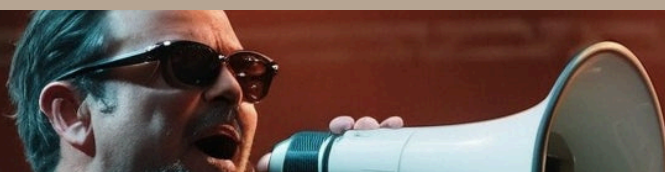
ADVANCED SONG PROGRAMMING SKILLS:
CUSTOM CUES

Go beyond the cues included in the Cues player and create custom AI generated cues.

- Learn how to create your own custom cues and slates
- Learn how to add your own song sections to the custom cues player
- Learn how to create custom pitch references and custom vocal cues to your programmed songs

ADVANCED SONG PROGRAMMING SKILLS: CUSTOM CUES

CREATING CUSTOM CUES USING AI

Let's look at how to generate custom cues using AI voice synthesis from Eleven Labs. While AI is certainly a current "buzz word", we're not using it simply because it's AI. Since all of the cues in the cues player were created using AI, this means you're able to use the same voice (without hiring a studio voice over artist) to say whatever you want. You can use the AI generator to create song titles, custom song sections, and even create some fun easter eggs to surprise your band and keep them motivated. (I know you'll use the custom voices to randomly swear at various band members during the set…just make sure these remain only in the ears.. Hey.. we all do it..)

1 SIGN UP FOR ELEVEN LABS

- Start by signing up for a free account on Eleven Labs. This is necessary to access the voice synthesis features and manage your custom cues.

2 SELECT A VOICE

- Below the lesson video, find links to five different AI-generated voices. Choose one that you'd like to use to generate custom cues.
- While there's five different voices includes, I'd suggest sticking with one voice for consistency unless you need multiple voices for varied cues.

3 ADD THE VOICE TO YOUR ACCOUNT

- Click the link for the voice you chose, which will direct you to the Eleven Labs website. If you're not already logged in, you will need to sign in or create an account.
- Once logged in, add the selected voice to your account by following the prompt. The default name of these voices will be shown on Eleven Labs, I highly suggest changing this to reflect the name in the cues player (i.e. Vox 2, Vox 3, etc..)

4 GENERATE YOUR CUSTOM CUE

- Use the speech synthesis engine to input the text for your cue, such as "guitar solo" or any other specific section of your song.
- Experiment with generating the cue multiple times to achieve the desired timbre. Download the best version as an MP3 file.
- Navigate to File > Save Live Set As.
- Save the customized template in a specific folder, ideally in a templates folder as previously discussed.
- Name the file in a way that you can distinguish it from the template you've downloaded from the site.
- Use the "Collect All and Save" function in Ableton to ensure all elements, such as samples from the cue player or click track, are included in your template.
- Make sure to backup your template in multiple places, as it's the only copy of your customized template available.

5 DELETE EMPTY SPACE

- Drag your cue into Ableton Live.
- Zoom in to the beginning of your cue and find the start of your cue.
- Highlight any extra space and hit delete on your keyboard to delete any extra space at the front of your cue.

6 CONVERT THE MP3 TO WAV FORMAT

- Before using your custom cue, convert the MP3 file to WAV format, to avoid any issues with Ableton.
- Highlight the entirety of your cue, and press Command + J or Control +J on PC to re-render your file and convert from MP3 to WAV format.

7 BEST PRACTICES FOR CREATING CUES

- I recommend generating and exporting cues individually rather than in strings for easier management. For instance, create separate cues for "Fields of Dreams" and "Never Going to Let Go" instead of a combined cue.
- Navigate to File > Save Live Set As.
- Save the customized template in a specific folder, ideally in a templates folder as previously discussed.
- Name the file in a way that you can distinguish it from the template you've downloaded from the site.
- Use the "Collect All and Save" function in Ableton to ensure all elements, such as samples from the cue player or click track, are included in your template.
- Make sure to backup your template in multiple places, as it's the only copy of your customized template available.

ADVANCED SONG PROGRAMMING SKILLS: CUSTOM CUES

CREATING SONG TITLE SLATES WITH THE CUSTOM CUES PLAYER

If we're going to move our Playback system off-stage (more on this soon), how will we know what song we're about to play? Without needing to buy a "smart" MIDI controller, or over-engineer a way to see your computer screen on-stage, we can use song title "slates" in order to know exactly what song is about to be blasted through the Front of House speakers, before we hear it. This gives up a few seconds to stop things if they went haywire, before we go full Ashlee Simpson on SNL.

1 GENERATE INDIVIDUAL SONG CUES

- Use Eleven Labs to create a custom cue for each song.
- Generate cues one at a time for accuracy, avoiding the potential mix-up of cues.
- Download the generated cue and rename it for easy identification (e.g., "Never Gonna Give You Up-Vox-1").

2 PREPARE AND CONVERT THE CUE

- Drag the cue into Arrangement View in any open audio track.
- Trim any empty space at the beginning of the cue to ensure it starts immediately.
- Convert the MP3 cue file into a WAV file for better quality and compatibility.

3 PLACE THE CUE IN YOUR SET

- Decide on the placement of the cue within your song's arrangement.
- Avoid adding the cue to a group track to maintain flexibility in routing.
- I suggest putting the cue above your song stems in a dedicated "song cues" track.

4 ADJUSTING THE BASIC TEMPLATE

If you're using the Basic Template, you'll notice the Song Title cue is MIDI. If you're planning on using Song title Slates, I suggest updating this track in your template to be an audio track, and placing your "slates" in this track.

4 ADJUSTING THE BASIC TEMPLATE (CONT.)

- Navigate to File > Save Live Set As.
- Save the customized template in a specific folder, ideally in a templates folder as previously discussed.
- Name the file in a way that you can distinguish it from the template you've downloaded from the site.
- Use the "Collect All and Save" function in Ableton to ensure all elements, such as samples from the cue player or click track, are included in your template.
- Make sure to backup your template in multiple places, as it's the only copy of your customized template available.
- Drop your song slate cue into the Song Titles Track at the top of your set.
- Drag your song slate to the start of the song.
- Consolidate the cue with the song's length to maintain alignment. You can highlight the length of the entire song, and press Command + J or Control J to consolidate to a single audio track.
- Rename your audio clip if need to match your song title, (i.e. NEVER GONNA GIVE YOU UP)
- Make sure to route the audio output of this track to match the audio output of your current cues track.

5 OPTIMIZING CUE PLACEMENT

- Carefully position the cue to avoid overlap with the song's intro or click tracks.
- If necessary, insert additional measures at the beginning of the track to accommodate the cue. For example, I'll often move my song slate a quarter note before the start of my song to avoid clashing with the count-in.
- Re-render and consolidate your song's stems if you've adjusted the arrangement to include the cue at the start.
- Disable warping on the cue to prevent CPU load and ensure playback stability.
- Navigate to File > Save Live Set As.
- Save the customized template in a specific folder, ideally in a templates folder as previously discussed.
- Name the file in a way that you can distinguish it from the template you've downloaded from the site.
- Use the "Collect All and Save" function in Ableton to ensure all elements, such as samples from the cue player or click track, are included in your template.
- Make sure to backup your template in multiple places, as it's the only copy of your customized template available.

CREATING & ADDING CUSTOM SONG SECTIONS TO YOUR CUE PLAYER

Let's look at how to create and integrate custom cues into your Ableton sets.

INTRODUCTION TO CUSTOM CUES IN ABLETON

1 OPEN THE TEMPLATE

Open either the Basic or Advanced template, or your own custom template that includes the AI cues player.

2 IDENTIFY MISSING CUES

Determine what specific cues are missing in your cue player that you need for your song sections.

3 GENERATE CUSTOM CUES

Use Eleven Labs and a voice from the cues player to generate the custom cues you've identified as missing.

4 RENAME & ORGANIZE CUES

Download and rename your generated cues for easy identification and organization.

5 ADD CUES TO ABLETON SET

Import your cues into Ableton, starting with the arrangement view, and adjust their start points to eliminate silence.

PREPARING CUES IN ABLETON

1 CONSOLIDATE AND CONVERT CUES

Consolidate each cue and convert them to WAV files, ensuring to turn off warp for each clip.

2 RENAME CLIPS FOR CLARITY

Rename each clip appropriately in Ableton to reflect the specific cue it represents.

3 ADD CUES TO DRUM RACK

Import your cues into the drum rack of the cue player, organizing them according to your preference. I suggest adding all new cues after the current cues, so any existing programming remains unchanged.

- Navigate to File > Save Live Set As.
- Save the customized template in a specific folder, ideally in a templates folder as previously discussed.
- Name the file in a way that you can distinguish it from the template you've downloaded from the site.
- Use the "Collect All and Save" function in Ableton to ensure all elements, such as samples from the cue player or click track, are included in your template.
- Make sure to backup your template in multiple places, as it's the only copy of your customized template available.

1 **PREVIEW AND RENAME CUES**

Preview your cues by pressing the play button on each cell in the drum rack, to ensure they play correctly and rename them within the drum rack for easier identification.

2 **INSERT NEW SCENES FOR CUES**

In the session view, insert new scenes for each cue, ensuring they're properly labeled.

3 **ADJUST CLIPS FOR CUE TRIGGERS**

Modify the MIDI notes for each cue scene to trigger the correct cue.

ADVANCED TEMPLATE ADJUSTMENTS

1 **CONFIGURE DYNAMIC CUES**

If using an advanced template, replace and duplicate the dynamic cues track, renaming and organizing it according to your setup.

2 **SAVE & ORGANIZE YOUR TEMPLATE**

Save your new cue setup, either by updating your existing template or by saving it as a new project file. Most importantly, make sure to use Collect All and Save to bring any new samples into the Samples folder of your template.

USING CUSTOM CUES IN YOUR PROJECT

1   **INTEGRATE CUES INTO SONG PROJECTS**

Open your song project and integrate the new cues by dragging them into arrangement view and positioning them as needed.

2   **TEST CUES WITHIN SONGS**

Play your project to test the cues in context, ensuring they trigger correctly and at the appropriate times.

- Navigate to File > Save Live Set As.
- Save the customized template in a specific folder, ideally in a templates folder as previously discussed.
- Name the file in a way that you can distinguish it from the template you've downloaded from the site.
- Use the "Collect All and Save" function in Ableton to ensure all elements, such as samples from the cue player or click track, are included in your template.
- Make sure to backup your template in multiple places, as it's the only copy of your customized template available.

HOW TO CREATE CUSTOM PITCH REFERENCE CUES IN ABLETON LIVE

In this lesson, we'll look at how to use vocal cues and pitch references to reduce the stress and burden on your vocalists, and make sure they always start on the right note.

1 CREATE A MIDI TRACK IN ABLETON LIVE

- Open Ableton Live and navigate to the bottom global programming track (using the basic template, this would typically be a markers track).
- Press CMD + Shift + T to create a new MIDI track.
- Rename the MIDI track (e.g., "Pitch Reference") using Command + R.

2 SELECT AN INSTRUMENT FOR PITCH REFERENCE

- Go to Ableton Live's browser, find the Instruments section, and choose a piano sound (or any preferred instrument).
- Drag the chosen instrument into the MIDI track.
- If you'll be creating lots of pitch reference cues, it would be worth investigating the best sounds for your vocalist and saving as a preset.

3 CREATE A MIDI CLIP FOR PITCH REFERENCE

- Determine the length of the count-in for the song and create a MIDI clip that spans this length by clicking and dragging on the track.

4 INPUT THE STARTING PITCH

- Using a MIDI keyboard or the piano roll, find and input the starting pitch of the song into the MIDI clip.
- If uncertain, collaborate with the vocalist to decide on the most comfortable starting pitch.

5 ADD CUES TO ABLETON SET

- Play the MIDI clip to ensure the pitch reference is correct and at a comfortable octave for the vocalist.
- Make necessary adjustments based on feedback or personal judgment.

6 ROUTE THE PITCH REFERENCE TO THE APPROPRIATE OUTPUT

- Route the output of this track to the same output as your cues track.
- If you have enough outputs on your interface, you could consider routing this to an additional output on your interface, that only goes to the vocalist.
- If you're working with multiple vocalists, you could create separate pitch references for each vocalist, ensuring they can hear their starting note clearly.

7 OPTIMIZE THE PITCH REFERENCE TRACK FOR PERFORMANCE

- Right-click the track and select "Freeze" to minimize CPU usage, keeping the pitch reference ready for playback.
- Optionally, "Flatten" the track to convert it into an audio file for simplicity, though freezing is recommended for flexibility.

8 FINALIZE AND TEST THE SETUP

- Ensure the pitch reference works as intended during rehearsals, making any final adjustments for clarity and volume in the mix.

ADDING YOUR OWN CUSTOM VOCAL SAMPLES TO THE CUES PLAYER

What do you do if you've already programmed all your cues in your set, and suddenly the music director you're working with casually mentions they want to use their own vocal cues??!! While quitting might sound the most appealing option, if you're using the cues player, you can easily keep all your programming, and easily replace the voice samples you're using for each cue. This will allow you to make it through the gig despite your Music Director's lack of planning or communication (Thanks ALOT JOHN)... and save yourself hours of having to re-do your work.

1 INITIAL SETUP

- Open the template used for initial song programming
- Save the template under a new name (e.g., "Wills custom cues") to prevent altering the original template.
- Perform a "Collect All and Save" operation to ensure all samples are included in the new template.

2 PREPARING FOR CUSTOM CUES

- If not already available, ensure you have recordings for all desired cues (e.g., count-ins, song sections).
- Identify the existing cue player used in the template.

3 INTEGRATING CUSTOM CUES

- Access the cue player within your project and navigate to the device view.
- Duplicate an existing chain (e.g., "voice five chain") and rename it (e.g., to "custom cues").
- Adjust the chain selector to include the new custom cues chain as an option.
- Update the macro mappings to accommodate the addition of the custom cues chain.

4 ADDING CUSTOM VOICE SAMPLES

- Navigate to the custom cues instrument within the instrument rack.
- Replace existing cues with custom voice recordings by dragging and dropping the samples onto the appropriate drum pads or keys.
- Save changes to the custom cues instrument.

5 COLLECT ALL AND SAVE

- After adding all your new vocal samples in, make sure to Collect All and Save, to ensure all your samples are in your new template.
- Any time you add new additional cues, make sure to Collect All and Save.
- When in doubt.. Collect All and Save.
- If the day of the week ends in "Y".. consider using Collect All and Save again.

6 TESTING AND IMPLEMENTING CHANGES

- Add a previously formatted song to your template, or drag new cues from your template into a song.
- Verify the custom voice cues are functioning as expected by playing back sections of the song.

7 FINAL STEPS

- Ensure all updated songs are saved within the new template framework to maintain consistency across the set.

CREATING A SEPARATE CUES PLAYER WITH SPECIAL CUES

If you're a Playback Engineer working with an artist, or the lead singer of your band could benefit from some subtle reminders during the show, you may want to consider a separate cue player just for them.

1 SONG SELECTION AND CUE PLANNING

- Choose a song that could benefit from custom cues. In my course example, I'll use Post Malone's "Enough is Enough".
- Decide on the types of cues needed, such as reminders of when to sing or specific lyric reminders.

2 CREATING VOCAL CUES

- Choose a voice from the AI cues player and use Eleven Labs to generate some custom cues. Example cues might include "vocals in" and specific lyrics from the song.
- Experiment with the timbre of the text-to-speech output to find the right timbre and feel for the cue.
- Download and rename the generated cues for easy access and organization.

3 SETTING UP THE CUE IN ABLETON

- Create a new audio track for the vocal cues.
- Position this track appropriately within your template. I suggest below the markers or global programming tracks.
- Import the vocal cues into the special cues track, placing them at relevant points within the song structure.
- If necessary, adjust the timing and format of the cues (e.g., converting to WAV format, disabling warping) to ensure they play back as intended.

4 ROUTING AND PLAYBACK CONSIDERATIONS

- Carefully route the cue track to ensure it is only audible to the intended recipient(s), protecting the integrity of the live performance.
- If applicable, assign the cue track to a specific output channel to segregate it from the main mix or other cue mixes.

5   CUSTOMIZATION AND UTILITY

- Route these cues to a specific discrete output on your interface, so that it can be routed only to the Artist (or specific band member's) in-ears.
- Utilize these cues as a tool to enhance performance quality, especially during extensive tours or performances where maintaining consistency and engagement can be challenging.

6   FINAL ADJUSTMENTS AND TESTING

- Ensure all cues are correctly formatted, placed, and routed.
- Conduct a thorough soundcheck to test the cues within the context of a live performance setting, making adjustments as needed for clarity and effectiveness.

SONG EXAMPLE CUES

The sky really is the limit when it comes to these cues. The exact cues you'll want to create depend on the artist/band you're working with, but here's a few ideas.

- Reminders of entrances and exits (Vocals In)
- Reminder of Stage Placement (Downstage Center)
- Reminder of things that could permanently injure you (Pyro Stage Left)
- Reminder of what city you're in (Hello Detroit!!)
- Reminder to walk off stage (Exit Stage Left)

ADVANCED SONG PROGRAMMING SKILLS: ONE-BUTTON REPEAT

Learn how to implement one-button repeats for effortless section looping in your live performances.

- Learn to repeat any song section, at any-time
- Implement this skill using various setlist management solutions:
  - Setlist
  - AbleSet 2
  - Conductor
  - Virtual MIDI drivers

CREATING A ONE-BUTTON REPEAT WITH SETLIST

In this lesson, we're focusing on creating a loop that can be controlled by a single button on a MIDI controller and using Setlist by Strange Electronic. This setup is ideal for artists looking to manage their performance seamlessly without the need to fiddle with multiple controls. While this process is technically "Creating a Pre-Programmed Loop", here's how we'll achieve it in Setlist.

1 LOADING SETLIST

- Ensure the Setlist plugin is loaded into Ableton

2 MIDI MAPPING FOR LOOP BRACE ACTIVITATION

- Enter MIDI mapping mode in Ableton by pressing Command + M on Mac or Control + M on PC.
- Click on Ableton's loop brace to select it for MIDI mapping.
- Assign a button on your MIDI controller to control the loop brace. In this example, the 'Previous' button on my Oakboard Slide Duo is used to toggle Ableton's loop brace on and off.
- Exit MIDI mapping mode by pressing Command + M (Mac) or Control + M (PC) again.

3 SELECTING THE LOOP SECTION

- Decide which part of the song you want to loop.
- Add a locator to the section of the song you wish to loop, and rename it to indicate the loop and its duration (e.g., "Loop 16" for a 16-beat loop).

4 ACTIVATING THE LOOP

- Play your set or song. When the playback reaches the designated loop section, Ableton's loop brace will automatically activate, looping the specified section for the duration you've set.
- To exit the loop, press the 'Previous' button (or whichever button you've assigned) on your MIDI controller to disable Ableton's loop brace.

5 ADDITIONAL LOOPS

- If you want to loop different sections within the same song, repeat the process of adding locators and renaming them according to their desired loop duration.
- Test each loop by playing the song and observing how Ableton and Setlist manage the loop activation and deactivation automatically.

CREATING A ONE-BUTTON REPEAT WITH ABLESET 2

In this lesson, we'll look at how to effortlessly set up a one-button repeat function using AbleSet 2. While this is an easy process, it requires a few specific adjustments to your AbleSet file to ensure smooth operation. If you're new to AbleSet or looking for a comprehensive understanding, I recommend checking out the full AbleSet course. Now, let's break down the process step by step.

1 START WITH A LOCATOR

- Make sure you have a locator at the beginning of your song and give it a name. In this case, it's named "Beautiful."

2 RENAME THE MARKERS TRACK

- Navigate to your markers track. Change the track's name from "markers" to "sections." This allows AbleSet to "read" the data in your locators track.

3 CONFIGURE ABLESET SETTINGS

- Access the AbleSet menu and click on the settings icon to open settings.
- Under the "playback" section, ensure the "auto loop the current section" is enabled. This setting is crucial for the one-button repeat functionality.
- For the "Jump Mode," it's recommended to leave it set to "end of section," although this can be adjusted based on personal preference.
- Optionally, you can enable the option to "place locators on section clips." This automatically adds locators throughout every section of your song, facilitating easier navigation and looping.

4 UTILIZE THE ABLESET WINDOW

- Open the AbleSet window.
- I prefer to keep AbleSet in a floating window for easy access. Navigate to your song within this view.

5 INITIATE LOOPING

- Select a section you wish to loop.
- You'll notice as your song plays, Ableton's loop brace moves to highlight each new song section (as defined by your "sections" track).
- When you're ready to repeat the current song section you can enable the loop in AbleSet, by pressing "L" on your computer keyboard, or your MIDI controller.
- To exit the loop, press "L" on your keyboard, which deactivates the loop and continues to the next song section.
- Optionally, stop the loop by pressing the spacebar.

6 MIDI MAPPING

- While not covered in this lesson, remember that you can MIDI map the loop function to a controller for even easier access. This way when you're ready to repeat the current section, you simply press the button you've assigned to the loop to enable the loop, and press the same button again to disable the loop.

CREATING A ONE-BUTTON REPEAT WITH CONDUCTOR

In this lesson, we're diving into the process of setting up a one-button loop feature using Conductor within Ableton. This process is very similar to that of AbleSet.

1 **LOAD CONDUCTOR INTO YOUR ABLETON SET**
- Begin by dragging Conductor into your Ableton session. This setup parallels the integration of AbleSet, utilizing Ableton Live's built-in loop brace for creating loops.

2 **NAVIGATING TO YOUR DESIRED SONG SECTION**
- Choose the song section you wish to loop. Conductor's design allows for easy navigation and selection of different sections of your song, separate from song navigation.

3 **AUTOMATIC LOOP BRACE**
- Upon selecting a section in Conductor, note how the loop brace automatically adjusts to select the chosen section. This visual cue indicates the specific part of the track that will be looped.

4 **INITIATE LOOPING**
- Find and click the loop button within Conductor. This action toggles the looping feature on, visually signaling that the section is ready to be looped.

5 **DISABLE LOOPING**
- When you're ready to end the loop and proceed to the next section of your song, simply click the loop button again to disable looping.

6 **OPTIONAL MIDI MAPPING**
- For enhanced control and convenience, consider MIDI mapping the loop function to a button on your MIDI controller. This allows for hands-on, immediate toggling of the loop feature during live performances or while recording.

CREATING A ONE-BUTTON REPEAT WITH VIRTUAL MIDI

If you don't have a setlist management solution-no fear. Using the Advanced Playback template you can easily implement a one-button repeat, without any additional software or hardware.

1 **SETUP YOUR VIRTUAL MIDI DRIVER**
- Before starting this lesson, make sure you've already installed, activated, and configured your Virtual MIDI Driver.

2 **OPEN THE ADVANCED ABLETON TEMPLATE**
- Start with your song loaded into an advanced template in Ableton.

3 **EXPAND YOUR ADVANCED TEMPLATE**
- In your browser, locate your advanced template, and expand it to find the repeat clip within your repeat track.

4 **DRAG THE REPEAT CLIP**
- Click and drag the repeat clip into the appropriate repeat track.

5 **MIDI SETUP**
- Ensure your repeat track is set to send MIDI to IAC Driver Bus 1, Channel 16, as previously set up in the IAC setup lesson.

6 **UNDERSTANDING THE MIDI MAPPING**
- The repeat clip should contain a MIDI note (E-2) that outputs on Channel 16 to the IAC Driver. This is already mapped to your previous locator using the Command + M (MIDI map) function.

7 ENABLING AND DISABLING LOOPING

- Use the Command + M function to MIDI map the on/off (track activator button) of the repeat track to a button (e.g., "previous") on your MIDI controller. This effectively turns it into a loop toggle.

8 TRIGGERING THE LOOP

- Play your song, and at any point of a song section, press your MIDI Controller to enable the repeat track. If configured correctly, the section will loop perfectly due to the repeat clip being programmed to jump back to the previous locator at the end of the measure, facilitated by global quantization set to 1 bar.

9 ADD REPEAT CLIPS TO SONG SECTIONS

- Add a repeat clip at the end of every last measure of each song section you wish to loop. This can be done by copying and pasting the clip, ensuring it's added to the correct place for each section.

10 MIDI MAP IN YOUR TEMPLATE

- While we're only testing this feature now, it's worth noting that you'll want to add these clips while you're programming each individual song. You'll never need to program these again, and they'll move with the song, into your full set.
- Make sure to MIDI map a button on your MIDI controller to control the track activator for the repeat track, in your template. There's no need to do this for each song, and we only have to complete this mapping once-at our template level, for it to apply to every set, going forward.

11 SAVE YOUR TEMPLATE

- After completing the setup, save your advanced template to retain these settings.

ADVANCED SONG PROGRAMMING SKILLS: PRE-PROGRAMMED LOOP

Learn to create automatic repeats for consistent section looping in your live performances.

- Understand the benefits of pre-programmed repeats for extended solos or intros
- Master this advanced song programming skill using:
  - Setlist
  - AbleSet 2
  - Conductor
  - Virtual MIDI Driver

CREATING A PRE-PROGRAMMED LOOP WITH SETLIST

Let's take a look at how to set a song section to automatically loop every time we reach it, using Setlist. Spoiler Alert: This is the same process we used to create a One-button repeat.

1 LOADING SETLIST

- Ensure the Setlist plugin is loaded into Ableton.

2 MIDI MAPPING FOR LOOP BRACE ACTIVATION

- Enter MIDI mapping mode in Ableton by pressing Command + M on Mac or Control + M on PC.
- Click on Ableton's loop brace to select it for MIDI mapping.
- Assign a button on your MIDI controller to control the loop brace. In this example, the 'Previous' button on my Oakboard Slide Duo is used to toggle Ableton's loop brace on and off.
- Exit MIDI mapping mode by pressing Command + M (Mac) or Control + M (PC) again.

3 SELECTING THE LOOP SECTION

- Decide which part of the song you want to loop.
- Add a locator to the section of the song you wish to loop, and rename it to indicate the loop and its duration (e.g., "Loop 16" for a 16-beat loop).

4 ACTIVATING THE LOOP

- Play your set or song. When the playback reaches the designated loop section, Ableton's loop brace will automatically activate, looping the specified section for the duration you've set.
- To exit the loop, press the 'Previous' button (or whichever button you've assigned) on your MIDI controller to disable Ableton's loop brace.

5 ADDITIONAL LOOPS

- If you want to loop different sections within the same song, repeat the process of adding locators and renaming them according to their desired loop duration.
- Test each loop by playing the song and observing how Ableton and Setlist manage the loop activation and deactivation automatically.

CREATING A PRE-PROGRAMMED LOOP WITH ABLESET 2

Let's take a look at how to set up a pre-programmed loop in AbleSet 2. This process differs slightly from the process used to create a one-button repeat.

1 **PREPARE ABLESET FOR LOOPING**
- Open AbleSet and load your song project.
- Identify the song section you want to loop (e.g., the intro section).

2 **METHOD 1: BASIC LOOP SETUP**
- Rename the target song section by adding " +LOOP" to its name (e.g., "Intro + LOOP").
- Play the song to verify the loop is functioning as intended.
- Observe the loop enabled and the loop brace toggled on.

3 **TESTING AND EXITING THE BASIC LOOP**
- Play the song section with the loop enabled.
- Disable the loop, by using the loop icon in AbleSet, pressing "L" on your keyboard, or by using your MIDI Controller (that's been mapped to Loop) to exit and observe any abrupt transitions.
- Note how the song jumps immediately to the next section upon disabling the loop, which might not always be desirable.

4 **METHOD 2: IMPROVE LOOP SETUP (RECOMMENDED)**
- Rename the section with " + LOOPFULL" instead of just " +LOOP" (e.g., "Intro + LOOPFULL").
- This adjustment ensures that the entire section finishes playing before moving on to the next section, even after disabling the loop.

5 **TESTING THE IMPROVED LOOP**
- Play the song from the looping section.
- Disable the loop midway and observe how the song continues to play until the end of the section before transitioning.
- This method provides a smoother exit from the loop and is generally more suitable for live performances and seamless playback.

6 **FINAL ADJUSTMENTS AND PRACTICE**
- Experiment with both methods to understand the differences in transitions and practical usage.
- Decide which method suits your performance or playback needs better.
- Practice enabling and disabling loops during live sessions to become comfortable with the controls.

CREATING A PRE-PROGRAMMED LOOP WITH CONDUCTOR

Let's take a look at setting up a pre-programmed loop with Conductor. While this process is completely different from the one-button repeat process, it's still insanely simple.

1 **ENABLE AUTOMATION MODE**
- Navigate to the upper right-hand corner of your screen.
- Enable automation mode in Ableton to begin setting up your loop.

2 **SELECT CONDUCTOR**
- In Arrangement View, go to the track where you have Conductor loaded. Typically, this will be your Markers track.
- With automation mode enabled, you'll see two boxes on your track.
- In the first box of your track's interface, called the 'device chooser', select the 'Conductor' device.

3 **CHOOSE LOOP AUTOMATION**
- In the second box called the "control chooser", select the 'loop automation' option to specify the type of automation you want to apply.

4 **NAVIGATE TO THE SONG SECTION**
- Jump to the beginning of the song or to the specific section you wish to loop.
- In this example, focus on looping the intro section of the track.

5 **DRAW THE LOOP**
- Use the draw mode (Command +B) to create a loop. Click and drag in the timeline over the section you want to loop.
- Ensure that the loop is marked as enabled in the automation lane, which should show "loop enabled" at the intro section.

6 **DISABLE AUTOMATION MODE (OPTIONAL)**
- Once your loop is set, you can disable automation mode.
- Alternatively, use the 'A' key on your keyboard to toggle automation mode on and off for quick visual confirmation.

7 **PLAY AND TEST THE LOOP**
- Open the user interface and navigate back to the top of your intro section.
- Press play to start playback and observe the looping section.
- Verify that the loop engages as planned and continues to repeat.

8 **EXITING THE LOOP**
- Decide when to exit the loop during playback. You can press the loop button in Conductor, or use your MIDI Controller mapped to the loop functionality in Conductor to disable this remotely.

CREATING A PRE-PROGRAMMED LOOP WITH VIRTUAL MIDI

If you don't have a Setlist management solution, don't worry. In this lesson, we'll take a look at using a Virtual MIDi Driver to achieve the same functionality without needing any additional hardware, or software.

1   INITIAL SETUP

- Begin with the lesson where you previously set up a one-button repeat. See the "Creating a One-Button Repeat" with Virtual MIDI lesson to see how to do this step by step.
- If not already done, enter MIDI map mode by pressing Command+M (Mac) or Control+M (PC). Assign the 'Repeat Track' activator button to a button on your MIDI controller, such as the 'Previous' button. Note the MIDI channel and note (e.g., Channel 16, D#1).

2   CREATING THE MIDI CLIP

- Exit MIDI map mode.
- In the control track (or duplicate it if it's used for other purposes), set the MIDI channel to the one used in the mapping (e.g., Channel 16).
- Go to the Arrangement View and create a new MIDI clip in the control track.
- Rename the clip to "Enable Loop/Repeat."
- Add a MIDI note matching the one assigned to the 'Repeat On/Off' (e.g., D#1). Make the MIDI note span the entire length of the clip.

3   PLACING THE MIDI CLIP IN YOUR SONG

- Copy the "Enable Loop/Repeat" clip.
- Paste the clip into your song structure where you want the loop to start, such as the last quarter note of the previous song section to ensure it triggers at the right moment.
- Ensure that the default state of your repeat track is set to 'Off' to avoid unintentional looping.
- Make sure that the default state of your "Control" track is enabled so that it automatically loops the section you've pre-programmed.

4   TESTING AND ADJUSTING

- Play your song from the beginning to test if the repeat activates correctly.
- Use your MIDI controller's assigned button to toggle the repeat track on and off as needed.

5   INTEGRATING INTO OTHER PROJECTS

- To use this setup across various projects, add the "Enable Loop/Repeat" clip to your project template.
- Open your template, ensure the MIDI channel and note are correctly set, and save the template.

ADVANCED SONG PROGRAMMING SKILLS: DYNAMIC CUES

Learn to have the correct cues when repeating sections.

- Understand the challenge of mismatched cues during section repeats
- Implement this advanced skill using various tools:
    - Setlist (with workaround)
    - AbleSet 2
    - Conductor (using virtual MIDI driver or workaround)
    - Virtual MIDI

CREATING DYNAMIC CUES WITH SETLIST

I have bad news and good news. The bad news, there's no "dynamic cues" feature built into Setlist. The other bad news is, you can't use a Virtual MIDI driver while using Setlist, so we can't use the Advanced Playback Template functionality to make this happen. And the good news….There's a few perfectly suitable work-arounds to make this work. Let's take a look!

1 UNDERSTAND THE LIMITATIONS

- Recognize that Setlist does not have built-in dynamic cue functionality.
- Avoid using the IAC Driver with Setlist, to prevent MIDI feedback loops.

2 EVALUATE THE NEED FOR DYNAMIC CUES

- If dynamic cues are crucial, consider using AbletSet, or opt for a virtual MIDI driver and the Advanced Playback Template.

3 OPTION 1: USE A VIRTUAL MIDI DRIVER WITHOUT SETLIST MANAGEMENT

- Set up a virtual MIDI driver to manage dynamic cues independently from the setlist functionality.
- This method may require more manual intervention but offers greater flexibility in cue management.
- We'll talk about setting this up in a moment.

4 OPTION 2: MANUAL CUE CONTROL VIA MIDI CONTROLLER

- Map a free button on your MIDI controller to the cues track in your template.
- Use this button to toggle the cues track on and off during performance as needed.
- This allows you to disable the audible cues to the band while repeating a section of the music.
- Ensure there is a talkback microphone or another method to communicate with the band members.
- Use verbal cues or hand signals to coordinate when sections of the music are repeated.
- Simply mute the cue track and inform the band to keep repeating the section as required.

5 KEEP THE PROCESS SIMPLE

- While this feature isn't built into Setlist, it can easily be worked around with a MIDI controller, and a talkback mic!
- Remember that straightforward communication often resolves the need for complex technical setups.

CREATING DYNAMIC CUES WITH ABLESET 2

If you're looking to use dynamic cues, and looking for a setlist management solution, you should choose AbleSet. While the setup is the same as using a virtual MIDI driver and the Advanced Playback template, the implementation is simple and easy! Here's how to make it happen!

1 OPEN ABLESET IN YOUR SESSION

- Begin by loading AbleSet within your session to start setting up your tracks.

2 MODIFY THE CUE TRACK

- Go to your global programming track and your cues track.
- Rename the cues track to 'guide' by adding 'plus' and typing 'guide'. This simple change allows you to jump to specific sections like drums when looping.

3 ENABLE LOOPING

- Press play and enable the loop on the intro section. If pre-programmed, the section should loop automatically.

4 OBSERVE THE DISABLED CUTE TRACK

- Notice that the guide cue track gets automatically disabled when the section loops. This is a key feature for managing transitions seamlessly.

Now, let's take a look at setting up our "dynamic" cue. This is the same exact process as using a Virtual MIDI Driver.

5 DUPLICATE THE CUES TRACK FOR ADVANCED MANAGEMENT

- If using the advanced template in AbleSet, the cues track is already duplicated. If not, duplicate the cues track manually.
- Add the cue for the current section to the new track, differentiating from the cue for the section you are moving to.
- For example, if you're on the intro, add a cue that says intro, instead of verse in the last measure of this track in the cue track.

6 ORGANIZE CUES EFFICIENTLY

- To speed things up, you can click on the cue before the section you're working on (in the regular cue track), and use option-click to drag (which automatically duplicates the clip) and drop into your new cues track.
- Set your grid to a fixed grid at 1 bar for faster and more precise selection.

7 FINAL ADJUSTMENTS TO TRACK NAMING

- Rename the duplicated track to +LOOPGUIDE by using Command 'r' and typing '+LOOPGUIDE'. Ensure correct spelling.

8 OPEN ABLESET'S WINDOW

- Open the AbleSet window to view your entire setlist.

9 MONITOR TRACK BEHAVIOR

- Start playback and observe how the 'plus guide' track mutes and the 'plus loop guide' track unmutes when entering a section. This allows for continuous playback of the desired section without transitioning.

10 DEMONSTRATE WITH DIFFERENT SECTIONS

- Jump around to other song sections, and test enabling the loop to observe how tracks mute and unmute, ensuring the intended section loops as expected.

11 DISABLE LOOPING AND RETURN TO DEFAULT

- Finally, disable the looping and watch the tracks return to their default state, moving from chorus to the next section seamlessly.

CREATING DYNAMIC CUES WITH CONDUCTOR

Similar to Setlist, there's no "dynamic cues" implementation in Conductor. But, no fear! Again, I'm back at it with alternative solutions. Spoiler Alert.. They're the same as the solutions shared in the Setlist lesson.

1 UNDERSTANDING THE LIMITATIONS

- Conductor does not have built-in dynamic cue functionality.
- If dynamic cues are crucial, consider using Abletset, or opt for a virtual MIDI driver and the Advanced Playback Template with Conductor.
- Conductor doesn't have the Virtual MIDI issues that Setlist has, so you could use dynamic cues with a virtual MIDI driver and the Advanced template with Conductor if you'd like.

2 OPTION 1: USE A VIRTUAL MIDI DRIVER WITHOUT SETLIST MANAGEMENT

- Set up a virtual MIDI driver and the advanced playback template to manage dynamic cues independently from the setlist functionality.
- This method may require more manual intervention but offers greater flexibility in cue management.
- We'll talk about setting this up in a moment.

3 OPTION 2: MANUAL CUE CONTROL VIA MIDI CONTROLLER

- Map a free button on your MIDI controller to the cues track in your performance setup.
- Use this button to toggle the cues track on and off during performance as needed.
- This allows you to disable the audible cues to the band while repeating a section of the music.

4 IMPLEMENTING EFFECTIVE BAND COMMUNICATION

- Ensure there is a talkback microphone or another method to communicate with the band members.
- Use verbal cues or hand signals to coordinate when sections of the music are repeated.
- Simply mute the cue track and inform the band to keep repeating the section as required.

5 KEEP THE PROCESS SIMPLE

- While this feature isn't built into Conductor, it can easily be worked around with a MIDI controller, and a talkback mic!
- Remember that straightforward communication often resolves the need for complex technical setups.
- If you're using Conductor and HAVE to have dynamic cues, use the Playback Advanced template to achieve this feature.

CREATING DYNAMIC CUES WITH VIRTUAL MIDI

If dynamic cues are important to you, and you aren't using AbleSet, here's how to use a Virtual MIDI Driver and the Advanced Playback Template to make that happen!

1 INITIAL SETUP

- Open a file you've formatted using the Advanced Playback Template.
- Locate the "Dynamic Cues" track in the template.
- If you're using the Playback Basic template, or a custom template, duplicate the main cue track to use as the Dynamic Cues track.
- Follow the steps in the "one-button repeat" lesson to add repeat clips throughout your song.

2 PLACING DYNAMIC CUES

- Go to the first section of your song that might be repeated during a performance (e.g., the intro or verse).
- Hold the option key (on Mac) or control key (on PC) and click and drag the cue from the section prior to the one you are in to the last measure of the current section on the Dynamic Cues track. (For example, while in the intro, drag the intro cue that sounds one measure before the intro starts to the last measure of the intro.)
- Repeat this process for each section of the song where a repeat might occur.
- Set your grid to a fixed 1-bar view to simplify the placement of cues.

3 MIDI MAPPING FOR LIVE CONTROL

- Press Command+M (Mac) or Control+M (PC) to enter MIDI map mode in Ableton.
- Map the on/off toggle of the repeat track to a button on your MIDI controller.
- While still in MIDI map mode, map the Dynamic Cues track's on/off button and the main cues track's on/off button to the same button on your MIDI controller for ease of live control.

4 FINAL SETUP

- Ensure the default state of your template or song has the repeat track and dynamic cues track turned off, and the main cues track turned on.
- Save your settings.

5 TESTING THE SETUP

- Play the song from the intro to check the default cues.
- Use the mapped button(s) on your MIDI controller to toggle between the default and dynamic cue states to ensure the functionality during live performance scenarios.
- You'll notice now when "repeat" is engaged, the normal "cues" channel is muted, and the new "dynamic cues" track is un-muted.

ADVANCED SONG PROGRAMMING SKILLS: CHOOSING A SETLIST MANAGEMENT TOOL

Explore setlist management solutions for Ableton to optimize your live performance setup.

- Compare industry standards (Setlist, AbleSet) with simpler options (Taz) and hardware integrations (Oakboard, LIOBOXv2)
- Choose based on your specific needs: from basic setlist management to advanced remote control capabilities

WHAT SETLIST MANAGEMENT PLUGIN IS BEST

Before we dive into advanced set programming skills, let's explore various setlist management solutions for Ableton. We'll dive into features, integration capabilities, and recommended scenarios for each solution, helping you select the ideal setup based on your specific needs.

- **Evaluate your needs:**
  - Determine whether you need simple setlist management or advanced features like remote control and integration with hardware.

- **Explore industry standards**
  - **Setlist by Strange Electronic:** Considered the industry standard with features like loop creation and setlist reordering without rebuilding songs. Requires Max for Live or Ableton Live Suite.
  - **AbleSet:** Growing in popularity, it offers comprehensive features including remote control capabilities and multiple set views. Works with any edition of Ableton Live and does not require Max for Live. AbleSet is more than a "setlist management" solution for Ableton, it's really a custom view for Ableton, and a way to easily remotely access Ableton "remotely".

- **Consider Simplicity and Affordability:**
  - **Taz by Oaktone (Taz Lite, Taz Pro, Taz SP):** Offers varying levels of functionality from basic setlist management (Taz Lite) to voice notifications of song titles (Taz Pro) and simple setlist management (Taz SP). Requires Max for Live or Ableton Live Suite.

- **Look at Hardware Integration Options:**
  - **Oakboard Floor Vista by Oaktone:** Ideal for guitar players needing a view-only setlist display at their feet. Works in conjunction with Taz Lite or Taz Pro.
  - **LIOBOXv2 by Goo Roo Controllers:** Offers extensive control capabilities with a built-in screen for navigating and controlling setlists. Compatible with all versions of Ableton and other music software.

- **Review newly released solutions**
  - **Conductor by Full Fat:** A newer solution that blends the simplicity of Taz and the features of Setlist, allowing for enhanced navigation during rehearsals. Requires Max for Live or Ableton Live Suite.

- **Select based on specific needs**
  - **For guitar players:** Opt for Oakboard Floor Vista paired with Taz Lite or Taz Pro.
  - **For drummers, keyboard players, and offstage playback engineers:** Consider LIOBOXv2 for comprehensive control over setlists.
  - **For aspiring professional playback engineers:** Master Setlist and AbleSet, as these are critical for industry-standard gigs in major music cities.

HOW TO PROGRAM A SET USING A SETLIST MANAGEMENT SOLUTION

While we cover how to build a setlist of pre-formatted songs in The Playback Method™ course, it's worth briefly touching on how to build a set when using a Setlist management solution. What changes, how do we organize a large catalog of content?

- **Review the Playback Method™: Prep Stage**
  - Begin by watching The Playback Method™: Prep stage to understand the foundational concepts of set programming and management.

- **Understand setlet management tools:**
  - Learn about different setlist management solutions, focusing on the typical process for building a set.
  - While it's possible to use the "Multi-File Project" feature of AbleSet 2 to avoid building a set of songs at all, I still prefer building a setlist of all my songs to avoid any potential delays or complications in opening files.

- **Build a master set:**
  - Aim to keep your set as small and manageable as possible to ease performance and reduce computer load.
  - Decide whether to include all songs in one set or split them into multiple sets based on the total number of songs and performance structure.

- **Optimize your computer:**
  - Prior to building your set, assess your computer's capability to handle large sets by following the optimizing tips from The Playback Method™: Optimize stage.

- **Consider set structure:**
  - For bands with fixed song lists per set, consider creating separate Ableton files for each set to manage performances more efficiently.
  - For example, Will, a student that is in a professional Tribute band, splits his band's two 45 minute sets into two different files. This helps keep the total file size of each set manageable and easy to use.

- **Song Arrangement:**
  - Initially, arrange songs in an alphabetical order or any order if using a setlist tool that allows reordering and searching.
  - If you plan to perform without a setlist management tool and have a smaller set, arrange songs in the order you expect to perform.

- **Follow the three-part framework:**
  - Template: Start with a solid template for your set. Choose the Playback Basic Template or if using a Virtual MIDI driver, choose the Playback Advanced Template.
  - Program Songs: Individually program each song with your template, to ensure proper integration into the set.
  - Program Sets: Drag every formatted song into your template and the overall set to have access to all files in one place.

- **Fine Management:**
  - Maintain organized file structures with a dedicated folder for songs and another for the master set.

- **Use Setlist management solution:**
  - Implement a setlist management tool like AbleSet to handle large sets efficiently, ensuring flexibility and control during performances.

- **Continuous updates and improvements:**
  - Regularly revisit and revise your set programming practices based on performance feedback and technological advancements.

ADVANCED SONG PROGRAMMING SKILLS:
CREATING A STOP TRACK

Learn to implement automatic song stops for a more hands-free performance experience.

- Master this game-changing technique to stay focused on the music
- Implement automatic stops using various tools:
  - Setlist, AbleSet 2, Conductor
  - LIOBOXv2 and Virtual MIDI

CREATING A STOP TRACK WITH SETLIST

Setlist makes it incredibly easy to set up an Auto Stop, so that your songs will automatically stop once they're complete.

1 **IDENTIFY STOP POINT**

- Open your Ableton project and navigate to the point in the timeline where you want the track to automatically stop.
- Right-click at the desired stop point and select "Add Locator."

2 **NAME THE LOCATOR**

- Name the newly created locator "AUTOSTOP" to clearly mark it for automation.

3 **OPEN AND REFRESH SETLIST**

- Launch the Setlist interface within Ableton.
- Hit the "Refresh" button in Setlist. This ensures Setlist reads all the current information and recognizes the new locator.

4 **TESTING THE SETUP**

- Press play in Ableton. As the playhead reaches the "AUTOSTOP" locator, it should automatically stop playback, confirming that the setup is correct.

5 **APPLY TO OTHER SONGS (OPTIONAL)**

- To maintain consistency and ease during your live set, consider applying an auto stop locator at the end of each song in your setlist.

6 **CONFIGURATION TO AVOID TECHNICAL ISSUES**

- Avoid using the IAC Driver for internal MIDI loopback with Setlist as it can cause interference. Instead, use it only for sending MIDI out of Ableton.
- Navigate to Ableton's preferences (use the shortcut Command + ,) and ensure that the MIDI input for the IAC Driver is disabled to prevent any unwanted feedback or conflicts.

CREATING A STOP TRACK WITH ABLESET 2

As you probably guessed, AbleSet not only makes it easy to set up an automatic stop, it does it multiple ways to accommodate multiple use cases.

METHOD ONE: USING A LOCATOR NAMED "STOP"

1 CREATE A LOCATOR AT THE DESIRED STOP POINT

- Navigate to the end of the track where you wish to stop.
- Right-click and choose to create a locator.
- Name the locator "STOP".

2 VISUAL CONFIRMATION

- After naming, a visual gap should appear between the end of your song, and the next song, indicating where the song will automatically stop.
- Press play to test this out!

METHOD TWO: USING A LOCATOR NAMED "AUTOSTOP"

1 ADD A LOCATOR WITH A SPECIFIC NAME

- Go to the end of another song in your set.
- Right-click at the end and add a locator named "AUTOSTOP".

2 PORTABILITY WITH SETLIST

- The "AUTOSTOP" locator functions exactly the same way as "stop", but it allows you to import an Ableton setlist you built using Setlist, and maintain the same functionality without needing to re-name any locators.

METHOD THREE: USING A DOT PREFIX IN THE SONG NAME

1 POSITIONING TWO TRACKS ADJACENTLY

- Identify two consecutive songs in your set.

2 RENAME THE FOLLOWING TRACKS

- At the end of the first track (e.g., "Flowers"), place a dot at the beginning of the next track's name to indicate a stop at the previous track.
- Example: Rename "Imagination" to ".Imagination" if you wish to stop after "Flowers".
- This renaming creates a clear visual cue that the track will stop at the previous song's end.
- This allows you to automatically stop between songs, without having large gaps of space between each song in your set.

CREATING A STOP TRACK WITH CONDUCTOR

While Conductor requires a bit more particularity to its stop setup, it's still a simple skill to integrate into your setlist.

1 **IDENTIFY THE SONG ENDING**

- Begin by locating the end of your song within your project timeline.

2 **ADD A LOCATOR**

- Right-click at the desired endpoint of your song on the timeline.
- Select the option to add a locator.

3 **RENAME THE LOCATOR**

- Rename the new locator with an asterisk () followed by the word "stop". This is important as it must be named differently from other locators or commands you might be using with Ableton or Setlist.

4 **RELOAD CONDUCTOR**

- After adding and renaming the locator, hit the "reload" button in Conductor to ensure the new settings are applied and functioning correctly.

5 **TEST THE AUTO STOP**

- Play your song and let it run towards the end.
- Observe as it reaches the newly named locator and stops automatically.
- Check if it correctly selects the next song, verifying that the setup works as intended.

CREATING A STOP TRACK WITH LIOBOXV2

Let's look at setting up automatic stops with the LIOBOXv2.

1 OPEN YOUR ABLETON SESSION

- Begin by launching the Ableton session for the song you want to automatically stop.

2 LOCATE THE STOP POINT

- Play through your song to identify the exact spot where you want it to stop. Pause the song at this desired endpoint.

3 ADD A LOCATOR

- Right-click at the top of the timeline where you paused the song and choose to add a locator. This marks the point where the song will stop.

4 MASK THE LOCATOR

- To keep the locator from being visible during your session, you will mask it. Click on the locator you just added, and add an open parentheses.

5 LABEL THE LOCATOR

- Inside the parentheses, type the word "STOP" in all caps. This label is critical as it signals Ableton to halt playback when this point is reached. For example, (STOP)

6 CLOSE THE PARENTHESIS AND SAVE

- Close the parentheses after typing "STOP" and hit enter to save this locator.

7 TEST THE AUTOMATIC STOP

- Play your song from the beginning or from a point before the locator to ensure it stops automatically when it reaches the masked locator.

8 VERIFY THE MASKING

- To confirm that the locator is masked, navigate through your session to see if the locator appears. It should not display the word "STOP" overtly, ensuring it remains hidden during performances or while you are working within other parts of your session.

CREATING A STOP TRACK WITH VIRTUAL MIDI

We're ending with where this all began. This was the special skill that got me hooked on "advanced set programming" many years ago. Here's how to use a Virtual MIDI Driver, and the Advanced Playback Template to create a stop track.

THE BASIC SETUP STEPS (WITHOUT USING THE PRE-MADE TEMPLATE)

1 SETTING UP THE MIDI CLIP

- Create a MIDI clip that functions as a MIDI controller by sending a specific note (e.g., C-2) on a designated channel (e.g., Channel 16).
- This clip will act similarly to pressing a MIDI controller button.

2 MIDI MAPPING THE STOP FUNCTION

- Enter MIDI Mapping Mode in Ableton Live (Command+M) and map the stop button to respond to the MIDI channel and note set up in your clip.
- This clip now acts just like an external MIDI Controller. When you press stop (when the clip plays), Ableton automatically stops.
- Instead of trying to set up this process from scratch, use the Playback Advanced Template to save yourself some time!
- Drag the stop clip from the template into the stop track of your current set.

USING THE PLAYBACK ADVANCED TEMPLATE

3 INTEGRATING THE STOP CLIP INTO SONGS

- Insert the stop clip at the end of each song within your set. Adjust it individually for each song rather than at the set level to save time in the long run.
- When Ableton's play head reaches the clip in the stop track, it will automatically stop.

4 CUSTOMIZING MIDI CLIPS FOR USE WITH MIDI CONTROLLERS

- If using a MIDI controller, ensure the MIDI mapping matches the settings of your stop clip.
- Map your MIDI controller to Ableton's stop button.
- Use the MIDI mappings browser to see what MIDI data your controller sends.
- Create a MIDI clip that matches this data exactly, including the MIDI channel and place the MIDI clip in the Stop track in the template.
- If the MIDI controller sends a different signal, adjust the MIDI clip in the stop track to match the controller's settings (e.g., changing the channel or note).

5 HANDLING MIDI CONTROLLERS WITH CC VALUES

- If your MIDI controller uses CC values, map these in Ableton Live's envelope section to match the stop clip.
- This involves adjusting the CC value in the MIDI clip to coincide with the CC value mapped on the stop button.

ADVANCED SONG PROGRAMMING SKILLS: CREATING A PAUSE AND GO TO NEXT TRACK

Master the 'pause and go to next' feature for seamless set navigation.

- Learn to automatically queue up the next song after each performance
- Implement this advanced skill using:
  - Setlist, AbleSet 2, Conductor
  - LIOBOXv2 and Virtual MIDI

HOW TO PAUSE AND GO TO NEXT SONG WITH SETLIST

Because of how well Setlist is designed, pause and go to next is the default behavior of the plugin. This feature is closely related to the "Auto Stop" function, and the setup for both commands is almost identical. Let's look at how it works.

1 **OPEN SETLIST SETTINGS**

- Open Setlist in either full or mini mode.
- Navigate to the settings menu by clicking on the "Settings" option.

2 **ENABLE AUTOMATIC SONG SELECTION**

- In the settings menu, ensure that the "Automatically Select Next Song" option is activated. This is typically the default setting but it's important to verify.

3 **WORK WITH A SONG**

- Select a song that you want to apply the "Pause and Go to Next" command. For demonstration, we'll use a song titled "Beautiful."
- Note: In this example, an AUTOSTOP" is set to occur just after the count-in, before the intro starts.

4 **OBSERVE THE FUNCTION IN ACTION**

- Play the selected song and observe how Setlist automatically selects the next song in the list after reaching the point where "AUTOSTOP" is applied.
- Stop the playback after the AUTOSTOP". Note that the song is paused.

5 **USE "PAUSE AND GO TO NEXT"**

- Press play again after the song has stopped. Setlist will automatically proceed to the next song in the queue.
- You can repeat this action to continue advancing through your setlist, with each song stopping at the designated "Auto Stop" point and ready to jump to the next on playback.

6 **NAVIGATE YOUR SET WITH PLAY**

- Combining both AUTOSTOP and the default "Automatically Select Next Song" feature allows you to setup the order of your songs in Setlist, and simply navigate your set using only the play button.

HOW TO PAUSE AND GO TO NEXT SONG WITH ABLESET 2

Similar to Setlist, Pause and Go to Next can easily be enabled in the AbleSet menu, and the implementation is practically automatic. Let's take a look at making this happen in AbleSet.

1 ACCESS ABLESET MENU

- Open AbleSet on your computer.
- Click on the settings icon to access the configuration options.
- Choose "Open Settings" in the menu.

2 ENABLE AUTO JUMP FEATURE

- In the settings menu, locate the option labeled "Auto Jump to Next Song."
- Ensure this setting is enabled. This is typically the default setting, but it's good to double-check.

3 REVIEW ABLETON SETLIST

- Return to your Ableton setlist to review the current song and its settings.
- Verify that each song has a stop command appropriately set up to ensure the "Auto Jump" works correctly.

4 OPEN ABLESET IN A FLOATING WINDOW (OPTIONAL)

- For ease of use during live performances, you might prefer opening AbleSet in a floating window. This allows for easier access and visibility.

5 TEST THE SETUP

- Navigate to a song with a stop command.
- Play through the song and observe the transition at the end. Once the stop marker is hit, AbleSet should automatically select the next song on the list.

6 INITIATE NEXT SONG

- With the next song automatically selected, press the play button on your MIDI controller or the spacebar on your computer keyboard to start playing the newly selected song.

7   NAVIGATE YOUR SET WITH PLAY

- With the "Auto Jump to Next Song" feature enabled, and by adding stop commands after every song, you can now fully navigate your setlist by only pressing stop on your MIDI controller.

HOW TO PAUSE AND GO TO NEXT SONG WITH LIOBOXV2

*Sensing a theme here yet? The default behavior of LIOBOX is
similar to Setlist and AbleSet. But let's dive in and see how pause
and go to next works with LIOBOX.*

1 SETTING UP THE STOP LOCATOR IN ABLETON LIVE

- Begin by adding a stop locator at the end of your song in Ableton Live. This locator is essential to automatically stop, and to use the pause and go to next feature.
- Ensure that the locator is masked so that it does not display on the LIOBOX interface. Review the earlier, "Creating a Stop Track with LIOBOXv2" lesson for detailed steps to make this happen.

2 DEMONSTRATION OF DEFAULT STOP BEHAVIOR

- Play the track in Ableton Live to demonstrate the functionality. As the track plays and reaches the stop locator, it should automatically stop.
- Observe that once the stop locator is hit, Ableton Live stops playback, indicating that the setup is correctly implemented.

3 CONFIGURING PAUSE AND GO TO NEXT IN LIOBOX

- Pause and Go to Next is the default behavior of LIOBOX.
- Test this by playing the end of a song. Once the song stops at the stop locator, the LIOBOX will automatically queue up the next song in your list.

4 TESTING THE TRANSITION

- Scroll back slightly in the current track in Ableton Live and play from the end to ensure the transition is smooth.
- Hit play after the track stops at the stop locator, and verify that the next song is correctly selected and ready for playback.
- This ensures that when you're ready to move to the next song, you simply press play, and the LIOBOX handles the transition.

5 NAVIGATING YOUR SET WITH PLAY

- By adding stop markers in your set, you can automatically take advantage of the pause and go to next feature of the LIOBOXv2. This allows you to fully navigate your set, by only pressing play on-stage.

HOW TO PAUSE AND GO TO NEXT SONG WITH CONDUCTOR

Alright, now this is getting a bit humorous. You know the drill.
Default behavior, easy to use…here's how Conductor does it!

1 **OPEN CONDUCTOR IN ABLETON**

- Access Conductor within your Ableton project to begin setting up the command.

2 **ADD A LOCATOR**

- Place a locator at the desired point in your song timeline where you want the song to pause or stop.

3 **NAME THE LOCATOR**

- Label the locator with an asterisk () followed by the word "stop" e.g., (stop). This is crucial for the command to function correctly.

4 **RELOAD CONDUCTOR**

- After setting the locator and naming it, make sure to hit the "reload" button. This refreshes Conductor, incorporating the new settings.

5 **START THE SONG**

- Play the song from the beginning to test the setup. Ensure that everything is in order as planned.

6 **NAVIGATE TO THE END OF THE SONG**

- Scroll towards the end of the song where the locator has been set.

7 **TEST STOP COMMAND**

- Press "play" from the point near the locator, then hit "stop" to see if the song pauses and the next song is automatically selected

8 **READY FOR THE NEXT SONG**

- If the setup was successful, when you're ready to continue to the next song in the setlist, simply press "play." This action should start playing the next selected song automatically.

HOW TO PAUSE AND GO TO NEXT WITH VIRTUAL MIDI DRIVER

While not as simple and automatic as using a setlist management solution, it's still certainly possible to implement pause and go to next, using a virtual MIDI driver and the Advanced Playback template.

1 STEP ONE : USE THE TEMPLATE

- **Start with the Playback Advanced Template**: Avoid building from scratch to save time and potential errors. The template already includes necessary components like select next song commands.

- **Ensure Your Songs Are Pre-Programmed in the Template:** All songs should already have their endpoints and transitions configured within the template.

2 STEP TWO : CONFIGURE SONG TRANSITIONS

- **Add Stop Clips**: Ensure each song in your set has a stop clip at its end.

- **Insert Song Clips for Transitions**: For each song, add a clip that triggers the next song. For instance, at the end of Song 1, insert a clip to jump to Song 2. These clips are pre-mapped to locators in your Advanced Playback template.

3 STEP THREE: ADJUST CLIP PLACEMENT AND TESTING

- **Fine-Tune Clip Placement**: Place the transition clip precisely where the stop clip is located to ensure a smooth transition.

- **Test Each Transition**: Play through each transition to ensure clips trigger correctly and smoothly move to the next song.

IF DOING THIS FROM SCRATCH
(WITHOUT THE ADVANCED TEMPLATE)

- **Setup MIDI Tracks**: Each transition clip should send a MIDI note mapped to the exact locator of the next song using a specific MIDI channel and note, like C#-1 on MIDI channel 16.

- **Apply Track Delay**: Set a track delay of at least 20 milliseconds on the select next song track to ensure the clip triggers after Ableton has fully processed the stop command.

AVOID COMMON MISTAKES

- **Ensure Correct Track Delay Settings:** A common error is setting the track delay too low; ensure it is at least 20 milliseconds.

- **Use Specific Locators, Not Relative Commands:** Map each transition to a specific locator rather than a relative next locator command to guarantee accuracy regardless of playback starting point. For example, in the Advanced Template, each clip corresponds to an exact locator, i.e. locator 3-not a relative mapping like "next" locator.

- **Maintain Locator Order:** Ensure locators are in the correct order and haven't been rearranged inadvertently.

ADVANCED SONG PROGRAMMING SKILLS: RE-ORDERING SONGS

Learn to quickly reorder your setlist on the fly for last-minute changes.

- Master efficient setlist management techniques for pre-show adjustments
- Implement flexible reordering using various tools:
  - Setlist, AbleSet 2, LIOBOXv2
  - Conductor, TAZ SP, and Virtual MIDI

HOW TO REORDER SONGS WITH SETLIST

Reordering songs is the bread and butter of Setlist. It's why it was created. Let's take a look at how to make it happen now.

1 STARTING WITH SETLIST
- Open the Setlist plugin in Ableton.
- You will see two windows: the full list of songs and the Setlist of songs.

2 ADDING A SONG TO THE SETLIST
- Click through the songs in the full list.
- Use the 'Add to Setlist' button to transfer your selected songs to the Setlist.

3 REORDERING SONGS INITIALLY
- We can add songs to our "setlist" in any order, no matter what their order in our Ableton set is.
- You can select any song in the full list and press 'Add to Setlist' to add to the Setlist, in any order.

4 PLAYING AND SWITCHING SONGS
- Start playing from the top of the Setlist.
- Continue pressing play to advance through the songs in the Setlist.

5 REORDERING ON THE FLY
- While a song is playing, you can navigate the Setlist and decide to change the order.
- For example, you can select a song in the Setlist window and click the Move Up or Move Down button in the Setlist window to move the order of the songs-while your audio is still playing.

6 USING AUTO-STOP
- Utilize the auto-stop feature which allows the track to stop abruptly after playing, making it easy to switch the order of your set, or to start a different song immediately.

7 MIDI MAPPING FOR ENHANCED CONTROL
- Activate MIDI mapping by pressing 'Command + M' in Ableton Live.
- Assign MIDI controls to various functions in Setlist, like navigating up and down the Setlist, moving songs within the Setlist, and controlling play/stop actions.

8 ADDING UNEXPECTED SONGS
- If an unplanned song needs to be added during a performance, select it directly from the full list without needing to rearrange or add it to the Setlist.
- Play the song directly from the full list, showcasing the flexibility of Setlist management.

HOW TO REORDER SONGS WITH ABLESET 2

The process of reordering songs in AbleSet is easy to do. Let's take a look at making it happen.

1 **OPEN ABLESET**
- Start by launching AbleSet on your computer to access your current set list.

2 **ACCESS SET LIST EDITING**
- Locate the "Edit Setlist" button within the AbleSet interface.
- Click this button to enter the editing mode where you can make changes to your set list.

3 **REORDER SONGS**
- Drag a single song to a new position in your setlist. For example, I will drag "Flowers" to the top of my list to make it the opening song.
- Continue adjusting the order of the songs as desired. For instance, I'll adjust the order of my songs to be "Flowers" with "September," and then "Enough is Enough."

4 **HIDE UNWANTED SONGS**
- Identify any songs you don't wish to include in the current performance.
- Use the hide option to remove these songs from the active set list without deleting them permanently, ensuring they are not visible or selectable during the performance.

5 **SAVE CHANGES**
- After reordering and adjusting your set list, click "Save Setlist" to apply the changes.
- This action updates your set list and finalizes the order of songs.

6 **REVIEW AND USE NEW SET LIST**
- Navigate back to the main screen of AbleSet where your new set list is displayed.
- Select the first song on the list, (In my case "Flowers"), and press play to start your set.
- Proceed through your set list by selecting and playing each song in the new order.

HOW TO REORDER SONGS WITH LIOBOXV2

The LIOBOX is the most unique MIDI controller that we've covered.
It's the only MIDI controller that allows us to create or edit a setlist directly
from the MIDI controller, without ever touching our computer.
Let's take a look at how easy it is to do.

1 ENTER SETTINGS

- Access the settings on your LIOBOX. Start by changing the operational mode to "Ableton Setlist Mode" to facilitate the loading and management of setlists directly from the device.

2 CREATE A SETLIST

- Navigate to the setlist options and select "Add an Ableton setlist."
- Enter the setlist interface. You may rename the default "setlist one" if desired, or keep it as is for simplicity.
- Add songs to your setlist. For example I'll add the songs "September," "Enough is Enough," "Flowers," and "Poppin" to my setlist.

3 MODIFY AND REORDER SONGS

- Return to the main setlist menu to view the current order of your songs.
- If necessary, reorder the songs according to your preference or set requirements.
- Use the "load setlist" option to load this setlist locally to your device. This action will display the tracks you've added in the order they are arranged.

4 PLAYBACK CONTROL

- Begin playback to start with the first track in your setlist.
- Seamlessly switch between tracks in real-time based on your flow.

HOW TO REORDER SONGS WITH CONDUCTOR

Right in line with its simple but elegant design, Reordering songs in our setlist using Conductor is simple-but elegant. Here's how.

1 OPEN CONDUCTOR IN YOUR SET

- Launch Conductor within your Ableton set. Click on 'expand' to access the full view of the interface.

2 ADDING SONGS TO YOUR SETLIST

- Select the songs you want to include in your performance setlist.

3 REORDERING SONGS

- Click and drag songs to rearrange their order according to your preference. Adjust their sequence by simply moving them up or down in the list.

4 USING PLAYBACK CONTROLS

- Utilize the play and stop buttons to start and stop the playback of the current song.
- Use the next song button to skip to the next track in your setlist, ensuring a smooth transition between songs during your performance.

5 MINIMIZE INTERFACE

- Once you are satisfied with the arrangement of your setlist, minimize the Conductor interface to declutter your screen and focus on the essential controls.

6 NAVIGATING THROUGH SONGS

- Navigate through your set list by jumping from one song to the next. Start and stop playback, and use the song navigation buttons to navigate through your setlist.

HOW TO REORDER SONGS WITH TAZ SP

TAZ SP is the version of TAZ that allows us to build and manage setlists. Here's how easy it is to do.

1 UNDERSTANDING THE DIFFERENT DEVICES

- **Taz Lite**: Primarily displays the setlist or cue list with a simple interface and allows you to get basic setlist navigation features. Also, integrates with the Oakboard Floor Vista for control from your feet.
- **Taz SP**: Allows creation and reordering of multiple cue lists.
- **Taz Pro**: Includes all functionalities of Taz Lite and Taz SP, and adds voice cues and locator features.

2 INITIATING EDIT MODE

- Access your default setlist on either Taz SP or Taz Pro.
- Navigate through the setlist as you would in Taz Lite, using simple commands to play or stop tracks.

3 CREATING A NEW SETLIST

- Click on 'Edit Presets' to modify your setlist.
- Enter a name for your new cue list, for example, "Four Song Set", and hit enter to load it.

4 REORDERING SONGS

- To change the order of songs, simply click and drag the songs to your preferred positions within the cue list. The interface is designed to be user-friendly, requiring no additional learning.

5 DELETING SONGS

- Select the song you wish to remove and click 'Remove Cue' to delete it from the list.

6 UPDATING THE SETLIST

- After making the desired changes, click 'Update Preset' to save the new arrangement of your setlist.

7 NAVIGATING UPDATED SETLISTS

- Navigate through the updated setlist to ensure all changes reflect correctly.
- Switch back and forth between the original and updated setlists to compare or revert changes.

HOW TO REORDER SONGS WITH VIRTUAL MIDI

This is an odd way to start a lesson, but I don't suggest you do this. I'll show you how to use only a Virtual MIDI Driver, and the Playback Advanced template to reorder songs in your set, but if you're planning on doing this alot, I would recommend a setlist management solution. But if you're stubborn, here's how to make this happen.

1 PREPARATION

- Ensure you have the "Playback Advanced Template" installed in Ableton. This template should have all necessary mappings pre-configured.
- Familiarize yourself with the locators in your set. These are pre-mapped to specific MIDI notes within the template.

2 VIEW AND ADJUST MIDI MAPPINGS

- Open the MIDI mapping mode in Ableton and review the mappings for each locator. These will correlate to specific songs in your setlist.
- Each locator should correspond to a MIDI note, which is crucial for reordering songs.

3 SETTING UP SONG SELECTION

- Locate the "Select Next Song" track within your template. If you look at the "Track Delay" section of the track, you'll notice the track delay is already set, which is part of what allows this trick to work.
- Prepare for song transitions by placing stop clips at desired points in your set, allowing for automatic or manual song changes.

4 EXECUTING SONG CHANGES

- To jump to a specific song, manually select the locator mapped to the desired song and activate the play command.
- Use the "Select Next Song" feature to transition from one song to another, ensuring global quantization is considered so transitions occur on the next downbeat.

5 BUILDING MEDLEYS

- For more complex arrangements, like medleys, use the MIDI mappings to jump from one song to another seamlessly. This involves careful timing and might require practice to ensure smooth transitions.

6 LIVE PERFORMANCE CONSIDERATIONS

- Test the setup in a live setting to ensure that all mappings and transitions work as expected.
- Consider the flow of the performance and adjust your setlist and transitions accordingly to maintain energy and engagement.

CREATING A ONE-BUTTON FADE WITH VIRTUAL MIDI

Here's how to use Virtual MIDI and the Advanced Playback Template to create a one-button fade.

ADJUSTING SETTINGS IN ABLETON

- **Open the Playback Template:** Load the "Playback Advanced Template," which has the fade function mapped to return tracks by default.

- **MIDI Mapping:**
  - Navigate to Session View.
  - Choose a button on your MIDI controller to map to the fade function.
  - Enter MIDI mapping mode in Ableton (e.g., Command + M).
  - Map this button to the clip launch button of the FADE Global Programming track in your Advanced Template.

OPTIONAL CUSTOMIZATIONS

- **Customize Fade Length**: Decide whether you want the default setting to be a one-measure or two-measure fade. Whatever value you prefer, make them the topmost clips in Session View, in the FADE track. For example, if you want a two measure fade in/out by default, move the 2M FADE OUT/FADE IN clips to the top of that track.

- **Additional Mappings:**
  - If you wish to also fade additional elements out, use the **USE TO MAP TO VOLUME** clip to assign to additional elements.
  - Solo your **FADE** track.
  - Trigger the clip launch button on the **USE TO MAP TO VOLUME** clip.
  - Press spacebar to stop playback.
  - Enter MIDI mapping mode in Ableton (e.g., Command + M).
  - Click on the fader/button you want to include in your mapping.
  - Press spacebar to send the MIDI value assigned to the **USE TO MAP TO VOLUME** clip.
  - Press spacebar to stop Playback once mapped.
  - Enter MIDI mapping mode in Ableton (e.g., Command + M) and review your mappings in your browser to make sure you didn't accidentally map to extra features in your set.

FINAL ADJUSTMENTS AND TESTING

- **Final Testing:**
  - Play your track and test the fade function using the mapped button.
- **Save Your Settings:** Save these settings in your playback template to ensure you can easily reuse them in future sessions.

THE PLAYBACK METHOD™: REDUNDANT

Hope isn't a good backup plan. That's why we need a fully-redundant Playback system, so that the show ALWAYS goes on-no matter what. Instead of hoping and praying that things work, let's learn how to setup and create a fully redundant Playback system.

In this stage of The Playback Method™ you'll learn:
- Why redundancy is the secret that allows you to relax, and have fun on-stage.
- What gear you need for a redundant setup.
- How to use the PlayAUDIO1U for full audio and MIDI redundancy.
- How to manage files in a redundant system.

THE PLAYBACK METHOD™ WORKBOOK

WHY DOES REDUNDANCY MATTER

The show MUST go on. People are paying to see you perform. They've traded their hard earned money to escape their problems for a few hours. The worst thing we want to do is say, "well oops.. We didn't have a backup plan so since our computer crashed, we've got to cancel the show". No! We're pros. We have a backup plan, and "hope" isn't a backup plan. Here's why redundancy matters so much in Live performance.

1 UNDERSTAND THE IMPORTANCE OF REDUNDANCY

- Hope is not a good backup plan.
- Without a backup plan, you'll spend the whole performance "baby-sitting" your computer and technology, and hoping it works. Or worst yet, canceling your show, because you didn't have a backup plan!

2 IMPLEMENT A BASIC BACKUP PLAN

- Start with simple backups, such as having an extra copy of your Ableton set on a thumb drive for easy transfer between computers.
- While this isn't "redundant" gear, it ensures your show goes on.

3 UPGRADE TO A FULLY REDUNDANT SETUP

- Incorporate a redundant audio interface, like the PlayAUDIO1U.
- Use two computers and a MIDI controller to ensure that if one computer fails, the other takes over seamlessly, without the audience or band noticing the switch.

4 APPLY THE CONCEPT OF REDUNDANCY BEYOND TECHNOLOGY

- Playback is an instrument. The same way we need backup instruments, or to think about what we do with our guitar, or drums.. We need to think about redundancy for playback.
- Just like having a spare guitar or extra strings is standard for guitarists, having a redundant setup should be standard for those using playback.
- "But we can't trust it.." If something goes wrong with Playback, and your band is quick to mention, "but we can't trust it, if something goes wrong…" remind them that "Playback is an Instrument". If a drum head breaks, a guitar string brings, a cable is bad, do you stop trusting the drums, and guitar? No! We understand that things happen. So, we make a backup plan. The same is true for Playback. Thankfully in our case, our backup plan is much easier (and automatic) to implement!

WHAT COMPUTERS DO YOU NEED FOR A REDUNDANT PLAYBACK SYSTEM

If you're going to build a redundant rig, how many computers do you need? And what type of computers? Can you use that five year old macbook air as your backup computer? Here's how to choose a computer.

1 **UNDERSTAND REDUNDANCY MATH**

- Redundancy math is simple. X2. Take the computer you're about to buy for Playback, and buy one more-exactly the same.

2 **SELECT IDENTICAL COMPUTERS**

- The cornerstone of a redundant setup is the identical nature of the computers. This means purchasing two of the exact same models, with the same specifications. Whether it's RAM, storage capacity, or any other critical specification, both computers should match perfectly.

3 **AVOID THE TEMPTATION OF OVERKILL**

- It might be tempting to invest in a single, highly powerful computer with specs like 4000 GB of RAM or a 16 TB hard drive. However, no matter how powerful a single computer is, it cannot provide the safety net that redundancy offers. Division of labor between two identical systems is the goal.

4 **ENSURE SYNCHRONIZATION**

- The reason behind insisting on identical computers is synchronization. When using a MIDI controller to trigger playback, both computers should be able to stay in sync down to the exact millisecond of the song. This precision ensures that switching from the primary to the backup computer is seamless and does not affect the timing or flow of your performance.

5 **PREPARE FOR SEAMLESS FAILOVER**

- The aim is to have a backup (B computer) that is just as reliable and high-performing as the primary (A computer). This setup ensures that if something goes wrong with the A computer, you can switch to the B computer without anyone noticing.

HOW MANY COPIES OF ABLETON DO I NEED FOR A REDUNDANT SETUP

Sure, we now understand redundancy math, x2. But does this mean we need to buy another copy of Ableton?

1 **UNDERSTAND ABLETON'S LICENSING POLICY**

- A single Ableton Live license grants two authorizations, allowing you to run Ableton on two computers simultaneously.
- This setup is both legally compliant and aligned with Ableton's usage policies.

2 **INSTALL ABLETON ON TWO COMPUTERS**

- Install Ableton Live on your primary (a) machine.
- Install the same version of Ableton Live on your secondary (b) machine, using the same license.

3 **AUTHORIZATION PROCESS**

- Authorize both installations with the same serial number via your Ableton account.
- If you've previously used both authorizations, contact Ableton at support@ableton.com or through the license portal to request an additional unlock for your redundant setup.

4 **CONSIDER YOUR ABLETON LIVE VERSION**

- For basic playback functionality, Ableton Live Standard is necessary. The Intro version is not sufficient.
- For advanced playback and redundancy, consider upgrading to Ableton Live Suite or adding the Max for Live add-on to access enhanced features and tools.

5 **UPGRADE OPTIONS**

- Evaluate the benefits of upgrading to Ableton Live Suite, which includes additional sounds and features, such as Max for Live.
- Alternatively, you can add Max for Live to Ableton Live Standard if you're only seeking that functionality.

6 **SET UP MAX FOR LIVE (IF NECESSARY)**

- If you intend to use Setlist, TAZ, Conductor, or any setlist management solution that requires Max for Live, ensure your setup includes this capability.
- Decide whether to upgrade to Suite for an all-inclusive solution or to add Max for Live to your Standard version based on your needs.

HOW TO BACK-UP AND MANAGE FILES IN A REDUNDANT SETUP

It's easy to stay focused on "gear" we need for a redundant setup, but one of the most important things to consider to have a rock-solid, reliable gig, is to manage our files so that we NEVER lose any files!

1 PURCHASE A DUAL-FACED THUMB DRIVE

- Opt for a thumb drive with both USB-A and USB-C connectors. Although speed and storage capacity (e.g., 64GB) may be modest, the versatility in connectivity makes it invaluable. This drive serves as a reliable medium for transferring files between primary and backup systems, a method affectionately known as "sneakernet."

2 EXTERNAL SOLID STATE DRIVE (SSD) FOR SONG STORAGE

- Store your tracks and projects on an external SSD. This not only frees up your computer's internal storage but also facilitates easy access to your files on different systems.
- Consider formatting your SSD in a manner compatible with your operating systems and music production software.
- Program and save your songs on this drive as part of your redundant file playback system.

3 SECONDARY BACKUP SSD

- It's wise to have a second external SSD as a backup. This ensures that you can access your files from a secondary computer, further bolstering your redundancy strategy.

4 CLOUD STORAGE SOLUTIONS

- Utilize cloud storage, such as Dropbox, for an additional layer of backup. This method allows for automatic synchronization and access to your files across multiple devices. However, be mindful of the following:
- The capacity of your computer's internal drive could be quickly exceeded by syncing large audio files. Plan accordingly by possibly opting for a computer with a larger internal drive or adjusting your cloud storage settings.
- Ensure that your critical files, especially Ableton sets, are fully downloaded and stored on the computer's internal storage, not just accessed remotely. It may be helpful to move important files out of the cloud storage's sync folder to a location on your desktop for easy access and certainty of availability.

WHAT WE NEED TO CREATE A REDUNDANT AUDIO INTERFACE SETUP

If we're going to create a redundant audio setup, there's a few things we need to make this happen. Or, we could buy one piece of equipment to handle it all…

1 SEPARATE OUTPUTS

- To hear the output of both computers, you'll need an audio interface for both computers.

2 INCORPORATE AN AUDIO SWITCH

- In a redundant setup, we only want to hear one computer at a time. So how do we switch between both interfaces? We use a switcher.
- Use a switcher, like the Radial SW8, to connect the two audio interfaces, allowing for seamless switching between the two sets of outputs.
- The switcher should have inputs for both audio interfaces and a single set of outputs to send to the front of house.

3 CONSIDER AN INTEGRATED SOLUTION: PLAYAUDIO1U

- For a more streamlined setup, consider the PlayAUDIO1U, which combines two audio interfaces and a switcher in one device.
- This device offers twelve XLR outputs and additional outputs for headphones,

4 EXPLORE ADVANCED DIGITAL SOLUTIONS FOR REDUNDANCY

- For setups requiring digital audio like Dante or MADI, investigate specialized devices like the Exbox.MD for Dante or the Prodigy MC/MP/MX.
- Understand that while these solutions offer high-quality digital audio transport, they don't support MIDI redundancy..you'll need to solve for this, somewhere else!

5 WHY'S MIDI LEFT OUT?

- If we're creating a live performance network on-stage to control our instruments and automate our production, how do we create a redundant MIDI solution? We'll cover that in our next lesson!

HOW DO WE MAKE OUR
MIDI REDUNDANT

If we're going to create a redundant audio solution, we can't neglect MIDI. How can we set up a redundant MIDI setup, so that we can continue to automate our production, and control our instruments on-stage without sending the same MIDI messages at the same time from both computers?

1   UNDERSTANDING THE NEED FOR REDUNDANCY

- Recognize the importance of having backup systems (audio and MIDI) to ensure that the live performance continues smoothly in case one computer fails.

2   EXPLORING MIDI REDUNDANCY SOLUTIONS

- Consider starting with two MIDI interfaces and a MIDI switcher as a basic redundancy setup.
- Discover specialized equipment like the Programmable Input Solutions from MIDI solutions, suitable for setups requiring five-pin DIN connections.

3   INTEGRATING AUDIO AND MIDI REDUNDANCY

- For a streamlined solution that covers both audio and MIDI redundancy, investigate the PlayAUDIO1U. These are designed to handle both aspects efficiently.

4   PLAYAUDIO1U FOR MIDI REDUNDANCY

- Examine the features of the PlayAUDIO1U, which includes MIDI redundancy capabilities and supports five-pin and RTP MIDI over Ethernet for expansive stage setups.
- Utilize the Ethernet port on the PlayAUDIO1U for a connected stage performance network, enhancing the versatility and control of your MIDI setup.

5   ADVANCED SOLUTIONS FOR PROFESSIONAL RIGS

- For high-end setups requiring pristine digital audio and comprehensive MIDI connectivity, the PlayAUDIO1U is recommended. It offers robust MIDI redundancy options, including USB and RTP MIDI, and can be connected to both A and B computers for ultimate reliability.
- Pair the PlayAUDIO1U with the mioXM or mioXL from iConnectivity to achieve a versatile setup that supports DIN and USB ports, catering to all your MIDI connectivity needs.

SETTING UP YOUR MIDI CONTROLLER WITH THE PLAYAUDIO1U

The easiest way to create a redundant audio and MIDI setup is to use the PlayAUDIO1U. In this lesson, we'll explore how to set up our MIDI Controller with PlayAUDIO1U.

1 ## CONNECT THE PLAYAUDIO1U TO REDUNDANT COMPUTERS

- Begin by connecting the PlayAUDIO1U interface to both your main and backup computers to establish a redundant setup.

2 ## CONNECT YOUR MIDI CONTROLLER

- Use a single USB cable to connect your MIDI controller to the PlayAUDIO1U's USB host port, favoring a direct connection for simplicity and reliability.

3 ## INSTALL AND LAUNCH AURACLE FOR X-SERIES SOFTWARE

- Download, install, and open the Auracle for X-Series software, a crucial tool for managing connections between your MIDI controller and the iConnectivity interface.

4 ## MAKE A USB HOST PORT RESERVATION

- Within the Auracle software, reserve a USB host port for your primary MIDI controller to ensure it consistently communicates through the same port.

5 ## (OPTIONAL) RESERVE A USB HOST PORT FOR A BACKUP MIDI COMPUTER

- Consider setting up a backup MIDI controller by reserving another USB host port, which allows for immediate switch-over in case of failure.

6   CONFIGURE MIDI PREFERENCES IN ABLETON LIVE

- Open Ableton Live's MIDI settings to enable "remote" from your MIDI controllers, ensuring both the primary and backup controllers are recognized and properly configured.

7   MAP MIDI CONTROLS

- Utilize Ableton Live's MIDI mapping function to assign playback controls (play, stop, next, previous) to your MIDI controller, facilitating live performance management directly from your controller.

8   SAVE AND TRANSFER YOUR SETP

- After mapping your MIDI controls, save your setup and transfer it to your backup computer. This step ensures both your main and backup systems mirror each other, providing a truly redundant setup.

9   TEST YOUR REDUNDANT SETUP

- Finally, test your setup by controlling Ableton Live from your MIDI controller, verifying that both computers respond correctly to commands, ensuring your performance can proceed flawlessly, even if one computer encounters issues.

SETTING UP MANUAL FAILOVER ON THE PLAYAUDIO1U

There's two ways to manage "failover" on the PlayAUDIO1U. Let's take a look at my preferred method for managing failover.

1   **SETUP DUAL ABLETON SESSIONS**
- Ensure you have two identical Ableton sessions ready for redundancy, each running a set list management solution of your choice.

2   **INTEGRATE REMOTE CONTROL**
- Use a MIDI Controller like the Oakboard Slide Duo for remote control, connecting it through a mioXM to a PlayAUDIO1U for navigating your Ableton set remotely.

3   **UNDERSTANDING SWITCHING METHODS**
- Acknowledge the three ways to switch between Computer A and B:
  - Using the front panel of the PlayAUDIO1U.
  - Automatic switching (covered in a separate lesson).
  - Manual switching using a footswitch, which is my preferred method.

4   **CONFIGURE THE MANUAL SWITCH (FOOTSWITCH SETUP)**
- Obtain a Boss Dual Footswitch (FS-6) or any compatible footswitch.
- Connect it to the PlayAUDIO1U using a TRS cable, plugged into the Control 1 port.

5   **VERIFY MANUAL SWITCH OPERATION**
- Test the switching functionality between Scene A and Scene B using the footswitch.
- Check the front panel to visually see the switchover happen, or you can see this in Auracle for X-Series on the "Audio" page.

6   **EXTEND FOOTSWITCH REACH FOR ONSTAGE USE**
- If you need to remotely control the manual switchover of your PlayAUDIO1U, you can use a few adapters and XLR cables to make this happen.
- Gather TRS to XLR adapters (TRS male to XLR male, and TRS male to XLR female).
- Use an XLR cable to extend the connection from the PlayAUDIO1U to the footswitch across the stage.

7   **TESTING DURING THE "BURN-IN SESSION**
- Perform a walk-across-room test to demonstrate the footswitch's effective range in switching between Scene A and Scene B.

SETTING UP AUTOMATIC FAILOVER ON THE PLAYAUDIO1U

Sure, I prefer manual failover (so I can be in control), but it does take a bit more mental bandwidth to manage, so most folks prefer automatic failover. Here's how to make it happen on the PlayAUDIO1U.

1 DOWNLOAD THE LIFESINE PLUGIN

- Visit the iConnectivity website and download the LifeSine plugin. Choose the version compatible with your operating system (e.g., Apple Silicon version for Macs with M1 chips).

2 INSTALL THE PLUGIN

- After downloading, locate the LifeSine plugin file on your computer.
- For Mac users, access the Library folder by holding down the Option key and clicking on the Go menu. Navigate to Library > Audio > Plugins > Components.
- Drag and drop the LifeSine plugin component (.component file) into the Components folder.

3 CONFIGURE ABLETON

- Open Ableton and go to Preferences (Command + Comma).
- Navigate to the Plugins section and ensure Audio Units V2/V3 or VST3 (depending on your plugin version) are enabled.
- Rescan your plugins so that Ableton recognizes the newly installed LifeSine plugin.

4 ADD THE PLUGIN TO YOUR SET

- In Ableton, find the LifeSine plugin in the browser and drag it into your set.
- Consider adding the LifeSine plugin to your playback template for ease of use in future sets.

5 SETUP PLUGIN OUTPUT

- Assign the plugin's output to external out, specifically choosing output 15 on the PlayAUDIO1U interface. Adjust preferences and output configurations in Ableton if necessary.

6 CONFIGURE FAILOVER SETTINGS IN AURACLE FOR X-SERIES

- Open Auracle for X-Series and navigate to the audio tab. Ensure the scene is set to A and the system is armed for automatic failover.

7 TEST THE SETUP

- Simulate a failure (e.g., turn off the LifeSine plugin or disconnect the computer) to ensure the system automatically switches to the backup computer seamlessly.

8 FINAL ADJUSTMENTS

- In Auracle for X-Series, adjust failover settings such as audio timeout to prevent premature switching. Disabling auto-switch back to Scene A is recommended for more control over the failover process.

HOW TO TRANSFER FILES BETWEEN REDUNDANT COMPUTERS

One of the hardest challenges of working with redundant setups is managing files. While you might immediately consider a cloud based solution like Dropbox, here's an alternative, and free, open source solution that's cross platform.

1 NETWORK YOUR COMPUTERS

- Start by networking both Mac computers. This doesn't require an internet connection but involves connecting both computers to the same network via Ethernet cables and a network switch.
- Any network switch will work, but I personally use the Netgear GS308.

2 INSTALL LANDROP

- Download and install LANdrop on both the source computer (Computer A) and the destination computer (Computer B).

3 PREPARE FILES FOR TRANSFER

- For individual files or small sets, ensure they are ready to transfer. If you're transferring Ableton projects, perform a "Collect All and Save" to include all necessary files.
- For larger projects or folders, right-click the folder and select "Compress" to create a ZIP file, ensuring all components are included in a single package.

4 INITIATE TRANSFER ON COMPUTER A

- Open LANdrop and choose "Send Files."
- Drag the file(s) or folder(s) you wish to transfer into the LANdrop window or use the "Add" button to browse and select them.
- Select the destination computer (Computer B) from the list and click "Send."

5 ACCEPT TRANSFERS ON COMPUTER B

- On Computer B, you'll receive a prompt to accept the incoming files. Click "Yes" to start the transfer.
- Files will transfer over your local network, showcasing the speed and efficiency of LANdrop, especially with large files.

6 ACCESS TRANSFERRED FILES

- Once the transfer is complete, locate the transferred files on Computer B.
- For zipped folders, right-click and choose "Uncompress" to access the contents.
- You can now open and use the files, such as an Ableton project, directly on Computer B.

MAKING EDITS AND UPDATING FILES

- **Edit Files on Computer A:**
  - Make any necessary edits to your files or projects on Computer A.

- **Repeat the Transfer Process:**
  - Use LANdrop to send the updated Ableton Set to Computer B, ensuring both computers are still connected to the same network. If you're only making an edit, you don't need to send the full project, only the Ableton Set.

- **Integration on Computer B:**
  - To make sure the files open properly on the b-machine, drag the Ableton set back into the Ableton Project folder, and open the Ableton set from that location.

HOW TO MANAGE EDITS IN A REDUNDANT PLAYBACK SYSTEM

If you're in the middle of rehearsal and you're making edits, how do you quickly get those edits to your B computer? Here's how to manage edits in a redundant playback system.

1 START WITH IDENTICAL SETUPS

- Ensure both A and B computers have the exact same Ableton project folder, including all samples and necessary files. This serves as the baseline for both systems.

2 DECIDE ON A FILE TRANSFER METHOD

- Choose your preferred method for transferring files between the two computers.
- Options include physical transfer devices (sneakernet), cloud storage, or local network solutions like LAN drop.

3 MANAGE EDITS WITH VERSION CONTROL

- When an edit is made to the file on the A computer, immediately save the project with a new version number (e.g., from 000 to 001) to document changes without overwriting the original file.

4 TRANSFER EDITS PROMPTLY

- After saving the new version, use your chosen transfer method to send the updated file to the B computer. This ensures both computers have the latest version of the file.

5 INCORPORATE THE NEW VERSION INTO B COMPUTER

- Once the file is transferred to the B computer, place the new version into the corresponding project folder to replace or join the previous version. This action synchronizes the two computers.

6 OPEN AND VERIFY THE UPDATE ON COMPUTER B

- Open the updated file on the B computer to ensure that the changes made on the A computer are reflected. Verify that samples and edits are correctly transferred.

7 MAINTAIN SYNCHRONIZATION

- Continuously update both A and B computers with any new changes to maintain synchronization. In scenarios where time allows, consider transferring files even while Ableton is running to minimize downtime.

HOW TO CREATIVELY USE A REDUNDANT SETUP IN REHEARSAL

If you're using a redundant setup, here's an easy way to creatively use your redundant system to manage files in rehearsal.

1 **SETUP REQUIREMENTS**
- Equip yourself with a redundant audio interface, such as the PlayAUDIO1U, connected to both your primary (A) and backup (B) computers.
- Temporarily add a folder containing all the songs or band repertoire to both computers. Make sure you've still got plenty of space on your computer.

2 **REPLICATE A DJ'S WORKFLOW**
- Envision operating two decks (A and B rigs) where one song plays on the current deck while the next song is queued on the other.
- In rehearsal, focus on individual songs rather than the full set for precise editing and preparation.

3 **SONG TRANSITION PROCESS**
- On the B rig, prepare the next song to be played, by opening the Ableton Session on the b computer.
- Continue rehearsing with the current song on the A rig. When ready to transition, switch the audio output to the B computer via the PlayAUDIO1U interface.
- Play the queued song on the B rig, then immediately prepare the next song on the A rig.
- Toggle the scene button on the interface to switch back to the A computer for the next song, and continue this process throughout the rehearsal.

4 **BENEFITS OF THIS METHOD**
- Keeps rehearsal sessions dynamic and uninterrupted.
- Facilitates on-the-fly editing and customization of individual songs.
- Allows for a more focused and productive rehearsal environment, especially when working on song arrangements and performance dynamics.

5 **INTEGRATION INTO FULL SET PREPARATION**
- Once individual songs are polished, integrate them into the full set for a comprehensive production run-through.
- This method is particularly useful before reaching the final stage of full set preparation, offering a creative way to utilize your redundant rig for more than just backup.

THE PLAYBACK METHOD™:
REMOTE

We don't want to let the audience in our "secret" that we're using Playback and we want to stay focused on the music, and in the moment. By "remotely" controlling our Playback system, we'll be able to move our Playback System off-stage, out of sight, and have full control of our system, without looking like we're checking our email on-stage!

In the "remote" stage of The Playback Method™, you'll learn:
- What you need for remote control
- How to remotely control a redundant system
- How to MIDI map your controller with Setlist and AbleSet 2
- Using a "Smart" MIDI controller for remote control
- How to remotely access Setlist and AbleSet 2 with an iPad (whether you have a MIDI controller or not!)

THE PLAYBACK METHOD™ WORKBOOK

SETTING UP REMOTE CONTROL OF A REDUNDANT PLAYBACK SYSTEM

We don't want to let the audience in on our "secret" that we're using Playback, and we don't want to look like we're checking our email on-stage. An easy way to accomplish this is to move our Playback system off-stage. But how do we control this without having it near us? Here's what we need to set up remote control of our fully redundant, "hands-free" setup.

1 EQUIPMENT CHECKLIST

- Network switch (e.g., Netgear GS308)
- mioXM or mioXL device for converting USB or 5-pin MIDI signals to RTP (Ethernet)
- PlayAUDIO1U interface
- MIDI controller (e.g., Oakboard Slide Duo)
- Network cables
- Two computers for a redundant setup

2 PREPARATION

- Sketch a "stage plot" for your configuration, detailing the placement of each piece of equipment.
- Install Auracle for X-Series on your computers to manage iConnectivity devices.

3 CONNECTING YOUR EQUIPMENT

- Link all devices to the network switch using Ethernet cables.
- Attach the MIDI controller to the mioXM.
- Ensure the PlayAUDIO1U interface and both computers are also connected to the network switch.

4 DEVICE CONFIGURATION

- Utilize Auracle for X-Series to set up communication between the mioXM and PlayAUDIO1U.
- Configure a USB host reservation on the mioXM for the Oakboard Slide Duo.
- Initiate an RTP network MIDI session from the mioXM to the PlayAUDIO1U.

5 SOFTWARE SETUP

- Adjust MIDI settings in Ableton Live, to recognize the PlayAUDIO1U interface.
- Activate remote control options to permit MIDI commands from the PlayAUDIO1U to interact with the DAW.

5 BURN-IN TESTING

- Conduct a thorough test of the setup by using the MIDI controller to command the DAW's playback functionalities, verifying actions such as play, stop, and navigation operate seamlessly through the mioXM, PlayAUDIO1U, and Ableton.
- Make any necessary tweaks and troubleshoot connectivity issues as they arise.

WHAT DO WE NEED FOR REMOTE MIDI CONTROL

If we're going to remotely control our Playback System, what do we need?

1 START WITH THE OAKBOARD SLIDE DUO
- Begin by connecting the Oakboard Slide Duo to your computer using its USB connection. This MIDI controller is chosen for its reliability and ease of use.

2 AVOID USB EXTENDERS
- Connect the Oakboard Slide Duo directly to your computer with a USB cable. Do not use USB extenders, as they often fail and disrupt MIDI data transmission.

3 INCORPORATE THE MIOXM
- For long-distance MIDI data management, use the mioXM device. This tool acts as a bridge, converting USB or five-pin DIN MIDI signals into a format that can be transmitted over Ethernet.

4 CONVERT MIDI TO RTP MIDI
- Utilize the Ethernet port on the mioXM to transform MIDI signals into RTP MIDI, making it ready for network transmission.

5 EMPLOY A NETWORK SWITCH
- Use a network switch (like the Netgear GS308) to connect multiple devices on the same network. Connect the Oakboard Slide Duo through the mioXM to this network switch.

6 CONNECT TO YOUR COMPUTER
- Directly connect your computer to the network switch via Ethernet. If your computer lacks an Ethernet port, employ a USB-C to Ethernet adapter to integrate it into the network.

7 ENSURE REDUNDANCY WITH PLAYAUDIO1U
- Utilize the PlayAUDIO1U interface to achieve redundancy. This device allows MIDI and audio data to be distributed to two computers simultaneously, ensuring there's no single point of failure in your setup.

8 OPTIONAL: UPGRADE TO THE MIOXL FOR LARGER SETUPS
- For setups requiring additional connections and presets, consider integrating the mioXL. This device offers an expanded version of the mioXM, providing more RTP, USB, and DIN connections for larger or more complex setups.

HOW TO REMOTELY VIEW YOUR SETLIST

We know that we need to remotely control our Playback system, and we know what we need to make that happen, but how do we remotely view our setlist?

1 **UNDERSTANDING THE NEED FOR VISUAL FEEDBACK & CONTROL**
- Recognize the importance of knowing exactly what you're controlling on stage, especially when using a MIDI controller like the mioXM.

2 **CONSIDERING HARDWARE MIDI CONTROLLERS WITH VISUAL FEEDBACK**
- For guitar players, consider the Oakboard Floor Vista. It offers a USB connection to mioXM and subsequently to your network switch and computer. This device displays your Ableton setlist, allowing navigation and play/stop controls, though it does not permit reordering of songs.
- For keyboard players, drummers, or those with a tabletop setup, the LIOBOXv2 is recommended. It offers two USB connections for direct connectivity to computers or through mioXM for control over both machines. Unlike the Floor Vista, it allows for full control over your setlist, including reordering songs.

3 **SOFTWARE SOLUTIONS FOR REMOTE CONTROL**
- Use the Mira app on an iPad for a basic view-only control of Setlist, ensuring both devices are on the same network.
- For more comprehensive control, consider AbleSet for remote viewing and manipulation of your Ableton set from an iPad, iPhone, or another computer. This requires both devices to be connected to the same network.

4 **ENSURE RELIABLE CONNECTIVITY**
- Avoid relying on wireless connections for live performances due to stability issues. Instead, use a wired connection for your devices.
- For iPhone or iPad, use a lightning to Ethernet adapter to establish a stable network connection. Ensure the adapter also supports power to keep your device charged during use.

5 **FINAL RECOMMENDATIONS**
- Choose between the Oakboard Floor Vista and LIOBOXv2 based on your role (guitarist vs. keyboardist/drummer) and need for control over your Ableton setlist.
- For remote control, prioritize using AbleSet with a wired network connection to ensure reliability and control over your performance setup.

HOW TO MIDI MAP YOUR CONTROLLER WITH SETLIST

If you're planning on using Setlist as your setlist management solution, here's how to MIDI map your MIDI controller with Setlist.

1 PREPARATION AND SETUP

- Start by incorporating Setlist into your Ableton template. This way, every new set you program will already include the setlist, pre-mapped and ready to use.
- Opt for a MIDI controller that offers at least four buttons, possibly five, to cover essential controls. For demonstration, the Oakboard Slide Duo is used alongside the mioXM for onstage control.

2 MIDI MAPPINGS ESSENTIALS

- Enter MIDI map mode in Ableton (using Command + M) and identify the setlist elements you wish to control. These elements are highlighted in a purplish-blue color within the setlist plugin.
- Map the following controls from your MIDI controller to the Setlist plugin:
- Play Button: Initiates playback of the selected song.
- Stop Button: Stops playback.
- Up/Previous Button: Navigates to the previous song in Setlist.
- Down/Next Button: Navigates to the next song in Setlist.
- Optionally, map the Open/Close Interface Button for toggling the Setlist interface within Ableton. This enhances visibility during performances.

3 IMPLEMENTING MIDI MAPPINGS

- Conduct the MIDI mapping process on your primary (A) machine first. This involves assigning each desired action on your MIDI controller to its corresponding function in Setlist.
- Save your Ableton set with the new mappings.

4 FILE TRANSFER FOR REDUNDANCY

- Transfer the newly saved Ableton set with MIDI mappings from your A machine to your B machine. This ensures both machines are identically configured for redundancy.
- Utilize your preferred method for file transfer (e.g., LAN drop) to complete this step.

5 VERIFICATION AND ADJUSTMENT

- On the B machine, open the transferred Ableton set and verify that all MIDI mappings are correctly in place.
- Ensure both A and B machines have the setlist plugin loaded and functioning with the MIDI mappings.

6 OPERATIONAL TESTING

- Test the MIDI controller's functionality with both machines to ensure seamless control over playback, navigation, and setlist visibility.
- Verify that both machines respond correctly to each command from the MIDI controller, maintaining synchronization between them for redundancy.

SETTING UP REMOTE CONTROL USING LIOBOXV2 WITH ABLETON LIVE

If you're looking for a hardware, fully-integrated solution for viewing, controlling and building a setlist, there's nothing like the LIOBOXv2. Here's how to set up the LIOBOXv2 for remote control of your Playback System.

1 PREPARATION

- For this lesson, I'm assuming you've already set up the LIOBOXv2 and have some basic understanding of the device. If not, view our LIOBOXv2 course.
- Make sure the LIOBOXv2 control script is correctly installed on your A (main) and B (backup) computers.
- Secure your network as outlined in previous lessons, ensuring all devices are interconnected.

2 HARDWARE SETUP

- Use a USB cable to connect the LIOBOXv2 to the PlayAUDIO1U for local control capabilities.
- Opt to use one of the two USB ports on the LIOBOXv2 for a unified workflow across different MIDI controllers.

3 SOFTWARE CONFIGURATION

- Launch Auracle for X-Series on your A computer to oversee USB and MIDI routing.
- In Auracle, reserve the necessary USB host port(s) for your devices.
- Configure MIDI routing from the LIOBOXv2 to both A and B computers, making sure to set up both sending and receiving paths.

4 ABLETON SETUP

- Adjust the MIDI preferences on both A and B computers to allow the LIOBOXv2 to send to and receive MIDI from Ableton via the designated ports.

5 TESTING LOCAL CONTROL

- Confirm that both computers recognize the LIOBOXv2 and can manage Ableton sets, ensuring sync and control from the device are intact.

6 SWITCHING TO REMOTE CONTROL

- Change the USB connection from PlayAUDIO1U to mioXM to enable remote control functionalities.
- In Auracle for X-Series, replicate the steps for USB and MIDI routing via mioXM, with a focus on ensuring network connectivity.
- Validate the setup by operating Ableton from the LIOBOXv2 through mioXM, checking that full remote capabilities are active.

7 FINAL VALIDATION

- Perform a comprehensive test of the whole system, including failover scenarios, to confirm redundancy is effective.
- Verify direct feedback and management of setlists from the LIOBOXv2.

8 PRACTICE AND REHEARSAL

- Employ the setup in a variety of rehearsal contexts to become accustomed to the workflow and identify any potential issues.

SETTING UP REMOTE CONTROL USING A OAKTONE FLOOR VISTA WITH ABLETON LIVE

As a guitar player, the Oakboard Floor Vista is the best solution for remotely viewing your setlist from your pedalboard.

1 **INTRODUCTION TO THE OAKBOARD FLOOR VISTA**
- Understand that this floor controller is specially designed for on-stage musicians who need a hands-free solution to control their playback system.

2 **SETTING UP YOUR SESSIONS IN ABLETON**
- Prepare two Ableton sessions, designated as Ableton session A and B. Ensure Taz Lite is loaded into both sessions to facilitate the mirroring of the cue list on the Oakboard Floor Vista.

3 **LOCAL SETUP WITH PLAYAUDIO1U**
- Initially, connect the Oakboard Floor Vista to the PlayAUDIO1U via a USB cable. This step is essential for setting up a local connection before moving to a networked setup.

4 **ABLETON CONFIGURATION FOR PLAYAUDIO1U**
- Configure MIDI settings in Ableton to enable remote control and MIDI mapping. This allows the Oakboard Floor Vista to control playback and navigate through your setlist.

5 **NETWORKING YOUR DEVICES**
- Link your devices (Oakboard Floor Vista, mioXM, and PlayAUDIO1U) through a networked setup. This includes setting up ethernet connections and ensuring all devices are communicating correctly.

6 **CONFIGURING AURACLE FOR X-SERIES FOR LOCAL AND NETWORKED CONTROL**
- Use Auracle for X-Series software to configure settings for both local (PlayAUDIO1U) and networked (mioXM) setups. This involves setting up USB host port reservations and MIDI routing paths.

7 **FINALIZING MIDI ROUTING FOR BI-DIRECTIONAL CONTROL**
- Ensure that MIDI signals can flow both ways between your Ableton sessions and the Oakboard Floor Vista. This step is crucial for the Oakboard Floor Vista to display the current setlist and receive feedback from Ableton.

8 **TESTING YOUR SETUP**
- Conduct thorough tests to confirm that the Oakboard Floor Vista can control both Ableton sessions. Verify that you can navigate the setlist, play songs, and the tempo indicator is functioning correctly.

9 **SWITCHING BETWEEN LOCAL AND NETWORKED SETUPS**
- Practice switching your Oakboard Floor Vista connection from the PlayAUDIO1U to the mioXM. This flexibility allows for easy transitions between rehearsal and live performance setups.

10 **SAVING YOUR CONFIGURATION**
- Once you're satisfied with the setup, save your configuration on both the PlayAUDIO1U and mioXM. This ensures that your system is ready to go for both rehearsal and live performances.

HOW TO SETUP REMOTE CONTROL OF SETLIST USING AN IPAD

If you're using Setlist for setlist management, here's how to use an iPad to remotely view your set. If you've also set up a MIDI controller for remote control, you can pair this functionality with your MIDI controller to visually see what your MIDI controller is doing.

INITIAL SETUP

- Ensure both of your computers (referred to as Computer A and Computer B) are connected to the same network.
- Connect your iPad to the same network to ensure seamless communication between devices.

INSTALLING THE MIRA CONTROLLER APP

- On your iPad, search for and install the "Mira Controller" app from the App Store.
- Upon first launch, allow the app to find devices on your local network.

CONNECTING TO MACS SERVERS

- Open the Mira Controller app on your iPad. It will search for Macs servers, which are essentially the computers running your setlist.
- Identify and connect to your primary computer (Computer A) to establish a link.

NAVIGATING YOUR SETLIST ON THE IPAD

- View and operate your setlist directly from the iPad, mirroring the actions on Computer A.
- Experiment with playing, stopping, and selecting songs within the setlist from your iPad.

ADDRESSING REDUNDANCY WITH COMPUTER B

- Recognize the limitation of controlling only one setlist instance (Computer A) from the iPad. For true redundancy, an additional solution is necessary.

INTEGRATING MIDI CONTROLLER FOR REDUNDANT CONTROL

- Connect a MIDI controller, such as the Oakboard Slide Duo, to a mioXM device, which networks both computers.
- Use the MIDI controller to simultaneously control setlists on both Computer A and Computer B, ensuring perfect sync.

CONFIGURING IPAD FOR VIEW-ONLY MODE

- Switch the iPad to view-only mode, allowing it to serve as an additional visual aid rather than a control device.
- Navigate the setlist using the MIDI controller, with changes reflected on both computers and the iPad.

ESTABLISHING A WIRED NETWORK CONNECTION

- For stability and reliability, especially in live settings, connect the iPad to a wired network using an Ethernet to Lightning adapter.
- Disable Wi-Fi on the iPad and both computers to minimize interference and ensure a solid connection.

FINALIZING THE SETUP

- Arrange your MIDI controller and iPad in an ergonomic and visually accessible manner, ensuring ease of navigation through your setlist.
- Consider using an aesthetically pleasing iPad stand for a professional setup appearance.

HOW TO SETUP REMOTE CONTROL OF ABLESET 2 USING AN IPAD

AbleSet is the best solution for remotely controlling and viewing your Playback System. If you don't have a MIDI controller, it's still possible to have full remote control of your Playback System from a remote device. Here's how to do it.

1 INTRODUCTION TO THE SETUP

- Begin with two computers (referred to as Computer A and Computer B) running identical Ableton Live sets with AbleSet open.
- Ensure that AbleNet is enabled on both machines for bi-directional synchronization.

2 ESTABLISHING A NETWORKED STAGE

- Connect both computers to a network switch, creating a performance network.
- Utilize a PlayAUDIO1U for audio connection and a mioXM for MIDI control, though MIDI control is optional for this setup.

3 PREPARING YOUR REMOTE DEVICE

- Opt for a device with a larger screen like an iPad for better visual control, though a smartphone can also suffice.
- Connect the remote device to the same network as your computers using a lightning to Ethernet adapter or its equivalent, depending on your device.

4 CONFIGURING REMOTE DEVICE ACCESS

- Within ableset settings, set a web app password to secure access.
- Locate and note the Remote IP Address from the ableset menu on one of the computers.

5 NETWORKING YOUR DEVICES

- On your remote device, enter the noted IP address in a web browser to access your AbleSet remotely.
- You'll initially have a view-only access; to interact with the setlist, click the lock icon and enter your password.

6 INTERACTING WITH YOUR SETLIST REMOTELY

- Navigate through the setlist, selecting songs or specific sections within songs from your remote device.
- Changes made will sync across both Computer A and B, ensuring unified playback control.

7 ENHANCING CONTROL WITH A MIDI CONTROLLER (OPTIONAL)

- If incorporating a MIDI controller, midi map it to ableset for additional control capabilities.
- The remote device can provide visual confirmation of selections made via the MIDI controller, offering a comprehensive overview of the setlist status.