



LIOBOX² and GoorooLink User Manual

Version 13

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LIOBOX² and GoorooLink User Manual

DOWNLOAD

Prefer a PDF? [Download the User Manual \(PDF\)](#).

The **LIOBOX²** is a MIDI controller for the following Digital Audio Workstations (DAW), and any other MIDI-compatible DAW:

 Ableton

 Bitwig

 Reaper

 Pro Tools

 Logic Pro

 Cubase

 QLab

It controls the transport of your DAW and displays the songs of your session automatically.

You can also create and save **setlists** on the device itself, to reorder the songs of a show without modifying your projects.

GoorooLink is its companion software for macOS. It is required for Pro Tools, Logic Pro, Cubase and QLab, and optional for the other DAWs.

New to the LIOBOX²? Start with the **Quick start**.

Choose your DAW

Pick your DAW: its guide gathers everything you need, from installation to pad features.

Ableton Script	Bitwig Extension	Reaper Script
Pro Tools GoorooLink	Logic Pro GoorooLink	Cubase GoorooLink
QLab GoorooLink	MIDI Any DAW or instrument	

How the LIOBOX² works with your DAW

The LIOBOX² integrates natively with Digital Audio Workstations (DAW).

- **Ableton, Bitwig and Reaper:** a script or an extension loaded in the DAW is all the LIOBOX² needs. No additional plug-in is required.
- **Pro Tools, Logic Pro, Cubase and QLab:** the same features are available through the **BRIDGE** app of [GoorooLink](#), which must be running on a Mac.
- **Any other DAW or instrument:** any DAW that works with MIDI devices can be used, see the [MIDI guide](#).

For example, the LIOBOX² retrieves the song names and information from your project without any action on your part. It also provides extended transport,

autostop, loop and autonext functions.

Setlists are created and stored in the LIOBOX² itself: no computer or additional plug-in is needed, and your DAW project stays unchanged.

The LIOBOX² fully supports Windows 10 and 11, and macOS (from Mac OS X).
GoorooLink runs on macOS only.

Where to go next

1. [Quick start](#): the steps to follow, from unboxing to your first song.
2. [Getting started](#): hardware, connection, GoorooLink installation, covered versions.
3. Your DAW guide (above): setup, markers, modes and pad features of your DAW.
4. [LIOBOX²](#): features, hardware description, pad configuration, banks, setlists and settings.
5. [LIObase](#): steel mounting case to attach the LIOBOX² to a drum arm or a stand.
6. [GoorooLink](#): BRIDGE, device configuration, firmware updates.
7. [Troubleshooting](#)
8. [Revisions and legal](#)

1 Quick start

Follow these steps in order to go from the box to your first song launched from the LIOBOX². Each step links to the detailed page if you need more.

! WHAT YOU NEED

- The LIOBOX² and the USB cable provided.
- Your DAW installed on the computer.
- A Mac with an internet connection for [GoorooLink](#). GoorooLink is **required** for Pro Tools, Logic Pro, Cubase and QLab, and recommended for the other DAWs (firmware and script updates).

1.1 Connect the LIOBOX²

1. Plug the LIOBOX² into the computer with the cable provided.
2. On macOS, click **Allow** when the computer asks *"Allow accessory to connect?"*. If **Don't Allow** was clicked by mistake, see [LIOBOX² not detected](#).

To learn the pads, the knob and the ports, see the [LIOBOX² description](#).

1.2 Install GoorooLink (Mac)

1. Open the `.dmg` file and drag the GoorooLink shortcut to the **Applications** folder.
2. Launch GoorooLink and grant the macOS permissions it asks for (**App Management** and **Files & Folders**).

Details: [Install Gooroolink](#).

1.3 Update the firmware

Always start from the latest firmware.

1. Connect the LIOBOX² **directly** to the Mac, on its **USB B** port (the one recognized as "Liobox SPARE"), with no USB hub in between. Only this port allows a firmware update.
2. In Gooroolink, open **DEVICE → DEVICES** and select your LIOBOX² in the Known Devices list.
3. In the **Device update** section, keep the **Auto** mode and click **Download** if a newer firmware is proposed.
4. Click **Start Firmware Update**. The update takes between 10 and 20 seconds.

DANGER

Do not disconnect the LIOBOX² or let the computer go to sleep during the update.

If the update fails or hangs, see [Firmware update problems](#). The full procedure is in [Device update](#).

1.4 Set up your DAW

Select your DAW for the short version of its setup, then follow the link to its complete guide.

Ableton

Bitwig

Reaper

**Pro
Tools**

**Logic
Pro**

Cubase

QLab

MI

1. Copy the LIOBOX² script folders matching your Ableton version into Ableton's **MIDI Remote Scripts** folder (GoorooLink can do it for you).
2. Connect the LIOBOX² and start Ableton.
3. In **Options → Settings → Link, Tempo & MIDI**, pick the Liobox script in a **Control Surface** slot and assign **Liobox Port 1** to Input and Output.

[Complete Ableton guide](#)

1.5 Select the mode on the LIOBOX²

1. Press the **MENU** pad (E) and choose **MODE**.
2. Select the mode of your DAW (for example **ABLETON**, **PRO TOOLS** or **QLAB**) and the **ALL TRACKS** list.

The LIOBOX² screen shows a **green check mark** once it communicates with the DAW (a red cross means the DAW or the script is not started). See [Connection status](#).

1.6 Play

- Turn the **knob** to select the next song and click it to launch it.
- Pad **A** plays, **B** rewinds or goes to the previous song, **C** forwards or goes to the next song, **D** pauses.
- Pad **F** changes the pad bank, pad **E** opens the menu.

Song names, BPM, key and duration come from your project: see the track naming convention in the guide of your DAW.

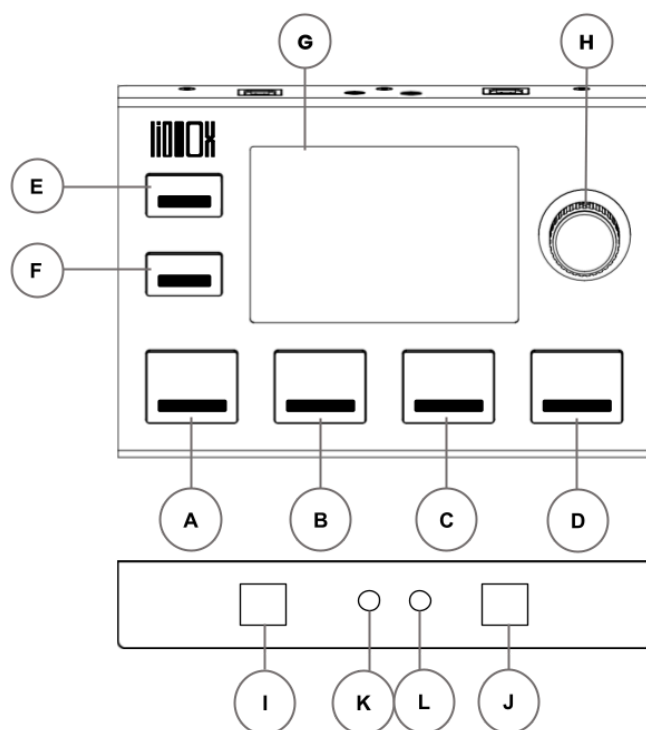
1.7 Next steps

- Build a show with [setlists](#): reorder songs without touching your project.
- Reassign the pads in [Pad config](#).
- Add a second computer for [redundancy](#).
- Something does not work? See [Troubleshooting](#).

2 Getting started

This chapter covers everything that does not depend on your DAW: the LIOBOX² hardware, how to connect it, how to install GoorooLink, and the versions this manual covers. Then follow the guide for [your DAW](#).

2.1 LIOBOX² description



Label	Element	Function
A, B, C, D	Pads A B C D	Pads that can be assigned to software functions or MIDI messages

Label	Element	Function
E	Pad E: MENU	Opens the menu and returns to the main screen
F	Pad F: BANK CHANGE / BACK	Changes the pad bank and goes back in submenus
G	Display	3.5-inch color display
H	Clickable knob	Navigates the menu, selects and launches the next or previous song
I	USB A	Connects to the Master computer
J	USB B	Connects to the Spare computer. Is also the port used for firmware update
K	MIDI OUT	3.5 mm jack MIDI output
L	MIDI IN	3.5 mm jack MIDI input

2.1.1 Pads (A to F)

The LIOBOX² has six RGB backlit silicone pads with click buttons. Each pad has a predefined function assigned to short, long and double presses. Pads A to D can be reassigned, as explained in [Pad config](#).

2.1.1.1 Predefined functions (Ableton)

- **A: PLAY:** launches the selected song. By default, once a song is launched, the LIOBOX² automatically selects the next song in the list.

- **B: RWD:** a long press launches fast rewind. A single press selects the previous song without launching it. A double press restarts the current song.
- **C: FWD:** a long press launches fast forward. A single press selects the next song without starting it.
- **D: PAUSE:** pauses playback. A second press resumes playback. During playback, a quick double press stops playback.
- **E: MENU:** opens the LIOBOX² menu (settings and setlists). In the menus, pressing MENU returns to the home screen.
- **F: BACK / BANK CHANGE:** in the menus, goes back to the previous menu. On the MAIN screen, changes the pad bank.

2.1.2 Clickable knob (H)

The clickable knob (a notched rotary encoder) moves through the menu options. Clicking it confirms the selection.

On the MAIN screen, turn the knob to select the next song to play, then click it to launch the song.

2.1.3 USB ports (I, J)

The LIOBOX² has two USB 2 MIDI ports, named USB A and USB B (I and J respectively in the drawing above):

- USB A is recognized as "Liobox MASTER"
- USB B is recognized as "Liobox SPARE"

The LIOBOX² can also be used with a single computer, connected to the USB A port.

Connecting two computers, one on each USB port, enables **redundancy**.

i NOTE

Only the USB B port allows a firmware update with GoorooLink. See [Device update](#).

2.1.4 Jack ports (K, L)

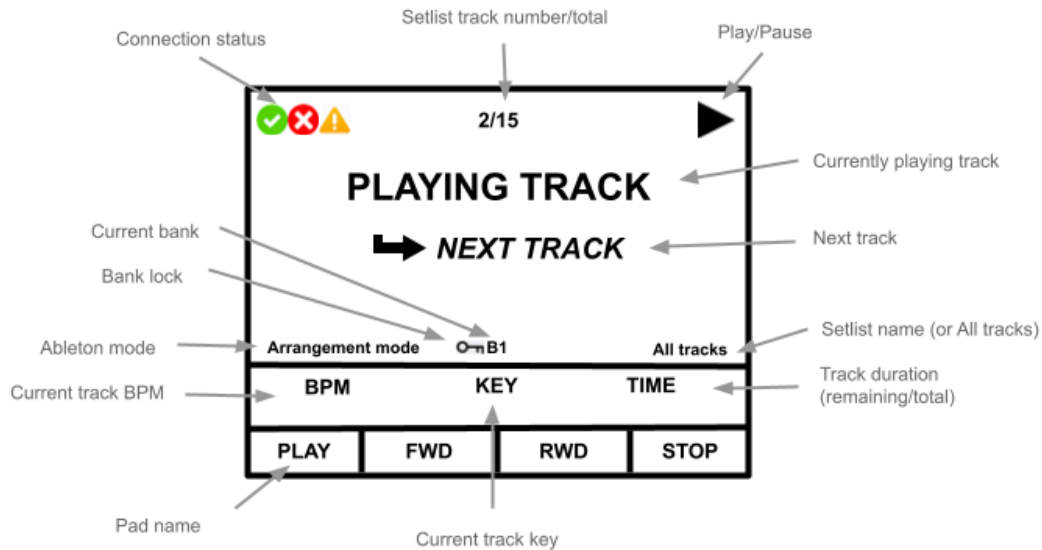
The LIOBOX² has two MIDI 3.5 mm jack ports:

- **MIDI IN** port: lets an external instrument control LIOBOX² functions
- **MIDI OUT** port: lets the LIOBOX² control an external instrument

2.1.5 Display (G)

The LIOBOX² 3.5" screen shows customizable information, so you do not need to look at the DAW.

In ADVANCED mode, the MAIN screen shows:



The amount of information shown on the MAIN screen depends on the screen setting. See [Screen preference](#) for all the options.

The MENU screens let you fully customize the LIOBOX² and [create and navigate setlists](#).

2.2 Connect the LIOBOX²

1. Plug the LIOBOX² into the computer with the cable provided, on the USB A port (Master computer). A second computer can be connected to the USB B port for [redundancy](#).
2. On macOS, always click **Allow** when the computer asks whether the LIOBOX² can connect. If you clicked **Don't Allow**, see [LIOBOX² not detected](#).

3. Set up the DAW as described in [your DAW guide](#), then check the [connection status](#) on the LIOBOX² screen.

2.2.1 Connection status

The LIOBOX² communicates with your DAW through a script (Ableton, Bitwig, Reaper) or through the BRIDGE app of [Gooroolink](#) (Pro Tools, Logic Pro, Cubase, QLab).

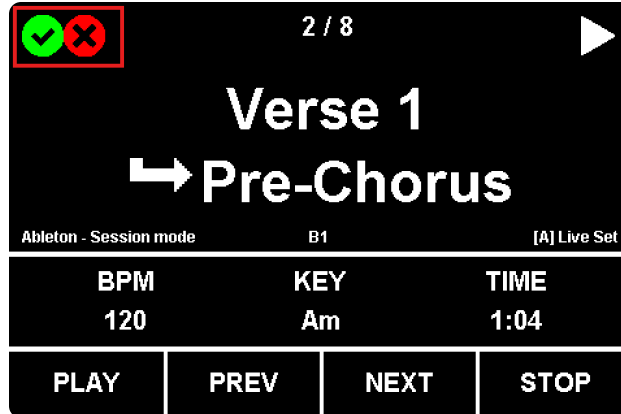
When two computers are used in [redundancy](#), load the **Spare** script on the second computer.

Once the script is loaded in Ableton, Bitwig or Reaper, the LIOBOX² exchanges MIDI information with the Main computer. The same applies to Pro Tools, Logic Pro, Cubase and QLab while Gooroolink is running.

The LIOBOX² screen shows the state of the connection:

Script loaded, communication active	DAW not started, script not loaded
	

With redundancy, the status of each connection is shown (Main first, then Spare):



2.2.2 Redundancy

The LIOBOX² can be connected to two computers running in sync: a Main and a Spare. If the Main computer fails, the Spare computer takes over, so neither the show nor its control is interrupted.

Loading the Spare script on the second computer tells the LIOBOX² that this computer is the backup.

The LIOBOX² sends information to the Spare computer but does not display its feedback, to avoid conflicts with the Main computer.

When the Spare computer is connected, the LIOBOX² compares the song lists of the Main and Spare computers to make sure the sessions are identical.

2.3 Install GoorooLink

GoorooLink is the companion software of the LIOBOX². It is **required** to use the LIOBOX² with Pro Tools, Logic Pro, Cubase and QLab, and optional (but recommended) with the other DAWs: it configures the LIOBOX² from your Mac and keeps the firmware and scripts up to date. See [GoorooLink](#) for a description of the application.

2.3.1 System requirements

GorooLink is compatible with:

- macOS on Intel processors
- macOS on Apple M processors

Supported macOS versions:

- Big Sur (11)
- Monterey (12)
- Ventura (13)
- Sonoma (14)
- Sequoia (15)
- Tahoe (26)

NOTE

An internet connection is required to perform auto-updates.

2.3.2 Install

GorooLink is distributed as a macOS installer (`.dmg`):

1. Open the `.dmg` file.
2. Drag the GorooLink shortcut to the Applications folder.

WARNING

GorooLink needs system permissions. Make sure they are granted.

2.3.3 Cross compatibility

To keep the LIOBOX² firmware, the scripts and GoorooLink compatible with each other, GoorooLink checks the Gooroo Controllers servers. If it detects a mismatch, it warns you and proposes the updates that fix it. See [Auto-updates](#).



TIP

Always keep your LIOBOX², scripts and GoorooLink up to date to benefit from the latest features and bug fixes.

2.4 Covered versions

This manual describes the features of the following firmware, software and script versions.

Keep your LIOBOX², scripts and GoorooLink up to date to benefit from the latest features, bug fixes and stability improvements.

Element	Version
LIOBOX² firmware	v6.1.2 and above
Ableton script	v3.1.7 and above
Reaper script	v1.1.0 and above
Bitwig extension	v1.0.0 and above
GoorooLink software	v1.1.0 and above

3 DAW

3.1 Ableton

! AT A GLANCE

- **Integration:** native, through the LIOBOX² Ableton script. GoorooLink is not required.
- **Features:** song list, setlists, transport, autonext, autostop, loop, redundancy.
- **Needed:** the script matching your Ableton version (see [Covered versions](#)).

3.1.1 Setup

Before connecting the LIOBOX² to the computer, **install the script** that matches your Ableton version. The script is a small folder that lets Ableton and the LIOBOX² exchange data.

When using two computers in **redundancy**, load the script with the "Spare" extension on the second computer, so that the LIOBOX² can tell the two computers apart.

! WARNING

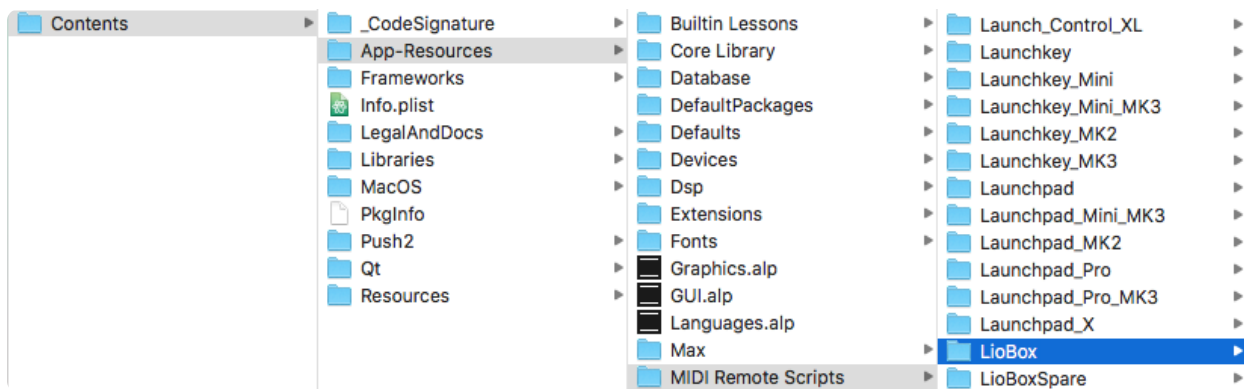
Ableton 10, 11, 12.0 and 12.1+ use different Python versions, so you must load the script that matches your version of Ableton.

💡 TIP

The [GoorooLink](#) software can install and update the Ableton scripts for you, and shows which scripts are compatible with your LIOBOX² firmware.

3.1.1.1 Add the Ableton script on macOS (manually)

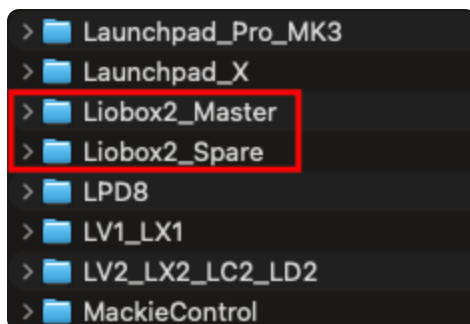
1. In the Applications folder, right-click on the Ableton icon and select **Show Package Contents**.
2. Drag the scripts that match your Ableton version into the `MIDI Remote Scripts` folder.



3.1.1.2 Add the Ableton script on Windows (manually)

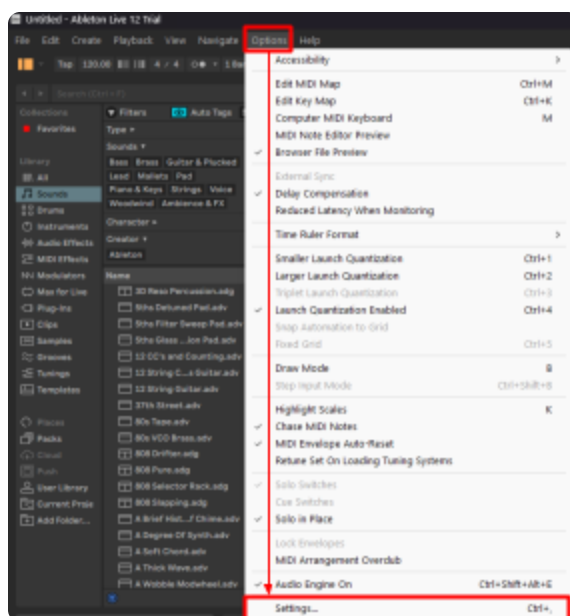
Copy the script folders `Liobox2_Master` and `Liobox2_Spare` into the following folder:

```
<path_to_Ableton>/Ableton/<version>/Resources/MIDI Remote Scripts
```

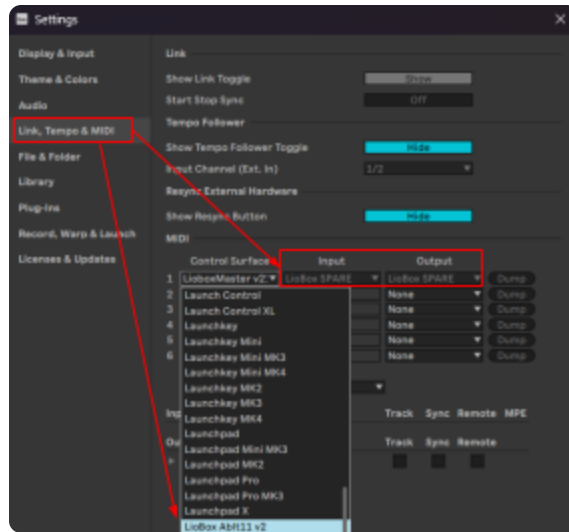


3.1.1.3 Load the script in Ableton

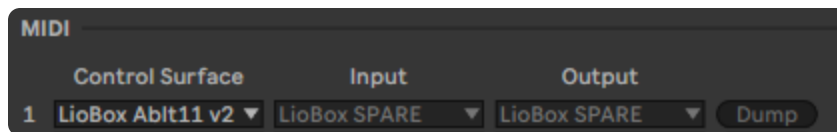
1. Connect the LIOBOX² to the computer and start Ableton.
2. In **Options** → **Settings**, select **Link, Tempo & MIDI**.



3. Select the script in a **Control Surface** dropdown.



4. Assign the **LioBox Port 1** to both Input and Output.



The script works the same way in Session and Arrangement view.

3.1.2 Script advanced features

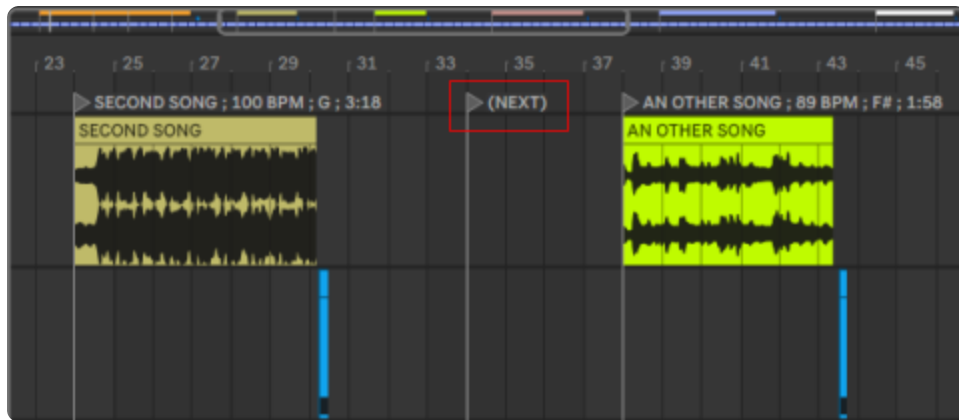
The Ableton script supports advanced features:

1. **Autonext**: a marker that asks the LIOBOX² to launch the next song. The command is executed by the LIOBOX².
2. **Autostop**: a marker that stops playback.
3. **Loop**

3.1.2.1 Autonext

Autonext sends a "Next" request that launches the next marker of the LIOBOX² (not the next marker of the session).

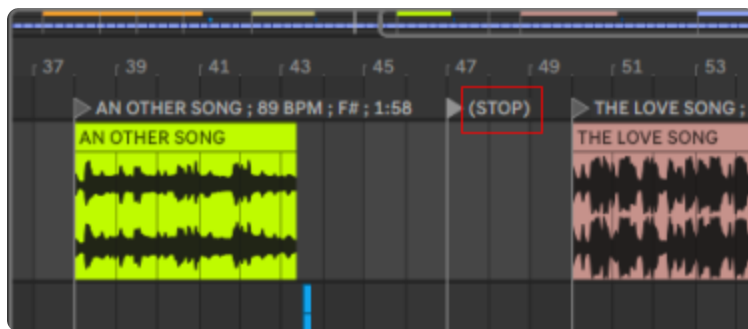
To use this feature, add a (NEXT) marker in your session. The command is executed when the playhead passes over it.



3.1.2.2 Autostop

Similarly, the "Stop" marker triggers a STOP in Ableton itself (not from the LIOBOX²).

To use this feature, simply add a (STOP) marker in your session. The command is executed when the playhead passes over it.



3.1.2.3 Loop

LOOP markers automate the Ableton loop section:

- (LOOP): creates a 4-beat infinite loop

- **(LOOP X)**: creates an infinite loop of X beats
- **(LOOP X//Y)**: creates a loop of X beats that repeats Y times and then deactivates

Loops can also be created on the fly from the LIOBOX², see [Loop on-the-fly](#).

3.1.3 Loop on-the-fly

The LIOBOX² pads can control the Ableton loop:

- **Loop in**: sets the loop **start** at the beginning of the **current** bar (or the current beat, see below). It also turns the Ableton loop off, so that a new one can be defined.
- **Loop out**: sets the loop **end** at the end of the **current** bar (or the current beat), and turns the loop on. A loop in must have been set first, otherwise nothing happens. The end must be after the start, otherwise an error "Loop end must be after start" is shown.
- **Loop in/out**: alternates between the two. If loop in was set, the next press sends loop out, and the other way around.
- **Loop on/off**: turns the loop on or off. Turning it off also cancels the remaining repeats of a **(LOOP X//Y)** marker.
- **Loop create X**: creates a loop of X beats (X from 1 to 127), starting at the beginning of the current bar. The loop is turned on, and its length is shortened if it would run past the end of the song.

i NOTE

Loop in and Loop create X always turn the loop on. If the playhead is already past the loop end, it jumps back to the loop start. The loop keeps repeating until you turn it off.

Assign these features to pads in [Pad config](#). By default, Loop in and Loop out snap to the **bar**. You can change this to **beat** in the [advanced settings](#).

3.1.4 MIDI OUT: connection with an external MIDI instrument

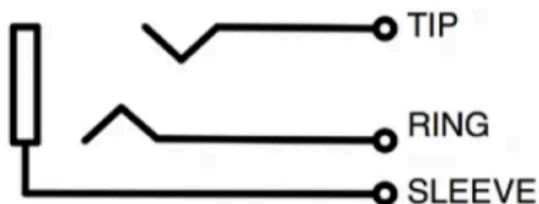
The LIOBOX² has a second virtual MIDI port that lets you send MIDI messages (Note, Control Change, Program Change) from Ableton to an external instrument.

1. On the MIDI track, open the **MIDI To** selector.
2. Select the LIOBOX² port 2 (**LioBox (Port 2)**).



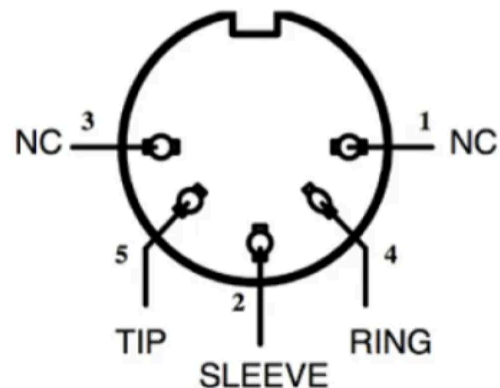
To connect the external instrument, use a 3.5 mm jack cable, or a MIDI DIN to 3.5 mm jack adapter (also called Type A MIDI).

**Tip Ring Sleeve
Female Connector**



NC = Not Connected

**5-Pin DIN
Female Connector
(mating face shown)**

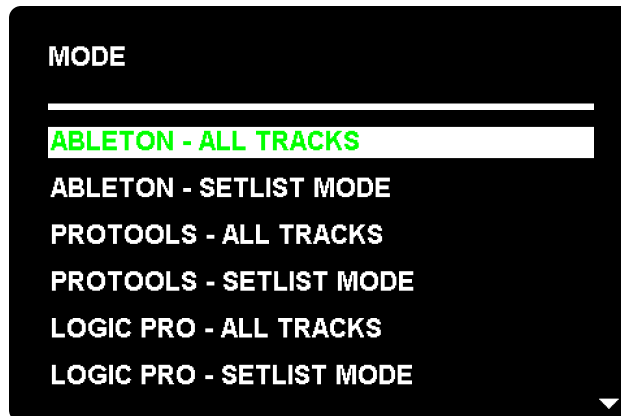


3.1.5 LIOBOX² modes

Select the **ABLETON** mode in **MENU → MODE**.

3.1.5.1 All tracks mode

Switch to **ALL TRACKS** mode from the [Mode menu](#).



ALL TRACKS mode gives access to all the songs of the DAW session, in session order, so you can move to and launch any song of your set.

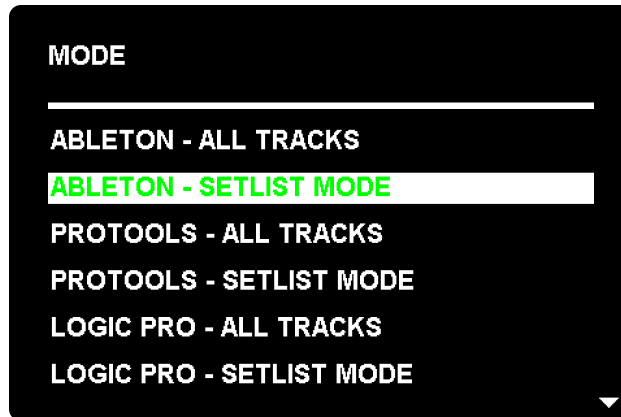
If [Error on duplicate marker](#) is enabled, the LIOBOX² checks the song names and warns you when two songs (scenes/locators) have the same name, so you can correct them.

3.1.5.2 Setlist mode

SETLIST mode lets you choose and reorder the songs: the LIOBOX² only displays the songs of the show's setlist, in the order you want. **All this without modifying the DAW session or touching the computer.**

Setlists can be renamed and are saved in the internal memory of the LIOBOX².

Switch to Setlist mode from the Mode menu:

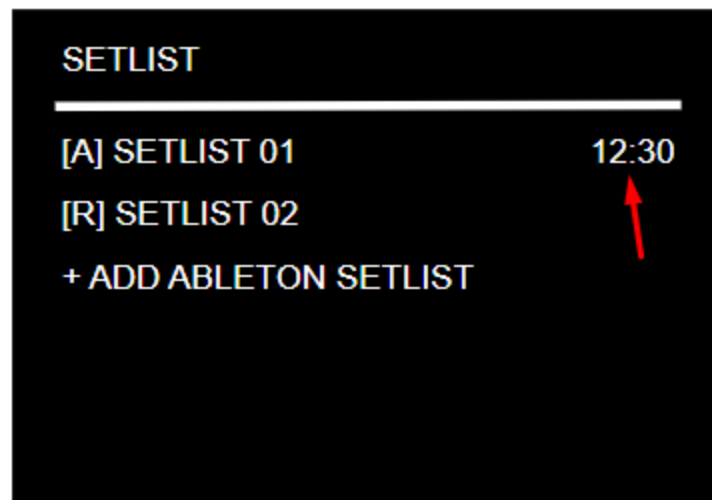


3.1.5.2.1 Setlist creation

To create a setlist, select **+ ADD [MODE] SETLIST** in **MENU → SETLIST**. First select the mode (Ableton) in **MENU → MODE**.

The first letter of the mode (A for Ableton, B for Bitwig, R for Reaper, ...) is added at the start of the setlist name, to show which mode it belongs to.

As songs are added, the total duration is displayed at the top of the window, next to the setlist name.

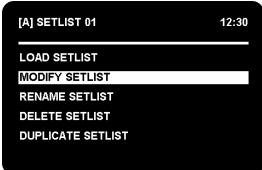
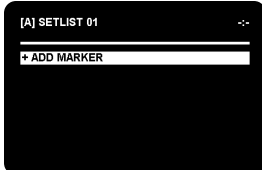
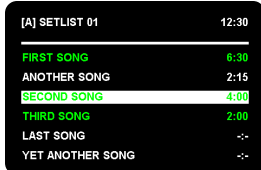
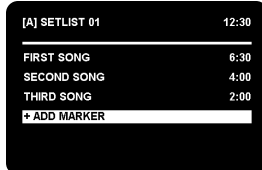


3.1.5.2.2 Add songs to the setlist

Once the setlist is created, you can add songs. The song list is loaded directly from the active Ableton project.

To add a song, open the setlist, select **MODIFY**, then **+ ADD TRACK**. The list of loaded songs appears: click a song to add it. The same song can be added several times.

The duration of each song is shown next to its name (it comes from the song title, see the [naming convention](#)).

Setlist menu	Setlist / MODIFY menu	ADD TRACK menu	Setlist / MODIFY menu
			

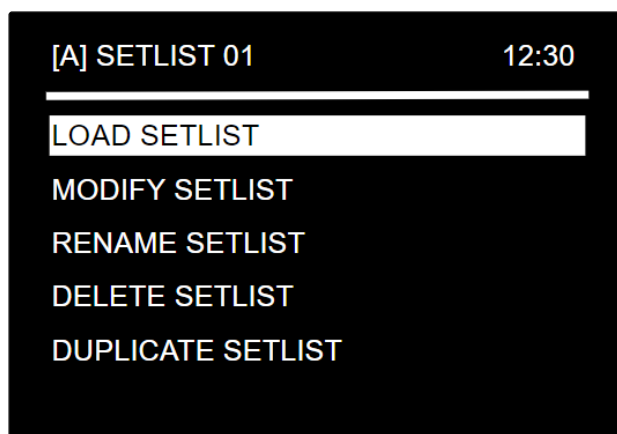
Songs already in the setlist appear in green.

3.1.5.2.3 Manage and load setlists

A setlist can be renamed (12 characters maximum), duplicated and modified at any time. See [Setlists](#).

If a song in the loaded setlist is not present in the DAW session, it is displayed in red on the Play screen. Up to 6 setlists can be created.

To use a setlist, select SETLIST mode in the MODE menu and load the setlist.



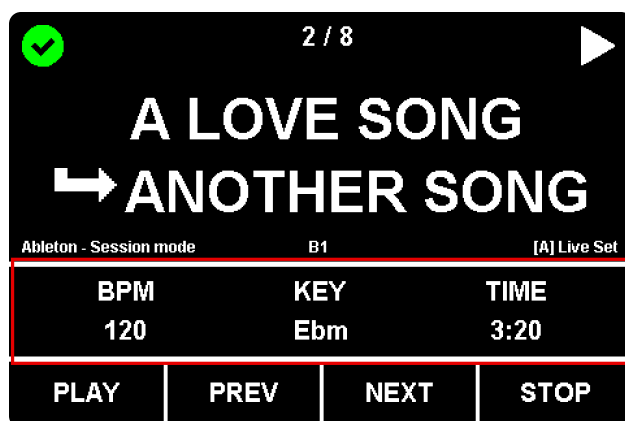
The setlist name appears in red on the Play screen if the loaded setlist's mode is different from the active mode.

3.1.5.3 Track position in session/setlist

The position of the current song in the session or setlist is constantly displayed at the top of the screen.

3.1.6 Track naming convention

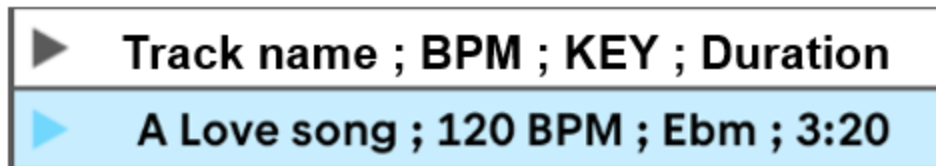
The LIOBOX² can display the BPM, key and duration of each song, in the box outlined below (Advanced display mode).



Enter them in the song name using this naming convention:

song_name ; bpm ; key ; duration

- Write the duration as mm:ss.
- If you do not need a value, leave the field empty and omit the ;.
- To keep a song from being sent to the LIOBOX², start its name with ().
Example: ()song number 1.



3.1.6.1 Compatible characters

The following characters are compatible with the LIOBOX². Any other character is filtered out.

- Upper case: A to Z
- Numbers: 0 to 9
- Parentheses: ()
- Square brackets: []
- Hashtag: #
- Ampersand: &
- Plus: +
- Slash: /
- Space

3.1.6.2 Names that are not transmitted

A name starting with one of the following is not transmitted to the LIOBOX²:

- ()
- []
- (LOOP
- _
- * *
- >
- >>
- +
- LOOP

The following marker names are also filtered out from the marker list received by the LIOBOX²:

- AUTOSTOP
- (STOP)
- (NEXT)
- STOP
- SONG END
- PLAYNEXT
- STOPBOT
- EASY LOOPER
- NEXTCUE

3.1.7 Pad features

Pads can be reassigned from **MENU → PAD CONFIG** (see [Pad config](#)). In Ableton mode, the following features are available:

- NONE
- PLAY LIOBOX MARKER

- PLAY (TRANSPORT)
- PAUSE
- STOP
- PREV LIOBOX MARKER
- PREV MARKER (TRANSPORT)
- FAST-REWIND
- RESTART MARKER
- NEXT LIOBOX MARKER
- NEXT MARKER (TRANSPORT)
- FAST-FORWARD
- LOOP IN/OUT, LOOP IN, LOOP OUT, LOOP ON/OFF, LOOP CREATE X
- CUSTOM MIDI

Notes:

- **Play (Transport)** corresponds to the DAW Play.
- **Play LIOBOX Marker** plays the next song (the selected one).
- **Fast-Rewind** and **Fast-Forward** can only be assigned to the Long press pad event.
- **Next** or **Prev Marker (Transport)** corresponds to the DAW Next event (next/previous in the project).
- **Next** or **Prev LIOBOX Marker** selects the next or previous marker from the setlist.
- The loop features are described in [Loop on-the-fly](#).

! INFO

Ableton shares its pad memory with Bitwig: a pad assignment made in one mode also modifies the assignment in the other.

3.1.8 Redundancy

Load the `Liobox2_Spare` script on the second computer, then connect both computers to the LIOBOX². The LIOBOX² compares the song lists of the Main and Spare computers to ensure that the sessions are identical. **Nothing else is required.**

See [Redundancy](#).

3.1.9 Troubleshooting

If the LIOBOX² does not show the green check icon or the song names, see [Troubleshooting](#).

3.2 Bitwig

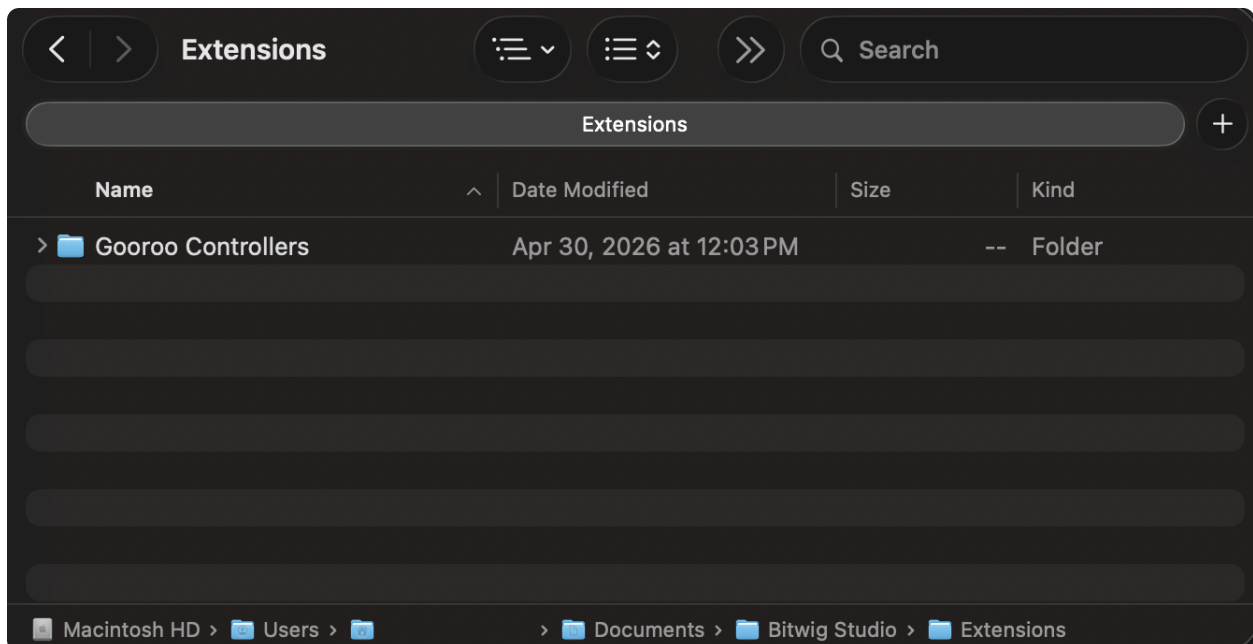
! AT A GLANCE

- **Integration:** native, through the Gooroo Controllers Bitwig extension. GoorooLink is not required.
- **Features:** song list, setlists, transport, autonext, autostop, loop, redundancy.
- **Needed:** the Bitwig extension (see [Covered versions](#)).

3.2.1 Setup

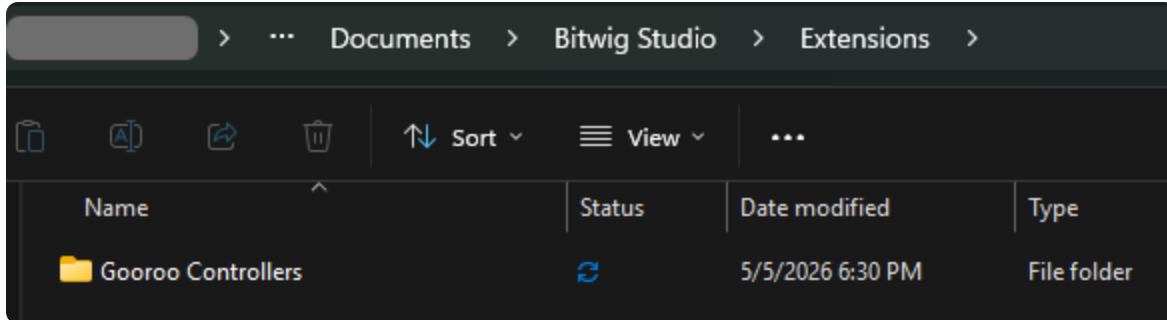
3.2.1.1 Add the Bitwig extension on macOS

Unzip the extension folder into `/Users/<username>/Documents/Bitwig Studio/Extensions`.



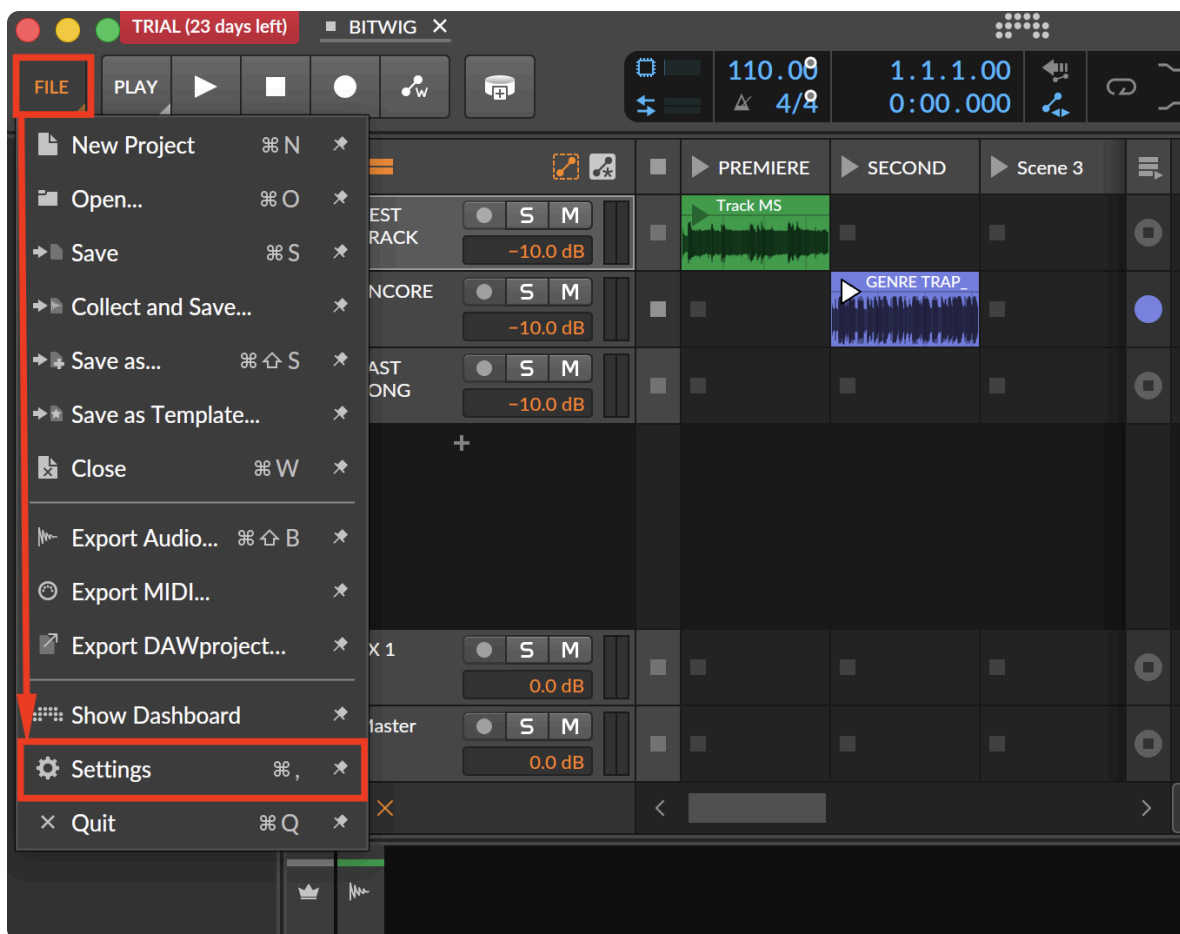
3.2.1.2 Add the Bitwig extension on Windows

Unzip the extension folder into `<username>/Documents/Bitwig Studio/Extensions`.

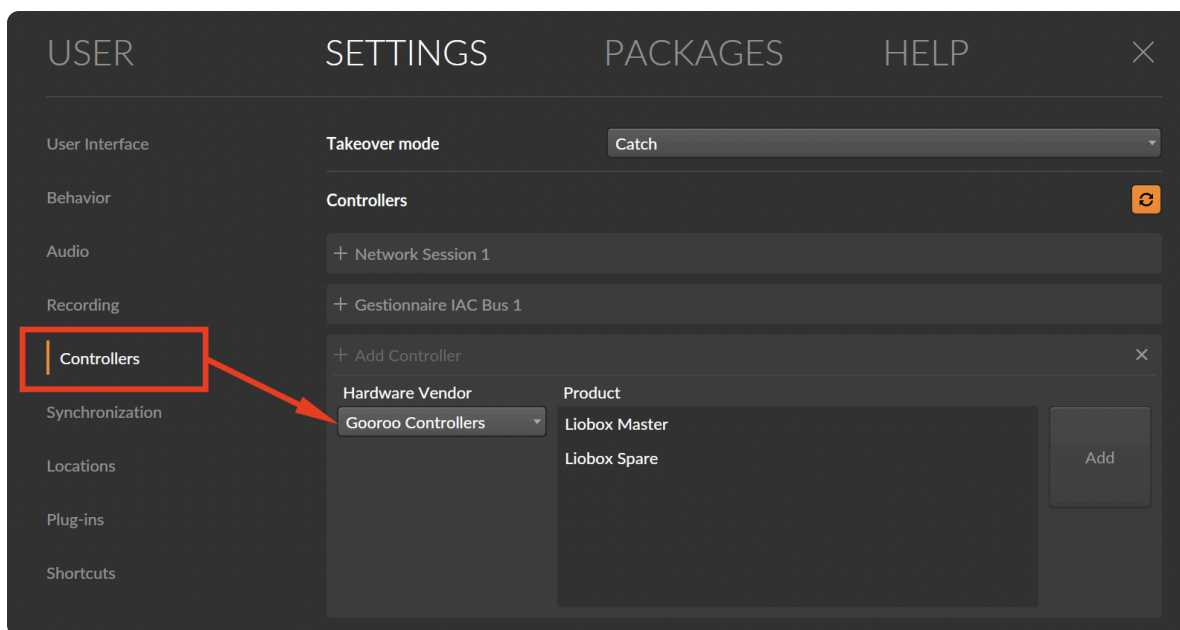


3.2.1.3 Load the extension in Bitwig

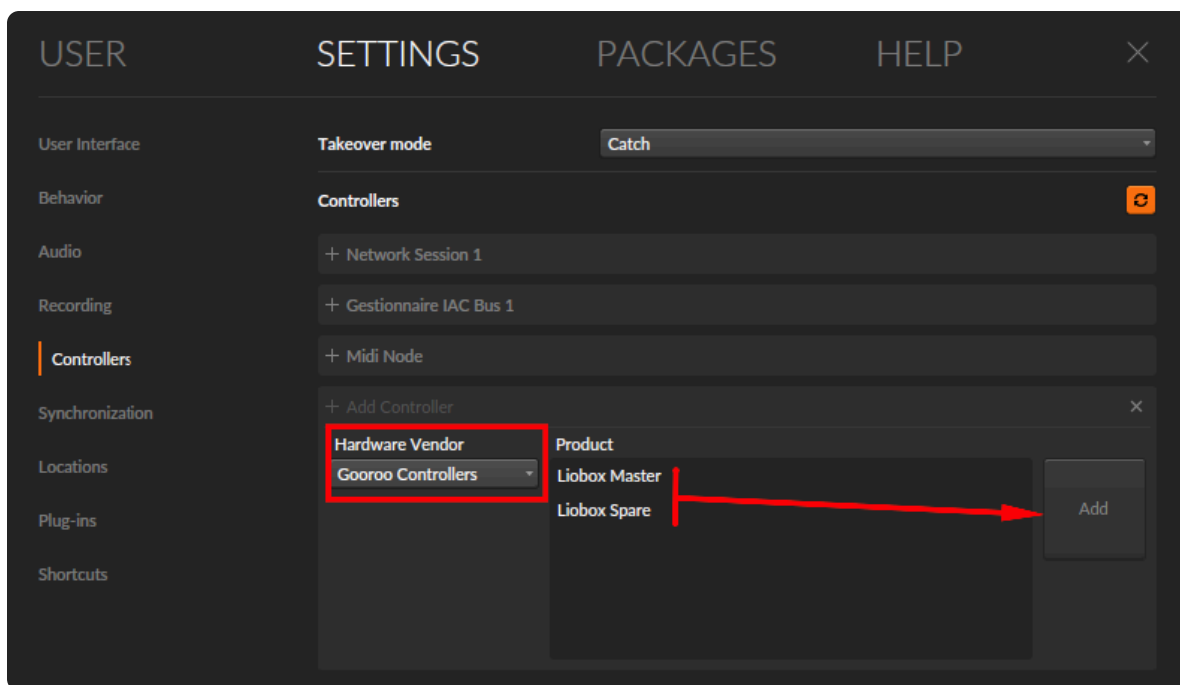
1. Connect the LIOBOX² to the computer and start Bitwig.
2. In **File** → **Settings**, select **Controllers**.



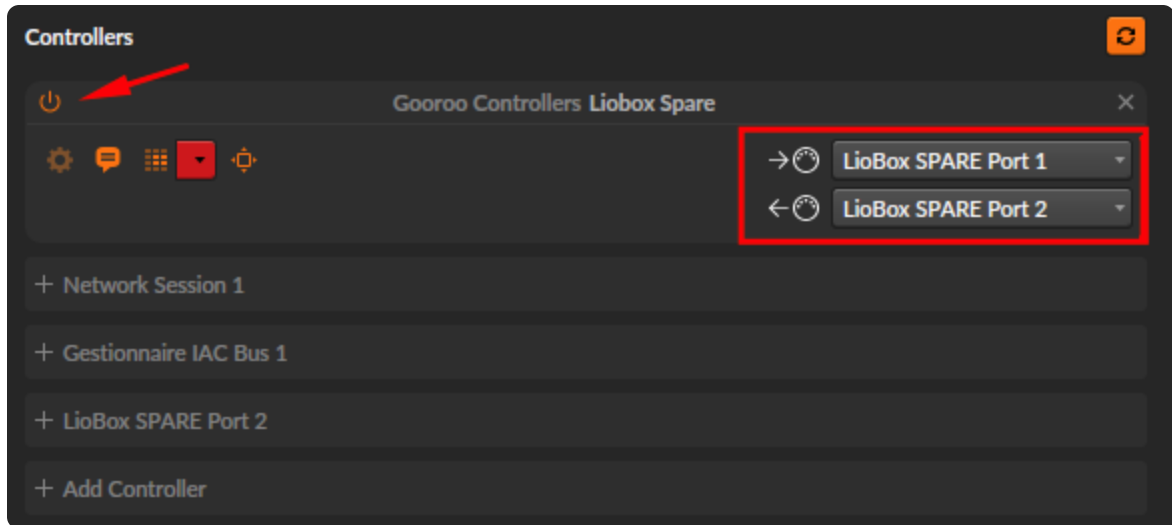
3. Select **Add Controller**, and look for **Gooroo Controllers** in the Hardware Vendor list.



4. Choose whether the LIOBOX² takes the **Master** or **Spare** role and click **Add**.



5. Assign the MIDI IN and MIDI OUT of the extension to the LIOBOX² MIDI ports, and make sure the extension is enabled.



The extension works the same way in Mix and Arrangement view.

3.2.2 Script advanced features

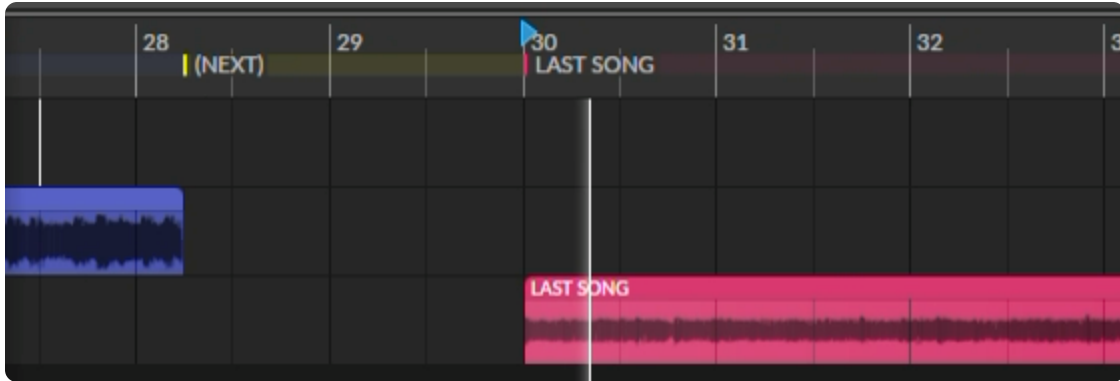
The Bitwig script supports advanced features:

1. **Autonext:** a marker that asks the LIOBOX² to launch the next song. The command is executed by the LIOBOX².
2. **Autostop:** a marker that stops playback.
3. **Loop**

3.2.2.1 Autonext

Autonext sends a "Next" request that launches the next marker of the LIOBOX² (not the next marker of the session).

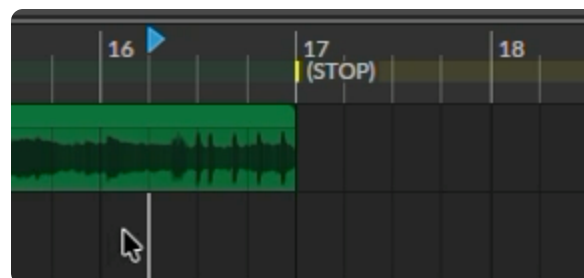
To use this feature, add a (NEXT) marker in your session. The command is executed when the playhead passes over it.



3.2.2.2 Autostop

Similarly, the "Stop" marker triggers a STOP in Bitwig itself (not from the LIOBOX²).

To use this feature, simply add a (STOP) marker in your session. The command is executed when the playhead passes over it.



3.2.2.3 Loop

LOOP markers automate the Bitwig loop section:

- (LOOP): creates a 4-beat infinite loop
- (LOOP X): creates an infinite loop of X beats
- (LOOP X//Y): creates a loop of X beats that repeats Y times and then deactivates

Loops can also be created on the fly from the LIOBOX², see [Loop on-the-fly](#).

3.2.3 Loop on-the-fly

The LIOBOX² pads can control the Bitwig loop:

- **Loop in:** sets the loop **start** at the beginning of the **current** bar (or the current beat, see below). It also turns the Bitwig loop off, so that a new one can be defined.
- **Loop out:** sets the loop **end** at the end of the **current** bar (or the current beat), and turns the loop on. A loop in must have been set first, otherwise nothing happens. The end must be after the start, otherwise an error "Loop end must be after start" is shown.
- **Loop in/out:** alternates between the two. If loop in was set, the next press sends loop out, and the other way around.
- **Loop on/off:** turns the loop on or off. Turning it off also cancels the remaining repeats of a (LOOP X//Y) marker.
- **Loop create X:** creates a loop of X beats (X from 1 to 127), starting at the beginning of the current bar. The loop is turned on, and its length is shortened if it would run past the end of the song.

i NOTE

Loop in and Loop create X always turn the loop on. If the playhead is already past the loop end, it jumps back to the loop start. The loop keeps repeating until you turn it off.

Assign these features to pads in [Pad config](#). By default, Loop in and Loop out snap to the **bar**. You can change this to **beat** in the [advanced settings](#).

3.2.4 LIOBOX² modes

Select the **BITWIG** mode in **MENU → MODE**.

3.2.4.1 All tracks mode

Switch to **ALL TRACKS** mode from the [Mode menu](#).



ALL TRACKS mode gives access to all the songs of the DAW session, in session order, so you can move to and launch any song of your set.

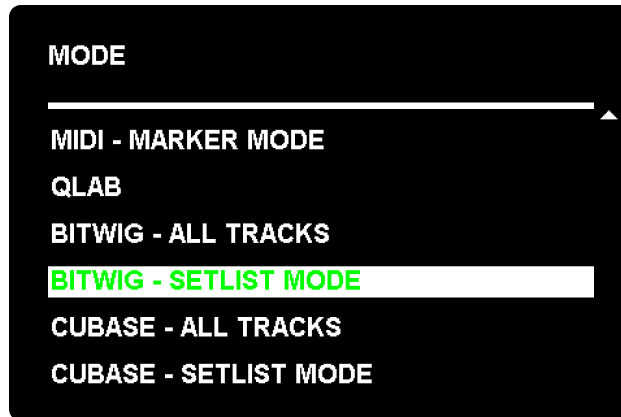
If [Error on duplicate marker](#) is enabled, the LIOBOX² checks the song names and warns you when two songs (scenes/locators) have the same name, so you can correct them.

3.2.4.2 Setlist mode

SETLIST mode lets you choose and reorder the songs: the LIOBOX² only displays the songs of the show's setlist, in the order you want. **All this without modifying the DAW session or touching the computer.**

Setlists can be renamed and are saved in the internal memory of the LIOBOX².

Switch to Setlist mode from the Mode menu:

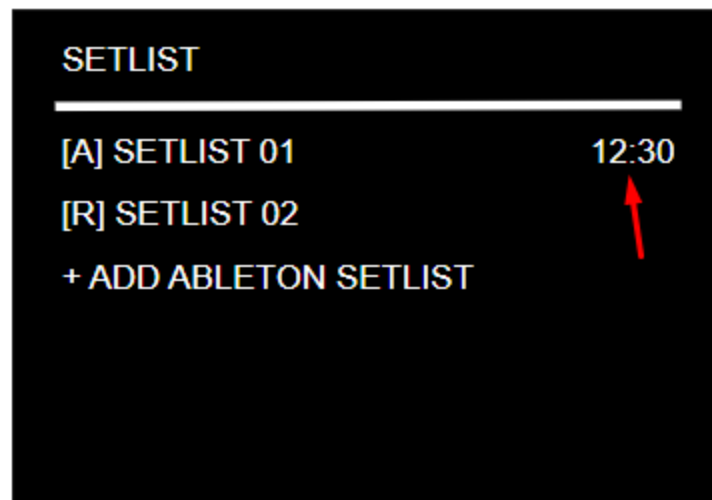


3.2.4.2.1 Setlist creation

To create a setlist, select **+ ADD [MODE] SETLIST** in **MENU → SETLIST**. First select the mode (Bitwig) in **MENU → MODE**.

The first letter of the mode (A for Ableton, B for Bitwig, R for Reaper, ...) is added at the start of the setlist name, to show which mode it belongs to.

As songs are added, the total duration is displayed at the top of the window, next to the setlist name.

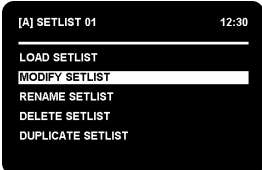
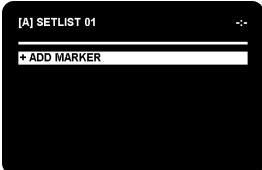
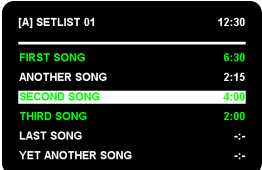
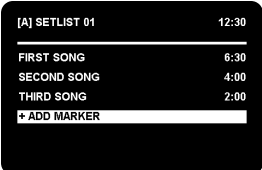


3.2.4.2.2 Add songs to the setlist

Once the setlist is created, you can add songs. The song list is loaded directly from the active Bitwig project.

To add a song, open the setlist, select **MODIFY**, then **+ ADD TRACK**. The list of loaded songs appears: click a song to add it. The same song can be added several times.

The duration of each song is shown next to its name (it comes from the song title, see the [naming convention](#)).

Setlist menu	Setlist / MODIFY menu	ADD TRACK menu	Setlist / MODIFY menu
			

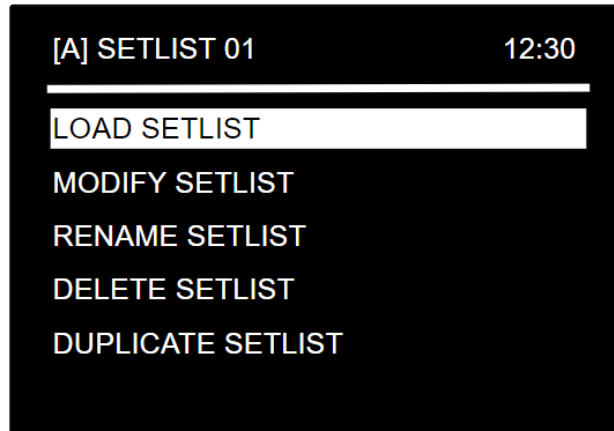
Songs already in the setlist appear in green.

3.2.4.2.3 Manage and load setlists

A setlist can be renamed (12 characters maximum), duplicated and modified at any time. See [Setlists](#).

If a song in the loaded setlist is not present in the DAW session, it is displayed in red on the Play screen. Up to 6 setlists can be created.

To use a setlist, select SETLIST mode in the MODE menu and load the setlist.



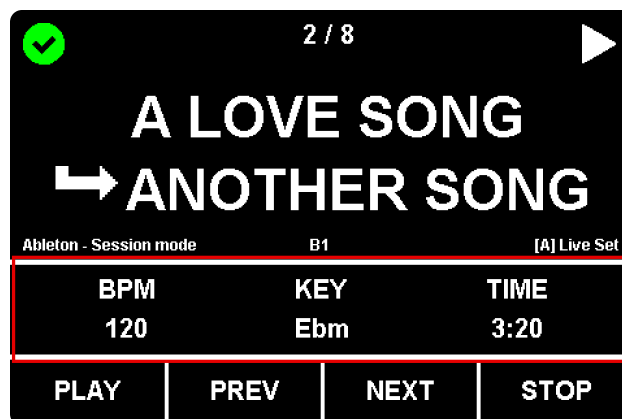
The setlist name appears in red on the Play screen if the loaded setlist's mode is different from the active mode.

3.2.4.3 Track position in session/setlist

The position of the current song in the session or setlist is constantly displayed at the top of the screen.

3.2.5 Track naming convention

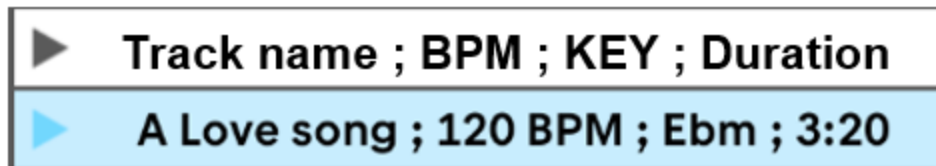
The LIOBOX² can display the BPM, key and duration of each song, in the box outlined below (Advanced display mode).



Enter them in the song name using this naming convention:

song_name ; bpm ; key ; duration

- Write the duration as mm:ss.
- If you do not need a value, leave the field empty and omit the ;.
- To keep a song from being sent to the LIOBOX², start its name with ().
Example: ()song number 1.



3.2.5.1 Compatible characters

The following characters are compatible with the LIOBOX². Any other character is filtered out.

- Upper case: A to Z
- Numbers: 0 to 9
- Parentheses: ()
- Square brackets: []
- Hashtag: #
- Ampersand: &
- Plus: +
- Slash: /
- Space

3.2.5.2 Names that are not transmitted

A name starting with one of the following is not transmitted to the LIOBOX²:

- ()
- []
- (LOOP
- _
- * *
- >
- >>
- +
- LOOP

The following marker names are also filtered out from the marker list received by the LIOBOX²:

- AUTOSTOP
- (STOP)
- (NEXT)
- STOP
- SONG END
- PLAYNEXT
- STOPBOT
- EASY LOOPER
- NEXTCUE

3.2.6 Pad features

Pads can be reassigned from **MENU → PAD CONFIG** (see [Pad config](#)). In Bitwig mode, the following features are available:

- NONE
- PLAY LIOBOX MARKER

- PLAY (TRANSPORT)
- PAUSE
- STOP
- PREV LIOBOX MARKER
- PREV MARKER (TRANSPORT)
- FAST-REWIND
- RESTART MARKER
- NEXT LIOBOX MARKER
- NEXT MARKER (TRANSPORT)
- FAST-FORWARD
- LOOP IN/OUT, LOOP IN, LOOP OUT, LOOP ON/OFF, LOOP CREATE X
- CUSTOM MIDI

Notes:

- **Play (Transport)** corresponds to the DAW Play.
- **Play LIOBOX Marker** plays the next song (the selected one).
- **Fast-Rewind** and **Fast-Forward** can only be assigned to the Long press pad event.
- **Next** or **Prev Marker (Transport)** corresponds to the DAW Next event (next/previous in the project).
- **Next** or **Prev LIOBOX Marker** selects the next or previous marker from the setlist.
- The loop features are described in [Loop on-the-fly](#).

Bitwig shares its pad memory with Ableton: a pad assignment made in one mode also modifies the assignment in the other.

3.2.7 Redundancy

On the second computer, choose the **Spare** role when adding the controller (step 4 above). The LIOBOX² compares the song lists of the Main and Spare computers to ensure that the sessions are identical. ** Nothing else is required.**

See [Redundancy](#).

3.2.8 Troubleshooting

If the LIOBOX² does not show the green check icon or the song names, see [Troubleshooting](#).

3.3 Reaper

! AT A GLANCE

- **Integration:** native, through the LIOBOX² Reaper script (`LioboxMaster.lua`). Gooroolink is not required.
- **Features:** song list, setlists, transport, autonext, autostop, loop, redundancy.
- **Needed:** the [SWS/S&M extension](#) and the Reaper script (see [Covered versions](#)).

3.3.1 Setup

i NOTE

These instructions are written for Reaper v7.27. Reaper is updated frequently, so they may differ slightly in other versions.

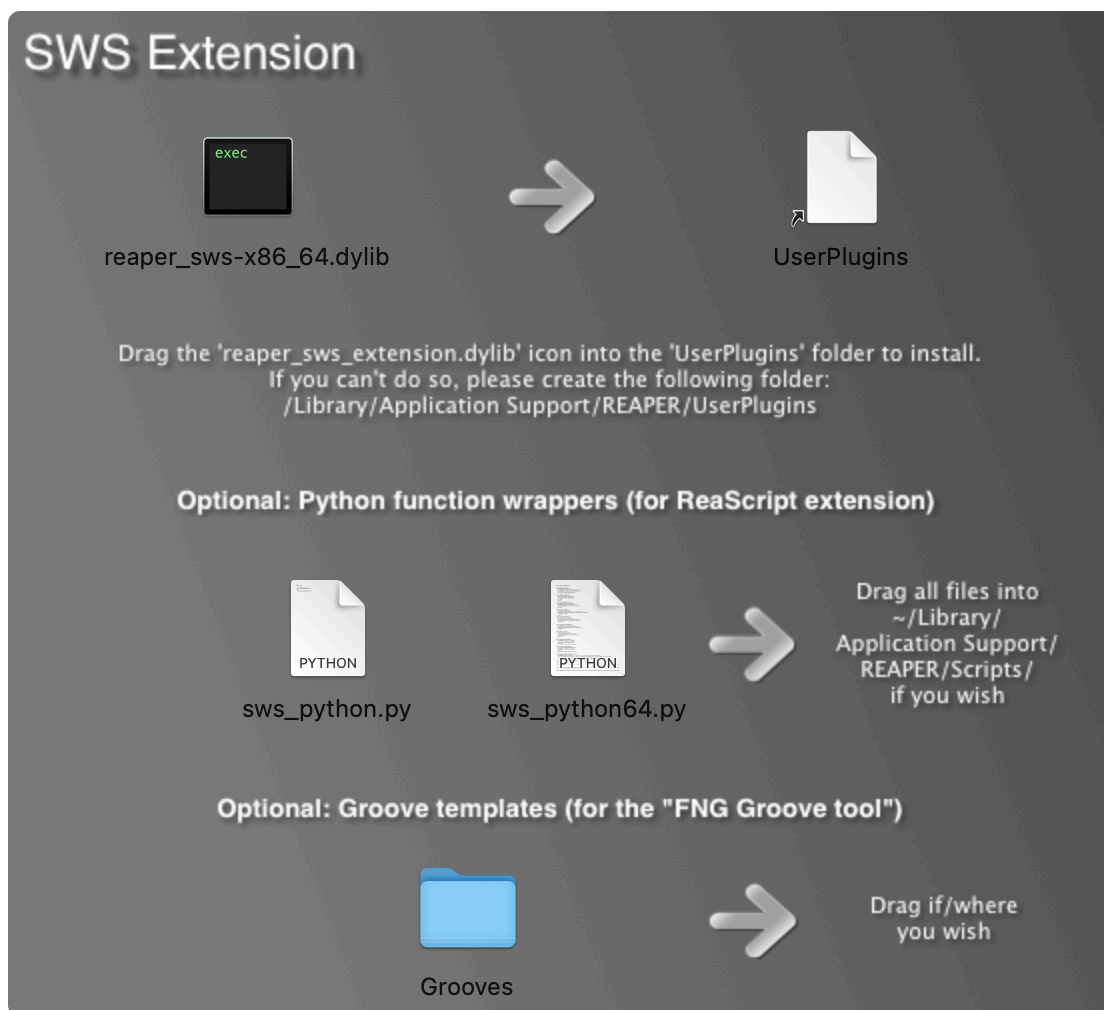
3.3.1.1 Prerequisite: SWS/S&M extension

Download and install the [SWS/S&M extension for REAPER](#).

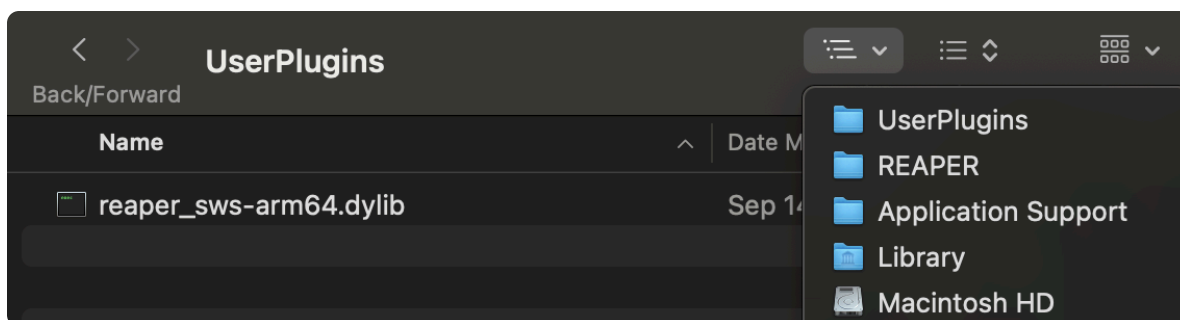
Windows: simply run the installer.

macOS:

1. Download: select **ARM64** if using Apple M processors or **X64** if using Intel processors.
2. Launch the installer.



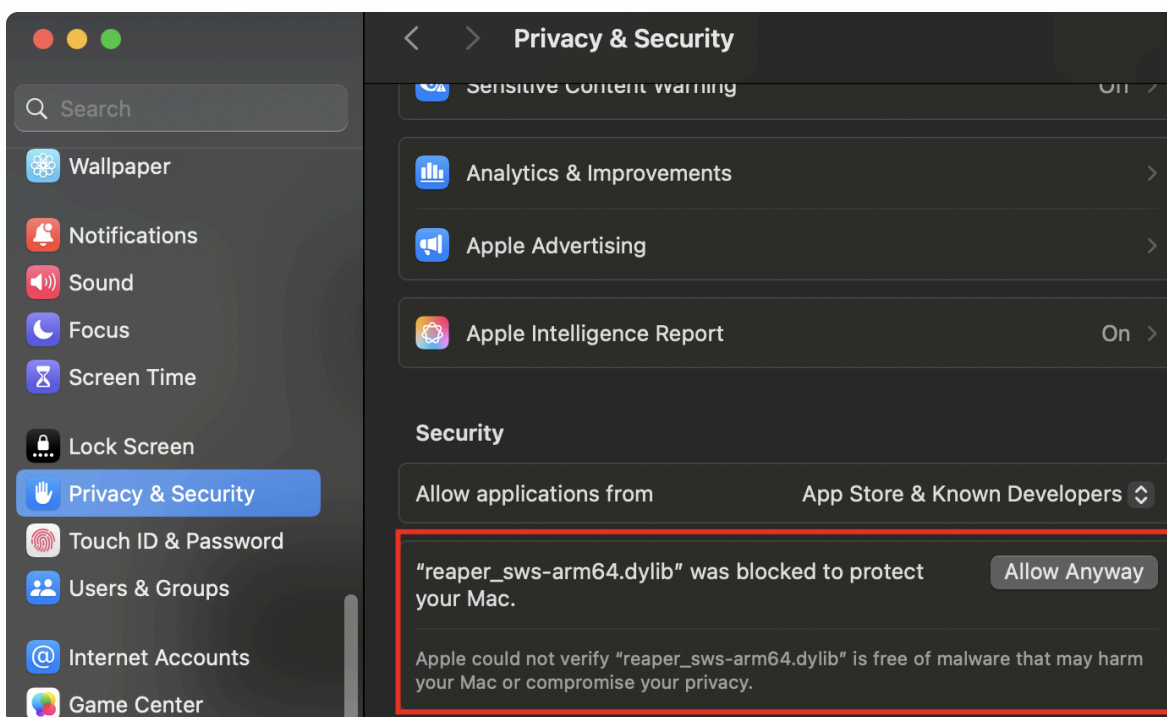
3. Drag and drop `reaper_sws-PROCESSOR.dylib` into the `/Library/Application Support/REAPER/UserPlugins` folder. If the folder does not exist, create it manually. The other files are not required for the LIOBOX² to run.



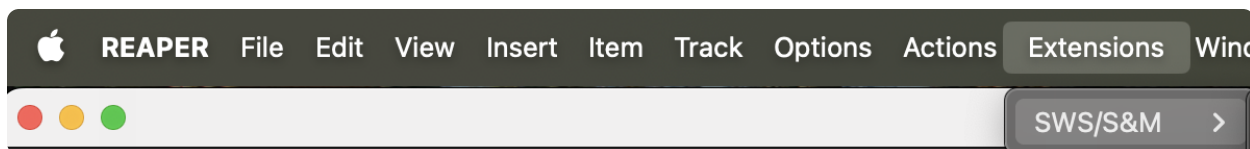
4. Launch REAPER.

NOTE

If a security alert pops up and prevents Reaper from opening properly because of the library you just copied, go to **macOS Settings → Privacy & Security**. Close Reaper, then scroll down until you reach the request to authorize the library anyway. When Reaper is launched again, make sure to **Open** the SWS library.



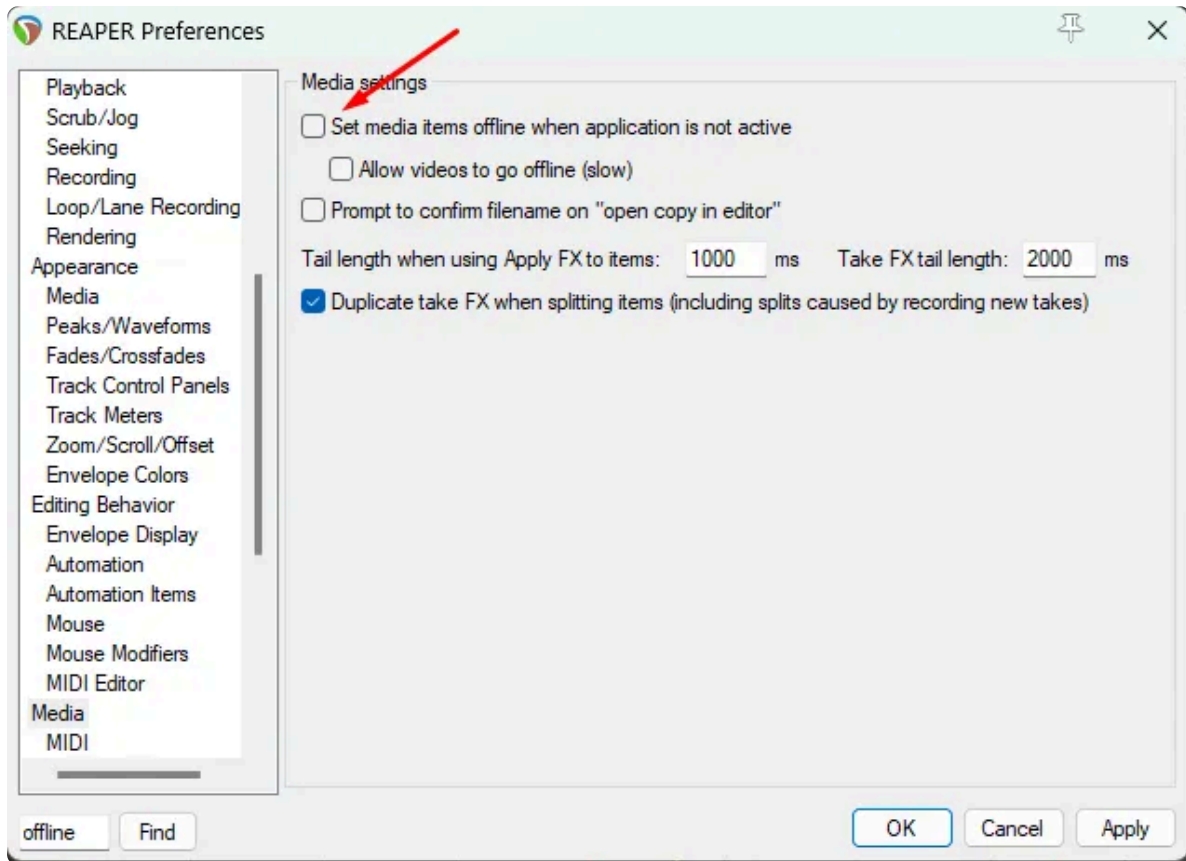
To check that SWS/S&M is installed, open **Extensions** in Reaper: the **SWS/S&M** menu should be present:



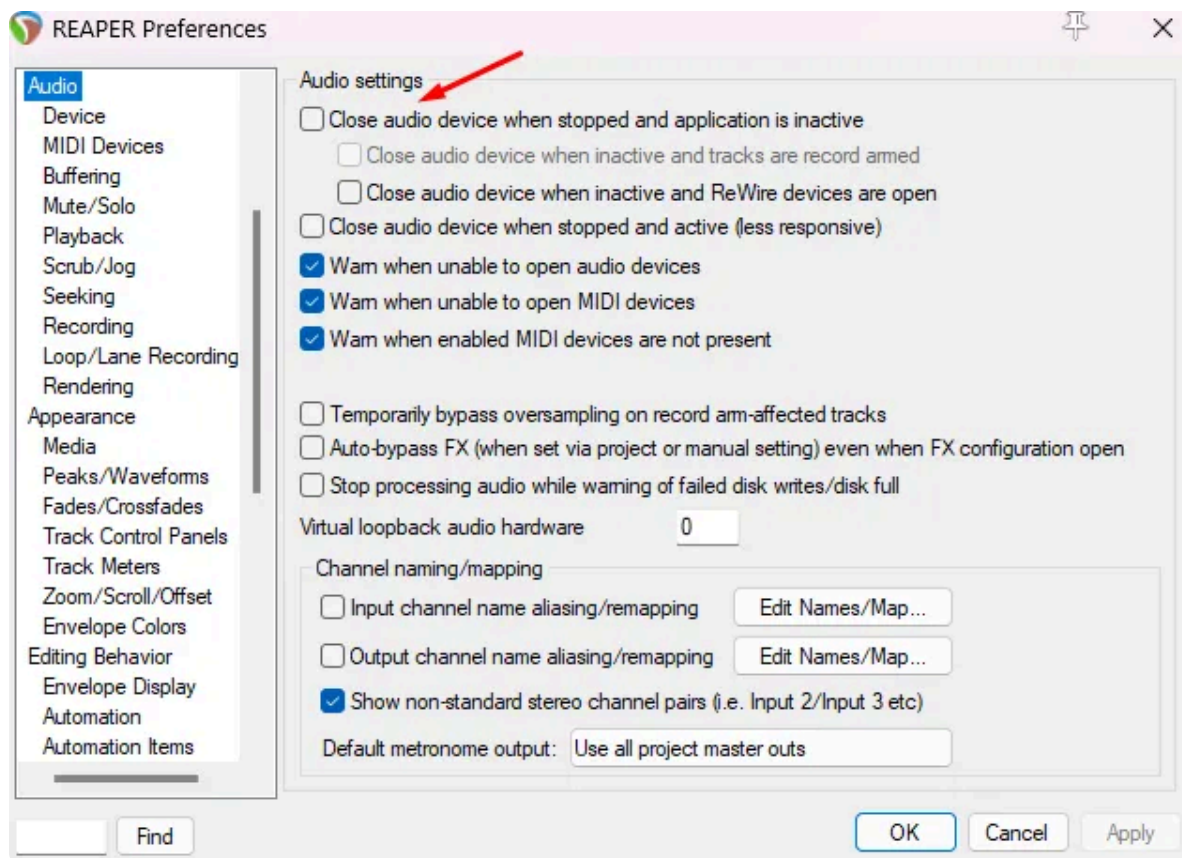
3.3.1.2 Reaper preferences

Go to **Options → Preferences**.

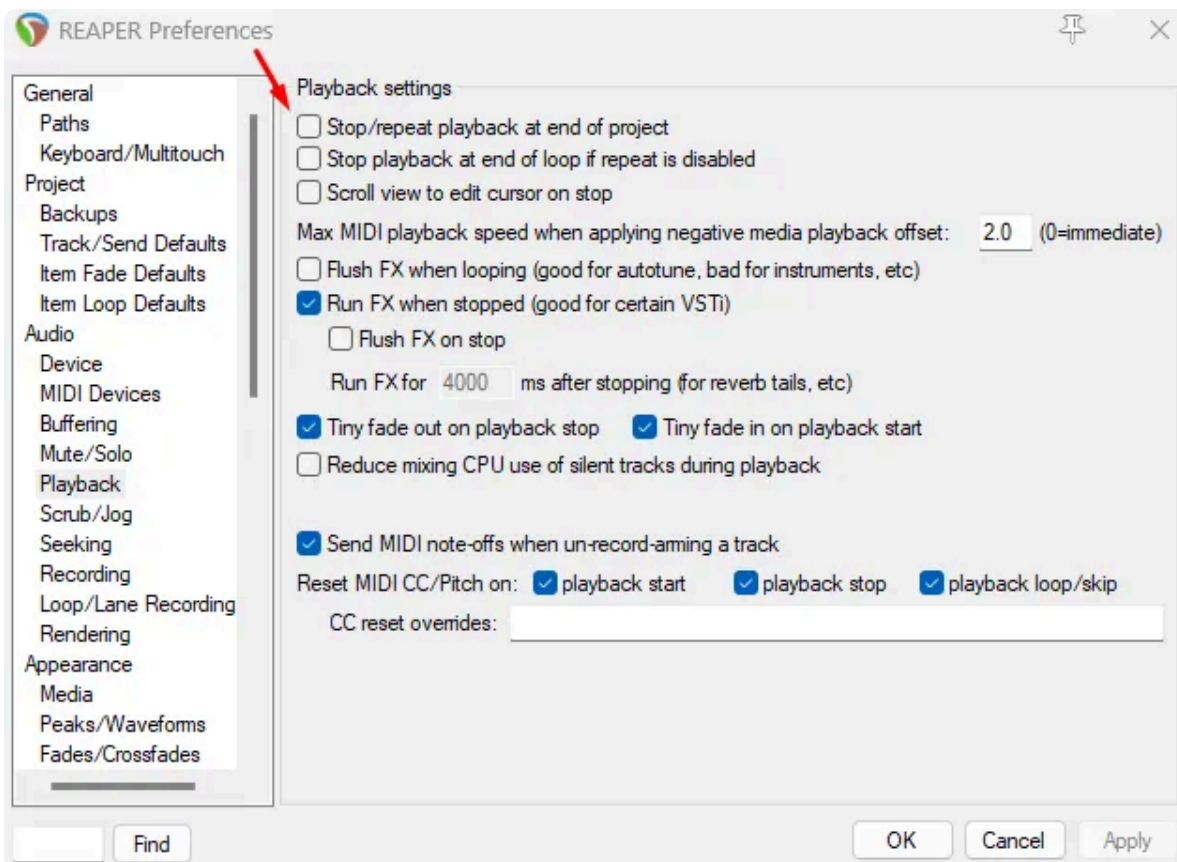
- **Media** section: disable *Set media items offline when application is not active*.



- **Audio** section: disable *Close audio device when stopped and application is inactive*.

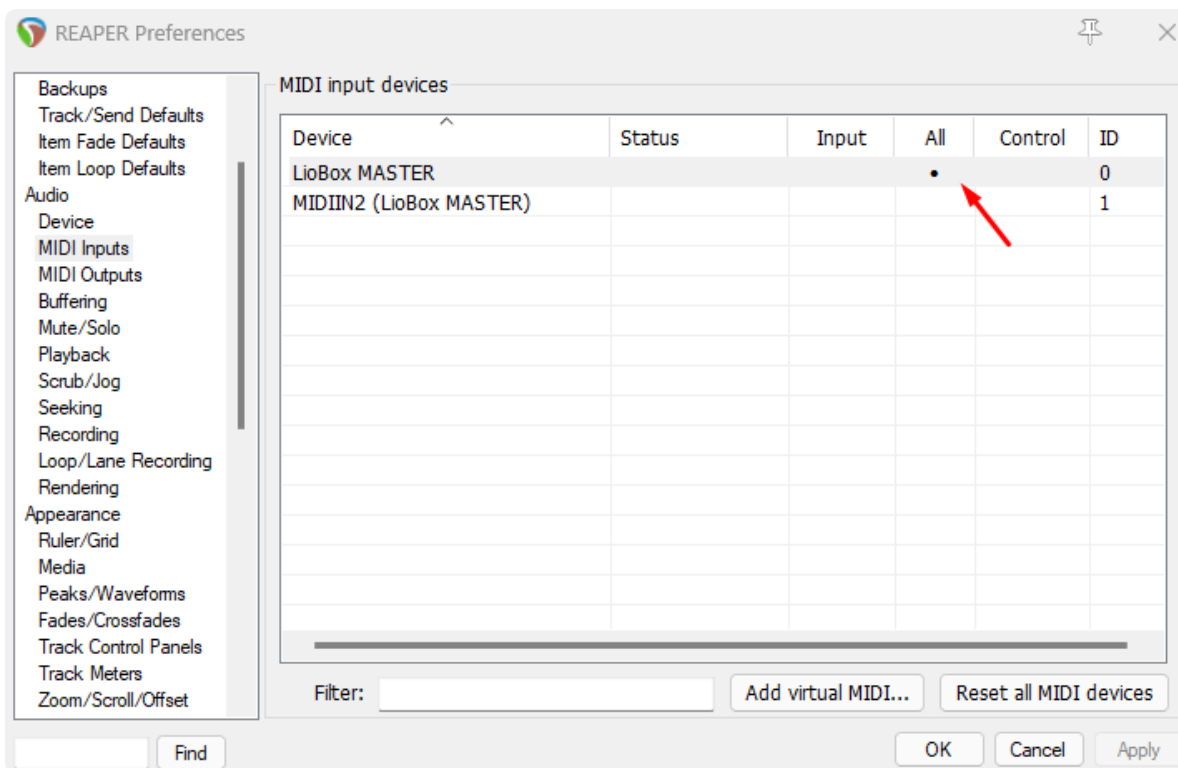


- **Audio → Playback** section: disable *Stop/repeat playback at end of project*.

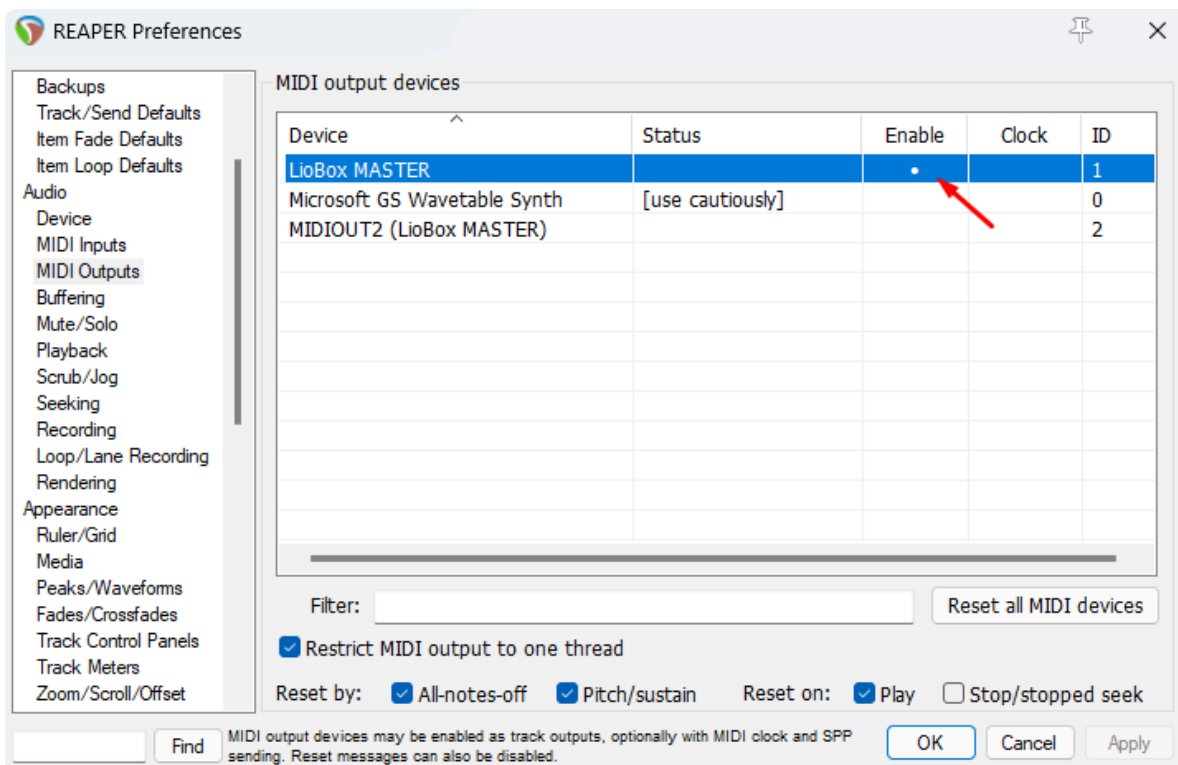


3.3.1.3 LIOBOX² configuration

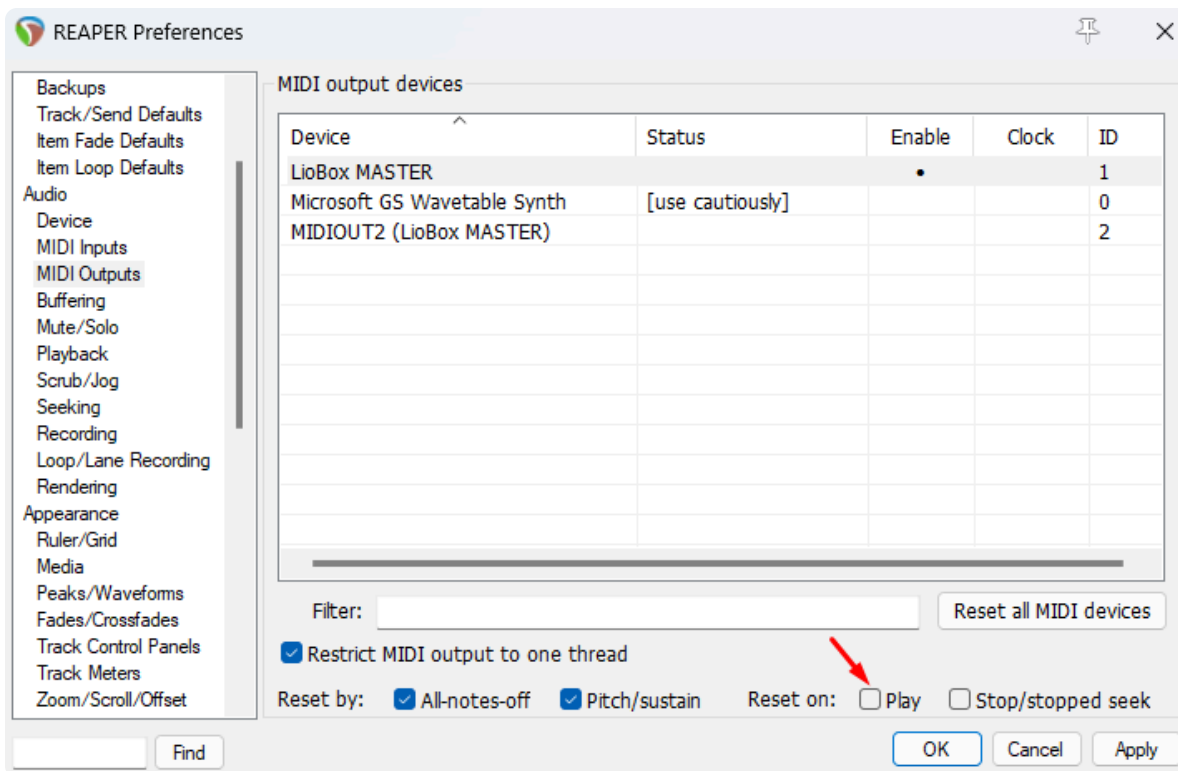
1. **Audio → MIDI Inputs:** enable **All** for the "Liobox ***" device.



2. **Audio → MIDI Outputs:** enable **Enable** for the "Liobox ***" device.

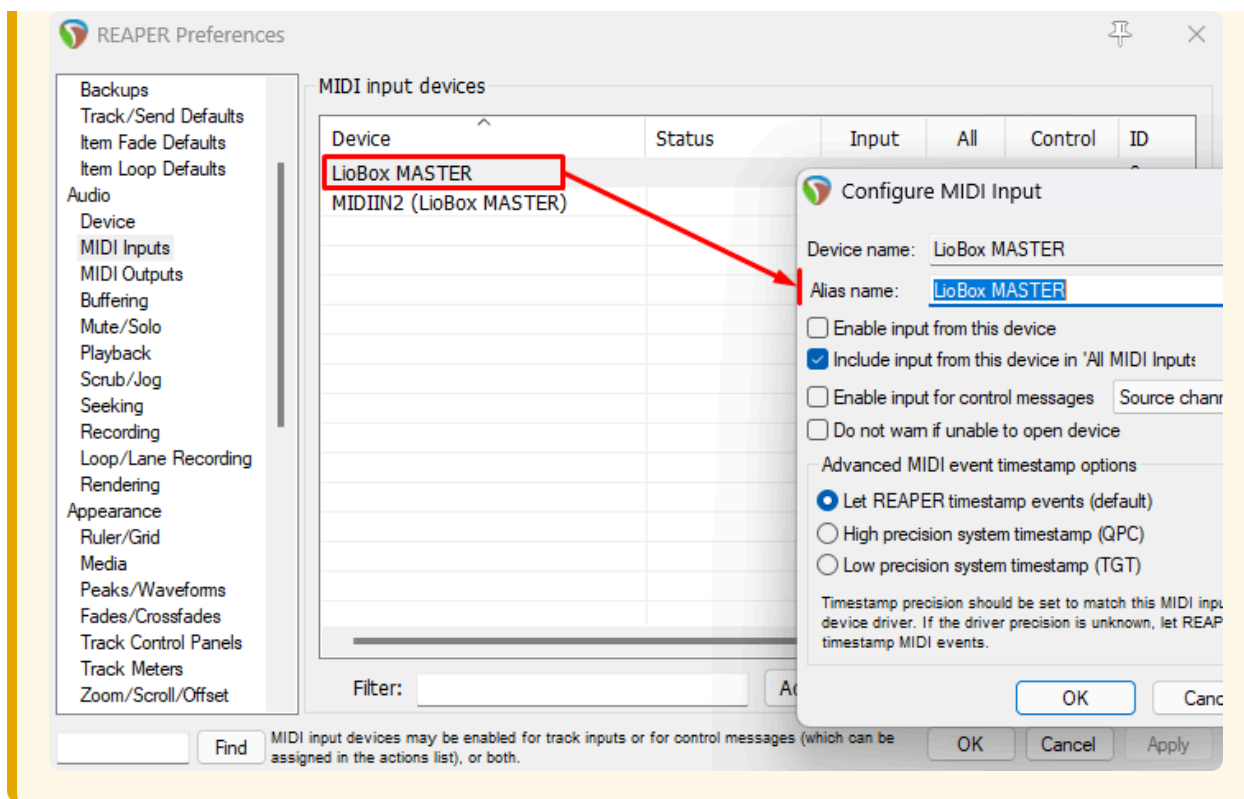


3. Audio → MIDI Outputs: disable **Reset on: Play**.



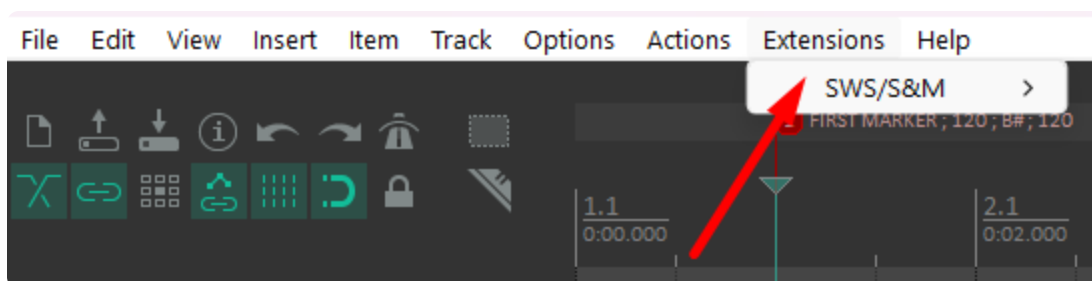
WARNING

The script searches for the LIOBOX² by looking for a MIDI device whose name **contains** "LIOBOX" (not case-sensitive). If the alias of your LIOBOX² is different (often the case on macOS), double-click the device to change it. Make sure only one MIDI device name contains "LIOBOX"; if several do, the script uses the first one in the list.



3.3.1.4 Script

1. Check that the SWS/S&M extension is installed: it appears under **Extensions** in the upper ribbon.



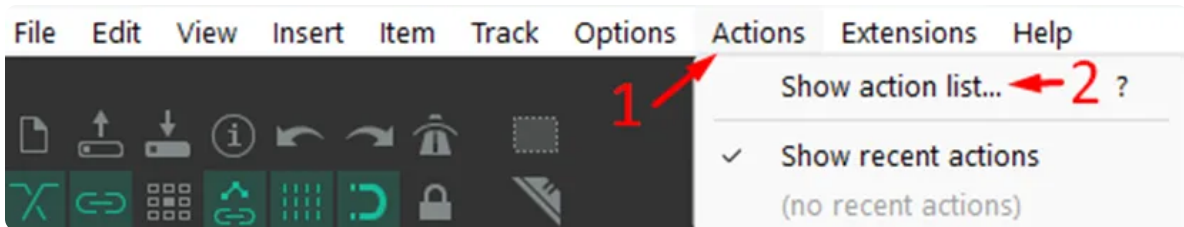
2. The script folder can be anywhere on a local drive, but avoid virtual or synced drives such as Google Drive folders. We recommend copying it to `<path to Reaper>\InstallData\Scripts`.



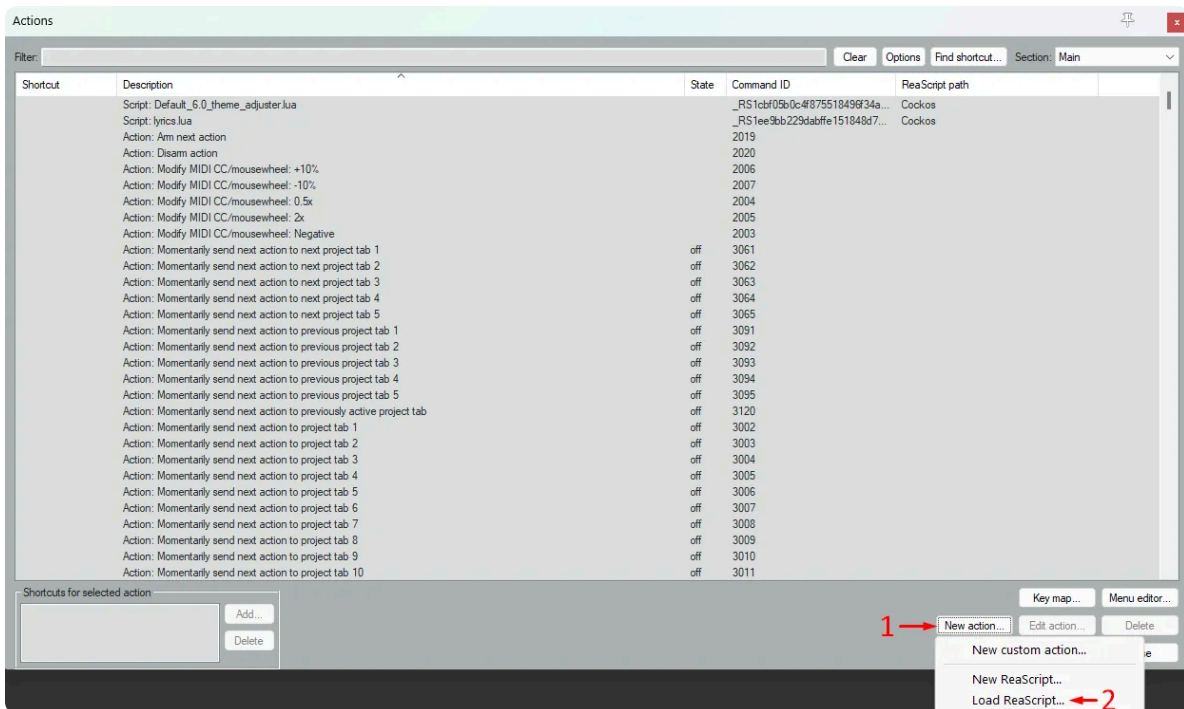
TIP

In the GoorooLink Reaper view, browse to the folder containing the scripts so that GoorooLink can detect their version and update them.

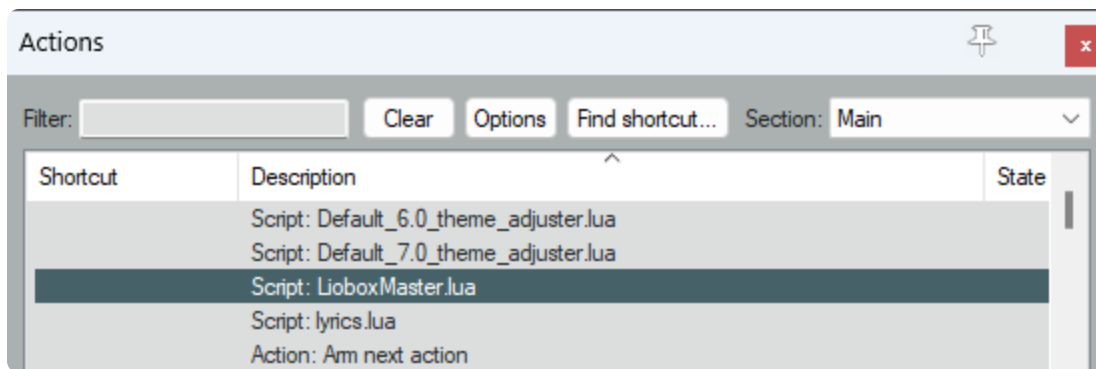
3. Show the action list in **Actions → Show action list...**



4. Load the script `LioboxMaster.lua` by clicking **New action... → Load ReaScript...**



The script should now appear in the script list:

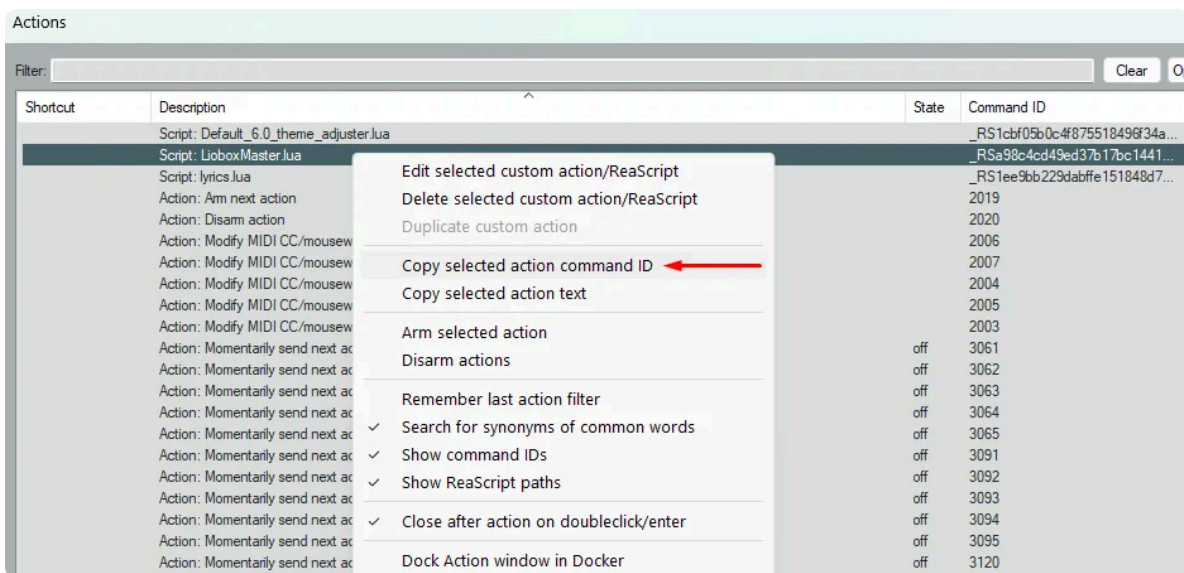


The script can run:

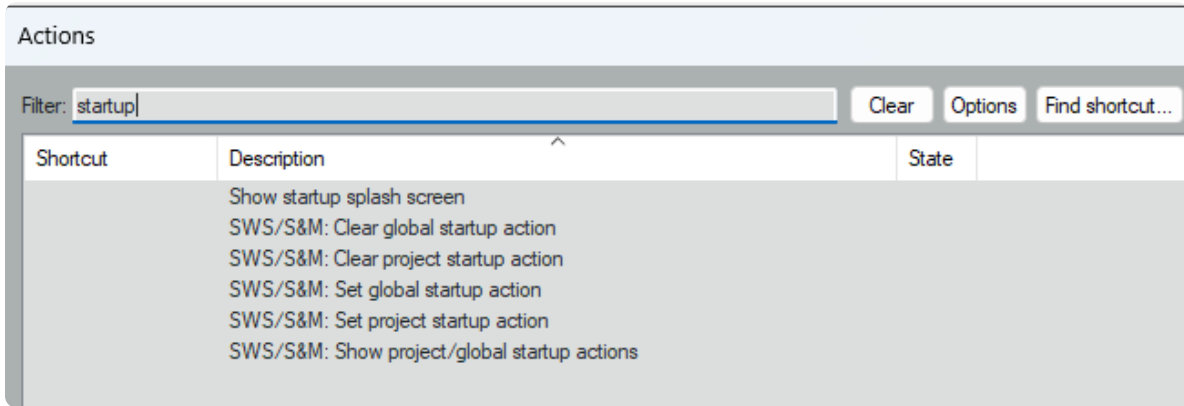
- On request (launched manually)
- At project opening
- At Reaper opening

To run the ReaScript automatically when a project or Reaper opens:

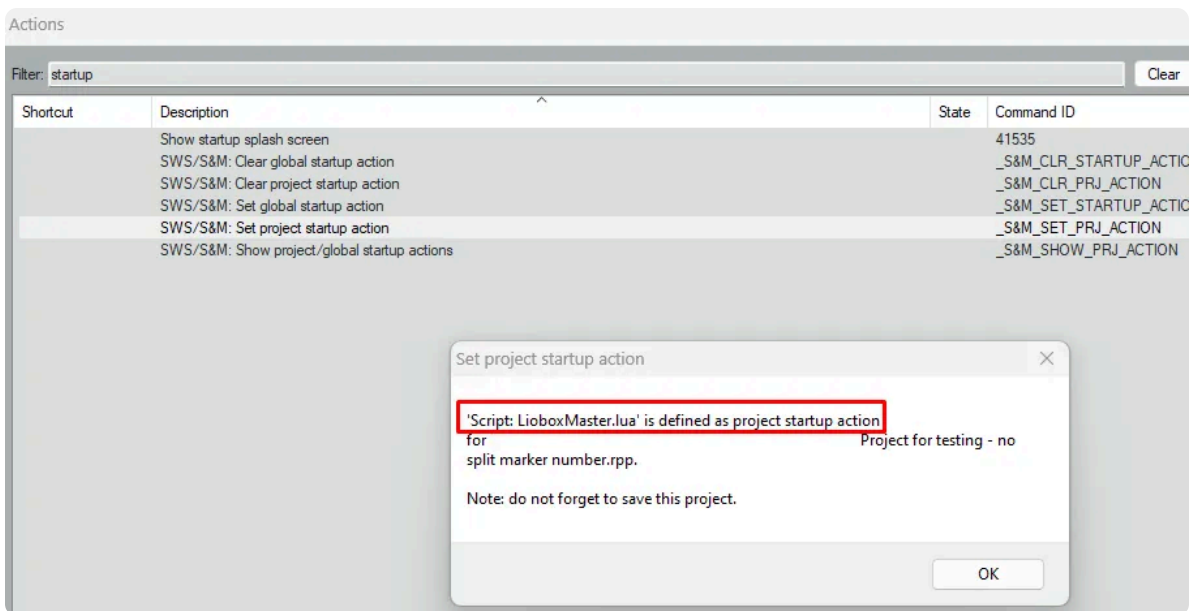
1. Copy the loaded ReaScript Command ID by right-clicking on the script and selecting **Copy selected action command ID**.



2. Type "startup" in the filter bar.



3. Select **Set project startup action** (to run the script when the project opens) or **Set global startup action** (when Reaper opens), and paste the Command ID.
4. A confirmation popup tells you it worked.



3.3.1.5 Other

- To stop the script from loading automatically, use **Clear global startup action** or **Clear project startup action**.
- To see the current startup actions, run **Show project/global startup actions**.

- To run the script only once, select it in the Actions list and click **Run**.

i NOTE

If the LIOBOX² does not appear, make sure it is connected before you launch Reaper.

3.3.2 Script advanced features

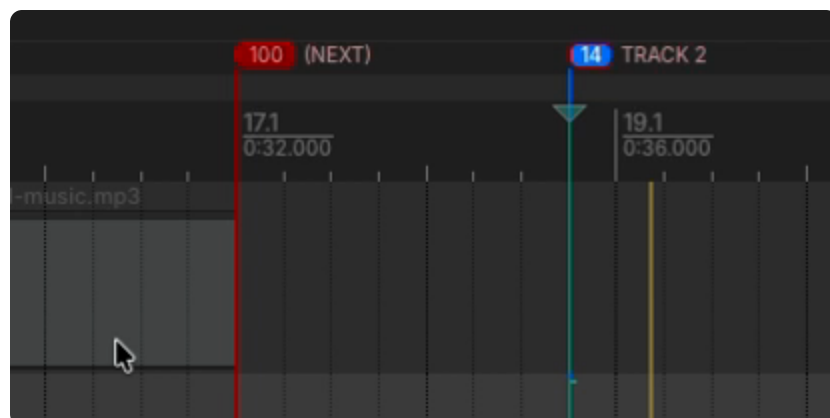
The Reaper script supports advanced features:

1. **Autonext:** a marker that asks the LIOBOX² to launch the next song. The command is executed by the LIOBOX².
2. **Autostop:** a marker that stops playback.
3. **Loop**

3.3.2.1 Autonext

Autonext sends a "Next" request that launches the next marker of the LIOBOX² (not the next marker of the session).

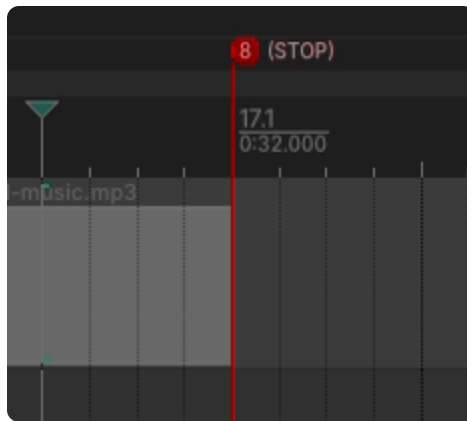
To use this feature, add a (NEXT) marker in your session. The command is executed when the playhead passes over it.



3.3.2.2 Autostop

Similarly, the "Stop" marker triggers a STOP in Reaper itself (not from the LIOBOX²).

To use this feature, simply add a (STOP) marker in your session. The command is executed when the playhead passes over it.



3.3.2.3 Loop

LOOP markers automate the Reaper loop section:

- (LOOP): creates a 4-beat infinite loop
- (LOOP X): creates an infinite loop of X beats
- (LOOP X//Y): creates a loop of X beats that repeats Y times and then deactivates

Loops can also be created on the fly from the LIOBOX², see [Loop on-the-fly](#).

3.3.3 Loop on-the-fly

The LIOBOX² pads can control the Reaper loop:

- **Loop in:** sets the loop **start** at the beginning of the **current** bar (or the current beat, see below). It also turns the Reaper loop off, so that a new one can be defined.
- **Loop out:** sets the loop **end** at the end of the **current** bar (or the current beat), and turns the loop on. A loop in must have been set first, otherwise nothing happens. The end must be after the start, otherwise an error "Loop end must be after start" is shown.
- **Loop in/out:** alternates between the two. If loop in was set, the next press sends loop out, and the other way around.
- **Loop on/off:** turns the loop on or off. Turning it off also cancels the remaining repeats of a (LOOP X//Y) marker.
- **Loop create X:** creates a loop of X beats (X from 1 to 127), starting at the beginning of the current bar. The loop is turned on, and its length is shortened if it would run past the end of the song.

i NOTE

Loop in and Loop create X always turn the loop on. If the playhead is already past the loop end, it jumps back to the loop start. The loop keeps repeating until you turn it off.

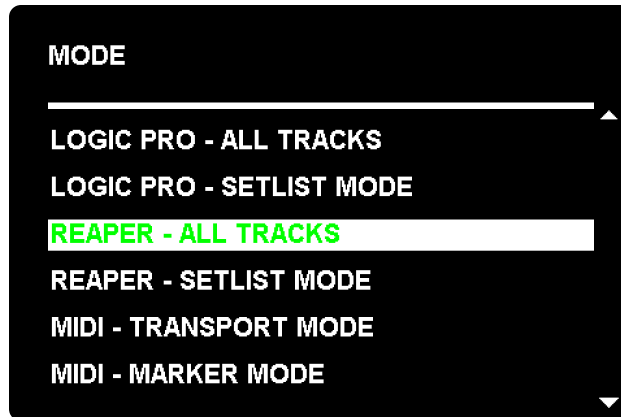
Assign these features to pads in [Pad config](#). By default, Loop in and Loop out snap to the **bar**. You can change this to **beat** in the [advanced settings](#).

3.3.4 LIOBOX² modes

Select the **REAPER** mode in **MENU → MODE**.

3.3.4.1 All tracks mode

Switch to **ALL TRACKS** mode from the [Mode menu](#).



ALL TRACKS mode gives access to all the songs of the DAW session, in session order, so you can move to and launch any song of your set.

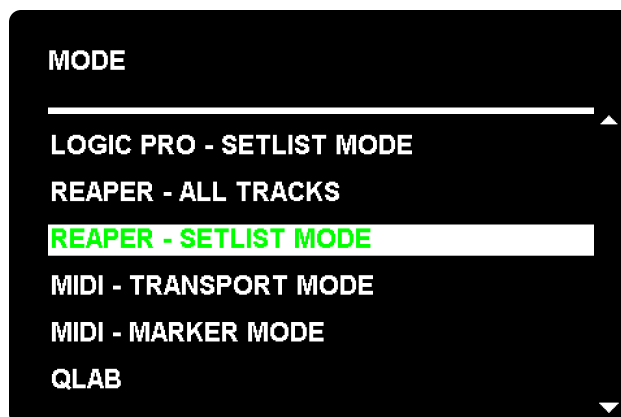
If **Error on duplicate marker** is enabled, the LIOBOX² checks the song names and warns you when two songs (scenes/locators) have the same name, so you can correct them.

3.3.4.2 Setlist mode

SETLIST mode lets you choose and reorder the songs: the LIOBOX² only displays the songs of the show's setlist, in the order you want. **All this without modifying the DAW session or touching the computer.**

Setlists can be renamed and are saved in the internal memory of the LIOBOX².

Switch to Setlist mode from the Mode menu:

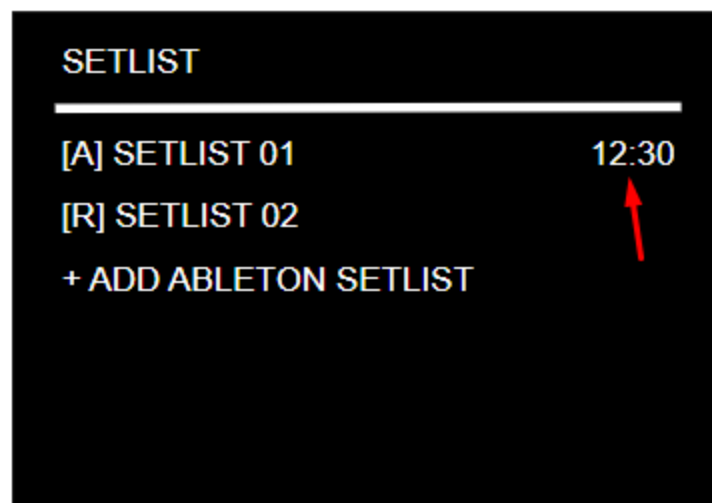


3.3.4.2.1 Setlist creation

To create a setlist, select **+ ADD [MODE] SETLIST** in **MENU → SETLIST**. First select the mode (Reaper) in **MENU → MODE**.

The first letter of the mode (A for Ableton, B for Bitwig, R for Reaper, ...) is added at the start of the setlist name, to show which mode it belongs to.

As songs are added, the total duration is displayed at the top of the window, next to the setlist name.

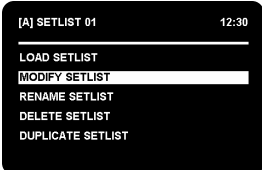
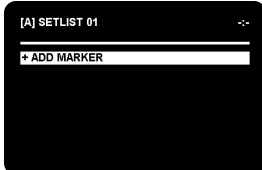
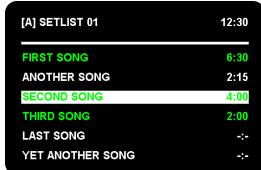
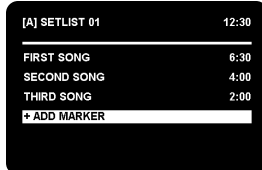


3.3.4.2.2 Add songs to the setlist

Once the setlist is created, you can add songs. The song list is loaded directly from the active Reaper project.

To add a song, open the setlist, select **MODIFY**, then **+ ADD TRACK**. The list of loaded songs appears: click a song to add it. The same song can be added several times.

The duration of each song is shown next to its name (it comes from the song title, see the [naming convention](#)).

Setlist menu	Setlist / MODIFY menu	ADD TRACK menu	Setlist / MODIFY menu
			

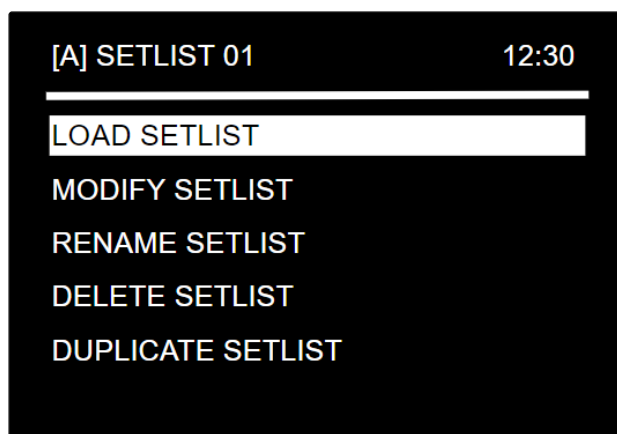
Songs already in the setlist appear in green.

3.3.4.2.3 Manage and load setlists

A setlist can be renamed (12 characters maximum), duplicated and modified at any time. See [Setlists](#).

If a song in the loaded setlist is not present in the DAW session, it is displayed in red on the Play screen. Up to 6 setlists can be created.

To use a setlist, select SETLIST mode in the MODE menu and load the setlist.



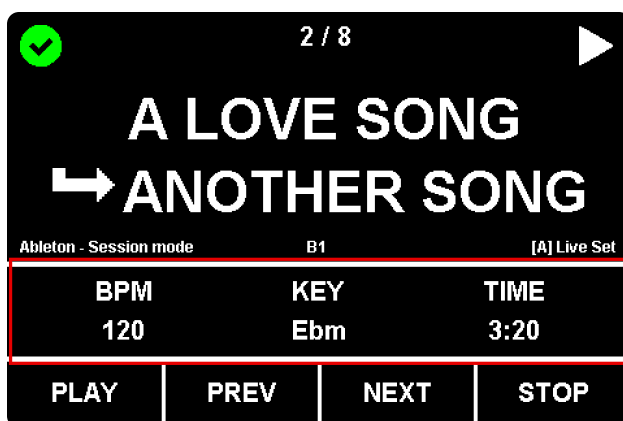
The setlist name appears in red on the Play screen if the loaded setlist's mode is different from the active mode.

3.3.4.3 Track position in session/setlist

The position of the current song in the session or setlist is constantly displayed at the top of the screen.

3.3.5 Track naming convention

The LIOBOX² can display the BPM, key and duration of each song, in the box outlined below (Advanced display mode).



Enter them in the song name using this naming convention:

```
song_name ; bpm ; key ; duration
```

- Write the duration as mm:ss.
- If you do not need a value, leave the field empty and omit the ;.
- To keep a song from being sent to the LIOBOX², start its name with ().
Example: ()song number 1.

▶	Track name ; BPM ; KEY ; Duration
▶	A Love song ; 120 BPM ; Ebm ; 3:20

3.3.5.1 Compatible characters

The following characters are compatible with the LIOBOX². Any other character is filtered out.

- Upper case: A to Z
- Numbers: 0 to 9
- Parentheses: ()
- Square brackets: []
- Hashtag: #
- Ampersand: &
- Plus: +
- Slash: /
- Space

3.3.5.2 Names that are not transmitted

A name starting with one of the following is not transmitted to the LIOBOX²:

- ()
- []
- (LOOP
- _
- * *
- >
- >>
- +
- LOOP

The following marker names are also filtered out from the marker list received by the LIOBOX²:

- AUTOSTOP
- (STOP)
- (NEXT)
- STOP
- SONG END
- PLAYNEXT
- STOPBOT
- EASY LOOPER
- NEXTCUE

3.3.6 Pad features

Pads can be reassigned from **MENU → PAD CONFIG** (see [Pad config](#)). In Reaper mode, the following features are available:

- NONE
- PLAY LIOBOX MARKER
- PLAY (TRANSPORT)
- PAUSE
- STOP
- PREV LIOBOX MARKER
- PREV MARKER (TRANSPORT)
- FAST-REWIND
- RESTART MARKER
- NEXT LIOBOX MARKER
- NEXT MARKER (TRANSPORT)
- FAST-FORWARD
- LOOP IN/OUT, LOOP IN, LOOP OUT, LOOP ON/OFF, LOOP CREATE X
- CUSTOM MIDI

Notes:

- **Play (Transport)** corresponds to the DAW Play.
- **Play LIOBOX Marker** plays the next song (the selected one).
- **Fast-Rewind** and **Fast-Forward** can only be assigned to the Long press pad event.
- **Next** or **Prev Marker (Transport)** corresponds to the DAW Next event (next/previous in the project).
- **Next** or **Prev LIOBOX Marker** selects the next or previous marker from the setlist.
- The loop features are described in [Loop on-the-fly](#).

3.3.7 Redundancy

When two computers are used in redundancy, load the **Spare** script on the second computer. The LIOBOX² compares the song lists of the Main and Spare computers to ensure that the sessions are identical. **Nothing else is required.**

See [Redundancy](#).

3.3.8 Troubleshooting

- If the LIOBOX² does not appear in Reaper, make sure it is connected before you launch Reaper, and that only one MIDI device name contains "LIOBOX" (see the alias warning above).
- For the green check icon and song names, see [Troubleshooting](#).

3.4 Pro Tools

! AT A GLANCE

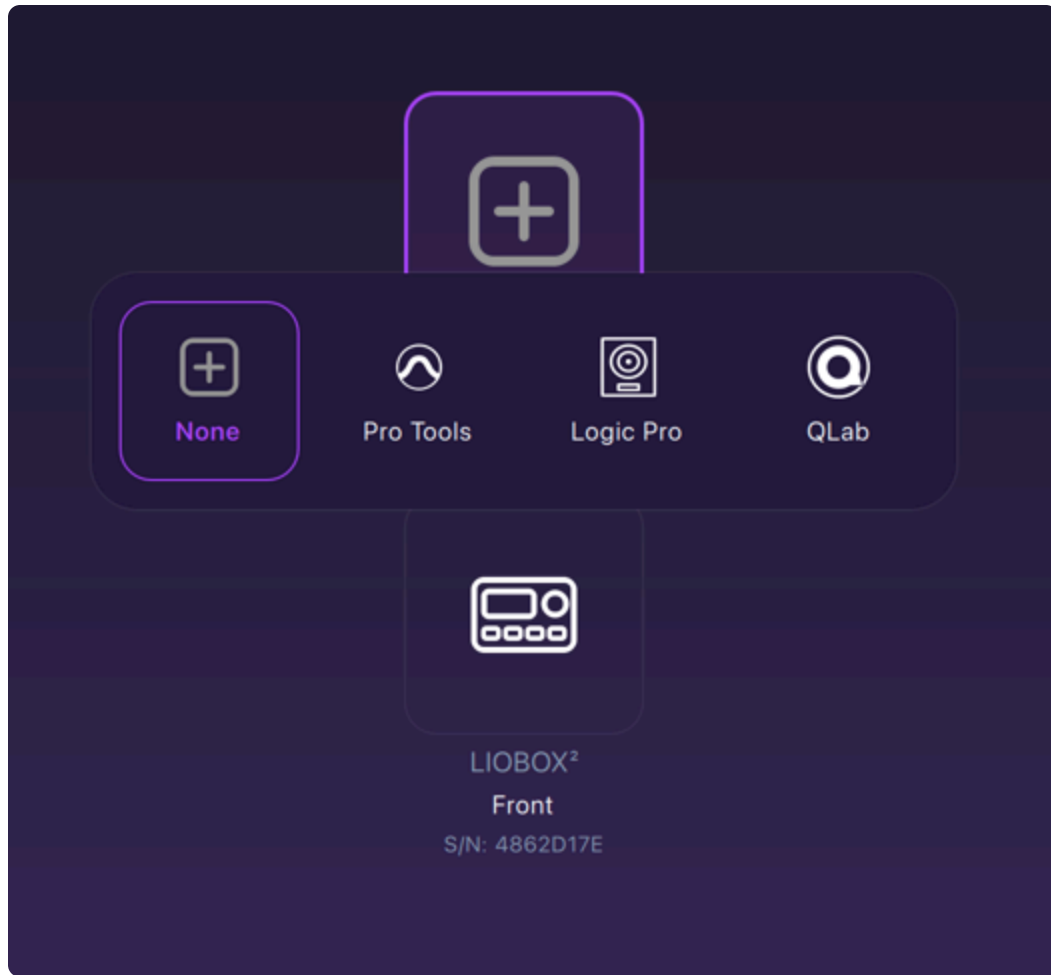
- **Integration:** through the **BRIDGE** app of GoorooLink (macOS), using MMC and MTC.
- **Features:** song list from markers, setlists, transport, redundancy (Pro Tools Studio or higher).
- **Needed:** GoorooLink running, and the Pro Tools configuration below.

3.4.1 GoorooLink BRIDGE

Pro Tools cannot be scripted like Ableton, Bitwig or Reaper, so the LIOBOX² works with it through the **BRIDGE** app of [GoorooLink](#). The BRIDGE relays the commands sent by the LIOBOX² and gives the LIOBOX² the Pro Tools information (marker list, playhead position, ...).

GoorooLink runs on macOS only. If it is not installed yet, see [Install GoorooLink](#).

1. Launch GoorooLink and open **APP → BRIDGE**.
2. In the DAW selection, click the DAW tile and choose **Pro Tools**.

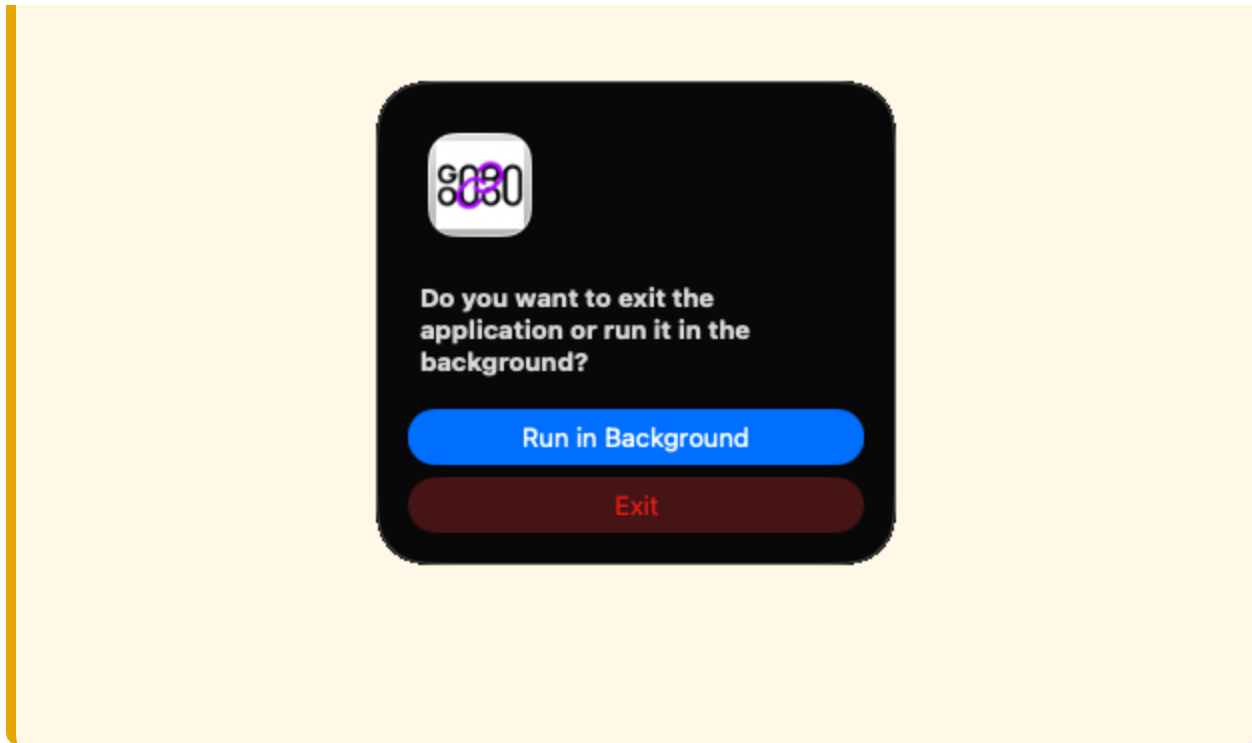


3. In the LIOBOX selection, choose your connected LIOBOX².
4. Check the **BRIDGE state** next to the **APP → BRIDGE** menu item: it turns green once both the DAW and the LIOBOX² are detected.

⚠ WARNING

GoorooLink must be running for the BRIDGE to work. **It can run in the foreground or in the background, but it must not be exited.**

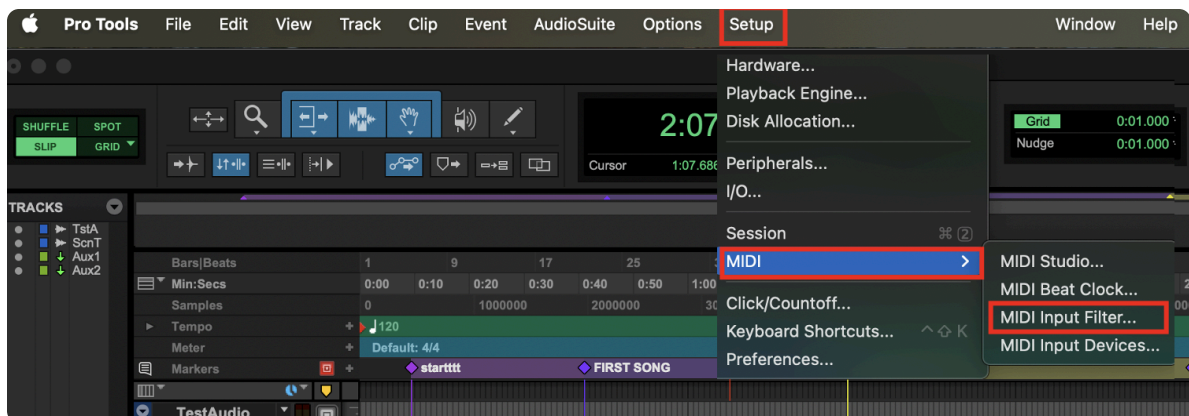
To run it in the background, quit the application: a dialog asks whether it should run in the background or exit.

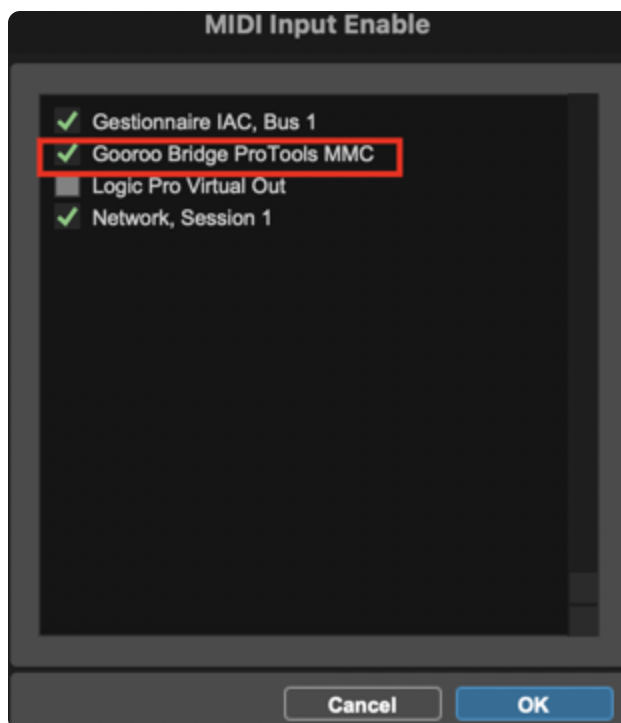


3.4.2 Pro Tools configuration

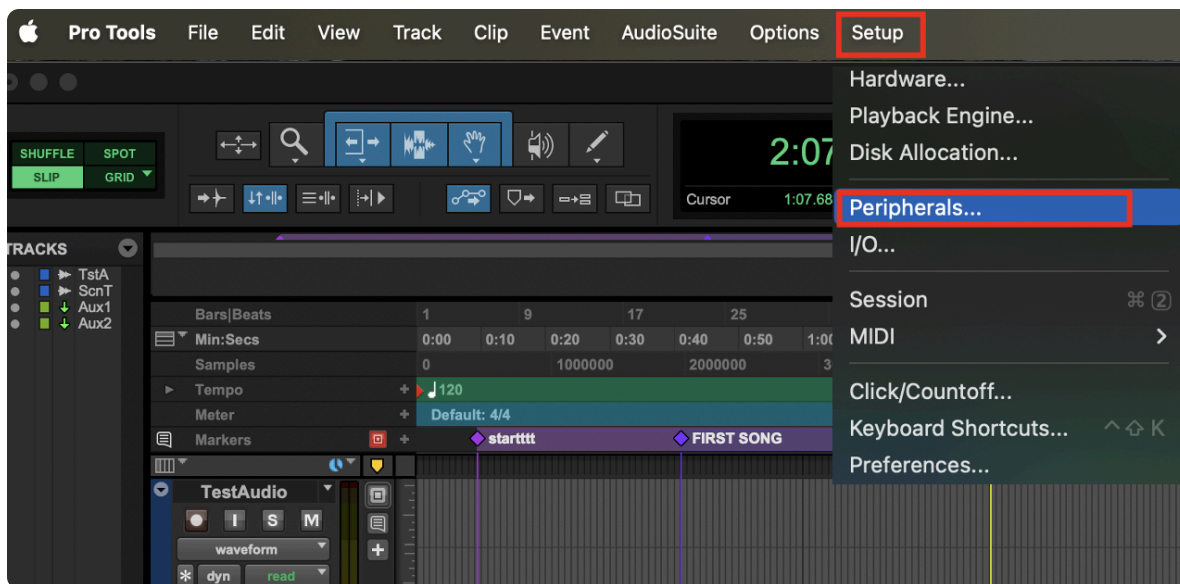
This section covers the Pro Tools configuration. Make sure Pro Tools is selected in the BRIDGE of GoorooLink.

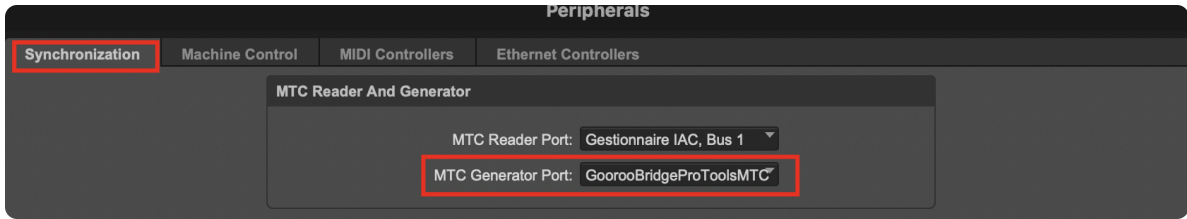
1. Enable the **Gooroo Bridge ProTools MMC** MIDI input in **Setup → MIDI → MIDI Input Filter...**



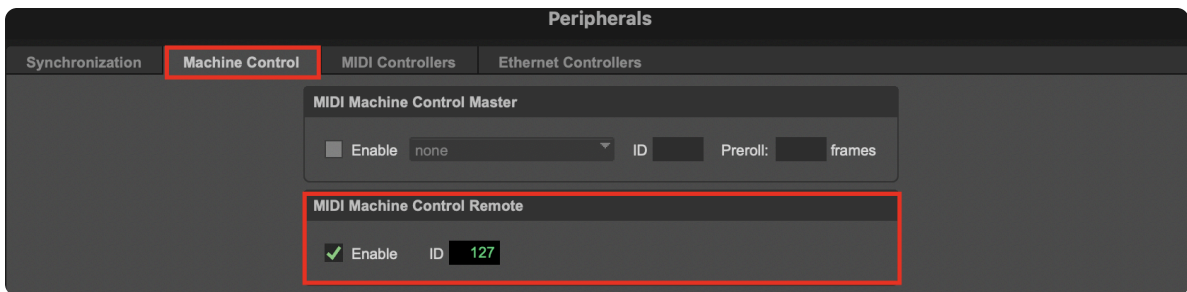


2. In **Setup** → **Peripherals...** → **Synchronization**, set the **MTC Generator Port** to **Gooroo Bridge ProTools MTC**.



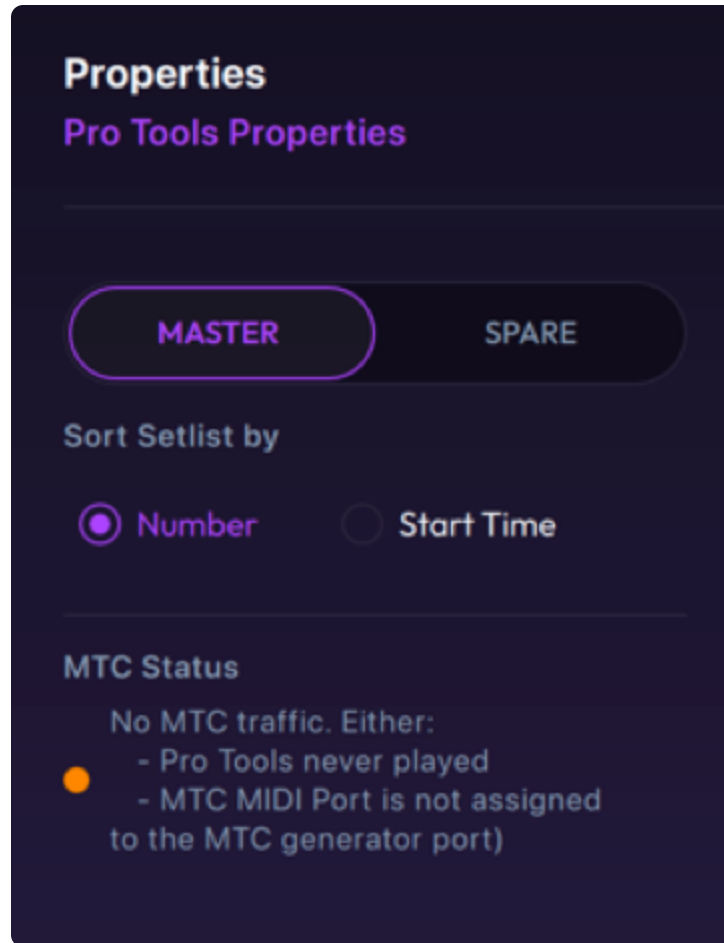


3. In **Peripherals...** → **Machine Control**, enable **MIDI Machine Control Remote** and set the ID to **127**.



3.4.3 Pro Tools properties in GoorooLink

The BRIDGE context section displays the properties of Pro Tools.



- **Master / Spare:** select to assign the connected LIOBOX² as Master or as a Spare. Prefer using the Spare assignment when actively using **redundancy**.
- **Sort Setlist by** (*Number* or *Start Time*): Pro Tools markers are numbered when they are created, but they can be moved freely, so their timecode position and their number can disagree. This option chooses which one defines the order of the setlist.
- **MTC Status indicator:** to follow the playhead position, Pro Tools must be assigned to the BRIDGE MTC port. This indicator shows that the MTC port is correctly assigned.

i NOTE

Pro Tools only generates MTC while the playhead is moving. MTC is therefore detected only once the settings are done and the playhead has played.

3.4.4 Markers

Pro Tools markers (Memory Locations) are the songs of the LIOBOX².

In Pro Tools, you can use the **Memory Location Comments** instead of the naming convention to give the extra information. Prefix each piece of information with `key:`, `duration:` or `bpm:`.

Edit Memory Location

Name: ENCORE

Number: 3

Time Properties

☒ Marker

☐ Selection

☐ None

Reference

Absolute

☐ Update Position

Marker Properties

Location

☒ Ruler: Markers

☐ Track: No track is targeted

Color

1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8

General Properties

☐ Zoom Settings

☐ Pre/Post Roll Times

☐ Track Visibility

☐ Track Heights

☐ Group Enables

☐ Window Configuration (none)

☐ VENUE Snapshot (none)

Comments

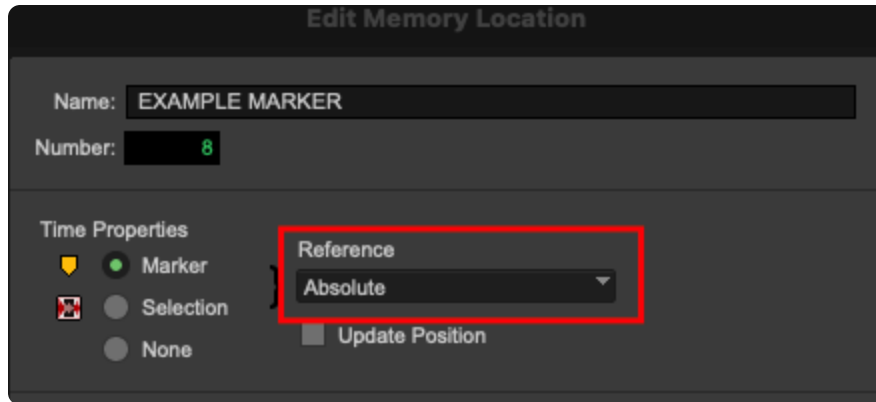
key: A#
duration: 128
bpm: 120

Cancel

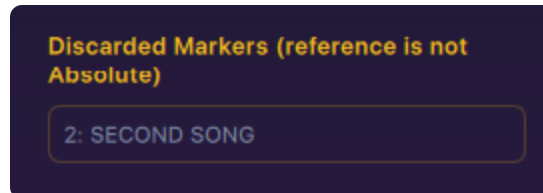
OK

3.4.4.1 Marker reference must be Absolute

The marker reference must be **Absolute**; otherwise the marker is discarded.



If the Pro Tools Properties panel shows the message "**Discarded Markers (reference is not Absolute)**", the listed markers will not be forwarded to the LIOBOX².



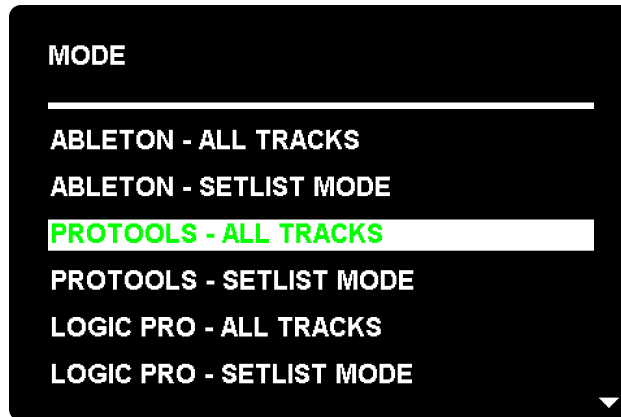
To clear this error, set the marker reference to **Absolute** in the Pro Tools **Edit Memory Location** window.

3.4.5 LIOBOX² modes

Select the **PRO TOOLS** mode in **MENU → MODE**.

3.4.5.1 All tracks mode

Switch to **ALL TRACKS** mode from the [Mode menu](#).



ALL TRACKS mode gives access to all the songs of the DAW session, in session order, so you can move to and launch any song of your set.

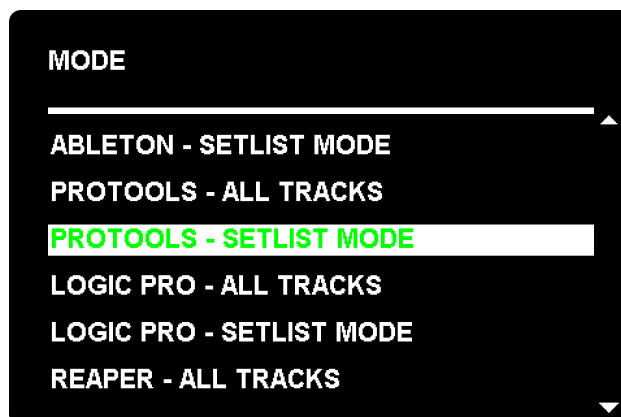
If **Error on duplicate marker** is enabled, the LIOBOX² checks the song names and warns you when two songs (scenes/locators) have the same name, so you can correct them.

3.4.5.2 Setlist mode

SETLIST mode lets you choose and reorder the songs: the LIOBOX² only displays the songs of the show's setlist, in the order you want. **All this without modifying the DAW session or touching the computer.**

Setlists can be renamed and are saved in the internal memory of the LIOBOX².

Switch to Setlist mode from the Mode menu:

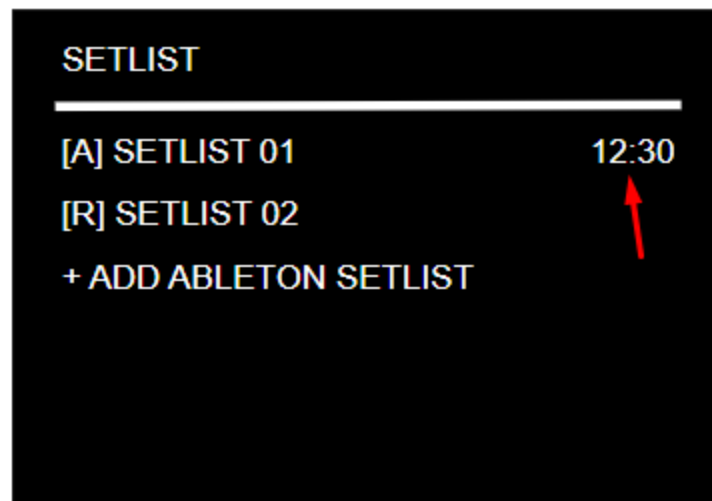


3.4.5.2.1 Setlist creation

To create a setlist, select **+ ADD [MODE] SETLIST** in **MENU → SETLIST**. First select the mode (Pro Tools) in **MENU → MODE**.

The first letter of the mode (A for Ableton, B for Bitwig, R for Reaper, ...) is added at the start of the setlist name, to show which mode it belongs to.

As songs are added, the total duration is displayed at the top of the window, next to the setlist name.

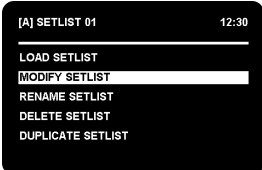
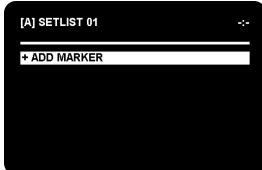
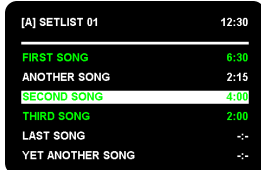
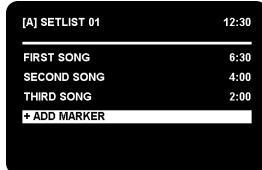


3.4.5.2.2 Add songs to the setlist

Once the setlist is created, you can add songs. The song list is loaded directly from the active Pro Tools project.

To add a song, open the setlist, select **MODIFY**, then **+ ADD TRACK**. The list of loaded songs appears: click a song to add it. The same song can be added several times.

The duration of each song is shown next to its name (it comes from the song title, see the [naming convention](#)).

Setlist menu	Setlist / MODIFY menu	ADD TRACK menu	Setlist / MODIFY menu
			

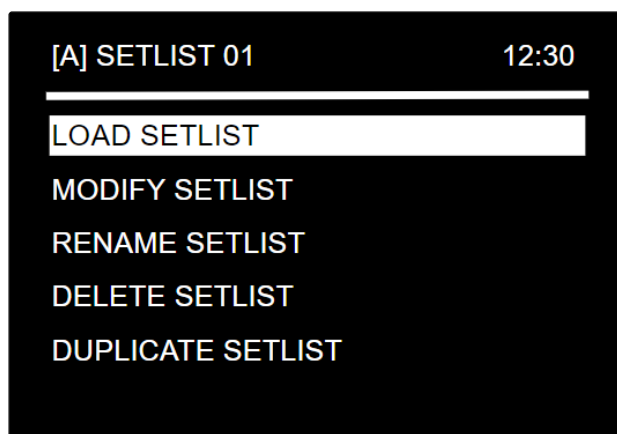
Songs already in the setlist appear in green.

3.4.5.2.3 Manage and load setlists

A setlist can be renamed (12 characters maximum), duplicated and modified at any time. See [Setlists](#).

If a song in the loaded setlist is not present in the DAW session, it is displayed in red on the Play screen. Up to 6 setlists can be created.

To use a setlist, select SETLIST mode in the MODE menu and load the setlist.



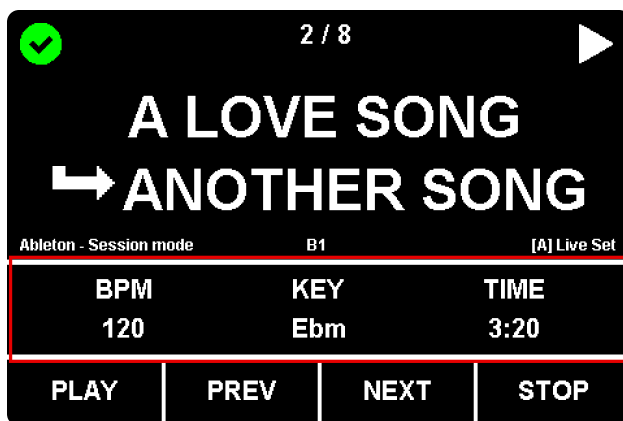
The setlist name appears in red on the Play screen if the loaded setlist's mode is different from the active mode.

3.4.5.3 Track position in session/setlist

The position of the current song in the session or setlist is constantly displayed at the top of the screen.

3.4.6 Track naming convention

The LIOBOX² can display the BPM, key and duration of each song, in the box outlined below (Advanced display mode).



Enter them in the song name using this naming convention:

```
song_name ; bpm ; key ; duration
```

- Write the duration as mm:ss.
- If you do not need a value, leave the field empty and omit the ;.
- To keep a song from being sent to the LIOBOX², start its name with ().
Example: ()song number 1.

▶	Track name ; BPM ; KEY ; Duration
▶	A Love song ; 120 BPM ; Ebm ; 3:20

3.4.6.1 Compatible characters

The following characters are compatible with the LIOBOX². Any other character is filtered out.

- Upper case: A to Z
- Numbers: 0 to 9
- Parentheses: ()
- Square brackets: []
- Hashtag: #
- Ampersand: &
- Plus: +
- Slash: /
- Space

3.4.6.2 Names that are not transmitted

A name starting with one of the following is not transmitted to the LIOBOX²:

- ()
- []
- (LOOP
- _
- * *
- >
- >>
- +
- LOOP

The following marker names are also filtered out from the marker list received by the LIOBOX²:

- AUTOSTOP
- (STOP)
- (NEXT)
- STOP
- SONG END
- PLAYNEXT
- STOPBOT
- EASY LOOPER
- NEXTCUE

3.4.7 Pad features

Pads can be reassigned from **MENU → PAD CONFIG** (see [Pad config](#)). In Pro Tools mode, the following features are available:

- NONE
- PLAY LIOBOX MARKER
- PLAY (TRANSPORT)
- PAUSE
- PREV LIOBOX MARKER
- PREV MARKER (TRANSPORT)
- FAST-REWIND
- RESTART MARKER
- NEXT LIOBOX MARKER
- NEXT MARKER (TRANSPORT)
- FAST-FORWARD
- CUSTOM MIDI

Notes:

- **Play (Transport)** corresponds to the DAW Play.
- **Play LIOBOX Marker** plays the next song (the selected one).
- **Fast-Rewind** and **Fast-Forward** can only be assigned to the Long press pad event.
- **Next** or **Prev Marker (Transport)** corresponds to the DAW Next event (next/previous in the project).
- **Next** or **Prev LIOBOX Marker** selects the next or previous marker from the setlist.

3.4.8 Redundancy

Redundancy in Pro Tools is achieved using the LIOBOX² as a central coordinator, together with Pro Tools Studio features. See also the generic [Redundancy](#) page.

WARNING

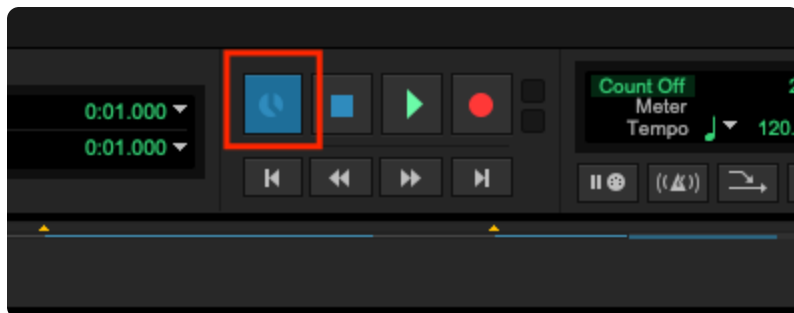
Pro Tools Studio (or higher) is mandatory: the **Jam Sync** feature is required to enable redundancy.

Pro Tools sessions can be large: jumping to a marker and launching a command can take Pro Tools from dozens to hundreds of milliseconds, so fire-and-forget commands would leave the two computers out of sync.

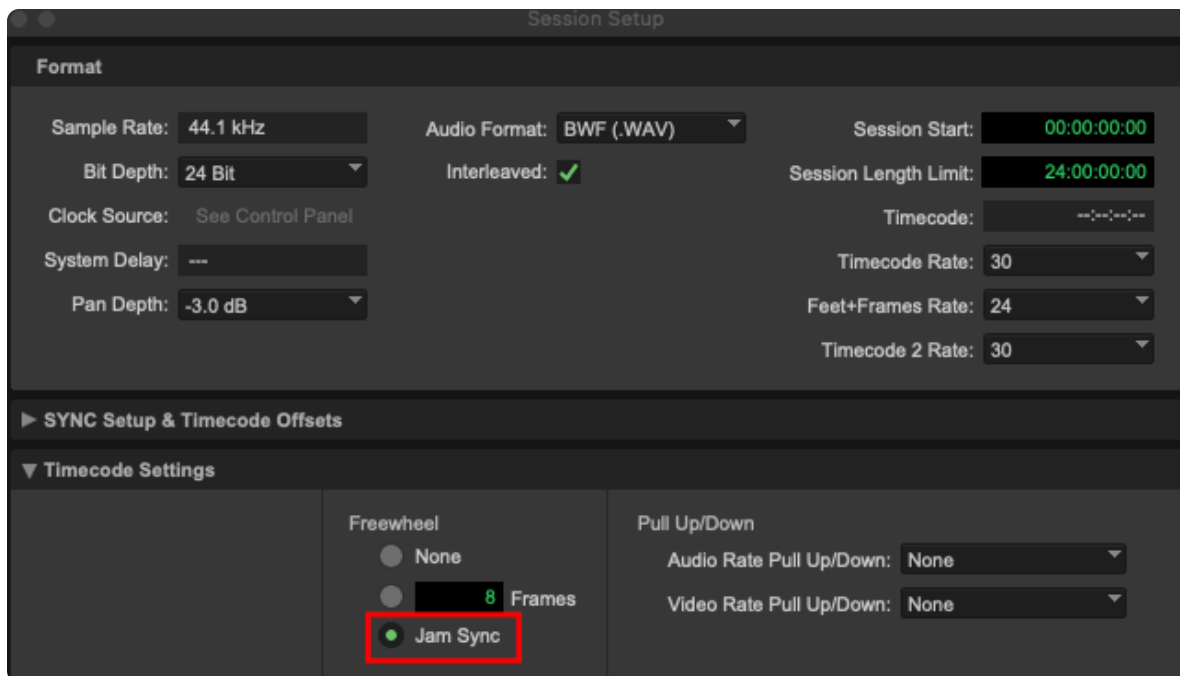
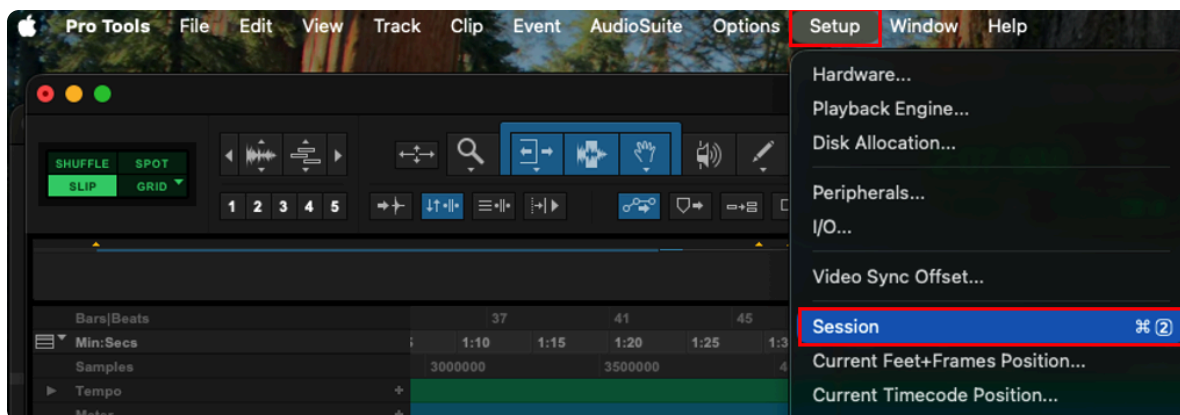
To prevent this, the LIOBOX² and GoorooLink constantly check that Pro Tools is ready, and synchronize the commands so they start at the same time on both computers.

GoorooLink therefore relies heavily on MTC, and the following Pro Tools features must be enabled:

- **Sync Point** enabled

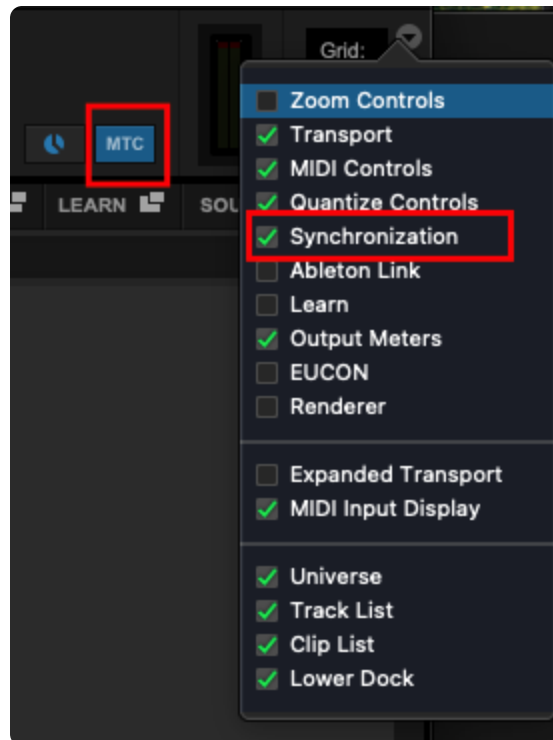


- **Setup → Session → Session Timecode Settings: Jam Sync**



Enable these features on the **Spare** computer. They are optional on the Master computer.

On **both** the Master and Spare computers, enable **Synchronization → MTC**:



Because the LIOBOX² MASTER, Pro Tools and the LIOBOX² SPARE are constantly synchronized, commands behave differently:

- **Play, Restart, Next, Prev commands**

- Master side: a slight delay (a few hundred milliseconds) at launch, to make sure the playhead is positioned and the Spare is ready.
- Spare side: the playhead catches up approximately 1 second after the Master starts.
- Any of these commands sent while the Spare catches up is discarded.

- **Pause command**

- Deferred while Play, Restart, Next or Prev is launching and the Spare is synchronizing.

- **Deactivated commands**

- Fast forward and fast rewind commands are ignored if both Master and Spare are connected.

3.4.9 Troubleshooting

- Markers missing on the LIOBOX²: check the [marker reference](#) is Absolute.
- No MTC detected: see the MTC note in [Pro Tools properties](#).
- For the green check icon and song names, see [Troubleshooting](#).

3.5 Logic Pro

! AT A GLANCE

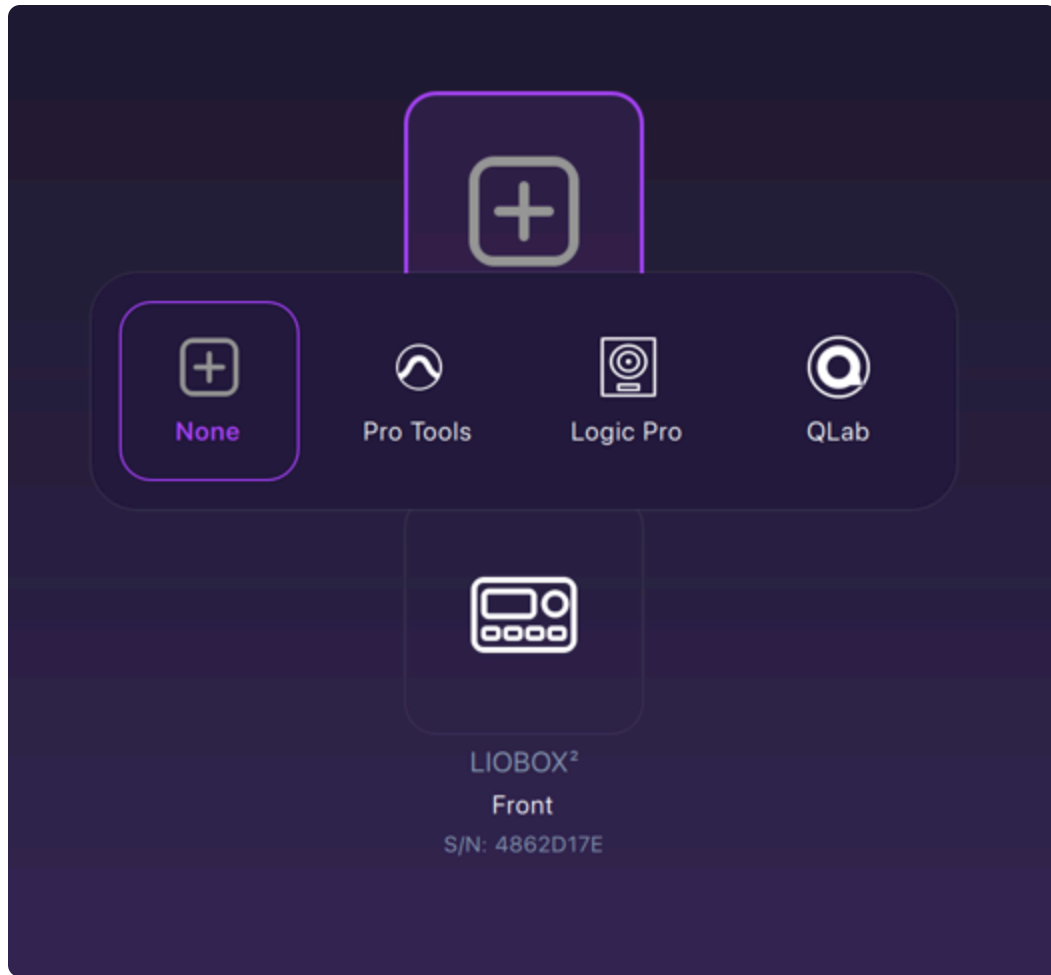
- **Integration:** through the **BRIDGE** app of GoorooLink (macOS), using MMC and MTC.
- **Features:** song list from markers, setlists, transport, redundancy.
- **Needed:** GoorooLink running, the Logic Pro configuration below, and the marker list copied into GoorooLink whenever it changes.

3.5.1 GoorooLink BRIDGE

Logic Pro cannot be scripted like Ableton, Bitwig or Reaper, so the LIOBOX² works with it through the **BRIDGE** app of [GoorooLink](#). The BRIDGE relays the commands sent by the LIOBOX² and gives the LIOBOX² the Logic Pro information (marker list, playhead position, ...).

GoorooLink runs on macOS only. If it is not installed yet, see [Install GoorooLink](#).

1. Launch GoorooLink and open **APP → BRIDGE**.
2. In the DAW selection, click the DAW tile and choose **Logic Pro**.

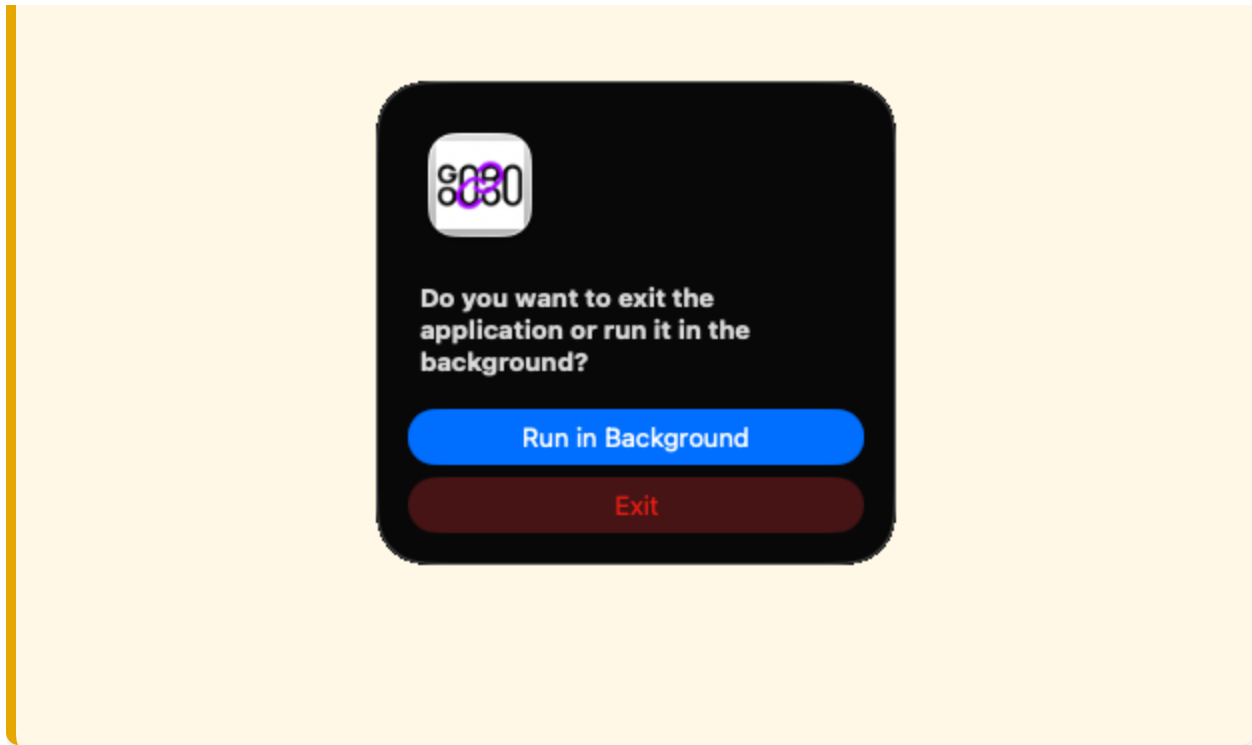


3. In the LIOBOX selection, choose your connected LIOBOX².
4. Check the **BRIDGE state** next to the **APP → BRIDGE** menu item: it turns green once both the DAW and the LIOBOX² are detected.

⚠ WARNING

GoorooLink must be running for the BRIDGE to work. **It can run in the foreground or in the background, but it must not be exited.**

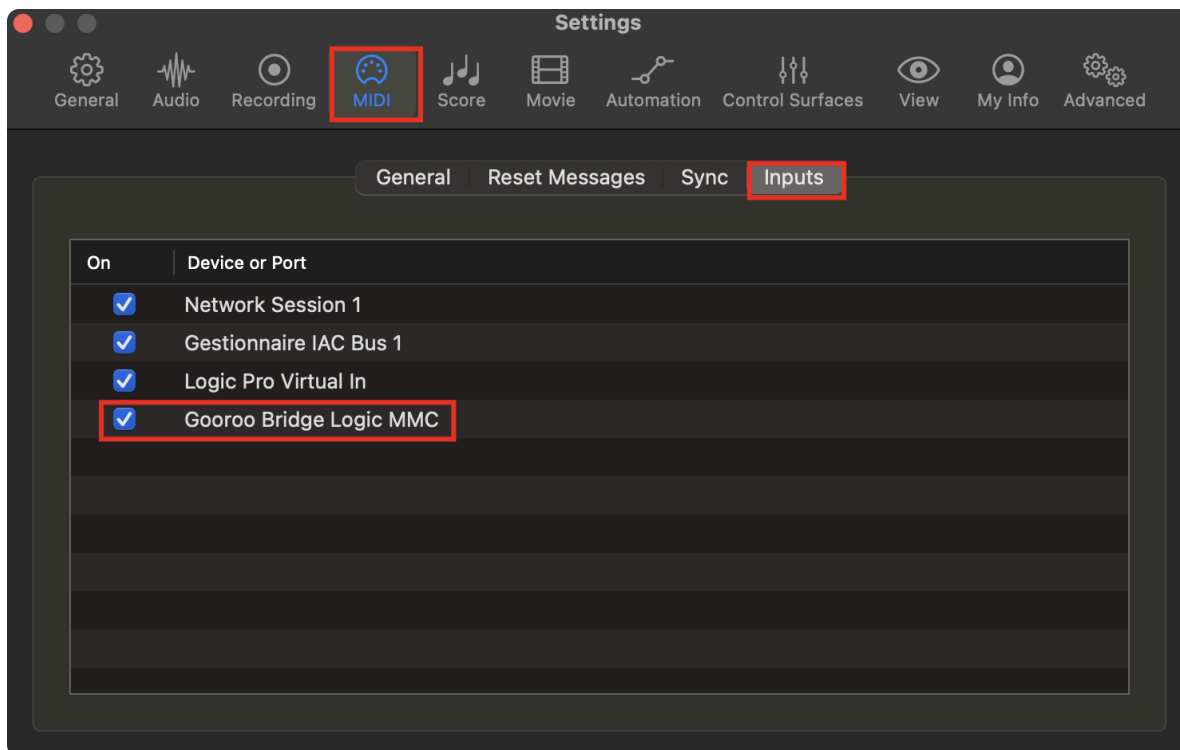
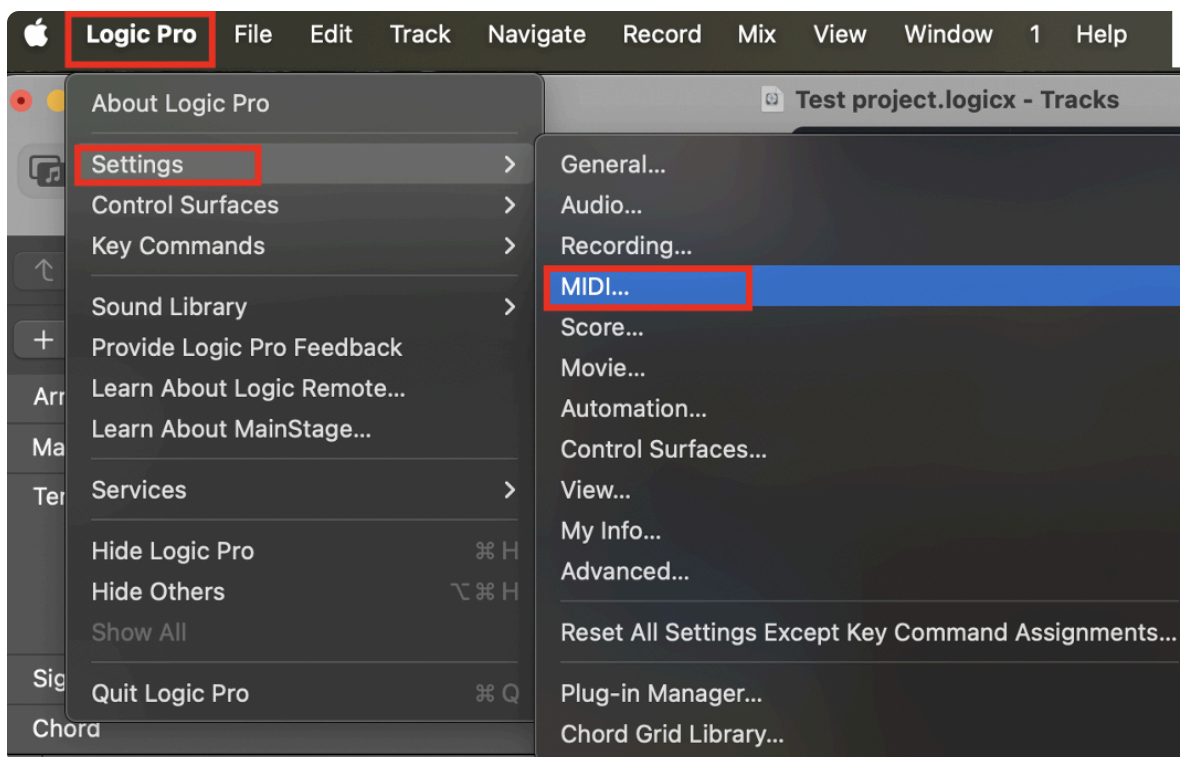
To run it in the background, quit the application: a dialog asks whether it should run in the background or exit.



3.5.2 Logic Pro configuration

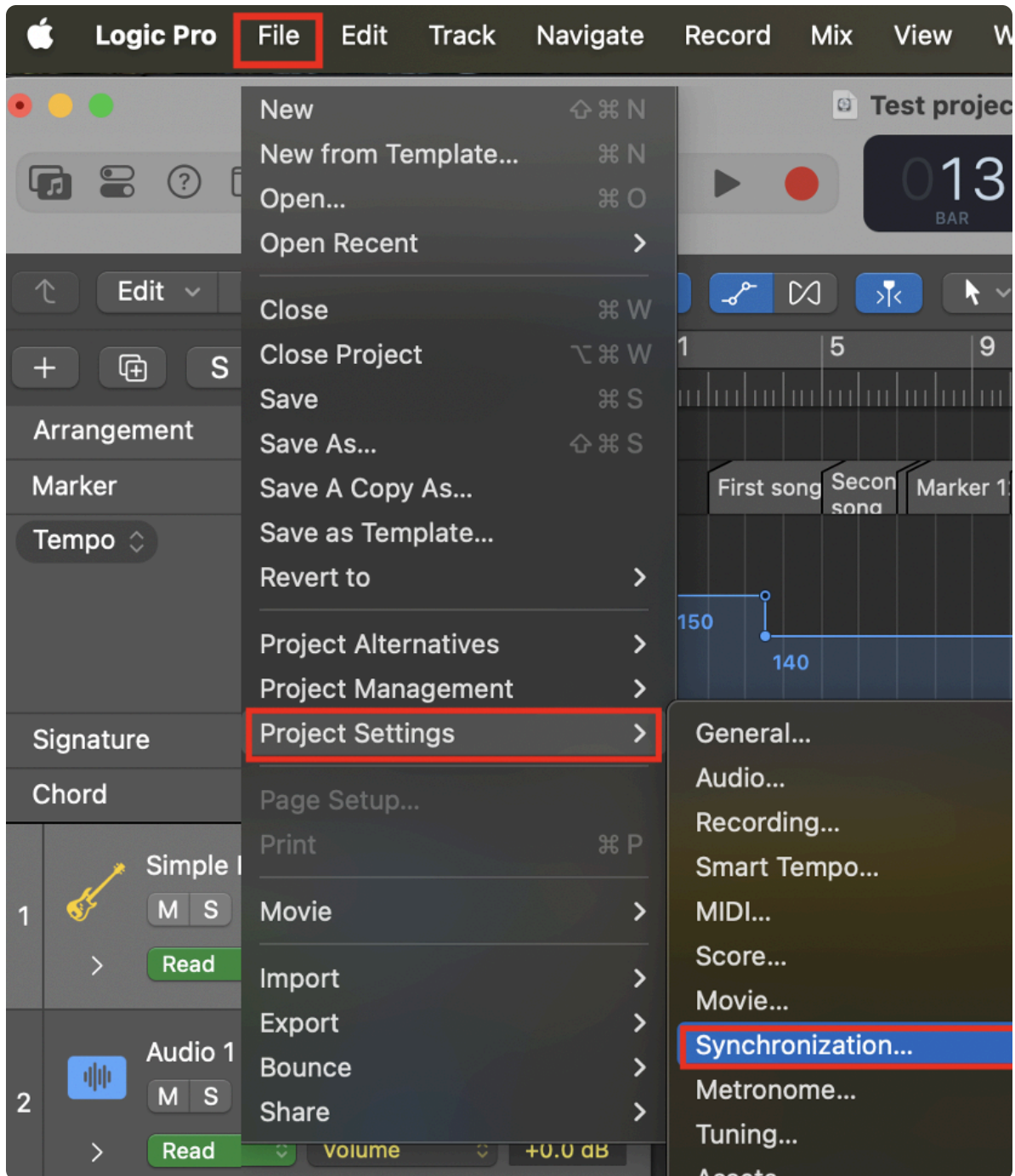
This section covers the Logic Pro configuration. Make sure Logic Pro is selected in the BRIDGE of GoorooLink.

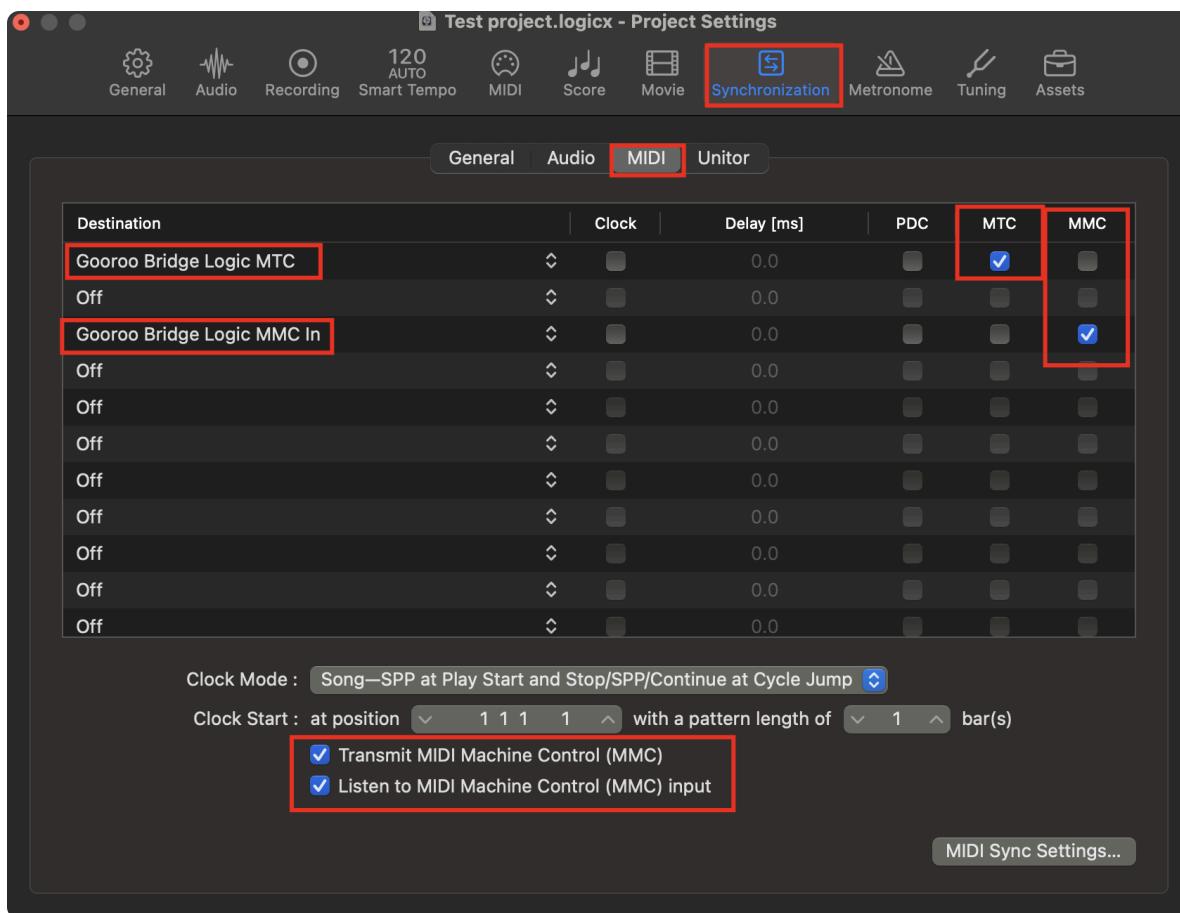
1. Enable the MIDI input **Gooroo Bridge Logic MMC** in **Logic Pro → Settings → MIDI → Inputs**.



2. In **File** → **Project Settings** → **Synchronization** → **MIDI**, activate both MTC and MMC synchronization for:

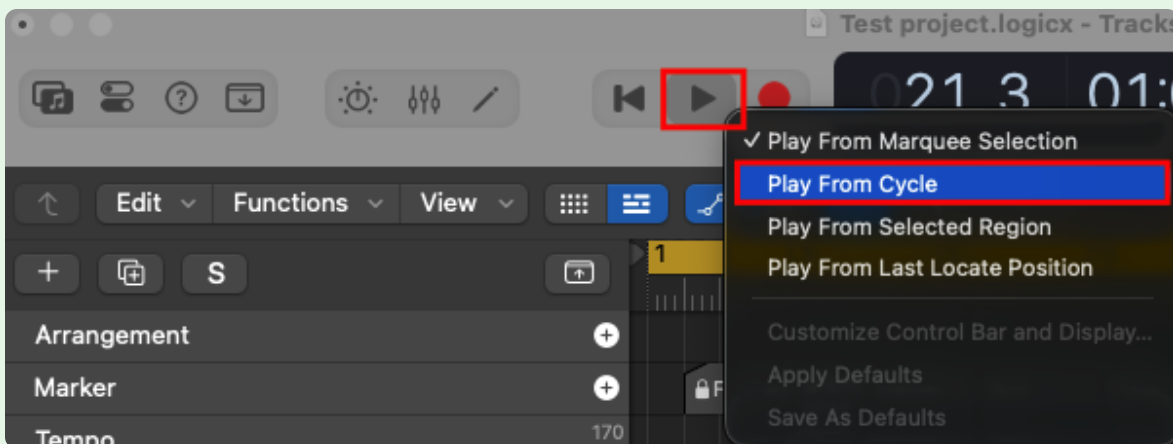
- **Gooroo Bridge Logic MTC** → MTC
 - **Gooroo Bridge Logic MMC In** → MMC
3. Enable both **Transmit MIDI Machine Control (MMC)** and **Listen to MIDI Machine Control (MMC)** input.





TIP

Deactivate **Play from Cycle** (right-click on the Play button) so that the playhead does not return to its original position instead of playing the selected marker.



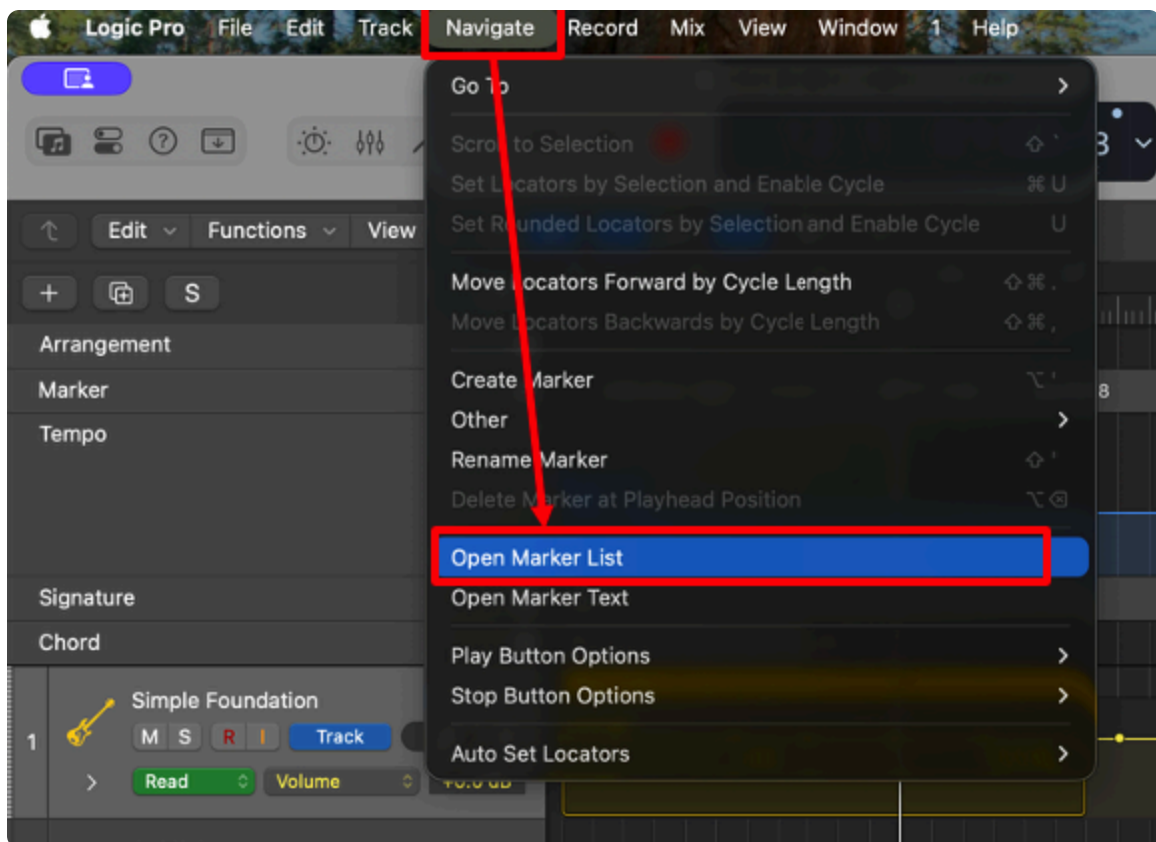
3.5.3 Retrieve the marker list

Logic Pro does not provide an API to read its marker list, so you have to provide the list yourself. To keep this simple, the BRIDGE app reads the list from the clipboard: you only need to copy the markers.

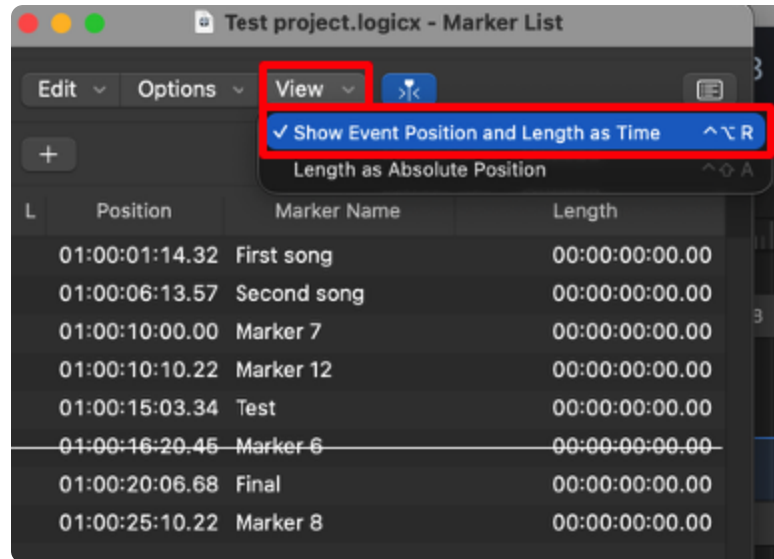
⚠ WARNING

If the marker list changes **or** if a marker position changes, this process must be redone.

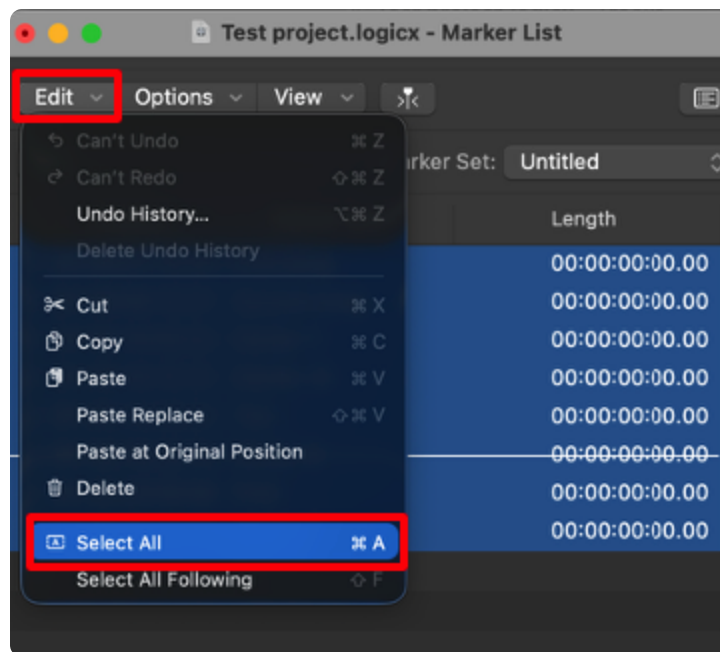
1. In the **Navigate** menu, select **Open Marker List**.



2. In **View**, select **Show Event Position and Length as Time** (or `Shift + Option + R`).

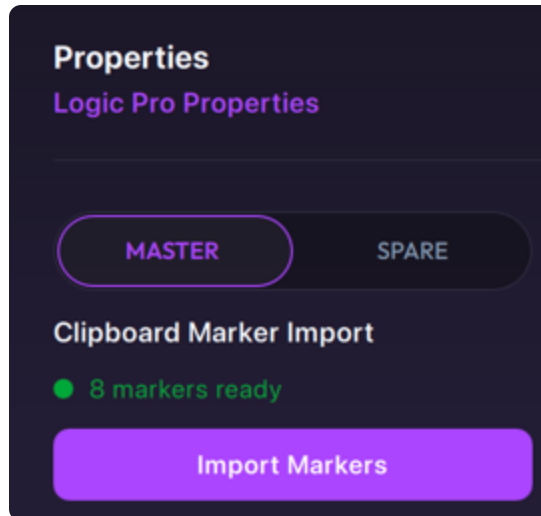


3. In **Edit**, select **Select All** (or Command + A).



4. Copy the selection: Command + C (or **Edit** → **Copy**).

5. In the **Logic Pro Properties** of the BRIDGE, click **Import Markers**.



When importing, a popup asks you to assign the "Position" and "Name" columns. Use the drop-downs to do so.

Valid marker format

Import Markers

Assign column roles below. Only SMPTE timecodes can be used as position.

	SMPTE	Text	SMPTE
	Position	Name	—
1	01:00:01:14.32	First song	00:00:00:00.00
2	01:00:06:13.57	Second song	00:00:00:00.00
3	01:00:10:00.00	Marker 7	00:00:00:00.00
4	01:00:15:03.34	Test	00:00:00:00.00
5	01:00:21:03.34	Final	00:00:04:06.68
6	01:00:25:10.22	(STOP)	00:00:08:13.57
7	01:00:34:00.00	Marker 8	00:00:06:20.45
8	01:00:40:20.45	(NEXT)	00:00:04:06.68
9	01:00:45:03.34	Marker 6	00:00:08:13.57

9 markers total

Cancel Import

Invalid marker format

Import Markers

Assign column roles below. Only SMPTE timecodes can be used as position.

	Text	Text	Text
#	Name	—	—
1	2111	First song	2112
2	4 4 4 240.	Second song	5111.
3	7111	Marker 7	7112
4	10111	Test	10112
5	13311	Final	16111
6	16111	(STOP)	21111
7	21111	Marker 8	25111
8	25111	(NEXT)	27311

⚠ Marker list shall be provided with "Event Position and Length as Time" enabled in Logic.

9 markers total

Cancel Import

i NOTE

Only SMPTE timecodes can be used as position. The marker list must be provided with **Show Event Position and Length as Time** enabled in Logic Pro.

The marker list can now be used by the LIOBOX² and the BRIDGE. You can compare the list in GoorooLink with the Logic Pro Marker List.

Clipboard Marker Import

● 8 markers ready

Import Markers

Copy markers from Logic Pro's marker list and click Import

- 01:00:01:14.32 First song
- 01:00:06:13.57 Second song
- 01:00:10:00.00 Marker 7
- 01:00:10:10.22 Marker 12
- 01:00:15:03.34 Test
- 01:00:16:20.45 Marker 6

Test project.logicx - Marker List

Edit Options View

Marker Set: Untitled

L	Position	Marker Name	Length
	01:00:01:14.32	First song	00:00:00:00.00
	01:00:06:13.57	Second song	00:00:00:00.00
	01:00:10:00.00	Marker 7	00:00:00:00.00
	01:00:10:10.22	Marker 12	00:00:00:00.00
	01:00:15:03.34	Test	00:00:00:00.00
	01:00:16:20.45	Marker 6	00:00:00:00.00
	01:00:20:06.68	Final	00:00:00:00.00
	01:00:25:10.22	Marker 8	00:00:00:00.00

3.5.4 Logic Pro properties in GoorooLink

Properties

Logic Pro Properties

MASTER

SPARE

Clipboard Marker Import

☐ Clipboard empty

Import Markers

Copy markers from Logic Pro's marker list and click Import

- 01:00:01:14.32 First song
- 01:00:06:13.57 Second song
- 01:00:10:00.00 Marker 7
- 01:00:10:10.22 Marker 12
- 01:00:15:03.34 Test
- 01:00:16:20.45 Marker 6

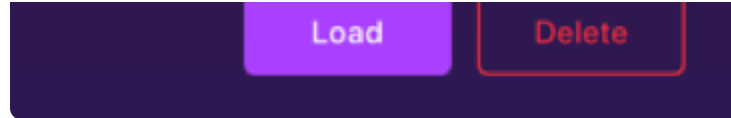
Marker List Presets

Save Preset

Save

Load Preset

▼



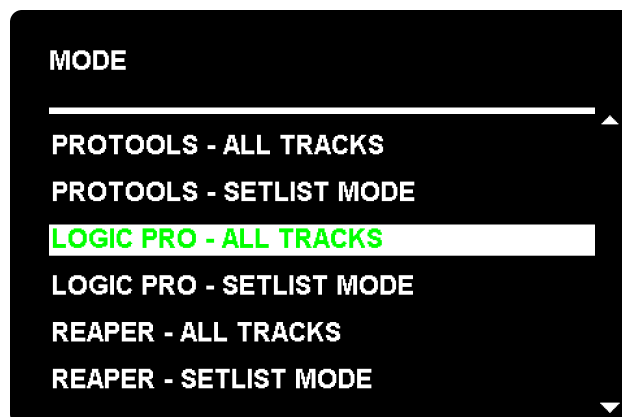
- **Master / Spare:** select to assign the connected LIOBOX² as Master or as a Spare. Prefer using the Spare assignment when actively using **redundancy**.
- **Clipboard Marker Import:** imports the marker list from the clipboard. Copy it from the Logic Pro Marker List first (see **above**).
- **Marker List:** displays the imported marker list (from the clipboard or presets).
- **Marker List Presets:** you can save up to 10 imported marker lists and reuse them from session to session.
- **Save Preset:** saves the imported marker list with the provided name.
- **Load Preset:** loads the selected preset into the imported marker list.
- **Delete Preset:** deletes the selected saved preset.

3.5.5 LIOBOX² modes

Select the **LOGIC PRO** mode in **MENU → MODE**.

3.5.5.1 All tracks mode

Switch to **ALL TRACKS** mode from the **Mode menu**.



ALL TRACKS mode gives access to all the songs of the DAW session, in session order, so you can move to and launch any song of your set.

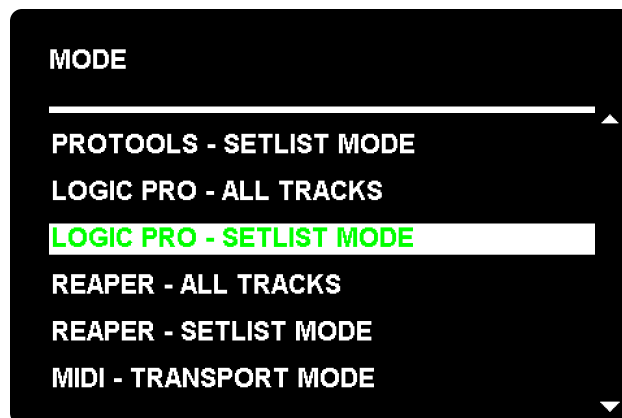
If **Error on duplicate marker** is enabled, the LIOBOX² checks the song names and warns you when two songs (scenes/locators) have the same name, so you can correct them.

3.5.5.2 Setlist mode

SETLIST mode lets you choose and reorder the songs: the LIOBOX² only displays the songs of the show's setlist, in the order you want. **All this without modifying the DAW session or touching the computer.**

Setlists can be renamed and are saved in the internal memory of the LIOBOX².

Switch to Setlist mode from the Mode menu:

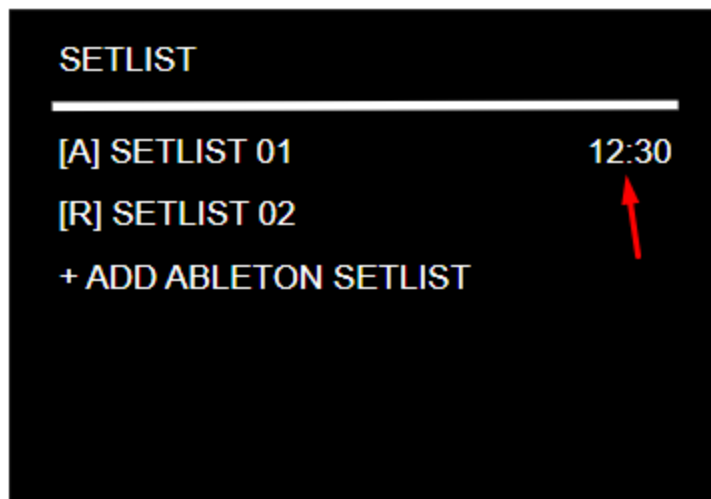


3.5.5.2.1 Setlist creation

To create a setlist, select **+ ADD [MODE] SETLIST** in **MENU → SETLIST**. First select the mode (Logic Pro) in **MENU → MODE**.

The first letter of the mode (A for Ableton, B for Bitwig, R for Reaper, ...) is added at the start of the setlist name, to show which mode it belongs to.

As songs are added, the total duration is displayed at the top of the window, next to the setlist name.



3.5.5.2.2 Add songs to the setlist

Once the setlist is created, you can add songs. The song list is loaded directly from the active Logic Pro project.

To add a song, open the setlist, select **MODIFY**, then **+ ADD TRACK**. The list of loaded songs appears: click a song to add it. The same song can be added several times.

The duration of each song is shown next to its name (it comes from the song title, see the [naming convention](#)).

Setlist menu	Setlist / MODIFY menu	ADD TRACK menu	Setlist / MODIFY menu
[A] SETLIST 01 12:30 LOAD SETLIST MODIFY SETLIST RENAME SETLIST DELETE SETLIST DUPLICATE SETLIST	[A] SETLIST 01 --: + ADD MARKER	[A] SETLIST 01 12:30 FIRST SONG 6:30 ANOTHER SONG 2:15 SECOND SONG 4:00 THIRD SONG 2:00 LAST SONG --: YET ANOTHER SONG --:	[A] SETLIST 01 12:30 FIRST SONG 6:30 SECOND SONG 4:00 THIRD SONG 2:00 + ADD MARKER

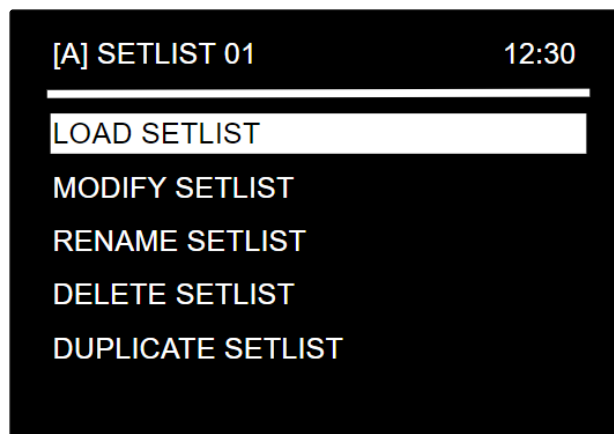
Songs already in the setlist appear in green.

3.5.5.2.3 Manage and load setlists

A setlist can be renamed (12 characters maximum), duplicated and modified at any time. See [Setlists](#).

If a song in the loaded setlist is not present in the DAW session, it is displayed in red on the Play screen. Up to 6 setlists can be created.

To use a setlist, select SETLIST mode in the MODE menu and load the setlist.



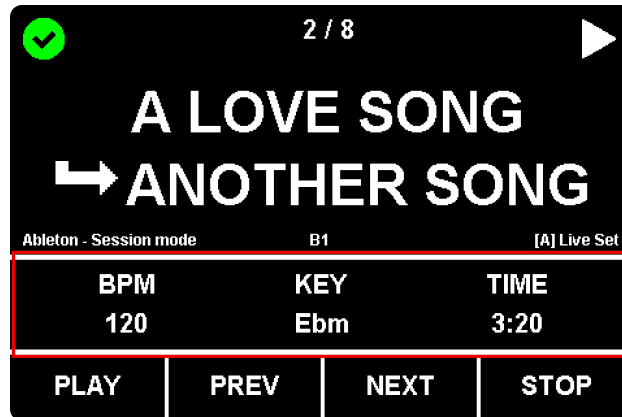
The setlist name appears in red on the Play screen if the loaded setlist's mode is different from the active mode.

3.5.5.3 Track position in session/setlist

The position of the current song in the session or setlist is constantly displayed at the top of the screen.

3.5.6 Track naming convention

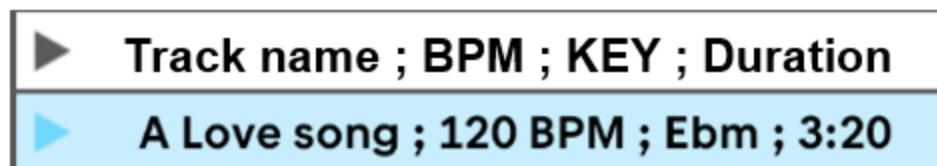
The LIOBOX² can display the BPM, key and duration of each song, in the box outlined below (Advanced display mode).



Enter them in the song name using this naming convention:

song_name ; bpm ; key ; duration

- Write the duration as mm:ss.
- If you do not need a value, leave the field empty and omit the ;.
- To keep a song from being sent to the LIOBOX², start its name with ().
Example: ()song number 1.



3.5.6.1 Compatible characters

The following characters are compatible with the LIOBOX². Any other character is filtered out.

- Upper case: A to Z
- Numbers: 0 to 9
- Parentheses: ()
- Square brackets: []

- Hashtag: #
- Ampersand: &
- Plus: +
- Slash: /
- Space

3.5.6.2 Names that are not transmitted

A name starting with one of the following is not transmitted to the LIOBOX²:

- ()
- []
- (LOOP
- _
- * *
- >
- >>
- +
- LOOP

The following marker names are also filtered out from the marker list received by the LIOBOX²:

- AUTOSTOP
- (STOP)
- (NEXT)
- STOP
- SONG END
- PLAYNEXT
- STOPBOT

- EASY LOOPER
- NEXTCUE

3.5.7 Pad features

Pads can be reassigned from **MENU → PAD CONFIG** (see [Pad config](#)). In Logic Pro mode, the following features are available:

- NONE
- PLAY LIOBOX MARKER
- PLAY (TRANSPORT)
- PAUSE
- PREV LIOBOX MARKER
- PREV MARKER (TRANSPORT)
- FAST-REWIND
- RESTART MARKER
- NEXT LIOBOX MARKER
- NEXT MARKER (TRANSPORT)
- FAST-FORWARD
- CUSTOM MIDI

Notes:

- **Play (Transport)** corresponds to the DAW Play.
- **Play LIOBOX Marker** plays the next song (the selected one).
- **Fast-Rewind** and **Fast-Forward** can only be assigned to the Long press pad event.
- **Next** or **Prev Marker (Transport)** corresponds to the DAW Next event (next/previous in the project).

- **Next** or **Prev LIOBOX Marker** selects the next or previous marker from the setlist.

Logic Pro shares its pad memory with Cubase: a pad assignment made in one mode also modifies the assignment in the other.

3.5.8 Redundancy

In the BRIDGE Logic Pro properties of the second computer, assign the LIOBOX² as **Spare**. The LIOBOX² compares the song lists of the Main and Spare computers to ensure that the sessions are identical. See [Redundancy](#).

3.5.9 Troubleshooting

- Playhead jumps back instead of playing the selected marker: deactivate **Play from Cycle** (see the tip above).
- Markers outdated or missing: [import the marker list](#) again.
- For the green check icon and song names, see [Troubleshooting](#).

3.6 Cubase

! AT A GLANCE

- **Integration:** through the **BRIDGE** app of Gooroolink (macOS), using MMC and MTC.
- **Features:** song list from an exported marker file, setlists, transport, redundancy.
- **Needed:** Gooroolink running, the Cubase configuration below, and the marker file loaded in Gooroolink whenever the markers change.

! CUBASE VERSION

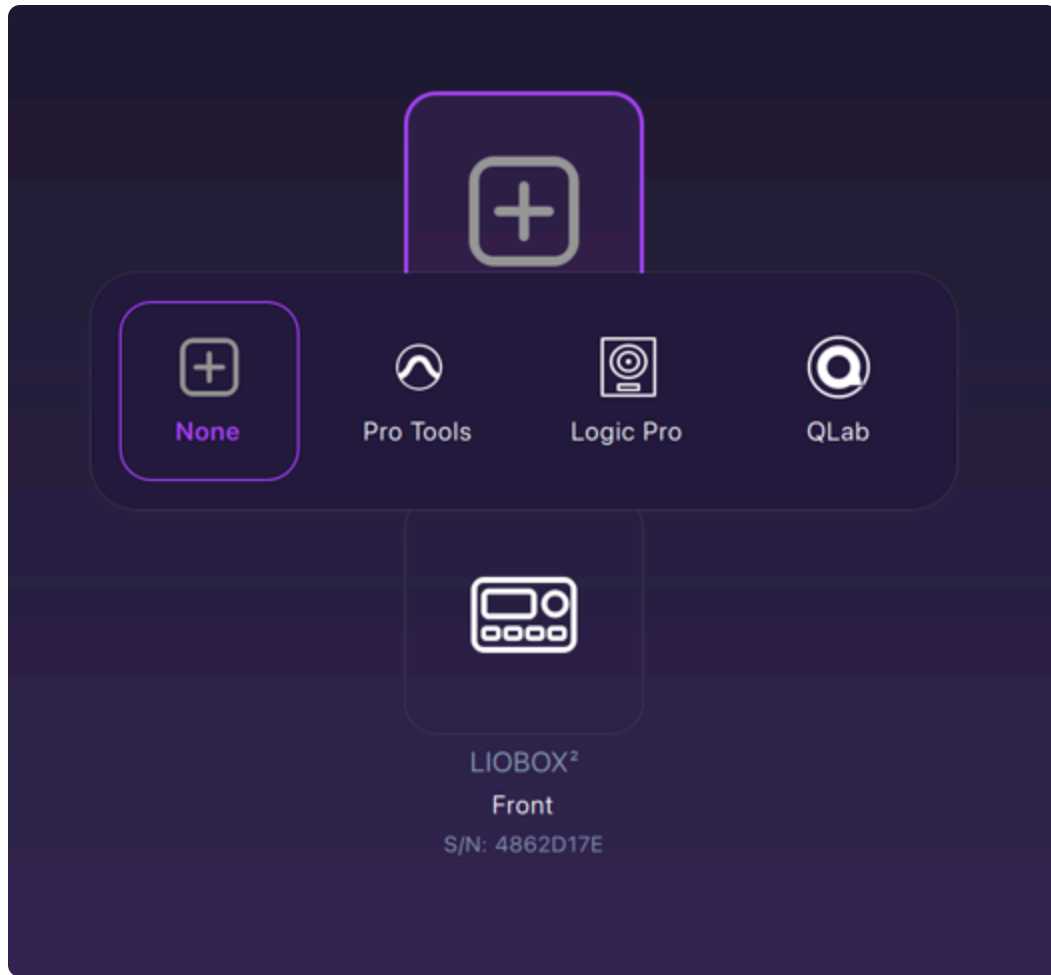
Cubase **Artist** or **Studio** is required. MTC and MMC features the BRIDGE rely on are not available on lower versions.

3.6.1 Gooroolink BRIDGE

Cubase cannot be scripted like Ableton, Bitwig or Reaper, so the LIOBOX² works with it through the **BRIDGE** app of [Gooroolink](#). The BRIDGE relays the commands sent by the LIOBOX² and gives the LIOBOX² the Cubase information (marker list, playhead position, ...).

Gooroolink runs on macOS only. If it is not installed yet, see [Install Gooroolink](#).

1. Launch Gooroolink and open **APP → BRIDGE**.
2. In the DAW selection, click the DAW tile and choose **Cubase**.

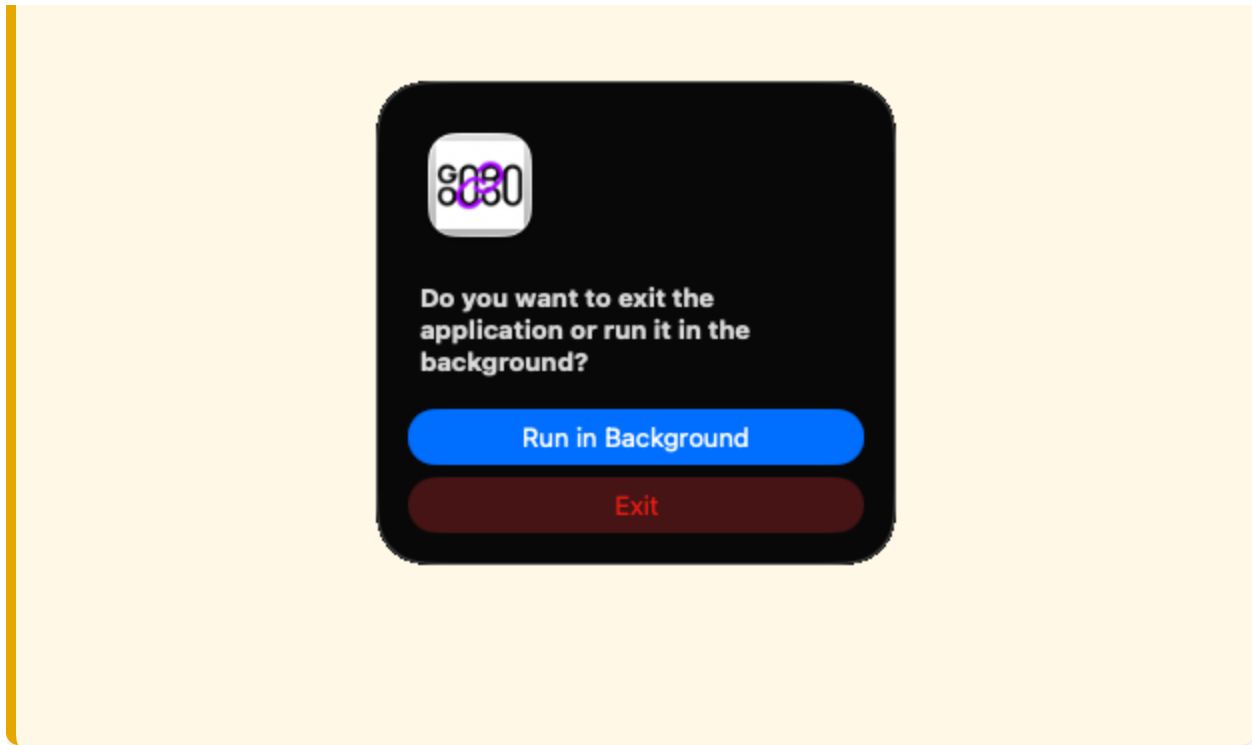


3. In the LIOBOX selection, choose your connected LIOBOX².
4. Check the **BRIDGE state** next to the **APP → BRIDGE** menu item: it turns green once both the DAW and the LIOBOX² are detected.

⚠ WARNING

GoorooLink must be running for the BRIDGE to work. **It can run in the foreground or in the background, but it must not be exited.**

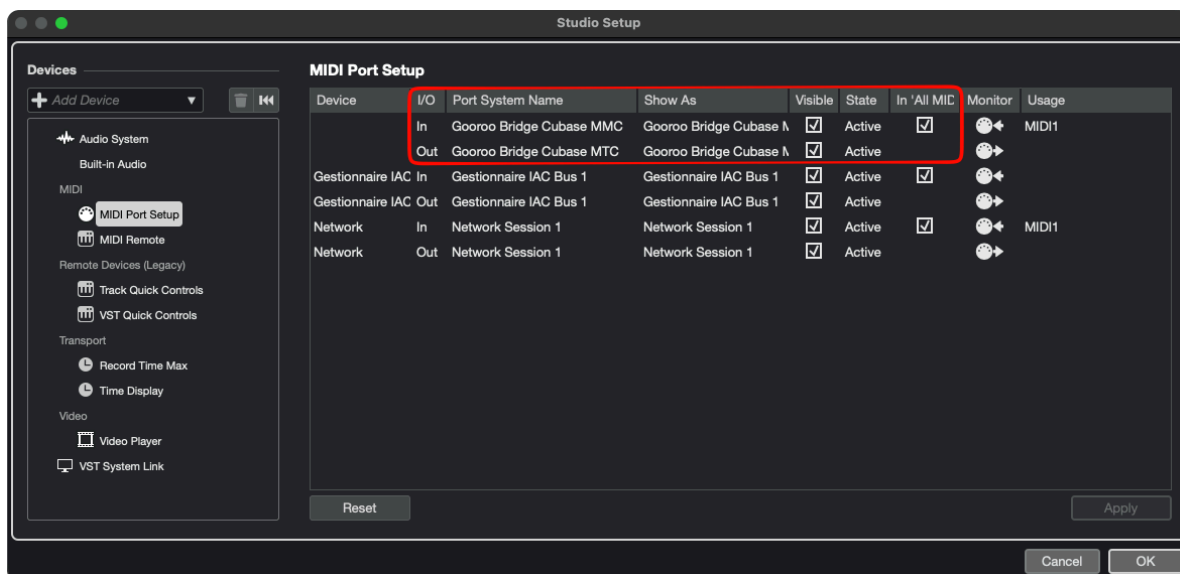
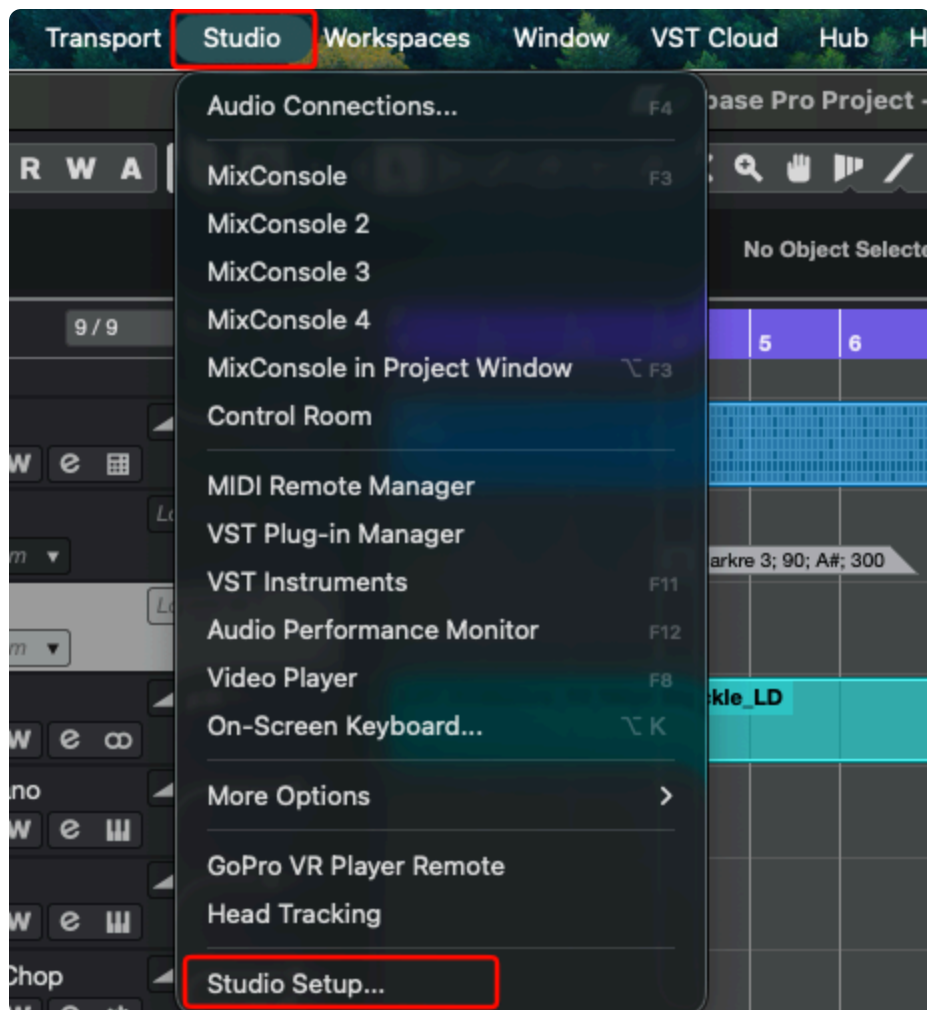
To run it in the background, quit the application: a dialog asks whether it should run in the background or exit.



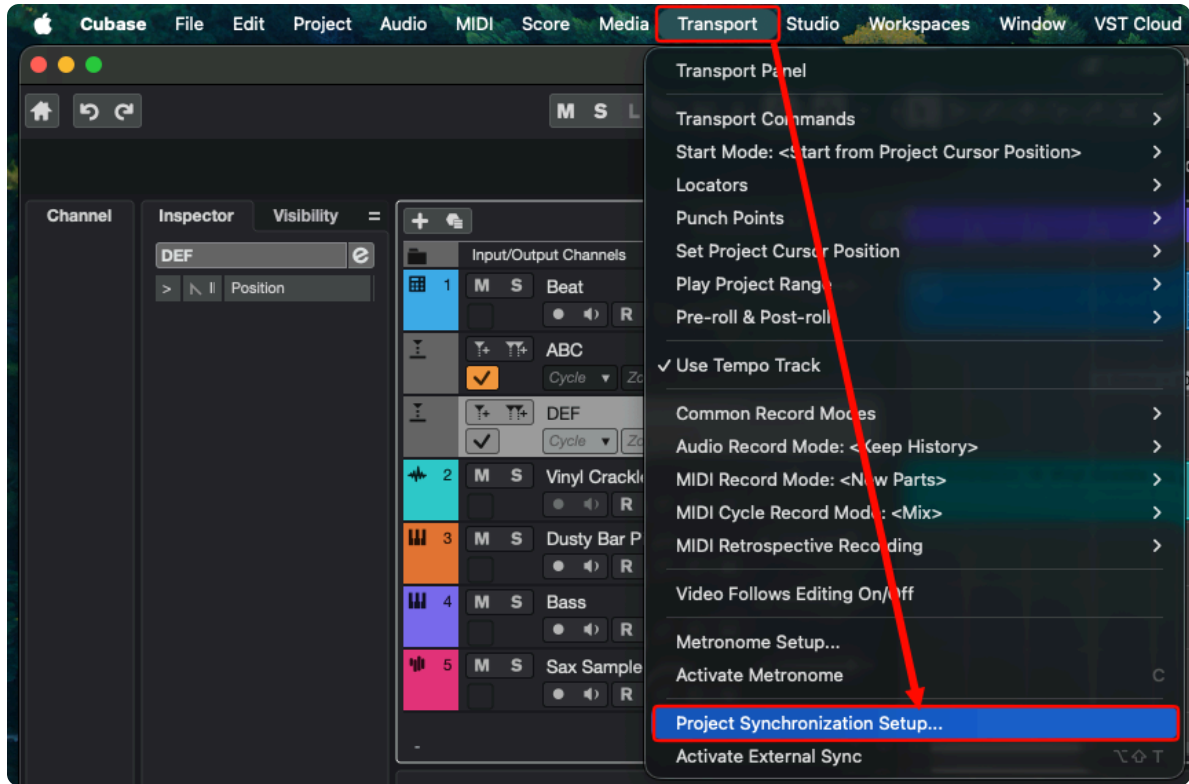
3.6.2 Cubase configuration

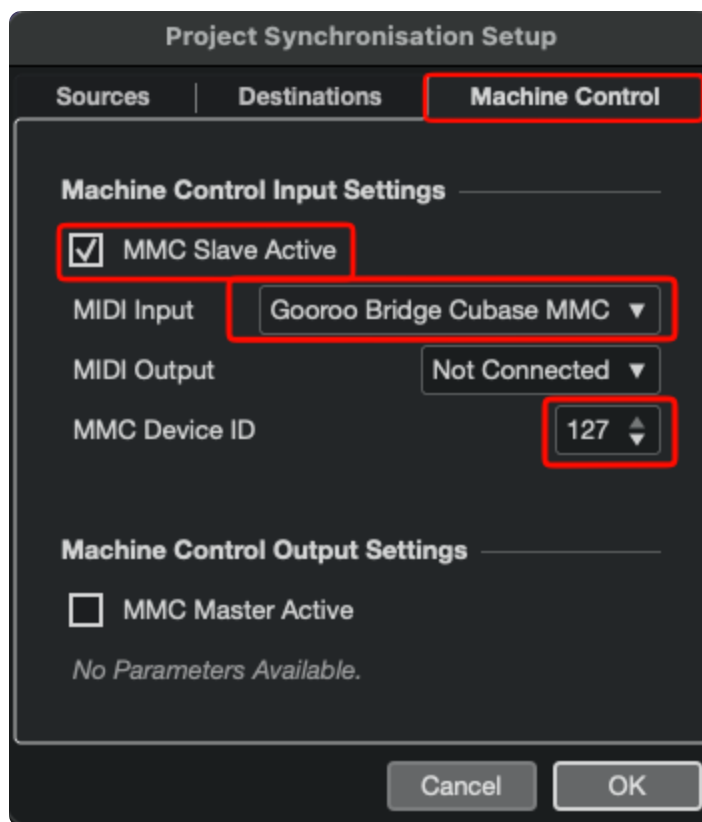
This section covers the Cubase configuration. Make sure Cubase is selected in the BRIDGE of GoorooLink.

1. Check that the Gooroo Bridge MIDI devices are visible and active in **Studio** → **Studio Setup**.

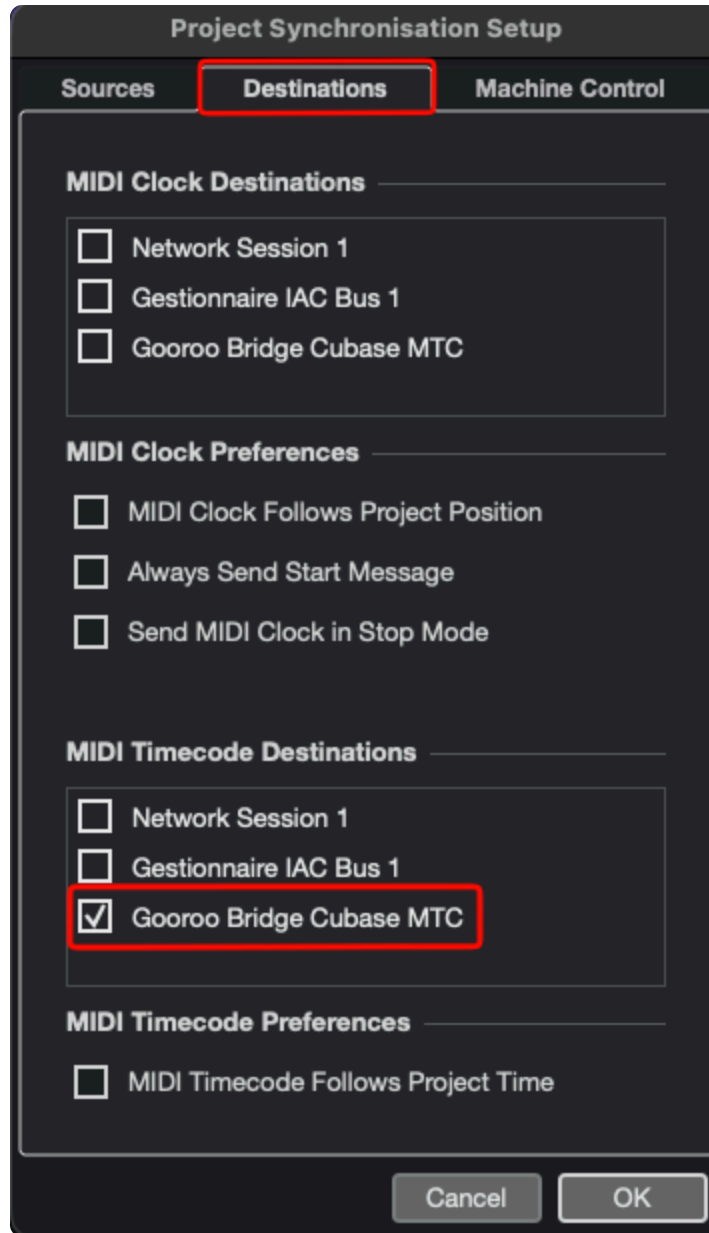


2. In **Transport** → **Project Synchronization Setup**, open the **Machine Control** tab and configure the MMC input: enable **MMC Slave Active**, set the MIDI Input to **Gooroo Bridge Cubase MMC** and the MMC Device ID to **127**.

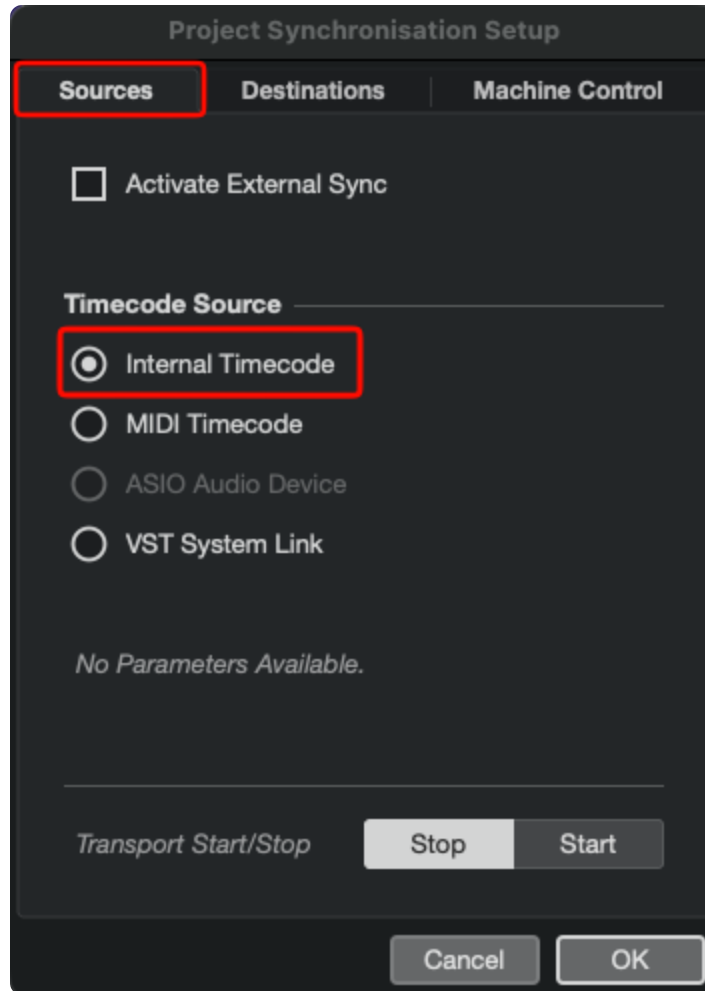




3. Configure the MTC output: in the **Destinations** tab, tick **Gooroo Bridge Cubase MTC** under MIDI Timecode Destinations.



4. In the **Sources** tab, set the Timecode Source to **Internal Timecode**.



Cubase is ready to be used!

3.6.3 Retrieve the marker list

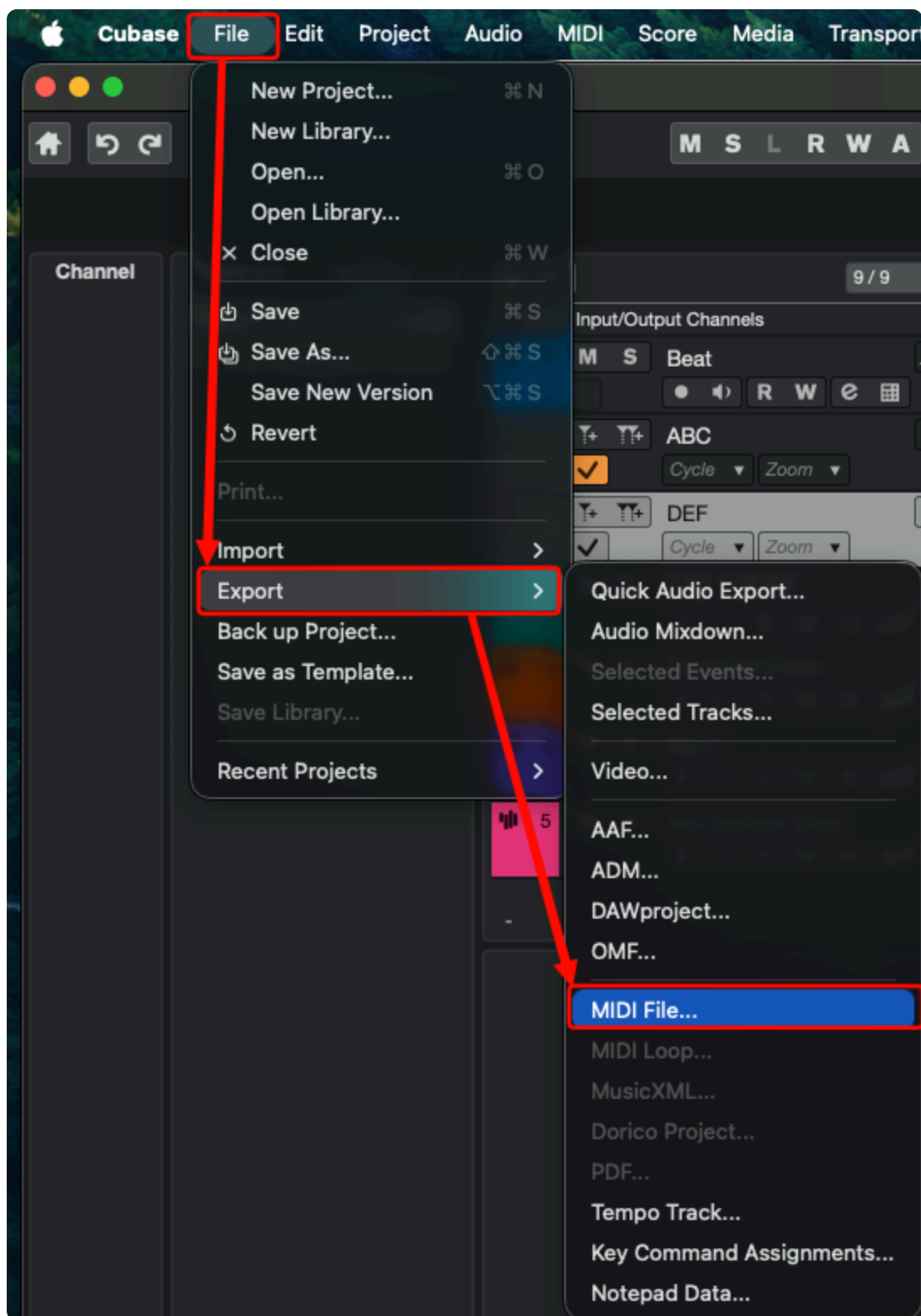
Cubase does not provide an API to read its marker list, so you have to provide the list yourself. To keep this simple, the BRIDGE app reads the markers from an exported file: you only need to give it that file.

WARNING

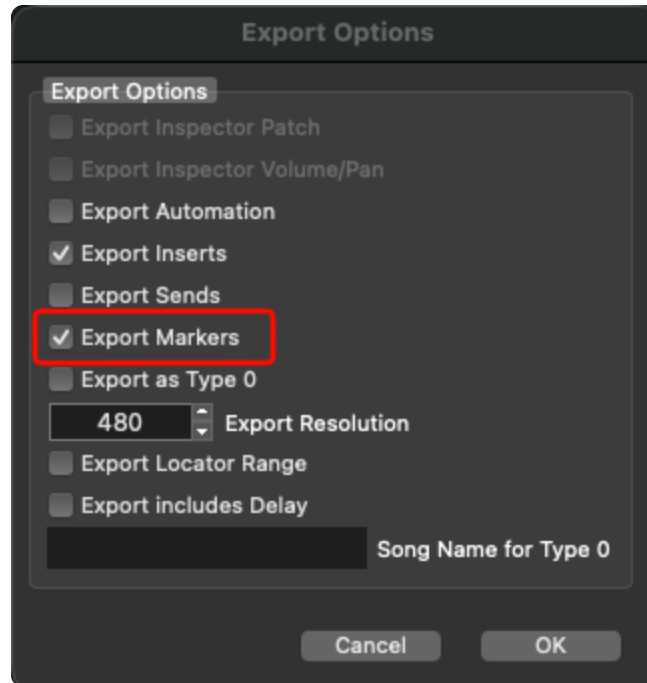
If the marker list changes **or** if a marker position changes, this process must be redone.

3.6.3.1 Option A: export the Cubase MIDI file (.mid)

1. Export by going to Cubase **File** → **Export** → **MIDI File...**

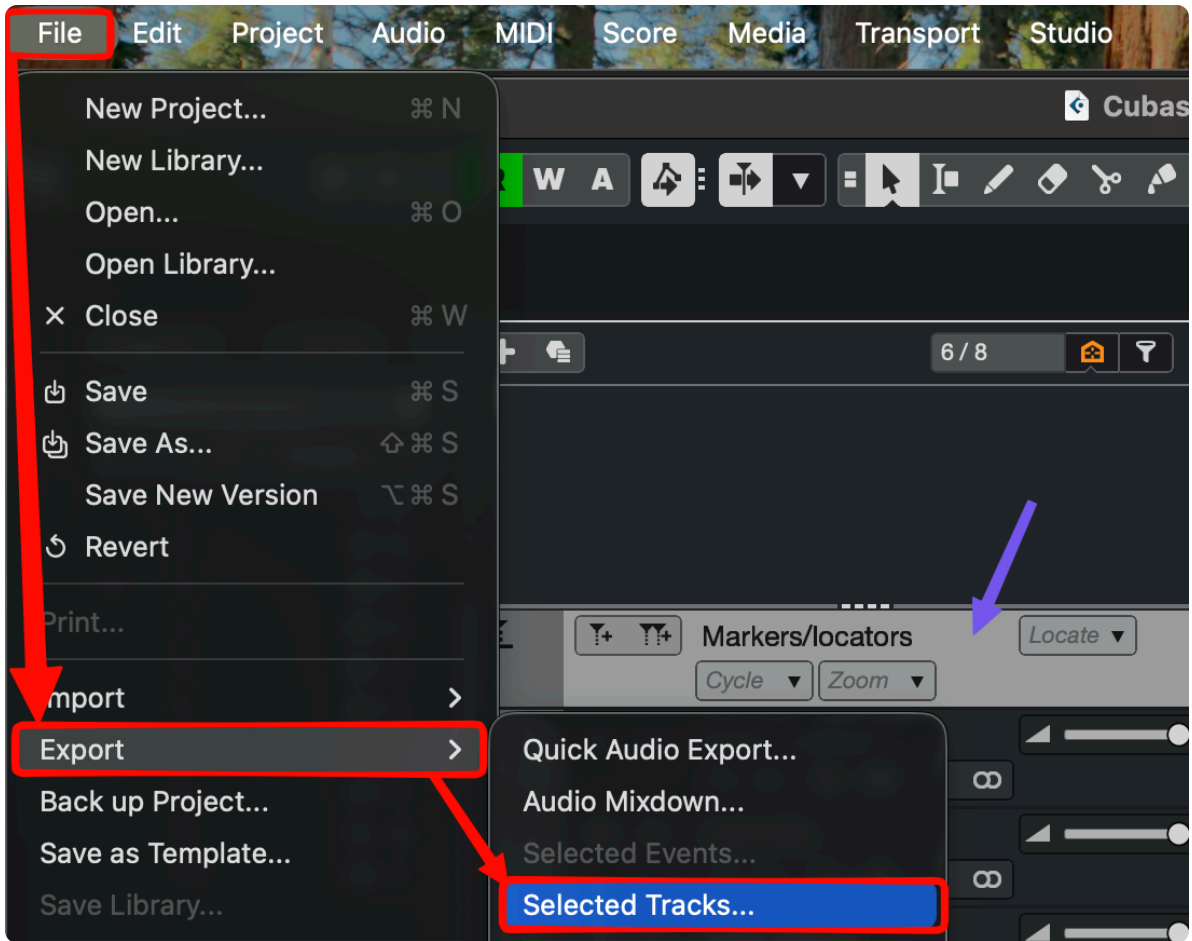


2. Make sure **Export Markers** is selected.



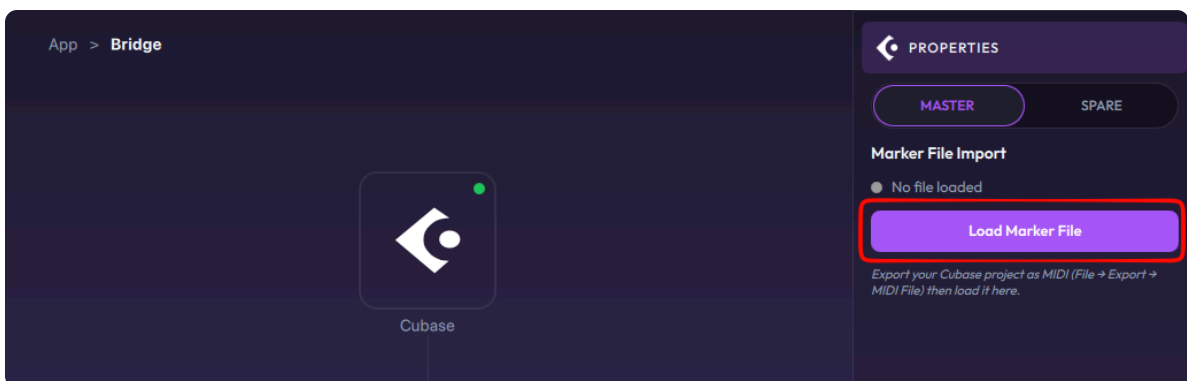
3.6.3.2 Option B: export the Cubase Selected Tracks file (.xml)

1. Select the marker track to export.
2. Export by going to Cubase **File** → **Export** → **Selected Tracks...**

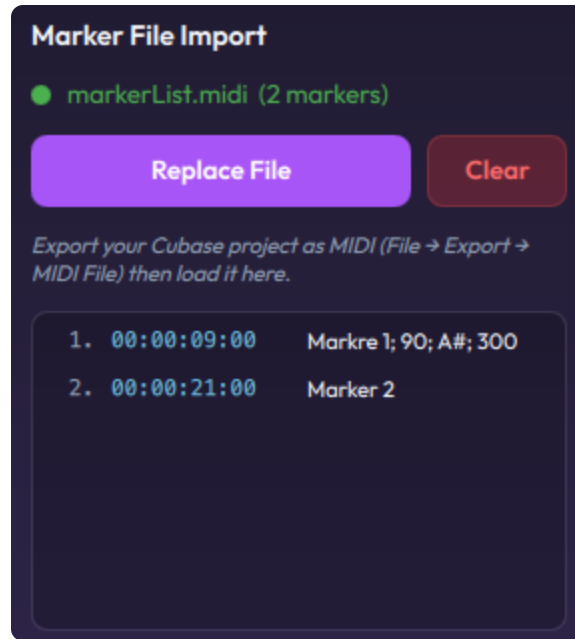


3.6.3.3 Import the MIDI or XML file in GoorooLink

1. Load the exported marker file with **Load Marker File**:

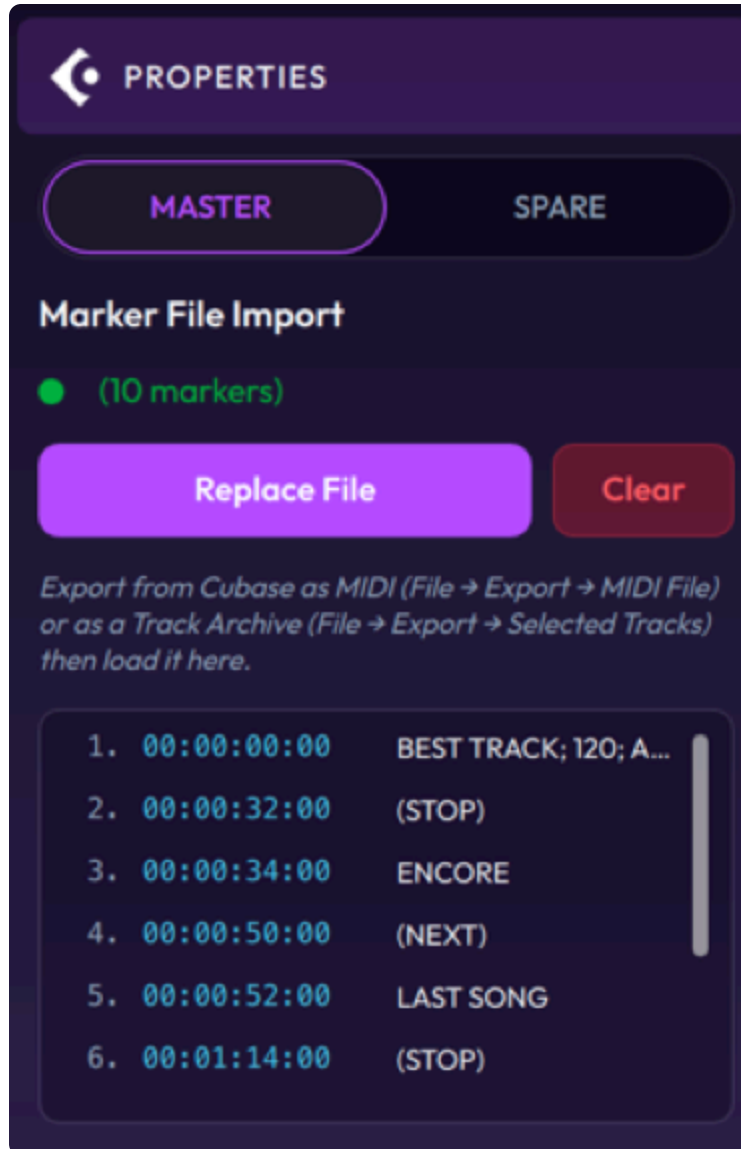


2. The marker list is imported automatically and displayed. The LIOBOX² can now use this marker list.



To replace the list later, use **Replace File**; to remove it, use **Clear** (see [Cubase properties](#)).

3.6.4 Cubase properties in GoorooLink



- **Master / Spare:** select to assign the connected LIOBOX² as Master or as a Spare. Prefer using the Spare assignment when actively using [redundancy](#).
- **Marker File Import:** displays the loaded file and the number of markers read. If no file is displayed but markers are loaded, the markers come from a previous GoorooLink session (cached information).

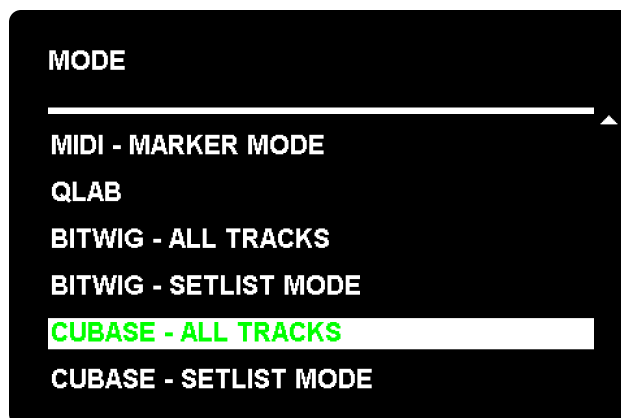
- **Replace File:** loads a marker file, either from a Cubase-exported MIDI file (.mid) or from a Cubase-exported Selected Tracks file (.xml).
- **Clear:** clears the marker list and the loaded file path.

3.6.5 LIOBOX² modes

Select the **CUBASE** mode in **MENU → MODE**.

3.6.5.1 All tracks mode

Switch to **ALL TRACKS** mode from the [Mode menu](#).



ALL TRACKS mode gives access to all the songs of the DAW session, in session order, so you can move to and launch any song of your set.

If [Error on duplicate marker](#) is enabled, the LIOBOX² checks the song names and warns you when two songs (scenes/locators) have the same name, so you can correct them.

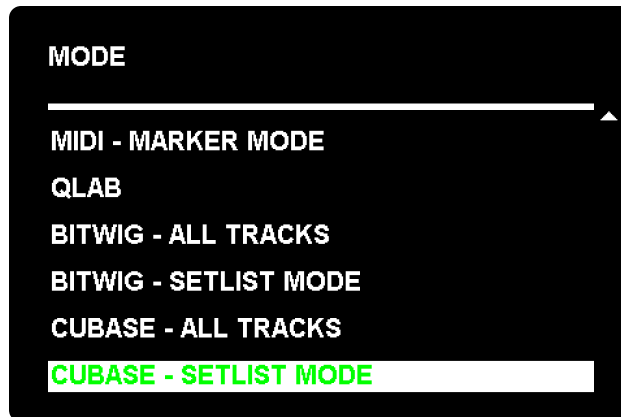
3.6.5.2 Setlist mode

SETLIST mode lets you choose and reorder the songs: the LIOBOX² only displays the songs of the show's setlist, in the order you want. **All this without**

modifying the DAW session or touching the computer.

Setlists can be renamed and are saved in the internal memory of the LIOBOX².

Switch to Setlist mode from the Mode menu:

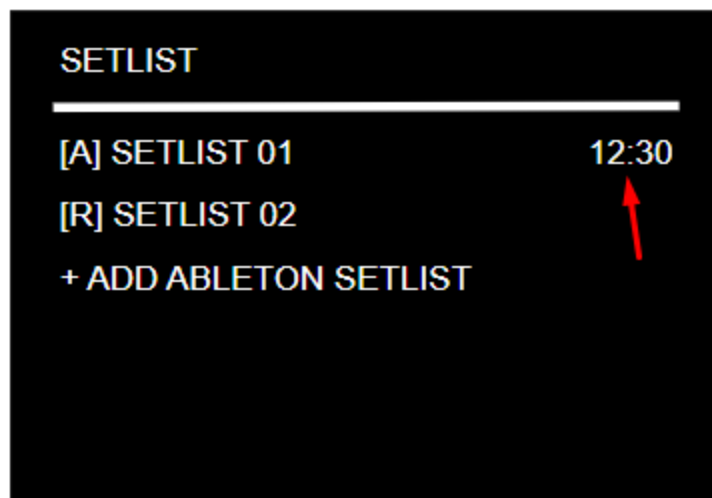


3.6.5.2.1 Setlist creation

To create a setlist, select **+ ADD [MODE] SETLIST** in **MENU → SETLIST**. First select the mode (Cubase) in **MENU → MODE**.

The first letter of the mode (A for Ableton, B for Bitwig, R for Reaper, ...) is added at the start of the setlist name, to show which mode it belongs to.

As songs are added, the total duration is displayed at the top of the window, next to the setlist name.



3.6.5.2.2 Add songs to the setlist

Once the setlist is created, you can add songs. The song list is loaded directly from the active Cubase project.

To add a song, open the setlist, select **MODIFY**, then **+ ADD TRACK**. The list of loaded songs appears: click a song to add it. The same song can be added several times.

The duration of each song is shown next to its name (it comes from the song title, see the [naming convention](#)).

Setlist menu	Setlist / MODIFY menu	ADD TRACK menu	Setlist / MODIFY menu

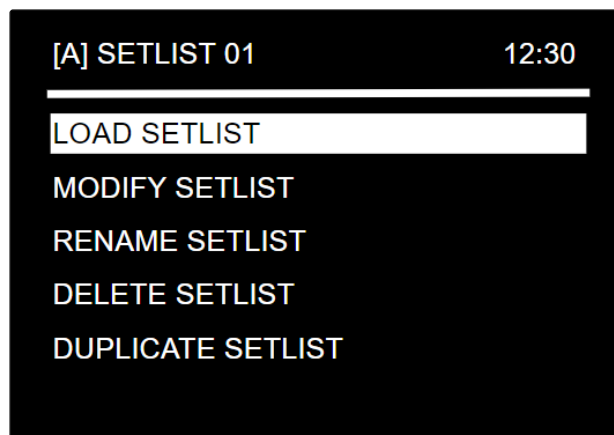
Songs already in the setlist appear in green.

3.6.5.2.3 Manage and load setlists

A setlist can be renamed (12 characters maximum), duplicated and modified at any time. See [Setlists](#).

If a song in the loaded setlist is not present in the DAW session, it is displayed in red on the Play screen. Up to 6 setlists can be created.

To use a setlist, select SETLIST mode in the MODE menu and load the setlist.



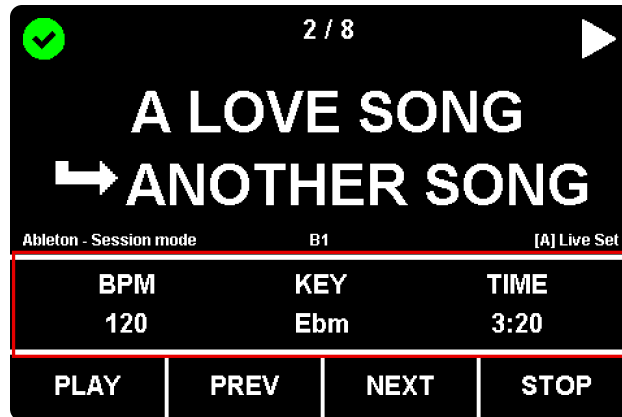
The setlist name appears in red on the Play screen if the loaded setlist's mode is different from the active mode.

3.6.5.3 Track position in session/setlist

The position of the current song in the session or setlist is constantly displayed at the top of the screen.

3.6.6 Track naming convention

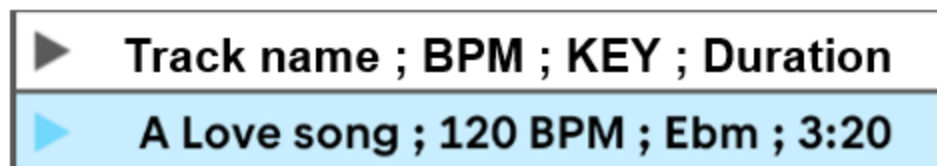
The LIOBOX² can display the BPM, key and duration of each song, in the box outlined below (Advanced display mode).



Enter them in the song name using this naming convention:

song_name ; bpm ; key ; duration

- Write the duration as mm:ss.
- If you do not need a value, leave the field empty and omit the ;.
- To keep a song from being sent to the LIOBOX², start its name with ().
Example: ()song number 1.



3.6.6.1 Compatible characters

The following characters are compatible with the LIOBOX². Any other character is filtered out.

- Upper case: A to Z
- Numbers: 0 to 9
- Parentheses: ()
- Square brackets: []

- Hashtag: #
- Ampersand: &
- Plus: +
- Slash: /
- Space

3.6.6.2 Names that are not transmitted

A name starting with one of the following is not transmitted to the LIOBOX²:

- ()
- []
- (LOOP
- _
- * *
- >
- >>
- +
- LOOP

The following marker names are also filtered out from the marker list received by the LIOBOX²:

- AUTOSTOP
- (STOP)
- (NEXT)
- STOP
- SONG END
- PLAYNEXT
- STOPBOT

- EASY LOOPER
- NEXTCUE

3.6.7 Pad features

Pads can be reassigned from **MENU → PAD CONFIG** (see [Pad config](#)). In Cubase mode, the following features are available:

- NONE
- PLAY LIOBOX MARKER
- PLAY (TRANSPORT)
- PAUSE
- PREV LIOBOX MARKER
- PREV MARKER (TRANSPORT)
- FAST-REWIND
- RESTART MARKER
- NEXT LIOBOX MARKER
- NEXT MARKER (TRANSPORT)
- FAST-FORWARD
- CUSTOM MIDI

Notes:

- **Play (Transport)** corresponds to the DAW Play.
- **Play LIOBOX Marker** plays the next song (the selected one).
- **Fast-Rewind** and **Fast-Forward** can only be assigned to the Long press pad event.
- **Next** or **Prev Marker (Transport)** corresponds to the DAW Next event (next/previous in the project).

- **Next** or **Prev LIIOBOX Marker** selects the next or previous marker from the setlist.

Cubase shares its pad memory with Logic Pro: a pad assignment made in one mode also modifies the assignment in the other.

3.6.8 Redundancy

In the BRIDGE Cubase properties of the second computer, assign the LIIOBOX² as **Spare**. The LIIOBOX² compares the song lists of the Main and Spare computers to ensure that the sessions are identical. See [Redundancy](#).

3.6.9 Troubleshooting

- Markers outdated or missing: [export and load the marker file](#) again.
- For the green check icon and song names, see [Troubleshooting](#).

3.7 QLab

! AT A GLANCE

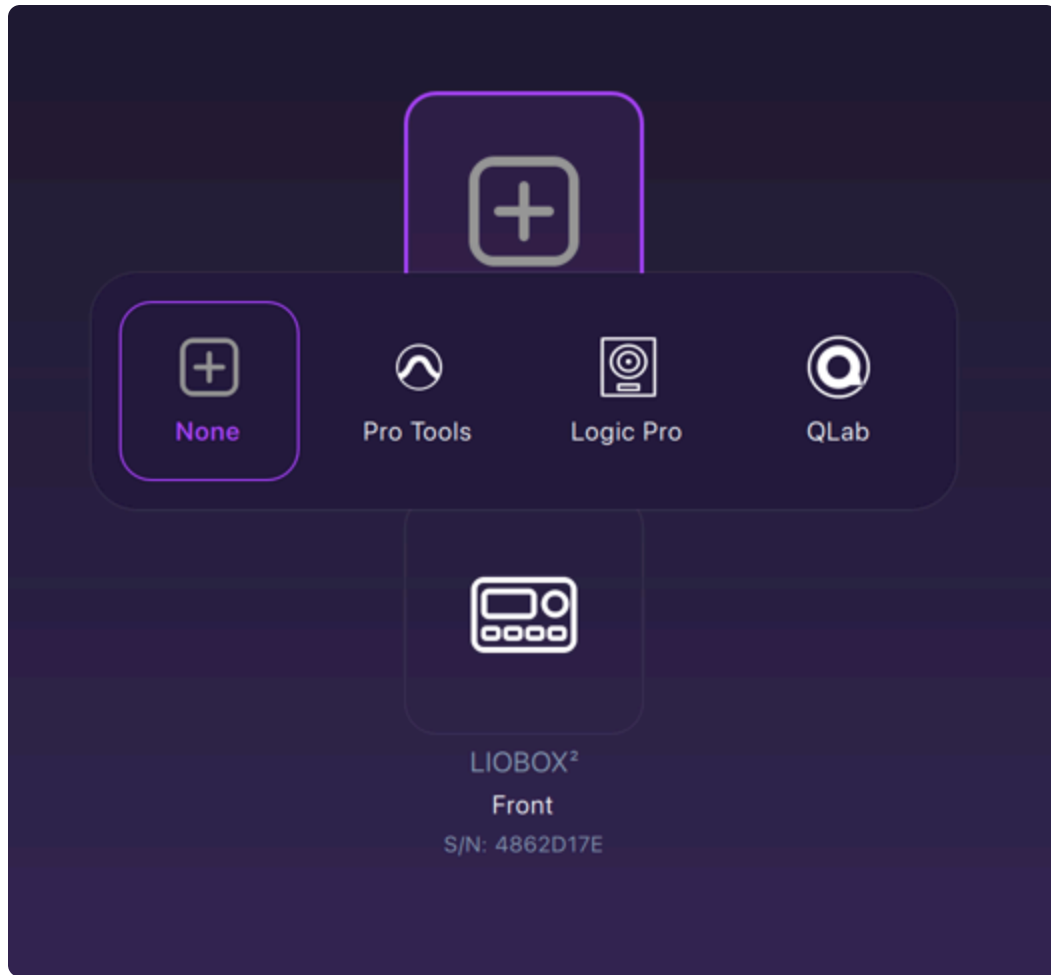
- **Integration:** through the **BRIDGE** app of GoorooLink (macOS), which transforms MIDI to the OSC protocol.
- **Features:** cue display (latest Go'ed, selected, remaining time), transport and cue commands from the pads.
- **Needed:** GoorooLink running and OSC access enabled in QLab.

3.7.1 GoorooLink BRIDGE

QLab cannot be scripted like Ableton, Bitwig or Reaper, so the LIOBOX² works with it through the **BRIDGE** app of [GoorooLink](#). The BRIDGE relays the commands sent by the LIOBOX² and gives the LIOBOX² the QLab information (marker list, playhead position, ...).

GoorooLink runs on macOS only. If it is not installed yet, see [Install GoorooLink](#).

1. Launch GoorooLink and open **APP → BRIDGE**.
2. In the DAW selection, click the DAW tile and choose **QLab**.

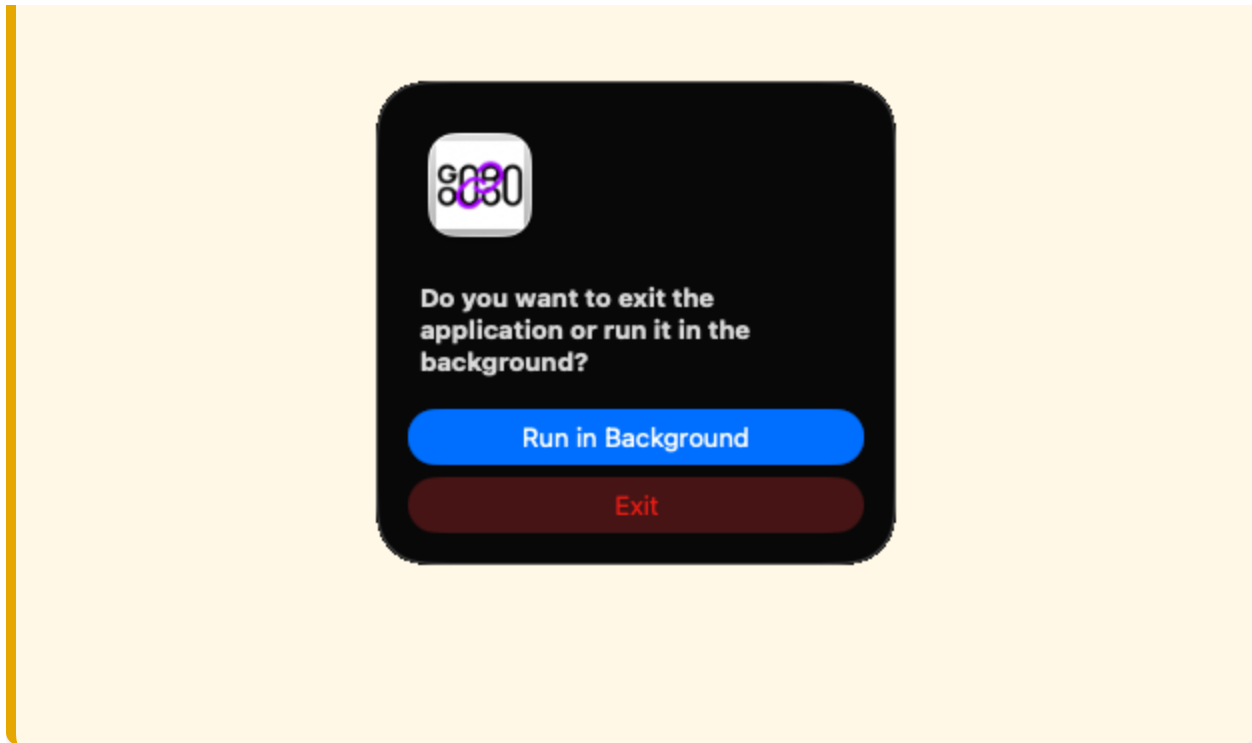


3. In the LIOBOX selection, choose your connected LIOBOX².
4. Check the **BRIDGE state** next to the **APP → BRIDGE** menu item: it turns green once both the DAW and the LIOBOX² are detected.

⚠ WARNING

GoorooLink must be running for the BRIDGE to work. **It can run in the foreground or in the background, but it must not be exited.**

To run it in the background, quit the application: a dialog asks whether it should run in the background or exit.

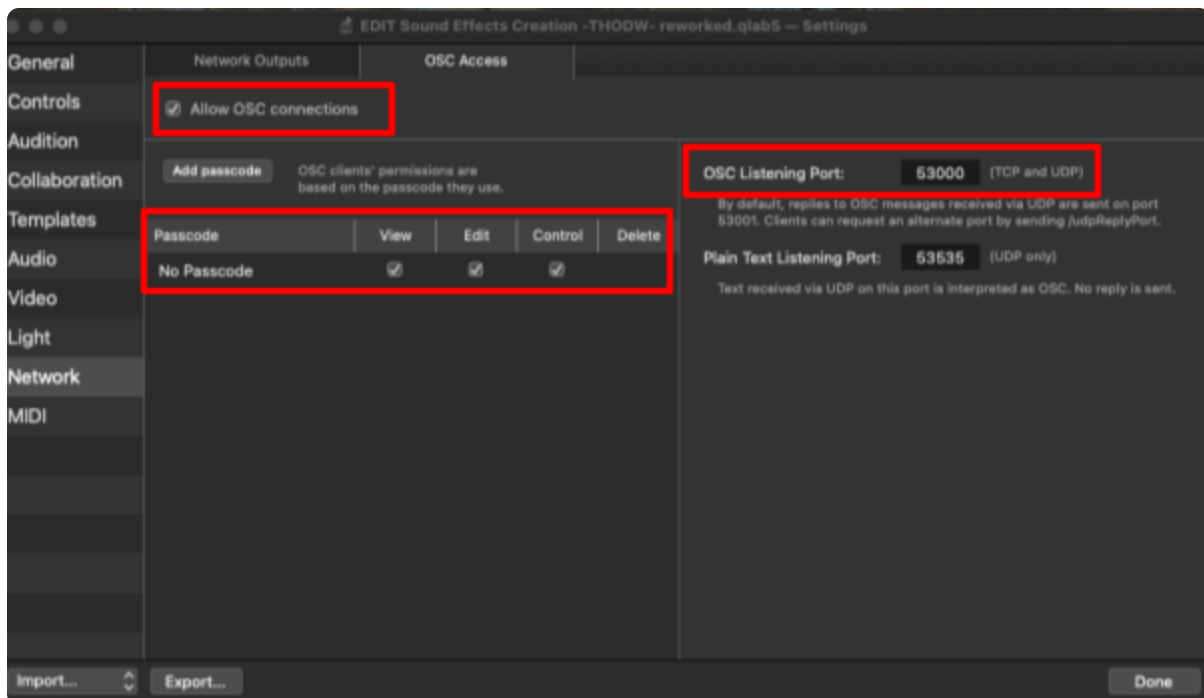
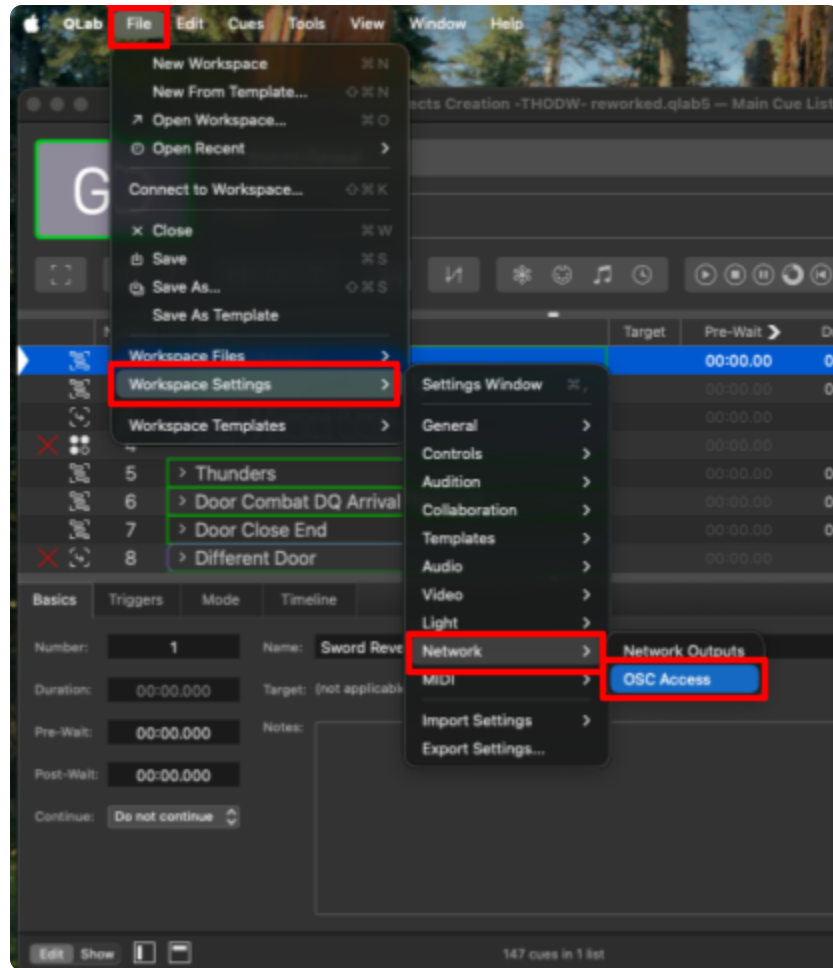


3.7.2 QLab configuration

The LIOBOX² communicates with QLab through GoorooLink, which converts MIDI to the OSC protocol.

To allow this, enable OSC access in the QLab settings:

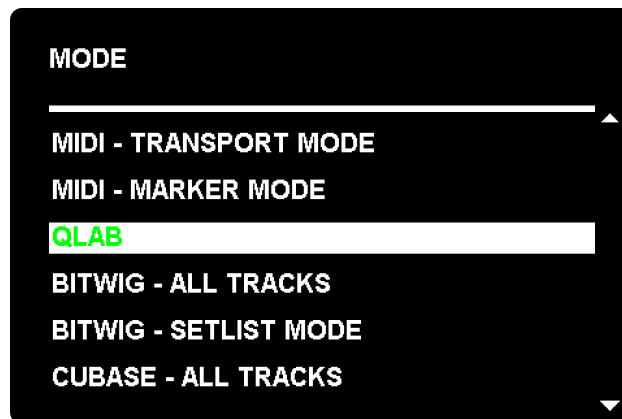
File → Workspace Settings → Network → OSC Access



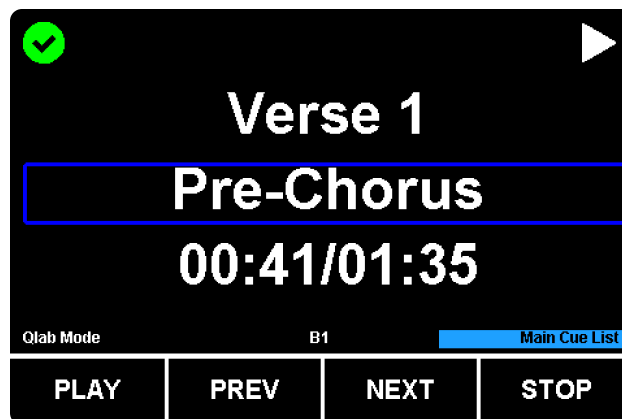
Allow OSC connections, use the "No Passcode" access with View, Edit and Control rights, and keep the default OSC listening port (53000).

3.7.3 QLab mode

Select the **QLAB** mode in **MENU → MODE**.



QLab works very differently from the other DAWs. In QLab mode, the LIOBOX² does not store tracks or setlists: it mainly displays information, and it can also trigger specific commands.



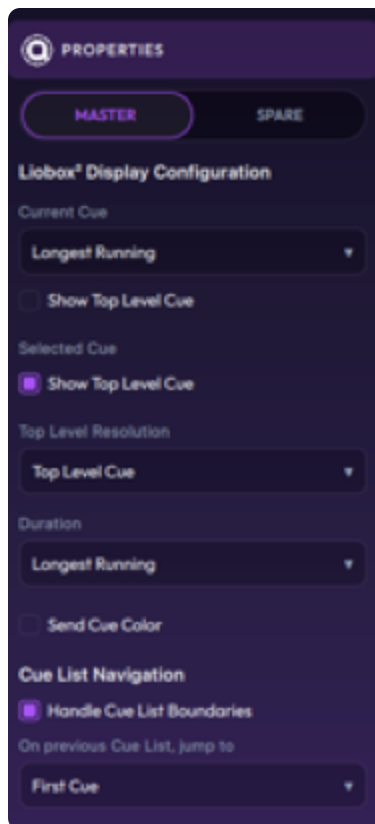
Three pieces of information can be displayed:

- **Latest Go'ed cue**
- **Selected cue:** the cue that will be Go'ed if sending the Play command

- **Remaining / cue duration**

3.7.4 QLab properties in GoorooLink

Use the BRIDGE QLab properties to choose the information shown on the LIOBOX².



- **Master / Spare:** select to assign the connected LIOBOX² as Master or as a Spare. Prefer using the Spare assignment when actively using redundancy.

Selection of the information displayed on the LIOBOX² (LIOBOX² Display Configuration):

- **Current Cue:** when several cues are running, choose which one is shown on the LIOBOX²:

- *Longest running*
 - *Latest fired*
 - **Selected Cue**
 - **Duration:** shown as remaining/total duration. The same choice applies as for Current Cue:
 - *Longest running*
 - *Latest fired*
 - **Show Top Level Cue:** QLab cues can have multiple levels. When Show Top Level Cue is selected, if the Current or Selected Cue is in a sub-level, the name of its top-level cue is shown instead.
- 

38

▼ Top level

2nd level
- **Top Level Resolution:** select between *Top Level Cue* and *Cue List* (when available).
 - **Send Cue Color:** allows displaying the cue colors on the LIOBOX² display.
 - **Cue List Navigation:** changes the effect of Next and Previous when used in a project using cue lists (*Handle Cue List Boundaries* and *On previous Cue List, jump to*).

3.7.5 Pad features

Pads can be reassigned from **MENU → PAD CONFIG** (see [Pad config](#)). In QLab mode, the following features are available:

- NONE

- PLAY CUE
- PAUSE
- PREV CUE
- NEXT CUE
- PREV CUE LIST
- NEXT CUE LIST
- PANIC
- CUSTOM MIDI

3.7.6 Redundancy

In the BRIDGE QLab properties of the second computer, assign the LIOBOX² as **Spare**. See [Redundancy](#).

3.7.7 Troubleshooting

For the green check icon, see [Troubleshooting](#). Make sure OSC access is allowed in QLab and GoorooLink is running.

3.8 MIDI (any DAW or instrument)

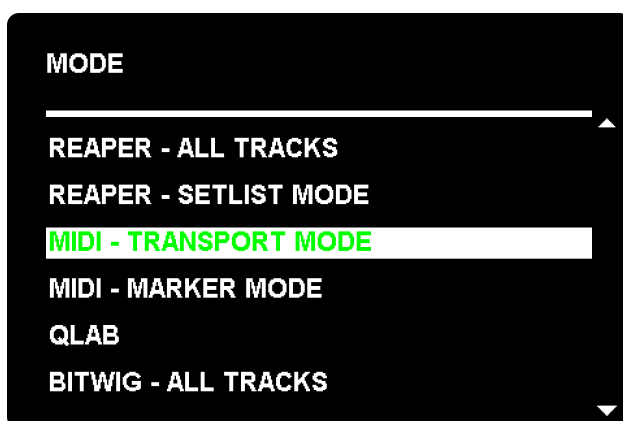
! AT A GLANCE

- **Integration:** plain MIDI over USB. No script, no GoorooLink.
- **Features:** pads sending Notes, Control Changes or Program Changes, and internal markers to build setlists.
- **Needed:** a DAW or instrument that can receive MIDI via USB.

The LIOBOX² is compatible with all MIDI DAWs that can interface MIDI devices. Select the **MIDI** mode in **MENU → MODE**.

3.8.1 Transport mode

Select **MIDI - TRANSPORT MODE** in **MENU → MODE**.

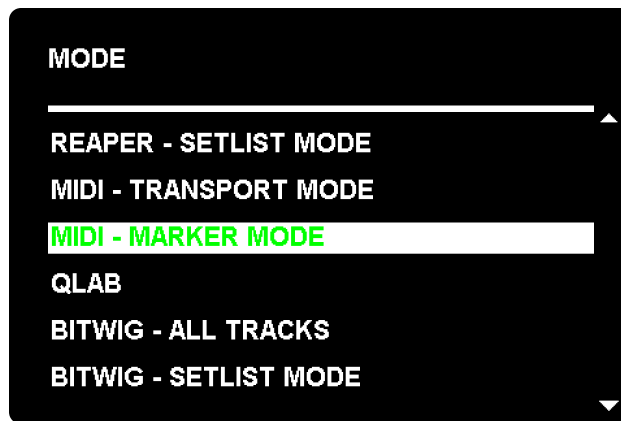


Transport mode lets you use the LIOBOX² with any software or hardware that can receive MIDI over USB.

Each pad can send a Note or a Control Change to the USB port, to control a function of a DAW or an instrument.

3.8.2 Marker mode

Select **MIDI - MARKER MODE** in **MENU → MODE**.



Marker mode lets you build setlists directly on the LIOBOX² to navigate between songs and launch them.

For instance, this mode can be used to create preset-change setlists for instruments or autotunes.

To do so:

1. Create markers on the LIOBOX² for the presets of your instruments.
Markers are sorted in the order in which they were created.
2. Link each marker to its preset with MIDI assignments.
3. Rename the markers and move them into the order you want.

Multiple setlists can be saved. See [Setlists](#).

3.8.2.1 What is sent to the DAW

Each marker has a number, shown as [number] name in the setlist. Turn the knob to choose the next marker, then press it to send the marker to your DAW or instrument: map the corresponding MIDI note there to the action you want (preset change, scene...).

A marker is sent as a Note On on **channel 1**, with velocity 127 followed by velocity 0. The note is the marker number:

Marker number	Note sent
1 to 90	Same as the marker number
91 and above	Marker number + 4

Notes 91 to 94 are skipped because they are used by the LIOBOX² transport functions.

A setlist holds up to 120 markers. A new marker takes the lowest free number, and moving a marker in the list does not change its number, so the mapping in your DAW stays valid.

3.8.3 Pad features

Pads can be reassigned from **MENU → PAD CONFIG** (see [Pad config](#)). In MIDI mode, the following features are available:

- NONE
- SELECT MARKER
- PLAY
- PAUSE

- PREVIOUS MARKER
- FAST-REWIND
- NEXT MARKER
- FAST-FORWARD
- CUSTOM MIDI

CUSTOM MIDI can send a MIDI Note, a Control Change or a Program Change, see [Custom MIDI](#). Pads can also be triggered by an external instrument through the [MIDI IN trigger](#).



WARNING

The LIOBOX² transport functions use MIDI port 1. To avoid conflicts with the notes or CC messages they send, we advise against using MIDI channels 1 to 4 in your own assignments.

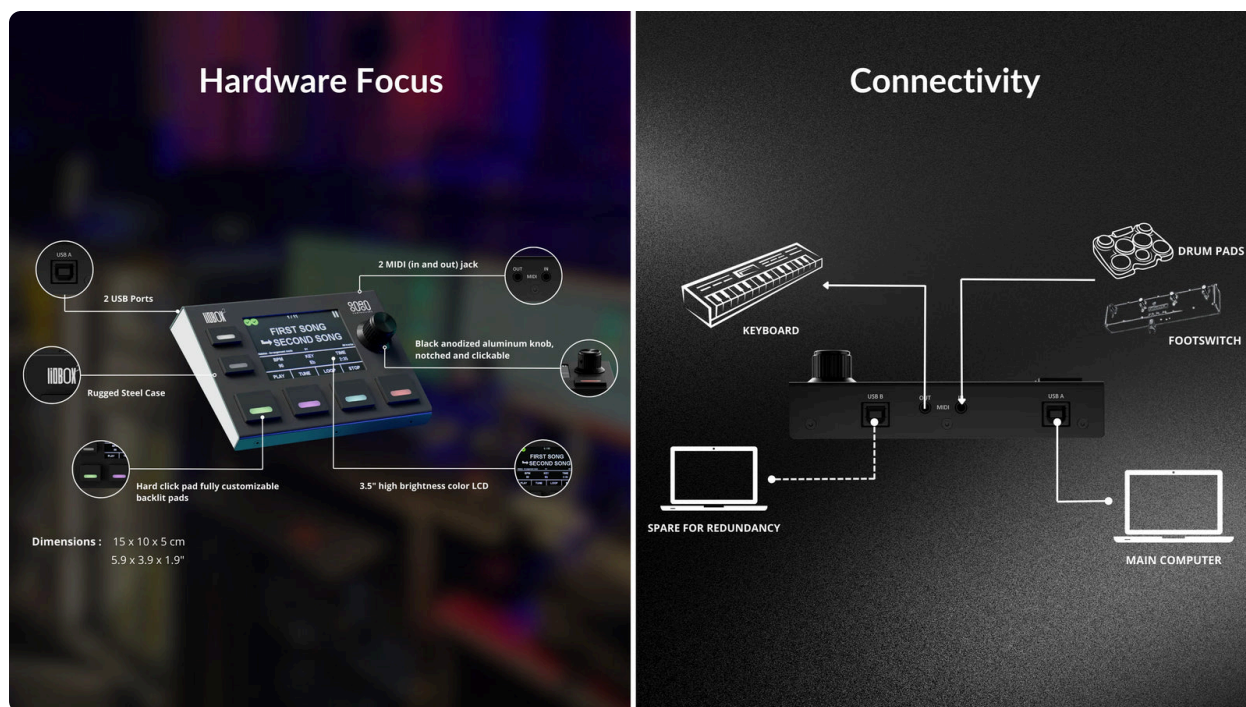
4 LIOBOX²

The LIOBOX² is a MIDI controller and setlist manager for live performance. It reads the songs of your DAW session, shows them on its screen and controls the transport from its pads.

This chapter describes the LIOBOX² and its hardware, then the features of the LIOBOX² that are common to all DAWs: modes, pads, banks, setlists and settings. Anything specific to a DAW (script installation, markers, DAW modes) is in the [guide for your DAW](#).

4.1 LIOBOX² description

The LIOBOX² is a compact controller (15 × 10 × 5 cm, 5.9 × 3.9 × 1.9 in) in a rugged steel case. It has a 3.5" high-brightness color LCD, six backlit click pads (four of them assignable), a notched clickable knob in black anodized aluminum, two USB ports and two MIDI jacks.



- **USB A** connects the main computer, and **USB B** a second computer used as a spare. See [Redundancy](#).
- **MIDI IN** lets drum pads, a footswitch or other MIDI hardware trigger the LIOBOX². See [Pad MIDI IN trigger](#).
- **MIDI OUT** lets the LIOBOX² control a stage instrument, such as a keyboard.

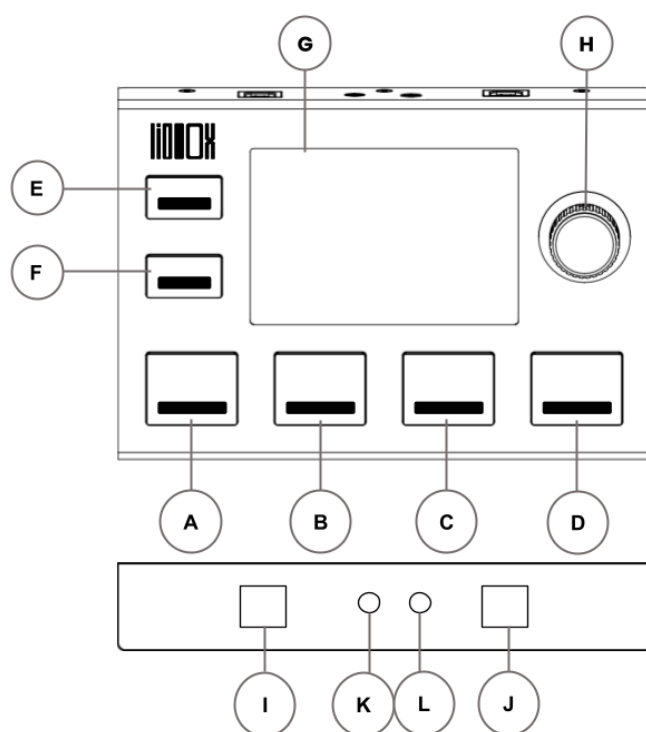
4.2 Feature overview

Capability	What it does	Details
Automatic song retrieval	Reads the songs and markers of your session, with no configuration, and follows the changes in real time.	Mode , Refresh , DAW guides

Capability	What it does	Details
Transport control	Play, pause, resume, stop, rewind and forward from the pads.	Pads, Pad features
Setlists	Create, reorder and save setlists on the device, without modifying your projects.	Setlists
Redundancy	Two USB ports connect a Main and a Spare computer, and the screen shows the connection status.	Redundancy, Connection status
Customizable pads	Assign features, MIDI messages, names and colors to the pads.	Pad config, Custom MIDI, Pad LED color
Pad banks	Up to four banks of pads, for more features at hand.	Bank management
MIDI IN and MIDI OUT	Trigger pads from an external device, and control a stage instrument.	Jack ports, Pad MIDI IN trigger, MIDI OUT (Ableton)
Markers and loops	Autonext and Autostop markers, and loops on the fly.	Script advanced features, Loop on-the-fly, Loop on bar / Loop on beat

Capability	What it does	Details
Song information	Shows the title, BPM, key and duration of the songs.	Screen preference, Track naming convention

4.3 LIOBOX² hardware



Label	Element	Function
A, B, C, D	Pads A B C D	Pads that can be assigned to software functions or MIDI messages

Label	Element	Function
E	Pad E: MENU	Opens the menu and returns to the main screen
F	Pad F: BANK CHANGE / BACK	Changes the pad bank and goes back in submenus
G	Display	3.5-inch color display
H	Clickable knob	Navigates the menu, selects and launches the next or previous song
I	USB A	Connects to the Master computer
J	USB B	Connects to the Spare computer. Is also the port used for firmware update
K	MIDI OUT	3.5 mm jack MIDI output
L	MIDI IN	3.5 mm jack MIDI input

4.3.1 Pads (A to F)

The LIOBOX² has six RGB backlit silicone pads with click buttons. Each pad has a predefined function assigned to short, long and double presses. Pads A to D can be reassigned, as explained in [Pad config](#).

4.3.1.1 Predefined functions

- **A: PLAY:** launches the selected song. By default, once a song is launched, the LIOBOX² automatically selects the next song in the list.

- **B: RWD:** a long press launches fast rewind. A single press selects the previous song without launching it. A double press restarts the current song.
- **C: FWD:** a long press launches fast forward. A single press selects the next song without starting it.
- **D: PAUSE:** pauses playback. A second press resumes playback. During playback, a quick double press stops playback.
- **E: MENU:** opens the LIOBOX² menu (settings and setlists). In the menus, pressing MENU returns to the home screen.
- **F: BACK / BANK CHANGE:** in the menus, goes back to the previous menu. On the MAIN screen, changes the pad bank.

Predefined functions (A to D) vary depending on the selected DAW.

4.3.2 Clickable knob (H)

The clickable knob (a notched rotary encoder) moves through the menu options. Clicking it confirms the selection.

On the MAIN screen, turn the knob to select the next song to play, then click it to launch the song.

4.3.3 USB ports (I, J)

The LIOBOX² has two USB 2 MIDI ports, named USB A and USB B (I and J respectively in the drawing above):

- USB A is recognized as "Liobox MASTER"
- USB B is recognized as "Liobox SPARE"

The LIOBOX² can also be used with a single computer, connected to the USB A port.

Connecting two computers, one on each USB port, enables **redundancy**.

i NOTE

Only the USB B port allows a firmware update with GoorooLink. See [Device update](#).

4.3.4 Jack ports (K, L)

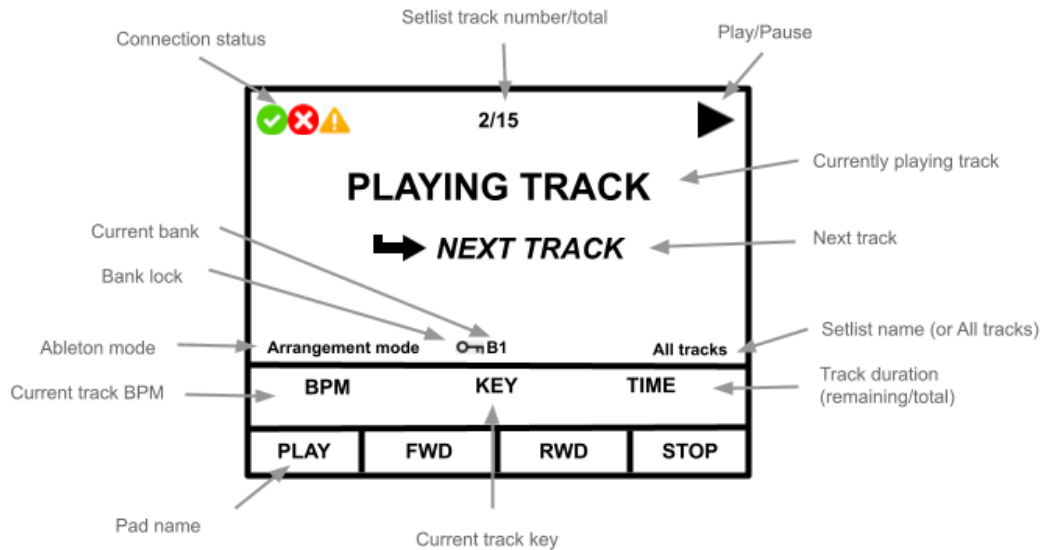
The LIOBOX² has two MIDI 3.5 mm jack ports:

- **MIDI IN** port: lets an external instrument control LIOBOX² functions
- **MIDI OUT** port: lets the LIOBOX² control an external instrument

4.3.5 Display (G)

The LIOBOX² 3.5" screen shows customizable information, so you do not need to look at the DAW.

In ADVANCED mode, the MAIN screen shows:



The amount of information shown on the MAIN screen depends on the screen setting. See [Screen preference](#) for all the options.

The MENU screens let you fully customize the LIOBOX² and [create and navigate setlists](#).

4.4 Mode

The available modes are:

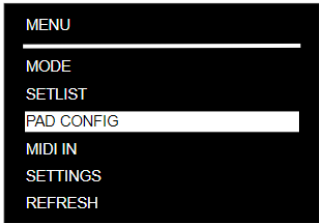
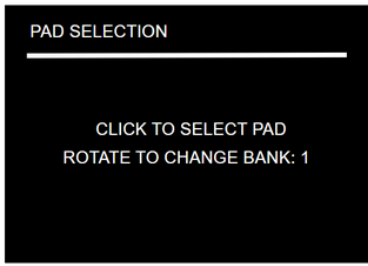
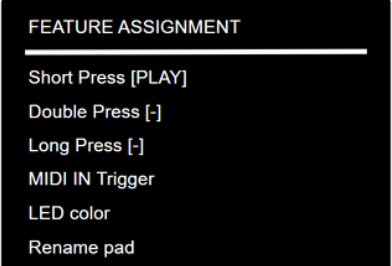
- **Ableton, Bitwig, Reaper, Pro Tools, Logic Pro, Cubase modes**
 - All tracks
 - Setlist

- **MIDI mode**
 - Transport
 - Marker
- **QLab mode**

Each mode is described in the guide of the corresponding DAW: [Ableton](#), [Bitwig](#), [Reaper](#), [Pro Tools](#), [Logic Pro](#), [Cubase](#), [QLab](#) and [MIDI](#).

4.5 Pad config

To configure a pad, go to **MENU → PAD CONFIG**, turn the knob to select the bank, then select the pad.

MENU	PAD SELECTION	FEATURE ASSIGNMENT
		

4.5.1 Pad features

Every pad except MENU and BACK/BANK can be assigned a custom feature.

Each pad can react to the following events, in any combination:

- Short press
- Double press
- Long press

Each event can be turned on or off.

The available features depend on the selected mode. The same lists are repeated in each [DAW guide](#).

4.5.1.1 Ableton, Bitwig, Reaper

- NONE
- PLAY LIOBOX MARKER
- PLAY (TRANSPORT)
- PAUSE
- STOP
- PREV LIOBOX MARKER
- PREV MARKER (TRANSPORT)
- FAST-REWIND
- RESTART MARKER
- NEXT LIOBOX MARKER
- NEXT MARKER (TRANSPORT)
- FAST-FORWARD
- LOOP IN/OUT, LOOP IN, LOOP OUT, LOOP ON/OFF, LOOP CREATE X
- CUSTOM MIDI

Notes:

- **Play (Transport)** corresponds to the DAW Play.
- **Play LIOBOX Marker** plays the next song (the selected one).
- **Fast-Rewind** and **Fast-Forward** can only be assigned to the Long press pad event.
- **Next** or **Prev Marker (Transport)** corresponds to the DAW Next event (next/previous in the project).

- **Next** or **Prev LIOBOX Marker** selects the next or previous marker from the setlist.
- The loop features are described in [Loop on-the-fly](#).

4.5.1.2 Pro Tools, Logic Pro, Cubase

- NONE
- PLAY LIOBOX MARKER
- PLAY (TRANSPORT)
- PAUSE
- PREV LIOBOX MARKER
- PREV MARKER (TRANSPORT)
- FAST-REWIND
- RESTART MARKER
- NEXT LIOBOX MARKER
- NEXT MARKER (TRANSPORT)
- FAST-FORWARD
- CUSTOM MIDI

Notes:

- **Play (Transport)** corresponds to the DAW Play.
- **Play LIOBOX Marker** plays the next song (the selected one).
- **Fast-Rewind** and **Fast-Forward** can only be assigned to the Long press pad event.
- **Next** or **Prev Marker (Transport)** corresponds to the DAW Next event (next/previous in the project).
- **Next** or **Prev LIOBOX Marker** selects the next or previous marker from the setlist.

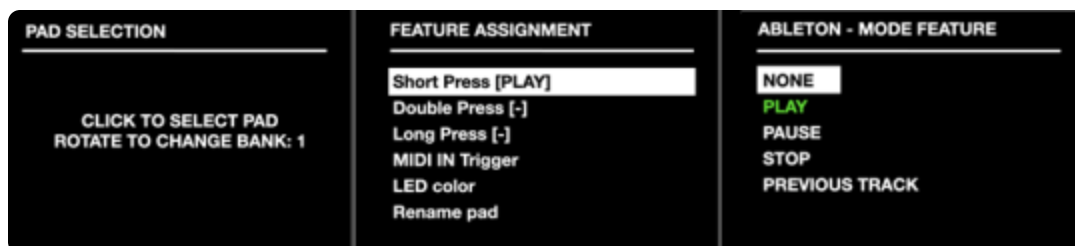
4.5.1.3 MIDI

- NONE
- SELECT MARKER
- PLAY
- PAUSE
- PREVIOUS MARKER
- FAST-REWIND
- NEXT MARKER
- FAST-FORWARD
- CUSTOM MIDI

4.5.1.4 QLab

- NONE
- PLAY CUE
- PAUSE
- PREV CUE
- NEXT CUE
- PREV CUE LIST
- NEXT CUE LIST
- PANIC
- CUSTOM MIDI

The feature currently assigned appears in green.



WARNING

The LIOBOX² transport functions use MIDI port 1. To avoid conflicts with the notes or CC messages they send, we advise against using MIDI channels 1 to 4 in your own assignments.

4.5.2 Custom MIDI

Any event can send a Custom MIDI message: a MIDI Note, a Control Change or a Program Change. The configuration screen depends on the selected type.

MIDI NOTE CONFIGURATION	MIDI NOTE CONFIGURATION	MIDI NOTE CONFIGURATION
NOTE : 0	CONTROLLER NUMBER : 1	PROGRAM NUMBER : 1
VELOCITY : 127	VALUE : 127	-
CHANNEL : 16	CHANNEL : 16	CHANNEL : 16
MODE : MIDI NOTE	MODE : CONTROL CHANGE	MODE : PROGRAM CHANGE

TIP

Custom MIDI can, for example, activate loops or an autotune.

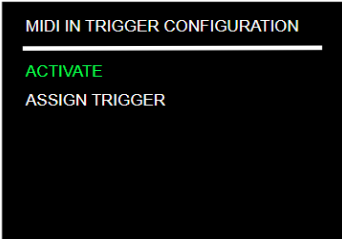
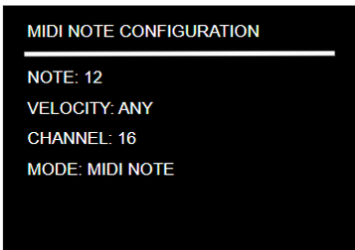
4.5.3 Pad MIDI IN trigger

Pads can be triggered by an external device, such as a drum module or a footswitch, connected with a mini-jack cable to the LIOBOX² MIDI IN.

A custom MIDI message received on MIDI IN can trigger the **Short press** event of any pad.

To enable this feature:

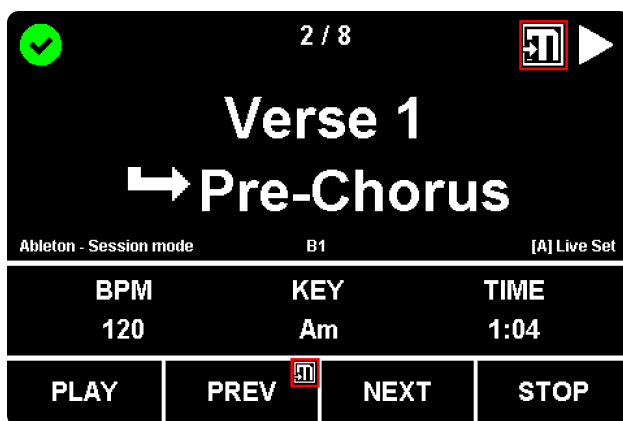
1. Turn on **MIDI IN** on the first MENU screen (the entry turns green).
2. Turn on the **MIDI IN Trigger** of the pad.
3. Assign the MIDI message that triggers the pad.

Global MIDI IN activated	Specific pad MIDI IN	MIDI message config
		

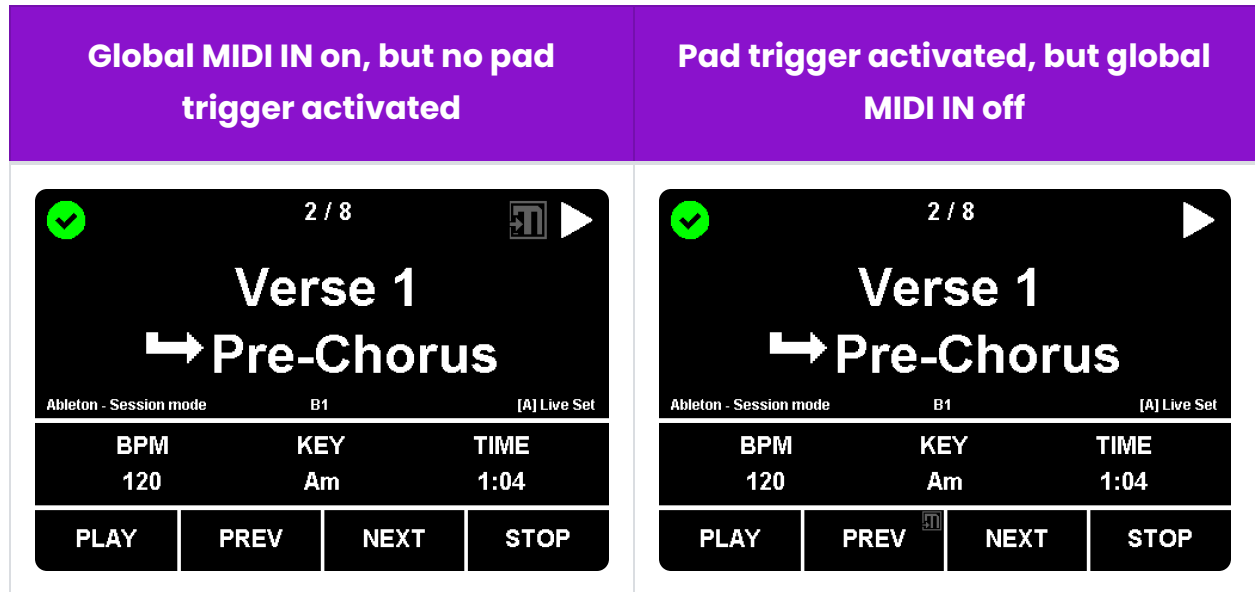
Select the MIDI message that triggers the pad, then click **ACTIVATE**: a MIDI logo appears next to the pad name on the main screen.

To check that the MIDI IN trigger is active, make sure that:

1. The MIDI logo next to the PLAY icon has a white background.
2. The MIDI logo of the customized pad is visible next to the pad name, with a white background.



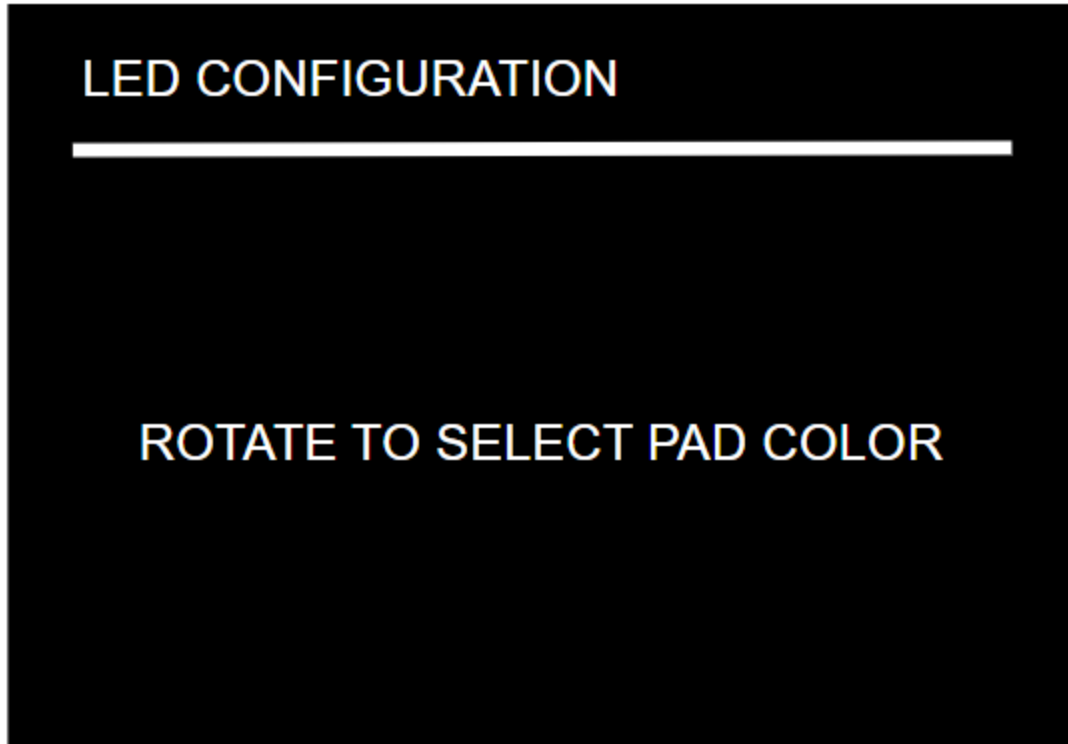
A logo appears in gray if the global MIDI IN is turned off, or if no pad has a MIDI IN trigger:



4.5.4 Pad LED color

Pads are RGB backlit.

The **LED color** menu offers up to 9 colors: Black (off), White, Blue, Red, Green, Yellow, Pink, Cyan, Orange.



4.5.5 Rename pad

Each pad can be renamed (limited to 6 characters). The name is displayed when **ADVANCED** or **PAD NAMES** is selected in the [Screen preference](#).

4.6 Shared pad memory

The following pairs of modes behave alike and share the same pad memory: a pad assignment made in one mode also applies to the other.

- Ableton shares pad memory with Bitwig.
- Logic Pro shares pad memory with Cubase.

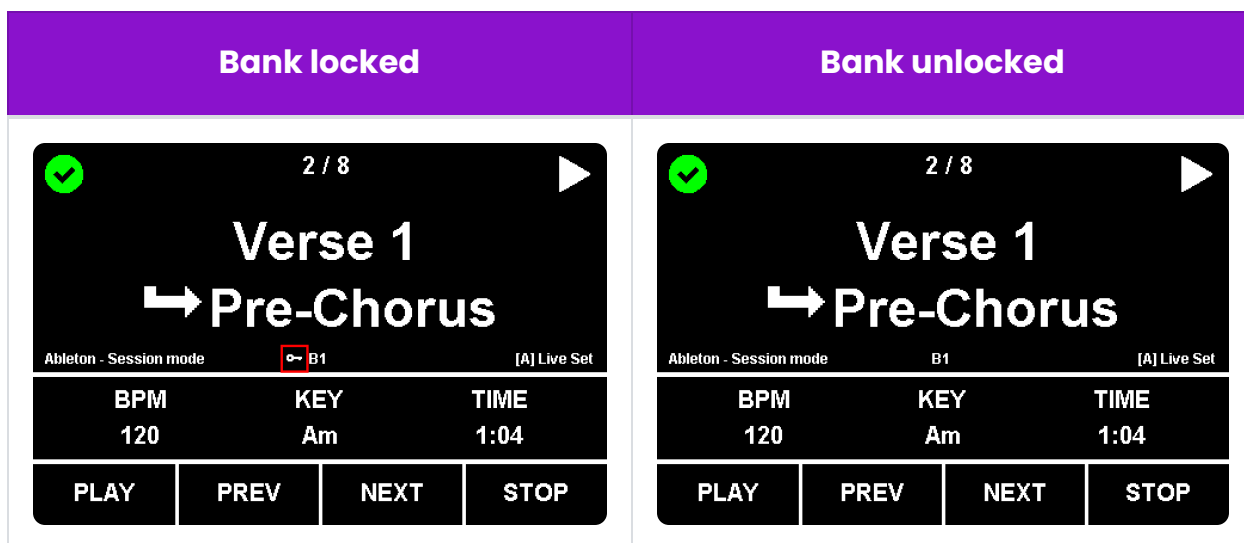
4.7 Bank management

The LIOBOX² has a pad bank system.

Each bank holds its own configuration of the four assignable pads, and there are up to four banks. You can therefore assign up to 48 features per mode (4 pads × 4 banks × 3 events per pad).

The active bank is displayed on the Play screen.

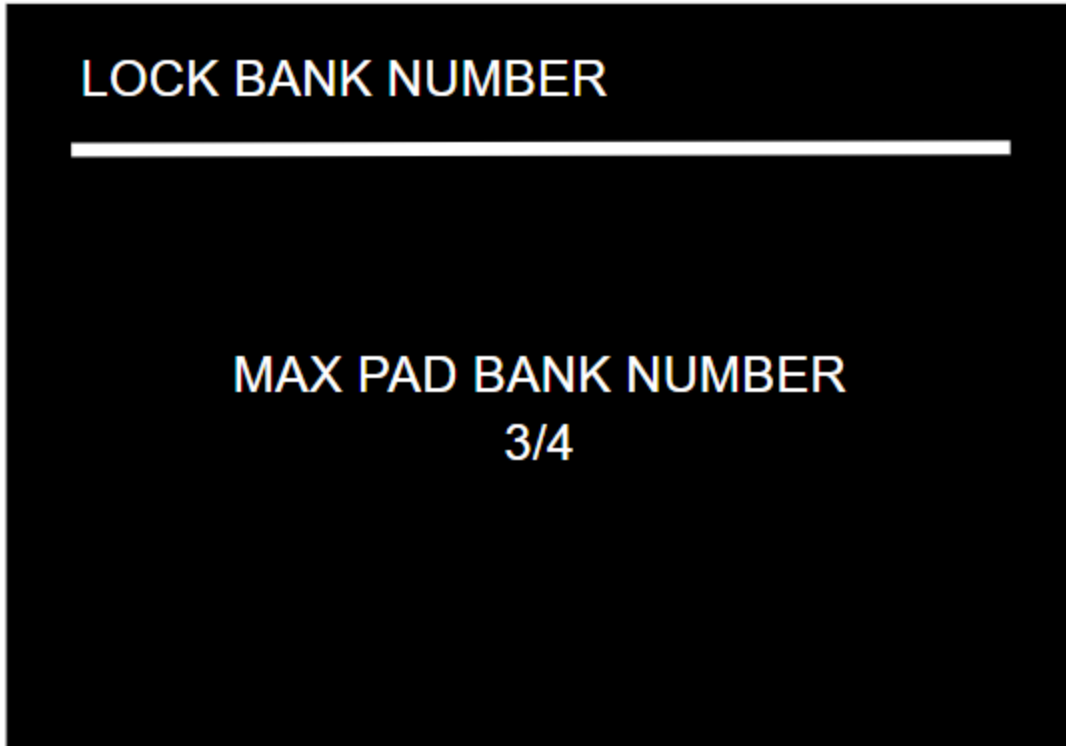
- On the MAIN screen, a **short press** on the BANK pad (F) switches to the next bank.
- A **long press** locks the current bank.



4.7.1 Bank lock number

You can also limit the number of banks, to avoid cycling through empty banks.

Go to **MENU → SETTINGS → BANK LOCK NUMBER**, turn the knob to select the maximum bank number, then press the knob to confirm.



The bank lock and bank number can also be set from [Gooroolink](#).

4.8 Setlists

To access setlist management, enter **MENU → SETLIST**.

Setlists are custom song lists that are quick to access and can be changed on the fly. You never need to modify the active project.

NOTE

LIOBOX² setlists are built from your Ableton, Bitwig, Reaper, Pro Tools, Logic Pro or Cubase project, but never modify it.

Setlists work differently depending on the selected mode:

- **Ableton, Bitwig, Reaper, Pro Tools, Logic Pro, Cubase (DAW modes):** the songs/markers of the active project are loaded and can be added to the setlist.
- **MIDI:** you create internal markers and associate a MIDI message with each of them, so they can be mapped directly in your DAW settings.

 WARNING

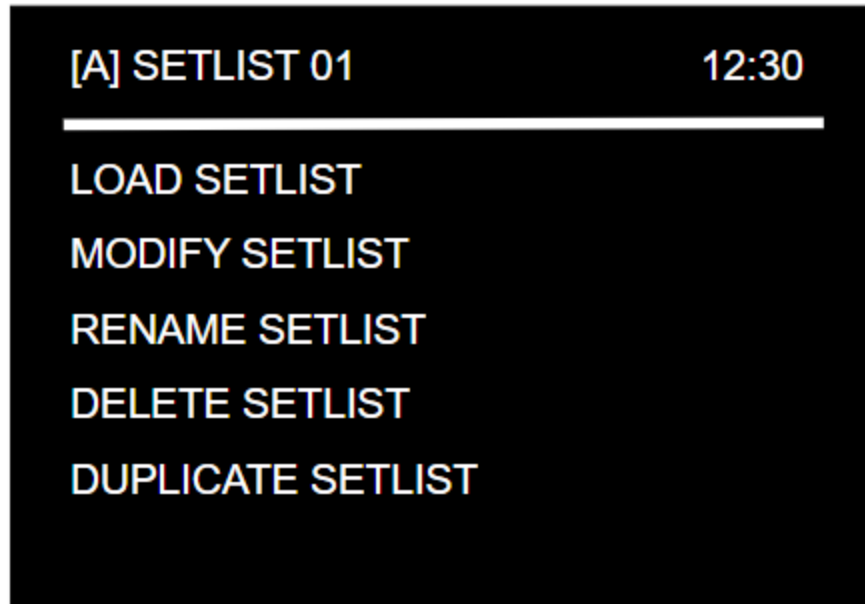
A setlist only works in the mode it was created in. For instance, an Ableton setlist only works in Ableton mode.

Up to 6 setlists can be created.

You can manage setlists directly on the LIOBOX²:

- Create a setlist
- Modify it (manage its songs/markers, rename it)
- Duplicate it
- Delete it

You can also edit them on a computer with [Gooroolink](#).



4.8.1 Create a setlist

In the SETLIST menu, select the last entry, **+ ADD [MODE] SETLIST**. Select the correct mode before creating the setlist.

This entry is not available once the maximum number of setlists is reached.

4.8.2 Load a setlist

A setlist must be loaded to be active. In the SETLIST menu, select **LOAD SETLIST**.

The name of the loaded setlist is always displayed in the bottom right corner of the screen. It appears in red if the active mode is not the mode the setlist was created for.

4.8.3 Manage the songs/markers

How songs are loaded and managed depends on the DAW. See "LIOBOX² modes" in the guide of your DAW (for instance [Ableton](#)), and [MIDI marker mode](#) for MIDI.

4.8.4 Rename a setlist

The name of a setlist can be changed. The allowed characters are:

- Letters: **A-Z**
- Numbers: **0-9**
- Parentheses: **()**
- Square brackets: **[]**
- Special characters: **#, &, +, /**
- Space

Press the knob to move to the next character, and to confirm the name once it is complete.

4.8.5 Duplicate a setlist

Open the setlist and scroll to **DUPLICATE SETLIST**. After you confirm, the SETLIST menu is displayed again and the copy appears in the list.

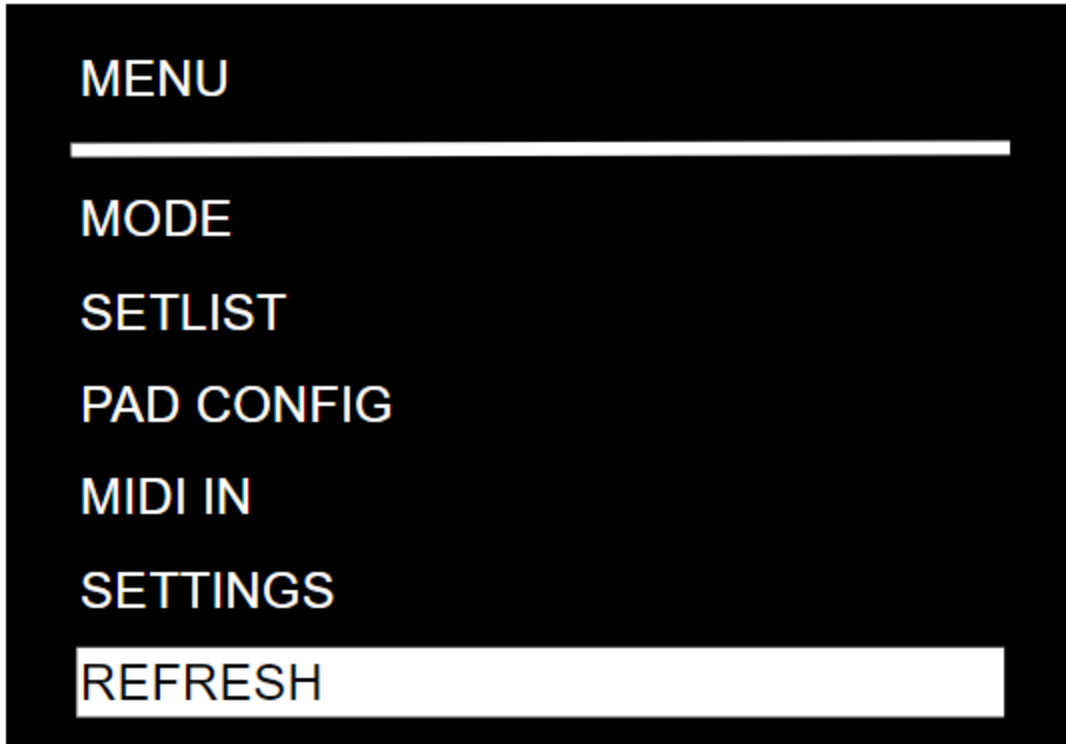
4.8.6 Delete a setlist

Open the setlist, scroll to **DELETE SETLIST** and confirm twice. The setlist is erased.

4.9 Settings

4.9.1 Refresh

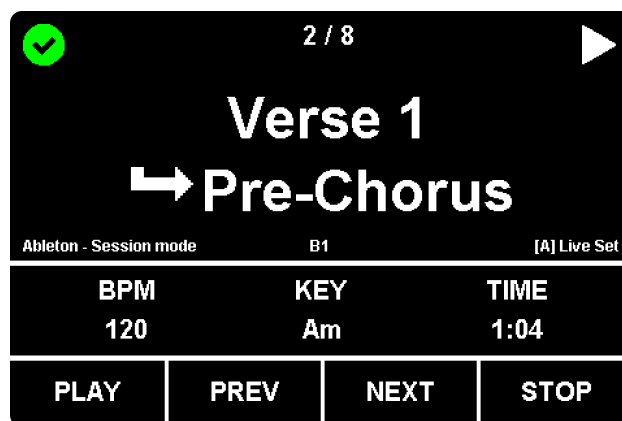
The LIOBOX² updates automatically when your Ableton, Bitwig, Reaper, Pro Tools, Logic Pro or Cubase session changes. You can also start a manual refresh from the **REFRESH** menu.



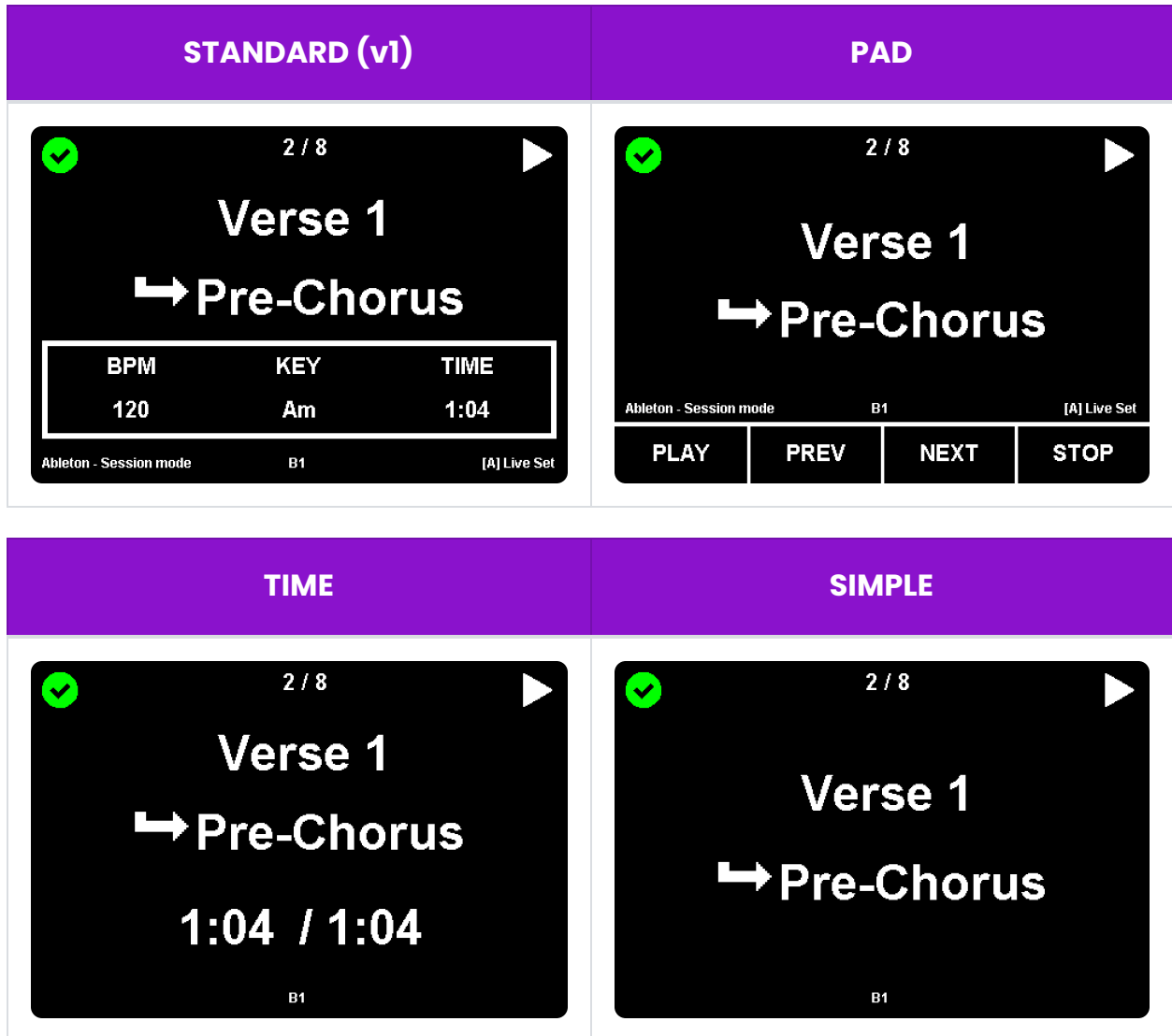
4.9.2 Screen preference

MENU → SETTINGS → SCREEN

The default screen option is **ADVANCED**.



Other screen options:



BPM: only whole numbers are accepted (no decimals).

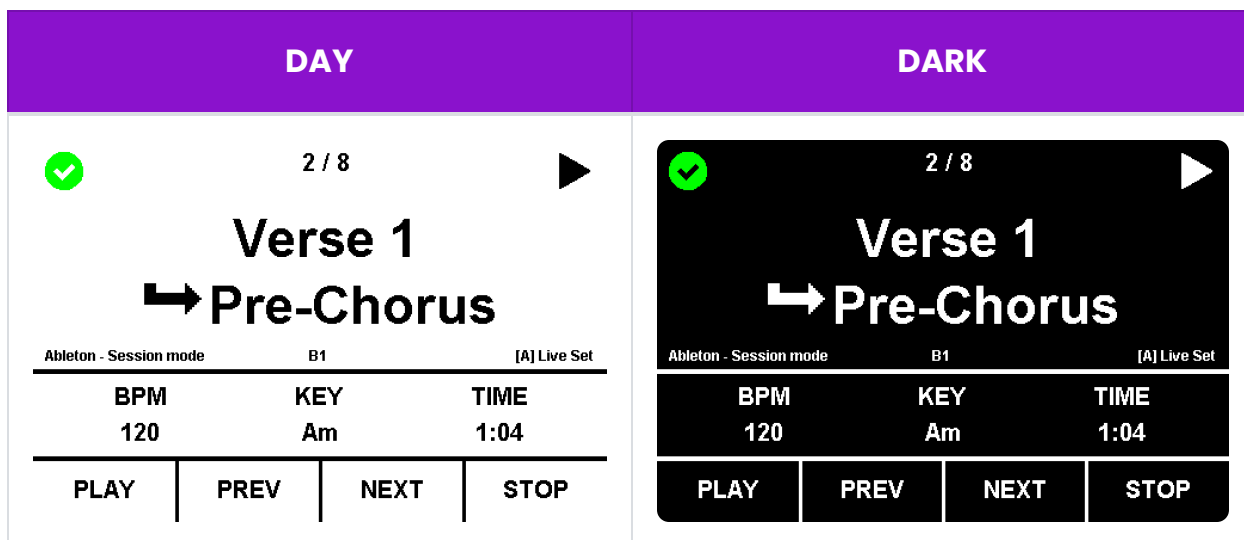
KEY: up to 4 characters. This field can also hold other information, within the same 4-character limit.

DURATION: enter the duration as "minutes:seconds", or in seconds (the LIOBOX² converts it to minutes:seconds).

4.9.3 Theme

MENU → SETTINGS → THEME

Choose **DARK** (black background) for dark venues, or **DAY** (white background) to keep the screen easy to read in bright light.



4.9.4 Brightness

MENU → SETTINGS → BRIGHTNESS

Turn the knob to change both the **display brightness** and the pad backlight intensity.

BRIGHTNESS

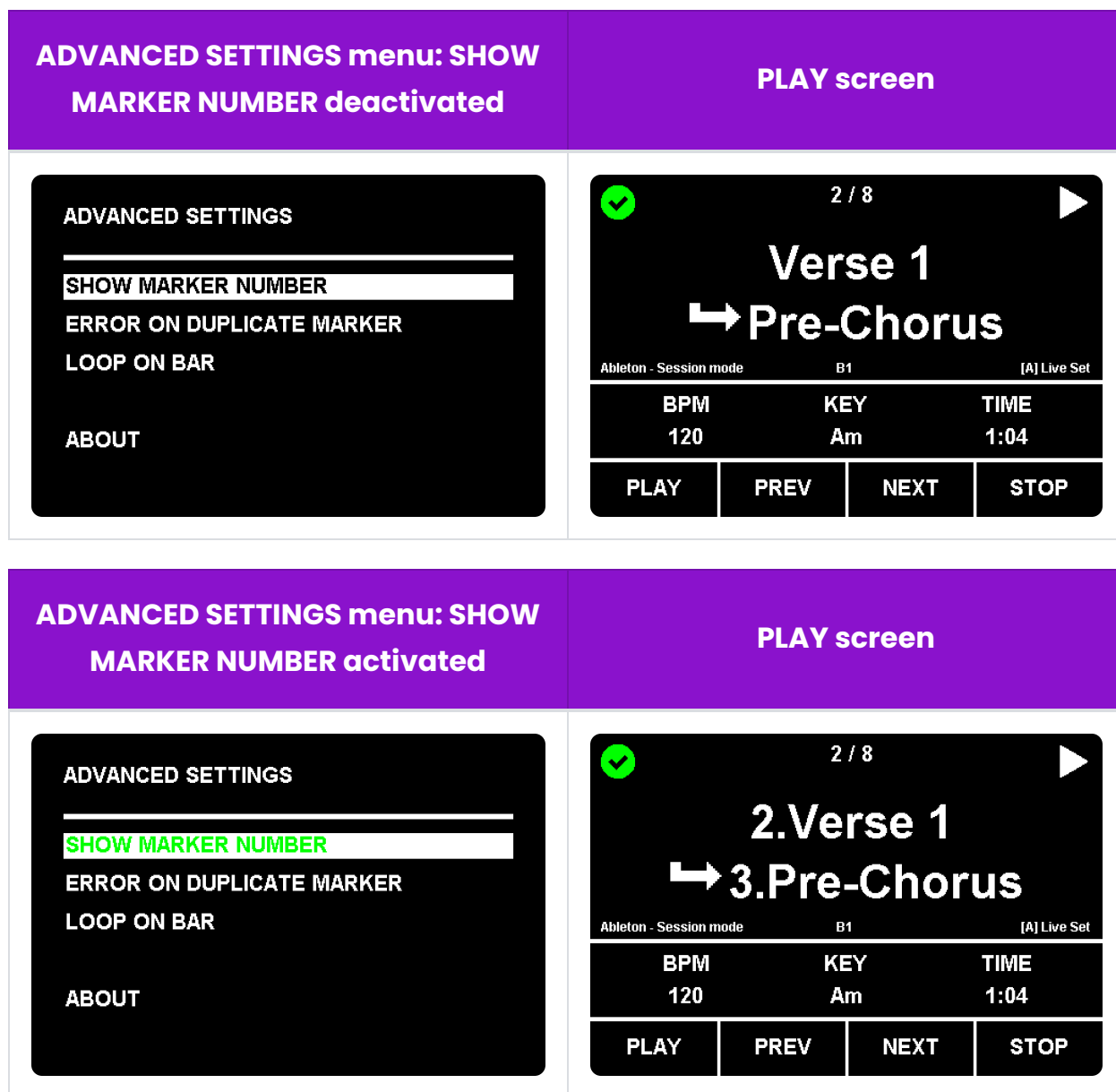
70

4.9.5 Advanced settings

MENU → SETTINGS → ADVANCED SETTINGS

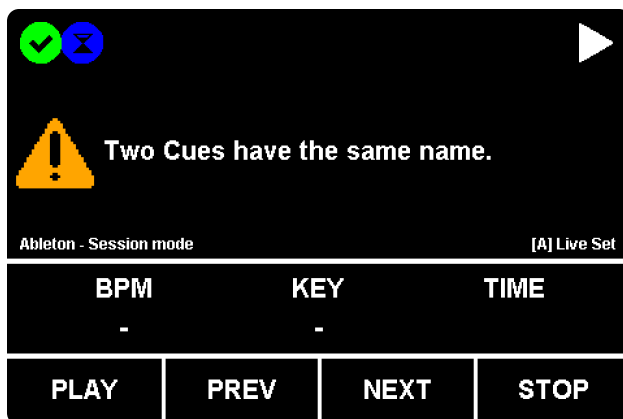
4.9.5.1 Show marker number

Shows the song number before the song name.



4.9.5.2 Error on duplicate marker

Displays an error message if two songs have the same name (for instance two scenes or two locators).



4.9.5.3 Loop on bar / Loop on beat

By default, when the LIOBOX² sends a "Loop In" to the DAW, the script places the loop start at the beginning of the current **bar**, and "Loop Out" places the loop end at the end of the current bar (*loop on bar*).

With **Loop on beat**, the script uses the current beat instead (1/4 for instance).

In the ADVANCED SETTINGS menu, select this line with the knob and press the knob to switch between the two:

LOOP ON BAR (default)	LOOP ON BEAT (1/4)
ADVANCED SETTINGS SHOW MARKER NUMBER ERROR ON DUPLICATE MARKER LOOP ON BAR ABOUT	ADVANCED SETTINGS SHOW MARKER NUMBER ERROR ON DUPLICATE MARKER LOOP ON BEAT (1/4) ABOUT

4.9.6 Reset

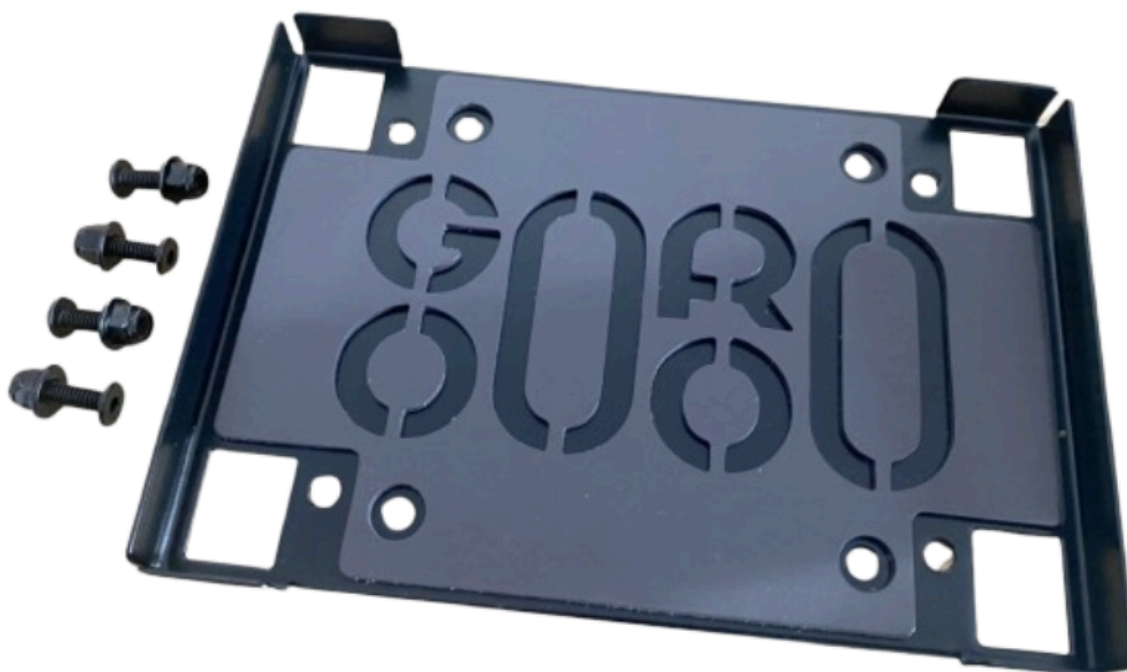
MENU → SETTINGS → RESET

The Reset menu restores the default configuration and settings of the LIOBOX².

- **Pad config reset:** sets the default configuration of the pads.
- **Factory reset:** resets the entire LIOBOX² (theme, mode, screen preference, brightness, pads, advanced settings).

5 LIOBASE

The **LIOBASE** is a rigid steel case with a custom magnet that holds the LIOBOX². Use it to attach the LIOBOX² anywhere on stage, on a drum arm or on a stage stand, next to your other accessories.



5.1 Description

- **Steel plate:** 1 mm (0.04 in) thick.
- **Magnet:** a strong magnet for holding the LIOBOX².
- **Mounting holes:** compatible with drum accessories (e.g. ROLAND MDP7) or microphone stands (e.g. VESA K&M 19685).

LIOBOX² on a drum kit



5.2 Specifications

Item	Description
Material	Steel, 1.01 mm (0.04 in) plate
Dimensions	14.9 × 10.4 × 1.1 cm (5.9 × 4.1 × 0.47 in)

5.3 Package contents

- 1 LIOBASE

- 4 M4 × 12 mm (0.47 in) flat head black screws
- 4 M4 black self-locking nuts

i NOTE

The drum or stand accessory is not included.

5.4 Compatible mounts

The LIOBASE is designed to be compatible with drum and microphone mounts. Example reference:

- the **Roland MDP-7** drum accessory
- the **K&M 19685** VESA holder

5.5 Installation

1. Screw the LIOBASE onto the mount with the four M4 screws and self-locking nuts provided.
2. Attach the mount to the drum arm or stand, and tighten it.
3. Place the LIOBOX² on the LIOBASE: the magnet holds it in place.

6 GoorooLink

GoorooLink is the companion software of the LIOBOX². It adds support for the DAWs that cannot be scripted (Pro Tools, Logic Pro, Cubase, QLab) and lets you configure the LIOBOX² from a Mac.

The **BRIDGE app** gives the DAWs that do not support scripting (Pro Tools, Logic Pro, Cubase, QLab) access to the full features of the LIOBOX². The DAW-specific part of the BRIDGE (properties, marker list) is described in the guide for each DAW.

Setting up every feature directly on the LIOBOX² can be time-consuming. GoorooLink makes it faster by letting you manage setlists, pads and settings from a Mac.

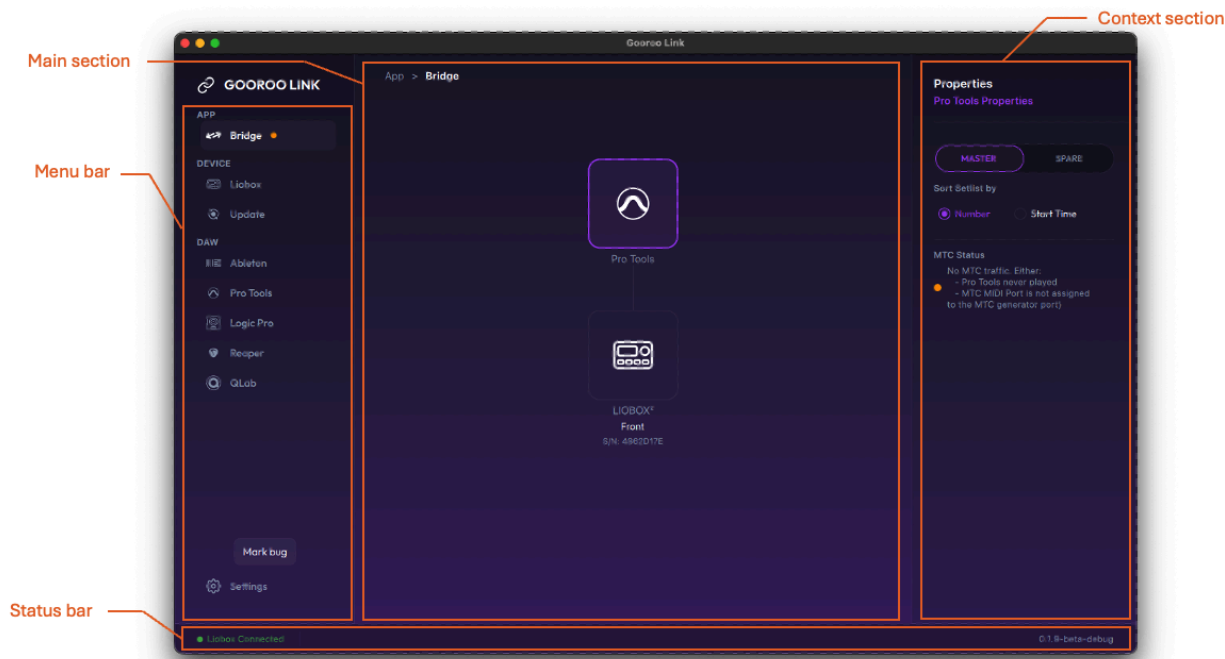
You can also export and import configurations. A typical use is to export a configuration once and import it on all your LIOBOX², which saves a lot of manual work when preparing a show.

To install GoorooLink, see [Install GoorooLink](#).

6.1 User interface overview

The user interface is divided into four sections:

1. **Menu bar**
2. **Main section**
3. **Context section**
4. **Status bar**



Views and features are described in the following sections.

6.1.1 Menus

The menus are organized in categories.

Category	Description
APP	Modules that interact with DAWs to provide advanced control features
APP → BRIDGE	Module that brings all the advanced LIOBOX ² features to the DAWs that do not support scripting (Pro Tools, Logic Pro, Cubase, QLab). See BRIDGE .
DEVICE	Device management modules

Category	Description
DEVICE → LIOBOX	LIOBOX ² management module: configure the LIOBOX ² remotely and import or export configurations. See LIOBOX .
DEVICE → DEVICES	Manage connected devices, update their firmware and handle proxies. See Devices .
DAW	DAW information page: detected DAW versions, script compatibility and DAW configuration information. See DAW .

6.1.2 Status bar

The status bar shows:

Element	Description
Device connection status	Shows the state of the device connection
Temporary messages	Shown next to the connection status, to give feedback on ongoing actions. They disappear after a couple of seconds.
Software version	Version of the running software (more information in the Settings)

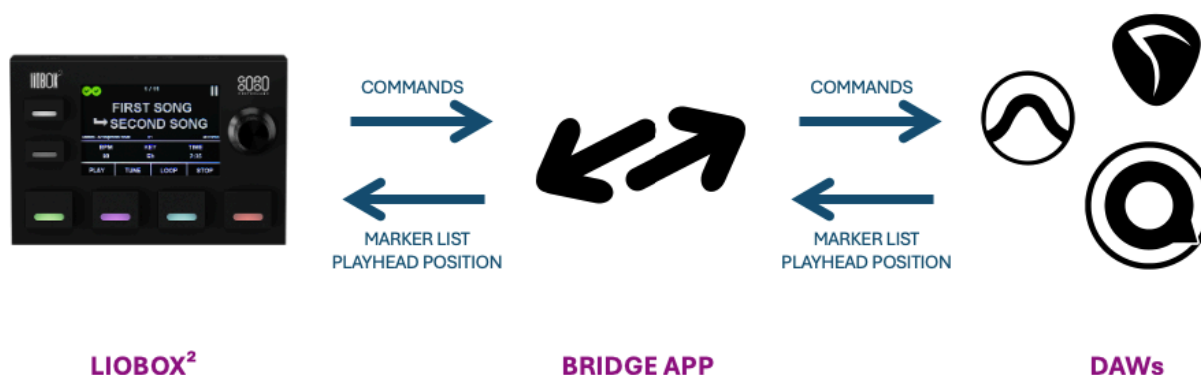
6.2 APP → BRIDGE

The BRIDGE app connects the LIOBOX² to the supported DAWs: Pro Tools, Logic Pro, Cubase and QLab.

These DAWs cannot be scripted like Ableton or Reaper. The BRIDGE app makes all the capabilities of the LIOBOX² available with them: transport functions, playhead position, setlist creation and management, redundancy and more.

It combines native DAW capabilities (MMC and MTC) with the APIs the DAW provides.

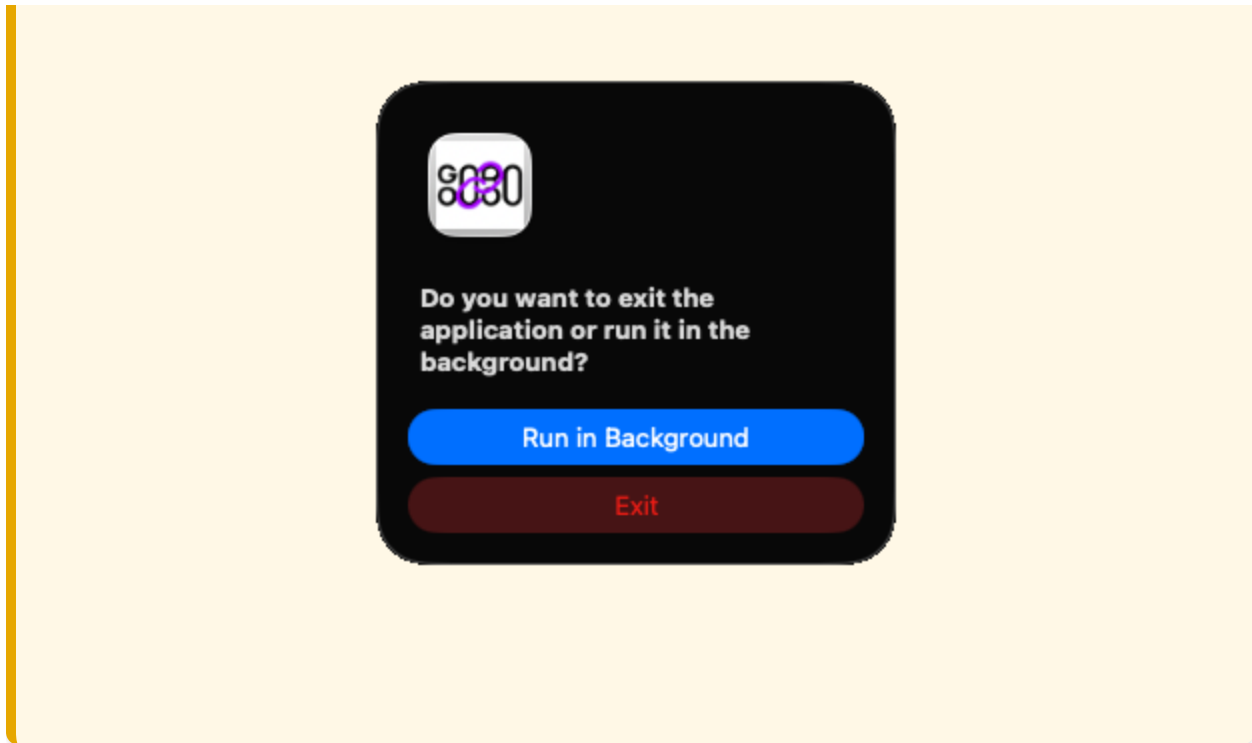
In short, the BRIDGE app relays and converts the commands sent by the LIOBOX², and provides the LIOBOX² with the DAW information.



⚠ WARNING

GoorooLink must be running for the BRIDGE to work with a DAW. **It can run in the foreground or in the background, but it must not be exited.**

To run it in the background, quit the application: a dialog asks whether it should run in the background or exit.

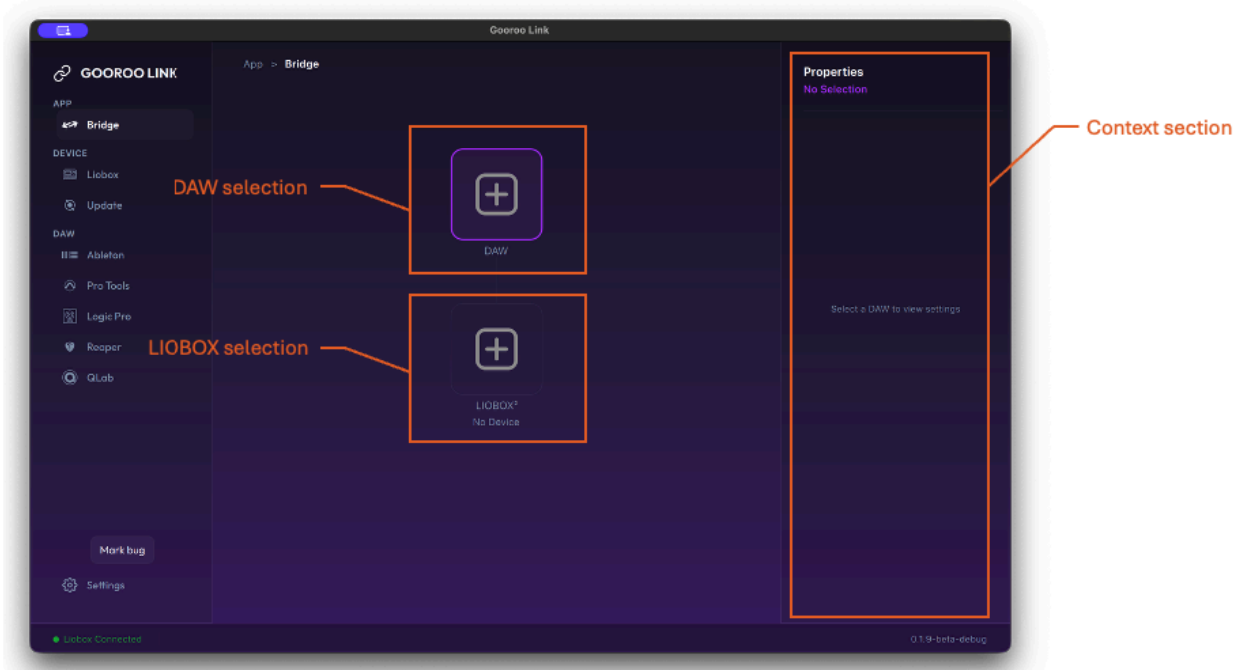


6.2.1 Layout

The BRIDGE view has three sections:

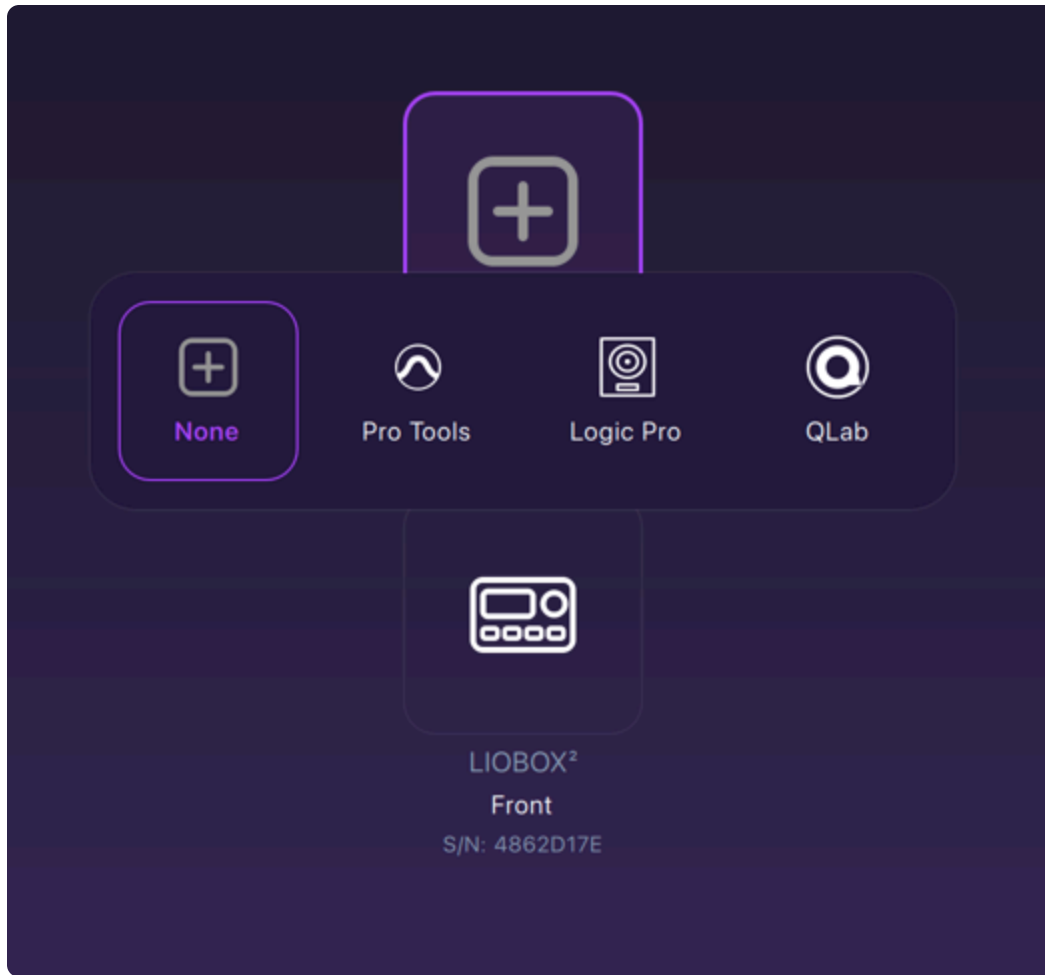
- **DAW selection**
- **LIOBOX² selection**
- **Context section**

The context section changes with the selected DAW and LIOBOX².



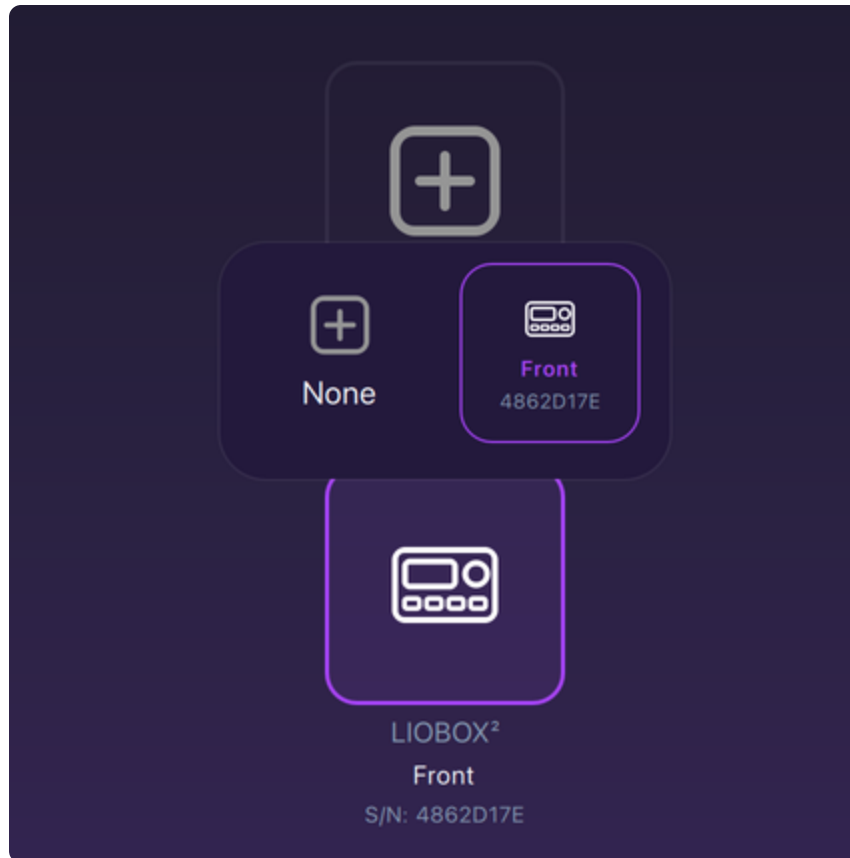
6.2.1.1 DAW selection

Click the DAW tile to choose the DAW to connect to the LIOBOX².



6.2.1.2 LIOBOX selection

Only connected LIOBOX² are listed.



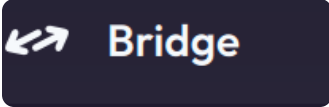
⚠ WARNING

This version of GoorooLink is designed for use with a single connected LIOBOX².

The **properties of the selected DAW** are shown in the context section. The BRIDGE **state** is shown next to the BRIDGE menu item.

6.2.2 BRIDGE states

The current BRIDGE state is shown next to the **APP → BRIDGE** menu item and mirrored by the GoorooLink tray icon.

APP → BRIDGE state	GoorooLink tray icon	Status
		The DAW is set up and the LIOBOX ² is connected. The LIOBOX ² can control the DAW.
		Only one of the two conditions is met: the DAW is set up and open, or a supported LIOBOX ² is selected.
		Neither an open DAW nor a selected LIOBOX ² is detected.

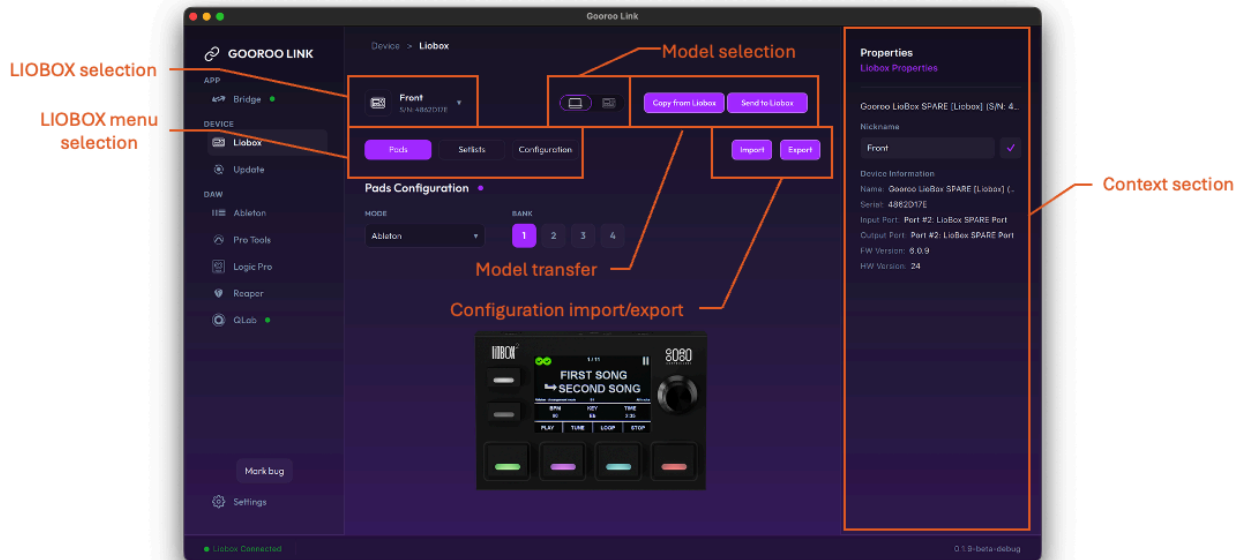
6.2.3 DAW-specific BRIDGE procedures

The properties of each DAW and the procedures to retrieve its marker list are in the guide for that DAW:

- **Pro Tools**: properties and discarded markers
- **Logic Pro**: retrieve the marker list from the clipboard
- **Cubase**: retrieve the marker list from an exported file
- **QLab**: choose the information displayed on the LIOBOX²

6.3 DEVICE → LIOBOX

The **DEVICE → LIOBOX** module configures all the LIOBOX² parameters: setlists, pads and settings.



6.3.1 LIOBOX selection

Select a connected LIOBOX² to view its parameters.

6.3.2 Data model (model) concept

The **data model** (or *model*) describes all the parameters saved in the LIOBOX².

- **CACHED model:** a copy stored in GoorooLink. You can edit it without altering the memory of the LIOBOX².
- **LIOBOX² model:** the exact content of the LIOBOX². It cannot be edited directly: use **Send to LIOBOX** to replace the content of the LIOBOX² with the CACHED model.

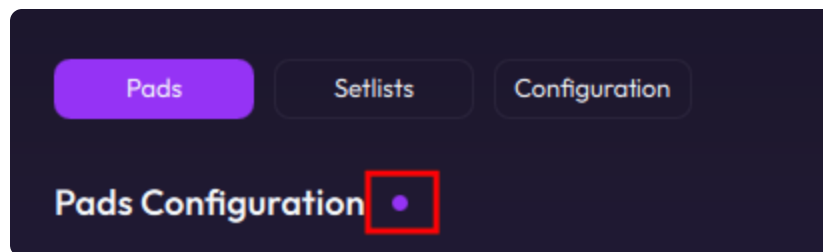
6.3.2.1 Model selection

Select which model to visualize:

- **CACHED** (laptop icon)
- **Connected LIOBOX²** (device icon)

6.3.2.2 Data model mismatches

A dot next to the name of the selected LIOBOX menu indicates a mismatch between the CACHED and LIOBOX² models.



6.3.2.3 Model transfer

The CACHED model starts with default values, which may not match the connected LIOBOX². You can either:

- **Copy from LIOBOX:** replace the CACHED model with the LIOBOX² model. This happens entirely inside GoorooLink.
- **Send to LIOBOX:** replace the LIOBOX² model with the CACHED model. The data is transferred over USB, which can take a couple of seconds.

6.3.2.4 Configuration import / export

You can save the CACHED model to a file (export) and load it again later (import):

- **Import:** replaces the content of the CACHED model (pads, setlists and settings) with the content of the file.

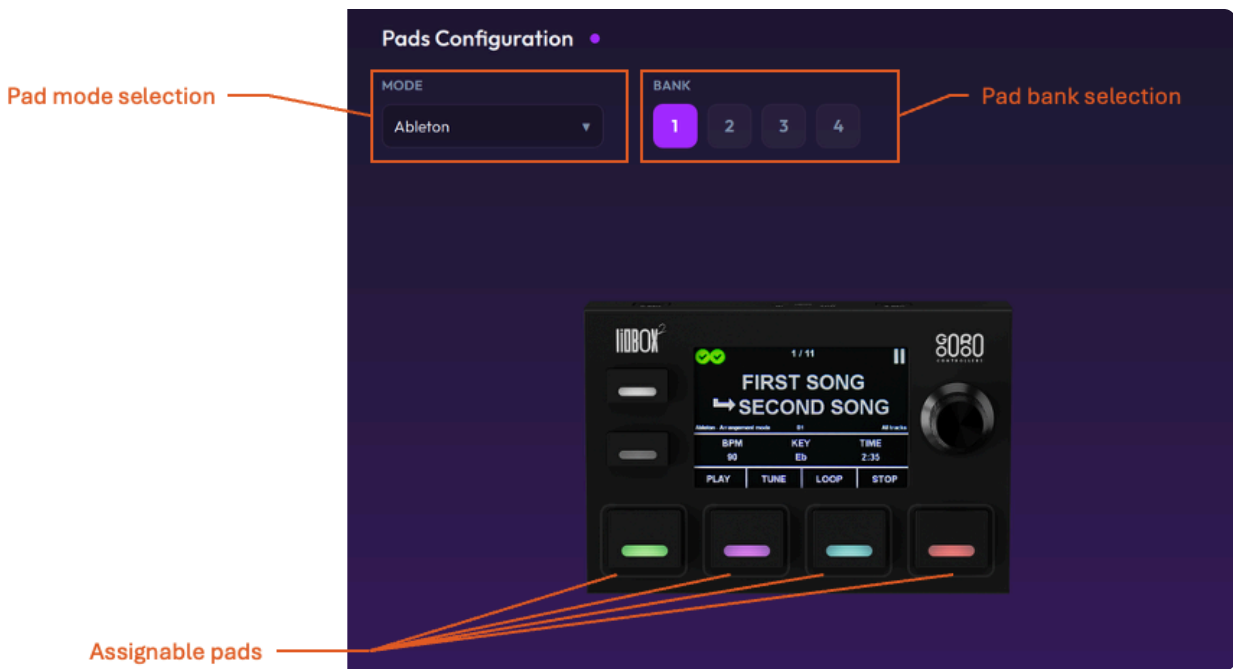
- **Export:** saves the content of the CACHED model to a file.

This is particularly useful when several LIOBOX² on stage need the same configuration.

6.3.3 LIOBOX menu selection

Select the category to display: **Pads**, **Setlists** or **Configuration**.

6.3.4 Pads configuration

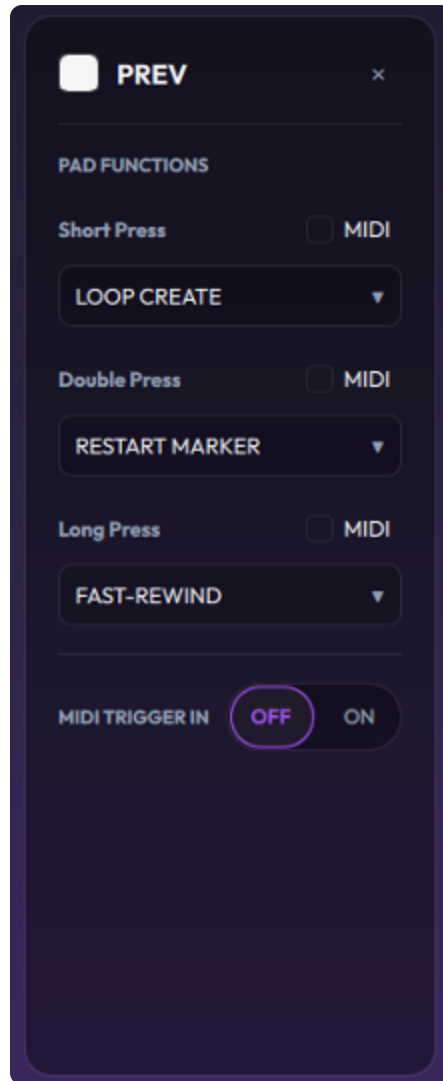


6.3.4.1 Pad mode selection and pad bank selection

Each assignable pad has its own configuration for each mode and each bank. Select the mode and the bank to display.

6.3.4.2 Assignable pads

Click one of the four assignable pads to change its function.



- **Pad color:** the LED color of the pad.
- **Pad name:** the name of the pad (shown with some screen layouts).
- **Pad functions:** the function assigned to each of the Short press, Double press and Long press events (the choices depend on the selected mode).
- **MIDI Trigger In:** turns the MIDI IN trigger of the pad on or off.

Pad function = MIDI

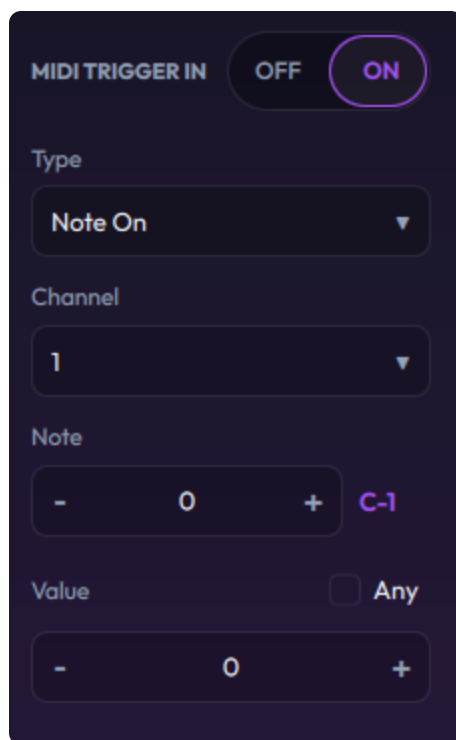
The pad sends a MIDI note, control change or program change, depending on the selected type.

The screenshot shows a dark-themed interface for configuring a pad function. At the top, it says 'PAD FUNCTIONS'. Below that, 'Short Press' is selected, and a purple square icon with 'MIDI' next to it is active. The configuration options are: 'Type' set to 'Note On', 'Channel' set to '1', 'Note' set to '60', and 'Value' set to '127'. Each option has a dropdown or a +/- control.

MIDI Trigger In enabled

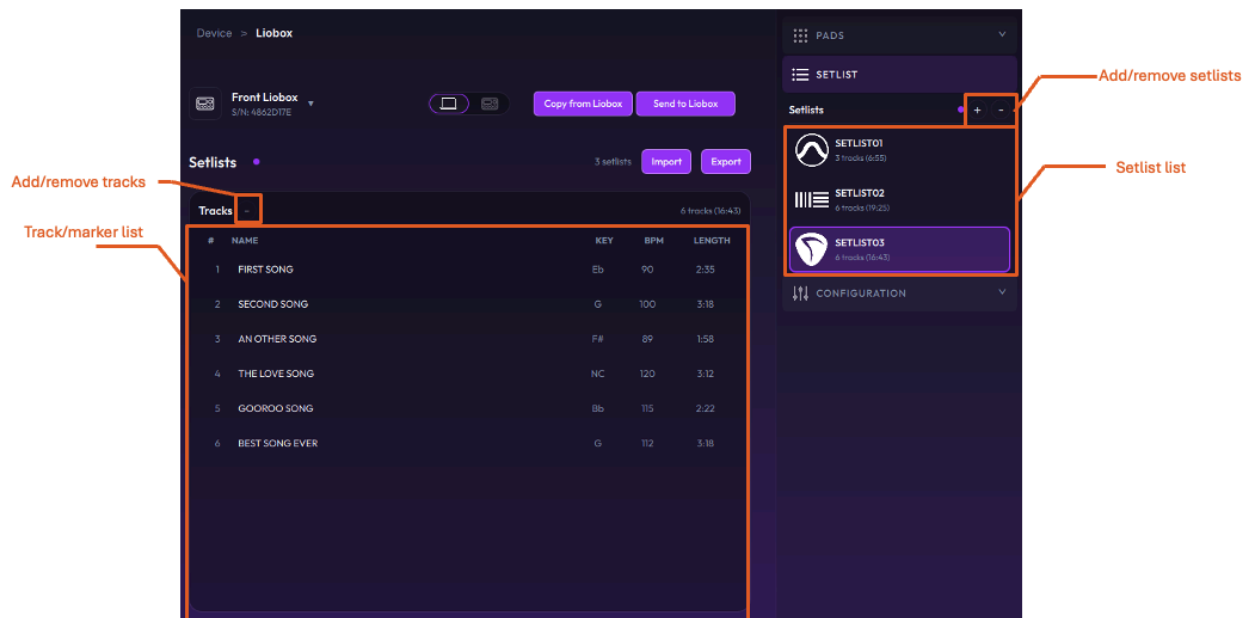
When ON, the MIDI messages received on the LIOBOX² MIDI port are compared with the configured values. If they match, the LIOBOX² triggers the **Short press** function of the pad.

Value = Any: when checked, the value of the received message is ignored (any value from 0 to 127 is accepted).



See also [Pad config](#) on the LIOBOX².

6.3.5 Setlists



6.3.5.1 Setlist list

The setlists stored in the selected model, in order of creation. Setlists can be added or removed, in the CACHED model only.

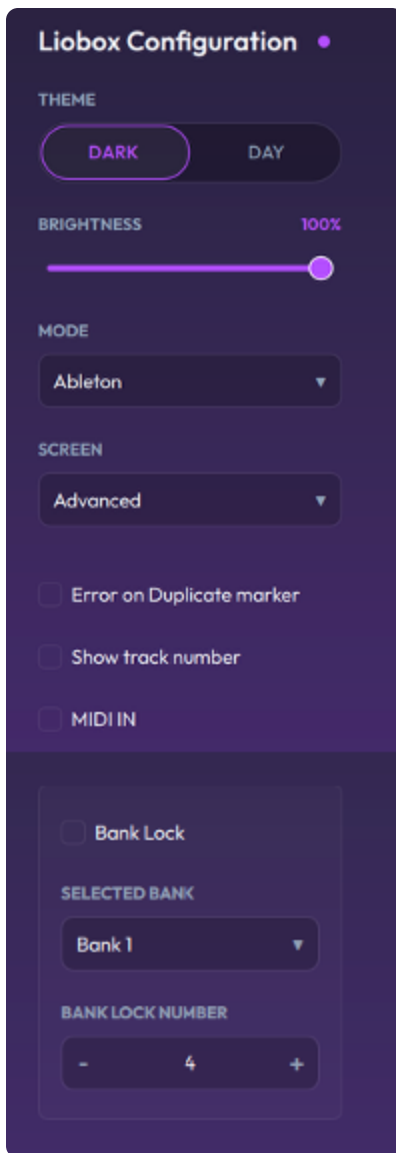
6.3.5.2 Track/marker list

The tracks/markers of the selected setlist.

- Select and drag a track to change its position in the setlist.
- Markers can be removed from or added to the setlist using the corresponding buttons.

See also [Setlists](#) on the LIOBOX².

6.3.6 LIOBOX configuration

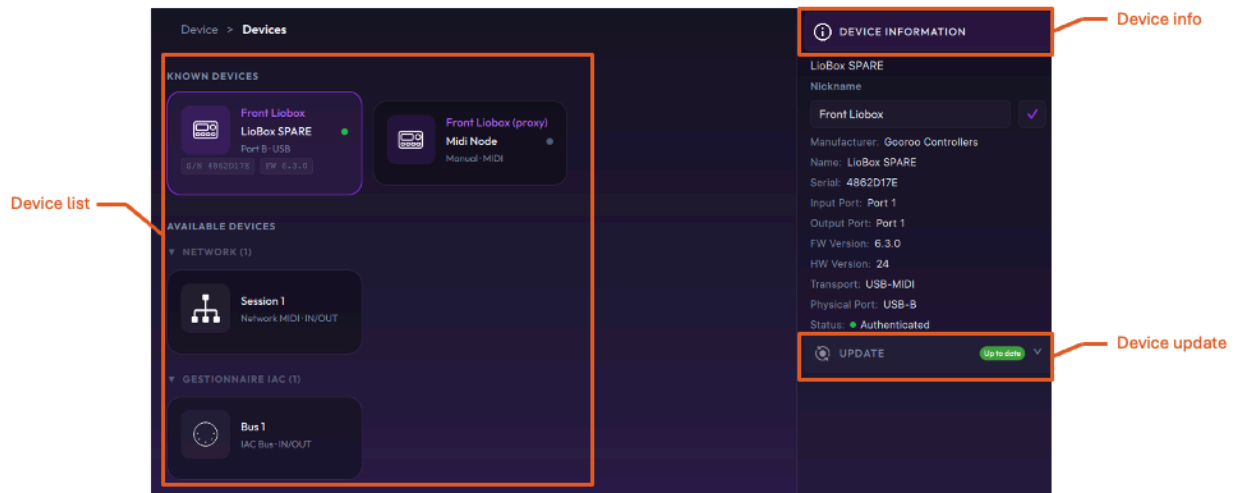


Setting	Description
Theme	LIOBOX ² display mode (dark or day)
Brightness	LIOBOX ² display brightness

Setting	Description
Mode	LIOBOX ² mode selection (Ableton, Pro Tools, Logic Pro, Reaper, QLab, MIDI, all tracks, setlist mode, ...)
Screen	LIOBOX ² display layout
Error on duplicate marker	Displays an error if two markers have the same name (redundancy mode)
Show marker number	Adds the track number before the displayed track name
MIDI IN	Enables the MIDI IN port of the LIOBOX ²
Bank lock	Locks the bank selection to the currently selected bank
Selected bank	Selected bank number (1 – 4)
Bank lock number	Maximum bank number (1 – 4)

See [LIOBOX²](#) for details about these settings, in particular the [settings](#) and [bank management](#) sections.

6.4 DEVICE → DEVICES



6.4.1 Device list

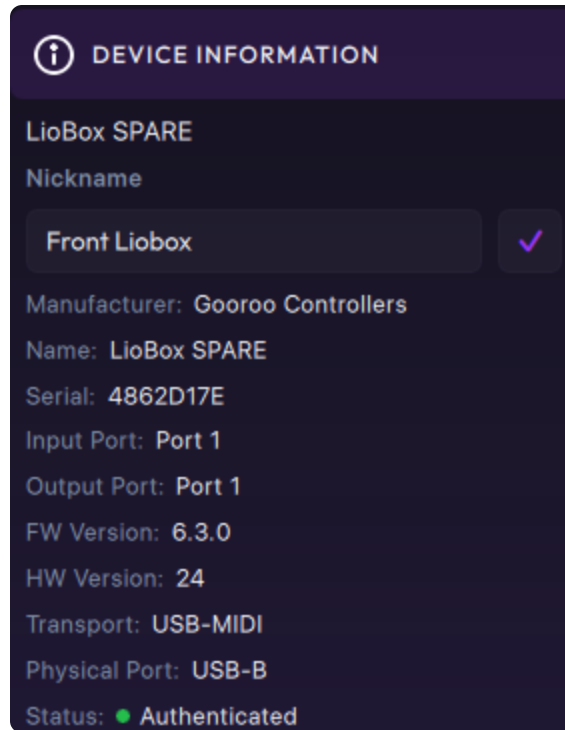
The device list is divided into two categories:

- **Known Devices:** devices recognized as Gooroo Controllers devices (LIOBOX², ...).
- **Available Devices:** MIDI devices, grouped by MIDI IN/OUT pair, that can be used as proxies.

Known Devices lists the connected devices automatically, as well as the devices you [assigned manually](#).

6.4.2 Device information

You can give a Known Device a nickname so it is easier to recognize.



- **Nickname:** a friendly name to tell one LIOBOX² from another (for example Front stage / Back stage). It is used only in GoorooLink: it does not rename the actual device and is not used by macOS or your DAW.

Device information (read-only):

- **Manufacturer**
- **Name** (as per macOS USB-MIDI information)
- **Input / output ports:** macOS MIDI port names. If you rename the device in the macOS MIDI settings, the new name appears here.
- **Serial number**
- **FW version:** firmware version
- **HW version:** hardware version
- **Transport:** type of peripheral used (USB, RTP, ...)
- **Physical port:** LIOBOX² USB port the MIDI traffic comes from
- **Status:** see below

6.4.2.1 Device status

The status shows the state of the device.

Status	Description	Goroo Controllers device	Proxy
Available <i>(Available Devices)</i>	Device ready to be assigned	N/A	
Disconnected <i>(Known Devices)</i>	The proxy is not plugged into the computer, so it is not visible	N/A	Gray
Connected	The proxy is visible. GorooLink periodically tries to authenticate with the Goroo Controllers device	N/A	Orange
Authentication failed	Authentication cannot be completed; the device cannot be used in the GorooLink apps	Orange	Orange
Authenticated	The device can be used in the Bridge or LIOBOX apps	Green	Green
Update available	A newer firmware is available. The Update section is only visible if the	Red	Red

Status	Description	Goroo Controllers device	Proxy
	Goroo Controllers device is plugged directly into the computer		

6.4.3 Device update

You can update a device from the Device Properties panel. Only Goroo Controllers devices **connected by USB** can be updated.

6.4.3.1 Manual vs Auto

Mode	Description
Auto	Proposes the latest compatible firmware. The firmware file is first downloaded from the server, then stored so it can be reused later. Once it is available, start the firmware update.
Manual <i>(advanced users only)</i>	Browse for the firmware file (.lbf) yourself, then start the update.

Auto: update available	Auto: up to date	Manual
Properties Firmware Update Firmware File MANUAL AUTO Firmware v6.1.6 available Download v6.1.6 Update Status Download firmware using the panel above	Properties Firmware Update Firmware File MANUAL AUTO ✔ Device firmware is already up to date (v6.1.6) Update Status Device firmware is already up to date (v6.1.6)	Properties Firmware Update Firmware File MANUAL AUTO No file selected Browse... Update Status Select a firmware file (.lbf)

6.4.3.2 Update process

Properties

Firmware Update

Firmware File

liobox2_v611.lbf
Browse...

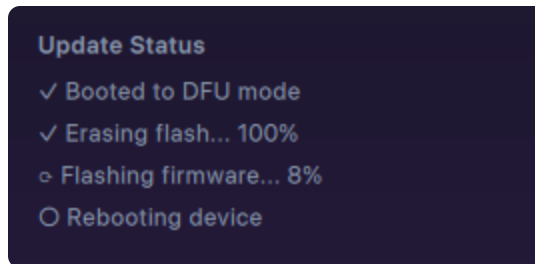
Update Status

Ready to update

Start Firmware Update

- **Firmware file:** in Manual mode, load the file yourself; in Auto mode, download the proposed file.

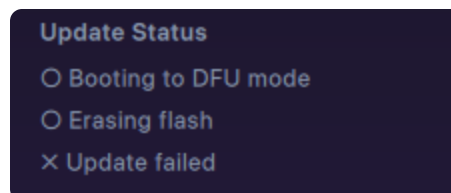
- **Update status:** information about the status and progress of the update.
 - *Ready to update:* the firmware file is loaded and a compatible device is selected.
 - *Update progressing normally:* the update is in progress. For a LIOBOX², it takes between 10 s and 20 s.



DANGER

DO NOT DISCONNECT THE LIOBOX² DURING THE UPDATE. If this happens, follow the [recovery procedure](#).

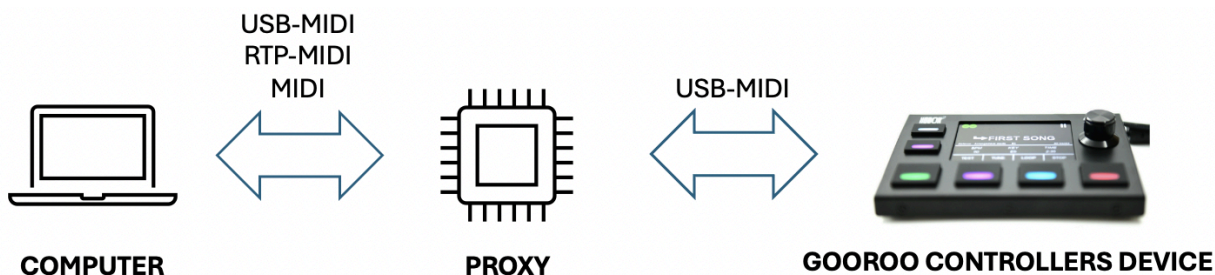
- *Update failed:* the update failed. Try again and see [Firmware update problems](#). If it keeps failing, contact Gooroo Controllers support.



- **Start Firmware Update:** starts the firmware update. It requires a valid firmware file and a selected compatible device.

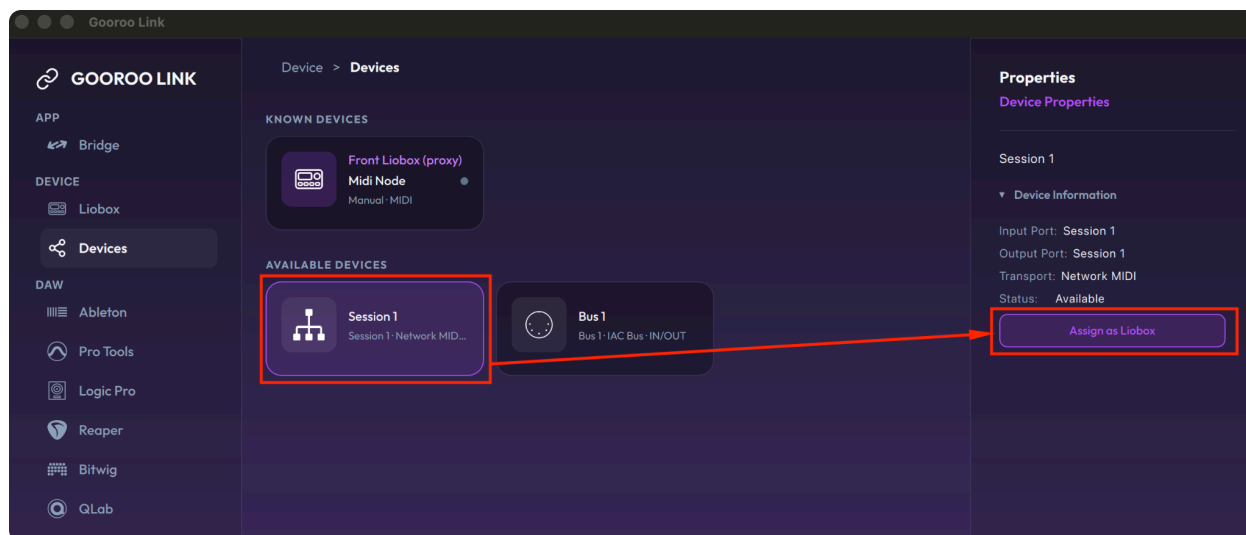
6.4.4 Device assignment

Device assignment lets GoorooLink reach a Gooroo Controllers device through a **proxy** MIDI device.



Because the computer cannot see the Gooroo Controllers device directly, you must tell Gooroolink which proxy is used by **assigning** it manually.

Select the peripheral in the Available Devices list and click **Assign as Liobox**. The proxy now appears in the Known Devices list.



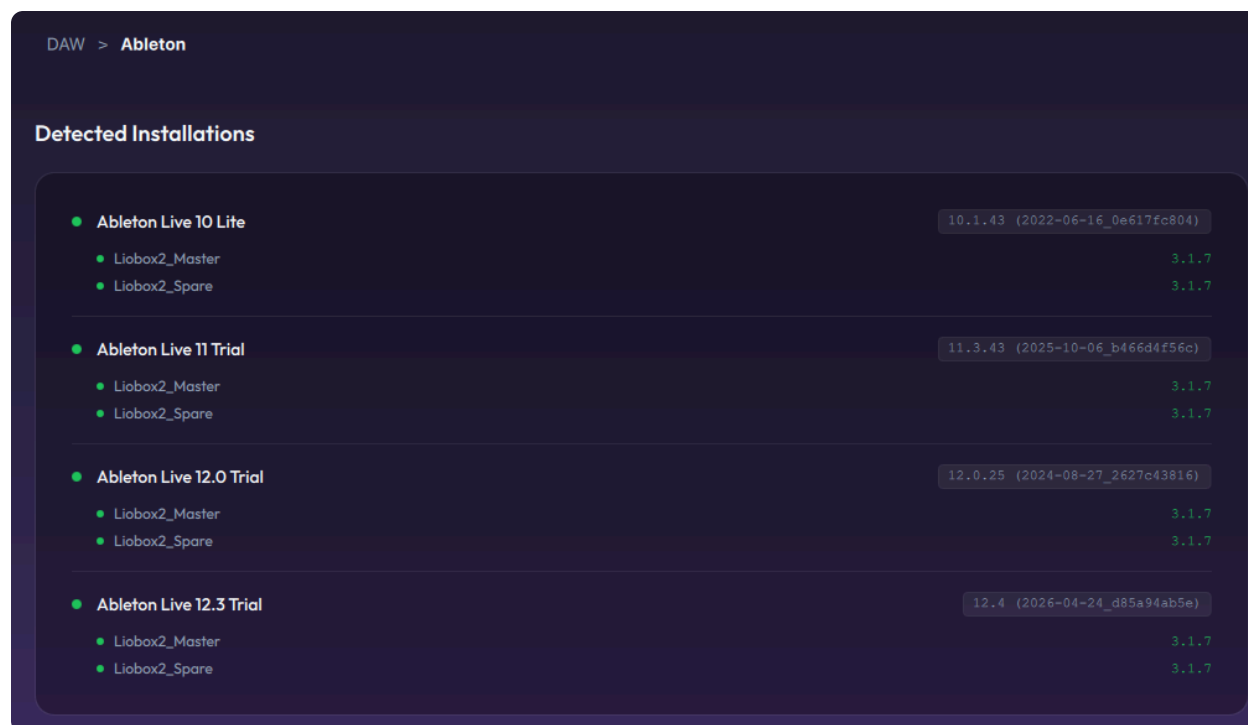
Gooroolink remembers the assignment and always lists the device under Known Devices, even when it is disconnected.

When a Known Device is Connected, Gooroolink scans its port to communicate with the assigned device.

6.5 DAW view

The DAW views list the DAW installations detected automatically and their versions.

For Ableton and Reaper, the DAW view also shows the loaded scripts and their compatibility, and lets you update them when a newer version is available (see [Auto-updates](#)).



i NOTE

The Reaper script can be loaded from any folder. For GoorooLink to detect the script versions, browse to the folder containing the scripts once: GoorooLink then scans it automatically.

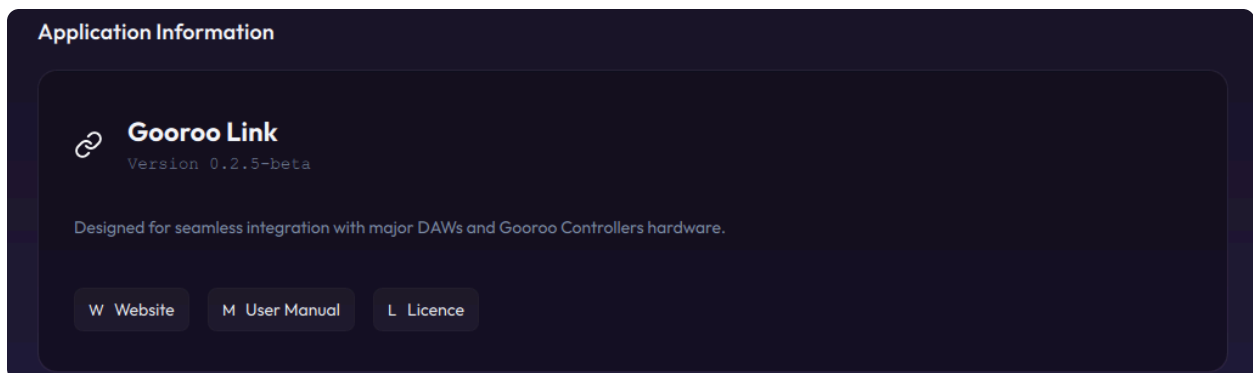


6.6 Settings

6.6.1 Application information

General information about the application, with links to resources such as the website and the user manual.

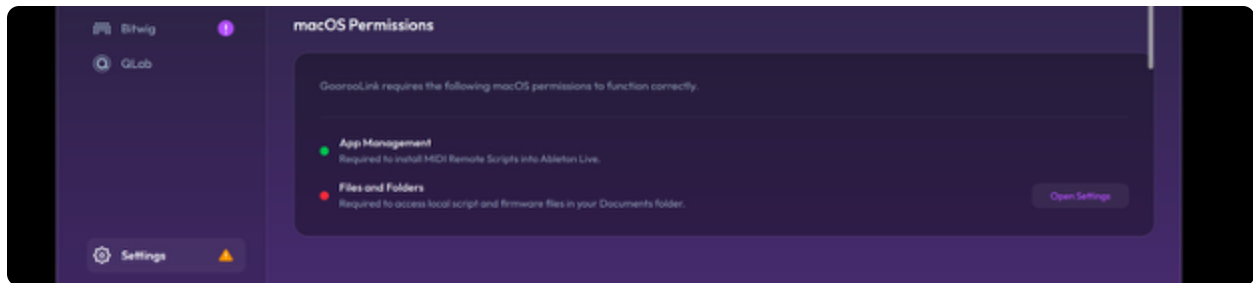
You can also read the software licence, the End User License Agreement (EULA) and the third-party licences here.



6.6.2 macOS permissions

GoorooLink needs both the **App Management** and **Files & Folders** permissions to work fully.

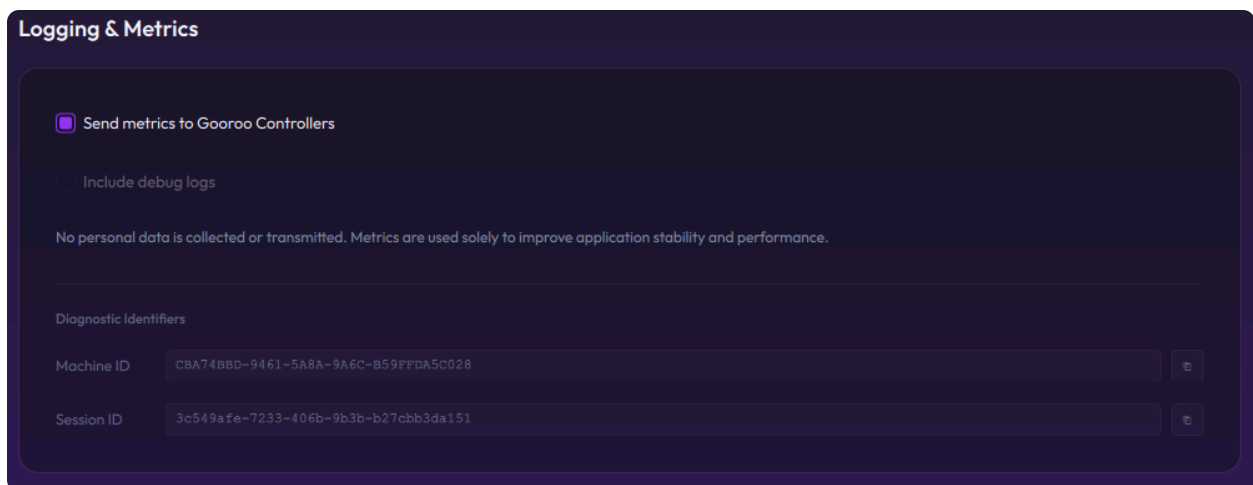
The settings show whether the permissions are granted. A warning appears if one is missing.



Without these permissions, **auto-updates fail**.

6.6.3 Logging & metrics

GoorooLink logs information and actions locally. The logs are anonymized with randomly generated IDs.



These metrics can be uploaded automatically to the Gooroo Controllers servers. They are only used to improve the stability and performance of the application.

No personal information or personal data is collected or transmitted.

6.7 Auto-updates

When GoorooLink starts, it checks the Gooroo Controllers servers for the latest versions of the scripts (Ableton and Reaper), of GoorooLink itself and of the LIOBOX² firmware.

This lets GoorooLink check that the following work together, and update them if needed:

- LIOBOX² with GoorooLink
- LIOBOX² with Ableton scripts
- LIOBOX² with Reaper script



TIP

Always keep everything at the latest version. New features and bug fixes are released regularly.

GoorooLink can report:

- **Incompatible:** some features will not work, or the system will not work at all.
- **Outdated:** a newer version is available.
- **Compatible:** all features can be used.



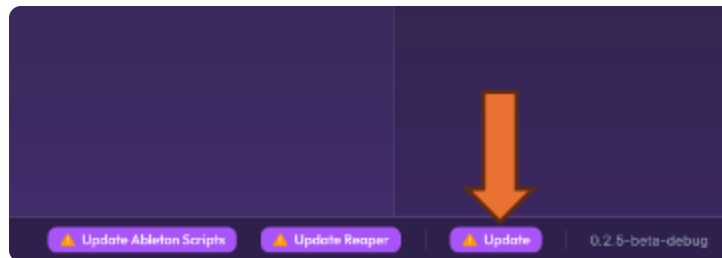
WARNING

Grant GoorooLink the right to access and write to folders when macOS asks. See [Auto-update fails](#).

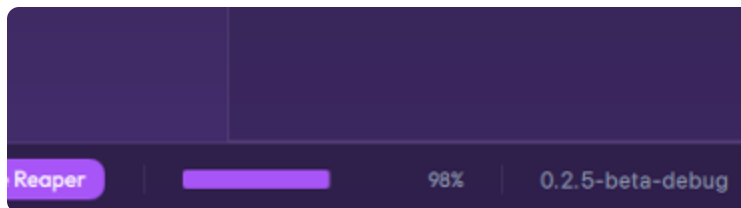
6.7.1 GoorooLink software update

Updating GoorooLink takes three steps.

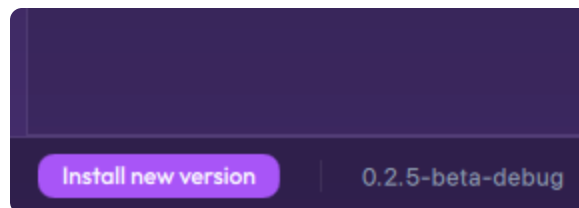
1. A newer version is detected. Hover over the button for more information about the new version. Click it to download the new version from the Gooroo Controllers servers.



2. The new version is being downloaded. Wait for the download to finish. GoorooLink stays fully usable in the meantime.



3. Install the new version. Click to install the new version. GoorooLink closes and reopens.



i NOTE

If you close GoorooLink without installing the new version, the process will have to be started over.

6.7.2 LIOBOX² firmware update

The detailed procedure is in [Device update](#). If the update fails, see [Firmware update problems](#).

The firmware status is shown in the menu bar by an icon next to the Update menu item.

Icon	Status
Warning (orange triangle)	LIOBOX ² firmware incompatible . A firmware update is required to use LIOBOX ² features with GoorooLink.
Information (purple dot)	LIOBOX ² firmware outdated . A newer firmware is available. GoorooLink features still work, but compatibility with the scripts is not guaranteed.
None	LIOBOX ² firmware compatible / up to date . The firmware is at its latest version and fully compatible with GoorooLink.

6.7.3 Scripts update

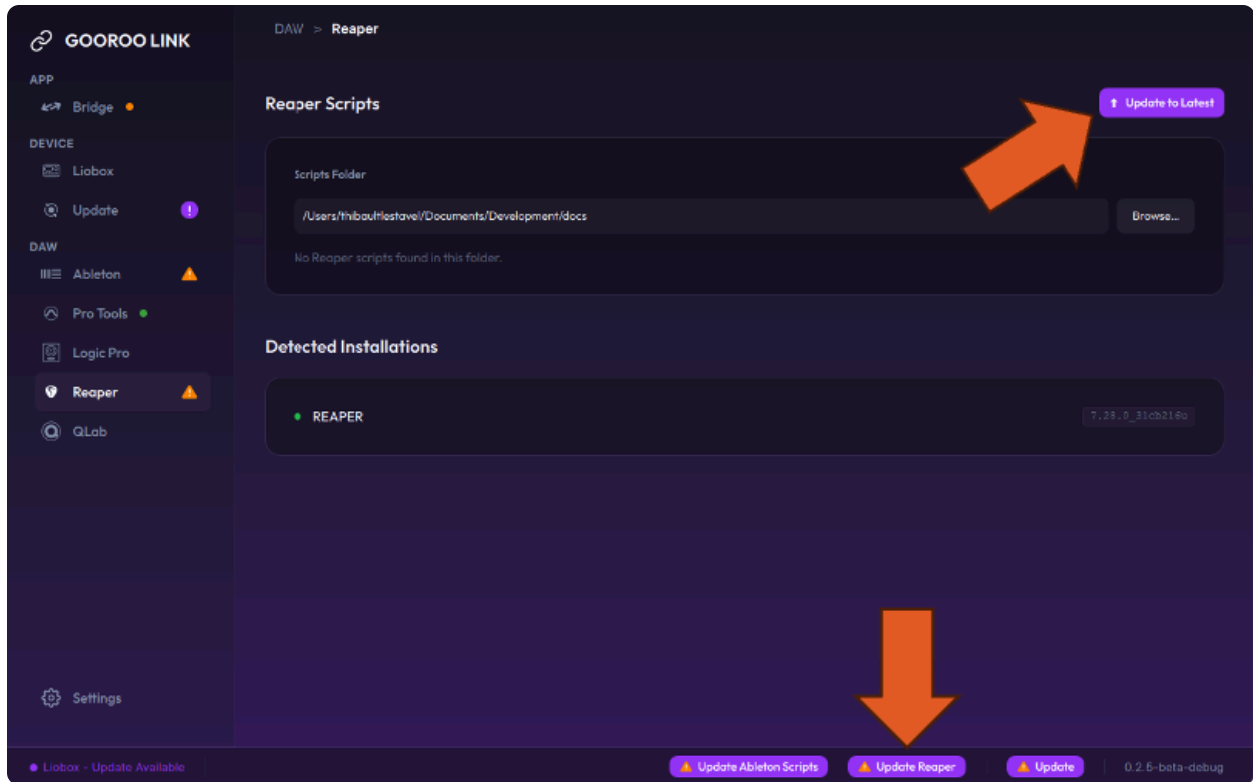
The script versions are checked in the same way and can be updated from GoorooLink.

6.7.3.1 Script status

Status	Description
● Ableton Live 12.3 Trial ● Liobox2_Master Incompatible with Liobox v6.1.4 ● Liobox2_Spare Incompatible with Liobox v6.1.4	Script incompatible. The detected LIOBOX² firmware version and the installed script will not work together.
● Ableton Live 10 Lite ● Liobox2_Master Update available (v3.1.6) ● Liobox2_Spare Update available (v3.1.6)	Script outdated. A newer script is available, but the current one is compatible with the current LIOBOX².
● Ableton Live 11 Trial ● Liobox2_Master ● Liobox2_Spare	Script compatible / up to date. The script is up to date and compatible with the detected LIOBOX² firmware version.

6.7.3.2 Script update process

To update a script, click the **Update Script** button, in the status bar or in the DAW view.



7 Troubleshooting

Please go through this section if you encounter issue with your LIOBOX² or GoorooLink.

7.1 LIOBOX²

7.1.1 The LIOBOX² does not turn on

- Check the connections.
- Use the cable provided.
- Try [recovering](#) the LIOBOX²

7.1.2 The green check icon does not appear

- Check that the DAW is started and configured (and [GoorooLink](#) too, if you use Pro Tools, Logic Pro, Cubase or QLab).
- Check that the correct script is loaded in the MIDI input and output settings of the DAW, on LIOBOX² port 1.
- If you use a hub or a MIDI card, check the connection to the computer.
- On macOS, check that the LIOBOX² is allowed as a USB accessory (a prompt appears the first time you connect it). If you clicked **Don't Allow** by mistake, go to **macOS System Settings → Privacy & Security → Accessories** and change the setting. See also [LIOBOX² not detected](#).



7.1.3 Song name not displayed

Check that:

- A name has been entered.
- The **naming convention** has been followed.
- The name does not start with the prefix **()**, which filters out the song.
- The project exceeds the limit of 120 songs that the LIOBOX² can manage.

7.1.4 A "caution" symbol appears at the top of the screen

Check that:

- Both sessions (Main / Spare) have the same song names, in the same order.
- Both computers are in the same mode (arrangement or session).

7.1.5 The song name in the setlist is displayed in red

- The song no longer exists in the DAW session.
- The song name or its information is incorrect.

7.2 GoorooLink

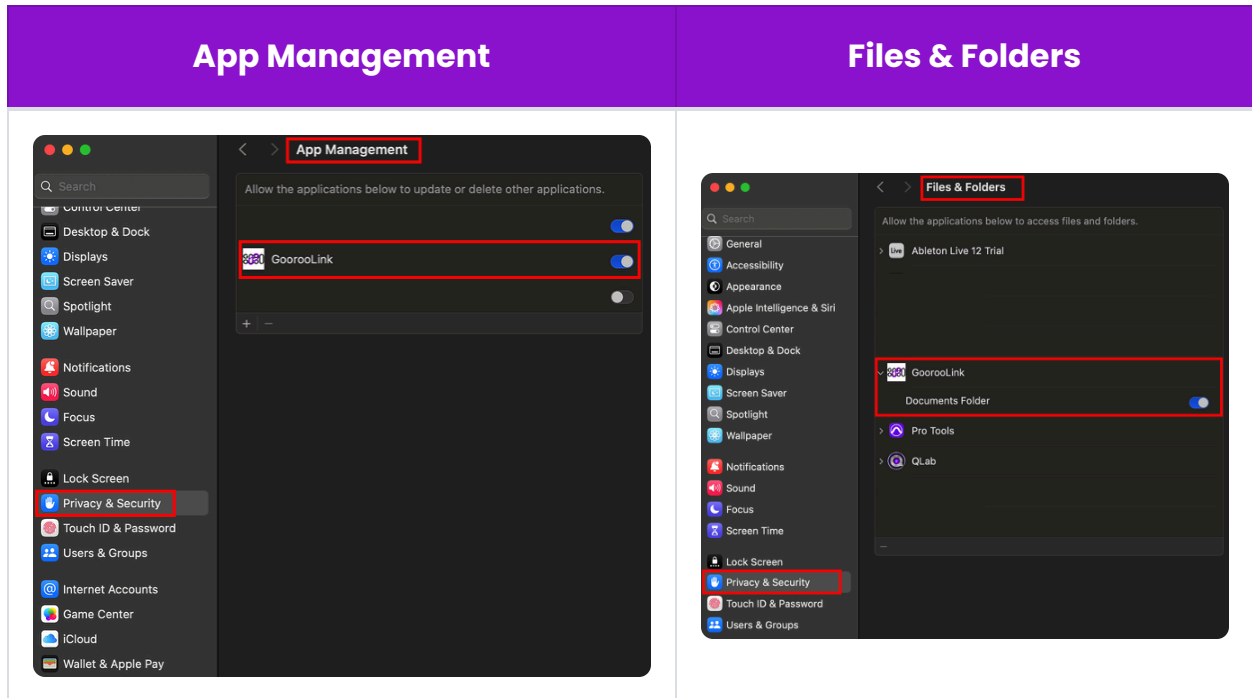
7.2.1 Auto-update fails

By default, macOS prevents applications from accessing, modifying or creating files and folders outside the application itself.

To auto-update, GoorooLink must copy files into several folders. The first time, macOS asks for your confirmation.

You can also grant the permissions in the macOS Settings, under **Privacy & Security**. Grant them for:

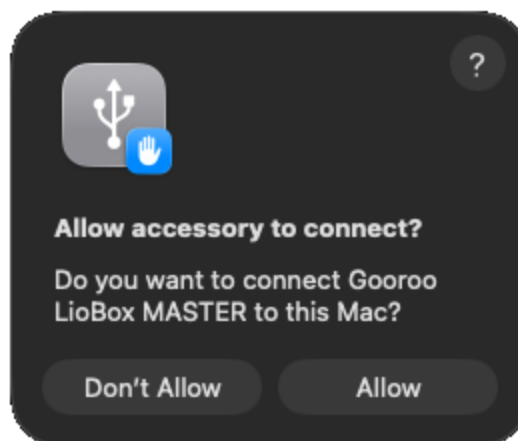
- **App Management** (copies the script into Ableton)
- **Files & Folders** (local script, firmware and software files)



If GoorooLink is not listed, add it with the + button at the bottom.

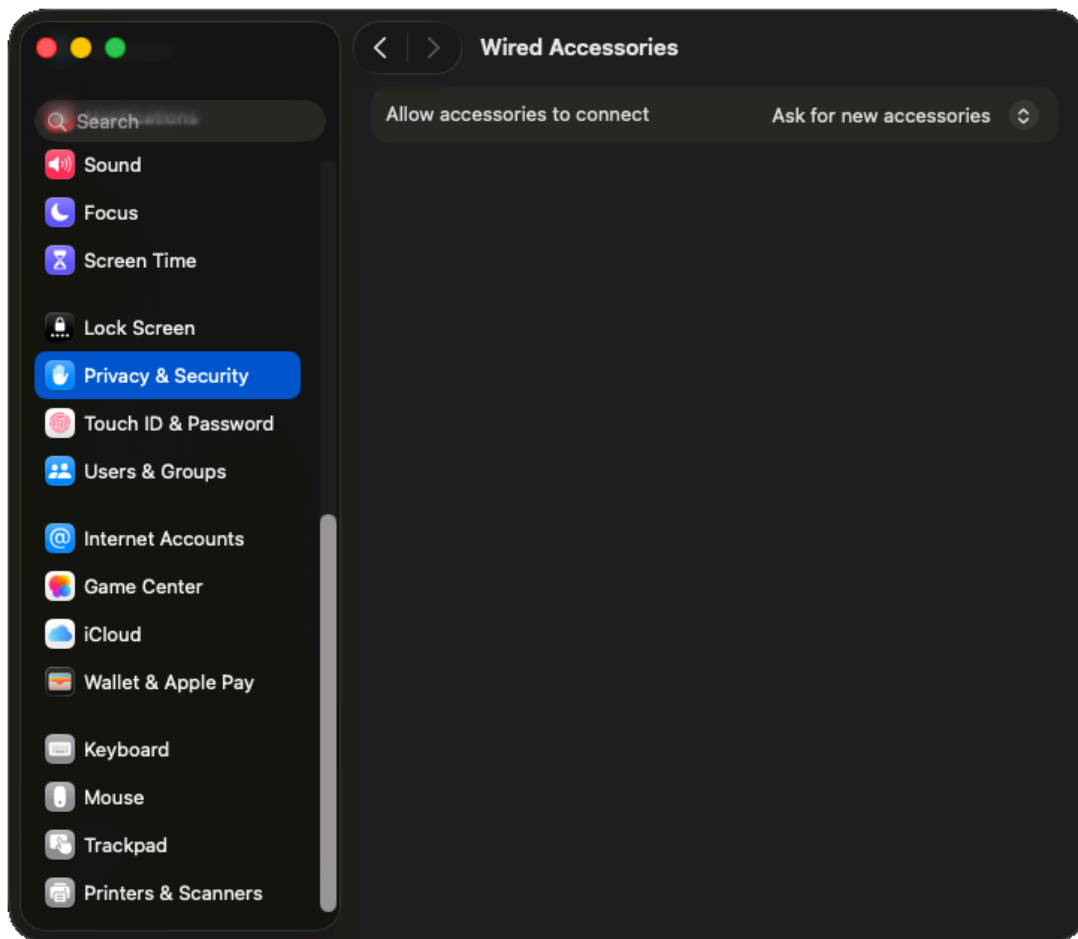
7.2.2 LIOBOX² not detected

macOS can block USB accessories when a new device is connected. Always click **Allow** when the computer asks whether the LIOBOX² can connect.



If you clicked **Don't Allow**, the prompt may not appear again, and GoorooLink cannot use the LIOBOX².

To reset this, go to **System Settings → Privacy & Security → Accessories** (at the bottom) and open the **Allow accessories to connect** list. Selecting the same option again is enough.



7.3 Firmware update problems

This section covers the problems met most often when updating the LIOBOX² firmware from GoorooLink (**DEVICE** → **DEVICES** → **Device update**, see [Device update](#)).

During an update, GoorooLink asks the LIOBOX² to restart in update mode (DFU mode). The LIOBOX² then reappears on the computer as a different USB device, and GoorooLink recognizes it and sends the new firmware, which takes 10 to 20 seconds. Most problems happen in the first part: GoorooLink does not see the LIOBOX² restart in time, or does not recognize it.



A LIOBOX² THAT NO LONGER STARTS IS NOT BROKEN

If an update fails, even halfway, the LIOBOX² can normally be recovered with the [manual DFU procedure](#) below.

7.3.1 Recovery: LIOBOX² disconnected during reflashing



WARNING

This procedure only applies to the LIOBOX².

If the update is interrupted (USB cable removed, computer turned off or put to sleep, ...), the memory of the LIOBOX² is corrupted and the device can no longer start correctly.

To recover, follow this procedure:

1. Remove all USB cables from the LIOBOX².
2. Keep the LIOBOX² **MENU** button pressed (the upper left one).

3. While holding it, plug the USB cable into the **USB Spare** (port B).
4. Open GoorooLink and select the **DEVICE → DEVICES** module. The LIOBOX² appears as a DFU device.
5. Proceed with the firmware update as described in [Device update](#).

7.3.2 Before you start an update

Most failures disappear when these conditions are met:

- The LIOBOX² is plugged **directly** into a USB port of the Mac, on its **USB B** port (Liobox SPARE), with the cable provided. No hub, no dock, no adapter chain. Only USB-connected devices can be updated: a LIOBOX² reached through a proxy cannot.
- GoorooLink is at its latest version (see [Auto-updates](#)).
- Nothing else is sending data to the LIOBOX² while the update starts (no DAW sessions running).
- The Mac stays awake and is not busy with another heavy task (renders, backups, large file copies).
- Only one LIOBOX² is connected.

7.3.3 "Device failed to enter DFU mode (timeout)"

GoorooLink waits a few seconds for the LIOBOX² to restart in update mode, then gives up. On a busy Mac, or when the LIOBOX² is connected through a hub, the restart can take longer than that. **The LIOBOX² may then be waiting in update mode even though GoorooLink reports an error.**

1. Open **DEVICE → DEVICES**. If the LIOBOX² now appears as a **DFU device**, select it and run **Start Firmware Update** from there.

2. If it does not appear, quit GoorooLink completely (exit, not run in background), unplug the LIOBOX², plug it directly into the Mac and launch GoorooLink again. Try the update again.
3. If the error comes back, use the [manual DFU procedure](#). It does not depend on GoorooLink detecting the restart.

7.3.4 The update does not start, or the status stays on "Booting to DFU mode"

If the status text never changes, or every device shows **Another update in progress**:

1. Quit GoorooLink completely and launch it again. This resets the update.
2. Check that the LIOBOX² still works normally. If it does not start, use the [manual DFU procedure](#).
3. Try again with the conditions of [Before you start an update](#).

If the problem appears right after an interrupted firmware download, restart GoorooLink and download the firmware again before retrying.

7.3.5 The progress stays at 0% or stops moving

A complete update takes 10 to 20 seconds. If the progress has not moved for several minutes:

1. Leave the LIOBOX² connected and the Mac awake for a few more minutes.
2. If nothing changes, quit GoorooLink, unplug the LIOBOX² and use the [manual DFU procedure](#) to flash it again. The procedure is designed for an interrupted update.



Only interrupt an update that has been stuck for several minutes. Before that, **DO NOT DISCONNECT THE LIOBOX²**.

7.3.6 The LIOBOX² works but cannot be updated

If the LIOBOX² is recognized and works normally but the **Device update** section is missing, or pressing **Start Firmware Update** has no effect and ends in a timeout:

- Change the USB port, use a port directly on the Mac, and avoid hubs and docks.
- Make sure the cable is the one provided (or a data cable, not a charge-only cable).
- Check the macOS permissions of GoorooLink (see [Auto-update fails](#)) and that the LIOBOX² is allowed as an accessory (see [LIOBOX² not detected](#)).
- If the problem persists, use the [manual DFU procedure](#).

7.3.7 Manual DFU procedure

To update the firmware by hand, or to recover a LIOBOX² after any of the problems above, follow [Recovery: LIOBOX² disconnected during reflashing](#).

7.3.8 Contact support

If the update still fails, contact Gooroo Controllers support at contact@gooroocontrollers.com and provide:

- The GoorooLink version and macOS version.
- The LIOBOX² firmware version before the update, and the one you tried to install.

- How the LIOBOX² is connected (port used, hub or not, Apple Silicon or Intel Mac).
- The exact message shown in GoorooLink and the step reached (for instance "Booting to DFU mode" or "Erasing").
- Whether the manual DFU procedure was tried, and its result.

8 Revisions and legal

8.1 Revisions

Since revision v13, the LIOBOX² and GoorooLink manuals are a single manual. The earlier revisions of each manual are kept below.

Revision	Date	Modifications
v13	October 2026	Merged the LIOBOX² and GoorooLink manuals into a single manual organized by DAW Added one guide per DAW: Ableton, Bitwig, Reaper, Pro Tools, Logic Pro, Cubase, QLab and MIDI Added the Quick start Added the firmware update troubleshooting Updated the legal section (GoorooLink EULA and third-party licenses) Rewrote and clarified the text throughout

8.2 Legal

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Use of the LIOBOX² for purposes other than those described in this manual may result in non-conformity of the equipment and its accessories.

The LIOBOX² complies with the requirements of European Directive 89/336/EEC. Modifying the device or using accessories not supplied by GOOROO CONTROLLERS may result in the equipment being banned from use in Europe.

The LIOBOX² meets FCC requirements. Modifying the device or using accessories not supplied by GOOROO CONTROLLERS may result in prohibition of use in the USA.

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Last Updated: March 18, 2026

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8.2.6.2 libusb

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8.2.6.3 RtMidi

This application uses RtMidi, a set of C++ classes providing a common API for realtime MIDI input/output, licensed under the MIT License.

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8.2.6.4 LibreMidi

This application uses LibreMidi, a modern C++ library for realtime and virtual MIDI input/output, licensed under the MIT License.

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8.2.6.5 Sparkle Framework

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8.2.6.8 dfu-util

This application uses dfu-util, an open source implementation of the USB Device Firmware Upgrade (DFU) protocol, to flash firmware updates to Gooroo hardware.

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