Playtime Reference

2025-05-15

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Introduction



You are viewing the printable PDF version of the Playtime Reference. For a better and more interactive reading experience, visit the online version!

| Last update of text: | 2025-03-15 (v2.18.0) |
|-----------------------------|----------------------|
| Last update of screenshots: | 2025-03-15 (v2.18.0) |

What is Playtime?

Playtime is a powerful and versatile **session view** or **clip launcher** made specifically for the DAW REAPER. It is designed as a creative instrument for recording and triggering both audio and MIDI clips, making it ideal for **live performances**, **improvisation**, **jamming**, **looping** and **sketching arrangements**.

As part of the Helgobox plug-in, Playtime integrates seamlessly with REAPER by leveraging its unique native-speed extension API. This deep integration provides a smoother and more efficient user experience compared to using REAPER alongside other DAWs.

For a more detailed introduction to Playtime and a shiny presentation of its features, visit the Playtime website.

About this document

This reference provides a detailed guide to Playtime's usage, concepts, and features.



It is the place for user-contributed content and contains links to other related content, such as tutorials and guides.

Installation

At first, please follow the installation instructions for Helgobox, the add-on that contains Playtime.

Playtime main toolbar button

After installing Helgobox, the easiest way to access Playtime is by using the convenient button in REAPER's main toolbar.

You can add this button very easily by doing this:

- 1. Select Extensions > Helgobox > Show welcome screen
- 2. Check "Add Playtime button to toolbar"

| H su | elgobox has been ccessfully installed! |
|-------------|---|
| Cons opt | sider the following options to imize your user experience: |
| | 🗸 Add Playtime button to main toolbar |
| | Send errors to developer automatically |
| | ✓ Show errors in console |
| | ✓ Notify about updates |
| E> | Tip: You can come back here at any time via αtensions → Helgobox → Show welcome screen |
| | Close |

Alternatives

If you don't like that button, here are a few alternatives.



Manually removing the button from the main toolbar is not going to work: You will have it back the next time you start REAPER. In order to remove the button

Start directly via action

Playtime provides the action Helgobox/Playtime: Show/hide Playtime, which you can invoke from the REAPER action list or via **Extensions > Helgobox > Playtime > Show/hide Playtime**. In the action list, you can also assign your preferred keyboard shortcut. The default is Shift + Cmd/Ctrl + P.

Add the button to another toolbar

You can add the Playtime button to your own toolbar like this:

- 1. Right-click the toolbar and choose **Customize toolbar...**
- 2. Click [Add...] (should open the REAPER action list)
- 3. Search for the action Helgobox/Playtime: Show/hide Playtime and double-click it.

That's it! you should now see the button in your custom toolbar.

Basic usage

Let's get familiar with the basics!

A typical Playtime usage scenario, from beginning to end, looks like this:

- 1. Prepare
- 2. Create clips
- 3. Play clips
- 4. Use grid controllers
- 5. Adjust clips
- 6. Structure the song
- 7. Create an arrangement
- 8. Render

In the following sections, we will learn step by step how to do this.



This guide assumes that you already installed Playtime. If not, head to the Installation page!

Prepare

At first, we need to do some preparations.

1. Start REAPER

Playtime runs within REAPER, so at first you need to start REAPER.

2. Set up your audio and MIDI devices

If you haven't done it already, you should let REAPER know which audio and MIDI devices you are planning to use with it, because Playtime will use them as well!

- 1. Open the REAPER preferences via **Options > Preferences/Settings...**
- 2. In the section **Audio > Device**, configure your audio input and output.
- 3. In the section **Audio > MIDI Inputs**, configure your MIDI input devices, such as music keyboards.
- 4. In the section **Audio > MIDI Outputs**, configure your MIDI output devices, such as hardware synthesizers.

If you want to know more about this process, please consult the one and only REAPER user guide.

3. Fire up Playtime

Press the button in REAPER's main toolbar, or use any of the alternative ways to start Playtime (described in Installation). After pressing the button, you should see the Playtime window with an empty Matrix:



Figure 1. Playtime window with empty matrix

You can press Shift + Cmd/Ctrl + P to show/hide the Playtime window at any time.

At this point, you could directly continue with Create clips, but I strongly recommend to read the following deep dive, as it will improve your understanding of how Playtime works!

Deep dive: Playtime button

Pressing the button actually does multiple things in one go:

- 1. Create a new REAPER track named "Playtime" at the very top of the project.
- 2. Arm the track and set its input to "MIDI: All: All channels".
- 3. Add an instance of the Helgobox plug-in to the track's FX chain.
- 4. Open the Helgobox App associated with that new Helgobox instance.
- 5. Navigate to the Playtime section of the App.
- 6. Create a Playtime Matrix in this Helgobox instance.

If you wanted, you could do all of those steps manually instead:

• Right-click REAPER's track control panel and choose Insert virtual instrument on new

track...

- Double-click instrument plug-in "VSTi: Helgobox ReaLearn & Playtime (Helgoboss)"
- Optionally rename the track to "Playtime"
- In the Helgobox plug-in window, press Menu > Show app.
- In the Helgobox app window, press the 🕑 button in the Navigation bar on the left.
- Press the button [Create a Playtime Matrix]

What we learn from that:

- Playtime is built into Helgobox, which is an instrument plug-in, so there needs to be an instance of it somewhere in your project. → This is a good thing because it means that you can play it like an instrument!
- A new Helgobox instance doesn't have a Playtime Matrix by default. You first need to create one. → This means Playtime doesn't consume any CPU and memory if you don't use it!

Create clips

Playtime is all about clips, small snippets of audio or MIDI that you can freely play together with other clips to compose a larger musical piece.

Before we can play a clip, we need to create one. Let's do this!

1. Create a column

At first, we need to make some space for the clip within the Matrix. Press the Add column button on the right of Matrix settings to add a new Column.

You should then see a new column named "Column 1" with empty slots that can take our new clip.

Column track

This didn't just create a new column, it also created a new REAPER track with the same name, the so-called Column track. Playtime will play clips within this column through that track.



Exactly as in REAPER, Playtime columns don't have a type. They can always play both, audio and MIDI clips. The Track input type indicator looks a bit as if the column would have a special type, but it really just reflects the input currently selected for recording clips.

Alternatives

Use matrix templates

Instead of creating the column manually, you could also have started with a template by

pressing Mixed in the Template panel, for example.

Import existing tracks

Maybe you have existing tracks already that you want to use as column tracks. In that case, select them, right-click Matrix settings and choose Insert column for each selected track.

2. Create a clip

There are many ways to create a new clip. Let's explore the most common ones.

Import an existing audio or MIDI file

Maybe you have an existing audio or MIDI file somewhere on your computer. Simply drag it from your favorite file manager or from REAPER's media explorer onto one of the empty slots! See Slot drag-and-drop support for details.

Alternatives

Use file picker

You can pick the file using Playtime's own file picker by right-clicking an empty slot and pressing Import file(s)....

Import an existing REAPER item

Maybe you have an existing item on a REAPER track that you want to turn into a Playtime clip.

- 1. Select the item
- 2. Right-click an empty slot and choose Import selected item(s) into slot

This does more than just importing the audio file or MIDI data from the item: It also translates many of the item's properties, such as the item cut and pitch, to Playtime clip properties.

Create an empty MIDI clip

If you want to start entering MIDI notes from scratch, simply double-click the slot. This will create an empty MIDI clip with the length of 1 bar.

Record a clip

Playtime offers plenty of ways to record clips directly. The most common one is to record a Loop of rhythmic material while Playtime is playing.

In this example, we are going to record an audio loop to a click:

1. Start playback

Start playback in Playtime by pressing the Start/stop playback button in the transport section of the toolbar or simply by pressing the Space key. The Visual metronome in the middle of the Playtime text

logo should start running.

2. Turn on metronome

Turn on the metronome by pressing the Metronome button in the tempo section of the toolbar. You should now hear the metronome clicking.

3. Choose track input

Press Track input in the track panel below the column in order to choose the audio input channel(s) from which you want to record.



If you don't see the input section, increase the height of the track panel a bit by grabbing the resize handle above the track panels and dragging it up.

4. Arm track

Press the round Arm track button. It should turn red and record buttons should appear in all empty slots of that column.



If you record from a microphone and don't wear a headphone, you probably should turn off input monitoring by pressing Input monitoring off. Otherwise, you might hear loud feedback.

5. Get ready

At this point, you can try making some noise. Do you see something in the meter? Good! Now, get ready for recording!

6. Start recording

Shortly after the start of a bar, press the Record clip button in an empty slot. You should see a countdown which will reach zero exactly when the next bar starts. The record button will turn red and Playtime will record whatever you play.

7. Stop recording

Press the red Record clip button again to indicate that you want to stop recording. The button will start to blink and turn into a play button as soon as the next bar starts. Playtime will play back your recording repeatedly.

8. Be happy

Congratulations, you have recorded your first Loop. If you didn't get the timing right, don't worry. After some attempts, you will get the hang of it. Plus, Playtime offers quite a few ways to make recording clips less stressful.

Variations

There are many variations of above recording procedure. Let's look at a few aspects that you

can do differently:

Record MIDI instead of audio

If you want to record MIDI, choose a MIDI device in step 3. Choose track input. You probably also want to put an instrument on the FX chain of the Column track by pressing the FX chain button, or route the track to an external MIDI synthesizer by pressing the Track routing button.

Record a one-shot instead of a loop

If you want to record material that should play just once without being repeated, open the Matrix recording settings and uncheck the Looped checkbox. If you do that, the recorded material will **not** immediately be played back after recording.

Stop recording automatically

Find it too stressful having to press the stop button **while** you are playing? Often we know in advance how many beats or bars we want to record. You can tell Playtime by opening the Matrix recording settings, enabling Limit recording length and choosing the desired Length. After that, Playtime will stop clip recordings automatically.

Wait longer until the recording starts

Find it too stressful having to grab your instrument within the short time period after pressing the record button? One way to get more time is to adjust the Clip start timing. For example, you could set Start timing to **4 bars** instead of just **1 bar**. Or you do it just for one specific column.

However, this approach has downsides. It will also have an effect on playing clips. Plus, you might have to wait quite long to get your turn. The next variation might suit you better.

Record in stopped state with count-in

There's another way to give you more time to prepare. So far we have always recorded while Playtime was already playing, but we can also start recording while it's still stopped. That gives us the possibility of an arbitrarily long count-in phase. See Count-in recording.

Record via foot switch

One more way to give you more time is to start recording with your foot instead of your hand. For this, Playtime offers the possibility to start recording clips via MIDI. In addition, it offers the convenient Smart record toolbar button, which makes it possible to use just one button - or foot switch - to record into the next non-occupied slot.

- 1. Press the Show/hide MIDI triggers button in the toolbar. This should reveal a small MIDI trigger area on the right sight of the Smart record button.
- 2. Press that MIDI trigger area. It should turn red.
- 3. Press the MIDI foot switch connected to your MIDI keyboard. Playtime should pick it up. If not, see Troubleshooting.
- 4. Press the MIDI foot switch to start recording.
- 5. Press it again to stop recording.

You can hide the MIDI trigger areas at any time by pressing the Show/hide MIDI triggers button again. They will remain active!

Record with tempo detection and without click

All the approaches that we have talked about so far require a metronome or another clip to provide a rhythmical reference. However, imagine you want to do a looper-style live improvisation, without metronome. In that case, you can do a Tempo detection recording.

Record non-rhythmic material

Playtime suites itself very much for rhythmic material. But what if you want to record something that's tempo-independent? In that case, you probably want two things:

- Recording should start immediately, no need to wait until the next bar.
- Playtime shouldn't time-stretch your clip later on when changing the project playback tempo.

You can simply achieve that by setting the Start timing in the Matrix playback settings to Immediately. If you want to use this behavior just for a specific column, you can override this setting on column level instead!

MIDI overdub

Maybe you already have a MIDI clip and want to slowly add some notes by playing them on your keyboard:

- 1. Select the desired (looped) MIDI clip by clicking the Slot content area.
- 2. In the Clip inspector on the right side, press the Overdub button. The clip should start playing repeatedly.
- 3. Play some MIDI notes on your music keyboard. They will be recorded into the playing clip. You will hear them on the next repetition.
- 4. When you are done, press the same button again.



Many of the above aspects can be combined, which gives you a maximum of flexibility.

Play clips

As soon as you have some clips in the matrix, you can play them!

Unlike items on the REAPER timeline, you can start and stop clips totally freely. There are no rules, which makes Playtime very suitable for improvisation.

Playing clips using the app

The obvious way to play a clip is to use your mouse: Press the Trigger slot button of its containing Slot:

- If Playtime's transport was stopped before you pressed the button (see Start/stop playback button in the toolbar), Playtime and your clip should start playing immediately.
- If Playtime's transport was playing already, the clip should start playing according to the configured Clip start timing, by default at the next bar.

You can stop the clip by pressing the <u>same button</u> again, which now appears as a stop icon. The clip should stop playing according to the configured <u>Clip stop timing</u>.

Playtime pipes audio and MIDI directly to the column tracks!



Playtime "magically" plays the clip's MIDI or audio content directly through the column track of the containing column. It doesn't use any sends for this! In fact, the Helgobox Plug-In itself doesn't produce any audio or MIDI data at all.^[1]



You can hide or close the app window at any time. This will not affect playback or recording. Playtime also works without its user interface!

Playing clips using a MIDI keyboard

Playtime allows you to play your clips by pressing keys on your MIDI keyboard:

- 1. Press the Show/hide MIDI triggers button. This should reveal small MIDI trigger areas on the right side of each slot cell.
- 2. Press the MIDI trigger area of the slot that you want to play. It should turn red.
- 3. Press a key on your MIDI keyboard. Playtime should pick it up. If not, see Troubleshooting.
- 4. Press the key once. The clip should start playing.
- 5. Press the key again. The clip should stop.

Variations

Play as long as you press the key

By default, pressing the key toggles between *playing* and *stopped*. You can change that, for example on column level, by setting the column property Trigger mode to Momentary in the Column inspector. Then pressing the key down will start playback and releasing it will stop playback. This goes very well with Clip start timing Immediately.

Restart when pressing the key again

Another Trigger mode is Retrigger: Tapping the key once will start playback and tapping it again will trigger a restart.

Play with different velocities

Maybe you want to play the clip with a lower volume when hitting the key softly and with a higher volume when hitting it hard. You can achieve this and fine-tune the effect by adjusting the matrix property Velocity sensitivity in the Matrix inspector. It is of course also adjustable on column and clip level.

Suitable for finger drumming!

Triggering clips via MIDI happens in real-time! As with any other instrument plug-in that you use in REAPER, the latency depends on the block size set in REAPER.

So if you use Clip start timing Immediately and set the block size in REAPER **Options** > **Preferences/Settings...** > **Device** low enough (e.g. 256 samples), you will not perceive any delay between pressing the key and hearing the sound.

Is Playtime a sampler?

When playing Playtime via MIDI, it works a bit like a sampler. But instead of playing single tones, it is optimized to trigger complete musical *phrases*. And not just audio phrases, also MIDI sequences.

You are basically working on a higher level. Each of the triggered phrases in turn can trigger samplers or synthesizers ... or even Playtime itself.

Playing multiple clips

The fun starts when playing multiple clips simultaneously.

Columns in exclusive mode

By default, playback within one column is limited to just one slot. We call this Exclusive mode, because one slot has the exclusive right of playing.

Example 1. Exclusive mode

Let's say you have clip A in the first column cell and clip B in the second column cell.

- 1. Trigger clip A and wait until it started playing
- 2. Now, trigger clip B

You will see that clip A stops and clip B takes over.

The consequence is: If you want to play multiple slots simultaneously, you would need to create a new column. Musically, that makes a lot of sense. It is very common in clip launchers to have one column per instrument. And one instrument can normally only play one phrase at a time. Alternating between those phrases is often exactly what people want.

Columns in non-exclusive mode

Playtime is a quite relaxed fellow and allows you to opt out of the exclusive mode. The easiest way to do this is to press the Exclusive mode button in the Column cell.

After disabling exclusive mode, you can play multiple clips within that column, as your heart desires.

Playing in sync

Usually when playing multiple clips within a clip launcher, one expects those clips to play perfectly in sync with each other. This "perfectly in sync" is by default given in Playtime, but it all depends on how each of the clips is configured.

If you have messed with Clip start timing, Start position, Length or Sync to project tempo, your clips might get out of sync. If this happens, and you don't know why, revisit In sync to deepen your understanding.

Row and column transport buttons

You can play all clips in a row at once by pressing the Play scene button at the very left.

You can permanently stop all clips in a column at once by pressing the Stop column button in the Column cell at the top of the column. Double-clicking this button stops the clips abruptly.

You can permanently stop all clips in the complete matrix at once by pressing the Stop matrix button in the Matrix cell at the top-left of the matrix area. Double-clicking this button stops the clips abruptly.

Starting and stopping Playtime playback

Playtime's playback can be started and stopped instance-wide, using either the Start/stop playback button in the Transport section or the Space key.

Stopping Playtime playback doesn't just stop all playing slots, it also memorizes which ones it stopped, so that next time you start playback, they will play again. We call those memorized slots ignited slots. Ignited slots have a circle around their play button.

Starting Playtime playback will automatically start all ignited slots. If you don't want that, press the Stop matrix or Stop column button to un-ignite the slots.

Alternatives

Conducting a count-in by tapping tempo

A neat way to start playback with a new tempo is to stop playback and repeatedly press the Tap tempo button in a "1, 2, 3, 4"-style count-in.

Playing together with the REAPER arrangement

Starting playback within REAPER

Maybe you already have some items on the REAPER timeline that you want to improvise over using Playtime. All you need to do for this is to start playback within REAPER:

- 1. Click somewhere into the REAPER main window in order to switch focus to REAPER.
- 2. Press Space to start REAPER playback.

Playtime will now play synchronized to the arrangement. Changing the REAPER play cursor position will automatically retrigger Playtime's clip so that they stay in sync.

Full transport synchronization

Maybe you would like to always play together with the REAPER arrangement, even if you start playback within Playtime:

- 1. Set Transport synchronization in the Matrix inspector to Full
- 2. Press Space within Playtime.

REAPER should start playing as well.

Use grid controllers



Grid controllers are optional!

You don't need a Grid controller to use Playtime! However, using one adds a tactile dimension to the clip-launching experience, making Playtime feel more like a distinct musical instrument. It's a fun way to enhance interaction and creativity.

If your Grid controller is on the list of supported devices, here's how you set it up:

- 1. Ensure that Playtime is running and you see its User interface.
- 2. If the device is already connected to the USB port, **disconnect it** and wait a few seconds!
- 3. **Connect** the device to the USB port.
- 4. After waiting for a few seconds, Playtime should show a green success notice at the bottom of the screen.

After that, the device should visually reflect the contents of the Playtime Matrix and you should be able to control the matrix with it.

In addition, the device should now appear in the ReaLearn controllers section of the Settings dialog. This is also the place where you can manually set up the device in case it was not auto-detected.

Troubleshooting

If the device is not detected, please proceed as follows:

- Execute REAPER action REAPER actions and copy the output to the clipboard.
- If the controller is not in the list of supported devices, create a feature request, naming your controller and including the copied info.
- If the controller is in the list, write an email to info@helgoboss.org, naming your controller and including the copied info.

Related videos



Adjust clips

Now that you know how to create and play clips, you might want change them a bit.

Editing the clip source

If you are dealing with MIDI clips, you can easily edit the clip Source:

- 1. Double-click the <u>Slot content</u> area of the desired slot. This should open the clip source in REAPER's MIDI editor.
- 2. Make changes in the MIDI editor. Any change should be applied right away if the clip is currently playing.
- 3. You can also use the playback controls of REAPER's MIDI editor or arrange view. As soon as you use them, the clip will stop playing in Playtime and you can play it within REAPER instead. As long as the MIDI editor is open, the clip is mirrored by a regular REAPER MIDI item positioned on the Column track.
- 4. Close the MIDI editor.

Any change can be undone using Playtime's Title bar function.

Adjusting clip properties

Each clip has certain properties in addition to its actual source, which you can adjust.

1. Select the slot

Select the desired slot by clicking the Slot content area.

This will show the properties of the clip within that slot in the Clip inspector on the right side.

2. Adjust clip properties

Now go ahead and check what properties are available in the inspector.

We will just take the example of the **pitch** property. Find the Pitch setting, move your mouse over the number **0.00** semitones and use your mouse wheel or any other General usage interaction to change the pitch. For example, to **12.00** semitones, which corresponds to one octave.

The new pitch will be applied right away or according to the matrix start timing.

Structure the song

Playtime's Matrix area suits itself for organizing the clips into a musical structure.

Rename slots

Renaming a slot is as easy as selecting the Slot cell and pressing F2, or right-clicking the cell and selecting Rename primary clip....

Add more columns

You can add more columns, for example one column per instrument.

You can rename a column or its corresponding Column track by selecting the Column cell and pressing F2, or right-clicking the cell and selecting Rename column or track....

Drag and drop things

You can freely drag and drop slot contents or other things. Check out the following links to learn more about it:

- Column drag-and-drop support
- Row drag-and-drop support
- Slot drag-and-drop support

Add more rows

You can add more rows if you are running out of vertical space for your clips. Just press the Add row button or right-click a Row cell and choose Insert row below.

Renaming works just as with columns.

Use colors to spice things up

There are two things in a Matrix that can get individual colors: Tracks and clips.

In order to change the color of a track, click the Track label to select the track. Then change the color in the Track inspector on the right. This sets the color of the REAPER track.

In order to change the color of an individual clip, select the <u>Slot cell</u> and change the color in the <u>Clip</u> inspector on the right.

Build scenes

One particular way to make use of rows of the matrix is to consider a row as a Scene - a part within a song. By organizing your clips into scenes, the scene column on the left of the matrix basically turns into a playlist for your song, which is very convenient if you want to turn the song into an arrangement.

One function which greatly helps to build scenes (apart from drag-and-drop and copy-and-paste) is Build scene from currently playing clips, which you can access by right-clicking the Row label of an empty row.

Create an arrangement

Maybe you want to use Playtime for live improvisation only, in which case the basic usage guide would end here. But chances are, you want to go further than that and turn your Playtime matrix into a proper REAPER arrangement at some point.

This is also important if you control Playtime with items or use meta clips and your goal is to include the output of Playtime in the final rendering. Unlike traditional instrument plug-ins, Playtime doesn't participate in rendering! ^[1] Which is why you first need to turn the output into a conventional REAPER arrangement.

There are two ways of building an arrangement.

Export matrix content

You can export parts of the matrix to the arrangement directly:

1. Make a time selection (optional)

You can influence the start and length of the export on the timeline by creating a time selection on the REAPER timeline. If you don't do that, the length will correspond to the longest exported clip.

2. Export the desired content

- If you want to export all clips in the matrix, right-click the Matrix cell and choose Export matrix to arrangement.
- If you want to export all clips in a particular column, right-click the corresponding Column cell and choose Export column to arrangement.

- If you want to export all clips in a particular row, right-click the corresponding Row cell and choose Export row to arrangement.
- If you want to export the primary clip of a slot, right-click the corresponding Slot cell and choose Export primary clip to arrangement.

Quickly export different parts of your song

Maybe you have named the matrix rows so that they represent different parts of your song, such as *Verse*, *Chorus*, *Bridge* and *Solo*. Now you want to export those parts like this:

- 2x Verse
- 1x Chorus
- 1x Bridge
- 1x Verse
- 1x Solo
- 2x Chorus

Making such an export can be done very quickly just by using keyboard keys:

- 1. Select the Verse row cell
- 2. Press key A 2 times (the shortcut for exporting the selected cell to the arrangement)
- 3. Select the Chorus row cell
- 4. Press key A 1 time
- 5. ...

This works nicely because after exporting a row, Playtime automatically moves the play cursor or the complete time selection to the right.

Record and write a sequence

Another way to export an arrangement is to record a Playtime performance and write the result to the arrangement. This is done using Playtime's built-in Matrix sequencer:

1. Start recording a new matrix sequence

Press the Record matrix sequence button in the Matrix sequencer of the Toolbar.

This will always create a new sequence and never overwrite an existing one, so you can press this anytime.

2. Perform your song within Playtime

Playtime will record all play and stop interactions with your matrix.

3. Stop recording the sequence

Press the Record matrix sequence button again to stop recording.

4. Play sequence (optional)

If you want, you can play the sequence directly within Playtime by pressing the Play/stop matrix sequence.

5. Write the sequence to the arrangement

If you are satisfied, you can write the sequence to the REAPER tracks by pressing Write to arrangement.

The translation from clips to items

What happens in both cases is that Playtime translates its clips into REAPER items.

Ideally, the items - when played back by REAPER - should sound exactly as the clips in Playtime. If you detect deviations, please open a bug report in the Helgobox issue tracker.

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The resulting items are played back by REAPER alone. Those are conventional REAPER items, there is no connection to Playtime anymore!

That also means that if you share the REAPER project file with other people, they won't need a Playtime installation to play back the arrangement.

Deep-dive: Translation from clips to items

When translating clips to items, Playtime may set track, item or take properties.

Here are some noteworthy translations:

Free item positioning

Playtime enables free item positioning for a track as soon as it detects that some items written to the same track would overlap in time. This usually happens when two clips play at the same time on the same track. Not enabling it would lead to a hard-to-see overlap.

Time base

If the clip is configured to synchronize to the project tempo, it chooses item time base **Beats (auto-stretch at tempo changes)**, because this reflects how Playtime itself would behave when changing the tempo. With this mode, REAPER may automatically create stretch markers.

If the clip is configured to **not** synchronize to the project tempo, it chooses item timebase **Time** (if start timing is Immediately) or **Beats (position only)** (the the start timing is quantized), because those settings resemble Playtime's clip playing behavior best.

Play rate

For audio clips, the play rate is always set to the ratio between the clip's Tempo and the project tempo.

Render

At the end, you probably want to render/mix-down/export the arrangement created in the previous step to an audio file.

All you need to do is to use REAPER's built-in render functionality as usual:

- 1. Open File > Render...
- 2. Change options if desired
- 3. Press the [Render] button

That's it! Playtime doesn't change anything about the rendering process. In fact, it's not involved anymore at this point.

[1] It's possible that this will be added in the future by introducing a new mode of operation.

Key concepts

This section offers brief descriptions of Playtime's key concepts. An understanding of these concepts is beneficial for effectively using Playtime, regardless of which features you plan to utilize.

Linear vs. non-linear music production

Linear music production

In *linear* music production, tracks are arranged sequentially along a timeline, supporting structured composition and precise arrangement from start to finish.

Non-linear music production

In *non-linear* music production, such as in jamming and sketching, musical elements are arranged in flexible, often loop-based sections that can be triggered or layered in any order, allowing for spontaneous creativity and experimentation.

Playtime's purpose is to add one popular flavor of *non-linear* music production to REAPER: Music production via Session view / Clip launcher.

Session view / Clip launcher

A *session view* or *clip launcher* is a user interface tailored to Non-linear music production where musical elements are arranged in a grid of rows and columns. Each cell typically holds a single musical element, and users can trigger, loop, and record these elements in real time, often for live performance or experimental composition.

Playtime is a session view.

Matrix

In Playtime, a *matrix* is the top-level structure. It is fundamentally a two-dimensional grid of slots that hold clips, arranged in columns and rows. On a broader level, the matrix functions as a container, comparable to a project in REAPER, and includes various settings.

Each Playtime Instance can load a single Playtime matrix. By default, it contains no matrix, so it must be created explicitly. This approach ensures that Helgobox instances dedicated solely to ReaLearn don't consume any Playtime-related CPU or memory resources - you only "pay for what you use".

Playtime Instance

The terms *Playtime Instance* and Helgobox instance are interchangeable — they both refer to the same concept.

Column

In Playtime, a *column* refers to a group of slots, typically arranged vertically.

A column is linked to a Column track, which is used for playing back the clips it contains.

There's one exception: If you load an external matrix preset into Helgobox and an associated column track doesn't exist in the REAPER project, the column will be track-less and unusable for playback. In this case, you'll need to manually reassign a track in the Inspector.

By default, only one slot in a column plays at a time, but Playtime also allows for simultaneous playback of multiple slots in the same column.

In practice, each column typically represents a single musical instrument or vocal track.

Column track

A column track is a normal REAPER track linked to a Playtime Column.

Row

Like a Column, a *row* refers to a group of slots, but arranged horizontally.

A row is always associated with a Scene, so the terms are often used interchangeably.

In practice, each row often represents a part within a larger song structure.

Slot

In Playtime, a *slot* is a fixed position in the matrix that can hold clips and can be played back or stopped. Each slot functions as a mini audio player.

Typically, a slot contains a single clip, but Playtime allows multiple clips in a slot to play back simultaneously. In such cases, the Clip start timing of each individual clip is relevant. The slot itself does not contain any settings.

Clip

In Playtime, a *clip* is a container that holds a snippet of audio or MIDI, referred to as the Source, and can be configured in various ways. It is somewhat comparable to an *item* in REAPER.

In practice, a clip is often a short, beat-aligned loop.

Source

In Playtime, a *source* represents the raw media data.

Audio source

An *audio* source contains <u>audio</u> data. Technically, it is not more than a reference to an audio file, e.g. a WAV or MP3 file. All audio formats supported by REAPER are also supported by Playtime.

MIDI source

A *MIDI* source contains MIDI data. It is typically used to control instruments. Technically, it is an inmemory representation of a sequence of MIDI events, similar to REAPER's *in-project MIDI* sources.

Scene

In Playtime, a *scene* denotes a segment within a larger song structure. It corresponds to a Row.

Each scene features a play button that triggers playback for all slots in that row.

By default, a scene encompasses all <u>slots</u> of the row. However, Playtime allows a <u>Column</u> to opt out of scene playback if desired.

Matrix sequence

A *matrix sequence* is a recording of interactions with the Matrix.

Playtime lets you record matrix interactions into a sequence. Each sequence is saved as part of the matrix. Later, you can play it back, directly in Playtime.

Matrix sequence playback always uses the current matrix settings, slots and clips for playback. Therefore, subsequent playbacks don't necessarily sound the same!

Most importantly, a sequence can be "written down" to a REAPER Arrangement at any time: All clips occurrences are placed on column tracks as REAPER items. This is often done at the point in the song creation process, when you are satisfied with the sequence and want to transition to linear arranging on the REAPER project timeline.

Arrangement

In Playtime, an *arrangement* typically refers to a set of REAPER items on the column tracks of the matrix, making it suitable for Linear music production.

An arrangement can be created ...

- a. ... by writing a Matrix sequence to the arrangement
- b. ... by exporting clips, scenes or the complete matrix to the arrangement
- c. ... by placing items there on your own

Playtime is not necessary to play the arrangement back. You can share a REAPER project containing an arrangement written via Playtime with someone who doesn't own Playtime, and they will still able to play it back! In practice, however, it's recommended to keep Playtime as part of the project, to freely switch between Session view / Clip launcher and Arrangement.

Clip start timing

The clip *start timing* is a configuration property for a Clip. Because of its importance, it's mentioned here already as a key concept.

The *start timing* decides when a clip actually starts to be played back, after you have triggered its playback.

We distinguish between *quantized* start timings and *immediate* start timing.

Quantized start timing

By default, the start timing is **1 bar**, which means that the clip will start playing at the beginning of the next bar. This is what makes everything in-sync. You can change that to arbitrary quantizations, such as **2 quarter notes** or **3 bars**.

Immediate start timing

Alternatively, you can use the start timing **Immediately**, which makes the clip start playing instantly when you trigger it. Of course, that means **you** are now in charge to get the timing right.

You can set the start timing for the complete matrix and override it on column or clip level.

Clip stop timing

The clip *stop timing* is very similar to the Clip start timing but determines when the clip actually stops after you have triggered its stop. In most cases, it makes sense to leave it at its default settings Like start timing.

Loop vs. one-shot

Loop

In Playtime, a *loop* is a Clip that is *looped*, which simply means that it seamlessly repeats.

One-shot

In Playtime a *one-shot* is a Clip that plays only once, that is, it's not looped.

Bar

A *bar*, also known as a *measure*, is a section of music that contains a specific number of beats, as defined by the Time signature. It helps organize the music into manageable parts, making it easier for musicians to read and perform. For example, in a 4/4 time signature, each bar has four beats.

Beat

A *beat* is the basic unit of time in music, serving as the rhythmic foundation for a piece. It's what you tap your foot to when listening to a song. Beats are grouped together in bars and can vary in length

and speed, creating different feels and tempos in music.

Time signature

A *time signature* in music is a way to show how beats are grouped in a piece. It tells you how many beats are in each Bar and which type of note gets one beat. For example, in a 3/4 time signature, there are three beats per bar, and each beat is a quarter note. It helps musicians understand the rhythm and feel of the music.

Nominator

The top number of a time signature (the **3** in 3/4) is called *nominator* and shows the number of beats per measure.

The bottom number (the **4** in 3/4) is called *denominator* and shows the type of note that counts as one Beat.

In sync

In the context of rhythmical music, *in sync* means that everything is synchronized and the timing aligns correctly. When you play loops in Playtime, you typically want them to be *in sync* with each other and with all other rhythmical material on the reference timeline.

To achieve this synchronization, the following conditions must be met:

Correct start and end position

The start and end positions of the Clip must align **precisely** with a musical Beat in the Source.

Beat-aligned start of playback

Clip playback must start exactly on a beat of the Timeline.

Playback with the same tempo

The clips must be played back in the same tempo (or a multiple of it).

When using Playtime's default settings, all conditions are automatically met:

- Playback with the same tempo is met because by default, Playtime starts and stops a clip *recording* quantized to a 1-bar grid (see Clip start timing).
- Beat-aligned start of playback is met because by default, Playtime starts and stops clip *playback* quantized to a 1-bar grid (see Clip start timing).
- Playback with the same tempo is met because by default, Playtime adjusts the tempo of a clip to the current project tempo (see Sync to project tempo).

Concerning the first condition:

• In most cases, you want the start point to align exactly with the downbeat, and the length to be precisely 1 bar (or a multiple of it).

- If the start point is located between beats or the length falls between bars, the loop will be *out of sync*.
- By selecting a quantized start/stop timing, such as "1 bar", Playtime ensures that your loop's start point and length are perfectly beat-aligned with sample precision!
- If you choose immediate start/stop timing, it's your responsibility to ensure that the start point and length are musically appropriate. Achieving perfect timing with a button or foot pedal press is close to impossible.

Quantization

A *quantization* in Playtime defines when an event should occur, such as the start of clip playback or the stop of a recording. It divides the <u>Timeline</u> into equal time intervals, ensuring that the event occurs only at the beginning of each interval.

A quantization is typically expressed as a Time signature.

Example 2. Quantization examples

3/4

The length of each interval will be 3 quarter notes.

1/8

The length of each interval will be 1 eight's note.

1/1

The length of each interval will be 1 bar.

4/1

The length of each interval will be 4 bars.

Timeline

In Playtime, a *timeline* refers to the concept of time divided into bars and beats, featuring a continuously advancing playhead and a current tempo.

One Matrix has exactly one *reference timeline* at a given point in time. Quantized events such as start of Clip playback are aligned to this reference timeline.

REAPER project timeline

When the REAPER project is playing, Playtime uses the *REAPER project timeline* as reference. That is, it starts and stop playback according to the bar/beat division and tempo of the REAPER project.

Playtime timeline

When the REAPER project is stopped, Playtime uses its own timeline as reference, which however, shares a common tempo with the REAPER project timeline.

Grid controller

A *grid controller* is a unique class of hardware controller designed specifically for clip launching. A well-known example is the Novation Launchpad. A grid controller feature a grid of pads with LEDs arranged in rows and columns — exactly like Playtime's Matrix!

Playtime includes out-of-the-box support for many popular grid controllers. Here you can find the current list of supported devices.

User interface

This section provides a detailed overview of all elements in Playtime's user interface.

Main screen

Playtime's design centers around a single, large *main screen*, offering streamlined access to its most essential features.

| × c | • A | | | Neutral light | If you | record a clip now, Pla play f | ytime will initiate a te | empo detection recor | Start timing Immediately | Purchase & Activa Matr Sequence | te O D → II O rix sequencer ce 1 → → ± | 2.16.11 #0 |
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| | 1 | Verse | 1 | Kick & Snare | • | | ► Riff | | | | Name Kick & Snare | |
| | 2 | Chorus | 1 | ► Full | • | | | | | | Looped | |
| | 3 | Verse | | Kick & Snare 2 | • | | | | | | Volume | 0.00dB |
| | 4 | Chorus | 1 | ► Full | • | | | | | | Pitch | 0.00 |
| | 5 | Bridge | | 4x Kick | • | | | | | | | |
| | 6 | • | | | • | | | | | | Velocity sensitivity | Inherit |
| | 7 | • | | | • | | | | | | Source info Embedded MI | DI |
| | 8 | + | | | • | | | | | | Color Triggering O Inherit | Immediately |
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Figure 2. Main screen

Main screen areas

The main screen is divided into distinct areas, each serving a specific purpose.

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Figure 3. Areas of the main screen

Title bar

The bar at the top of the app window is the *Title bar*. It primarily provides general Helgobox functions that are not specific to Playtime, such as window controls, access to settings, and quick access to the REAPER transport.

Navigation bar

The vertical bar on the left is the *Navigation bar*. Its primary function is to navigate between different Helgobox user interface pages.

Toolbar

The bar directly below the window title bar is the Playtime *toolbar*. It provides quick access to essential performance controls, including play/stop, tempo adjustments, and more.

Content panel

This area appears when you double-click an audio clip. At the moment, it only contains a waveform view.

Matrix area

The large central area is the *matrix area*. It displays the Matrix, which is the very core of Playtime.

Track area

The area at the bottom is the *track area*. It displays the master output track at the very left, followed by the column tracks. The tracks are arranged horizontally, mirroring the layout of REAPER's mixer control panel.

Inspector

The vertical panel on the right side is the *inspector*. It displays detail settings for the currently selected element in the Matrix area or Track area.

Info panel

The area at the bottom right is the *info panel*. It offers context-sensitive help and displays engine statistics.

General usage

See general usage in the Helgobox Reference.

Title bar

The bar at the top of the app window is the *Title bar*. It primarily provides general Helgobox functions that are not specific to Playtime, such as window controls, access to settings, and quick access to the REAPER transport.

This section focuses solely on the Playtime-specific functions. For more information on the general functions, refer to the Title bar section in the Helgobox documentation.

Tempo detection recording hint

If you record a clip now, Playtime will initiate a tempo detection recording!

Playtime is stopped and the metronome is disabled. When you record a clip now, Playtime will initiate a tempo detection recording.

If you would like to do a count-in recording instead, enable the metronome.

You can disable this special behavior in the matrix recording settings.

Purchase & Activate

This shows further information on how you can purchase Playtime and lets you enter the license key.

This button is displayed only if your copy of Playtime has not been activated yet.

See Purchase & Activate dialog.

Navigation bar

The vertical bar on the left is the *Navigation bar*. Its primary function is to navigate between different Helgobox user interface pages.

See Navigation bar in the Helgobox documentation.

Toolbar

The bar directly below the window title bar is the Playtime *toolbar*. It provides quick access to essential performance controls, including play/stop, tempo adjustments, and more.

Metronome

Toggles the metronome.

Right-click to open the tempo settings dialog.

See Tempo settings dialog.

The Playtime metronome is only audible when REAPER is not playing. When REAPER is playing, REAPER's normal metronome takes over. This is also the reason why Playtime automatically syncs Playtime's metronome on/off status to REAPER's metronome on/off status.

Tempo

Controls the project tempo. This is only possible as long as REAPER playback is stopped and no tempo marker exists in the project.

120.00

Development status: To be improved

The ability to follow the REAPER tempo envelope might come in a future update.

Tempo adjustment during REAPER playback is disabled because of potential timing issues. It might be possible to fix this, but it needs a new feature on REAPER side. **Please note**: Using REAPER's own tempo control during project playback is **not** a workaround! It will potentially cause the mentioned timing issues.

Tap tempo

Click here repeatedly in order to tap the tempo. This is especially useful when playback is stopped, in which case it lets you conduct a count-in.

Time signature

Displays the project's time signature.

This is a convenience button for recording clips without first having to choose a

If nothing is recording yet, this will start recording into the next free slot of the first column whose track is armed.

If there is an ongoing recording, it will be stopped.

If playback is stopped, this button is displayed with a pulse animation. This indicates that pressing the button will trigger a count-in recording (if metronome enabled) or tempo detection recording (if metronome disabled).

Right-clicking the smart-record button opens the Smart-record menu.

Right-clicking the button lets you change various settings related to recording clips.

Start/stop playback

Pressing this button start or stops Playtime playback.

Stopping playback automatically **ignites** all clips that have been playing. After stopping, you can use the same button to start playback again or use the tap button to count in with a completely new tempo.

Development status: To be improved

Changing the time signature from here is planned. For the time being, you can do it within REAPER itself.

Play rate

Transport section

Smart record

particular matrix slot.

Provides the Playtime transport controls.

Controls the project play rate. This is only possible as long as REAPER playback is stopped and no tempo marker exists in the project.

Those are different from the REAPER transport controls, as Playtime is

capable of playing and recording while REAPER is stopped.

Starting playback also triggers playback of all previously **ignited** clips in the matrix. If you want to permanently stop all ignited clips before playback, simply click the matrix stop button.

If you want to start REAPER playback together with Playtime, you have two options:

- a. Start playback within REAPER itself (which automatically starts Playtime playback)
- b. Switch Transport synchronization to Full

Visual metronome

Shows the current position within the bar in beats. Can also be used for tempo tapping.

Matrix start timing

Decides when a clip actually starts playing after you have triggered its playback.

This setting applies to all clips in the matrix, but it can be overridden at column and clip level.

| Start timing | | |
|--------------|---|--|
| Immediately | • | |

See Clip start timing.

Matrix sequencer

The matrix sequencer lets you record play and stop interactions with the matrix and write them to the arrangement when satisfied. Matrix sequencer

Sequence 1

See Matrix sequence.

Record matrix sequence

Starts recording a new matrix performance

This will always create a new sequence. Old sequences are retained, so you can press this anytime without worrying to overwrite old sequences.

Even though the button turns red right after clicking it, you don't need to rush with your performance. After recording, Playtime will automatically remove silence at the beginning of the sequence.

Matrix sequence picker

Pick the active matrix sequence

See Sequences dialog.

Play/stop matrix sequence

Plays or stops the currently active matrix sequence

Write to arrangement

Writes the currently active matrix sequence to REAPER's tracks

If the Playtime column tracks already contain items, pressing this button will show the Arrangement writing mode dialog.

See Record and write a sequence for details.

Show/hide MIDI triggers

Shows or hides MIDI triggers assigned to cells.

The purpose of this feature is to quickly create **simple** and **instance-specific** mappings of MIDI keys/pads/buttons to cells.

- 0
- If you are looking for out-of-the-box support for full-featured grid controllers, such as the Launchpad, see Use grid controllers.
- If you are looking for advanced, highly-customizable control scenarios, you should use ReaLearn with its dedicated Playtime targets.

Here's how you assign a new MIDI trigger to a cell or toolbar button, after showing the MIDI triggers:

- 1. Click the MIDI trigger area in the cell or next to the toolbar button. It should turn red, which indicates that Playtime waits for you to press something.
- 2. Press a key or foot switch on your music keyboard. The area should now turn back to its original color and the corresponding note name or MIDI CC number should appear.
- 3. You can now use the note or foot switch to trigger the cell or invoke the toolbar function.

Powered by ReaLearn

Playtime's MIDI triggers are powered by ReaLearn, Helgobox's controller integration solution. In fact, each Playtime MIDI trigger corresponds to one Key concepts in ReaLearn's Main unit.

When you learn a MIDI trigger, you are actually learning the source of a ReaLearn mapping that Playtime automatically creates for you. The target is pre-configured by Playtime and is nothing more than one of the Playtime targets. The beauty of this is that under the hood, you have the complete power of ReaLearn at your disposal,

Troubleshooting

If nothing happens when you press the note or foot switch, we need to check the MIDI signal flow.

- 1. Press the Navigation bar button in the navigation bar on the left. This should open the plug-in window starring ReaLearn's Main panel.
- 2. Check ReaLearn's input!

By default, the input should be set to Input/output section. This means that ReaLearn captures MIDI messages from the surrounding REAPER track (the one containing this Helgobox instance). In this case, make sure that the track is armed and input monitoring is switched on!

If you want, you can also set the input to a specific device instead! In that case, the Helgobox track doesn't need to be armed.

After that, try again learning the MIDI trigger within Playtime!

Leveraging button LEDs using ReaLearn's feedback capabilities



If the buttons on your device have LEDs, you might want to set ReaLearn's output to the same device. With a bit of luck, that makes the LEDs reflect the current clip playback or function state. However, depending on the specific controller, that part might need a bit more work.

Pane toggler

Shows or hides different areas of Playtime's user interface.



Matrix area

The large central area is the *matrix area*. It displays the Matrix, which is the very core of Playtime.



Figure 5. Column cells of the matrix area

| 1 | ► | Verse |
|---|---|--------|
| 2 | ► | Chorus |
| 3 | ► | Verse |
| 4 | ► | Chorus |
| 5 | ► | Bridge |
| 6 | ► | |
| 7 | | |
| 8 | ► | |
| | | + |

Figure 6. Row cells of the matrix area

| ► | Kick & Snare | • | | Riff | |
|---|----------------|---|--|------|--|
| ► | Full | • | | | |
| ► | Kick & Snare 2 | • | | | |
| ► | Full | • | | | |
| | 4x Kick | • | | | |
| | | • | | | |
| | | • | | | |
| | | • | | | |

Figure 7. Slot cells of the matrix area

Template panel



Lets you pick among a bunch of simple matrix templates.

This is only shown if the matrix doesn't have any columns yet.

Audio

Creates a simple matrix with all track inputs set to audio channels.



MIDI

Creates a simple matrix with all track inputs set to MIDI devices.

Mixed

Creates a simple matrix with half of the track inputs set to audio channels and the other half to MIDI devices.

General

Add column

Adds a new column to the matrix and associates it with a newly created REAPER track.

Adding a new column automatically creates a corresponding REAPER track, on which clips in this column will be played back. See Column track.

Add row

Adds a new row to the matrix

Scroll indicator

This arrow tells that you are seeing only a part of the matrix and that you can scroll in the indicated direction to see more of it!

Matrix cell

This cell represents the complete matrix including all of its columns, rows and slots.

Stop matrix











Matrix settings

38

A single click stops all playing clips according to their stop timing.

A double click stops all playing clips instantly.

Matrix settings

Selects the matrix settings cell. This makes the inspector show settings related to the complete matrix.

See Matrix inspector.

Matrix settings



Right-clicking this area opens the Matrix context menu.

Column cell

This cell represents the complete column, including all of its slots.

If you don't see the upper part, check Show column numbers.

Column drag-and-drop support

Reorder column

Drag the cell left or right to change the position of the column.

Exclusive mode

This lights up if the column is in exclusive mode, which means that only one slot at a time will usually be playing.

You can also click this button to toggle exclusive mode on/off.

This is a shortcut for Exclusive mode.

Follow scenes

This lights up if the column follows scenes. You can also click this button to follow/unfollow.



This is a shortcut for Follow scenes.

Has overrides







1X





Trigger slot

Plays, retriggers or stops all clips in this slot depending on the trigger behavior configured for the matrix.

Stop: A single click stops all contained clips according to their stop timing. A double click stops all contained clips instantly.

Record clip

Starts recording a new clip into this slot.

This is only available if the corresponding Column track is armed.

Slot content

Selects this slot cell. This makes the inspector show settings for each clip in this slot.

Kick & Snare

2

A double click on a filled slot cell opens the waveform view or the MIDI editor of the primary clip in this slot. A double click on an empty slot cell creates an empty MIDI clip.

See Slot inspector.



Right-clicking this area opens the Slot context menu.

Slot drag-and-drop support

Move slot contents

Drag this area onto another slot in order to move all clips within this slot to the other slot.

Copy slot contents

Drag this area onto another slot while holding Cmd/Ctrl in order to copy all clips within this slot to the other slot.

Import content

Drag a MIDI or audio file from outside onto this area in order to import it as a clip. This should work from the REAPER media explorer, from other plug-ins that offer dragging out content as files and from most file managers.



Dragging REAPER items onto the slot won't work, because REAPER items are not real files. Use Import selected item(s) into slot instead!

Number of clips

Shows the number of clips contained in this slot if there's more than one.

If there's more than one clip in the slot, all will be triggered at the same time. However, each

one will start according to its individual start timing.

Track area

The area at the bottom is the *track area*. It displays the master output track at the very left, followed by the column tracks. The tracks are arranged horizontally, mirroring the layout of REAPER's mixer control panel.



Since multiple columns can have the same playback track, it's possible that you see one track panel multiple times!



| Drums | Percussion | 🛉 Bass | 🛉 Guitar | 🕟 Organ | 🕴 Synth |
|--|---|--|--|---|--|
| □ Input □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ | □ Input □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ | Input ↓ 1/2 ▼ | input ↓ 3/4 | □ Input □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ | Input Input |
| All 	→ Origir | All 	→ Origir | Auto 🗣 | Auto 🗣 | All ▼ → Origir ▼ | Auto 🔹 |
| Output | Output | Output | PDC Utput | Output | Output |
| FX N 0.000dB 0 12 6 M 0 -6 -24 -236 | FX N -3.00dB 12 6 M 0 -6 -24 -24 -236 | FX 0. -10.00dB 0 12 6 M 0 -6 -24 -24 -24 -24 -24 -24 -24 -24 | FX N -15.00dB 0 12 6 M 0 -6 -24 -24 -24 -24 -24 -24 -24 -24 | FX 10.00dB | ■ FX 0. -6.00dB 0 12 6 M 0 -6 -24 -24 -236 |

Figure 8. Master track panel



Track panel header

The top of the track panel is the *track panel header*.

Drag-and-drop support

Reorder column

Drag the header left or right to change the position of the corresponding column.

Track input type indicator

This icon indicates whether the track reacts to MIDI or audio input.



+

This should **not** be confused with a track type! Tracks in REAPER/Playtime don't have any type. A track can always **play** both audio and MIDI clips, no matter what's displayed here. The icon

only refers to the current recording input!

Track label

Displays the name of the column playback track.

Track input section

Track input

Pick the hardware input of this track used for recording and input monitoring. This can be a MIDI or audio input.

Playtime captures audio or MIDI input more or less directly from the hardware. That also means that the track's *input* FX chain will not have any effect on the recording! You can work around this limitation by using **Loopback** channels instead of input FX.

 \odot

Selecting **Loopback** channels as audio input doesn't automatically enable them! Make sure that the REAPER setting **Virtual loopback audio hardware channels** in **Options > Preferences/Settings... > Audio** is high enough!

This directly sets the input of the corresponding REAPER track. Although technically not necessary for recording because Playtime doesn't use REAPER's track recording facility, it is important for input monitoring.

MIDI channel filter

Allows to listen to a specific MIDI channel only. Messages from other MIDI channels will be ignored.

This directly sets the input MIDI channel of the corresponding REAPER track.

Map to MIDI channel

Route all incoming MIDI events to a specific MIDI channel at record time.

This directly sets the "Map input to channel" value of the corresponding REAPER track.

Input monitoring

Controls if and when the track input signal will be audible.











<All inputs>

Input monitoring off

Switches input monitoring for this track off. That means you will not hear what your play.

Input monitoring auto

Switches input monitoring to automatic mode. That means it will be on if the track is armed for recording and off if not.

Input monitoring on

Switches input monitoring for this track on. That means you will hear what you play.

Which input monitoring mode you choose also has an effect on how Playtime does latency compensation during recording. Read more about that in Latency compensation during recording.

Example 3. Playtime input monitoring explained

Playtime input monitoring options are slightly different from REAPER's input monitoring options. Each input monitoring option mode translates to a certain combination of REAPER track properties:

| Track input monitoring in Playtime | Track armed in Playtime | Track monitoring in REAPER | Track record input in REAPER | Track armed in REAPER |
|--|----------------------------|----------------------------------|---|--------------------------|
| Off | Νο | Off | Record: input (audio or MIDI) | No |
| Off | Yes | Off | Record: input (audio or MIDI) | Yes |
| Auto | Νο | On (Monitor Input) | Record: input (audio or MIDI) | No |
| Auto | Yes | On (Monitor Input) | Record: input (audio or MIDI) | Yes |
| On | Νο | On (Monitor Input) | Record: disable (input monitoring only) | Yes |
| On | Yes | On (Monitor Input) | Record: input (audio or MIDI) | Yes |

Track output section







PDC info

If the track is affected by Plugin delay compensation (PDC), a small icon will light up.

Tiny latency: 5ms

This track is affected by a tiny latency, which Playtime compensates during playback. **PDC** Input monitoring should be fine.

Significant latency: 20ms

This track is affected by a significant latency, which Playtime compensates during playback. Input monitoring will probably not be too much fun because of the introduced delay.

Critical latency: 200ms

This track is affected by a very high latency, which Playtime compensates during playback. Input monitoring will be absolutely terrible because of high delays. Playback will not be optimal.

Please note that Playtime is a live tool and therefore optimized for low latencies. It will do its best to deal with high latencies, but the experience might be less smooth. Consider turning off the offending FX if you want to use Playtime for jamming!

Pan

Changes the track panning.



This directly sets the pan value of the corresponding REAPER track.

Track volume



Shows the track peaks and lets you control the track volume.

When not enough vertical space is available, this turns into a drag field, visualizing the peaks as color changes.



PDC



This directly sets the volume of the corresponding REAPER track.

Instrument FX

| Shows the first instrument FX on this track. | J |
|--|------------|
| This icon is only visible if there's at least one instrument in the FX chain. | • |
| FX chain | |
| Shows the REAPER FX chain of this track | FX |
| The button is displayed in bold font if there's at least one FX in the chain. | 170 |
| Track routing | |
| Shows the REAPER routing window of this track | ហ |
| Arm track | |
| Arms this track for recording | 0 |
| See [user-interface::track-area:::input-monitoring-explained] to learn translates to REAPER track properties. | n how this |
| Mute track | |
| Mutes this track | М |
| This directly sets the mute state of the corresponding REAPER track. | |
| Solo track | |
| Soloes this track | S |



This directly sets the solo state of the corresponding REAPER track.

Info panel

The area at the bottom right is the *info panel*. It offers context-sensitive help and displays engine statistics.

Help

This tab displays helpful information about the item under the mouse.

Stats

This tab displays information about the current state of the Playtime engine.

Tempo buffer size (in blocks)

Tempo buffer size (in blocks) 0

The current size of the tempo buffer in blocks.

The tempo buffer size determines how many audio blocks Playtime may look ahead in order to prerender audio clips with the correct tempo and sample rate. It is influenced by the "Tempo latency" setting.

See Tempo latency.

Pre-buffered blocks playing (min)

Pre-buffered blocks playing (min) 0

The smallest encountered number of pre-buffered blocks among currently playing audio clips.

Pre-buffered blocks playing (avg)

Pre-buffered blocks playing (avg) 0

The average number of pre-buffered blocks among currently playing audio clips.

Pre-buffered blocks playing (max)

Pre-buffered blocks playing (max) 0

The largest encountered number of pre-buffered blocks among currently playing audio clips.

Pre-buffer fallbacks so far

Pre-buffer fallbacks so far

The number of times in which any audio clip's dynamic pre-buffer couldn't provide the desired prerendered audio content, but the static pre-buffer was able to provide it instead.

0

It's normal that this rises when playing audio clips, especially when using "Immediate" start timing.

Pre-buffer misses so far

Pre-buffer misses so far 0

The number of times in which any audio clip's dynamic pre-buffer couldn't provide the desired prerendered audio content and even the static pre-buffer failed to provide it.

If this rises from time to time, it's usually no reason to worry. Often the non-provided audio content lies within the count-in section of a clip, which is most likely silence anyway. However, if this continuously rises, it's not good, and you might experience audio dropouts or even completely silent clips. In this case, increasing REAPER's audio device buffer size and/or decreasing the sample rate might help. You can also try to increase Playtime's tempo latency.

Warnings

The presence of this button indicates potential issues that might or might not affect you. Click the button to learn more.

Detected 1 issue!

Inspector

The vertical panel on the right side is the *inspector*. It displays detail settings for the currently selected element in the Matrix area or Track area.

What exactly the inspector shows, depends on the current selection:

- Matrix inspector
- Column inspector
- Row inspector
- Slot inspector
- Track inspector

Matrix inspector

You will see this when selecting the Matrix cell.

This inspector is divided into two areas:

Matrix playback settings

Settings that are mainly about playing clips

Matrix recording settings

Settings that are mainly about recording clips

Matrix playback settings

You will see this when selecting the Matrix cell.

$\textbf{Basics} \ominus$

Start timing

Decides when a clip actually starts playing after you have triggered its playback.

This setting applies to all clips in the matrix, but it can be overridden at column and clip level.

See Start timing.

Stop timing

Decides when a clip actually stops playing after you have triggered its stop.

This setting applies to all clips in the matrix, but it can be overridden at column and clip level.

See Stop timing.

Trigger mode

Choose between different modes of triggering slots.

This setting applies to all clips in the matrix, but it can be overridden at column level.

See Trigger mode.

Velocity sensitivity

Velocity sensitivity

Adjusts how much the velocity of an incoming control message (e.g. MIDI note) affects the clip volume when triggering a slot.

0%

This setting applies to all clips in the matrix, but it can be overridden at column and clip level.

See Velocity sensitivity.

Activate slot on trigger

Activate slot on trigger

When slot triggered via controller, also make it the active one.

Transport synchronization



Partial transport synchronization means that starting playback in Playtime doesn't start playback of REAPER's arrangement. You can click this button to switch to **Full transport synchronization**, then starting playback in Playtime will start REAPER playback as well.

MIDI quantization grid

MIDI quantization grid 1 / 16

Which grid to use when quantizing MIDI clips within Playtime.

See Quantize.



If you want more advanced quantization options, do quantization in REAPER's MIDI editor instead.

$\textbf{More} \ominus$

Time stretch mode

Defines which kind of time stretching / pitch shifting algorithm to use on audio clips.

This setting applies to all clips in the matrix, but it can be overridden at column and clip level.

See Time stretch mode.

Resample mode

Resample mode <Project default> <

Defines which kind of resampling algorithm to use on audio clips.

This setting applies to all clips in the matrix, but it can be overridden at column and clip level.

See Resample mode.

Matrix recording settings

You will see this when selecting the Matrix cell.

$\textbf{Basics} \ominus$

Looped

If this is enabled, a clip will immediately start playing after it has been recorded, and it will be looped.

If disabled, the clip will be stopped after its recording, and it will be a **One shot**.

Allow tempo detection recording

Allow tempo detection recording

If this is enabled, recording a clip will initiate a tempo detection recording when playback is stopped and the metronome is off.

If disabled, it will initiate a count-in recording instead.

Limit recording length

Limit recording length

If enabled, recording a clip will automatically stop after a certain amount of time.

This is useful if you know in advance that you want to record, let's say, 2 bars only. Then you don't have to reach for the stop button manually.

Length



Defines the length to be used when limiting the clip recording length.

 $\textbf{MIDI} \ominus$

Detect downbeat



If you enable this, Playtime will record even MIDI notes that you play **before** the scheduled recording start (e.g. before the next bar). It will interpret those notes as pickup beat and adjust the downbeat setting accordingly.

See Downbeat.

Auto-quantize

Auto-quantize

If you enable this, Playtime will automatically quantize a newly recorded MIDI clip after it has been recorded. It will do so using the global matrix quantization grid setting.

See Quantize and MIDI quantization grid.

Settings for new clips \ominus

Sync to project tempo



Set whether playback of the recorded clip (after its recording) should synchronize to the project tempo.

See Sync to project tempo.

Auto

Derives this option automatically from the start timing.

Example: If the recording start timing was quantized, it will choose to synchronize to the project tempo. If it was "Immediately", it will not.

No

Doesn't sync to project tempo.

Yes







Syncs to project tempo.



MIDI reset behavior

MIDI reset behavior that will be assigned to new clips: Recorded clips, imported clips and empty clips created by double-clicking a slot.

See Reset behavior.

Tempo detection range

Tempo detection range 60.00 - 200.00 bpm

This influences how Playtime detects the tempo of imported or recorded audio material.

Playtime uses tempo detection if you import an audio clip or if you do tempo detection recordings. It derives the tempo from the length of the material, which should always give an accurate result if the material is already cut. However, it can easily happen that Playtime detects half-time or double-time tempos. This might result in clip playback being half or twice as fast as you want. By restricting the tempo detection range, you can improve the results.

Example 4. Simple example

Playtime might detect that imported audio material has the following valid tempos: 30bpm, 60bpm, 120bpm, 240 bpm. By setting the tempo detection range to 80bpm - 180bpm, Playtime will for sure pick 120bpm.

Column inspector

You will see this when selecting a Column cell.

This inspector is divided into two areas:

Column playback settings

Settings that are mainly about playing clips

Column recording settings

Settings that are mainly about recording clips

Column playback settings

You will see this when selecting a Column cell.



Playback track

Playback track 1. Drums

Choose the REAPER track on which this column plays its clips.

It's even possible to associate multiple columns with the same playback track!

See Column track.

Custom name

Custom name

Makes it possible to give the column a custom name.

By default, a column inherits the name of its playback track. But if you have multiple columns associated with the same track, assigning custom names can help distinguishing them from each other.

Exclusive mode

Exclusive mode

If exclusive mode is enabled, in this column only one slot at a time will usually be playing. That's good for switching between different variations.

If it's disabled, multiple slots can be playing at the same time. That's great for ad-hoc layering of multiple clips.

Follow scenes

Follow scenes

If the column follows scenes, playing a scene (= pressing the play button of the row) will trigger playback of the corresponding slot in this column. This is great for sketching out parts of a song.

If the column doesn't follow scenes, it will ignore scene playback. Good for letting some clips play independently of the song structure.









$\textbf{More} \ominus$

Start timing

Decides when a clip actually starts playing after you have triggered its playback.

This overrides the start timing (defined in the matrix settings) for all clips in this column.

See Start timing.

Stop timing

Decides when a clip actually stops playing after you have triggered its stop.

This overrides the stop timing (defined in the matrix settings) for all clips in this column.

See Stop timing.

Trigger mode

Choose between different modes of triggering slots.

This overrides the trigger mode defined in the matrix settings for all clips in this column.

Toggle

Press once to play, press again to stop.

Momentary

Press to play, release to stop. Goes well with immediate start/stop timing, feels weird otherwise.

Retrigger

Press once to play, press again to play from start.

Velocity sensitivity

Velocity sensitivity

Adjusts how much the velocity of an incoming control message (e.g. MIDI note) affects the clip volume when triggering a slot.

This overrides the velocity sensitivity (defined in the matrix settings) for all clips in this column.

See Velocity sensitivity.

Toggle

Momentary



0%

Time stretch mode

Defines which kind of time stretching / pitch shifting algorithm to use on audio clips.

This overrides the time stretch mode (defined in the matrix settings) for all clips in this column.

See Time stretch mode.

Resample mode

Defines which kind of resampling algorithm to use on audio clips.

This overrides the resample mode (defined in the matrix settings) for all clips in this column.

See Resample mode.

Column recording settings

You will see this when selecting a Column cell.



There are no column-specific recording settings yet. This section is reserved for the future,

Track inspector

You will see this when selecting a track panel.

Basics

Name



Lets you change the name of the REAPER track.

Color



Change the color of the REAPER track.

Row inspector

You will see this when selecting a Row cell.

Basics

Name

Name Verse

Name of the row.

Change tempo

Change tempo

Enable this if you want to change the project tempo when triggering this row.



This is an experimental feature.

Slot inspector

You will see this when selecting a Slot cell.

Clip picker

Playtime lets you have **multiple** clips within one slot, which is great for

layering clips on top of each other.

Click on one of the clips to reveal its settings!

Clip

This is one of the clips in this slot. Clicking on it will reveal its settings in the area below. Double-clicking on it opens the clip in the waveform view or MIDI editor.





Hi-Hats



Right-clicking one of the clips opens the Clip context menu.

★ Kick & Snare

Drag-and-drop support

Move a clip to another slot

Drag one clip onto another slot in order to move it there.

Clip inspector

Quick actions

Provides quick access to popular clip actions.

Overdub

Starts/stops a MIDI overdub session on this clip.

Overdub

Quantize

Pressing this will quantize or unquantize the MIDI notes of this clip according to the matrix-wide MIDI quantization grid setting.

Quantize

See MIDI quantization grid.

Playtime uses its own quantization algorithm, but it remembers the original event positions in a way that is compatible with REAPER.



If you open a MIDI clip quantized by Playtime in REAPER'S MIDI editor, you will see that the MIDI events are quantized there as well, and you have the possibility to unquantize directly in the MIDI editor.

Vice versa, Playtime detects correctly if a clip has been quantized in REAPER's MIDI editor. That means you can use both quantization methods interchangeably!

$\textbf{Basics} \ominus$

Name



Give your clip a descriptive name!



Another way to change the sanem is to press F2 when the slot is selected.

Looped

If enabled, the clip will loop until you stop it. If disabled, it will become a **One shot**.

See Loop and One-shot.

Volume

Volume

Set the volume of this clip. In case of MIDI, it will adjust the velocity of played MIDI notes.

Pitch

Pitch

Adjust the pitch of this clip. In case of MIDI, only integers are supported.

For audio, pitch shifting is done using REAPER's pitch-shifting/time-stretching engine with the clip's Time stretch mode.



Quantized application

If the clip is currently playing and configured to synchronize to the project tempo, changes of this clip property will not be applied immediately. Instead, Playtime applies them at the next quantization interval, according to the matrix start timing. This ensures that the clip will keep playing in time.

Velocity sensitivity

Velocity sensitivity

Adjusts how much the velocity of an incoming control message (e.g. MIDI note) affects the clip volume when triggering a slot.

This overrides the velocity sensitivity defined in the column or matrix settings.

Source info

Source info Media/guitar-riff.wav





0.00

0.00dB

Displays information about the source of this clip, e.g. the audio file.

See Source.



Right-clicking this area opens the Source context menu.

Color



Pick a color for this clip from the matrix color palette.

If you choose the "Auto" color, the clip will be displayed using the same color as the containing track.

$\textbf{Triggering} \ominus$

Start timing

Decides when a clip actually starts playing after you have triggered its playback.

This overrides the start timing defined in the column or matrix settings.

See Clip start timing.

Immediately

Plays the clip instantly. Good for finger drumming.

Custom

Use a custom quantization for starting the clip.

This can only be set in the matrix settings inspector.



In most cases, picking one of the pre-defined quantizations (e.g. **1 bar**) should be sufficient.

Stop timing

Decides when a clip actually stops playing after you have triggered its stop.

This overrides the stop timing defined in the column or matrix settings.



Custom

Like start timing

Derives the stop timing from the start timing. E.g. if the start timing is "1 bar", the stop timing will also be "1 bar".

Until end of clip

Stops after playing until the end of this clip.

This can easily lead to unintentional concurrent playback of clips when using Exclusive mode.

Like start timing

Until end of clip

Immediately



Whether to adjust the playback tempo of the clip to the project tempo. You usually want to have this enabled for rhythmic material.



→ Downbeat

This alone doesn't guarantee yet that your clip will be played in time. It's just one of multiple ingredients for in-sync playback. See In sync.

0.00 beats



This is comparable to REAPER's item time base setting. In fact, this will be translated to different item time base settings when writing to the arrangement.

Тетро



The original tempo in which the audio material has been recorded.

This setting influences the time stretching factor which Playtime applies to the clip in order to sync it to the project tempo.



This is available for audio clips only. MIDI clips are by its very nature tempoagnostic.

Quantized application



If the clip is currently playing and configured to synchronize to the project tempo, changes of this clip property will not be applied immediately. Instead, Playtime applies them at the next quantization interval, according to the matrix start timing. This ensures that the clip will keep playing in time.

Time signature



4 / 4

The original time signature in which the material has been recorded.

This will be used for display purposes.

Downbeat

Downbeat

0.00 beats

Defines which beat in the material is considered the first downbeat.

If you set a beat greater than 0, Playtime will shift the clip to the left accordingly so that the downbeat ends up exactly on the chosen play start timing quantization.

This setting takes effect the next time you trigger this clip with a quantized start timing.



This can be used to realize an Anacrusis (or pick-up beat). See Detect downbeat.

Section \ominus

Here you can define which part of the audio or MIDI clip you want to play.

You can play with the section start position and length as part of a performance! This distinguishes it from the more permanent "Source cut" settings in the expert section.



Usage with MIDI clips

These properties work for both audio and MIDI clips. When using it on MIDI clips, be aware that the REAPER MIDI editor doesn't indicate the start position or length in any way, which can be confusing. If you want to change the start position and length permanently, it's usually better to adjust the underlying MIDI data.

Start position

Start position



Sets the start position within the clip.

If the clip is configured to sync to the project tempo, this value is adjusted in beats, otherwise in seconds.



Quantized application

If the clip is currently playing and configured to synchronize to the project tempo, changes of this clip property will not be applied immediately. Instead, Playtime applies them at the next quantization interval, according to the matrix start timing. This ensures that the clip will keep playing in time.

Length



Crops the clip to a specific length, starting from the start position. If the length exceeds the end of the source, Playtime will insert silence.

The value **Original** means that the source will end at the original end of the source material.

Use the \div 2 and \times 2 buttons to halve or double the current length.

If the clip is configured to sync to the project tempo, this value is adjusted in beats, otherwise in seconds.



Quantized application

If the clip is currently playing and configured to synchronize to the project tempo,

changes of this clip property will not be applied immediately. Instead, Playtime applies them at the next quantization interval, according to the matrix start timing. This ensures that the clip will keep playing in time.

$\textbf{MIDI} \ominus$

Reset behavior

Choose which MIDI reset messages Playtime should send before and/or after playing the clip.

None

No reset messages at all. Say hello to hanging notes :D

Usually not recommended.

Light left

Ends all playing notes and lifts the sustain pedal when the clip starts. Maybe useful for ambient music.

Extreme left

Resets whatever it can when the clip starts, often leading to a hard mute of the complete instrument.

This setting is very likely to interfere with other clips playing the instrument at the same time.

Light right

Ends all playing notes and lifts the sustain pedal when the clip stops. A reasonable default.

Extreme right

Resets whatever it can when the clip stops, often leading to a hard mute of the complete instrument.

This setting is very likely to interfere with other clips playing the instrument at the same time.

MIDI channel

MIDI channel Original

Re-route the MIDI events in this clip to a MIDI channel of your choice.

None

Light left

Extreme left

Light right

Extreme right

Source fades

Source fades



Time stretch mode

Defines which kind of time stretching / pitch shifting algorithm to use on audio clips.

This overrides the time stretch mode defined in the column or matrix settings.

Playtime uses this algorithm whenever it needs to adjust beat-based audio clips to the current tempo while keeping the original pitch, but also when adjusting the pitch of audio clips.

Quantized application

If the clip is currently playing and configured to synchronize to the project tempo, changes of this clip property will not be applied immediately. Instead, Playtime applies them at the next quantization interval, according to the matrix start timing. This ensures that the clip will keep playing in time.

Vari-speed

i

Changes tempo and pitch together. This uses resampling under the hood (uses much less CPU than real time stretching).

Keeping pitch

Changes tempo while keeping the pitch. This can be quite CPUintensive.

Keeping pitch

Vari-speed

When selecting this option, you can choose between all pitch shifting modes and corresponding sub modes that are supported by REAPER.

Resample mode

Defines which kind of resampling algorithm to use on audio clips.

This overrides the resample mode defined in the column or matrix settings.

Playtime uses resampling in the following cases:

1. Vari-speed time stretching

- 2. Adjusting to play rate changes
- 3. Adjusting clips that have a sample rate other than the project/hardware sample rate

You can choose between all resample modes that are supported by REAPER.

Quantized application



If the clip is currently playing and configured to synchronize to the project tempo, changes of this clip property will not be applied immediately. Instead, Playtime applies them at the next quantization interval, according to the matrix start timing. This ensures that the clip will keep playing in time.

$\textbf{Expert settings} \ominus$

It's usually not necessary to touch the settings in this section.

Source cut: Start

Source cut: Start

0.00s

Sets the start position within the source material.

This is usually set by Playtime itself only, right after recording an audio clip, in order to crop away the count-in phase of the recording.

You may set this yourself, but you should be careful with it as it can easily destroy timing. Using this with MIDI clips is not recommended.

Quantized application

If the clip is currently playing and configured to synchronize to the project tempo, changes of this clip property will not be applied immediately. Instead, Playtime applies them at the next quantization interval, according to the matrix start timing. This ensures that the clip will keep playing in time.

Source cut: Length



Crops the source material to a specific length, starting from the start position. If the length exceeds the end of the source, Playtime will insert silence.

This is usually set by Playtime itself only, right after recording an audio clip, in order to obtain a perfectly cut loop that is independent of the actual length of the audio file.

You may set this yourself, but you should be careful with it as it can easily destroy timing. Using this

with MIDI clips is not recommended.

Quantized application



If the clip is currently playing and configured to synchronize to the project tempo, changes of this clip property will not be applied immediately. Instead, Playtime applies them at the next quantization interval, according to the matrix start timing. This ensures that the clip will keep playing in time.

Dialogs

Dialogs are small windows that are opened on demand.

Purchase & Activate dialog

This dialog opens when clicking the button Purchase & Activate.

1. Purchase

Please order Playtime 2 by following this link:

https://www.helgoboss.org/projects/playtime#buy

2. Enter license key

After the purchase, you should receive your license key via email. Please copy it to the clipboard and press the following button!

Verify license key!

Verify license key!

Reads the license key that you have copied to the clipboard and verifies it, unlocking Playtime's full version on success.

Verify license key!

If unlocking Playtime doesn't work, please write an email to info@helgoboss.org!



The copy protection mechanism of Playtime is as unobtrusive as the one used in REAPER: No iLok, no online verification. Just a regular license key that is checked offline.

No need to worry that you run in demo mode when your gig comes up!

Settings dialog

This dialog opens when pressing the Title bar button in the title bar and navigating to the Playtime section.

| | Settings |
|-------------|--|
| ▼ General | Here you can fine-tune the general appearance of Playtime. |
| Appearance | Show control unit frames |
| Title bar | Show column numbers |
| Shortcuts | Show clip activity |
| ReaLearn | Show cell selection as crosshair |
| Controllers | |
| ▼ Playtime | Snow hypothetical play cursor |
| Appearance | Cell color position Full cell Segmented Vertical bar Progress bar |
| Engine | Cell progress position Full cell Progress bar Vertical cursor |
| | Cell width $(XS S M L XL)$ |
| | Cell height |
| | |
| | |
| | Dismiss |

Appearance

Show control unit frames

Show control unit frames

If supported grid controllers are connected, Playtime usually shows which part of the matrix they are currently controlling by showing a colored frame. You can disable that.

See Control unit frame.

Show column numbers

Show column numbers

If enabled, a column number will appear on top of each column.

Disabling this will give you more vertical space, but also hides the shortcut buttons such as Exclusive mode. In that case, you can still change those things in the Column inspector.

Show clip activity

Show clip activity

Makes a slot cell light up according to the activity of its clips (e.g. when the clip plays a note).







Depending on color settings, this will be more or less visible. If the cell background is used for displaying the clip progress, it's not going to make a difference at all.

Show cell selection as crosshair

Show cell selection as crosshair

If enabled, Playtime will not just highlight the currently selected cells but also all other cells which are in the same row and column. Makes it easier to spot the selected cell.

Show hypothetical play cursor

Show hypothetical play cursor

If enabled, Playtime will also show an additional red cursor in the waveform view that represents the hypothetical playback position.

This is an expert feature usable for timing and bug analysis and should normally be turned off.

Cell color position

Cell color position

| | Full cell | Segmented | Vertical bar | Progress bar |
|--|-----------|-----------|--------------|--------------|
|--|-----------|-----------|--------------|--------------|

Choose how a slot cell shows the color of its primary clip.

Cell progress position

| Cell progress position | | | |
|------------------------|-----------|--------------|-----------------|
| | Full cell | Progress bar | Vertical cursor |
| | | * | |

Choose how a slot cell shows the playback progress of a clip.

Cell width

Cell width



Sets the width of all cells relative to their height.

Cell height

Cell height

XXS XS S M L XL XXL Jumbo

Sets the height of all cells.

In addition, you might be interested in the <u>Settings dialog</u> setting, located in the general appearance section.

Engine

Tempo latency

Tempo latency

Automatic

Adjust how many milliseconds of audio will be pre-buffered ahead of time.

Higher latencies improve resilience against sudden CPU spikes when playing back audio clips. But they will also increase the time that Playtime needs to respond to ad-hoc tempo changes.

Sequences dialog

This dialog opens when pressing the Matrix sequence picker button in the title bar.



Clicking on a sequence makes it the active sequence.
Edit sequence

Edits the sequence.

At the moment, all you can do here is to adjust its name.

Delete sequence

Deletes the sequence.

You can undo this operation using Playtime's built-in undo function.

Arrangement writing mode dialog

This dialog opens when pressing the Write to arrangement button in the title bar and the current arrangement is dirty. It gives you multiple options how to deal with the fact that there are already items in the arrangement.



Replace

Replaces the existing arrangement and places the new one at the start of the project.



Merge at cursor

Merges the new arrangement into the existing one, starting at the current cursor position.

Append

Appends the new arrangement to the existing one.

Append

Merge at cursor

Tempo settings dialog

This dialog opens when right-clicking the Metronome button in the title bar. It lets you adjust various tempo-related settings.



The settings in here are not global! They are saved as part of the matrix and therefore together with the REAPER project.

| | Click and tap | |
|--------------|---------------|--------|
| Click volume | | 0.00dB |
| Tap volume | | 0.00dB |
| Count-in | | 4 bars |

How to change the click sound In order to change the click and tap sound, disable the click in Playtime and do the following in REAPER: 1. Insert → Click source 2. Start playback in REAPER so that you can hear the click sound 3. Right click the click source and and press Source properties 4. Do adjustments as you wish and press Apply whenever you want to hear the result 5. Press Save as default Next time you enable the click in Playtime, it will use the new defaults.

Click and tap

Click volume

Click volume

Set the volume of the metronome click.

0.00dB

Tap volume

Tap volume

Set the volume of the tempo tap sound.

Count-in

Count-in

4 bars

Set the number of count-in bars used when doing count-in recording from stopped state.

Menus

Most of the menus in Playtime are context menus that you can open by right-clicking certain areas.

Smart-record menu

Right-clicking Smart record opens this menu.

Limit recording length

If enabled, recording a clip will automatically stop after a certain amount of time.

This is a shortcut for Limit recording length.

Matrix context menu

Right-clicking Matrix settings opens this context menu.

Insert column for each selected track

Inserts new columns to the right, one for each selected REAPER track.

Insert column right

Inserts a new column to the right and associates it with a newly created REAPER track.

Insert row below

Inserts a new row below.

Export matrix to arrangement

Exports all clips in this matrix to the REAPER arrangement.

Export matrix to clipboard as Lua

Exports the complete matrix to the clipboard as Lua code.

Column context menu

Right-clicking Column label opens this context menu.

Rename column or track...

Renames this column of the associated track.

If the track associated with this column is not associated with any other column, the track will be renamed. In all other cases, the column itself.

Duplicate column

Creates a copy of this column and its associated track and inserts it to the right.

Insert column left

Inserts a new empty column to the left and associates it with a newly created REAPER track.

Insert column right

Inserts a new empty column to the right and associates it with a newly created REAPER track.

Insert column for each selected track

Inserts new empty columns to the right, one for each selected REAPER track.

Remove column

Removes this column, including the associated REAPER track.

Remove column (keep track)

Removes this column but keeps the associated REAPER track.

Export column to arrangement

Exports all clips in this column to the REAPER arrangement.

Export column to clipboard as Lua

Exports the column to the clipboard as Lua code.

Row context menu

Right-clicking Row label opens this context menu.

Rename row...

Renames this row.

Build scene from currently playing clips

Takes all clips that are currently playing in scene-following columns and copies them to this row. In other words, it takes a snapshot of what is currently playing and pastes it into this row.

Copy row

Copies the contents of this row for later pasting.

Cut row

Cuts the contents of this row for later pasting.

Paste row

Pastes previously copied or cut row contents into this row.

Clear row

Clears all slots in this row.

Duplicate row

Creates a copy of this row and inserts it below.

Insert row above

Inserts a new empty row above.

Insert row below

Inserts a new empty row below.

Remove row

Removes this row.

Export row to arrangement

Exports all clips in this row to the REAPER arrangement.

Slot context menu

Right-clicking Slot content opens this context menu.

Rename primary clip...

Renames the primary clip in this slot.

Copy slot

Copies the contents of this slot for later pasting.

Cut slot

Cuts the contents of this slot for later pasting.

Paste slot

Pastes previously copied or cut slot contents into this slot, replacing what is already there.

Clear slot

Removes all clips from this slot.

Import selected item(s) into slot

Creates a clip that resembles the currently selected REAPER item and adds it to this slot. If you selected more than one item, the corresponding clips will end up in the slots below.

Import file(s)...

Lets you pick a file and adds it to this slot as a clip. If you pick more than one file, they will end up in the slots below.

Export primary clip to arrangement

Exports the primary clip of this slot to the REAPER arrangement.

Export primary clip to clipboard as Lua

Exports the primary clip of this slot to the clipboard as Lua code.

This can be helpful if you want to generate a matrix using code.

Clip context menu

Right-clicking one of the clips in the Clip picker opens this context menu.

Remove clip from slot

Removes the clip from this slot.

Promote clip to top

Makes this clip the primary clip of the slot. That means you will see this one in the matrix.

Source context menu

Right-clicking Source info opens this context menu.

Open in media explorer

Opens the source file of this clip in the REAPER media explorer.

Keyboard shortcuts

Playtime provides keyboard shortcuts in addition to the general ones.

| Shortcut | Purpose | |
|----------------------|---|--|
| Cmd + Z | Invokes Playtime's undo function. | |
| Cmd + R | Invokes Playtime's redo function. | |
| Backspace/Delete | Deletes the currently selected column or row, or clears the selected slot's contents. | |
| Cmd/Ctrl + C | Copies the currently selected row or slot contents to the clipboard. | |
| Cmd/Ctrl + X | Cuts the currently selected row or slot contents to the clipboard. | |
| Cmd/Ctrl+V | Pastes row or slot contents from the clipboard to the currently selected row or slot. | |
| Space | Starts or stops playback. | |
| Enter | Carries out an action depending on the current selection: When the Matrix cell is selected, stops all clips in the Matrix. When a Column cell is selected, stops all clips in the Column. When a Row cell is selected, plays all clips in the Row whose column follows scenes. | |
| | • When a Slot cell is selected, triggers the Slot. | |
| F2 | Renames the currently selected column, row, clip or track. | |
| T | Taps the tempo. | |
| M | Toggles the metronome. | |
| Ε | Edits the first clip in the currently selected slot. | |
| Q | Quantizes the first clip in the currently selected slot. | |
| 0 | Overdubs the first clip in the currently selected slot, if it's a MIDI clip. | |
| Α | Exports the complete matrix or the currently selected column, row or clip to the arrangement. | |
| Shift + Cmd/Ctrl + P | Executes the REAPER action Helgobox/Playtime: Show/hide Playtime. | |

Further concepts

General

Plugin delay compensation (PDC)

FX (an effect or instrument) may add latency to a track due to internal processing. This can happen even with FX that's not on the track itself, but somewhere downstream in the signal flow, e.g. on the master track.

REAPER and Playtime apply plug-in delay compensation (PDC) in order to fix the timing. That means they start processing content ahead of time in order to make up for the latency. PDC ensures that all tracks stay perfectly synchronized by delaying other tracks to match the plugin's latency. This prevents timing issues and maintains phase alignment in your project, ensuring accurate playback and mixing.

Latency compensation during recording

When recording in DAWs, it is important to account for certain types of latencies. Playtime compensates or doesn't compensate latencies during recording, depending on a multitude of factors. Here's the overview:

| Input monitoring | Start timing | Kind | Compensation | Comment |
|------------------|--------------|----------------|---|---|
| Off | Immediately | Any | Off | |
| Off | Quantized | Audio | Audio output latency + audio input latency | |
| Off | Quantized | MIDI (normal) | Audio output latency + block size (new) | |
| Off | Quantized | MIDI (overdub) | Audio output latency + block size + PDC read-ahead (new) | Results not too good when using high buffer sizes, but okay for now. |
| On | Any | Audio | Audio input latency | |
| On | Any | MIDI (any) | Off | |

When does this matter?

In general, those things should only matter when using high buffer sizes, since only then the delays introduced by latency become musically sensible.

Why compensate output latency only if input monitoring is off?

When input monitoring is off

If you don't enable input monitoring in the DAW (or in Playtime, it's the same), Playtime assumes that you are using some kind of zero-latency monitoring. In case of audio, this might be direct monitoring via audio interface or just listening to the instrument/voice itself. In case of MIDI, this might be an external hardware synthesizer with Local Mode being On or no monitoring at all (just pressing the keys at the right moment).

In that case, what counts in terms of timing is the actual key press (keyboard), strum (guitar), beat (drums), etc. This needs output latency compensation!

When input monitoring is on

If you enable input monitoring in the DAW, Playtime assumes that the player adjusts his playing according to what he hears coming out from the DAW and expects that this is the timing that ends up in the recording.

This means that output latency compensation is not necessary. Having input monitoring on in the DAW is usually only bearable when using low buffer sizes, otherwise it's super confusing.

Matrix concepts

Cell

A *cell* is a broad term that can refer to a Slot, a Column, a Row, or the entire Matrix.

While it may seem like a concept exclusive to Playtime's User interface, it is not limited to that context.

Active cell

In a Matrix, there's always exactly one Cell that is considered the currently *active* one. It is then possible to carry out certain actions on this cell, for example using the ReaLearn targets.

One way to *activate* a cell is to select it in the User interface. Vice versa, the selection in the user interface usually follows the currently active cell.

By default, a *slot cell* is also *activated* just by triggering it. This can be changed by setting the matrix property Activate slot on trigger.

Trigger a slot

Triggering a slot is an action carried out on a Slot that can have one of the following results, depending on the current slot contents and play state:

- Start slot playback
- Stop slot playback
- Start slot recording

• Stop slot recording

A slot can be triggered either by pressing Enter in the User interface or from a controller (see ReaLearn Target "Playtime: Slot transport action").

Triggering also takes the Trigger mode and Velocity sensitivity into account.

Control unit

A *control unit* represents a Key concepts connected to a certain Playtime matrix. The concept is most important for grid controllers because they have special features within Playtime, most importantly scrolling through the matrix and displaying a corresponding Control unit frame in the User interface.

One control unit always corresponds to a one ReaLearn unit within the same Key concepts as the Playtime matrix.

A control unit has the following properties:

Name

Usually corresponds to the name of the connected Key concepts, e.g. "Launchpad". The name is currently not visible in Playtime, but might be displayed as part of the Control unit frame in the future.

Color

The color of the control unit is derived from the color of the Key concepts. You can see the color "in action" by looking at the Control unit frame.

Size

The number of columns and rows available on the controller. For example, in case of Launchpads, it's usually 8 columns and 8 rows.

The size of the control unit is provided by Compartment concepts of the Key concepts within the ReaLearn unit representing this control unit:

| Variable | Туре | Description |
|--|---------|-----------------------------|
| <pre>playtime.control_unit.column_ count</pre> | Integer | Number of available columns |
| <pre>playtime.control_unit.row_cou nt</pre> | Integer | Number of available rows |

Example in Lua

```
custom_data = {
    playtime = {
        control_unit = {
            column_count = 8,
            row_count = 8,
        },
    },
```

},

Current scroll position

The address of the top-left visible slot. See Control unit scrolling.

Control unit scrolling

When connecting a Grid controller to Playtime, it reflects the contents of the Matrix. It often happens that the matrix is larger than the size of the controller grid. In that case, it's important to be able to scroll.

Control unit frame

The *control unit frame* is a rectangle in the Matrix area that shows which portion of the matrix is currently shown on a certain grid controller, according to the current scroll position.

The display of control unit frames can be switched off using Show control unit frames.

Count-in recording

A *count-in recording* is a special recording method initiated while Playtime playback is stopped. The metronome starts clicking during the count-in phase, which gives you enough time to prepare for the recording.

It goes like this:

- 1. Make sure that playback is stopped. If Playtime is playing, press the Space key.
- 2. Make sure Playtime's metronome is turned **on**. If it's off, press the M key.
- 3. Press the Record clip button in an empty slot. That should start Playtime's playback, and you should hear and see a count-in of 2 bars, during which you can prepare. When the slot count-down reaches zero, Playtime records as usual.

The count-in length can be adjusted in by right-clicking the Metronome button and adjusting Countin.

Here's a video showing this way of recording:



Tempo detection recording

A *tempo detection recording* is a special recording method tailored to looper-style live improvisation without metronome.

Let's say you want to use a foot switch to start recording an initial loop and press it again to set the tempo for all remaining loops.

Here's how you do that:

- 1. Make sure that playback is stopped. If Playtime is playing, press the Space key.
- 2. Make sure Playtime's metronome is turned **off**. If it's on, press the M key. should reveal a text in the title bar, saying:

If you record a clip now, its length will dictate the project tempo!

This tells us that *tempo detection* will be used.

- 3. Press the MIDI foot switch mapped to the Smart record button. That should start recording **immediately**, regardless of the currently set Clip start timing.
- 4. Press the foot switch again. This should stop recording **immediately**. Playtime should set the project tempo based on the length of the recording and play back the recorded loop immediately.

Obviously, this needs a bit of practice to get right because you need to trigger start and end of the recording precisely.

Here's a video showing this way of recording:



Slot concepts

Ignited slot

Stopping Playtime playback doesn't just stop all playing slots, it also memorizes them, so that next time you start playback, they will play again. We call those memorized slots *ignited*. Ignited clips have a circle around their play button.

Advanced usage scenarios

In Basic usage, we have learned how Playtime is typically used. But it doesn't end there! Playtime is designed in a quite open-ended way, which makes it versatile enough to use it in plenty of other scenarios.

This section explores some of the more advanced usage scenarios.

Start custom Playtime from template

Would you like to adjust the default settings of new Playtime instances? Then you are at the right place.

Most settings in Playtime are instance-specific

When designing software with the concept of instances or projects, a common challenge is deciding whether a particula setting should be **global** (immediately affecting all instances), **global templatelike** (affecting all new instances) or **instance-specific** (affect only the current instance).

For Playtime, I chose to make most settings **instance-specific**. Only settings related to *appearance* and *performance* — essentially everything in the Settings dialog — are global. The primary advantage of this approach is that it allows precise restoration of any instance, ensuring it behaves exactly as it was saved.

However, this approach has a drawback: You need to adjust settings for every new instance manually, especially if the default settings don't match your preferences.

Track templates to the rescue

You can solve this issue by leveraging a feature that you probably already know: **REAPER track templates**!

- 1. Create a Playtime instance as usual as explained in 3. Fire up Playtime.
- 2. Modify the instance-specific settings to suit your needs. For example:
 - Change settings in the Matrix inspector.
 - $\circ\,$ Change metronome settings in the Tempo settings dialog.
 - Add frequently used columns with specific track inputs.
- 3. Right-click the "Playtime" track and all column tracks and choose **Save tracks as track template...**, saving the new track template as "Playtime.RTrackTemplate".
- 4. Whenever you want to start with this custom Playtime instance in a new project, right-click the track control panel, choose
- 5. In new projects, you can now right-click the track control panel and choose **Insert track from template** to insert your custom "Playtime" track template.

Done! You immediately get a fresh Playtime instance with your favorite settings, including all

columns.

An action to make this approach more streamlined

The downside of this approach is that you can't use the beloved \bigcirc button to add Playtime, because this one still creates the Playtime default instance, not your custom one.

This is where the action Helgobox/Playtime: Show/hide custom Playtime comes into play. You can add a toolbar button for this action:

- 1. Right-click an empty area of the desired toolbar and choose **Customize toolbar...**
- 2. Press [Add...]
- 3. Search for action "Helgobox/Playtime: Show/hide custom Playtime" and double-click it
- 4. Press [OK]

The default icon for this button is ⁽¹⁾. When you press it, it looks for a track template called "Playtime" and loads it.

No default shortcut is assigned to this action, but you can assign your own in REAPER menu **Actions > Show action list...** For example, you could remove the Shift + Cmd/Ctrl + P shortcut from the Helgobox/Playtime: Show/hide Playtime action and instead assign it to this action.

Record performance as multi-track audio

Due to the way Playtime works, it is possible to record your Playtime performance directly to the column tracks as audio items. This is basically a sort of multi-track online rendering approach. It can be used as an audio-only post-FX alternative to recording matrix sequences.

Drawbacks

Before you proceed, be aware that this technique has a few drawbacks:

- 1. Below-mentioned step 2 will change the Input monitoring setting for all column tracks, which might not be what you want! You will need to restore the old input monitoring settings afterward.
- 2. Step 4 obviously changes the record-arm state within Playtime, which might also not be what you want! You will need to restore the old arm states afterward.
 - 3. Playing back the resulting multi-track audio will naturally flow through the track FX chain again. However, since the recording was done post-FX, the track FX is already part of the recorded audio. In order to avoid applying the FX twice, you would need to temporarily disable the FX of the affected column tracks.

It goes like this:

- 1. Select all column tracks in the REAPER track control panel
- 2. Right-click the record-arm button of one track in the selection and disable Monitor input. This is

a safety measure to prevent audio feedback.

3. Right-click the record-arm button again and enable **Record: output > Record: output (stereo)**



This step doesn't have any effect on recording within Playtime. Playtime will still record from the Track input, not from the track output. So this step shouldn't have any negative consequences.

- 4. Click the record-arm button. This should record-arm all column tracks.
- 5. Start recording in REAPER
- 6. Now play and stop clips in the Playtime Matrix as desired
- 7. Stop recording in REAPER when you are finished

Each column track now contains a stereo recording of its audio output.

Feedback wanted

Recording the performance as multi-track audio is a sort of "accidental feature" that is technically possible but not "officially" supported, because Playtime has not been optimized for it! It comes with the mentioned drawbacks, but it is there when you need it. If you like this feature and wish there would be a more streamlined version of it, post your idea at GitHub discussions.

Control Playtime with items

Because Playtime is an instrument plug-in, it can be controlled via MIDI. Not just via external MIDI controllers, but also from within REAPER. You can just put MIDI items on the Playtime track and start REAPER playback, exactly as you would do it with a synthesizer.

1. Set up matrix

i)

Click Matrix settings to open the Matrix inspector and make the following settings:

| Setting | Value | Reason | |
|--------------------------|-------------|---|--|
| Start timing | Immediately | Position and length of a note in the MIDI editor should correspond exactly to the position and length of clip playback. | |
| Trigger mode | Momentary | | |
| Activate slot on trigger | Off | We don't want the Playtime selection to jump around like crazy. | |

Also ensure that you haven't overridden the first two properties on column or clip level!

Additionally, you might want to switch off Exclusive mode for columns, in order to get more freedom of playing.

2. Create MIDI triggers

Before you can control Playtime with MIDI notes, you need to set up MIDI triggers.

Option A: Learn MIDI triggers manually

One way to do this is to learn the necessary MIDI triggers manually by using the Show/hide MIDI triggers feature. See Playing clips using a MIDI keyboard.

Option B: Assign MIDI triggers automatically

Another way to do this is to automatically assign MIDI notes to each slot cell. We can easily do that by importing a snippet of Lua code into ReaLearn.

Below code snippet by default spreads MIDI notes row by row in groups of 8, starting at the note C3. You can change that by modifying the configuration section before importing it into ReaLearn.

- 1. Copy below code to the clipboard
- 2. Press Navigation bar in the navigation bar on the left. This should open the ReaLearn main panel.
- 3. Press the Menu bar



This will overwrite existing MIDI mappings in the ReaLearn main unit.

4. After confirming the import, you should see a list of mappings in ReaLearn. But also in the Playtime user interface, when pressing showing the MIDI triggers.

```
-- Configuration
-- The first mapped note (key 48 correponds to C3)
local first_key = 48
-- The first mapped column
local first column = 0
-- The first mapped row
local first row = 0
-- If true, assignments will be spread row by row, otherwise column by column
local row_wise = true
-- Make that many assignments until jumping to the next column or row
local group_size = 8
-- Build mappings
local mappings = {}
for k = first_key, 127 do
    local i = k - first_key
    local i1 = math.floor(i / group_size)
    local i2 = i % group_size
    local mapping = {
        source = {
            kind = "MidiNoteVelocity",
```

```
channel = 0,
            key_number = k,
        },
        target = {
            kind = "PlaytimeSlotTransportAction",
            slot = {
                address = "ByIndex",
                column_index = first_column + if row_wise then i2 else i1,
                row_index = first_row + if row_wise then i1 else i2,
            },
            action = "Trigger",
        },
    }
    table.insert(mappings, mapping)
end
-- Return result
return {
    kind = "MainCompartment",
    value = {
        mappings = mappings,
   },
}
```

3. Record and edit MIDI items

Now we are ready to record some MIDI items that control our clips.

- 1. Ensure that the Playtime track is armed in REAPER and that all other tracks are unarmed. You should be able to trigger Playtime clips with your MIDI keyboard!
- 2. Start recording in REAPER
- 3. Play stuff on your MIDI keyboard
- 4. Stop recording in REAPER
- 5. Play back the MIDI item which you just recorded on the Playtime track

REAPER should repeat what you just played, cool!

Now you can edit the MIDI item as desired, using REAPER'S MIDI editor. For example, you could quantize all notes.



Rendering advice

Do you want to render your project? As Playtime will not participate in rendering, you first need to turn your performance into a regular REAPER arrangement. Please read Create an arrangement for more information.

Meta clips

We can take the previous scenario Control Playtime with items a step further!

The idea

If we can control Playtime with MIDI items, shouldn't it be possible to control it with MIDI *clips* as well? The answer is yes! I call such clips *meta clips*. **Playtime can basically play itself!**

Meta clips open up a whole new world of possibilities. Here are just some of the things you can do with them:

- Meta clips can be used as scenes on steroids. You can trigger many other clips at once, no matter in which row they are.
- You can record sequences of clip invocations and play them back at the press of a button.

Basic setup

- 1. Prepare the matrix and set up MIDI triggers as explained in Control Playtime with items. This should make it possible to play clips using your MIDI keyboard. Make sure that part works.
- 2. Select the track "Playtime" in your REAPER project (this is the track which contains the Helgobox instance, by default the first track in the project)
- 3. Right-click the Column label of some column, for example the last column. Choose Insert column for each selected track.

This should add a new column named "Playtime" that plays back its MIDI clips on the "Playtime" track, and can therefore be used to *play other clips*.

- 4. Now simply record a clip into the new "Playtime" column, while playing clips in other columns using your MIDI keyboard.
- 5. That's it! You recorded your first meta clip. When playing it back, it should trigger other clips in other columns. You can also edit that meta clip, e.g. quantize its notes.

You may look at the "Playtime" column as the **leader** column (which you trigger) and the other columns as **follower** columns (which are triggered by the leader column).

Adjust the setup to your needs

This was just an example setup. You can adjust it to your needs. Here are some ideas:

- Introduce more leader columns
- Move the leader column to the very left to make it obvious that it is a very important column
- Set the Start timing for the Playtime column to 1 bar
- Set the Trigger mode to Toggle



Using MIDI clips to control Playtime is subject to the same considerations about

rendering as when using MIDI items. Read Create an arrangement for more information.

Meta clips are just the beginning

The simple fact that Playtime is a MIDI-controllable instrument opens up even more possibilities.

 \bigcirc

Here are some ideas:

- Use a MIDI arpeggiator to arpeggiate between different clips
- Write a MIDI JSFX effect that controls clips

Multiple instances

Because Helgobox is implemented as an instrument plug-in, you can add multiple instances of it. That also means you can have multiple Playtime matrices in the same project.

How to do it

Assuming you have one Playtime instance already, here's how you add another one:

- 1. Right-click REAPER's track control panel and choose **Insert virtual instrument on new track...**
- 2. Double-click instrument plug-in "VSTi: Helgobox ReaLearn & Playtime (Helgoboss)"
- 3. In the Helgobox plug-in window, press Menu > Show app
- ^{4.} In the Helgobox app window, press the 💽 button in the Navigation bar on the left.
- 5. Press the button [Create a Playtime Matrix]

That's it! You now have a second Matrix in the project, that runs independently of the first one.



Currently, the only way to open that second matrix is to open the plug-in window of that second Helgobox instance and press **Menu > Show app**. In the future, a separate REAPER action is planned, to make that step easier.

Why?

Up to you!

I'm keen to hear if and how you use this possibility. Let me know on my YouTube channel, on GitHub discussions, on the REAPER forum or via info@helgoboss.org :)

Generate a matrix using code

Just as it is possible to generate ReaLearn mappings via Luau, you can also generate a Playtime Matrix via Luau.



This guide is a work in progress

The matrix generated by this example Matrix is viewable, but not yet playable! It will be improved in the future to be playable as well.

Proceed like this:

- 1. Copy below Luau code to the clipboard
- 2. Press the Navigation bar icon in the navigation bar on the left.
- 3. Press Menu bar.
- 4. After confirming the import, you should see a large and wildly colorful matrix.

Colorful matrix

```
local column_count = 10
local row count = 200
-- Clip source
-- Build columns
local columns = {}
local clip_index = 0
for c = 0, column_count - 1 do
    local slots = {}
    for r = 0, row_count - 1 do
        if (c % 2 == 0 and r % 2 == 0) or (c % 2 == 1 and r % 2 == 1) then
            local slot = {
                 \Gamma OW = \Gamma,
                 clips = {
                     {
                         name = `Clip {c + 1}/{r + 1}`,
                         color = {
                             kind = "PaletteColor",
                             index = 5 + clip_index % 17,
                         },
                         source = {
                             kind = "MidiChunk",
                             chunk = [[
HASDATA 1 960 QN
E 3840 b0 7b 00 0
IGNTEMPO 1 120 4 4
]],
}
                     },
                 },
            }
            table.insert(slots, slot)
            clip_index += 1
        end
    end
```

```
local column = {
       slots = slots or nil,
   }
   table.insert(columns, column)
end
-- Build rows
local rows = {}
for r = 1, row_count do
   local row = {
    name = `Scene {r}`,
   }
   table.insert(rows, row)
end
-- Build matrix
local matrix = {
   columns = columns,
   rows = rows,
}
-- Return result
return {
   kind = "ClipMatrix",
   version = "2.16.15",
   value = matrix,
}
```

REAPER actions

Playtime provides the following REAPER actions in addition to the general actions.

Helgobox/Playtime: Show/hide Playtime

If there's no Helgobox instance with a Playtime matrix in the current project, this action adds one and shows the matrix. If there is one already, it shows or hides the app window. This doesn't completely unload the app, it really just hides the window.

The default shortcut is Shift + Cmd/Ctrl + P.

Helgobox/Playtime: Show/hide custom Playtime

Works like Helgobox/Playtime: Show/hide Playtime with the following difference: If there's no Helgobox instance with a Playtime matrix in the current project, it looks for a top-level track template called "Playtime" and adds it to the project. See Start custom Playtime from template.

ReaLearn targets

ReaLearn is the controller integration tool at the heart of Helgobox that enables Playtime's *haptic* features. It drives the MIDI trigger functionality, integrates the grid controllers, and allows you to craft your own controller experiences. ReaLearn is the engine behind it all!

In simple terms, a ReaLearn target defines what happens when you press a button on your controller. ReaLearn provides a wide variety of such targets, including a specialized set of targets tailored for Playtime. Most of these targets even support Key concepts, enabling features like LED lighting or display updates. That gives you the flexibility to create highly customized controller integrations for Playtime!

For a glimpse of what's possible, take a look at Playtime's grid controller support. This functionality isn't hard-coded into Playtime, it's entirely implemented through ReaLearn compartment presets.

All targets are described here.

Configuration files

In addition to the general configuration files, Playtime maintains the following ones:

Helgoboss/Playtime/settings.json

Contains global configuration that affects all Playtime instances.

Supported controllers

At the moment, Playtime has built-in support for the following controllers. More controllers will follow over time. If your controller is not supported yet, feel free to create a new discussion in Playtime's idea tracker.

Akai APC Key 25

Support is mostly complete.



Notable functions which are currently not supported Device

Akai APC Key 25 mk2

Support is mostly complete.



Notable functions which are currently not supported Device

Akai APC mini (experimental)

Support is mostly complete.



Notable functions which are currently not supported Device

Akai APC mini mk2

Support is mostly complete.



Notable functions which are currently not supported Device

Novation Launchpad Mini mk3

Support is mostly complete.



Notable functions which are currently not supported Drums, Keys, User

Novation Launchpad Pro mk2

Clip-related functions are supported.



Notable functions which are currently not supported Note, Device, User, Volume, Pan, Sends

Novation Launchpad Pro mk3

Clip-related functions are supported.



Notable functions which are currently not supported

Note, Chord, Custom, Sequencer, Projects, Volume, Pan, Sends, Device, Swing, Tempo, Capture MIDI, Patterns, Steps, Pattern Settings, Velocity, Probability, Mutation, Micro Step, Print to Clip

Novation Launchpad X

Clip-related functions are supported.



Notable functions which are currently not supported Note, Custom, Volume, Pan, Send A, Send B, Capture MIDI

Novation Launchpad mk1

Clip-related functions are supported.



Notable functions which are currently not supported vol, pan, snd A, snd B