

HOW-TO

Sync Midronome and DAWs

For Firmware 2.0

There are different ways the Midronome and your DAW (Digital Audio Workstation) can interact, and some of these interactions sync them together, some do not. This, combined with the long list of DAWs and OS'es (Operating Systems), can make it difficult to navigate it all.

This manual is designed as a guideline, so you know what to look for online, in the Midronome documentation and videos, and in your DAW's manual.

Make sure to read the [first section](#) before jumping to your DAW's section.

Contents

1. The ways DAW & Midronome can interact.....	5
1.1 – Preliminary: USB communication.....	5
1.2 – Syncing DAW and Midronome – [IN] interfaces or external sync.....	6
1.3 – DAW sending commands to the Midronome.....	6
2. Ableton Live.....	8
2.1 – Video instructions.....	8
2.2 – Sync Ableton to the Midronome over USB.....	8
2.3 – Sync the Midronome to Ableton using the VST3 Plugin.....	8
2.3.1 – Sync the tempo.....	8
2.3.2 – Adjust the delay.....	9
2.3.3 – Sync the time signature.....	11
3. Image-Line FL Studio.....	13
3.1 – Sync FL Studio to the Midronome over USB.....	13
3.2 – Sync the Midronome to FL Studio using the VST3 Plugin.....	13
3.2.1 – Sync the tempo.....	13
3.2.3 – Sync the time signature.....	14
4. Apple Logic Pro.....	16
4.1 – Sync Logic to the Midronome over USB.....	16
4.2 – Sync the Midronome to Logic using the AU Plugin.....	16
4.2.1 – Sync the tempo.....	16
4.2.2 – Sync the time signature.....	18
5. Avid Pro Tools.....	19
5.1 – Sync Pro Tools to the Midronome over USB.....	19
5.2 – Sync the Midronome to Pro Tools using the AAX Plugin.....	19
5.2.1 – Sync the tempo.....	19
5.2.2 – Sync the time signature.....	20
6. Steinberg Cubase.....	22
6.1 – Sync Cubase to the Midronome over USB.....	22
6.2 – Sync the Midronome to Cubase using the VST3 Plugin.....	22
6.2.1 – Sync the tempo.....	22
6.2.2 – Sync the time signature.....	23
7. Presonus Studio One.....	25

7.1 – Sync Studio One to the Midronome over USB.....	25
7.2 – Sync the Midronome to Studio One using the VST3 Plugin.....	25
7.2.1 – Sync the tempo.....	25
7.2.2 – Sync the time signature.....	26
8. Reason Studios.....	29
8.1 – Sync Reason to the Midronome over USB.....	29
8.2 – Sync the Midronome to Reason using the VST3 Plugin.....	29
8.2.1 – Sync the tempo.....	29
8.2.2 – Sync the time signature.....	31
9. Cockos Reaper.....	32
9.1 – Sync Reaper to the Midronome over USB.....	32
9.2 – Sync the Midronome to Reaper using the VST3 Plugin.....	32
9.2.1 – Sync the tempo.....	32
9.2.2 – Sync the time signature.....	33
10. Bitwig Studio.....	34
10.1 – Sync Bitwig to the Midronome over USB.....	34
10.2 – Sync the Midronome to Bitwig using the VST3 Plugin.....	34
10.2.1 – Sync the tempo.....	34
10.2.2 – Sync the time signature.....	35
11. Other DAWs.....	36
11.1 – Sync the DAW to the Midronome over USB.....	36
11.2 – Sync the Midronome to the DAW using external sync.....	36
11.2.1 – Use the Midronome DAW Plugin.....	36
11.2.2 – Create the 24ppq pulses manually in the DAW.....	37
11.2.3 – Sync using MidroSync (“Syn” mode).....	37
12. Troubleshooting.....	39
There are no Midronome MIDI interface in the DAW.....	39
When I press Play in the DAW, nothing happens on the Midronome.....	39
The sync works but there is a delay.....	39
In the Midronome settings, there is no “Syn” option in “inP” menu.....	40
In the Midronome settings, there is no “24P” option in “inP” menu.....	40
I cannot see the VST3/AU/AAX Plugin in my DAW.....	40
“Syn” option in “inP” is selected, LED is green, but nothing is in sync.....	41
The DAW’s and Midronome’s clicks are slightly off.....	41
There is a 1-bar delay when starting the sync.....	42

How to get more help.....	42
---------------------------	----

1. The ways DAW & Midronome can interact

1.1 – Preliminary: USB communication

Plugging the USB cable of the Midronome in a computer will add 5 MIDI interfaces in your DAW:

- Midronome Clock & Start [IN] – sends MIDI Clock, as well as Start&Stop
- Midronome Clock only [IN] – same without Start/Stop
- Midronome Commands [OUT] – receives commands for the Midronome
- Midronome MIDI Out 1 [OUT] – receives MIDI Data, forwarded to MIDI OUT 1
- Midronome MIDI Out 2 [OUT] – receives MIDI Data, forwarded to MIDI OUT 2

Please note that

[IN] = your computer/DAW will **receive** MIDI **from** the Midronome

[OUT] = your computer/DAW will **send** MIDI **to** the Midronome

and that on Windows the interfaces might be called differently, usually simply “Midronome”, then “Midronome 2”, “Midronome 3”, etc.

Important: if you are on Mac, recently upgraded to FW 2.0, and cannot see the new MIDI Out 1” and “MIDI Out 2” interfaces, you need to:

- *Unplug your Midronome*
- *Open the “Audio MIDI Setup” application*
- *In the menu, click “Window” -> “Show MIDI Studio”*
- *Delete everything called “Midronome” in the MIDI Studio*
- *Then replug your Midronome*

(Windows will sometimes do the same, in this case the concept is the same: delete the Midronome from the Device Manager, unplug and replug)

1.2 – Syncing DAW and Midronome – [IN] interfaces or external sync

To actually sync your DAW and your Midronome, there are 2 ways possible.

1. Getting your DAW to follow the Midronome's MIDI Clock sent to USB [IN] interfaces
 - in this case the Midronome is the master
 - no configuration needed on the Midronome
 - only requires a USB cable
 - not extremely precise
 - as of now, **only** Ableton, Bitwig, Reason, and FL Studio can do this
2. Getting the Midronome to follow your DAW using a Plugin
 - in this case your DAW is the master
 - requires an audio interface with a separate audio output
 - setting it up is a little bit more complex
 - very precise

If your DAW supports it, please try option 1 first and see if it fits your needs. **Do not** run both options at the same time.

The DAW-specific sections below give detailed steps for both option 1 and 2.

1.3 – DAW sending commands to the Midronome

You can also get your DAW to send MIDI messages to the “*Midronome Commands*” interface over USB.

These messages will **not** sync the two together, they are just a way “automate” some of the process. This will set the tempo (and other parameters) on the Midronome, the same way someone could turn the knob to change it.

See the full list of commands in section 4.3 “*Midronome Commands*” of the Midronome User Guide, available on [the website support page](#).

1.4 – DAW sending MIDI to external sequencers and synths


The last two interfaces, “*Midronome MIDI Out 1*” and “*Midronome MIDI Out 2*”, are forwarding interfaces: any MIDI data sent to these interfaces is forwarded instantly to the corresponding DIN-MIDI Output Jack on the back of the Midronome.

See more info about this in section 4.2 “*MIDI Forwarding interfaces Out 1&2*” of the Midronome User Guide, available on [the website support page](#).

2. Ableton Live

2.1 – Video instructions

Ableton has its own video which should summarize everything in this section.

 FW 2.0 – Sync your Midronome to Ableton

2.2 – Sync Ableton to the Midronome over USB

This requires no setup on the Midronome, and the only hardware required is the USB cable between the Midronome and the computer where you are running Ableton.

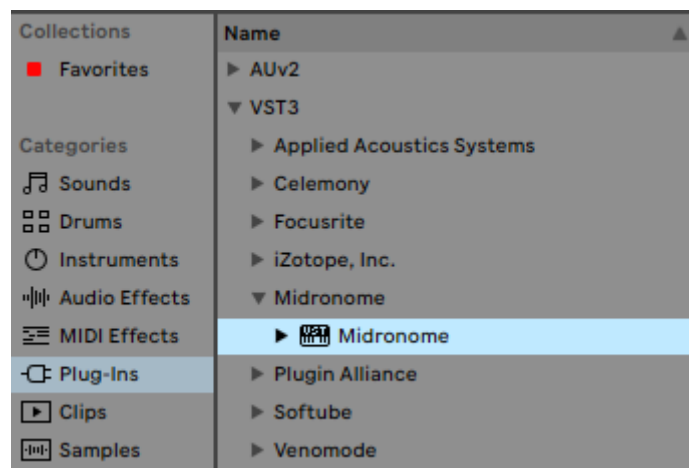
Then you need to get Ableton to follow external MIDI Clock:

- Follow the steps of the *“Syncing Live to another device or application”* section in the [official Ableton documentation](#)
- Make sure to check step 4 to adjust the MIDI Clock Sync delay appropriately

2.3 – Sync the Midronome to Ableton using the VST3 Plugin

2.3.1 – Sync the tempo

Start by downloading the VST3 plugin from [the website support page](#), installing it, and making sure you see “Midronome” in your list of plugins.



Then, set up the Midronome hardware:

- Set the *inP* setting to *24P* or *24P.*
 - (more info about these modes in the [Midronome User Guide](#))
- Make sure the time sig. (*bAr* setting) matches your session's

And set up the sync track in Ableton:

- Drag the plugin on an empty audio track
- Make sure that track is sending audio to a dedicated (physical) output
- Connect a cable from this output to the Midronome's "INPUT" plug

Then press Play: the Midronome should sync and its orange "Locked" LED should turn on after one bar. If not, make sure the plugin's audio is in fact sent to the "INPUT" plug of the Midronome, and that it's loud enough.

2.3.2 - Adjust the delay

Delays are normal, and can happen either in your DAW or in your hardware sequencers.

But most of these delays will be stable, they just need to be compensated for. To do this, you can get the Midronome VST plugin to send its audio *early* (i.e. with a negative delay), so that with the positive delay of the hardware, the final recording ends up right on the grid.

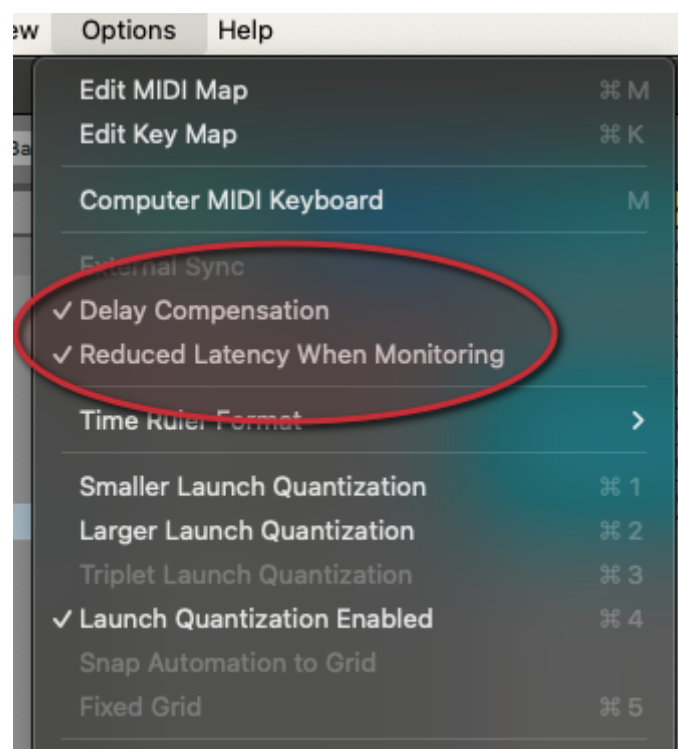
To do this you can use Ableton's track delay on the track where the Midronome plugin is. You can make it appear in session view by pressing the "D" button at the bottom right

The steps are:

1. record your sequencer with the track delay of 0ms
2. measure the latency in the recording
3. write that value negatively in the track delay

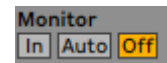


Important note: Ableton's track delay is tricky, and it does not seem to always work. Note that this is an Ableton issue and not a Midronome issue. If the track delay does not seem to have any effect, first make sure *Delay Compensation* is turned on (track delay will not work without it).



If this does not help, please try one or a combination of the following settings:

- Turn on *Reduced Latency When Monitoring*
- Set the Monitoring (“Monitor”) to *Off* on the tracks you are recording
- Set the Monitoring (“Monitor”) to *Off* on all tracks

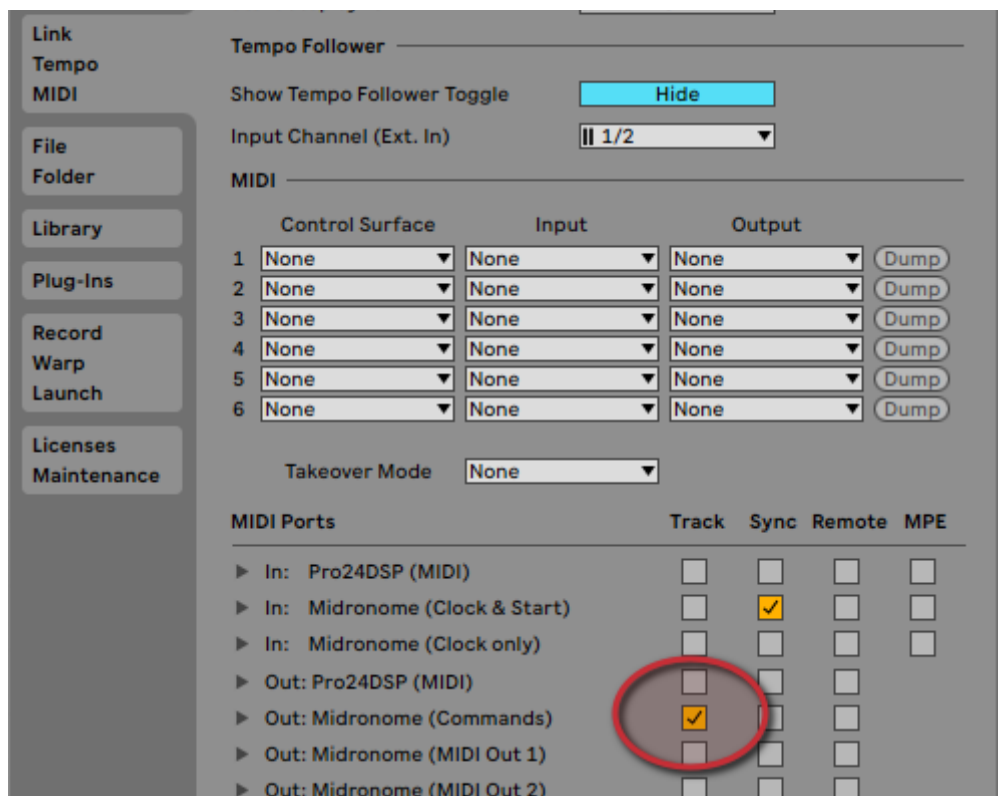


Note that the recording delay is a combination of both Ableton’s and your hardware. With this technique the compensation is the same for all hardware. If you have multiple hardware with each a different latency, and you want to record them all at the same time, on the grid, you will need a more complex setup like the one described by Denis Skok in his “[Sync Ableton with Hardware](#)” PDF.

2.3.3 - Sync the time signature

If you also want to sync the time signature, you need to use the MIDI messages sent by the plugin.

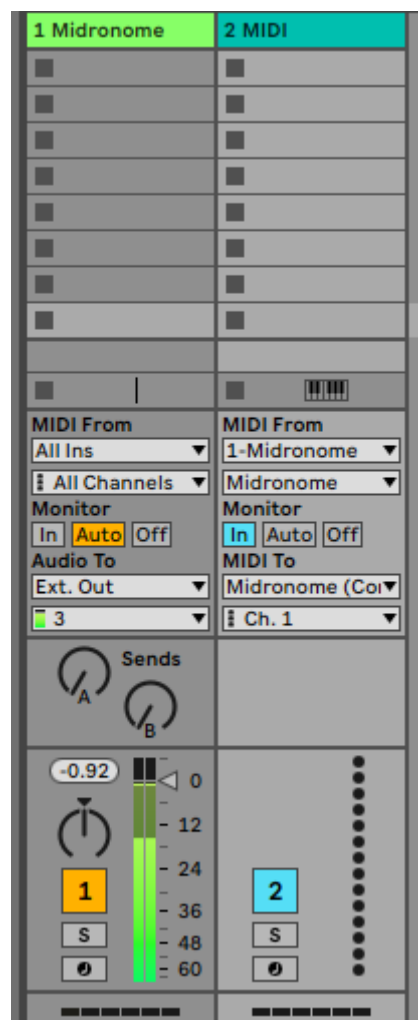
In Ableton, open the Preferences and in the “Link Tempo MIDI” tab, make sure to check “Track” in front of “Midronome (Commands)”.



Note that the name of the MIDI Port will be different on Windows (probably just "Midronome").

Then create a new MIDI Track

- In **"MIDI From"**:
 - change "All Ins" to the Midronome track
 - change "Post FX" to "Midronome"
- In **"Monitor"**, select "In"
- In **"MIDI To"**, change to "Midronome (Commands)" (or similar, on Windows)
 - The MIDI channel does not seem to matter (but the plugin will send on Channel 12 only)



Now the time signature will follow the changes in the session.

Moreover, even when Ableton is not playing, the Midronome's tempo will match the session's tempo (at the position of the playhead).

3. Image-Line FL Studio

3.1 – Sync FL Studio to the Midronome over USB

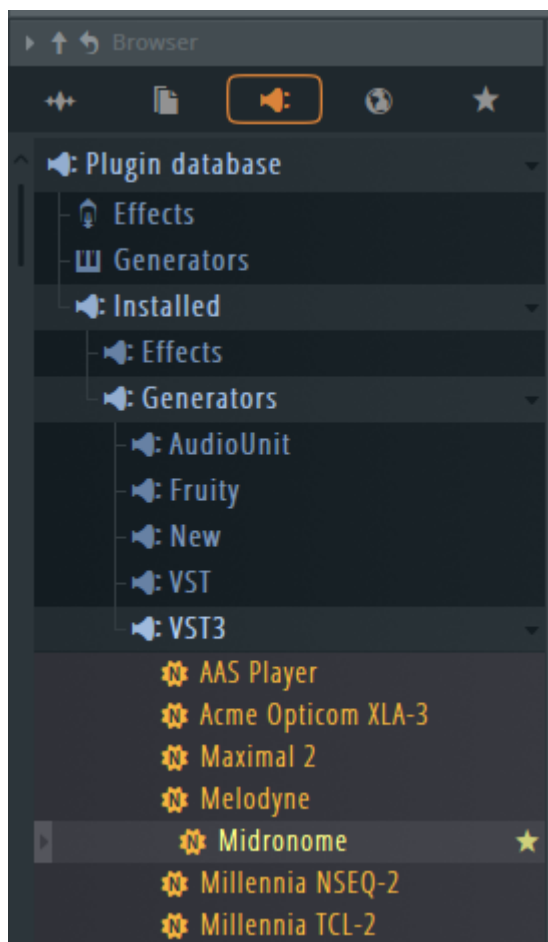
This requires no setup on the Midronome, and the only hardware required is the USB cable between the Midronome and the computer where you are running Reason.

Then you need to get FL Studio to follow external MIDI Clock, as written in the “System Settings – MIDI” section in the [official FL Studio documentation](#).

3.2 – Sync the Midronome to FL Studio using the VST3 Plugin

3.2.1 – Sync the tempo

Start by downloading the VST3 plugin from [the website support page](#), installing it, and making sure you see “Midronome” in your list of plugins.



Then, set up the Midronome hardware:

- Set the *inP* setting to *24P* or *2.4P*.
 - (more info about these modes in the [Midronome User Guide](#))
- Make sure the time sig. (*bAr* setting) matches your session's

And set up the sync track in FL Studio:

- Drag the plugin on an empty track ("Insert 1" for example)
- Make sure that track is sending audio to a dedicated (physical) output
- Connect a cable from this output to the Midronome's "INPUT" plug

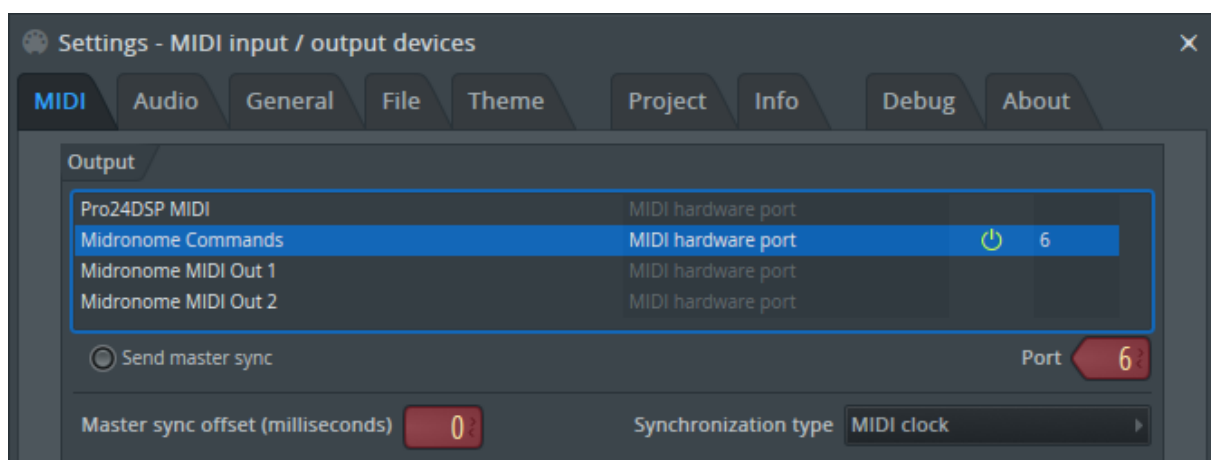
Then press Play: the Midronome should sync and its orange "Locked" LED should turn on after one bar. If not, make sure the plugin's audio is in fact sent to the "INPUT" plug of the Midronome, and that it's loud enough.

3.2.3 - Sync the time signature

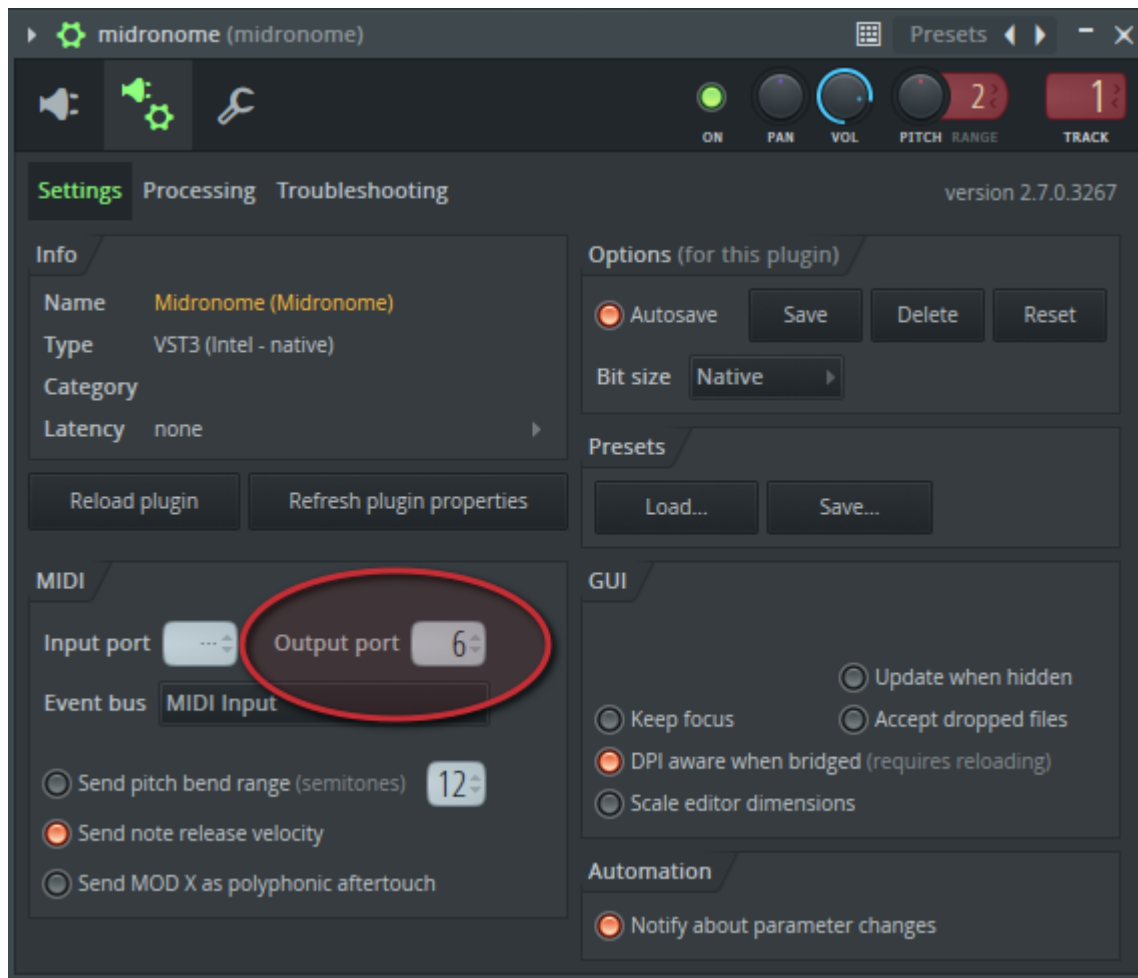
If you also want to sync the time signature, you need to use the MIDI messages sent by the plugin.

In FL Studio, open the MIDI Settings ("OPTIONS" -> "MIDI Settings" from the Menu) Find the "Midronome Commands" MIDI hardware port and give it a port number (for example 6).

Note that the name will be different on Windows (probably "Midronome").



Then open the Midronome plugin window, press the cog at the top left and the “Audio settings” icon. Then in “MIDI”, select the correct Output Port (6 in this example).



Now the time signature will follow the changes in the session. Moreover, even when FL Studio is not playing, the Midronome’s tempo will match the session’s tempo (at the position of the playhead).

4. Apple Logic Pro

4.1 – Sync Logic to the Midronome over USB

As of now, this is unfortunately only possible in Ableton, Bitwig, Reason, and FL Studio. This is not a Midronome limitation, other DAWs are simply not able to follow MIDI Clock.

4.2 – Sync the Midronome to Logic using the AU Plugin

4.2.1 – Sync the tempo

Start by downloading the AU plugin from [the website support page](#), installing it, and making sure you see “Midronome” and “MidronomeMIDI” in the Plug-In Manager.

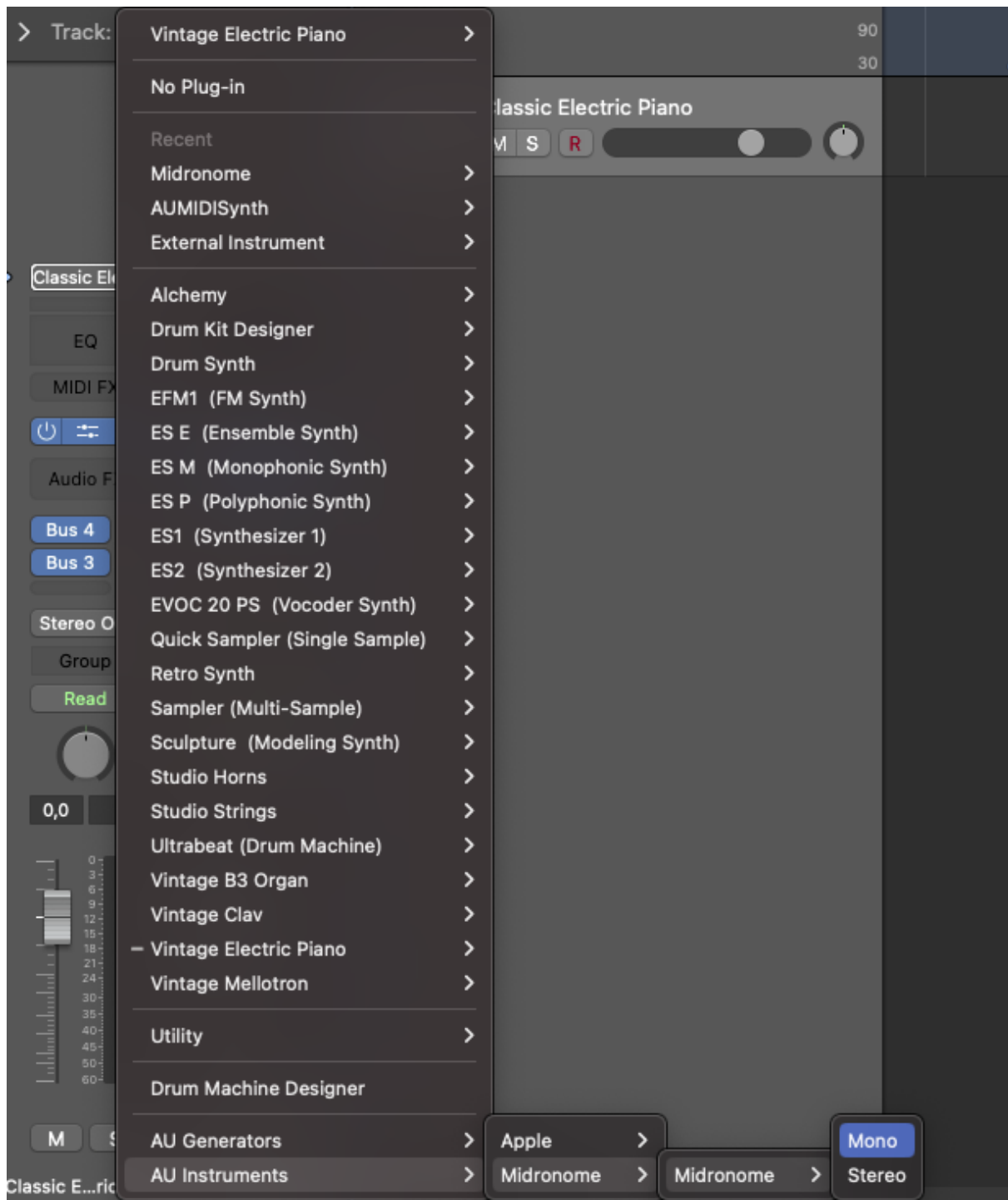
Name	Type	Manufacturer	Version	Compatibility	Use
Midronome	instrument	Midronome	1.1.0	successfully validated	<input checked="" type="checkbox"/>
MidronomeMIDI	MIDI processor	Midronome	1.1.0	successfully validated	<input checked="" type="checkbox"/>

Then, set up the Midronome hardware:

- Set the *inP* setting to *24P* or *2.4P*.
 - (more info about these modes in the [Midronome User Guide](#))
- Make sure the time sig. (*bAr* setting) matches your session's

And set up the sync track in Logic:

- Create a new Software Instrument Track
 - Replace the default “E-Piano” instrument by the Midronome Plugin
 - (which is in “AU Instruments” -> “Midronome”)



- Make sure that track is sending audio to a dedicated (physical) output
- Connect a cable from this output to the Midronome's "INPUT" plug

Then press Play: the Midronome should sync and its orange "Locked" LED should turn on after one bar. If not, make sure the plugin's audio is in fact sent to the "INPUT" plug of the Midronome, and that it's loud enough.

4.2.2 – Sync the time signature

If you also want to sync the time signature, you need to use the second plugin called “MidronomeMIDI”.

In Logic, create a new Software Instrument Track:

- Replace the default “E-Piano” instrument by the “External Instrument”
 - In its settings, set MIDI Destination to “Midronome Commands”
- On the track, add the “MidronomeMIDI” as a MIDI FX plugin
- Then record enable the track



Now the time signature will follow the changes in the session.

Moreover, even when Logic is not playing, the Midronome’s tempo will match the session’s tempo (at the position of the playhead).

5. Avid Pro Tools

5.1 – Sync Pro Tools to the Midronome over USB

As of now, this is unfortunately only possible in **Ableton**, **Bitwig**, **Reason**, and **FL Studio**. This is not a Midronome limitation, other DAWs are simply not able to follow MIDI Clock.

5.2 – Sync the Midronome to Pro Tools using the AAX Plugin

5.2.1 – Sync the tempo

Start by downloading the AAX plugin from [the website support page](#), installing it, and making sure you see “Midronome” in your list of plugins.



Then, set up the Midronome hardware:

- Set the **inp** setting to **24P** or **2.4P**.
 - (more info about these modes in the [Midronome User Guide](#))
- Make sure the time sig. (**bar** setting) matches your session's

And set up the sync track in Pro Tools:

- Create a Mono “Aux Input” track
- Put the Midronome plugin at the top of the INSERTS
- Make sure that track is sending audio to a dedicated (physical) output
- Connect a cable from this output to the Midronome’s “INPUT” plug

Then press Play: the Midronome should sync and its orange “Locked” LED should turn on after one bar. If not, make sure the plugin’s audio is in fact sent to the “INPUT” plug of the Midronome, and that it’s loud enough.

5.2.2 – Sync the time signature

If you also want to sync the time signature, you need to use the MIDI messages sent by the plugin.

In Pro Tools:

- Create a new MIDI Track
- In the “I / O” settings on the track
 - in the top drop-down, choose the track where the Midronome Plugin is, and choose “all channels”
 - in the drop-down right below, choose “Midronome Commands”
 - The name might be different on Windows (probably just “Midronome”)
 - The channel does not seem to matter (but the plugin will send on Channel 12 only)
 - Then record enable the MIDI track



Now the time signature will follow the changes in the session.
Moreover, even when Pro Tools is not playing, the Midronome's tempo will match the session's tempo (at the position of the playhead).

6. Steinberg Cubase

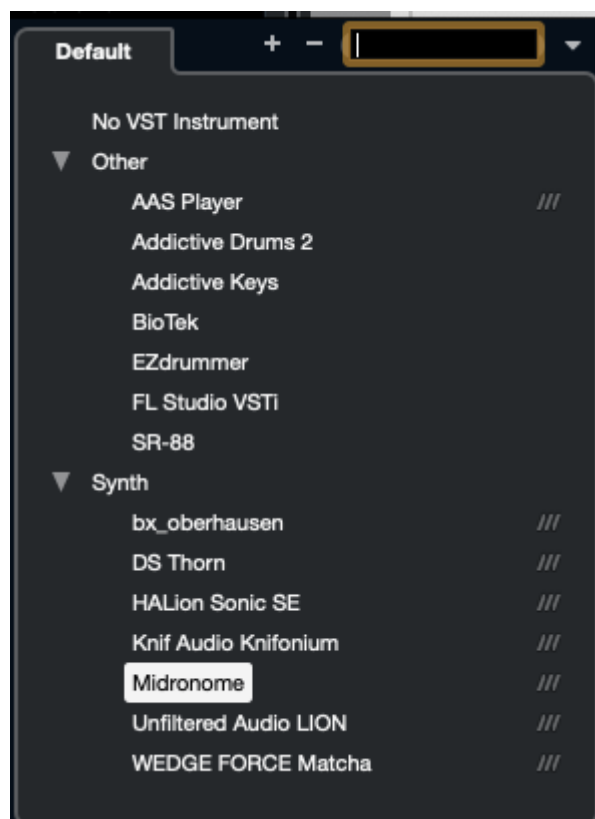
6.1 – Sync Cubase to the Midronome over USB

As of now, this is unfortunately only possible in Ableton, Bitwig, Reason, and FL Studio. This is not a Midronome limitation, other DAWs are simply not able to follow MIDI Clock.

6.2 – Sync the Midronome to Cubase using the VST3 Plugin

6.2.1 – Sync the tempo

Start by downloading the VST3 plugin from [the website support page](#), installing it, and making sure you see “Midronome” in your list of plugins.



Then, set up the Midronome hardware:

- Set the *inP* setting to *24P* or *2.4P*.
 - (more info about these modes in the [Midronome User Guide](#))
- Make sure the time sig. (*bAr* setting) matches your session's

And create an Instrument Track in Cubase:

- Select “Midronome” as the Instrument
- Select a dedicated (physical) output for the output of the track
- Connect a cable from this output to the Midronome’s “*INPUT*” plug

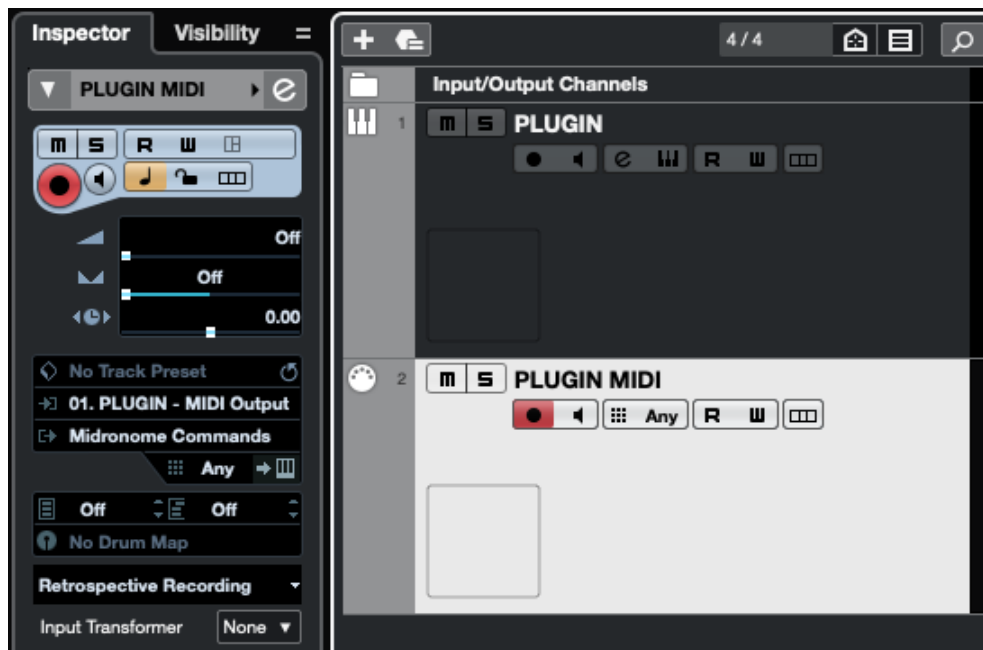
Then press Play: the Midronome should sync and its orange “Locked” LED should turn on after one bar. If not, make sure the plugin’s audio is in fact sent to the “*INPUT*” plug of the Midronome, and that it’s loud enough.

6.2.2 - Sync the time signature

If you also want to sync the time signature, you need to use the MIDI messages sent by the plugin.

In Cubase, create a new MIDI Track:

- Select the previous track as MIDI input
- Select “*Midronome Commands*” as MIDI output
 - The name might be different on Windows (probably “Midronome”)
 - The channel does not seem to matter (but the plugin will send on Channel 12 only)
- Then record enable the MIDI track (or simply select it)
 - Make sure **not** to record enable the original plugin track at the same time



Now the time signature will follow the changes in the session.
Moreover, even when Cubase is not playing, the Midronome's tempo will match the session's tempo (at the position of the playhead).

7. Presonus Studio One

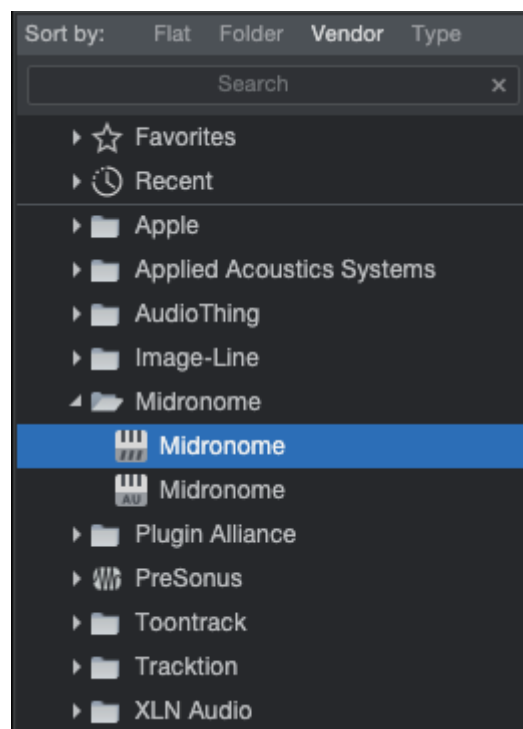
7.1 – Sync Studio One to the Midronome over USB

As of now, this is unfortunately only possible in Ableton, Bitwig, Reason, and FL Studio. This is not a Midronome limitation, other DAWs are simply not able to follow MIDI Clock.

7.2 – Sync the Midronome to Studio One using the VST3 Plugin

7.2.1 – Sync the tempo

Start by downloading the VST3 plugin from [the website support page](#), installing it, and making sure you see “Midronome” in your list of plugins.



(if you see two plugins like on the picture, it's because you have both the AU and the VST3 installed. Please prefer the “###” plugin, which is the VST3)

Then, set up the Midronome hardware:

- Set the **inP** setting to **24P** or **2.4P**.
 - (more info about these modes in the [Midronome User Guide](#))
- Make sure the time sig. (**bAr** setting) matches your session's

And set up the sync track in Studio One:

- From the Mixer window, add the Midronome as an Instrument
- Make sure that new track is sending audio to a dedicated (physical) output
- Connect a cable from this output to the Midronome's *"INPUT"* plug

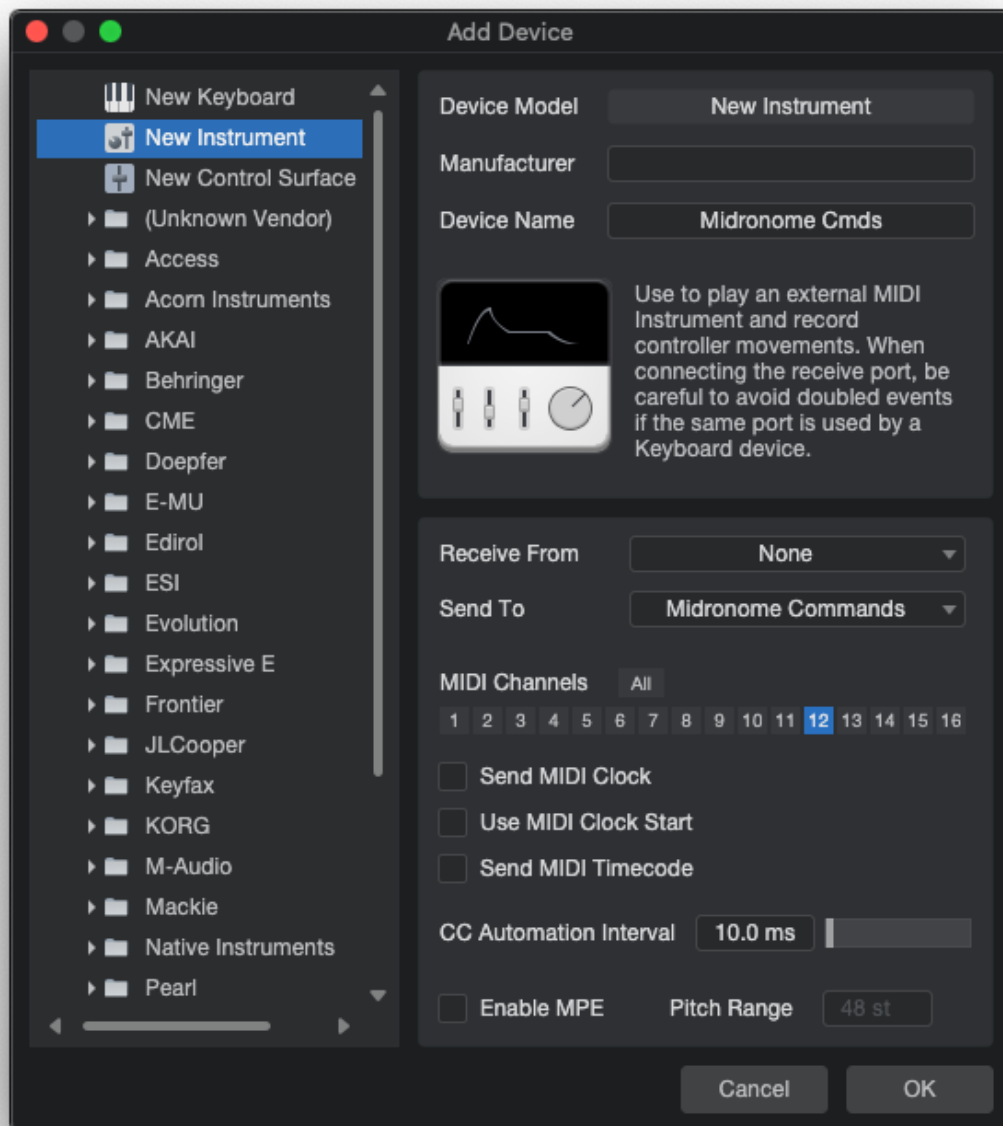
Then press Play: the Midronome should sync and its orange "Locked" LED should turn on after one bar. If not, make sure the plugin's audio is in fact sent to the "INPUT" plug of the Midronome, and that it's loud enough.

7.2.2 – Sync the time signature

If you also want to sync the time signature, you need to use the MIDI messages sent by the plugin.

In Studio One:

- Open the Preferences
- In the "External Devices" tab, press the "Add..." button
- Select "New Instrument"
- Give it a name (we will call it "Midronome Cmds")
- Select *"Midronome Commands"* in "Sent To"
 - The name might be different on Windows (probably "Midronome")
- Select MIDI Channel 12 (though when using this with the plugin it does not seem to matter)



Now create a new Instrument Track:

- In the MIDI Output, select the Instrument “*Midronome Cmds*” you created
- In the MIDI Input, select the Midronome Plugin, and channel 12
- Then record enable the track



Now the time signature will follow the changes in the session.
Moreover, even when Studio One is not playing, the Midronome's tempo will match the session's tempo (at the position of the playhead).

8. Reason Studios

8.1 – Sync Reason to the Midronome over USB

This requires no setup on the Midronome, and the only hardware required is the USB cable between the Midronome and the computer where you are running Reason.

Then you need to get Reason to follow external MIDI Clock:

- Follow the steps of the “*Syncing Reason to an external MIDI application or instrument*” section in the [official Reason documentation](#)
- Adjust the MIDI Clock delay as written in the “*Adjusting for Latency*” section

8.2 – Sync the Midronome to Reason using the VST3 Plugin

8.2.1 – Sync the tempo

Start by downloading the VST3 plugin from [the website support page](#), installing it, and making sure you see “Midronome” in your list of plugins.

Then, set up the Midronome hardware:

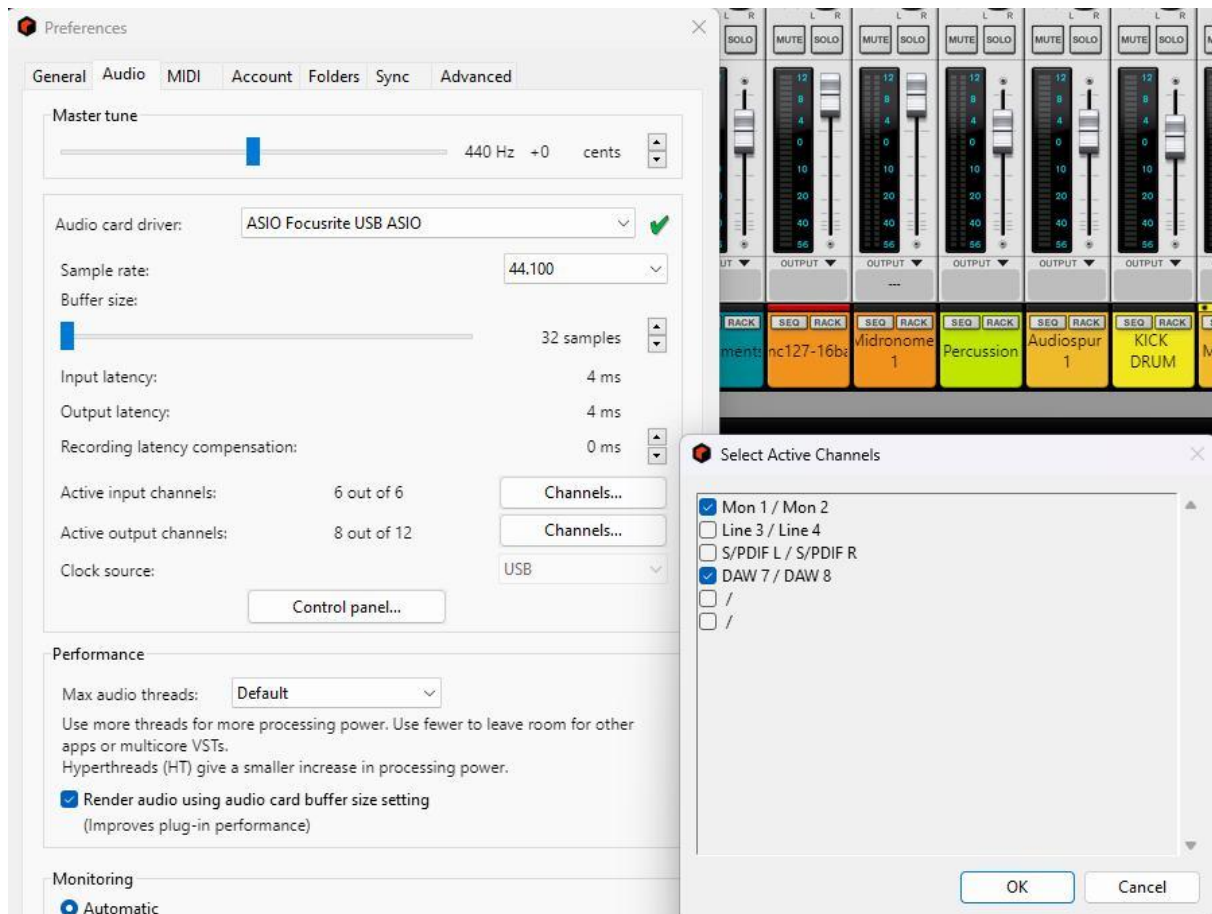
- Set the **inP** setting to **24P** or **24P.**
 - (more info about these modes in the [Midronome User Guide](#))
- Make sure the time sig. (**bAr** setting) matches your session’s

And set up the sync track in Reason:

- In the Rack view, add the Midronome as an Instrument to the Reason rack:
 - Drag and drop from the Browser from the left side
 - Or use Create > Instruments > Midronome (VST3)
- Press TAB to toggle Rack to look at the backside
- Connect the Audio Out of the plugin to a dedicated output on Audio I/O



Then activate the output by going to Menu > Preferences > Audio > Active output channels > Channels... and ticking the correct channels.



Finally connect a cable from this output to the Midronome's "INPUT" plug. Then press Play: the Midronome should sync and its orange "Locked" LED should turn on after one bar. If not, make sure the plugin's audio is in fact sent to the "INPUT" plug of the Midronome, and that it's loud enough.

8.2.2 - Sync the time signature

If you also want to sync the time signature, you need to use the MIDI messages sent by the plugin.

There are unfortunately no specific steps for Reason Studios yet. Please follow the steps in the "Other DAWs" section.

9. Cockos Reaper

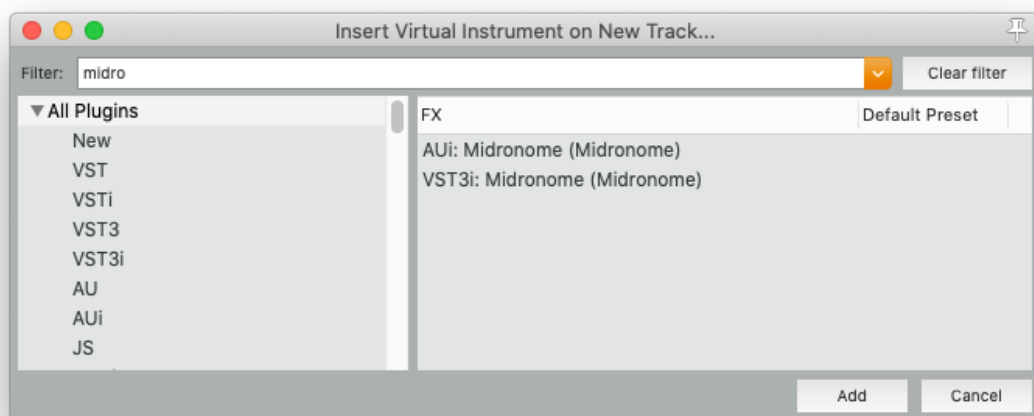
9.1 – Sync Reaper to the Midronome over USB

As of now, this is unfortunately only possible in [Ableton](#), [Bitwig](#), [Reason](#), and [FL Studio](#). This is not a Midronome limitation, other DAWs are simply not able to follow MIDI Clock.

9.2 – Sync the Midronome to Reaper using the VST3 Plugin

9.2.1 – Sync the tempo

Start by downloading the VST3 plugin from [the website support page](#), installing it, and making sure you see “Midronome” in your list of plugin



(if you see two plugins like on the picture, it's because you have both the AU and the VST3 installed. Please prefer the VST3)

Then, set up the Midronome hardware:

- Set the **inp** setting to **24P** or **24P**.
 - (more info about these modes in the [Midronome User Guide](#))
- Make sure the time sig. (**bar** setting) matches your session's

And set up the sync track in Reaper:

- Right click in the track list, and *"Insert virtual instrument on new track..."*.
- Then select the Midronome plugin
- Make sure that new track is sending audio to a dedicated (physical) output
- Connect a cable from this output to the Midronome's *"INPUT"* plug

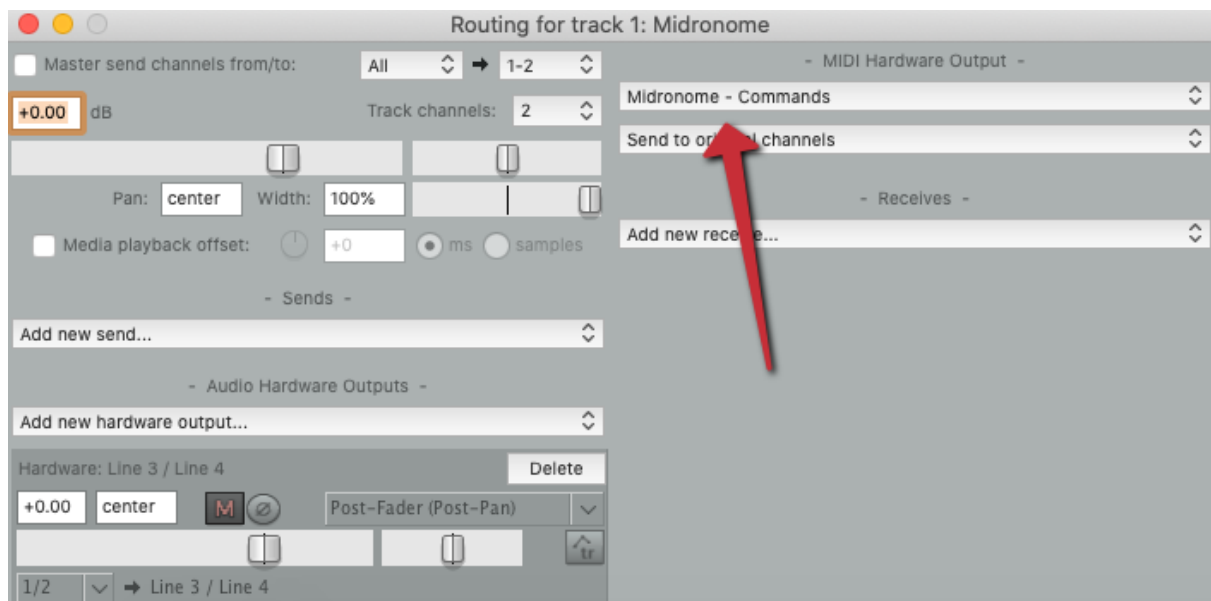
Then press Play: the Midronome should sync and its orange "Locked" LED should turn on after one bar. If not, make sure the plugin's audio is in fact sent to the "INPUT" plug of the Midronome, and that it's loud enough.

9.2.2 – Sync the time signature

If you also want to sync the time signature, you need to use the MIDI messages sent by the plugin.

In Reaper, on the Plugin track, press "Route" at the bottom. Then in "MIDI Hardware Output", select *"Midronome Commands"*.

Note that the name might be different on Windows (probably "Midronome").



Now the time signature will follow the changes in the session.

Moreover, even when Reaper is not playing, the Midronome's tempo will match the session's tempo (at the position of the playhead).

10. Bitwig Studio

10.1 – Sync Bitwig to the Midronome over USB

This requires no setup on the Midronome, and the only hardware required is the USB cable between the Midronome and the computer where you are running Bitwig.

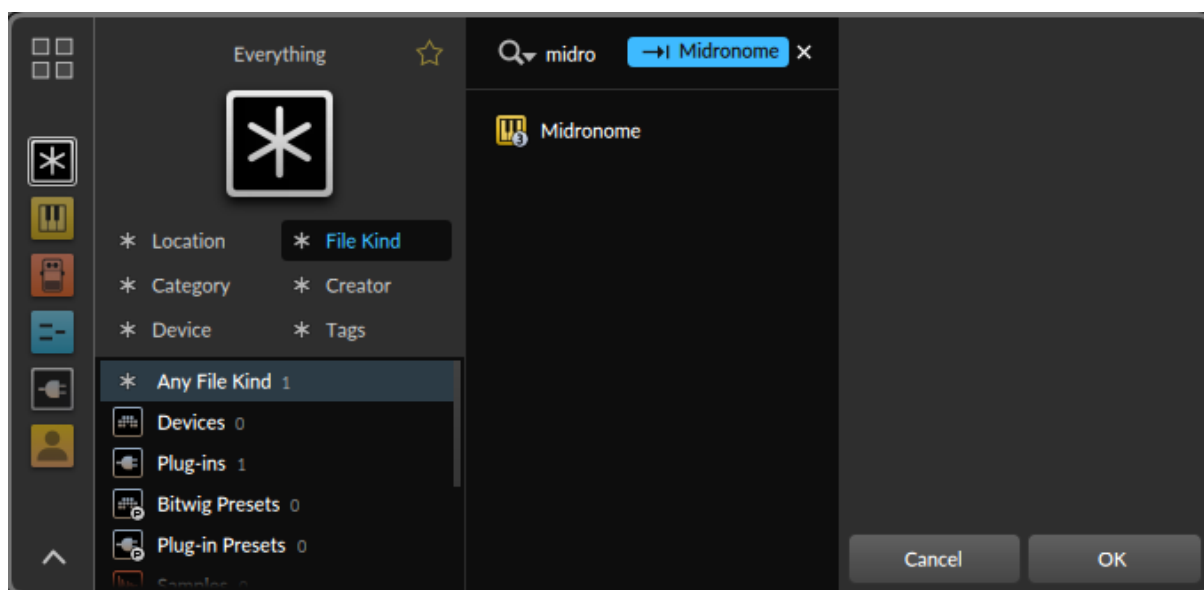
Then you need to get Bitwig to follow external MIDI Clock:

- see the [Bitwig User Guide](#) (**Synchronization Settings** section)
- In the Settings, in Synchronization
 - set “Sync Method” to “MIDI Clock”
 - choose one of the Midronome interfaces in “MIDI Input”
 - adjust the Clock delay value if needed

10.2 – Sync the Midronome to Bitwig using the VST3 Plugin

10.2.1 – Sync the tempo

Start by downloading the VST3 plugin from [the website support page](#), installing it, and making sure you see “Midronome” in your list of plugins.



Then, set up the Midronome hardware:

- Set the *inp* setting to *24P* or *24P*.
 - (more info about these modes in the [Midronome User Guide](#))
- Make sure the time sig. (*bAr* setting) matches your session's

And set up the sync track in Bitwig:

- Add a new track, and select the Midronome plugin
- Make sure that new track is sending audio to a dedicated (physical) output
- Connect a cable from this output to the Midronome's "INPUT" plug

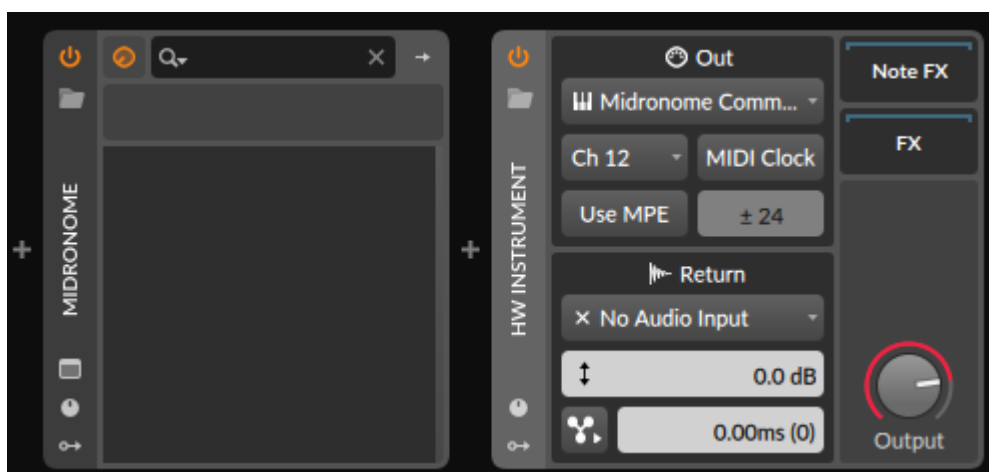
Then press Play: the Midronome should sync and its orange "Locked" LED should turn on after one bar. If not, make sure the plugin's audio is in fact sent to the "INPUT" plug of the Midronome, and that it's loud enough.

10.2.2 - Sync the time signature

If you also want to sync the time signature, you need to use the MIDI messages sent by the plugin.

In Bitwig, after the Midronome plugin, add the "HW Instrument" Plugin":

- Select "Midronome Commands" as the MIDI Output
 - The name might be different on Windows (probably "Midronome")
- Select MIDI Channel 12



Now the time signature will follow the changes in the session.

Moreover, even when Bitwig is not playing, the Midronome's tempo will match the session's tempo (at the position of the playhead).

11. Other DAWs

Use this section if your DAW does not have a specific section above.

11.1 – Sync the DAW to the Midronome over USB

As of now, this is unfortunately only possible in Ableton, Bitwig, Reason, and FL Studio. This is not a Midronome limitation, other DAWs are simply not able to follow MIDI Clock.

11.2 – Sync the Midronome to the DAW using external sync

11.2.1 – Use the Midronome DAW Plugin

The Midronome plugin generates 24ppq pulses which can be used to sync the Midronome to your DAW. The plugin also sends MIDI Data which can be sent to the “Midronome Commands” USB-MIDI interface, on Channel 12.

Start by downloading the plugin from [the website support page](#), installing it, and making sure it shows up as an “Instrument” in your DAW.

Then follow these instructions:

- On the Midronome:
 - set the *inP* setting to *24P* or *24P.*
 - (more info about these modes in the [Midronome User Guide](#))
 - Make sure the time signature (*bAr* setting) matches the DAW’s
- In the DAW, place the plugin on a track
- Make sure that track is sending audio to a dedicated (physical) output
- Connect a cable from this output to the Midronome’s “INPUT” plug

Then press Play: the Midronome should sync and its orange “Locked” LED should turn on after one bar. If not, make sure the plugin’s audio is in fact sent to the “INPUT” plug of the Midronome, and that it’s loud enough.

This should be enough to sync the tempo.

If you also want to sync the time signature, you need to use the MIDI generated by the plugin. Send the MIDI output from the plugin to the “Midronome Commands” [OUT] interface, on Channel 12.

In most DAWs, this is done by adding an extra MIDI track, set its input to the Midronome Plugin, set its output to “Midronome Commands”, and record-enabling this MIDI track.

11.2.2 - Create the 24ppq pulses manually in the DAW


If your DAW or software does not support the plugin, you can create the pulses yourself.

You can follow the same instructions as the section above, but instead of placing the plugin on the sync track, place a sharp sound every **64th note triplet** (24 times per beat).

Any sound will work (for example a recording), but edit it so it is loud (peaking at -1dBFS or close) and less than 5ms long.

To sync the time signature you can automate your DAW to send MIDI CC Commands to the “Midronome Commands” [OUT] interface, the same way the plugin would, using MIDI CC 90 on Channel 12.

11.2.3 - Sync using MidroSync (“Syn” mode)

As a final possibility, you can get your DAW to send a MidroSync signal ( setting set to **54n**) to sync both tempo and time signature.

Note: This way of syncing is **deprecated** since it has been replaced with the new 24PPQ modes since firmware 2.0. But it will still work.

See [this video](#) explaining how to set it up, or follow these steps:

1. Generate a WAV file using the **MidroSync File Generator** tool
 - o Select the correct sample rate for your session
2. Import the file to a track in the DAW

- For now, make sure the DAW is playing the file as it is, no warping/stretching, and no fades
- 3. Route that track to a separate external output on your audio interface
 - Make sure nothing else is playing on that output
 - connect this output to the Midronome's INPUT plug
- 4. Press play: the display should show "---" and start syncing on the next bar
 - turn the volume up if nothing is happening
 - turn the volume down if you are getting constant resyncs or strange behavior

Once this is working:

- find the ideal volume as shown in section 5.1 of the Midronome User Guide
- if your DAW can stretch/warp the sync WAV file, try enabling it
 - optionally, regenerate a new file with only 1 bar @125bpm
 - this file will be more easily stretched by the DAW
 - make sure the DAW stretches without changing the pulses (you can try a few different stretching modes, "re-pitch" mode is best)
 - make sure it detects the correct tempo on the original file

12. Troubleshooting

There are no Midronome MIDI interface in the DAW

If some of the 5 MIDI interfaces mentioned in [Preliminary: USB communication](#) do not appear in your DAW, try the following:

- Make sure your device's firmware version is 2.0 or newer
- Unplug and replug the USB cable
- Check the **"Important"** note in the [Preliminary: USB communication](#) section
- Make sure the USB cable is plugged all the way in
- Unplug all other USB devices
- Remove all USB hubs
- Try a different USB cable
- Try a different USB port
- Check in another MIDI software if the interfaces appear (MIDIView, MIDI Monitor, PocketMIDI, for example)

When I press Play in the DAW, nothing happens on the Midronome

Please check the following:

- The sync track has sound coming out of it (check the meters)
- The sync track is not muted
- The sync track's audio is sent to the right output
 - And that output is sent to the Midronome's INPUT plug
 - More precisely to the left channel of the INPUT plug
- The sync track's volume is not too low
- The output's volume is not too low
- The Midronome's **inP** setting is set to **24P**, **24P.** or **54n**
- If none of these work, try to flip the phase on the Midronome plugin output (most EQ plugins will have a "invert phase - Ø" button)

The sync works but there is a delay

Delay is normal, and can happen at many levels:

1. In the DAW internally
2. When converting audio from digital to analog and vice-versa

3. In the Midronome, when receiving/sending a sync signal or a clock (but we've made sure this one is very low, typically way under 1ms)
4. In the receiving hardware sequencers, between receiving the MIDI Clock and generating the audio

The only thing that matters is **stability** - if that delay is always the same, then it just needs to be compensated using a negative delay.

And the negative delay can be adjusted both when syncing using MIDI Clock over USB and when using external sync:

- **USB sync:** refer to your DAW's section and manual to adjust the MIDI Clock Sync delay
- **External sync/Plugin:**
 - or use your DAW's track delay (see for example how to adjust the track delay in Ableton in [this chapter of this video](#))
 - use the MidroSync File Generator negative delay

In the Midronome settings, there is no "Syn" option in "inP" menu

If in the Midronome settings (after pressing the Red Setup button), you cannot find the **Syn** option in the **inP** menu, please check:

- your device's firmware version is **1.0** or newer
- the **CL. 1** setting is set to a number (any number)

In the Midronome settings, there is no "24P" option in "inP" menu

Same as above but for the **24P** or **24P.** options. Please check:

- your device's firmware version is **2.0** or newer
- the **CL. 1** setting is set to a number (any number)

I cannot see the VST3/AU/AAX Plugin in my DAW

- Check that the plugin file is correctly installed (Midronome.vst3, Midronome.component, or Midronome.aax_plugin)
 - On Windows the plugin will be a folder, not a file
- Check that its location is in fact where your DAW is searching for Plugins
- Open the Plugin Manager in your DAW and refresh the list

Note that the plugin will **not** appear as an “Audio Effect”, but as an “Instrument”.

“Syn” option in “inP” is selected, LED is green, but nothing is in sync

When you are in the settings and have selected **Syn**, the device:

1. turns all LEDs off so you can check the volume
2. does **not** sync, it will when you exit the **inP** setting menu

So once the volume is correct, simply press the Red Setup button to exit the settings and start syncing.

The DAW’s and Midronome’s clicks are slightly off

It’s always a good idea to check hear the two metronomes (DAW’s and device’s) together to check if the sync works properly.

If you can hear there are slightly out of sync (sounding like “kl-klik” instead of “klik”), it probably means the device received an erroneous sync signal from your DAW.

This could mean:

- The signal volume is too low or too high
 - If you are using MidroSync (**inP** set to **Syn**), the volume has a specific “green zone”, see the section 5.1 of the Midronome User Guide
 - If you syncing to 24 ppq pulse (**inP** set to **24P** or **24P.**), there is only a minimum volume, so simply make sure you are not too close to the limit (i.e. turning the volume down a little should not break the sync)
- The signal is mixed together with something else (for example a metronome or another audio track from your DAW)
- The signal is too fast (above 400bpm) or too slow (below 30bpm)
- The signal is not sent at 24ppq - equivalent to 64th note triplets
- The signal has been badly stretched to tempo (for example, in Ableton, only the “re-pitch” warping option works, the others do no stretch the signal properly)
- This signal is missing pulses (because of fades or overlapping regions f.ex.)
- The signal is just wrong (bug in DAW software, in plugin, etc.)

- If you are using the Midronome plugin:
 - try reducing the buffer size to 128 or lower
 - avoid wild tempo changes (f.ex. from 350bpm to 40bpm)
 - check what the plugin sends by bouncing it.
 - count the pulses: there should be **24 per beat**
 - if some are added or missing, please reach out

There is a 1-bar delay when starting the sync

This is by design, as a lot has to happen right before a new bar.

Firmware 2.0 introduced a new mode **2.4P**, where the Midronome does not work as a master clock when it's not syncing, but when the sync starts right away, without that 1-bar delay.

How to get more help

Feel free to search and ask on:

- The [Midronome Forums](#)
- The [Midronome Facebook Group](#)

And feel free to contact support:

- by email on support@midronome.com
- on [Facebook Messenger](#)

No support will be provided regarding getting Ableton, Bitwig, Reason, or FL Studio to sync to MIDI Clock (over USB), as this is not Midronome specific.

If you struggle to get these to work, feel free to ask the community on the [Midronome Forums](#), on the [Midronome Facebook Group](#), or directly on your DAW's community forums.

Generally asking on public places will both help the community and have better chances of getting faster replies.