QuantiChord

MIDI Chord Quantizer
App and AUv3 MIDI effect for iPhone/iPad/Mac

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Presentation

"QuantiChord" is a MIDI effect that generates chords from incoming notes and quantizes the results to a pre-defined scale. It can be used as a standalone application or as an AUv3 MIDI effect plug-in.

The chord is generated by adding up to 8 transposed notes to the original note played. Once the chord is generated, it is quantized to limit it to the selected output scale.

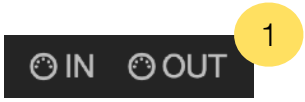
The application supports full internal and external MIDI connections for input and output. An internal sound bank is included.

The AUv3 MIDI effect plug-in supports multiple instances. A compatible host is required to run the plug-in. The host must support the Audio Unit v3 (AUv3) MIDI effect format.

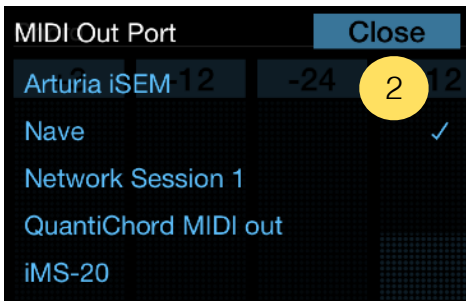
Application setup

MIDI connections between iOS or macOS apps

"QuantiChord" can send and receive MIDI from other applications installed on the same device. If an application is "Core MIDI" compatible, it will appear in the MIDI browser of "QuantiChord", and you will be able to send and receive MIDI from it.



1. ***Touch the "MIDI IN" or "MIDI OUT" button on the top left of the keyboard.***



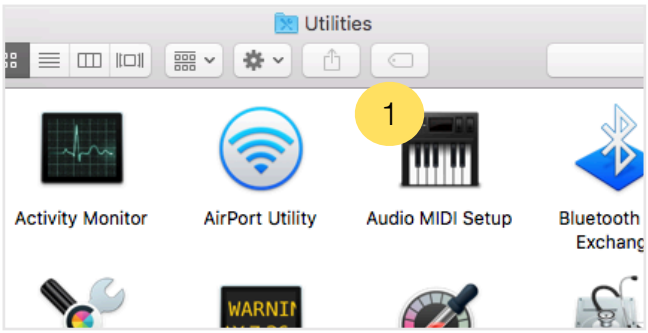
2. ***Select the application you want to send or receive MIDI from.***

If the application you want to send MIDI doesn't appear in the "MIDI Out Port" browser, you can try to use the "QuantiChord MIDI out" port, this is a specific virtual port created to send MIDI to any application that doesn't declare its own MIDI input port.

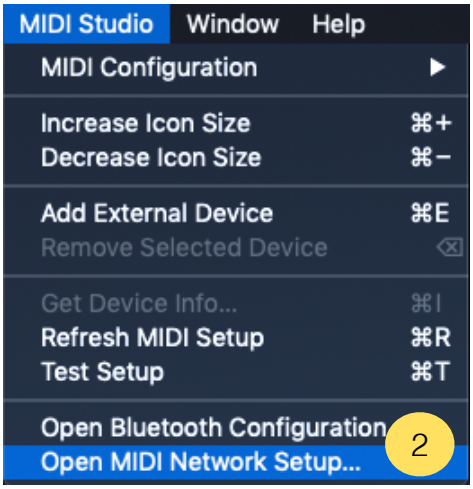
On iPhone or iPad, some applications are stopping to run when they are switched in background, then, they will not respond while "QuantiChord" is in foreground. Most applications have an option to activate an "Audio Background " mode that will let them running, even if they are going in background. Please check the manual of your other applications to know if they support "Audio Background" mode and how to activate it.

MIDI over WiFi to connect an iPhone or an iPad to a Mac

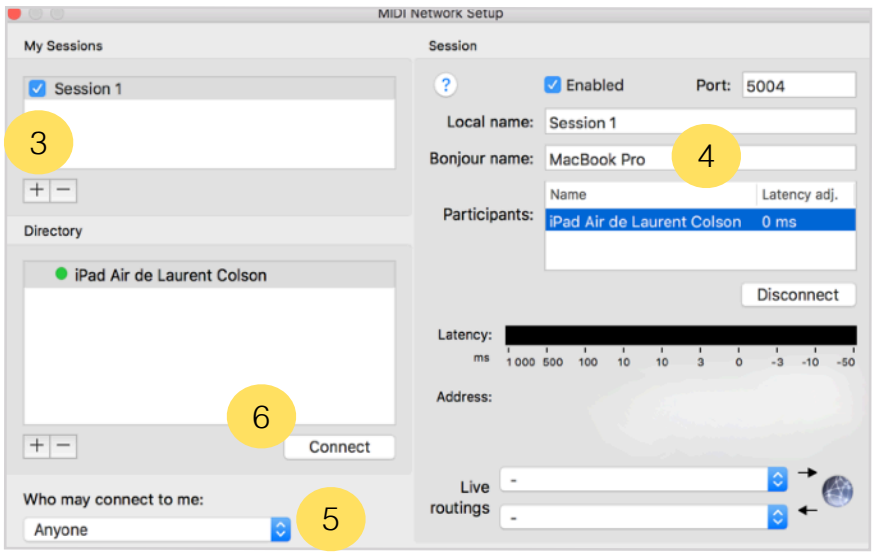
MIDI can be sent or received natively over a WiFi network between an iPad or an iPhone on a macOS computer. You can drive any DAW, virtual instrument or hardware gear hosted on the computer or receive MIDI from them.



1. *On the Mac, go to the "Applications" folder, then "Utilities" folder and open the application "Audio MIDI Setup".*



2. *Select the item "Open MIDI Network Setup" from the menu "MIDI Studio".*

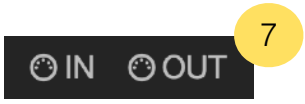


3. *Create a new session by clicking on "+" under "My Sessions".*

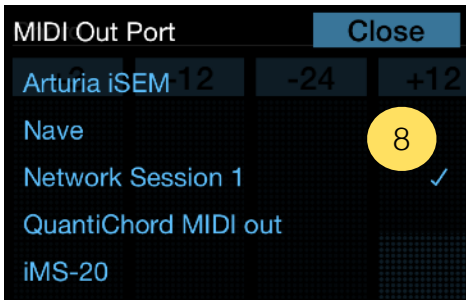
4. *Enter a "Bonjour name".*

5. *Under "Who may connect to me", select "Anyone".*

6. *Select the iPad or iPhone you want to connect, and click "Connect". If your device doesn't appear, be sure that "QuantiChord" is launched, and the device is connected to the same WiFi network as the computer.*



7. *Touch the "MIDI IN" or "MIDI OUT" button on the top left of the keyboard.*

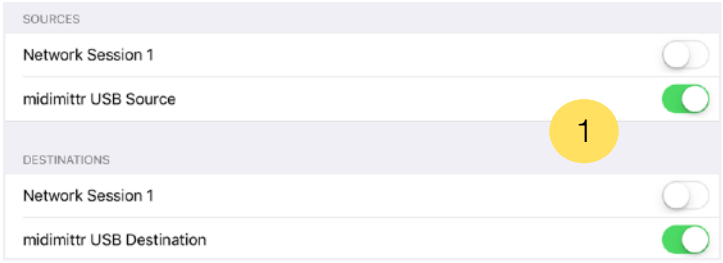


8. *Select "Network Session 1" to send or receive MIDI through the MIDI over WiFi network.*

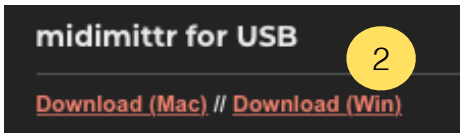
If your iPhone or iPad is connected with the USB cable to macOS, the MIDI over WiFi will use the wire connection cable to transmit MIDI directly to the computer instead of the wireless network. As soon as the MIDI cable is disconnected, the wireless connection is used again.

MIDI over USB with midimittr to connect an iPhone or an iPad to a Mac or Windows computer

MIDI can be sent or received through the USB cable to a computer running macOS or Windows. You can drive any DAW, virtual instrument or hardware gear hosted on the computer or receive MIDI from them.



1. *Download "midimittr" from the App Store on your device, launch it and select "midimittr USB source" and "midimittr USB destination" on the setup panel.*



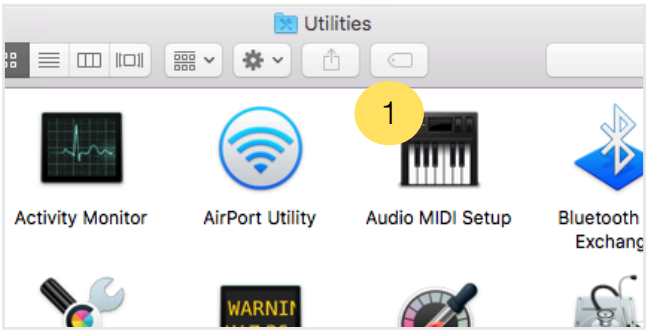
2. *Download "midimittr" for macOS or Windows on your computer from the website http://www.s-r-n.de/midile/ and launch it on your computer.*

3. *Touch the "MIDI IN" or "MIDI OUT" button on the top left of the keyboard.*

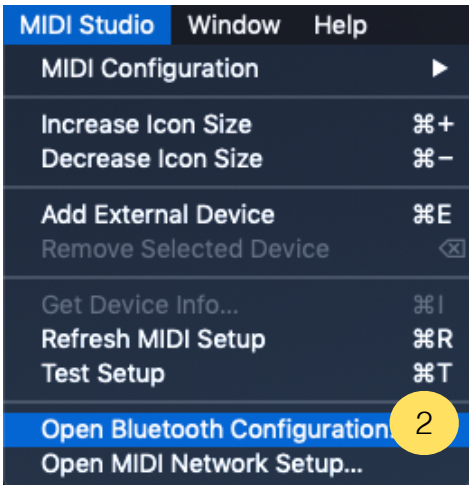
4. *Select "midimittr source" or "midimittr destination" to send or receive MIDI through the USB cable.*

MIDI over Bluetooth to connect an iPhone or an iPad to a Mac

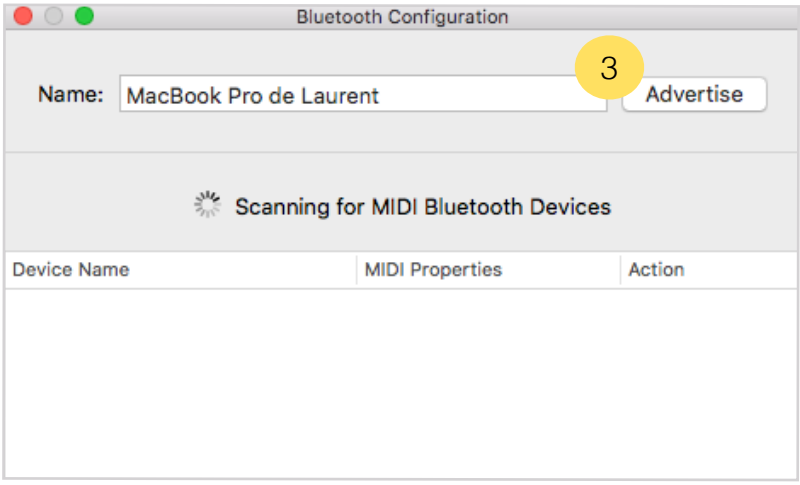
Like MIDI over WiFi, MIDI can be sent or received natively over a Bluetooth connection on macOS. You can drive any DAW, virtual instrument or hardware gear hosted on the computer or receive MIDI from them.



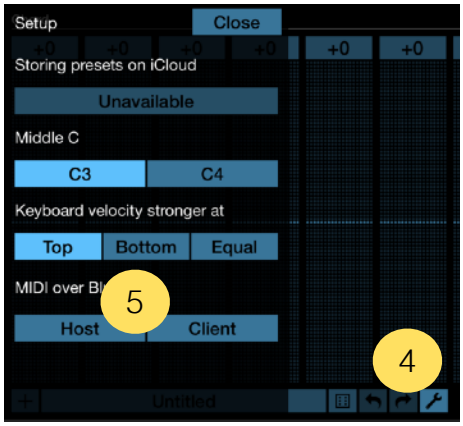
1. *On the Mac, go to the "Applications" folder, then "Utilities" folder and open the application "Audio MIDI Setup".*



2. *Select the item "Open Bluetooth Configuration" from the menu "MIDI Studio".*

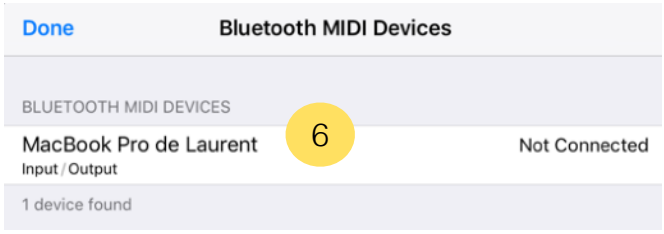


3. *On the "Bluetooth Configuration" window, click on "Advertise".*

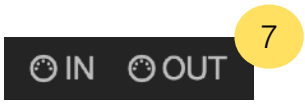


4. *On "QuantiChord", touch the setup button on the top right of the toolbar..*

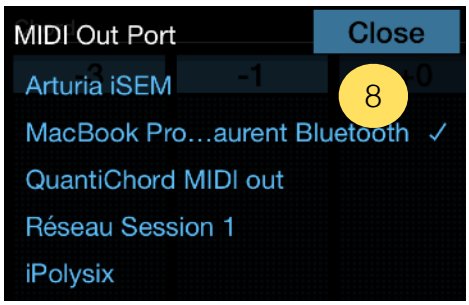
5. *Click on the "Host" button.*



6. *Select the MIDI device you want to join in the list to connect it.*



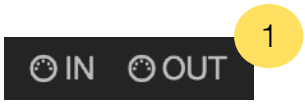
7. *Touch the "MIDI IN" or "MIDI OUT" button on the top left of the keyboard.*



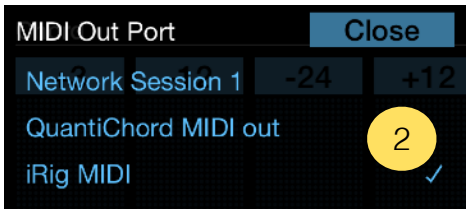
8. *Select the Bluetooth MIDI port to send or receive MIDI over the Bluetooth connection.*

MIDI to hardware setup

You can directly connect MIDI hardware to the iPad, iPhone or Mac by using a compatible MIDI interface. Once connected, the interface will be automatically recognized.



1. ***Touch the "MIDI IN" or "MIDI OUT" button on the top left of the keyboard.***



2. ***Select the MIDI interface port to send or receive MIDI through it.***

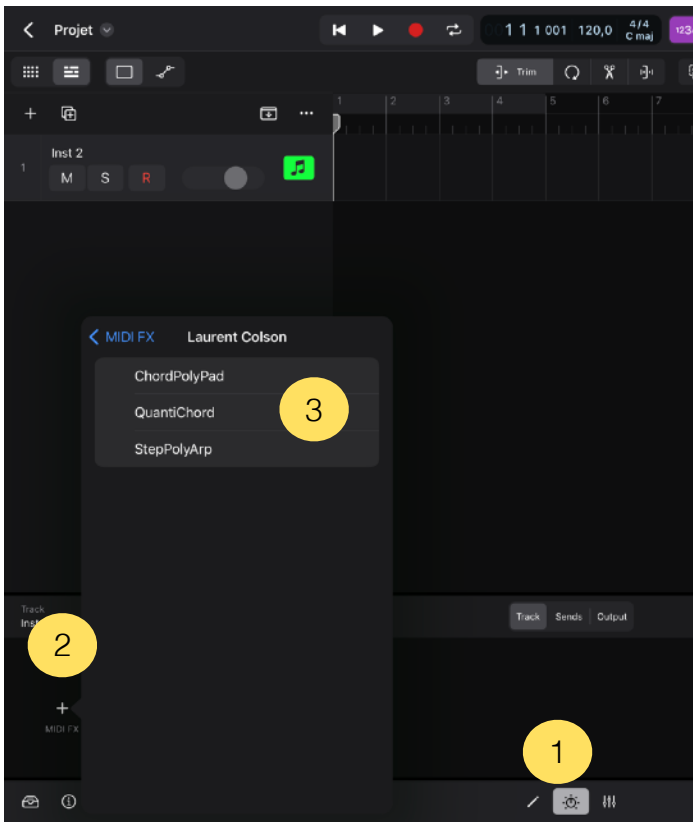
The AUv3 MIDI effect plug-in

The AUv3 plug-in is automatically installed after opening the application at least once.

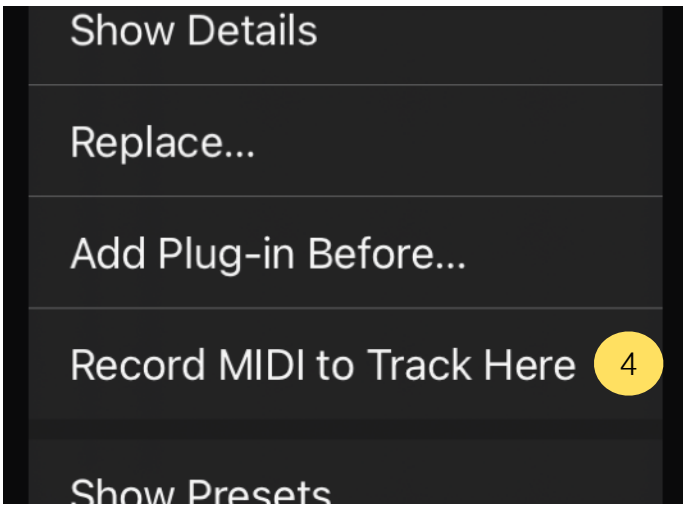
The AUv3 plug-in is able to run on multiple tracks or channels simultaneously, each instance memorizing its own settings. All the settings are automatically saved with the host project file and recalled when re-opening it later.

AUv3 plug-in setup for iPhone and iPad apps

Logic Pro AUv3 setup

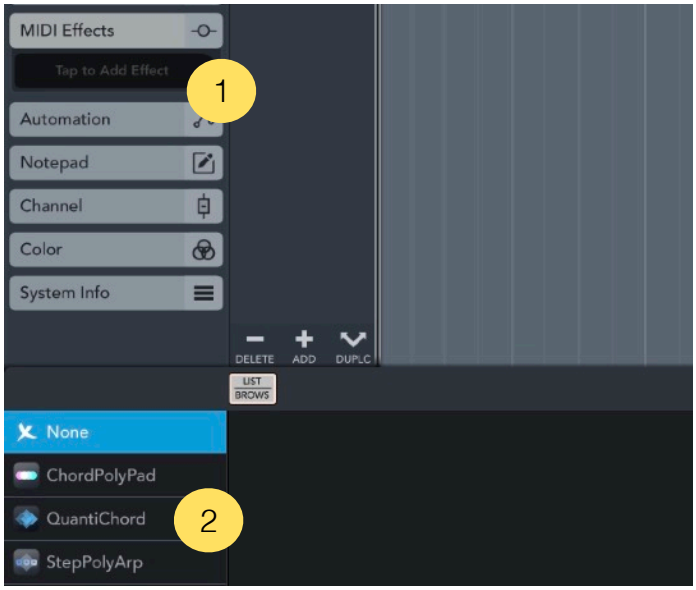


1. *On the track you want to insert "QuantiChord", press the "plugins" button.*
2. *Select "MIDI FX".*
3. *Then, choose "QuantiChord" in the list of Audio Units plug-ins.*



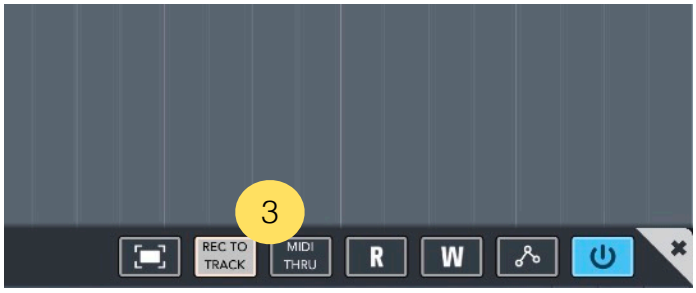
4. *If you want to record the MIDI output processed by "QuantiChord" instead of the notes you are playing, long press in the plug-ins view on the title of "QuantiChord" and select "Record MIDI to Track Here".*

Cubasis AUv3 setup



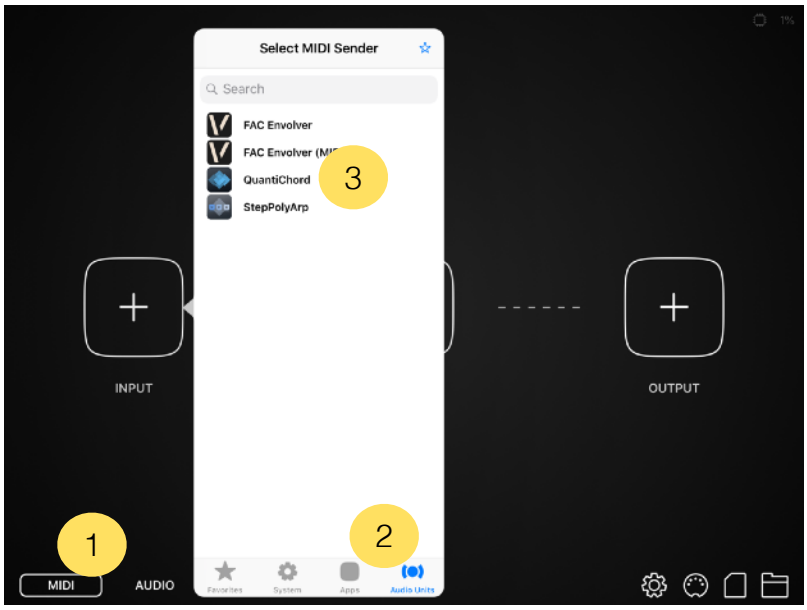
1. *On the track you want to insert "QuantiChord", select "MIDI effects" from the left panel.*

2. *Then, choose "QuantiChord" in the list.*

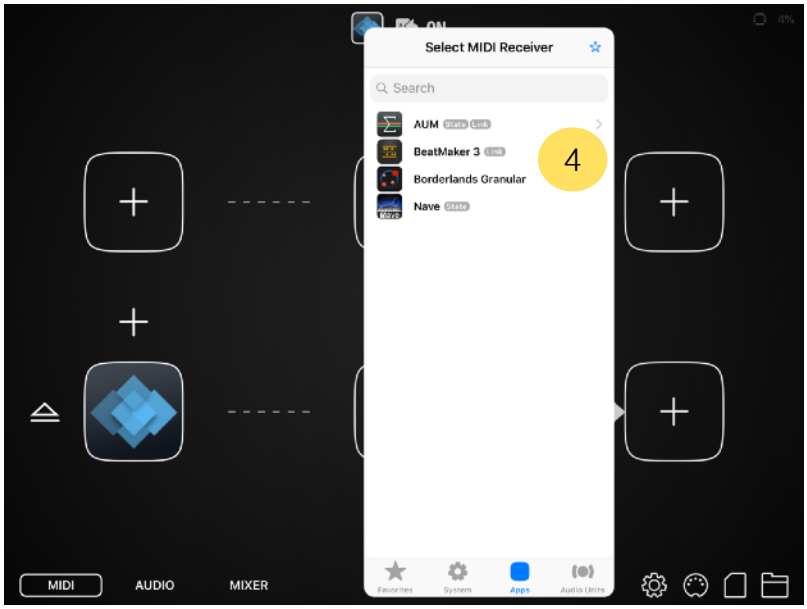


3. *If you want to record the MIDI output processed by "QuantiChord" instead of the notes you are playing, select the button "Rec to track" on the top right of the plug-in window.*

Audiobus AUv3 setup

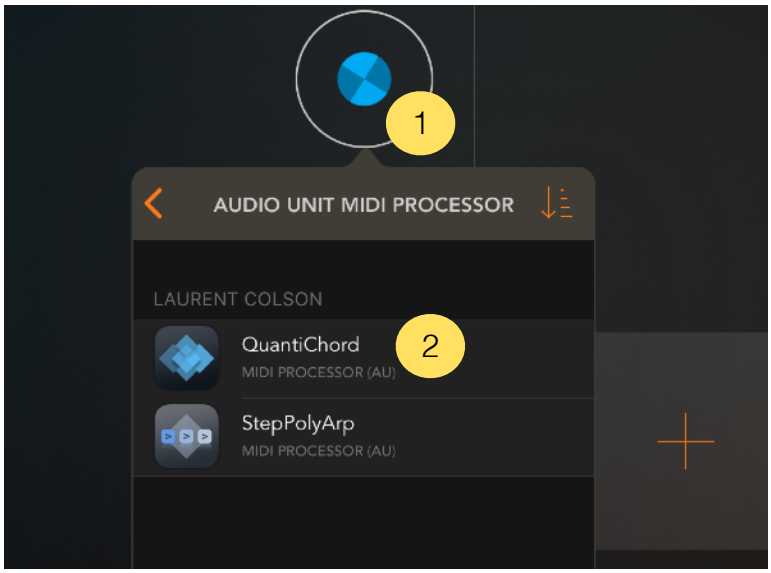


1. *Select "MIDI" section in "Audiobus".*
2. *Open the "INPUT" or "EFFECT" slot, and select the "Audio Units" section.*
3. *Then, choose "QuantiChord".*

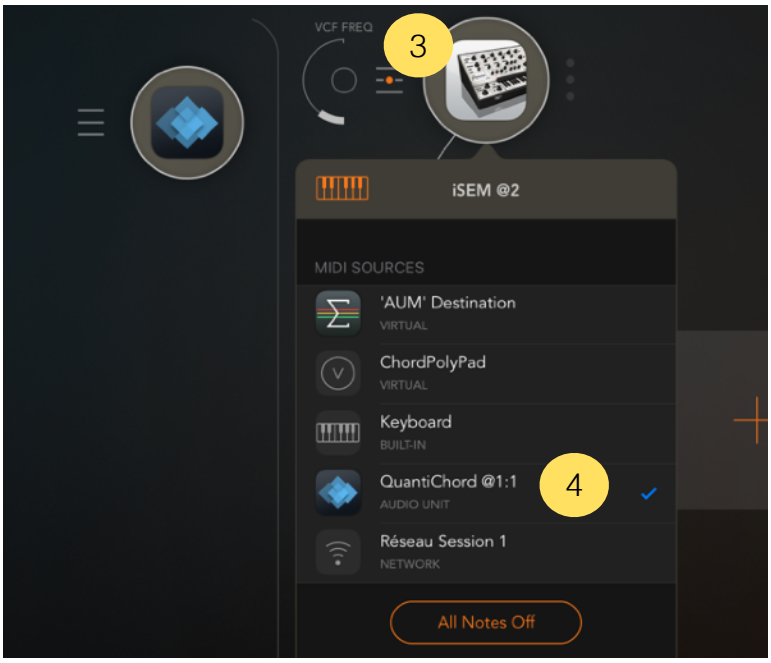


4. *Insert a MIDI receiver in the "OUTPUT" slot.*

AUM AUv3 setup

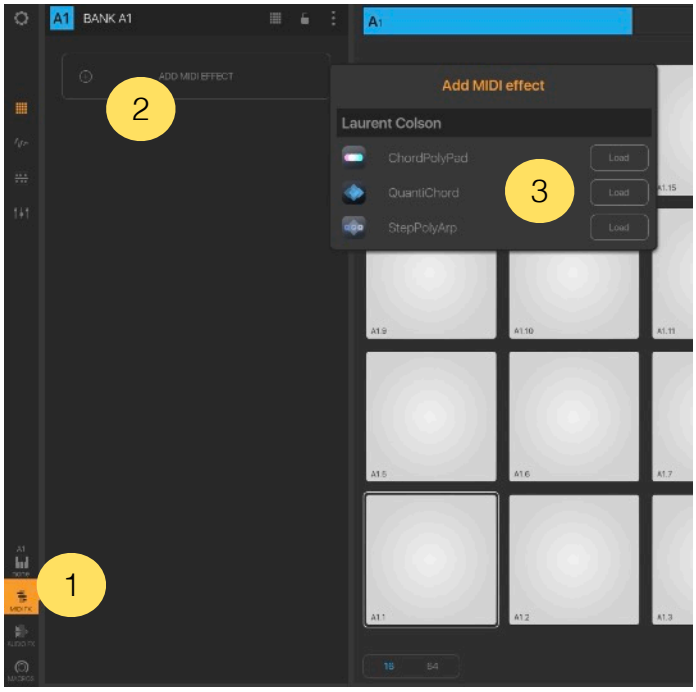


1. *Create a MIDI channel and open the plug-ins list on the top.*
2. *Choose "Audio Unit MIDI processor" section and select "QuantiChord".*



3. *Create an audio channel with an instrument and open its MIDI settings panel.*
4. *In the MIDI settings panel, select "QuantiChord" to route the processed MIDI output of "QuantiChord" to the MIDI input of the instrument.*

BeatMaker AUv3 setup

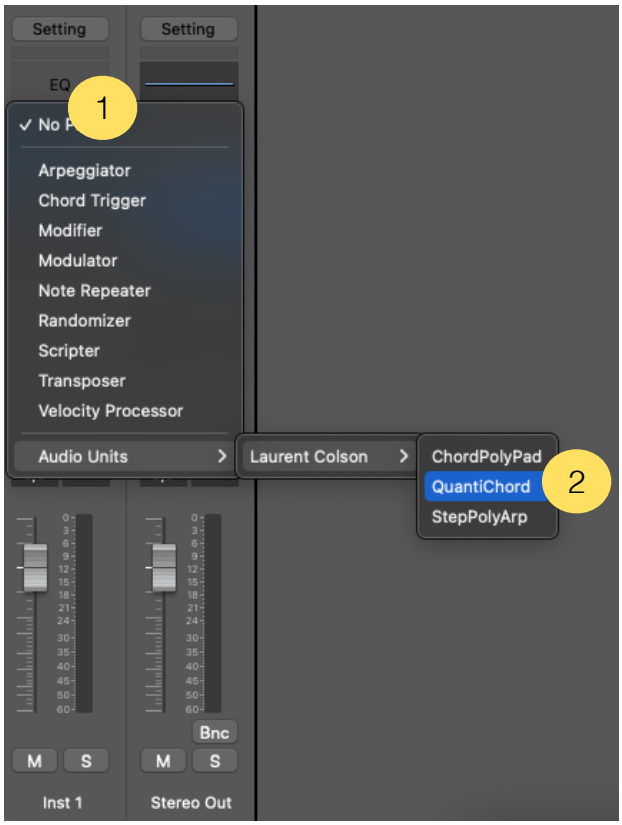


1. *On the bank you want to insert "QuantiChord", select the "MIDI effects" icon from the left panel.*
2. *Select "Add MIDI Effect" .*
3. *Load "QuantiChord" from the MIDI effects list.*

AUv3 plug-in setup for Mac apps

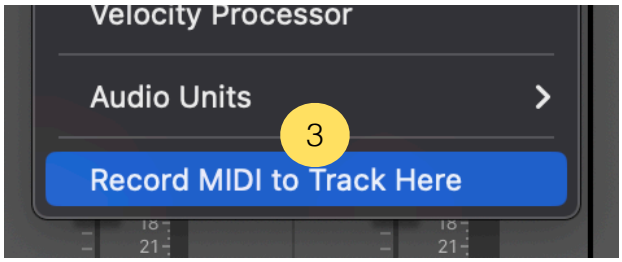
Logic Pro AUv3 setup

To use AUv3 MIDI effect plug-ins in Logic, the version 10.7 or later is required.



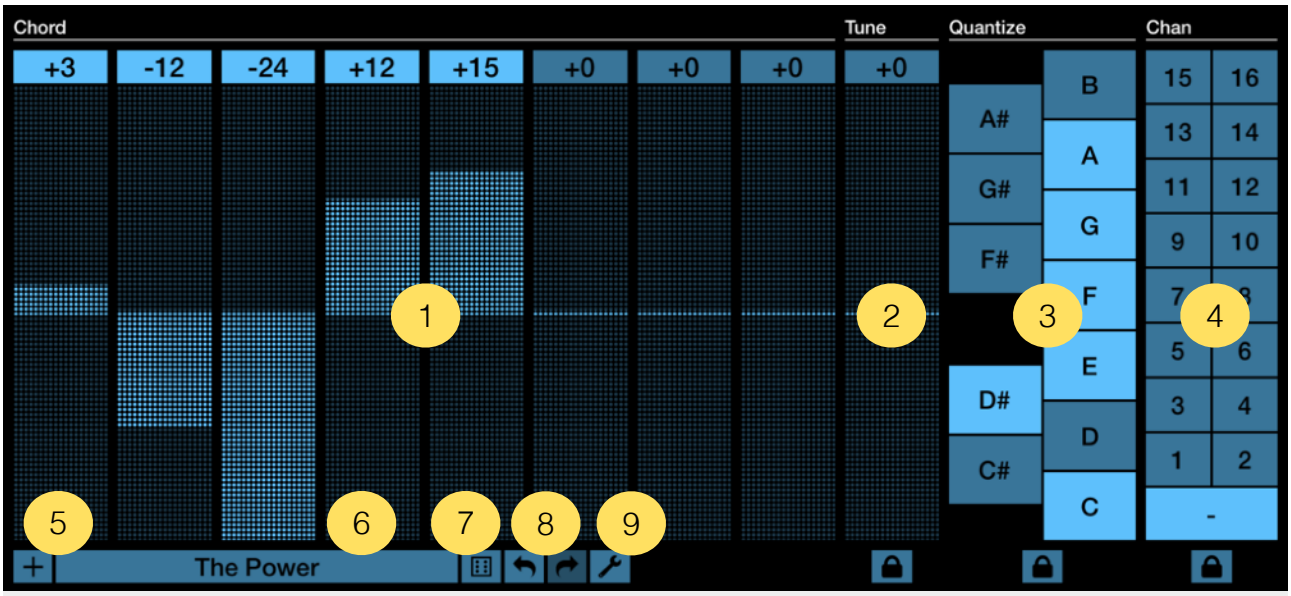
1. *On the track you want to insert "QuantiChord", select "MIDI FX" from the channel strip.*

2. *Then, choose "QuantiChord" in the list of Audio Units plug-ins.*



3. *Since Logic 10.7.5, if you want to record the MIDI output processed by "QuantiChord" instead of the notes you are playing, select the button "Record MIDI to Track Here" below the list of MIDI effects.*

The main view



1. Chord generator
2. Global tune
3. Scale quantize
4. MIDI out channel
5. Save preset
6. Preset browser
7. Random
8. Undo/Redo
9. Setup

Chord generator

The chord generator uses 8 sliders to create a chord from incoming MIDI notes. Each slider adds a transposed note from -24 to 24 semi-tones (+/- 2 octaves) to the orignal note.

Global tune

The global tune slider transposes all the notes (including incoming note) of the chord from -24 to 24 semi-tones (+/- 2 octaves).

By activating the lock button below the global tune slider, the value will be protected against any changes when switching or randomizing a preset.

Scale quantize

Before to play the generated chord, it will pass through the scale quantizer. All the notes deactivated are quantized to the next activated note.

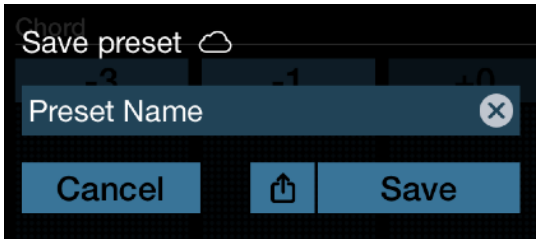
By activating the lock button below the scales quantizer area, the quantized values will be protected against any changes when switching or randomizing a preset.

MIDI out channel

By default, all incoming notes will generate a chord with the same MIDI channel that the original note. However, you can force "QuantiChord" to send all the notes to the selected MIDI channel.

By activating the lock button below the MIDI out channel area, the value will be protected against any changes when switching or randomizing a preset.

Save preset

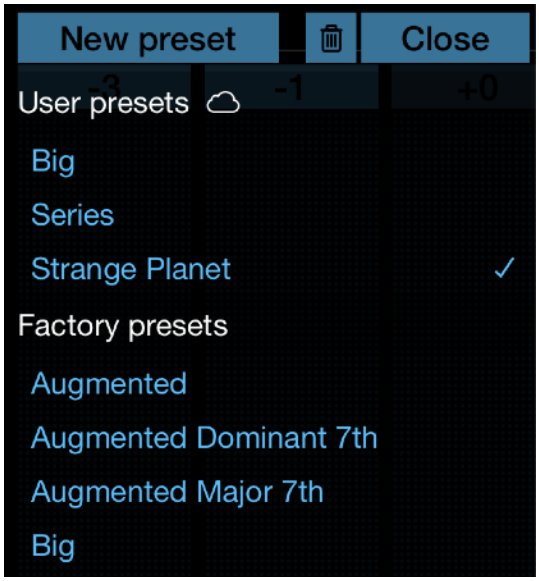


Use the "+" button to save your own presets. Enter the name you want to save the preset.

If you activated iCloud sync, a cloud icon will appear to the right of the "Save preset" title.

The share button lets you export the preset by "AirDrop", "Mail", "Message", "Files" or other available services.

Presets browser



Touching the preset name will display the list of presets available. You can load a preset from this menu.

The list is divided in two groups, "Factory Presets" and "User Presets". The first list includes all the presets originally installed, and can not be modified. The "User" group, empty at startup, contains your own presets. If you activated iCloud sync, a cloud icon will appear to the right of the "User presets" section. "New preset" button will create a new default preset.

You can delete presets inside the "User Presets" group by pressing the trash icon at the top right of the list and select the preset to delete. Confirm by pressing the "Delete" button that appears.

You can also delete a preset by making an horizontal slide on its name to erase it without having to press the trash icon first. As before, confirm the deletion by pressing the "Delete" button that appears.

Random

Creates a random preset. This affects the 8 chord sliders, and the scale quantize.

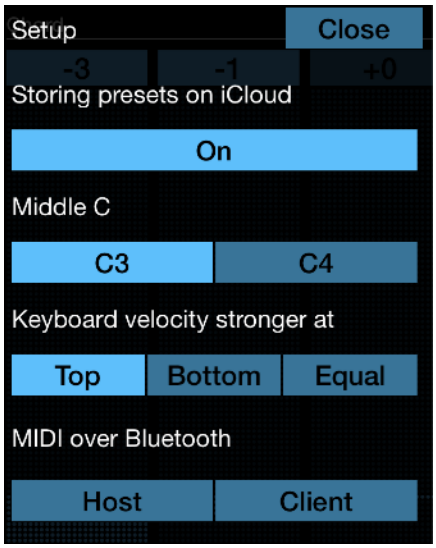
If you don't want the random change the scale quantize values, you must activate the lock button below it.

Undo/Redo

Press "Undo" to cancel previous changes you made. Press "Redo" to restore the changes.

Setup

The parameters inside the setup are globals for all instances of the AUv3 plug-in and the application.



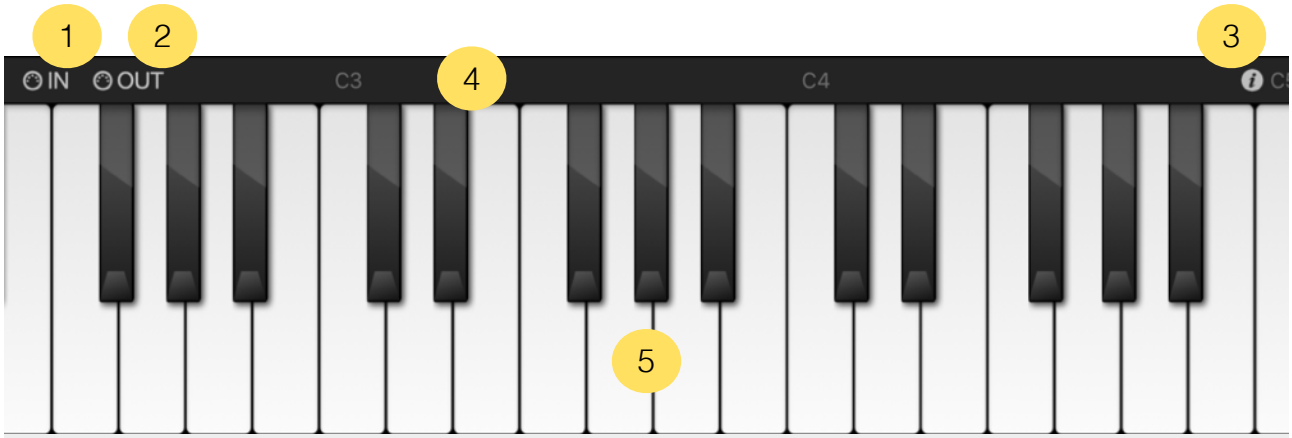
- **Storing presets on iCloud**
  Enable or disable the storage of presets on iCloud. If iCloud is not activated on your device, this switch button is disabled. Refer to Storing presets on iCloud section to learn more about iCloud storage.

- **Middle C (app)**
  Select if you want middle C labeled C3 or C4.

- **Keyboard velocity stronger at (app)**
  Determines the velocity of the application's built-in keyboard. "Top" indicates that the velocity will be higher when hitting the keys at the top. "Bottom" is the opposite, tapping the keys down gives more velocity. Finally, 'Equal' gives a fixed velocity no matter where the keys are touched.

- **MIDI over Bluetooth (app)**
  Connect to a MIDI bluetooth device or make device detectable from other. To setup MIDI over Bluetooth connection, please refer to MIDI over Bluetooth section.

The keyboard (app)



1. MIDI In
2. MIDI Out
3. Documentation
4. Scroll, size area
5. Notes

The keyboard is not available in the AUv3 version, it is provided by the host.

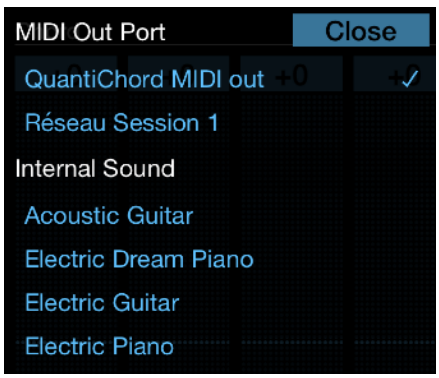
MIDI In

Select the MIDI port you want "QuantiChord" receive MIDI datas. MIDI channels can be filtered.

If you are sending MIDI directly from another application to the "QuantiChord" MIDI port, you don't need to activate any MIDI input port here.

MIDI datas received but not processed are automatically resent to the MIDI Output.

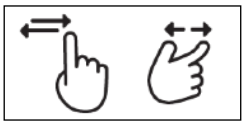
MIDI Out



Select the MIDI output port to use or an internal sound.

"QuantiChord MIDI out" is an internal virtual port that can be used to send MIDI to an application that doesn't have its own MIDI ports

Scroll, size area



The keyboard can be scrolled by panning your finger, a trackpad or a mouse inside the top area. On iPhone and iPad you can change the size of the keyboard by executing a pinch gesture in this same area.

Notes

The notes can be played directly on the virtual keyboard.

Storing presets on iCloud

"QuantiChord" can store presets on iCloud to make them available and synchronized on all your devices.

Even if you choose to store the presets on iCloud, they remain stored on local in a specific iCloud container. You will be able to load and save the presets without internet connection. A connection is needed only to sync them between the different devices.

If iCloud is activated on your device, "QuantiChord" will ask you if you want to use iCloud on the first use.

If you want to activate or deactivate it later, you can do it from the setup menu.

Multitasking - Audio Background (iPhone and iPad app)

"Audio Background" is activated by default in "QuantiChord". If the MIDI is processed while the application is in background, the application will continue to play and other applications can be launched. It is possible to control other musical applications from "QuantiChord" on the same iPad if they are themselves multitasking and "Core MIDI" compatible.

"QuantiChord" will automatically stop working in "Audio Background" mode after 30 minutes of inactivity.

"Slide Over" and "Split View" support (iPad app)

"Slide Over" and "Split View" for iPad are fully supported in "QuantiChord".

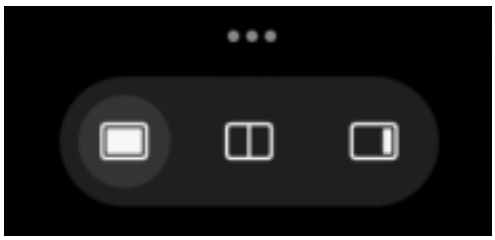
Use "Slide Over" to work on an application that slides in front of any open application, even over two open applications in "Split View".

1. *Swipe up from the bottom of the screen to open the Dock.*
2. *On the Dock, touch and hold the second app that you want to open, then drag it to the screen.*

With "Split View", you can view and use two applications at the same time.

1. *Swipe up from the bottom of the screen to open the Dock.*
2. *On the Dock, touch and hold the second app that you want to open, then drag it off the dock.*
3. *When the app opens in "Slide Over", drag the top horizontal bar inside the title area down.*

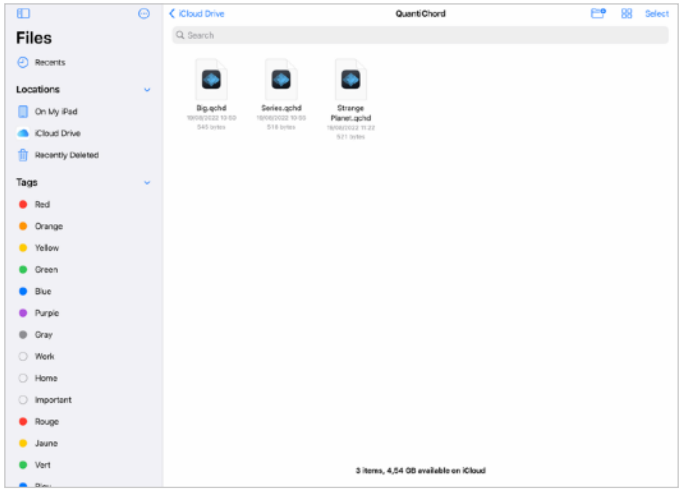
"QuantiChord" will adapt its size to the available space.



Since iPadOS 15, using "Slide Over" and "Split View" has been simplified. Just touch the 3 little dots at the top of the screen to activate either mode.

Files sharing

If you want to access your presets files directly, you need to activate iCloud in "Quanti-Chord".



In the "Files" application from the "iCloud Drive" location on iOS, or in the folder "iCloud Drive" on macOS, you will find a folder named "QuantiChord" that contents all your presets files. You can move and share them anywhere you want.

You can launch a preset from the "Files" application on iOS, or from the macOS "Finder", it will automatically load the preset inside "QuantiChord".

MIDI Program Change

The presets can be recalled from a "Program Change" command by inserting the program number as "#NNN" at the beginning of the preset name.

The number "NNN" is from 001 to 128.

For example, if you want to recall the preset "My Preset" by a MIDI "Program Change" number 10, you need to name it "#010 My Preset".

Some softwares or hardwares are using a number from 0 to 127, where "QuantiChord" is using a number from 1 to 128. In this case, to recall a preset called "#010 My Preset" on "QuantiChord", you need to send the 'Program Change" number 9 from the software or hardware (the "QuantiChord" number minus 1).

Recognized automations (AUv3)

The "AUv3" version of "QuantiChord" responds to automation parameters if the host implemented it for AUv3 MIDI effect plug-in.

Parameter	Values	Function
Transpose 1 to 8	-24 to +24	Chord transposers
Tune	-24 to +24	Global tune transposer
C to B Enabled	0 = Disabled 1 = Enabled	Note enabled or disabled

Support

To submit a bug report, please contact support from the website:
https://dev.laurentcolson.com

Do not forget to specify for which application you are requesting support, the type of device (iPhone, iPad, Mac), the version of the operating system, the way to reproduce the bug. The more details you provide, the faster the bug will be fixed.

For any issues related to the purchase, refund, app download, or occurring on the App Store, please contact Apple Support directly here:
https://support.apple.com/apps