

VoiceQ Pro: REAPER User Guide

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VoiceQ and Digital Audio Workstations

This guide describes the configurations and procedures used within VoiceQ and Digital Audio Workstations and is intended for use by Audio Engineers to understand the operation and configuration of both systems.

During the recording process, VoiceQ takes over the role of playing back the media file. You can leave the media file loaded in your Reaper session, but the track should be disabled, to avoid competing with the VoiceQ Application.

VoiceQ superimposes the scrolling text on the media and outputs it via the second DVI port of your Apple Mac video card (or the external DVI port on laptops). VoiceQ uses the Graphics Processing Unit (GPU) and the Memory on the video card to process the video, which reduces the load on the CPU of your computer.

VoiceQ will chase and scrub with Reaper while you work in Reaper. VoiceQ also has an option to cue Reaper when you select a line in VoiceQ. This will locate the Reaper session to the record location for the selected line with an adjustable pre-roll value.

Recent improvements specific to VoiceQ Pro:

- GENMTC Support for accurate sync
- VoiceQ listens for 'Start, Continue, Play & Stop commands'
- Latency Compensate Is now redundant with GENMTC active. We have left it in as a feature for hardware that may have trouble performing under load.
- Post-roll Users can set post-roll in VoiceQ Preferences
- Mute Sound when Recording mutes VoiceQ audio when recording
- Recording starts before a set time (See Preferences)
- Recording Icon added to VoiceQ Transport Actual recording of audio and management of playlists still takes place in Reaper using your normal process.

Note: In a single computer configuration VoiceQ will work with many other recording applications including Logic Pro and others. Check our website for the correct setup instructions and screenshots for these applications.

Note: In a dual computer configuration the Digital Audio Workstation may be any device that will output MIDI Time Code (MTC) and/or MIDI Machine Control.

About Reaper



Using REAPER with your Mac, and no other software, you can import any audio and MIDI, synthesize, sample, compose, arrange, edit, mix, and master songs or any other audio projects. If you add a hardware audio interface and a microphone, you have a complete professional quality recording studio, suitable for recording anything from a soloist to a band to an orchestra.

The best way to understand what REAPER can do is to try it for yourself. There is only one version of REAPER, used by home hobbyists and high-end professional studios alike. Evaluate the full version of REAPER with no obligation for up to 60 days.

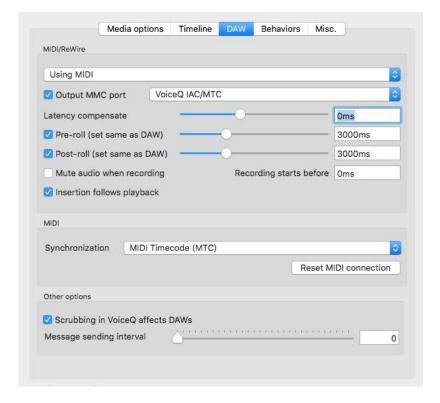
The free <u>User Guide</u> and helpful <u>user forum</u> are always available if you need a hand.

Feature Highlights

- Efficient, fast to load, and tightly coded. Can be installed and run from a portable or network drive.
- Powerful audio and MIDI routing with multichannel support throughout.
- 64-bit internal audio processing. Import, record to, and render to many media formats, at almost any bit depth and sample rate.
- Thorough MIDI hardware and software support.
- Support for thousands of third-party plug-in effects and virtual instruments, including VST, VST3, AU, DX, and JS.
- Hundreds of studio-quality effects for processing audio and MIDI, and built-in tools for creating new effects.
- Automation, modulation, grouping, VCA, surround, macros, OSC, scripting, control surfaces, custom skins and layouts.
- A whole lot more.

DAW Preferences (VoiceQ)

The preferences have been slightly altered to allow easier user access to options for MIDI.



MIDI/Rewire Option Selection – Allows users to select either MIDI or ReWire connections. Note: ReWire will not be visible if not active or installed.

Output MMC Port Checkbox – Outputs MIDI/ReWire data and ignores any chase data sent from Reaper. This option is used if Reaper engineers need to make changes on the fly and not affect VoiceQ playback.

MIDI Selection – This dropdown lists all available external connections

Latency Compensate – If playback is incorrect between VoiceQ and the set DAW. Users can adjust the latency using the slider.

 $\label{eq:pre-Roll} \textbf{Pre-Roll} - \textbf{Users can now set pre-roll in Reaper and leave this option unchecked. This option is available if users wish to see pre-roll when not connected to a DAW$

Post-Roll – Sets the time the DAW records after the line is completed

Mute Sound when recording – Mutes VoiceQ audio

Recording Starts before – Sets the time the DAW records before the line begins.

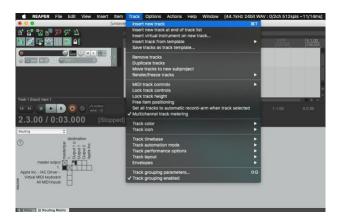
Insertion follows playback - Playhead follows from DAW in VoiceQ

Synchronisation - User can select either to output 'MIDI Timecode (MTC)' or 'Song Position Pointer (SPP)'

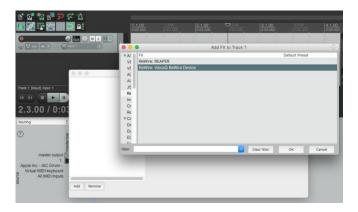
Scrubbing - Scrubbing allows users to choose the send interval

Rewire Setup

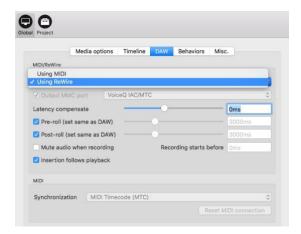
- 1. Install Rewire (see installing rewire)
- 2. Open Reaper
- 3. Select 'Track>Insert new track...'



4. Select 'FX' on the track head and select 'Add" then select 'ReWire: VoiceQ ReWire Device' (note: If VoiceQ Rewire Plug-in is not visible please refer to the ReWire FAQ)



- 5. Launch VoiceQ and a project you wish to connect and select 'VoiceQ>Preferences>Global>DAW' from VoiceQ main menu.
- 6. Here you will select **ReWire** as you primary sync option



7. Close the Preferences window and select the **Chase external timecode option** on the toolbar (command+J)

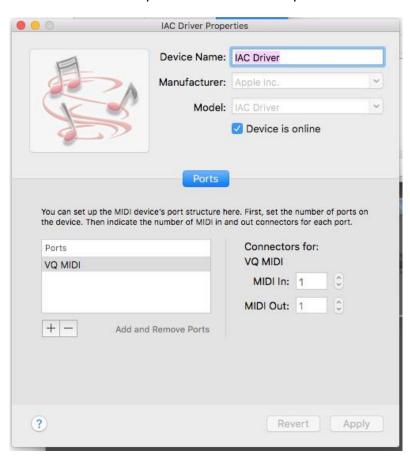
Single Machine Setup (using IAC driver)

The Apple Inter Application Communication (IAC) Bus is used to send all MIDI information when VoiceQ and Reaper are on the same computer – we refer to this as a Single Computer Configuration. A MIDI interface or Network Session is used when the Digital Audio Workstation (DAW), in this case Reaper, and VoiceQ are on separate machines (dual computer configuration). If you are using a Dual Computer Configuration you do not need the IAC Bus and can skip directly to the next section.

1. Open MIDI Studio. It is located in Applications/Utilities/Audio MIDI Setup.app. Launch this app and select Window>Show MIDI Window (Command + 2) from the menu to open it.



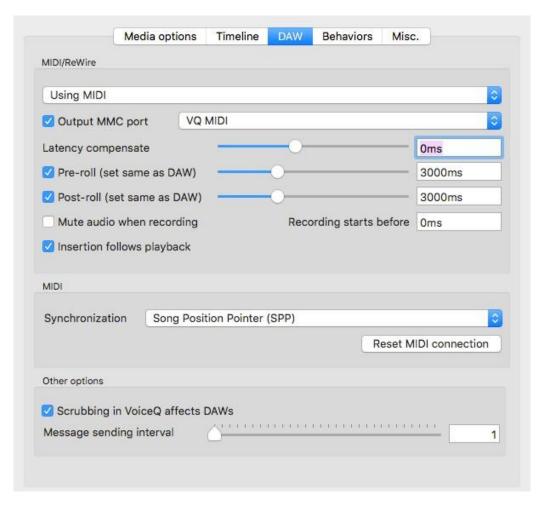
2. Select IAC Driver. Double click it to open the IAC Driver Properties window.



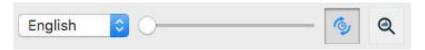
- 3. Add Ports by selecting '+' button and give the port a name. In this example, we named it VoiceQ MMC/MTC.
- 4. Click the checkbox 'Device is online' to enable this virtual MIDI device.

Basic MIDI setup in VOICEQ

- 5. Launch VoiceQ and select 'VoiceQ>Preferences>Global>DAW' from VoiceQ main menu.
- 6. Enable Output MMC Port and select the IAC Driver by name.
- 7. Select 'Song Position Pointer (SPP)' from the Synchronization in order for Reaper to read the timing and sync correctly.

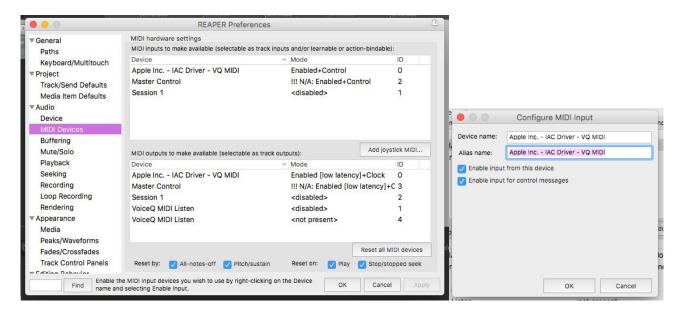


8. Close the Preferences window and select the **Chase external timecode option** on the toolbar (command+J)



Basic MIDI setup in REAPER

Note: your MIDI input and output devices are setup in the **Options** → **Preferences MIDI Devices pull down**. You need to configure Reaper first, if you have not done so.



Please download the following file to see the connection settings already prepped:

Reaper demo - DOWNLOAD

1. Open Reaper and Right Click in the track pane (on the left) to create a new track. Or you can use the Control-T hotkey combination.



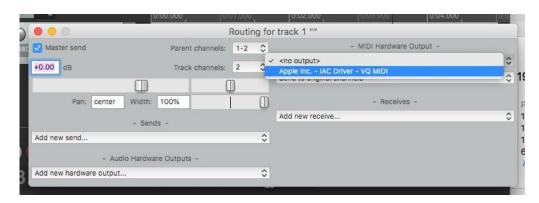
- 2. Click the Record icon (red circle) box on the left. This arms the track for recording. It will also turn red.
- 3. Click the speaker icon, it will turn solid white. This will send your MIDI controller output to the selected MIDI output.



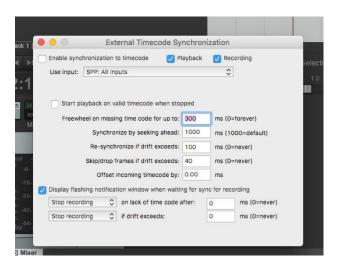
4. Select the Input selection dropdown. The Input selection defaults to Analog 1. We want MIDI input, so click on that area and select MIDI Input and the desired input device. You then want to select 'All Channels' as an option.



- 5. Click on Routing button.
- 6. Under MIDI Hardware Output select your MIDI output device. You can leave the default Send to Original Channels selected.



7. Right click the Play icon and select "SPP: All inputs'



8. Follow the instructions below to add the VoiceQMIDISync plugin to complete the set-up.

VoiceQMIDISync plugin

VoiceQMIDISync.js

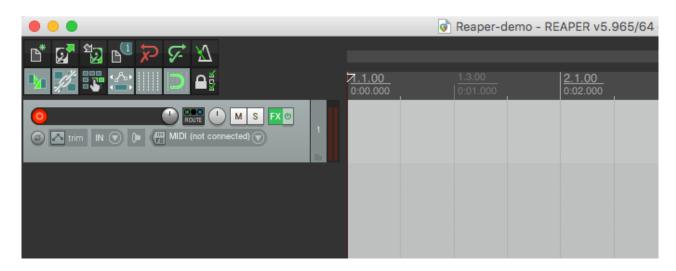
Download

Users can download the effect and add this to your reaper plugin folder "User/Library/ **Application Support/REAPER/Effects/**"

Alternatively the user can add the plug-in via the FX panel following the steps below.

Steps:

- 1. Open FX 'Add' right click and 'Create new JS FX'
- 2. Name it 'VoiceQMIDISync'
- Select 'Edit'
 The following screen will open this is where we will post our code.
- 5. Open 'VoiceQMIDISync.js' file and copy all the text.
- 6. Now go back to Reaper and the opened FX editor.
- 7. Select all of the code and paste the new code from the js file.
- 8. You should now have a working FX file.



Dual Machine Setup (using Network driver)

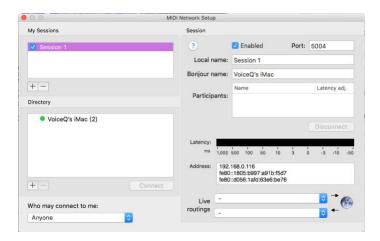
Reaper connection via Network is currently unstable, we are looking for feedback from users who can execute a stable network connection. We will update the guide when we have more information for our users on using a multi-computer connection.

The Dual Computer Configuration is when Reaper and VoiceQ are on separate computers with MIDI information sent via the Local Area Network (LAN) or WiFi.

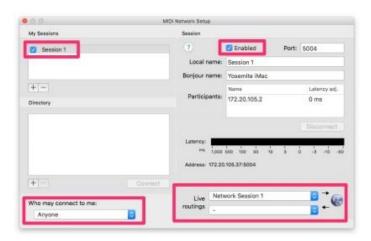
With a Dual Computer Configuration, we can use Apple's MIDI network feature to send MIDI via the Local Area Network. This setup does not require any additional MIDI hardware. First configure your LAN (if required) so the 2 machines can communicate and 'see' each other on the local network. Contact your Systems Administrator for assistance if required.

Mac running Reaper

1. Open MIDI Studio. It is located in Applications/Utilities/Audio MIDI Setup.app. Launch this app and select Window>Show MIDI Window (Command + 2) from the menu to open it.

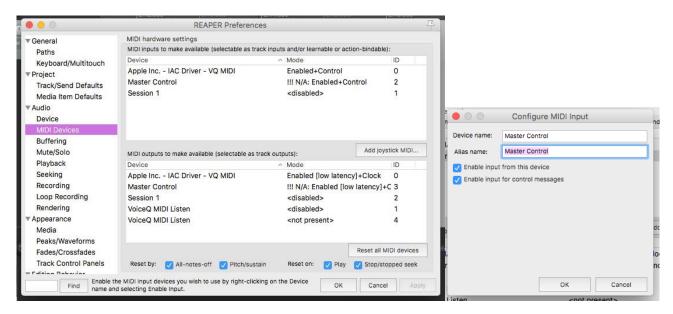


2. Select Network. Double click it to open the MIDI Network Setup window. (MacOS Mohave users: the network settings are now located on the top toolbar)



- 3. Add a session by selecting '+' button under My Sessions. Enable the session by clicking the Enabled check box under Session and name it. We are using the default name 'Session 1' in this example.
- 4. Select 'Anyone' from the drop down list under 'Who may connect to me:' section.
- 5. Select this Network Session from the first drop down list under the 'Live routings' section. (Note skip this if you have lag or connectivity issues)

Note: your MIDI input and output devices are setup in the **Options** → **Preferences MIDI Devices pull down.** You need to configure Reaper first, if you have not done so.



Please download the following file to see the connection settings already prepped:

Reaper demo - DOWNLOAD

6. Open Reaper and Right Click in the track pane (on the left) to create a new track. Or you can use the Control-T hotkey combination.



- 7. Click the Record icon (red circle) box on the left. This arms the track for recording. It will also turn red.
- 8. Click the speaker icon, it will turn solid white. This will send your MIDI controller output to the selected MIDI output.



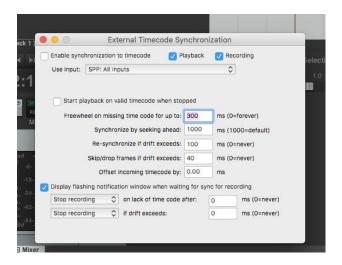
9. Select the Input selection dropdown. The Input selection defaults to Analog 1. We want MIDI input, so click on that area and select MIDI Input and the desired input device. You then want to select 'All Channels' as an option.



- 10. Click on Routing button.
- 11. Under MIDI Hardware Output select your Network MIDI output device. You can leave the default Send to Original Channels selected.



12. Right click the Play icon and select "SPP: All inputs'



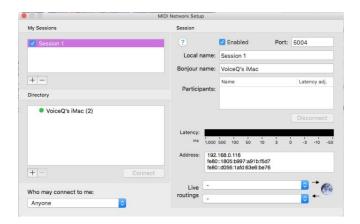
13. Follow the instructions below to add the VoiceQMIDISync plugin to complete the set-up.

Mac running VoiceQ

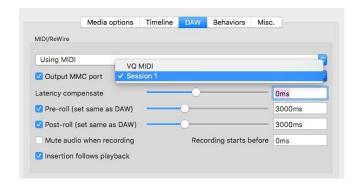
1. **Open MIDI Studio.** It is located in Applications/Utilities/Audio MIDI Setup.app. Launch this app and select Window>Show MIDI Window (Command + 2) from the menu to open it.



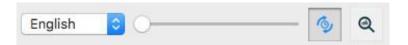
2 Select Network. Double click it to open the MIDI Network Setup window. (MacOS Mohave users: the network settings are now located on the top toolbar)



- 3. Add a session by selecting '+' button under My Sessions. Enable the session by clicking the Enabled check box under Session. You must give the exactly same name and port used in Step 3. Again, we are using the default name 'Session 1' in this example.
- 4 Now you can see the Mac runs Reaper from the Directory list. In our example, its name is Yosemite iMac. Select the Mac runs Reaper from the list. Connect to it by clicking the 'Connect' button.
- 5. Launch VoiceQ and select VoiceQ>Preferences... from VoiceQ main menu.
- 6. Enable Output MMC Port and select the Network session by name. In this example it is Session 1.



7. Select the MIDI Chase Icon in the lower left hand corner of the VoiceQ Project window.



Note: RTC-MIDI protocol used for this configuration is stable in most cases but it does not guarantee zero packet loss. The latency and the possibility of packet loss may vary under your network conditions. Especially when the network is congested, which may cause the latency and packet loss to increase.