

Using VoiceQ Pro with Apple Logic Pro

VoiceQ and Digital Audio Workstations

This guide describes the configurations and procedures used within VoiceQ and Digital Audio Workstations and are 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 movie file from Logic Pro X. You can leave the movie file loaded in your Logic Pro X session, but the track should be disabled, to avoid competing with the VoiceQ Application.

VoiceQ superimposes the scrolling text on the movie and outputs it via the second DVI/HDMI 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 Logic Pro X while you work in Logic Pro X. VoiceQ also has an option to cue Logic Pro X when you select a line in VoiceQ. This will locate the Logic Pro X session to the record location for the selected line with an adjustable pre-roll value. VoiceQ does not control Logic Pro X in any other way, at this time.

Actual recording of audio and management of playlists still takes place in Logic Pro X using your normal process.

Note: In a single computer configuration VoiceQ will work with many other recording applications including Pro Tools, Soundtrack and others. Check our website for the correct set up instructions and screen shots 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.

Note: If you experience issues with **stopping playback** from VoiceQ, we recommend that you use the transport controls via Logic Pro.

Single Machine Setup (using IAC driver)

The Apple Inter Application Communication (IAC) Bus is used to send all MIDI information when VoiceQ and Logic Pro X 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 Logic Pro X, 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.

 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.

Device Name	IAC Driver	
Device Name.	ING DITICI	
Manufacturer:	Apple Inc.	
Model:	IAC Driver	_
	🗹 Device is online	
	Less Inf	ormation
Ports		
number of MIDI in a	ere. First, set the num nd out connectors for (ber of ports of each port.
and the second		
	onnectors for:	
	onnectors for: Q & PT	
	onnectors for: Q & PT MIDI In: 1	0
Ci Vi	MIDI Out 1	0
C. V	MIDI Out: 1	0 0
nove Ports	MIDI Out:	0
nove Ports	MIDI Out:	0
	Manufacturer: Model: Ports Ce's port structure h number of MIDI in an	Manufacturer: Apple Inc. Model: IAC Driver Content of MIDI in and out connectors for of MIDI in and out connectors for of the num

- 3. Add Ports by **selecting '+' button** and **give the port a name**. In this example, we named it **VQ & PT**.
- 4. Click the checkbox 'Device is online' to enable this virtual MIDI device.
- 5. Launch Logic Pro X application and select Logic Pro X>Preferences>MIDI from the menu.



6. Select the **Sync** tab from the menu and ensure your settings match those in the image below. Once completed close the window.

Preferences Image: Constraint of the second secon
General Reset Messages Sync
All MIDI Output
Delay: 🔻 0.0 🔺 ms
MIDI Time Code (MTC)
MTC Pickup Delay: 💌 0 🔺 Frames
Delay MTC transmission by: 💌 0 🧥 ms
MIDI Machine Control (MMC)
MMC Uses: MMC standard messages
Output ID (Transport): 🗹 All 🛛 👘 127 🔼
Input ID (Transport): 🗹 All 🔍 127 🔺
Transmit locate commands when: 🗹 Pressing Stop twice
✓ Dragging regions or events
Transmit record-enable commands for audio tracks
MIDI Sync Project Settings

7. Next select File>Project Settings>Synchronization



8. Under Synchronization we will set the Sync Mode to '**Internal**'. You can also choose to control the MIDI sync externally.

	•					🔮 My	Projec	ct.logic	X	
General	Synchronization	Metronome	Recording	<u>/</u> Tuning	Audio	MIDI	S core	Movie	Assets	
					Ge	eneral	Aud	lio N	MIDI	
	Sync Mode	Internal		÷			٦			
		MTC Manual		al Sync	and Ta	p Temp	00			
	Frame Rate:	25		‡ fps						
	8	🛛 Auto dete	ect format	of MTC						

9. Next set the **Frame rate** to match the video in your project using the **drop down menu**.

General Synchronization	Metronome Recording	Le Audio	My	Project Score	t.logic Movie	X Assets		
			ieneral	Audi	io I	MIDI		
Sync Mode: Frame Rat∈ ✓	Internal 23.976 24 25	 ♦ al Sync and T ♦ fps 	ap Temp	00				
alidate MTC	29.97d 29.97 <i>30d</i> 30	of MTC	ИРТЕ			01:00:00	0:00.00	
	50 59.94d	MPTE /iew Of	fset					
Bar Positior	59.94 60d 60	displayed a	as SMP1	TE				

10. Go to MIDI tab and enable Destination 1 under the MIDI clock, select the IAC Driver under the drop down menu to enable connection to VoiceQ

MIDI Cloo	k	
	Transmit to: 🗹 Destination 1	Destination 2
	✓ Off All	÷ Off +
	Mode VQ IAC Driver VQ & PT	tinue at Cycle Jump 🗘
	Start Network Session 1	
Delay tra	nsmission by: 🔻 0.0 🔺 ms 📄 Auto-compensa	te Plug-in Latency

11. For the best possible sync **enable** 'Auto-compensate Plug-in Latency' next to transmission delay options.

Transmit to:	Destination	n 1					Destination 2				
	VQ IAC Drive	er VQ &	PT				\$	Off			
Mode :	Song - SPP	Song - SPP at Play Start and Stop/SPP/Continue					e at Cycle Ju	Imp			
Start :	at position		11	1	1						
Start : Delay transmission by:	at position	ms	1 1 🗸 Au	1 to-c	1 om	pens	ate Plug	-in Latency	1		

12. Next enable the **MIDI Time Code (MTC)**, then under the drop down menu **select the IAC Driver**.



13. Finally under MIDI Machine Control (MMC) enable 'Transmit MMC' and 'Listen to MMC Input'



For step-by-step instructions on setting up a MIDI interface in Logic Pro X <u>click here</u>. You can use these settings to synchronize Logic Pro, which acts as the master, to VoiceQ, which acts as the slave.

For specific information on Logic Pro X please visit Apple's Support section: <u>click here to view.</u> It provides an extensive library of information including; User Guide, Video Tutorials and a Forum. 14. Launch VoiceQ and select VoiceQ>Preferences>Global>DAW... from VoiceQ main menu.

and the second	dia options	Timeline	DAW Behaviors Misc	
MIDI/ReWire				
	voice			
Latency compensa	te			Oms
Pre-roll (set sar	ne as DAW))	3000ms
Post-roll (set sa	me as DAW))	3000ms
Mute audio whe	n recording		Recording starts before	0ms
Insertion follows	s playback			
MIDI				
Synchronization	MIDI Timeco	ode (MTC)		
			Reset M	IDI connection

15. Enable Output MMC Port and select the IAC Driver by name. In this example it is VoiceQ IAC/MTC.

VoiceQ and Logic Pro X are now ready to communicate through a virtual MIDI device.

Dual Machine Setup using Network (RTC-MIDI)

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

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.

On the computer running Logic Pro X

 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.

00	MIDI Network Setup		
My Sessions	Session		
Session 1	?	Zenabled Po	rt: 5004
	Local name:	Session 1	
	Bonjour name:	Yosemite iMac	
+ -		Name	Latency adj.
Directory	Participants:	172.20.105.2	0 ms
	Latency: ms 1,000	1 1 1 1 500 100 50 10 3	Disconnect
+ -	Address: 172.20	0.105.37:5004	
Who may connect to me: Anyone	Live Network	work Session 1	

- 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.

On the computer running VoiceQ

 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.

My Sessions	Section
Session 1	(?) Enabled Port: 5004
	Local name: Session 1
	Bonjour name:
+ -	Name Latency adj.
21	Participants: Yosemite iMac 0 ms
	Latency: ms 1,000 500 100 50 10 3 0 -3 -10 -50 Address: 172,20.105.2:5004
+ - Con	172.20.105.33:5004
ho may connect to me:	Live → → → → → → → → → → → → → → → → → → →
	•

- 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 exact same name and port used in Step 3. Again, we are using the default name 'Session 1' in this example.
- Now you can see the Mac that runs Logic Pro X from the Directory list. In our example, its name is Yosemite iMac. Select the Mac running Logic Pro X from the list. Connect to it by clicking the 'Connect' button.

On the computer running Logic Pro X

1. Launch Logic Pro X application and select Logic Pro X>Preferences>MIDI from the menu.

Logic Pro X File Edit Track	Navigate Record Mix View Window				
About Logic Pro X					
Preferences > Control Surfaces > Key Commands >	General Audio MIDI				
Sound Library Provide Logic Pro Feedback Download Logic Remote Learn About MainStage	Score Movie Automation My Info				
Services ►	Advanced Tools				
Hide Logic Pro X #H	Initialize All Except Key Commands				
Hide Others ℃#H Show All	Plug-in Manager				
Quit Logic Pro X #Q	► Track: Audio Track				

2. Select the **Sync** tab from the menu and ensure your settings match those in the image below. Once completed close the window.

Image: Second Audio MIDI Display Score Movie Automation My Info Advanced	
General Reset Messages Sync	
All MIDI Output	
Delay: 💌 0.0 🔺 ms	
MIDI Time Code (MTC)	
MTC Pickup Delay:	
MIDI Machine Control (MMC)	
MMC Uses: MMC standard messages Output ID (Transport): ✓ All Input ID (Transport): ✓ All Transmit locate commands when: ✓ Pressing Stop twice	
Vansmit ocate commands when: ♥ Pressing stop twice ♥ Dragging regions or events	
MIDI Sync Project Setting	5

- É Logic Pro X File Edit Track Navigate View Record Mix Window **☆**₩N New Untitled - Pro New from Template... ЖN 50 80 Ý Open... 2.2 **Open Recent** ۲ MIDI ₩W Close General Auc Close Project ×₩W Save ЖS **ĉ**#S Save As... Save A Copy As... External Sync and Tap Tempo Save as Template... ‡ fps Revert to ► format of MTC Alternatives ۲ **Project Management** • General... **Project Settings** Synchronization. Page Setup... Metronome Recording... Tuning... Movie ۲ Audio... Import . MIDI... Export • Score... Bounce . Movie... Share ٠ Assets... Import Project Settings..
- 3. Next select File>Project Settings>Synchronization

4. Under **Synchronization** we will set the Sync Mode to '**Internal**'. You can also choose to control the MIDI sync externally.

00						🔄 My	Projec	t.logic	x	
<u> </u>	Synchronization	Metronome	Recording	<u>/</u> Tuning	Audio	MIDI	Score	Movie	Assets	
_					Ge	eneral	Aud	lio l	MIDI	
	Sync Mode 🗸	Internal MTC Manual		ŧ al Sync	and Ta	p Temp	00			
	Frame Rate:	25 Auto dete	ect format	€ fps of MTC						

5. Next set the **Frame rate** to match the video in your project using the **drop down menu**.

General Synchronization	Metronome Recording	Le Tuning Audio	My Project	t.logicx Movie Assets	
		G	eneral Aud	lio MIDI	
Sync Mode: Frame Rate ✓	Internal 23.976 24 25	≑ al Syrc and Ta ≑ fps	p Tempo		
Validate MTC Bar Positior	29.97d 29.97 <i>30d</i> 30	of MTC	PTE	▼ 01:00:00:00.0	00 🔺
Bar Positior	50 59.94d 59.94 <i>60d</i> 60	MPTE /iew Off	set s SMPTE		

6. Go to MIDI tab and enable Destination 1 under the MIDI clock, select Network Session 1 under the drop-down menu to enable connection to VoiceQ

MIDI Cloc	K Transmit to Mode	Off All VQ IAC Driver VQ & PT ✓ Network Session 1 ○ Off : Song - SPP at Play Start and Stop/SPP/Continue at Cycle Jump)
	Start	at position	
Delay trar	nsmission by	: 🔽 0.0 🔺 ms 🗹 Auto-compensate Plug-in Latency	

7. For the best possible sync **enable** 'Auto-compensate Plug-in Latency' next to transmission delay options.

MIDI Clock	
Transmit to:	Destination 1 Destination 2
	Network Session 1 A T
Mode :	Song - SPP at Play Start and Stop/SPP/Continue at Cycle Jump +
Start :	at position 🔍 111 1 🔺
Delay transmission by:	🔻 0.0 🔺 ms 🛛 🗹 Auto-compensate Plug-in Latency

8. Next enable the **MIDI Time Code (MTC)**, and then under the dropdown menu **select Network Session 1**.

MIDI Time Code (MTC)	1	
	🗹 Transmit MTC	
	Network Session 1 +	

9. Finally, under MIDI Machine Control (MMC) enable 'Transmit MMC' and 'Listen to MMC Input'

MIDI Machine Contro	I (MMC)	
	✓ Transmit MMC ✓ Listen to MMC Input	

For step-by-step instructions on setting up a MIDI interface in Logic Pro X <u>click here</u>. You can use these settings to synchronize Logic Pro, which acts as the master, to VoiceQ, which acts as the slave.

For specific information on Logic Pro X please visit Apple's Support section: <u>click here to view.</u> It provides an extensive library of information including; User Guide, Video Tutorials and a Forum. 14. Launch VoiceQ and select **VoiceQ>Preferences>Global>DAW...** from VoiceQ main menu.

	Media optio	ns Timeline	DAW Behaviors Misc	
MIDI/ReWire				
Using MIDI				
🖸 Output MM0	port	VoiceQ IAC/MTC	2	
Latency compe	insate	-	-0	Oms
🗹 Pre-roll (set	same as DA	w)	· · · · · · · · · · · · · · · · · · ·	3000ms
🗹 Post-roll (se	t same as D/	4W)	0	3000ms
Mute audio	when recordi	ing	Recording starts before	Oms
🗹 Insertion fol	lows playbac	k		
MIDI				
Synchronizatio	m MIDLT	imecode (MTC)		
			Reset M	IDI connectior
-formation of the				

2. Enable Output MMC Port and select the Network Session by name. In this example it is 'Session 1'.

VoiceQ and Logic Pro X are now ready to communicate through your network (RTC-MIDI).

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. To account for this, you may use the **'Latency Compensate slider'** in VoiceQ until sync is perfected.

Dual Machine Setup using MIDI hardware interfaces

Using separate computers for Logic Pro X and VoiceQ with MIDI information sent via MIDI hardware interfaces.

This configuration requires a MIDI hardware interface on both computers, which are connected via a MIDI cable. Many AVID hardware boxes like the M-Box 003, Digi 001-003, Command 8, Control 24 feature MIDI output ports.

The VoiceQ computer can use any standard USB MIDI interface, with VoiceQ automatically recognizing and chasing incoming MIDI timecode when it is set to online/chase mode.

On both computers running Logic Pro X and VoiceQ

- 1. Connect both computers with the MIDI Device using the appropriate MIDI cables. The actual configuration maybe different from the screen shots.
- 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.





3. Check all your MIDI interfaces are shown in the windows of both machines. If not, click 'Rescan MIDI' button to rescan MIDI ports. In this example, we used USB MS1x1 MIDI Interface from M-Audio for Logic Pro X machine, and USB Uno MIDI Interface from M-Audio for the VoiceQ machine.

On the computer running Logic Pro X

1. Launch Logic Pro X application and select Logic Pro X>Preferences>MIDI from the menu.

ogic Pro X File Ed	it Track	Navigate	Record	Mix	View	Window
About Logic Pro X						
Preferences	Þ	General				
Key Commands		MIDI				
Sound Library Provide Logic Pro Fee Download Logic Remo Learn About MainStag	► dback te e	Score Movie Automa My Info.	tion			
Services	•	Advance	ed Tools			
Hide Logic Pro X	жн	Initialize	All Excep	t Key (Commar	nds
Hide Others Show All	∕∵жн	Plug-in	Manager			
Quit Logic Pro X	жQ		► 1	rack:	Audio Tr	ack

- É Logic Pro X File Edit Track Navigate Record Mix View Window New **☆**೫N Untitled - Pro New from Template... #N 0 50 Open... 80 (200) **Open Recent** ۲ Close #W General Auc Close Project ×₩W Save #S Save As... **企業S** Save A Copy As... External Sync and Tap Tempo Save as Template... ‡ fps Revert to ۲ format of MTC Alternatives . **Project Management** • **Project Settings** General... Synchronization. Page Setup... Metronom Recording... Tuning... Movie . Audio... Import . MIDI... Export . Score... Bounce Movie... Share • Assets... Import Project Settings..
- 2. Next select File>Project Settings>Synchronization

3. Under **Synchronization** we will set the Sync Mode to '**Internal**'. You can also choose to control the MIDI sync externally.

00						🔮 My	Projec	t.logic	x	
General	Synchronization	Metronome	Recording	ب سرح Tuning	Audio	MIDI	Score	Movie	Assets	
					Ge	eneral	Aud	lio I	MIDI	
	Sync Mode 🗸	Internal MTC Manual		al Sync	and Ta	p Temp	50			
	Frame Rate:	25 🖌 Auto dete	ect format	fps of MTC						

4. Go to MIDI tab and enable Destination 1 under the MIDI clock, select USB MS1x1 MIDI under the drop down menu to enable connection to VoiceQ



5. For the best possible sync **enable** 'Auto-compensate Plug-in Latency' next to transmission delay options.

MIDI Clock		
Transmit to:	Destination 1 Destination 2	
	USB MS1x1 + Off	
Mode :	Song - SPP at Play Start and Stop/SPP/Continue at Cycle Jump	
Start :	at position 🔻 111 1 🔺	
Delay transmission by:	🔻 0.0 🔺 ms 🛛 🗹 Auto-compensate Plug-in Latency	

6. Next enable the **MIDI Time Code (MTC)**, then under the drop down menu **Select the USB MS1x1 MIDI**.

MIDI Time Code (MTC)		
	Transmit MTC	

7. Finally under MIDI Machine Control (MMC) enable 'Transmit MMC' and 'Listen to MMC Input'



For step-by-step instructions on setting up a MIDI interface in Logic Pro X <u>click here</u>. You can use these settings to synchronize Logic Pro, which acts as the master, to VoiceQ, which acts as the slave.

For specific information on Logic Pro X please visit Apple's Support section: <u>click here to view.</u> It provides an extensive library of information including; User Guide, Video Tutorials and a Forum.

On the computer running VoiceQ

1. Launch VoiceQ and select VoiceQ>Preferences... from VoiceQ main menu.

MIDI/DoWire	Media options	Timeline DAW Behaviors Misc	
Using MIDI			-
Output MMC	port U	SB MS1x1 MIDI	
Latency compe	nsate		Oms
🗹 Pre-roll (set	same as DAW)		3000ms
🖸 Post-roll (se	t same as DAW	0	3000ms
Mute audio	when recording	Recording starts before	0ms
🗹 Insertion fol	lows <mark>pl</mark> ayback		
MIDI			
Synchronizatio	n MIDI Tim	ecode (MTC)	
		Reset M	IIDI connection

2. Enable Output MMC Port and select the MIDI interface connected to the VoiceQ machine in this example the USB MS1x1 MIDI

VoiceQ will now chase the incoming MIDI timecode from Logic Pro X through your hardware MIDI interface.

VoiceQ will also scrub the video and scroll text in response to the MIDI machine control. MIDI Beat clock is used for additional synchronization accuracy. The transport controls in VoiceQ can also be used, even when VoiceQ is waiting for external MTC. To have VoiceQ chase incoming MTC from Logic Pro X click on the `Chase External Timecode' button in the transport section or use the Quick Key J.

Recording triggered by VoiceQ

- 1. Configure MIDI connection between Logic Pro X and VoiceQ
- **2.** Next set pre-roll time settings so both are the same in Logic Pro X and VoiceQ eg. 3000ms (3.0 seconds) is a common setting.
 - a. To configure the pre-roll in Logic Pro X, select the **recording settings** by **right-clicking the record icon** in the top view as shown below.



 b. Under Recording Settings.... set the Record pre-roll under General settings to the desired time as Shown in Figure 1 below.

Note: Logic Pro X only uses seconds for time measurement.



Figure 1. Pre-roll time setting in Logic Pro X

c. In VoiceQ, set the **Record pre-roll** under Global settings to the same time set in Logic Pro X, as **shown in Figure 2** below:

	edia options	Timeline DAW Behaviors Misc	
MIDI/ReWire			
Using MIDI			
🖸 Output MMC p	ort Voice0	Q IAC/MTC	
Latency compense	ate		0ms
🗹 Pre-roll (set sa	me as DAW)		3000ms
🗹 Post-roll (set s	ame as DAW)		3000ms
Mute audio wh	en recording	Recording starts before	Oms
MIDI	MIDI Timoso	de (MTC)	
Synchronizauon	MIDI TImeco	de (MTC)	IDI connection
o j		Heset M	ibi oonnootion
ey		Reset M	
o j nom o nization		Reset M	
		Keset M	
		Keset M	
		Keset M	

Figure 2. MIDI and Preroll settings in VoiceQ.

3. In Logic Pro X, add an audio track (if required) and enable recording. When recording is enabled, the **Record Icon** flashes red in colour.



4. In VoiceQ, turn on MIDI chase (MIDI connection) by clicking the icon.



Figure 4. VoiceQ MIDI connection icon

- 5. In VoiceQ, select a line.
- **6.** Logic Pro X will shift to the selected lines' start timecode and record with pre-roll configured in Logic Pro X and VoiceQ.
- 7. Command + Down (or Up) to select next (previous) line and repeat step 6.

Please contact <u>VoiceQ Support</u> if you require further information on how to implement any of these configurations.

Thank you

Your VoiceQ Support Team