Stereo Playback from a Laptop in the CDA Mixing Suite

2024

A pdf version of this guide is available at: www.concordia.ca/finearts/cda/suites/descriptions

About this guide

This guide describes how to monitor a stereo analog signal from your laptop in the CDA VS10 mixing suite.

You can use this method to work on a stereo audio project directly from your laptop.

The HD OMNI audio interface in VS10 will receive a stereo analog signal from your laptop. On the VS10 computer, you can use the audio software of your choice to monitor that input by placing a stereo track in record monitor. In this guide I show how to monitor with Ableton Live and Pro Tools.

Connect your laptop

Connect the stereo 1/8" inch cable, provided for you in the suite, to your laptop's analog headphone output.

This cable is already connected to Inputs 3 and 4 on the back of the AVID OMNI audio interface.

Do not change this connection!



Play sound from your laptop

In the audio software on your laptop, the audio output settings should be the laptop's headphone output.

Play a track in your software and look for the green LED input lights on the front of the OMNI interface to indicate an audio input on channels 3 and 4.



Option One Using Ableton Live to Monitor the Input

Using Ableton Live to Monitor the Input

Launch Ableton Live and go to "Settings" which takes you to the Preferences! In Audio Preferences, select the "Pro Tools HD Native Thunderbolt" as the Audio Input and Output Device.



• • •	Preference	ces
Look	Audio Device	
	Driver Type	CoreAudio 🔻
Audio	Audio Input Device	Pro Tools HD Native Thunderbolt (8 Ir 🔻
Link	Audio Output Device	Pro Tools HD Native Thunderbolt (8 Ir
Tempo MIDI	Channel Configuration	Input Config Output Config
File	Sample Rate	
Folder	In/Out Sample Rate	44100 🔻
Library	Default SR & Pitch Conversion	High Quality
Plug-Ins	Latency	
Record	Buffer Size	512 Samples 🔻
Warp	Input Latency	17.4 ms

Using Ableton Live to Monitor the Input

In Audio Preferences, click on the **Input Config** button. In the Input Config, enable inputs 3/4 in both the Mono and Stereo Inputs.

•••	Preferen	ces
Look Feel Audio	Audio Device Driver Type Audio Input Device	Core/
Link Tempo MIDI	Audio Output Device Channel Configuration	Pro To D Native Thunderbolt (8 Irv Input Config Output Config
File Folder	Sample Rate	44100
Library	Default SR & Pitch Conversion	High Quality
Plug-Ins	Latency	
Record Warp	Buffer Size	512 Samples

Choose which audio hardware inp	outs to make available to Live's tracks. Every input pa
can be used as one stereo in and, CPU load.	or two mono ins. Deactivating inputs reduces the
Mono Inputs	Stereo Inputs
1&2	1/2
3&4	3/4
5&6	5/6
78.9	7/9

Using Ableton Live to Monitor the Input

Then select channels 3 and 4 as the **Ext. In** (input) on an audio track. Make sure it is an audio type track, not an instrument track.

And press the **Monitor In** button right below the input to hear the input.

That's it!

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Engage the AIR Remote



Moving the volume dial on the AIR remote will turn on the speakers.

Switch on the L and R buttons to activate the Left and Right speakers.

Note that when monitoring stereo in the CDA Mixing Suite, only the Left and Right speakers are used. The subwoofer (SUB) is not used.

Not hearing an Input in Ableton?

Then check the following hardware settings in **Audio MIDI Setup** in Applications/Utilities



In the list of Audio Devices, go to the HD Native Thunderbolt, right click and "Configure Device"



The **Main** tab should look like this (your Sample Rate may be different):

Vinte		p	
Peripherals HD OMNI #1	Interface: HD OMNI Main Analog In Analog Out	Monitor Mixer	
HD Native Thunderbolt, Port 1 Clock Master: Internal	Input 1-2 Analog 1-2 3-4 Analog 3-4 5-6 None 7-8 None	Output Analog 1-2 Analog 3-4 Analog 5-6 Analog 7-8	
Loop Master: HD OMNI #1 Sample Rate: 44.1 kHz Buffer Size: 256 Use C 24 Routing (1/3) Use X-Mon Routing (1/5)	Digital 1-2 Input Format: AES/EBU S/PDIF Optical (S/PDIF) Sample Rate Conversion	Optical Output Format: ADAT Optical S/PDIF S/PDIF Output Format: Tascam	
	Ext. Clock Output: Word Clock (44.1 kHz)	· ·	

The Analog In tab should look like this:

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ritor		F	lardware Setu	р					
AirD	Peripherals HD OMNI #1	Interface: HD OMNI Main Analog In	Analog Out	Monitor	Mixer	_	_		
App Des		Reference Level Ch 1 +4 dBu Ch 2 +4 dBu	 -10 dBV -10 dBV 	Limite	er Clip ¹ Clip ¹	i i			
Doc Dow	HD Native Thunderbolt, Port 1 Clock Master: Internal	Ch 3 +4 dBu Ch 4 +4 dBu	 -10 dBV -10 dBV 	Soft	Clip [¬] Clip [¬]	1			
Crea tion: iClo cda·	Loop Master: HD OMNI #1 Sample Rate: 44.1 kHz Buffer Size: 256 Use C 24 Routing (1/3) Use X-Mon Routing (1/5)								v

The Monitor tab should look like this:

		На	rdware Se	tup																	
Peripherals HD OMNI #1	Interface: HD O Main A	MNI nalog in	Analog Out		M	onito	or		Vixer												
HD Native Thunderbolt. Port 1	CR Path	Format	Fold-Down		/	Analo	og (l	DB-2	:5)			A	ES/	EBL) (D	B-2	5)		Dig		
Clock Master: Internal	MAIN	None	None	1	2	3	4	5 6	5 7	8	1	2	3	4	5	6	7	8	1	2	
Loop Master: HD OMNI #1	ALT	None	None																		
Sample Rate: 44.1 kHz Buffer Size: 256	Engage F	old-Down fo	r MAIN r ALT																		
Use C 24 Routing (1/3)	Use C 24 Routing (1/3) Control Room Fold-Down: Use X-Mon Routing (1/5) Do Not Fold Down Between CR Paths																				
Use X-Mon Routing (1/5) Headphone Fold-Down: Do Not Fold Down (L/R Channels Only)																					

Option Two Using Pro Tools to Monitor the Input

Using Pro Tools to monitor the input



Launch Pro Tools.

Create a new Stereo Mix Session

	Dashboard	
	👤 Sign In	
CREATE	Name: laptop session	Name the session.
RECENT	Local Storage (Session) Collaboration and Cloud Backup (Project. subscription required)	
PROJECTS	Create From Template	
GETTING STARTED	Template Group: Dolby Atmos	
	Dolby Audio Bridge Stereo	
		Ideally you will set the sample rate to the sample rate of your audio project on your
		laptop (but it can be different).
	Bit Depth: 24-bit VIO Settings: Stereo Mix VIO	Set I/O Settings to "Stereo Mix"
	Interleaved	
	 Prompt for location Location /Users/cda/Documents/ 	
 Show on startup 	Open from Disk Cancel Create	

Mix"

In the new session, in the top menu, go to Setup/Playback Engine.

<	Clip	Event	AudioSuite	Options	Setup	Window	Avid Link	Help		
					Hardwar	re				
					Playbac	k Engine				
Ç	K <u>-</u>	,→ ₩2+	5. AN	1.	Disk Allo	ocation			:00.000 :00.000 :00.000	
 •	≡• ⊪	+ ►	~ ₽	+8 🕀	Peripher	als			SM	
					1/0					

The Playback Engine should be: HD Native Thunderbolt



The HD Native Thunderbolt is the AVID OMNI interface.

Then go to **Setup/Hardware**:



The **Main** tab should look like this. It is the Inputs and Outputs that are most important.

	Hardware Setup	3	
Peripherals	Interface: HD OMNI		
HD OMNI#1	Main Analog In Analog Out	Monitor Mixer	
	Input	Output	
	1-2 Analog 1-2	Analog 1-2	
	3-4 Analog 3-4 🔻	Analog 3-4	
HD Native Thunderbolt, Port 1	5-6 None T	Analog 5-6	
Clock Master: Internal	7-8 None 🔻	Analog 7-8	
Loop Master: HD OMNI #1			
Sample Rate: 48 kHz	Digital 1-2 Input Format:	Optical Output Format:	
	AES/EBU		
		Optical S/PDIF	
	Optical (S/PDIF)	S/PDIF Output Format:	
	Sample Rate Conversion	Tascam	
	Ext. Clock Output: Word Clock (48 kHz)	-	

The Analog In tab should look like this:

	Hardware Setup	p
Peripherals HD OMNI #1	Interface: HD OMNI Main Analog In Analog Out	Monitor Mixer
	Reference Level Ch 1	Limiter Soft Clip T Soft Clip T
HD Native Thunderbolt, Port 1	Ch 3 🔵 +4 dBu 💿 -10 dBV	Soft Clip 👻
Clock Master: Internal	Ch 4 🔵 +4 dBu 💿 -10 dBV	Soft Clip 👻
Loop Master: HD OMNI #1 Sample Rate: 48 kHz		

The Monitor tab should look like this:

		Har	dware Se	tup)															
Peripherals HD OMNI #1	Interface: HD OI Main Ar	MNI nalog In	Analog Ou	t	Мо	nito	or	м	ixer											
HD Native Thunderbolt, Port 1	CR Path	Format	Fold-Down	1	60 Ai	nalo 3	og (Di	B-25 6) 7	8	1	A 2	ES 3	/EBU	J (D 5)B-2 6	5) 7	8	Di 1	g 2
Clock Master: Internal	MAIN	None 🚽	None ,	,																
Loop Master: HD OMNI #1	ALT	None 🚽	None -	,		_														
Sample Rate: 48 kHz	Engage F	old-Down for	MAIN																	
	Engage F	old-Down for																		
	Control Room	Fold-Down:																		
	Do Not Fo	old Down Betw	ween CR Pat	hs		`														
	Headphone F	old-Down:																		
	Do Not Fo	old Down (L/R	Channels O	nly)					Ŧ											

Go to Track/New, to make a new audio track.

Ś	Pro Tools	s File	e Edit	View	Track	Clip	Event	AudioSuite	Options	Setup	Window	Avid Link	He
	•				New				ΩΩ₩Ν				
					Group				жG				
SHU	FLE SPOT	•	₩ - Ę	≟ ▶	Duplica	te			て企D		0:00	-000 -	End
SL	IP GRID				Split int	o Mon	D						Length
		1	2 3 4	5 -	Make Ir	active				Cursor		*	***
Т	RACKS 🕤				Move to	New F	older		て合業N				
					Conver	t Aux to	Routing	Folder					
		Ba	ars Beats		Change	Track	Width		>		17	25	
		⊟* M	in:Secs		Delete					0:	:30 0:40	0:50	1:
		Ti	mecode							0	0:00:30:00		0
		Sa			Freeze					000			
		► Te	mpo		Commit	t			て合く				
		M	eter		Pouroa								
		M	arkers		Bounce				CT 46 D				
		▥▾		0 ⁺ ins	Melody	ne			>				
					Extract	MIDI to	New Tra	ack					
					Save Tr	ack Pre	eset		℃企P				

Make a Stereo Audio Track.

New Tracks			
Create	Audio Track in Samples	Name: Audio	+
			Cancel

On the audio track make sure that it is displaying the **I/O options** for the track.

Click on this icon to get the track display options.



Set the track inputs to A 3-4. Outputs to A 1-2.



Then press the monitor record button. You should hear the audio from your laptop.

Engage the AIR Remote



Moving the volume dial on the AIR remote will turn on the speakers.

Switch on the L and R buttons to activate the Left and Right speakers.

Note that when monitoring stereo in the CDA Mixing Suite, only the Left and Right speakers are used. The subwoofer (SUB) is not used.

Multi-Channel Playback

If you require multi-channel playback from a laptop, this is also possible but beyond the scope of this guide.

Request a driver for the AVID OMNI interface from a CDA technician. You must have a laptop with an compatible operating system.

Please contact Phil Hawes: philip.hawes@concordia.ca