Stereo Playback from a Laptop in the CDA Mixing Suite

2023

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

Connect your laptop

- This guide explains how to use your laptop for stereo output to the speakers in the suite.
- Connect the 1/8" inch cable, provided for you in the suite, to your laptop's analog headphone output.
- This cable is already connected for you to Inputs 1 and 2 on the back of the AVID OMNI interface.

Set the Input to Line on the AVID OMNI interface.



About this example:

- In this guide I will be using Pro Tools as an example of how to monitor your stereo input but you can use other software in the computer.
- If you will be using other software, then you will have to do the Hardware settings described on page 9 for Pro Tools in the AUDIO MIDI setup application. See Page 19 for details.

Launch Pro Tools



Create a new Stereo Mix Session

	Dashboard
	L Sign In
CREATE	Name: laptop session Name the session.
RECENT	Local Storage (Session) Collaboration and Cloud Backup (Project, subscription required)
PROJECTS	Create From Template
	Template Group: Dolby Atmos
GETTING STARTED	Dolby Audio Bridge Mono
	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).
	File Type: BWF (.WAV) Sample Rate: 48 kHz Sample Rate: 48 kHz
	Bit Depth: 24-bit VO Settings: Stereo Mix Set I/O Settings to "Stereo Mix
	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		
					Hardwa	re				
				<u>,</u>	Playbac	k Engine				
0		→ ₩2>	5°7 🗐	1.	Disk Alle	ocation			:00.000	
•	≡•⊪•	+ ▶	~ ₽ -	-+8 []	Periphe	rals			< S M	N
					1/0					

The Playback Engine should be: HD Native Thunderbolt

		Playback Engin	le
Device	Playback Engine:	HD Native Thunderbolt	
Settings	H/W Buffer Size: Video Engine:	1024 Samples Enable	
Optimizat	ions ?	Ignore Errors During Playbac May cause clicks and pops Main Playback Engin Aux I/O Dynamic Plug-in Process Plug-ins only use CPU re Optimize Performance a	ck/Record for: ne sing esources when processing audio t Low Buffer Sizes

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	
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 None *	Analog 3-4
ID Native Thunderbolt, Port 1	5-6 None 🔻	Analog 5-6
Clock Master: Internal	* 7-8 None *	Analog 7-8
.oop Master: HD OMNI #1	Digital 1.2 Input Formati	Online Output Formati
ample Rate: 48 kHz	AES/EBU	ADAT
	S/PDIF	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. Set the Limiter to "Soft Clip".

		н	ardware Setu	p		
Peripherals	Interface: H	DOMNI				
HD OMNI #1	Main	Analog In	Analog Out	Monitor	Mixer	
	Reference	e Level		Limi	ter	
	Ch 1	🔵 +4 dBu	-10 dBV	Sof	it Clip	-
	Ch 2	🛑 +4 dBu	-10 dBV	Sof	it Clip	-
HD Native Thunderbolt, Port 1	Ch 3	😐 +4 dBu) -10 dBV	Nor	ne	*
Clock Master: Internal	Ch 4	💿 +4 dBu	-10 dBV	No	ne	*
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 Of Main Ar	MNI nalog in	Analog Out		Mon	itor	м	ixer		•7								
HD Native Thunderbolt, Port 1	CR Path	Format	Fold-Down	1	An:	alog (C 4	0B-25 5 6) 7	8	1	AE 2	ES/EB 3 4	iU (DB-2 5 6	5) 7	8	Di 1	g 2
Clock Master: Internal	MAIN	None +	None -															
Loop Master: HD OMNI #1 Sample Rate: 48 kHz	Engage F Engage F Control Room Do Not Fo Headphone F Do Not Fo	old-Down for old-Down for Fold-Down: old Down Betw old-Down: old Down (L/R	MAIN ALT ween CR Pat	hs nly)		•												

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

🗯 Pro Too	ls File	Edit	View	Track	Clip	Event	AudioSuite	Options	Setup	Window	Avid Link	He
				New				ΩΩ₩Ν				
			1000	Group.				жG				
SHUFFLE SPOT		÷	•	Duplica	ite			τŵρ		0:00	-000 -	Start End
SLIP GRID				Split in	to Mon	D			10			Length
	1	2 3 4	5 -	Make Ir	nactive				Cursor		*	****
TRACKS				Move to	New F	older		N米介ブ				
				Conver	t Aux to	Routing	Folder					
	Bar	rs Beats		Change	Track	Width		>		17	25	
	⊟ * Mir	1:Secs		Delete					0:	:30 0:40	0:50	1
	Tim	iecode							00	0:00:30:00		0
	Sar	nples		Freeze					000		00000	
	► Ter	npo		Commi	t			TAC				
	Me	ter		Dauman				25 4 90 0				
	🗐 Mai	rkers		Bounce				LUHB				
	 *		0 INS	Melody	ne			>				
				Extract	MIDI to	New Tra	ack					
				Save Tr	ack Pre	eset		τôΡ				

Make a Stereo Audio Track

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

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



Set the inputs and outputs to A 1-2.



Press the Record Monitor button to hear the signal from your laptop.

🔹 Pro Tools	: 1	File Edit	View	Track C	lip Event	A	Jdio	Suite	Options	Setup	Window	v Avi	d Link He	elp		
000																
SHUFFLE SPOT SLIP GRID		 4 4 1 2 3 4 	5 -	÷ ₹		کہ م می	₩¥ ∓°	‡ ≫ ⊽+	⊷= ₽	Cursor	0:00	0.00	O - Start End Length	0:0 0:0 0:0 4 Diy ⓒ 💥	0.000 0.000 0.000	Grid Nudge
TRACKS																
		Bars Beats									17					41
	■"	Min:Secs						9:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20
		Timecode						00:00:00				00		00:01:00:	00	
		Samples								1000000		2000	000	30000		
		Tempo						120								
		Meter						Default	t 4/4							
	町	Markers														
	•	4	0.	INSERTS A-E	1/0		а С. —									
	0	Audio 1			A 1-2	•										
		O I S	M		A 1-2	+ E										
		waveform k dyn read	•		vol 0.0	•										
		apre -														

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.

Using software other than Pro Tools

- If you are using another DAW to monitor your stereo input, you must make sure to select the HD Native Thunderbolt as the audio playback hardware in your software.
- Then check the following hardware settings in Audio MIDI setup.

Go to 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):

	Interface:	HD OMNI				
HD OMNI #1	Main	Analog In	Analog Out	Monitor	Mixer	
	Ir	nput		Outpu	t	
	1-2	Analog 1-2	*	Analo	ig 1-2	*
	3-4 1	None	*	Analo	ig 3-4	*
HD Native Thunderbolt, Port 1	5-6	None	*	Analo	ig 5-6	¥
Clock Master: Internal	7-8	None	*	Analo	ig 7-8	*
Loop Master: HD OMNI #1						
Sample Rate: 44.1 kHz	D	igital 1-2 Input Fo	ormat:	Optica	I Output Format:	
Buffer Size: 512		AES/EBU		0		
Use Cl24 Routing (1/3)		Optical /S/	DIE	0	Optical S/PDIP	
Use X-Mon Routing (1/5)		Optical (S/P Sample Pat		S/PDI	F Output Format:	
Use X-Mon Routing (1/5)		Sample Rat	e Conversion	0	Tascam	
	Ext. Clo	ck Output: Word	Clock (44.1 kHz)	*		

The Analog In tab should look like this:

		H	lardware Setu	р		
Peripherals	Interface: H	D OMNI	-35			
HD OMNI #1	Main	Analog In	Analog Out	Monitor	Mixer	
	Referenc	e Level		Limit	ter	
	Ch 1	🔿 +4 dBu	🔘 -10 dBV	Soft	t Clip 👻	
	Ch 2	🔿 +4 dBu	🔕 -10 dBV	Soft	t Clip 👻	
HD Native Thunderbolt, Port 1	Ch 3	🔘 +4 dBu	🔵 -10 dBV	Nor	10 *	
Clock Master: Internal	Ch 4	🔘 +4 dBu	🔿 -10 dBV	Nor	10 *	
Loop Master: HD OMNI #1	- 2.4					
Sample Rate: 44.1 kHz	*					
Buffer Size: 512						
Use C 24 Routing (1/3)						
Use X-Mon Routing (1/5)						

The Monitor tab should look like this:

		r ie	iruware se	cup	_									_				
Peripherals	Interface: H	ID OMNI																
HD OMNI #1	Main	Main Analog In Analog Out Monitor Mixer																
				n S														
	CR Pa	th Earmat			An	alog	(DB	-25)	191	1	A	ES/	EBL	J (DB-	-25)	121	Di	g
ID Native Thunderbolt, Port 1	GRPa	tn Pormat	Fold-Down	1	2 3	4	5	6	78	1	2	3	4	5 6	57	8	1	2
lock Master: Internal	MAIN MAIN	None None	None															
oop Master: HD OMNI #1	ALT	None	None															_
ample Rate: 44.1 kHz	Enga	age Fold-Down fo	or MAIN															
uffer Size: 512 *	Enga	age Fold-Down fo	or ALT															
Use CI24 Routing (1/3)	Control I	Room Fold-Down	i:															
Use X-Mon Routing (1/5)	Do N	lot Fold Down Be	tween CR Path	15		*												
	Headpho	one Fold-Down:																
	Deh	let Fold Down /l i	D Chonnele Or	de el e					T									

Multi-Channel Playback

- If you require multi-channel playback from a laptop, this is also possible but beyond the scope of this guide.
- You must request a driver for the AVID OMNI interface from a CDA technician.
- This driver is only available to AVID account holders who own a license of Pro Tools.
- Please contact Phil Hawes: philip.hawes@concordia.ca