

## **DANGEROUS AGGREGATION 101**

Aggregation of any Core Audio compliant interface in Apple's OS X can be accomplished from the Audio MIDI Setup application. This application is located in \Applications\Utilities by default. In this document, we will describe the aggregation of a Dangerous CONVERT-8 and a UA Apollo, but this process can be applied to a CONVERT series device via USB and any Core Audio interface. The resulting aggregate can be used in any DAW that is compatible with Core Audio.

The Audio Devices pane will list all available audio interfaces on the left side. The Audio MIDI Setup application typically shows the Audio Devices pane when started. If not, it can be shown by selecting it from the Window menu at the top of the screen.



1. At the bottom left, the "plus" (+) icon adds new virtual interfaces to Core Audio.

2. Selecting "Create Aggregate Device" will mount a new empty aggregate virtual device to the system.





Audio Devices AirPlay EXAMPLE Clock Source: No Devices in Aggregate ? Built-in Output 0 in/ 2 ou Sample Rate: 0.0 Hz HOMI HDMI 0 in/ 2 out No HOMI HDMI Use Audio Device Out Drift C. CONVERT-8 [sn8103] AirPlay 2 Ŷ Built-in Output 0 2 **()** 0 in/ 8 out ¥ HDMI 0 2 CONVERT-8 [sn8104] HDMI 0 2 0 in/ 8 out CONVERT-8 [sn8103] 0 8 0 8 Avid CoreAudio Device CONVERT-8 [sn8104] 0 in/ 0 out Pro Tools Aggregate I/O 0 in/ 2 out Hixdown 40 in/ 60 out texample + - 🌣~

4. Selecting the aggregate device (highlighting with a click) will display a list of all eligible devices in the main section of the window to the right. From here, simply check the check boxes corresponding to the devices you wish to include in the aggregate.



If the two devices do not align in time perfectly (an audible difference in time between outputs of each device), Drift Correction to the right can be used to align them.

In the case of Dangerous CONVERT series devices, we recommend leaving Drift Correction unchecked and using the CONVERT as the master clock. Clock can be distributed to the slave unit(s) by daisy-chaining the Word Clock Out to In of each device in series.

The aggregate device will now show up as an option in the device setup in your DAW. Here, for example, is the aggregate in the Playback Engine window in Avid's ProTools.

Settings	AirPlay Built-in Output HDMI CONVERT-8 [sn8103] CONVERT-8 [sn8104] Pro Tools Aggregate I/O Universal Audio Apollo Mixdown EXAMPLE O Host Engine: Ignore Errors During Playback/Record (may cause clicks and pops) Minimize Additional I/O Latency Compensation Engine: Maximum
Disk Playback	
Cache Size:	Normal
Lower values for performance.	he disk buffer reduce memory usage. Higher values improve disk