

# An Adaptable Multi-Channel Audio Ecosystem

Movies and games have long delivered multi-channel audio, and now platforms like Apple Music, Tidal, QQ, Qobuz, and YouTube are following suit with support for Dolby Atmos, DTS, and multi-channel PCM formats. Modern homes blend stereo systems, streamers, gaming consoles, and home theaters — all providing multi-channel audio through USB and HDMI.

**The NuPrime Fusion-X platform unites these worlds in one modular, flexible, and scalable ecosystem — redefining how you experience music and movies.**



Mac Mini

Windows PC

Music Server

**USB audio delivering multi-channel PCM**



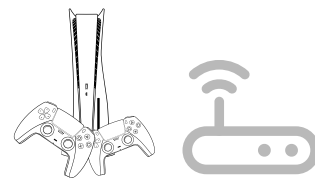
PS5, TV, Set-Top-Box, Apple TV, etc

**HDMI Outputs: Dolby & DTS**

## Core Component: Compact AV Processor



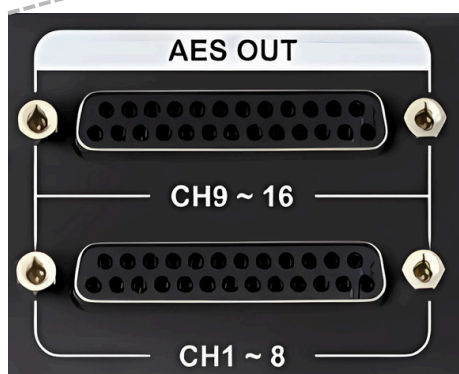
**5.1 to 9.1.6 Channels**



PS5, TV, Set-Top-Box, Apple TV, etc

**Movies  
Games  
Stereo &  
Immersive  
Music**

Decodes Dolby and DTS HDMI signals to 16-channel digital outputs.



**H16-AES** - A full-featured **AV Processor** with room acoustic calibration and **16-Channel AES outputs**.

- HDMI 2.0 with HDCP 2.2., 3D and 4K HD video
- Dolby Atmos (up to 7.1.4), Dolby True HD, DTS:X, DTS-HD
- HDMI eARC

## Speaker Layouts

The H16 speaker setup is similar to a Dolby Atmos multi-channel system.

Output Channel	Speaker Layout					
	5.1	7.1	5.1.2	5.1.4	7.1.2	7.1.4
1	L	L	L	L	L	L
2	R	R	R	R	R	R
3	C	C	C	C	C	C
4	LFE	LFE	LFE	LFE	LFE	LFE
5	Ls	Ls	Ls	Ls	Ls	Ls
6	Rs	Rs	Rs	Rs	Rs	Rs
7		Lrs	Ltm	Ltf	Lrs	Lrs
8		Rrs	Rtm	Rtf	Rrs	Rrs
9				Ltr	Ltm	Ltf
10				Rtr	Rtm	Rtf
11						Ltr
12						Rtr
13						
14						
15						
16						

## H16-ANA

A full-featured **AV Processor** with room acoustic calibration and 16 channels XLR outputs.



2 X DB25 to XLR Cables for  
Channels 1-8 & Channels 9 to 16

# Future-Proof & Expandable Ecosystem

Modular Design with Flexible Connectivity and Scalable Growth



## MCX-800AD - 8-channel DACs+Amps

- Multi-channel DAC architecture using four clock-sync stereo DACs
- Peak Power: 8 x 280W@4ohm, 170W@8ohm;  
RMS Power: 8 x 220W@4ohm, 120W@8ohm



## Fusion 8D - 8-channel DACs

- Multi-channel DAC architecture using four clock-sync high end stereo DACs
- 8-Channel USB Audio, 8-Channel XLR, and five expansion slots for AES, AoIP and XLR I/Os



Expandable plug-in modules for multi-channel digital and analog inputs and outputs.



## Fusion 3X & 4X (3 & 4-Channel Amps)

- Power Output (RMS rated) @ 4Ω: 310 W per channel
- Power Output (RMS rated) @ 8Ω: 160 W per channel
- THD + N: 0.007@5W 1K Hz, 0.012@50W 1K Hz, 0.02@100W 1K Hz
- Frequency Response: 10Hz ~ 50K Hz
- Signal to Noise Ratio: 100 dB @ 10W, 110 dB @ 100W

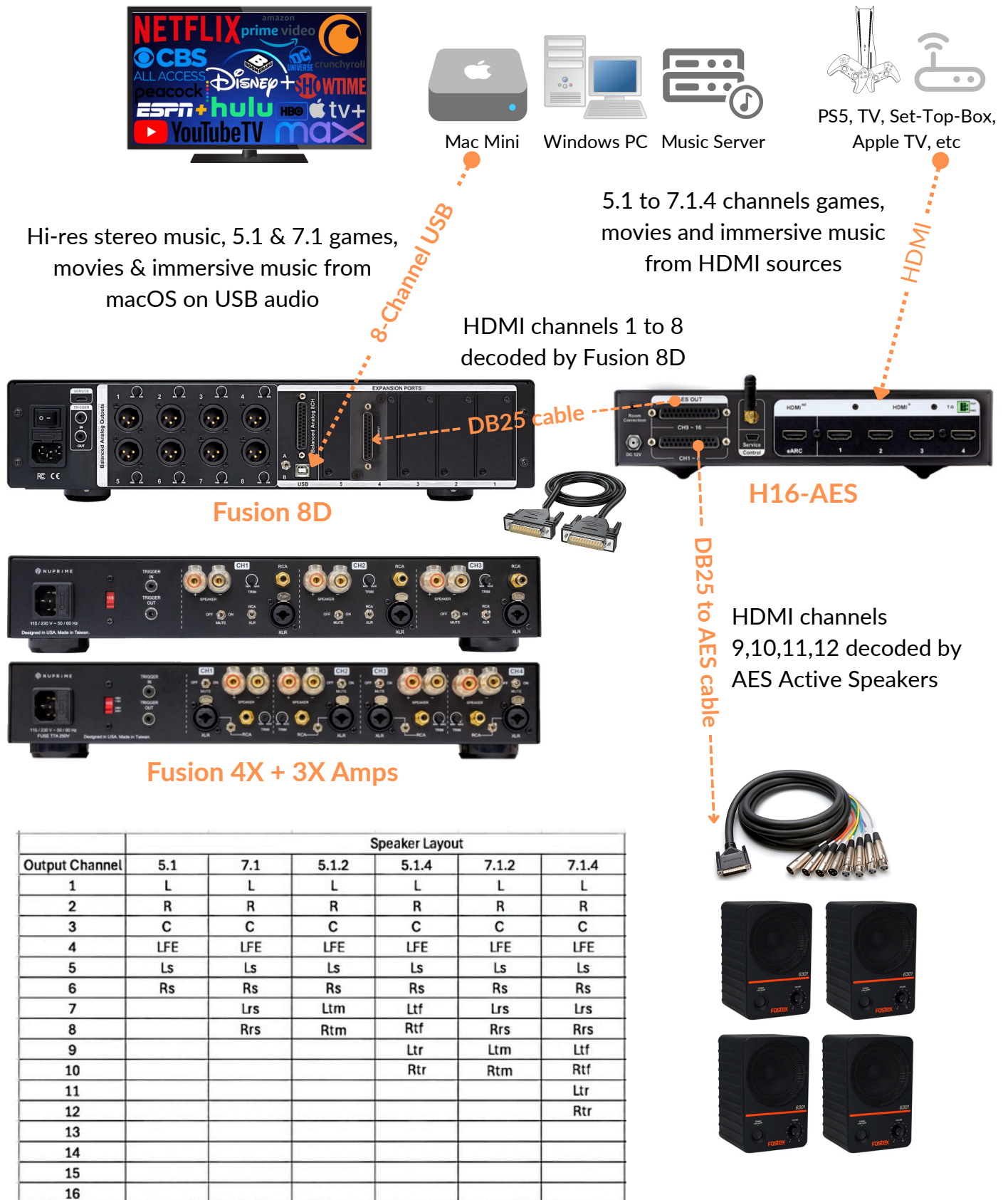


## MCX-800MZ

- Peak Power: 8 x 280W@4Ω, 170W@8Ω.
- RMS power: 8 x 220W@4Ω, 120W@8Ω.
- Multizone: Bus A, Bus B, and Line In.



# Use Case1: A High-End Stereo and Home Theater System with USB Audio and HDMI Sources



## Use Case2: A Mid-Level Stereo and Home Theater System with USB Audio and HDMI Sources using all passive speakers



Hi-res stereo music, 5.1 & 7.1 games, movies & immersive music from macOS on USB audio



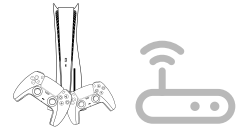
Mac Mini



Windows PC



Music Server



PS5, TV, Set-Top-Box, Apple TV, etc

5.1 to 7.1.4 channels games, movies and immersive music from HDMI sources



MCX-800AD



MCX-800AD

8-Channel USB

Channels 1 to 8

DB25 cable



H16-AES

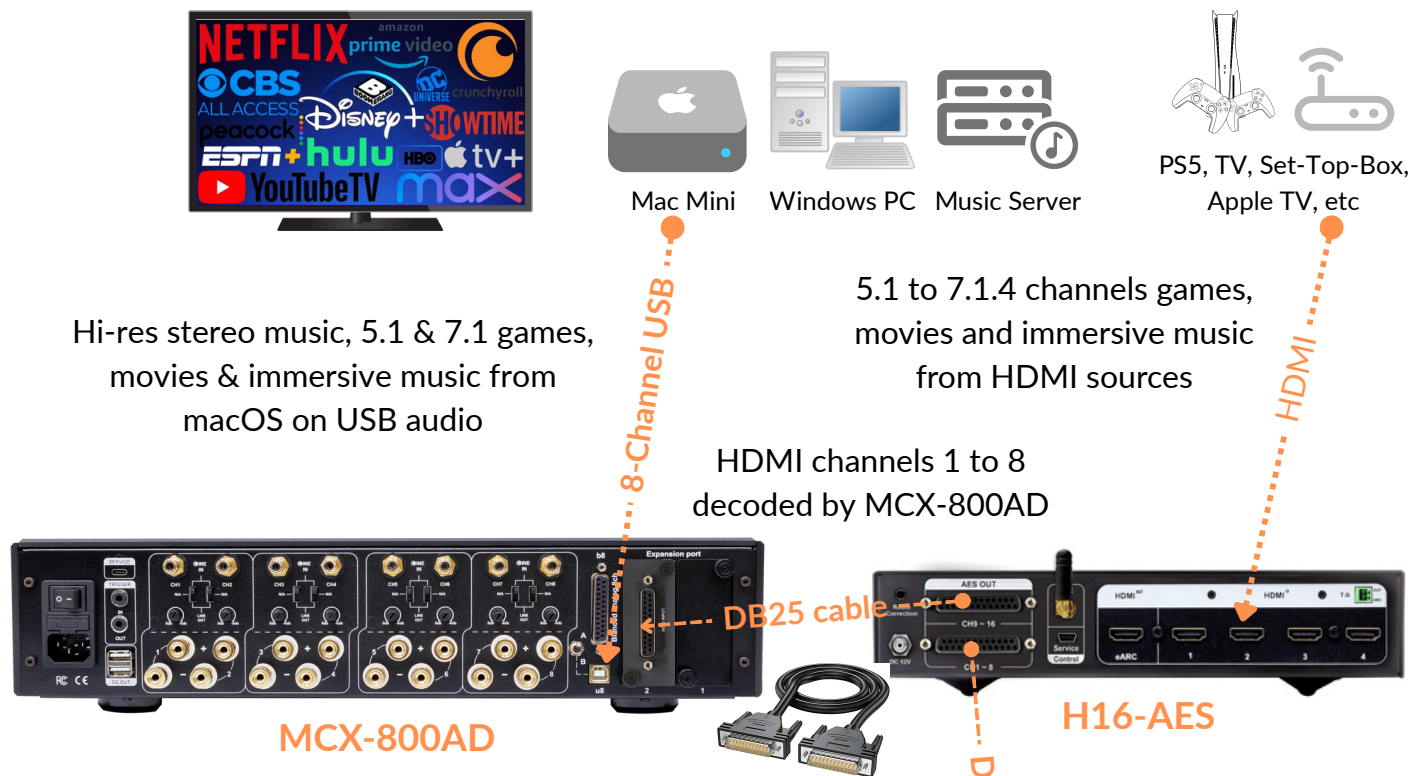
HDMI



Channels 9,10,11,12

	Speaker Layout					
Output Channel	5.1	7.1	5.1.2	5.1.4	7.1.2	7.1.4
1	L	L	L	L	L	L
2	R	R	R	R	R	R
3	C	C	C	C	C	C
4	LFE	LFE	LFE	LFE	LFE	LFE
5	Ls	Ls	Ls	Ls	Ls	Ls
6	Rs	Rs	Rs	Rs	Rs	Rs
7		Lrs	Ltm	Ltf	Lrs	Lrs
8		Rrs	Rtm	Rtf	Rrs	Rrs
9				Ltr	Ltm	Ltf
10				Rtr	Rtm	Rtf
11						Ltr
12						Rtr
13						
14						
15						
16						

# Use Case3: A Mid-Level Stereo and Home Theater System with USB Audio and HDMI Sources



Output Channel	Speaker Layout					
	5.1	7.1	5.1.2	5.1.4	7.1.2	7.1.4
1	L	L	L	L	L	L
2	R	R	R	R	R	R
3	C	C	C	C	C	C
4	LFE	LFE	LFE	LFE	LFE	LFE
5	Ls	Ls	Ls	Ls	Ls	Ls
6	Rs	Rs	Rs	Rs	Rs	Rs
7		Lrs	Ltm	Ltf	Lrs	Lrs
8		Rrs	Rtm	Rtf	Rrs	Rrs
9				Ltr	Ltm	Ltf
10				Rtr	Rtm	Rtf
11						Ltr
12						Rtr
13						
14						
15						
16						





## Use Case4: A High-End Stereo and Home Theater System with USB Audio only Sources



### Computer Sources

Online Games, Movies and Immersive Music 5.1 to 7.1.4 Channels



Windows PC

Mac Mini

Music Server

Two USB audio ports  
delivering 16 channels PCM

(Channels 9 to 16)



MCX-800AD



Fusion 8D



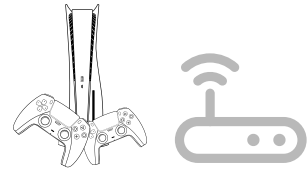
Fusion 4X + 3X Amps

## Use Case: An Entry Level Gaming System with HDMI Sources



Movies, Games, Stereo  
& Immersive Music

Stereo, 5.1 to 7.1.4  
Channels



PS5, TV, Set-Top-Box,  
Apple TV, etc

**H16-ANA** - A full-featured **AV Processor** with room acoustic calibration and 16 channels XLR outputs.



DB25 to 16-Channel XLR Converter

