

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



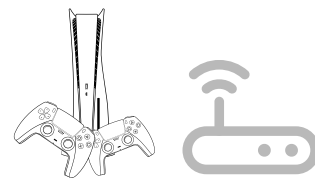
PS5, TV, Set-Top-Box, Apple TV, etc

HDMI Outputs: Dolby & DTS

Core Component: Compact AV Processor



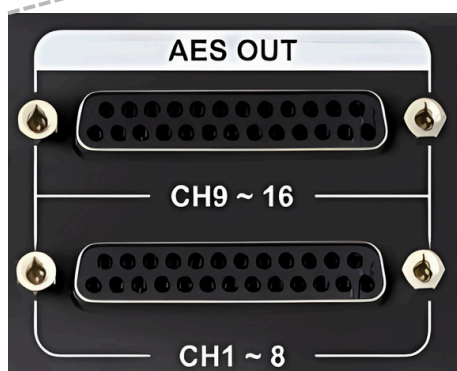
5.1 to 9.1.6 Channels



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 9.1.4), Dolby True HD, DTS:X, DTS-HD
- HDMI eARC

Speaker Layouts

All Fusion-X platform devices follow industry-standard speaker layouts for Dolby multi-channel systems

	Speaker Layout						
Output Channel	5.1	7.1	5.1.2	5.1.4	7.1.2	7.1.4	9.1.4
1	L	L	L	L	L	L	L
2	R	R	R	R	R	R	R
3	C	C	C	C	C	C	C
4	LFE	LFE	LFE	LFE	LFE	LFE	LFE
5	Ls	Ls	Ls	Ls	Ls	Ls	Ls
6	Rs	Rs	Rs	Rs	Rs	Rs	Rs
7		Lrs			Lrs	Lrs	Lrs
8		Rrs			Rrs	Rrs	Rrs
9							Lw
10							Rw
11				Ltf		Ltf	Ltf
12				Rtf		Rtf	Rtf
13			Ltm		Ltm		
14			Rtm		Rtm		
15				Ltr		Ltr	Ltr
16				Rtr		Rtr	Rtr

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



Mac Mini



Windows PC



Music Server



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

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

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

HDMI channels 1 to 8 decoded by Fusion 8D



Fusion 8D



H16-AES



Fusion 4X + 3X Amps

HDMI channels 11,12,15,16 decoded by AES Active Speakers

DB25 to AES cable



Output Channel	Speaker Layout						
	5.1	7.1	5.1.2	5.1.4	7.1.2	7.1.4	9.1.4
1	L	L	L	L	L	L	L
2	R	R	R	R	R	R	R
3	C	C	C	C	C	C	C
4	LFE	LFE	LFE	LFE	LFE	LFE	LFE
5	Ls	Ls	Ls	Ls	Ls	Ls	Ls
6	Rs	Rs	Rs	Rs	Rs	Rs	Rs
7		Lrs			Lrs	Lrs	Lrs
8		Rrs			Rrs	Rrs	Rrs
9							Lw
10							Rw
11				Ltf		Ltf	Ltf
12				Rtf		Rtf	Rtf
13			Ltm		Ltm		
14			Rtm		Rtm		
15				Ltr		Ltr	Ltr
16				Rtr		Rtr	Rtr

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

8-Channel USB

HDMI

Channels 1 to 8



MCX-800AD



H16-AES

DB25 cable

DB25 cable



MCX-800AD



Channels 11,12,15,16

	Speaker Layout						
Output Channel	5.1	7.1	5.1.2	5.1.4	7.1.2	7.1.4	9.1.4
1	L	L	L	L	L	L	L
2	R	R	R	R	R	R	R
3	C	C	C	C	C	C	C
4	LFE	LFE	LFE	LFE	LFE	LFE	LFE
5	Ls	Ls	Ls	Ls	Ls	Ls	Ls
6	Rs	Rs	Rs	Rs	Rs	Rs	Rs
7		Lrs			Lrs	Lrs	Lrs
8		Rrs			Rrs	Rrs	Rrs
9							Lw
10							Rw
11				Ltf		Ltf	Ltf
12				Rtf		Rtf	Rtf
13			Ltm		Ltm		
14			Rtm		Rtm		
15				Ltr		Ltr	Ltr
16				Rtr		Rtr	Rtr

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



Mac Mini



Windows PC



Music Server



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

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

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

HDMI channels 1 to 8 decoded by MCX-800AD



MCX-800AD



DB25 cable



H16-AES

DB25 to AES cable



HDMI channels 11,12,15,16 decoded by AES Active Speakers

Output Channel	Speaker Layout						
	5.1	7.1	5.1.2	5.1.4	7.1.2	7.1.4	9.1.4
1	L	L	L	L	L	L	L
2	R	R	R	R	R	R	R
3	C	C	C	C	C	C	C
4	LFE	LFE	LFE	LFE	LFE	LFE	LFE
5	Ls	Ls	Ls	Ls	Ls	Ls	Ls
6	Rs	Rs	Rs	Rs	Rs	Rs	Rs
7		Lrs			Lrs	Lrs	Lrs
8		Rrs			Rrs	Rrs	Rrs
9							Lw
10							Rw
11				Ltf		Ltf	Ltf
12				Rtf		Rtf	Rtf
13			Ltm		Ltm		
14			Rtm		Rtm		
15				Ltr		Ltr	Ltr
16				Rtr		Rtr	Rtr

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

8-Channel USB

8-Channel USB

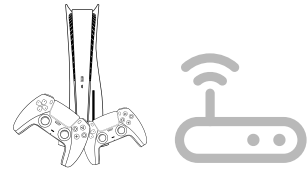
(Channels 1 to 8)

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

