

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

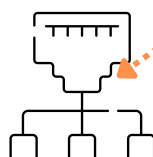


PS5, TV, Set-Top-Box, Apple TV, etc

**Movies
Games
Stereo &
Immersive
Music**

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

Ethernet Network



AoIP (Audio over IP) supports large multi-zone, reliable and low latency network audio



H16-AIP - A full-featured **AV Processor** with room acoustic calibration and **16-Channel AoIP 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, but for 5.1.2 and 7.1.2 layouts, the left and right top middle (Ltm and Rtm) speakers use Channels 11 and 12 instead of 13 and 14.

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			Lrs	Lrs
8		Rrs			Rrs	Rrs
9						
10						
11			Ltm	Ltf	Ltm	Ltf
12			Rtm	Rtf	Rtm	Rtf
13						
14						
15				Ltr		Ltr
16				Rtr		Rtr

H16-ANA

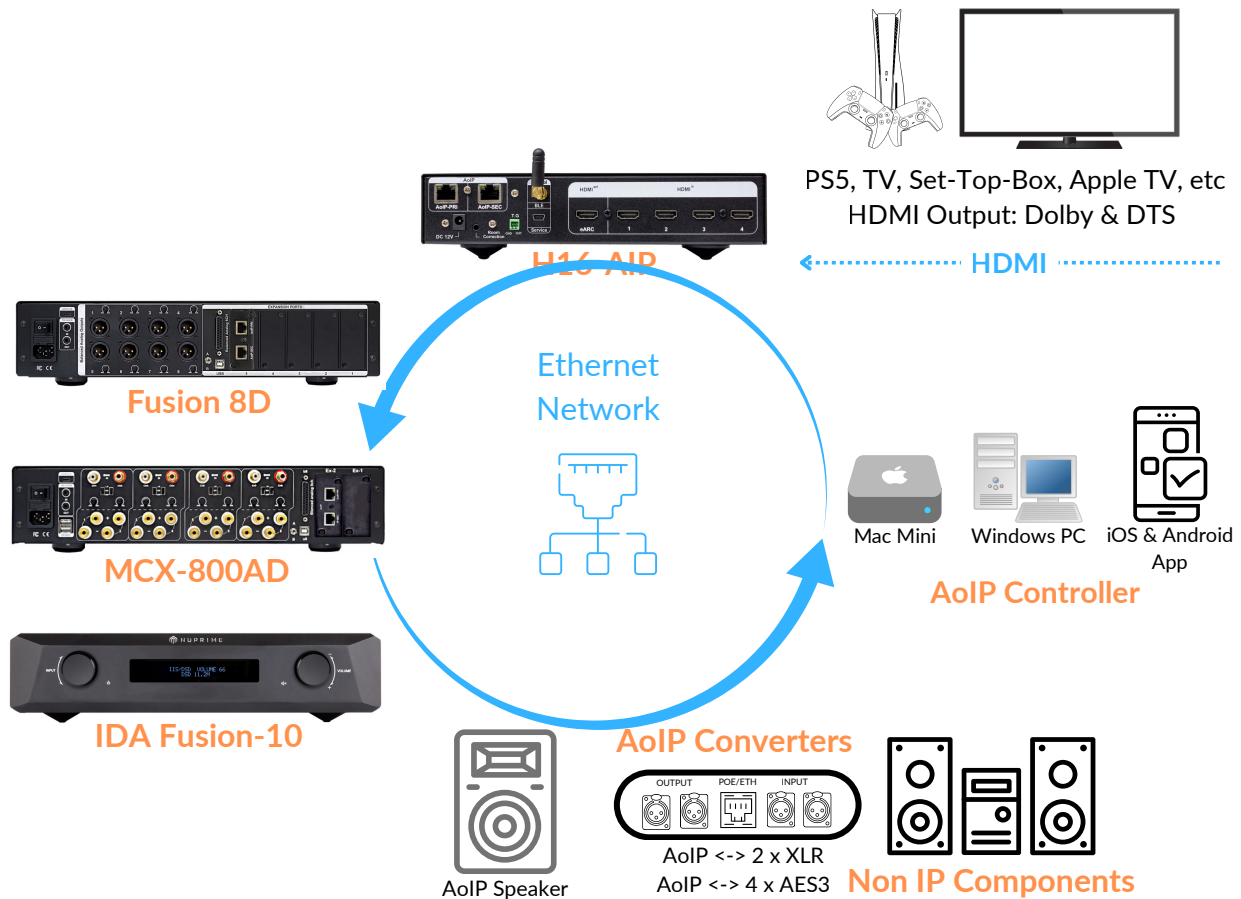
A full-featured **AV Processor** with room acoustic calibration and 16 channels XLR outputs.



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

AoIP Ecosystem

Audio over Internet Protocol (AoIP) is a technology used for transmitting digital audio across standard IP networks, revolutionizing the way audio is distributed in various professional and consumer environments.



Key Benefits

- High-Resolution, Uncompressed Audio.
- Flexible, Scalable & Centralized — Expand your system without rewiring and manage everything from one simple interface
- Long-Distance, Low-Latency Audio — Transmit audio reliably over standard Ethernet with sub-microsecond sync, using AES67 for smooth interoperability across devices.

Future-Proof & Expandable Ecosystem

Modular Design with Flexible Connectivity and Scalable Growth



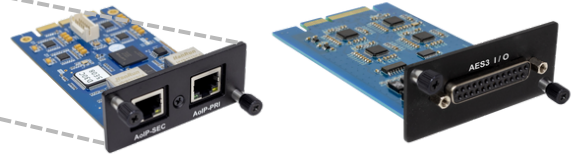
MCX-800AD - 8-channel DACs+Amps

- 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.

Future-Proof & Expandable Ecosystem

Modular Design with Flexible Connectivity and Scalable Growth



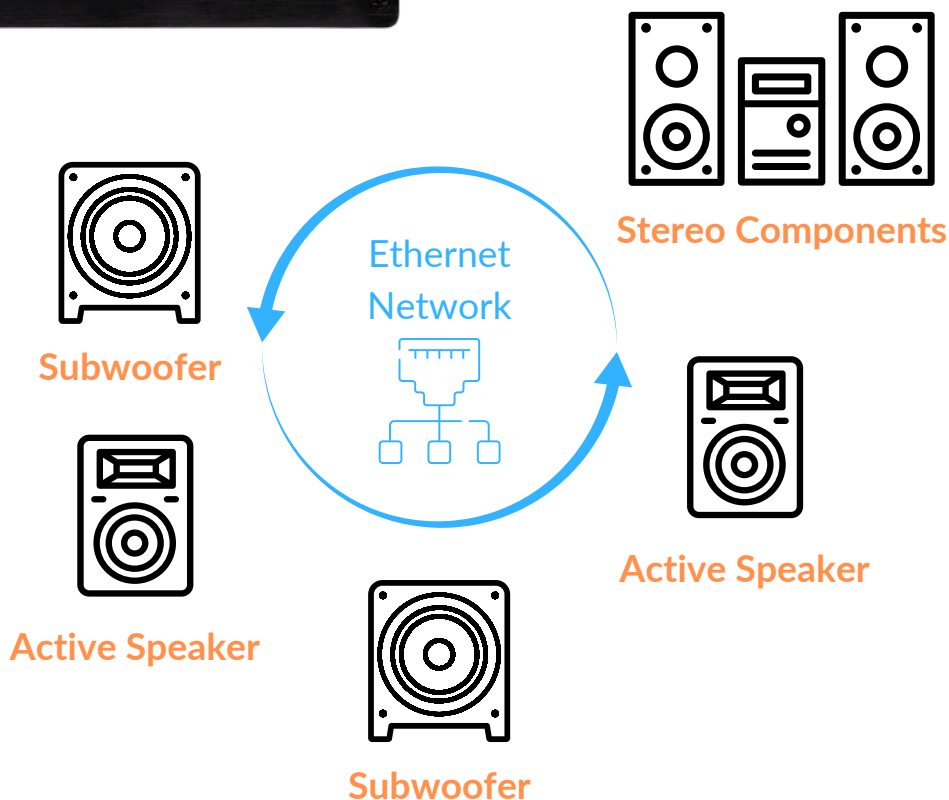
AoXLR-2C

Two channels XLR and 3.5mm stereo inputs and outputs converter for AoIP. Idea for subwoofer or active speakers. Sampling rate up to 96kHz.



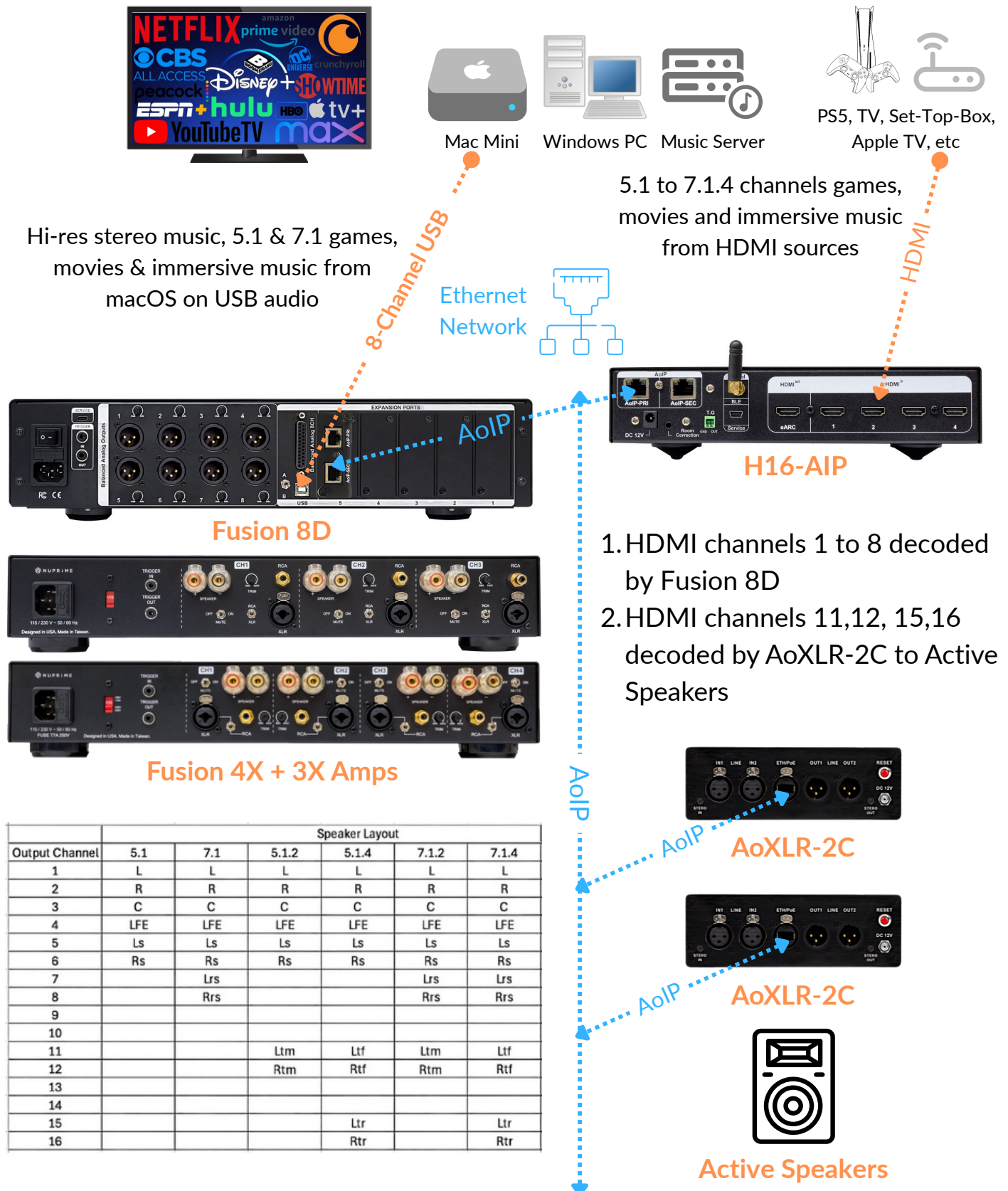
AoAES-4C

AES3 Four channels in and out to AoIP converter. Sampling rate up to 96kHz.



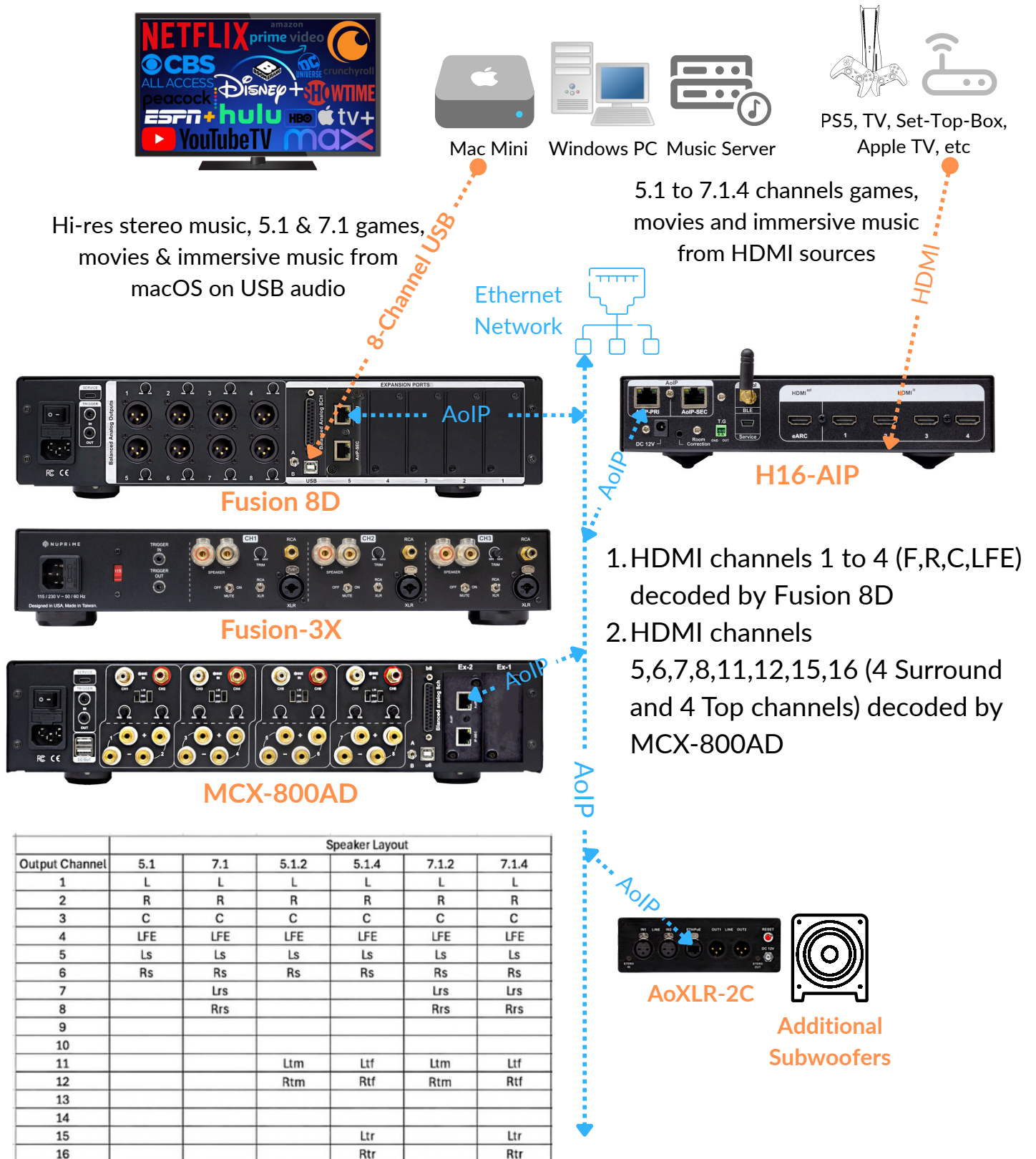
Use Case1: A High-End Stereo and Home Theater System with USB Audio and HDMI Sources

Distributed and scalable system connected by ethernet cable.



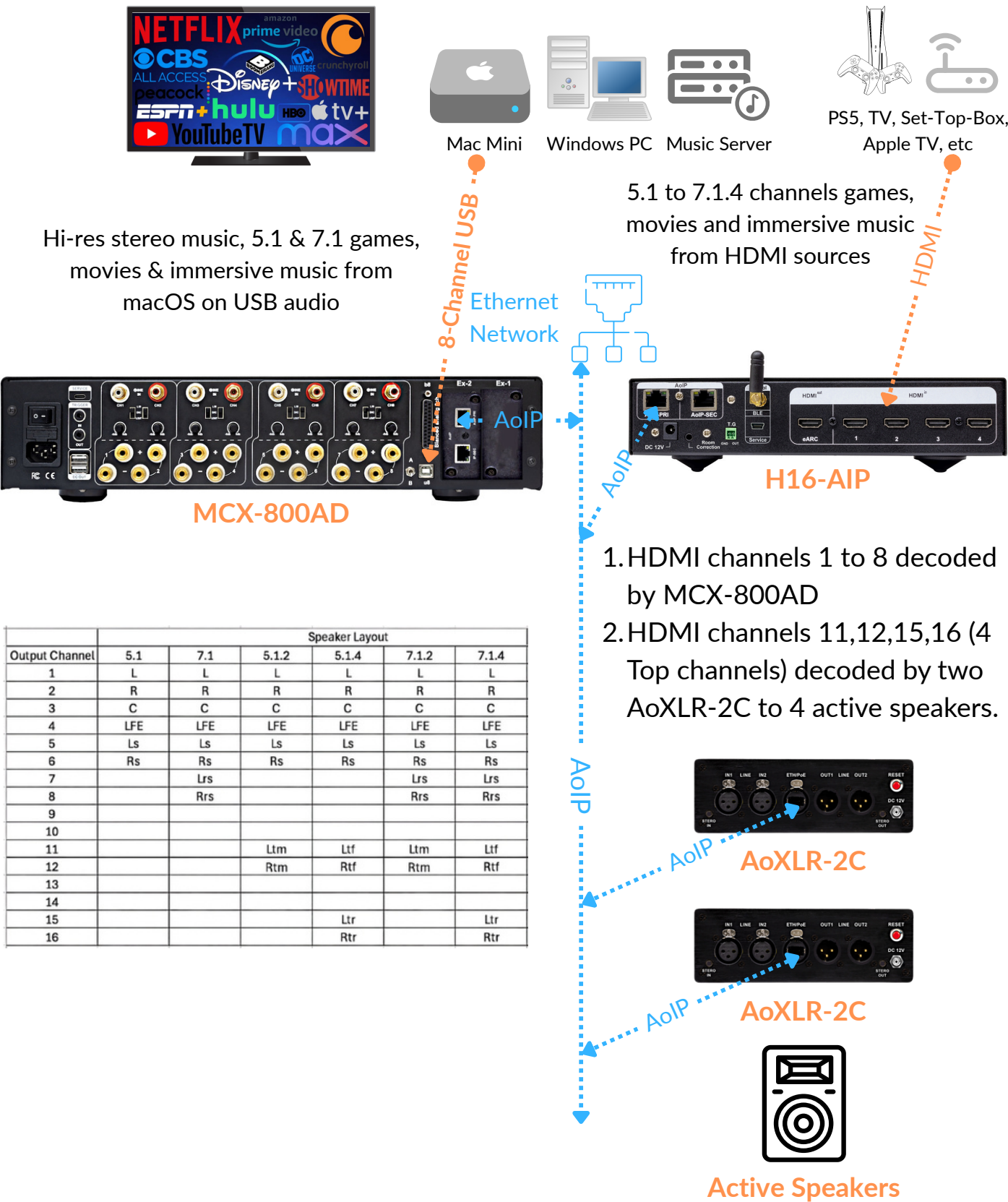
Use Case2: A High-End Stereo and Home Theater System with USB Audio and HDMI Sources

Distributed and scalable system connected by ethernet cable.



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

Distributed and scalable system connected by ethernet cable.



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

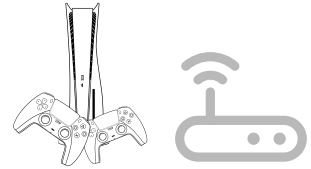
Use Case5: An Entry Level Gaming System with HDMI Sources

Many long XLR cables to each speakers and subwoofer!



Movies, Games, Stereo
& Immersive Music

Stereo, 5.1 to 7.1.4
Channels

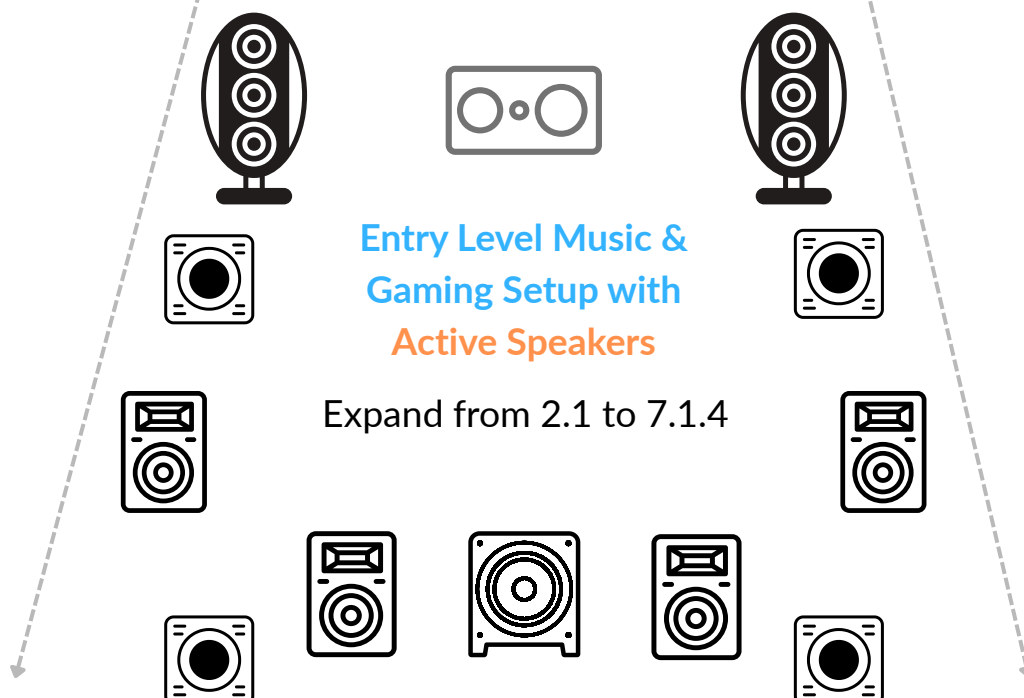


PS5, TV, Set-Top-Box,
Apple TV, etc

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



DB25 to 16-Channel XLR Converter



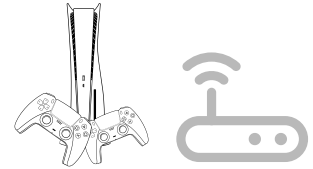
Use Case6: Large Gaming Room & Esports Arena Systems with HDMI Sources

Active speakers are connected to AoIP-to-XLR converters distributed throughout the gaming room and esports arena, enabling a scalable and distributed multi-channel audio setup.



Movies, Games, Stereo
& Immersive Music

Stereo, 5.1 to 7.1.4
Channels



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



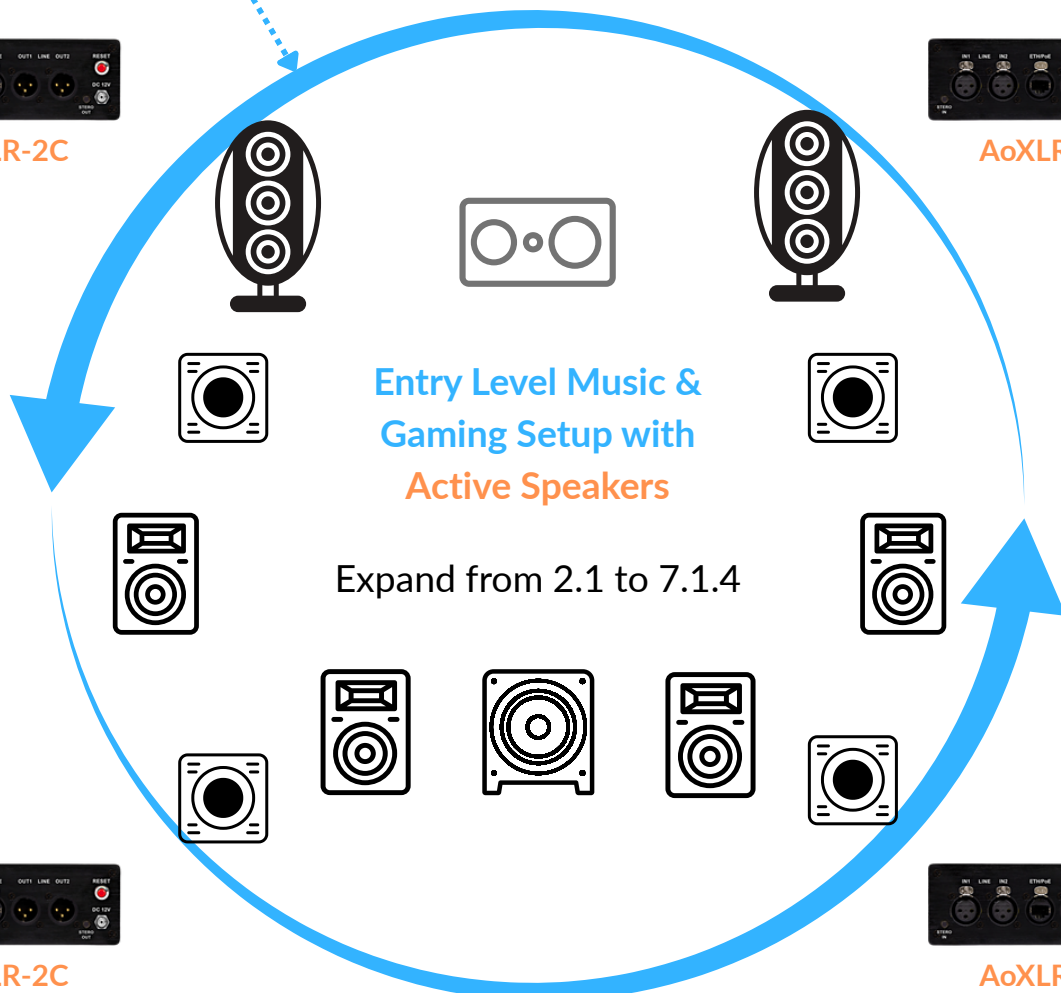
H16-AIP



AoXLR-2C



AoXLR-2C



Entry Level Music &
Gaming Setup with
Active Speakers

Expand from 2.1 to 7.1.4



AoXLR-2C



AoXLR-2C