

AV Device Taxonomy Guidelines

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Document History and Change Log

This section captures the history of changes made to this document.

Version	Date	Reason for Change
1.0	2026-03-05	Initial release of AV Device Taxonomy Guidelines.
1.1	2026-04-02	Incorporated Community Feedback

1. Purpose

This document outlines the taxonomy guidelines for Audio/Video (AV) devices developed, deployed, or integrated by members of the OpenAVCloud initiative.

The goal of this document is to capture all the possible categories of AV products that can be integrated and managed at a customer site. The intent will be to use these categories to define ontologies and data models as well as more detailed APIs for the functionality they provide, in a later document published by the OpenAVCloud technical working group.

2. High-Level Device Categories

Below is a taxonomy of AV (Audio-Visual) devices organized into categories based on their function, usage context, and technical characteristics:

2.1 Display Devices

Devices that present visual content to users.

2.1.1 Monitors & Screens

Examples of these may include LCD/LED Monitors, OLED Displays, Touchscreens, and Passive Screens.

2.1.2 Projectors

Examples of these may include DLP Projectors, LCD Projectors, and Laser Projectors.

2.1.3 Video Walls

Examples of these may include LED Panels, AIO LED Walls, and LCD Video Walls.

2.1.4 Interactive Whiteboards

Examples of these may include Smart Boards, and Digital Flipcharts.

2.2 Audio Devices

Devices that capture, process, or reproduce sound.

2.2.1 Microphones

Examples of these may include Dynamic Microphones, Condenser Microphones, Lavalier Microphones, Boundary Microphones, and Beamforming Microphones.

2.2.2 Speakers

Examples of these may include Passive Speakers, Active Speakers, Ceiling Speakers and Soundbars.

2.2.3 Amplifiers & Mixers

Examples of these may include Audio Mixers, Power Amplifiers and Digital Signal Processors (DSPs).

2.3 Video Devices

Devices that capture or transmit video.

2.3.1 Cameras

Examples of these may include PTZ (Pan-Tilt-Zoom) Cameras, Fixed Cameras, USB Cameras, and Document Cameras.

2.3.2 Video Capture & Streaming Devices

Examples of these may include Capture Cards, and Streaming Encoders.

2.3.3 Codec-based Systems

2.4 Control Systems

Devices and software used to manage AV systems.

2.4.1 Control Panels

Examples of these may include Touch Panels, and Button Panels.

2.4.2 Remote Controls

Examples of these may include IR Remotes, and RF Remotes.

2.4.3 Automation Systems

Examples of these may include Room Scheduling Panels, and Environmental Controls (lighting, shades).

Examples of these may also include software bases AV control systems such as On-Prem Control Systems, and Cloud-based AV Management Platforms.

2.5 Signal Management & Distribution

Devices that manage AV signal routing and processing.

2.5.1 Switchers & Matrix Switches

Examples of these may include HDMI/SDI/AV Switchers, and Video Matrix Routers.

2.5.2 Extenders & Converters

Examples of these may include HDMI over IP, HDBaseT, Fiber Optic Extenders, Format Converters (e.g., VGA to HDMI), and DisplayPort/USB-C DP Alt-mode devices.

2.5.3 Splitters & Distribution Amplifiers

Examples of these may include Audio Splitters, and Video Distribution Amplifiers.

2.6 Collaboration & Video Conferencing Systems

Devices and platforms that facilitate interaction and teamwork.

2.6.1 Interactive Displays

These may also include Digital Whiteboarding Tools

2.6.2 Wireless Presentation Systems

These may also include Bring Your Own Device (BYOD) and Bring Your Own Meeting (BYOM) systems.

2.6.3 Unified Communications Platforms

These may also include Integrated Room Systems.

2.7 Recording & Playback Devices

Devices used for capturing and replaying AV content.

2.7.1 Media Players

Examples of these may include Blu-ray/DVD Players, and Streaming Devices (Apple TV, Chromecast).

2.7.2 Recorders

Examples of these may include Digital Video Recorders (DVRs), and Network Video Recorders (NVRs).

2.7.3 Storage Solutions

Examples of these may include NAS Devices, Cloud Storage Platforms.

2.8 Infrastructure & Accessories

Supporting components for AV systems.

2.8.1 Power Management

Examples of these may include UPS Systems, Power Conditioners, and Power Distribution Units (PDU).

2.8.2 Networking Equipment

Examples of these may include Switches, Routers, Wireless Access Points, and Network Gateways.

Network equipment are part of a larger Network Infrastructure category that may also include Network Management Software. However, there are many guidelines that already address Network Infrastructure and this document only highlights physical equipment as it is adjacent to AV devices that may be integrated in deployed systems.

5. References

- 1 OpenAVCloud - “AV Device Minimum Functionality Guidelines”