

# AV Installations

Professional Audio-Visual (AV) installations require fixed, reliable connection points that can withstand constant use, minimize signal interference, and protect overall system integrity. Reliable connections are essential for achieving optimal performance, since proper connectivity supports clean signal transmission for audio, power, video, control, and data across the entire system.

To support that level of performance, most AV systems rely on a set of common connection points and cable types that create a stable, serviceable backbone for the rest of the installation.

## Patch Panels on AV Racks

Patch Panels serve as the central hub for routing and managing signals within equipment racks in control rooms, server closets, and other back-of-house spaces. They act as passive distribution points that link external sources to rack-mounted devices like mixers, processors, and servers. They also play a key role in cable management and signal organization.

## Stage Pockets (Floor Boxes)

Stage Pockets provide floor-level access for signal and power distribution on stages, in performance spaces, and in conference rooms. They protect permanent under-floor wiring and offer localized, protected connectivity for microphones, instruments, monitors, and floor lighting.

## Wall Panels (Input/Output Plates)

Wall Panels create built-in connection points in meeting rooms, classrooms, studios, and auditoriums. They let users connect laptops, portable cameras, and temporary audio or video gear to the main infrastructure. They provide a clean, organized termination point for structured cabling inside walls.

## Patch Cables

Patch cables provide a dependable, organized way to connect devices to structured cabling through patch panels. They support audio, video, lighting, control, and network signals. When choosing patch cables, durability, shielding, and conductor quality are important for stable, consistent performance.

## Commonly Used Products

### JL / JLX Panel Mount XLR Connectors

Used in patch panels, stage pockets, and wall plates. These connectors hold up well in permanent installations, maintain stable signal paths, and offer secure mechanical contact even with frequent use. Their metal housings, locking options, and wide format availability make them a reliable choice for audio, video, and data terminations.

### Etherlatch Network Cables and Connectors

Designed for networked AV systems. They provide strong latch retention and consistent data performance, reducing the chance of dropouts in control networks, Dante audio, video-over-IP, and other transport formats.

### XLR Cables

A standard for balanced audio. They reject noise, support long cable runs, and remain dependable in both permanent and portable setups.

### Instrument / Balanced Patch Cables

Ideal for short runs between devices, processors, and local I/O. Their shielding and conductor quality help maintain clean, consistent signals in tight spaces.

### Powerlatch Cables and Connectors

Recommended for power connections where accidental disconnects would cause issues. Their locking feature and rugged build help keep equipment powered safely and consistently in racks and floor boxes.

## AV Rack

