AV System Terms and Definitions

- **Amplifier -** An amplifier is an electronic device that increases the voltage, current, or power of a signal.

- **Analog audio -** Analog audio signals are continuous, electrical representations of sound waves. These signals vary in voltage or current in a manner that mirrors the fluctuations in air pressure caused by sound waves.

- **Control processor -** A Control Processor is the central brain that orchestrates the automation of AV systems. It manages and processes signals to control various components within an AV setup, such as projectors, speakers, lighting, and screens.

- **Digital signal -** A digital signal is data (audio, video, control) represented as discrete binary values (0s and 1s) rather than continuous waves.

- **Digital signal processor (DSP) -** A digital device designed to process signal streams such as audio, video, and RF data.

- **Input Devices -** A connection point that receives information from another piece of equipment.

- **LCD -** A video display technology that uses light transmission through polarizing liquid crystals to display an image.

- **LED -** Short for Light-Emitting Diode displays, LED displays are electronic devices made of tiny light bulbs that work together by emitting light when an electric current is passed through them to create images or text. The LEDs are arranged in a grid, and each LED can be turned on or off individually to produce the desired image or text.

- **MicroLED -** is a type of display made of microscopic LEDs, where each pixel produces its own light and color, resulting in very bright, high-contrast, energy-efficient screens.

- **MiniLED -** Mini-LED refers to smaller, more numerous LEDs used behind an LCD panel to improve brightness, contrast and dynamic range compared to traditional LED-backlit displays.

- **Mounts -** are hardware brackets used to attach displays, projectors, speakers, cameras, or other AV devices to walls, ceilings, poles, or structures.

- **OLED -** A semiconductor light-emitting diode constructed from organic compounds. Displays built from OLEDs generally use separate layers for emitting the red, green, and blue components of an image.

- **Output devices -** Output devices are the end points of an AV system, where the signals are converted back into sounds and images for the user to experience. This includes speakers for audio and screens for video.

- **Power over Cable (PoC) -** is a technology that sends electrical power and audio/video/control signals through the same cable so a device can operate without needing a separate power supply at its location.

- **Power over Ethernet (PoE) -** Also known as power over data line (PoDL), PoE is a DC power supply delivered as an "invisible" overlay on the data lines of an Ethernet network system. The voltage is overlaid in common mode across both wires in a twisted-pair to eliminate any effect on the data. PoE is used to power a wide range of Ethernet-connected devices.

- **Racks -** are metal enclosures or frames used to hold and organize AV equipment such as amplifiers, DSPs, switchers, servers, and power units.

- **Switcher (or scaler) -** A device used to select one of several available signals.