The 2014 CEDIA Expo was held at the Colorado Convention Center in Denver September 11-14. According to published reports from CEDIA (Custom Electronics Design & Installation Association), this year’s Expo showed a steady growth in attendance and participation, with more than 18,500 guests and 480 exhibitors from 82 countries. This includes 72 exhibitors who launched 105 new home technology products and services, many of which were displayed for the first time.

This year also marked CEDIA’s 25th Anniversary, which was acknowledged in comments made by both CEDIA officials and Mike Fasulo of Sony Electronics, who delivered this year’s keynote address. As always, both the dealers and integrators in attendance were also engaged in a variety of CEDIA Certification programs and training sessions, with more than 40 different classes sold out.

In regards to the latest CEDIA trends, 4K Ultra HD was by far the single biggest activity on the Expo floor, with numerous companies showcasing a wide range of end-to-end solutions that have been specifically designed to meet the many needs of the custom installation market. In fact, one could easily say that “4K in every way” was the central message at CEDIA this year, with 4K product offerings from virtually every display company (LG, Planar and Sony), projector manufacturer (Christie, DPI, Epson, JVC, Sony and Wolf), and screen provider (Draper, Elite, SCI, Severtson and Stewart Filmscreen), along with leading system integrators like Crestron.

Additionally, a number of products which support Dolby Atmos and High Resolution Audio were featured prominently throughout CEDIA Expo, by numerous component and speaker manufacturers. Plus, given its focus on interoperability and integration, CEDIA Expo featured a number of key technology zones as well, including exhibits from HDMI, HD-BaseT, WiSa (Wireless Speaker & Audio Association) and the Z Wave Alliance.

All of these developments support the core business activities of CEDIA members, including home theaters, media rooms and multi-room distributed home entertainment.

Below is a brief summary of the products and services that were exhibited at CEDIA Expo this year.

**Autonomic**

Autonomic demonstrated its Mirage High Resolution Audio system, featuring an advanced media server which delivers 192 kHz/24-bit resolution and is bridgeable for up to 96 different zones.

It also includes a choice of two digital amplifiers and two in-wall control options, plus supplied software for iOS and Android devices.
**Bang & Olufsen**
Bang & Olufsen (B&O) used CEDIA Expo to premier its second 4K Ultra HD TV model, the new 85-inch BeoVision Avante. The unit includes a motorized stand and special wall bracket option, which enables it to blend in or stand out in almost any environment.

The company also showcased its BeoLink Gateway, a proprietary hardware and software protocol which utilizes HTML5 and a Real-Time Configuration Tool to seamlessly connect every audio and video product that B&O currently offers.

**Bryston**
Bryston’s new digital music player supports a number of high resolution file formats at up to 192 kHz/24-bit resolution. It also features a variety of connectivity options, including multiple USB and Ethernet inputs; as well as UPnP and DLNA compliance.

**Christie**
One of the leaders in Digital Cinema projection, Christie showcased a new reference standard 4K projector which is compatible with both the latest HDMI/HDCP and DCI specifications.

The unit features a 3-chip DLP panel and supports High Frame Rate content at 60 and 120 Hz.
**Comcast**
This year’s CEDIA Expo marked the first appearance of the Comcast Innovation Lab who announced their new Xfinity Integration Beta Program which has been specifically created for CEDIA installers.

The exhibit featured a new rack mountable DVR, complete with 6 tuners and built-in CableCard slot. Comcast conducted multiple demonstrations and held numerous meetings with potential CEDIA partners.

**Crestron**
One of the most advanced system integration companies, Crestron used CEDIA Expo to highlight the industry’s first 4K Certification Program which launched this past year. It’s specifically designed to address a variety of critical 4K factors, including mismatched resolutions; frame rate considerations; signal integrity; cable length restrictions; and source/display compatibility.

Crestron has reportedly evaluated 45 different 4K-enabled products in their DigitalMedia lab so far, with 10 having passed and eight failing. This underscores the amount of issues that need to be resolved, in order to insure full interoperability between 4K displays and other enabled devices.
Digital Projection International
DPI used CEDIA Expo to launch their new 3-chip DLP-based INSIGHT 4K projectors. Their new laser engines deliver more than 30 percent more brightness than conventional UHP lamps and are designed to last more than 20,000 hours without replacement.

Dish
Like a growing number of other platforms, Dish Networks highlighted its new Smartbox TV management system which has been created for CEDIA installers and provides a number of scalable, adaptable and cost-effective satellite service solutions.

Dolby
Dolby launched its new Dolby Atmos object-based multi-channel surround system, with a number of their licensees demonstrating AV receivers and speakers on the show floor.

This included electronics companies like D&M (Denon and Marantz), Onkyo/Integra, Pioneer and Yamaha, as well as such speaker manufacturers as Atlantic Technology, Definitive Technology, GoldenEar, Triad and Steinway Lyngdorf (which announced a surround processor that incorporates both Dolby Atmos and Auro-3D channel-based decoding).
Dune HD
Dune HD highlighted its universal media player which incorporates built-in WiFi and supports a variety of digital audio and video formats, including uncompressed Hi-Res Audio at up to 192 kHz/24-bit resolution. This unit is also equipped with an internal 3.5 inch HDD bay with hot swap function.

DVDO
DVDO demonstrated a variety of wired and wireless solutions, including two new 4K Ultra HD switchers that supports up to six 4K compatible HDMI inputs and two outputs for greater flexibility.

The company also showed its 4K Ultra HD test pattern generator, along with a 4K upscaling video enhancement system.

Epson
Epson announced their new Elite Pro Cinema home theater projector that utilizes advanced upscaling technology to achieve near 4K performance, in similar manner to JVC.

Perhaps more significantly, this new 3 LCD model incorporates a laser light engine that is far more reliable than conventional UHP designs. The unit is expected to sell for $8,000.
**Integra**
Integra displayed a broad range of advanced AV receivers which incorporate virtually every sound reproduction option available, including Dolby Atmos and High Resolution Audio support.

The company also introduced a new state-of-the-art preamplifier which supports a variety of different sources and provides advanced switching capability.

**JVC**
JVC demonstrated its current line of e-Shift 4K projectors in their exhibit room on the floor.

**Kaleidescape**
In addition to highlighting its distribution deals with Lionsgate, Sony Pictures and Warner Bros., Kaleidescape demonstrated its Cinema One media server, which features their new KOS 6.0 operating system.
This new platform enables a more simplified approach to downloads and purchase activations and includes Digital Offers service which enable customers to upgrade their DVDs and Blu-ray Discs to digital downloads. The company also showed a new version of the Kaleidescape Store, which is UltraViolet compliant.

LG
LG featured its full line of 4K Ultra HD TV offerings which range from 40 to 105-inches diagonally. The sets incorporate a number of proprietary picture enhancement technologies, including their LED Plus Edge Lighting with Local Dimming.

The company also highlighted its new 55-inch Curved OLED HDTV model, which offers outstanding brightness, contrast and black levels, along with their LG Smart TV+ webOS connected platform that supports a variety of streaming services.

Lyngdorf Audio
Lyngdorf introduced a 170-watt per channel stereo digital amplifier that can support a variety of different high resolution file formats, at up to 384 kHz/32-bit performance. An optional high end A/D converter is also available to complement this.

Meridian
Meridian Digital highlighted a select group of audio devices from its wide range of products, including its latest Hi-Res compatible Direct DAC.
**Mozalex**
This high-end manufacturer of Blu-ray based multi-room entertainment servers demonstrated its new iPlay feature, which enables you to browse, stream or download iTunes movies and music via the Mozeax library.

The Mozaex server also supports HULU, Netflix and VUDU services and is UltraViolet compliant.

**Planar/Runco**
Planar/Runco brought 4K resolution to its popular Planar EP Series of 58-inch and 65-inch displays, which are designed for both residential and advanced commercial applications.

The new models support both landscape and portrait modes and are available with integrated multi-touch technology that provides a more interactive 4K experience.

**Rotel**
Rotel displayed a variety of different Hi-Res Audio solutions, including a stereo preamplifier with on-board DAC; and an ultra slim stereo D/A converter.

**Russound**
Russound featured a variety of audio streaming devices and distribution amplifiers, including a new rack mountable model that can support 96 kHz/24-bit High Resolution Audio.
**Sonos**
Widely acknowledged as the leader in wireless multi-room audio, Sonos announced an exclusive arrangement with Deezer to support lossless CD quality music streaming.

Deezer is reportedly the second largest music streaming service worldwide, with over 16 million active users and five million subscribers, across 182 countries.

**Sony**
Sony highlighted its latest series of displays, projectors and AV receivers; all of which deliver 4K Ultra HD performance and feature Control over IP capability for easy integration.

In addition to greater detail, the Sony 950 Series TVs provide greater dynamic range and deeper black levels, due to their full array LED backlighting. They also incorporate an exclusive wider color gamut technology, along with advanced upscaling capability.

Sony also announced that their FMP-X10 4K media player will add Amazon's new 4K streaming service and is being upgraded to support not just Sony TVs, but virtually every 4K Ultra HD model that's compatible with HDMI 2.0 and HDCP content protection. And the company introduced a new line of A/V receivers that were specifically designed based on direct feedback from custom installers.

Finally, in addition to their current reference standard and entry level 4K models, Sony introduced the world’s first 4K Ultra Short Throw projector, which features a new laser light engine that generates up to 2,000 lumens of brightness and provides more than 20,000 hours of maintenance free operation.
TiVo
In addition to its broad range of consumer and professional models, TiVo displayed their new rack mountable TiVo Mega DVR, which provides 24 terabytes of storage and incorporates six tuners, complete with built-in Cable Card.

This new non-4K unit is specifically targeted to CEDIA installers and will sell for a reported $6,000, which includes lifetime service support.

Wolf Cinema
Wolf Cinema also demonstrated a new 3 chip DLP-based 4K reference projector. The new DCI compliant model is designed for both high end residential and commercial theater applications.