BEST IN MARKET

2021

Program Guide Showcasing Nominated and Winning Products

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I nnovation in media technology doesn't stop for pandemics or postponed conventions. The Future Best in Market Awards Program Guide is pleased to introduce you to new products for the TV, video, streaming, radio, audio and pro AV business sectors.

This digital guide provides you with an excellent review of new technology available. It features all the nominees that participated in this year's program and allows companies to tell you in their own words why they believe a new product is noteworthy.

Winners are selected by professional users and our editors based on descriptions provided via the nomination form and are noted by a special winner logo. The Best in Market awards are judged and presented by Future brands TV Tech, TVBEurope, Next TV, B+C, Radio World, Mix and Sound & Video Contractor.

Thank you to all the participants; congratulations to the winners. And thank YOU for reading. We hope to see you at the spring NAB Show in April 2022.

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Adobe
Premiere Pro

Creating Inclusive and Accessible Video Content for Deaf and Hearing-Impaired Audiences

Captions are increasingly necessary in many areas due to the growth of social video, globalized content and accessible content, but the captioning process can be tedious. Solving this painstaking process has the opportunity to greatly expand accessibility across all areas of video, from broadcast sports and news, to YouTube and social media, as well as television and film. Especially in the year and a half, people have come to rely more and more on video to connect with friends and family, entertain themselves with a welcome distraction and learn new skills.

Video creators need tools to help them add captions to content, and audiences everywhere, especially those in the deaf community, need captions to unlock the verbal communication that drives most video content. The new Speech to Text feature set (currently in beta) in Adobe Premiere Pro, the world's leading video-editing software, will introduce an efficient way to add accurate captions to any kind of video content.

More specifically, Speech to Text will enable video creators to automatically create a transcript from their video, then generate automatic captions on their editing timeline. Also embedded in this feature is Auto Captions, which uses Adobe Sensei, Adobe's proprietary artificial intelligence software, to accurately mirror the pacing of spoken dialog and match it to the video timecode. While this can potentially be overlooked as a small element, ensuring that the cadence of captions is accurate is key to understanding and engagement. The Speech to Text feature set represents the first time that a professional editing software offers this kind of robust tool for captioning.

Beyond providing accessibility, captions have many practical benefits for video creators, such as improving SEO optimization to boosting engagement rates and shares. Additionally, the new Speech to Text feature allows video editors to add creative spark and style to captions. Captions have always been black and white—literally. Now, creators can add color, manipulate sizing and placement, and access additional stylization elements that open up creative pathways for accessible captions that have never existed before.
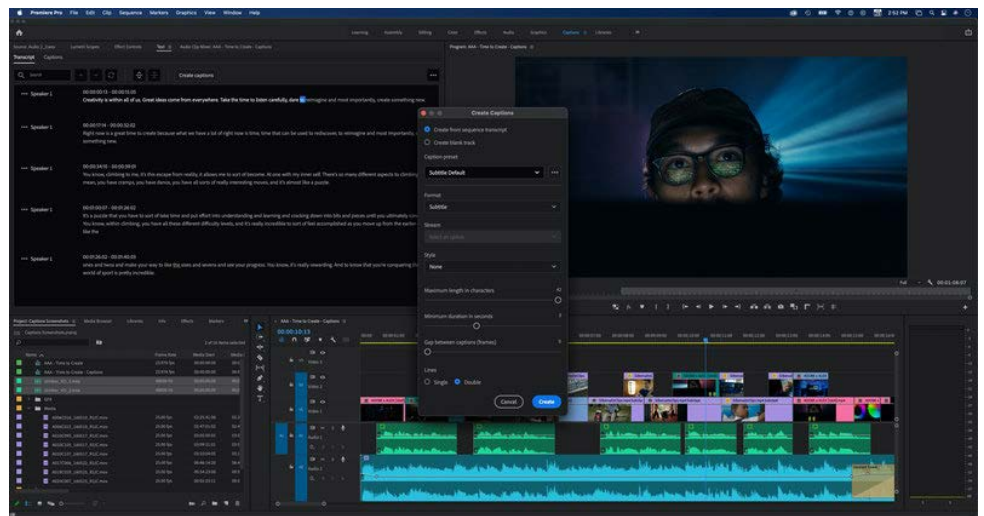
The Speech to Text workflow is designed to be intuitive and customizable to the user's needs. The Captions workspace in Premiere Pro consists of the Text panel, which includes the Transcript and Captions tabs. To get started, the user auto-transcribes their video in the Transcript tab, which then generates captions. These captions can then be edited in the Captions tab and in the Program Monitor. Captions have their own track on the timeline. Lastly, editors can stylize their captions with the design tools in the Essential Graphics panel.

As video continues to dominate communication and entertainment worldwide, the Speech to Text will be welcomed by content creators and audiences alike.

https://pages.adobe.com/premiere/en/speechtotext/

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NOMINEE

Amazon Web Services
AWS Elemental Link UHD
Simple, Cost-Effective and Secure UHD Live Video Encoding

AWS Elemental Link UHD is an intuitive encoding device that connects a live video source, like a camera or video production equipment on the ground, to AWS Elemental MediaLive in the cloud, enabling broadcast-grade live video streaming of ultra-high definition (UHD) video with up to 10-bit color depth and high dynamic range (HDR) support. Launched in June 2021, the portable device improves the quality and reliability of UHD live video streams for production professionals in the field while reducing the cost and complexity of equipment needed to move live video signals from on-premises technology into the cloud. Link UHD ships fully configured to a user's AWS account, offering an easy, cost-efficient way to transfer UHD video securely and reliably to MediaLive for delivery to viewers on a range of device types. Both high HDR 10 and HLG video outputs are supported. Using the device is as simple as connecting it to power, Ethernet, and a video source. It can be controlled remotely and monitored from anywhere with an internet connection using the AWS Management Console.

Available for $4,995 USD per device (excluding customs clearance, duty, tax and shipping), AWS Elemental Link UHD provides a more cost-efficient approach to cloud video contribution compared to traditional methods. The compact device requires minimal power and cooling requirements and is easy to own and operate. With silent, fanless operation, the device is also

well-suited for low-noise environments like sporting and event venues, studios or conference rooms. It also maximizes the quality of the UHD video sent to the cloud, adapting automatically to changes in network conditions. To deliver the best possible video, Link UHD devices encode using the HEVC (High Efficiency Video Coding) codec, which is up to 50 percent more efficient than the AVC (Advanced Video Coding) AVC codec.

For high resiliency video transport, AWS Elemental Link UHD uses the Zixi delivery protocol, which combines content-aware and network-adaptive forward error correction with error recovery, while minimizing latency. Encoded video is encrypted using AES-128 and rotating keys from AWS Key Management Service (AWS KMS). The device also uses a network-aware adaptive bitrate algorithm, adjusting in real time to changes in network conditions. This closed-loop feedback system minimizes packet loss to keep the video signal stable, even if network issues occur.

Link UHD is a valuable tool in live production and streaming environments, especially as companies try to minimize the amount of staff located on-site during a global pandemic. Even a non-technical person can plug in a Link UHD device on-site and, after that, control the remainder of the stream configuration from the cloud. For the many reasons outlined above, AWS Elemental Link UHD is a prime candidate for a best in market award this year.

https://aws.amazon.com/medialive/features/link/

Amazon Web Services
AWS Cloud Digital Interface (AWS CDI)
Reliable, Uncompressed Live Video Transport in the Cloud

AWS Cloud Digital Interface (AWS CDI) is an advanced networking technology for transport of high-quality uncompressed video up to 4K resolution at 60 frames per second on AWS, with high reliability and low network latency. Much like Serial Digital Interface (SDI) technology helped to advance digital video through connectivity, AWS CDI paves the way to more robust cloud-based live video workflows by forging connections between cloud-based technologies including AWS Media Services, AWS Partners and Independent Software Vendors (ISVs).

Highly interoperable, AWS CDI combines the scalability and agility of AWS with the raw performance of on-premises standards. The AWS CDI software development kit (SDK), an open source project released under the two-clause BSD license, provides the schema necessary to ensure reliable communications between cloud-based broadcast and live production applications.

With AWS CDI, broadcasters and live production professionals can tap into the benefits of the cloud to work in a more flexible, scalable manner when working with uncompressed video. AWS CDI links cloud-based applications from different vendors with incredibly high-data transfer speeds and latency as low as 8 milliseconds, or less than one frame of video for 60 frames per second content. The net result is higher-quality video in the cloud with no generational loss due to encode/decode processing and the ability to build uncompressed live video workflows in the cloud that previously could only be done on the ground.

JPEG-XS compression makes high-bandwidth cloud ingest possible. JPEG XS is a visually lossless, low-complexity, and low-latency video codec that lends itself to hybrid video workflows, reducing the throughput strain as customers shift to playout in the cloud. Newly launched AWS Elemental Live with JPEG XS encoding provides the bridge needed to move uncompressed video to and from the cloud, working alongside AWS Elemental MediaConnect, a transport service for live video.

As the entire production process moves into the cloud, workflows can link with converged (OTT and primary screen) distribution headends, unifying production, broadcast and content delivery. Applications that integrate the AWS CDI SDK move traditionally complex parts of broadcast workflows into the cloud, enabling ISVs and broadcasters to build a production environment that can grow and shrink to make each live production more commercially viable, setting the stage to democratize access to broadcast TV. For consumers, this means more varied and curated content experiences, and for the streaming production community easier access to professional-grade tools to elevate content quality without breaking the bank.

Examples of technology partners harnessing AWS CDI in production include Evertz and Grabyo. Evertz leverages the AWS CDI SDK to take feeds directly from Evertz Overture compositing engine into AWS Elemental MediaLive, without additional encoding required. The company also uses AWS CDI to support FOX with live production switching between multiple sources. For Grabyo, AWS CDI allows it to move data between multiple Amazon EC2 instances, so they can add sophistication and horizontal scaling capability to their live production application. AWS CDI is a game-changing technology for the industry paving the way for a more innovative future.

https://aws.amazon.com/media-services/resources/cdi/

Amazon Web Services
Amazon Nimble Studio

Set Up a Content Production Studio in Hours and Quickly Scale Capacity

Amazon Nimble Studio is a new service that empowers creative studios to produce visual effects, animation and interactive content entirely in the cloud, from storyboard sketch to final deliverable. Launched April 2021, the service enables customers to set up a content production studio in hours instead of weeks, with elasticity that provides near limitless scale and on-demand rendering access.
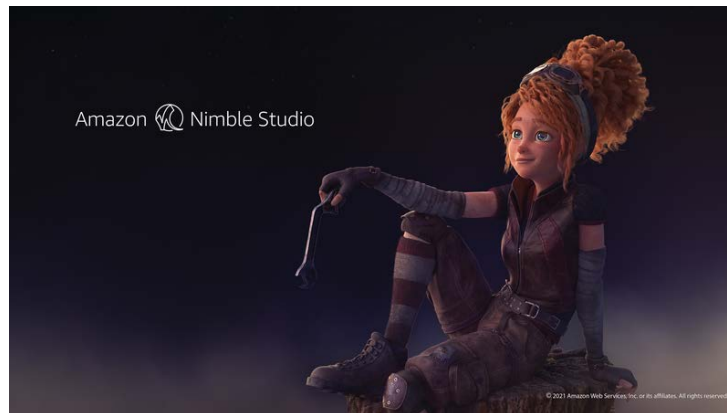
With Amazon Nimble Studio, customers can rapidly onboard and collaborate with artists from anywhere in the world, and produce content faster and more cost-efficiently using virtual workstations, high-speed storage and scalable rendering across the globe. There are no upfront fees to use Nimble Studio, and customers only pay for the underlying AWS services used.

Historically, studios relied on local high-performance workstations connected to shared file storage systems over low-latency, on-premises networks to create high-quality visual effects, animation, and other creative content. Costly infrastructure decisions were made up front, with studios aiming to balance capacity and demand in sourcing hardware used for several years and the space to house it. This limited studios to artistic talent located near studios, or those willing to move. With Amazon Nimble Studio, customers can use the cloud for remote and traditional studio setups. Studios can scale up compute resources and team size based on project demand, and shut down those resources after delivery.

This flexibility is vital to studios as demand for premium content rises. Visual effects and animation, which are compute-intensive to render, feature in nearly every modern production. Keeping pace with ever-growing demand causes content production studios to over-provision compute, networking, and storage infrastructure for peak capacity, which proves expensive, difficult to manage, and hard to scale.

Amazon Nimble Studio leverages the power of the cloud to transform content production, making it much faster, easier and less expensive to create content that consumers want to watch.

Once set up on Amazon Nimble Studio, creative talent can instantly access high-performance workstations powered by Amazon Elastic Compute Cloud (EC2) G4dn instances with NVIDIA Graphical Processing Units (GPUs), shared file storage from Amazon FSx, and ultra-low latency streaming via the AWS global network. Nimble Studio lets content production studios start with as few resources as needed, scale up resources when rendering demands peak, and spin them back down once projects are complete.

Content production studios can onboard remote teams from around the world and provide them access to just the right amount of high-performance infrastructure for only as long as needed — all without having to procure, set up and manage local workstations, file systems and low-latency networking. Amazon Nimble Studio supports both the Windows and Linux operating systems so that artists can work with their preferred third-party creative applications. Additionally, studios can use custom software applications. A transformative technology, Amazon Nimble Studio is well deserving of a Best in Market Award.

"We decided to divest from on-premises infrastructure and go completely remote. We are now up and running completely on Nimble Studio, and it has exceeded our expectations thus far," said Adam Stern, founder and CEO, Artifex Studios.

https://aws.amazon.com/nimble-studio/

Apantac

12G SDI Receiver for SDM

Integrated UHD 12G SDI Connectivity With Your SDM Displays

One of Apantac's highlights this year is its new line of interface products that are based on the Intel SDM Platform. Apantac is an Intel Gold Partner and is the first provider of interfaces based on the Intel Smart Display Module (SDM) platform with Intel FPGAs.

What is the purpose of SDM? SDM stands for Smart Display Module, and it was launched in 2018 by Intel, whereby SDM modules can be inserted into a SDM display. At ISE 2019, there were approximately 10 companies that showed their SDM monitors. Regardless of broadcaster/pro AV integrators, SDM interface modules will provide a direct connection from source to display. The benefits of the SDM platform ensure they can be easily integrated into slim displays, provide future-proof connectors, and in the case of Apantac SDM solutions, are based on the Intel Cyclone 10 and Arria V FPGAs.

Apantac's new SDM modules and interfaces provide superior flexibility for extending and connecting UHD signals to SDM displays. They solve key challenges that network operators, broadcasters and systems integrators may have by now providing an integrated solution with SDM displays. The advantages of SDM are that it takes up minimum space and provides maximum flexibility. The design is forward-looking, so you can easily swap out one module that supports one format to another or even swap out the display and keep the same module. The ease of integration with the slim form factor that fits nicely in the display provides a very clean installation, whether the workflow is for broadcast or pro AV, baseband or AV over IP.

The product we are nominating is the SDM-SDI-HDTV-UHD, which adds UHD SDI Input Connectivity to SDM Monitors. It is a 12G (3G, HD) SDI Receiver for SDM with SDI loop-out and HDMI 2.0 4:4:4 output.

Here are some examples of how the SDM interfaces can be used:
1. In a broadcast production environment, facilities can use a less-expensive SDM-capable display with a 12G SDI SDM module as their program and preview monitors. Since the SDM modules supports tally and UMD, it will fit seamlessly into the router and tally control system of the facility.
2. In a broadcast master control, a SDM-capable display with a SDM module can be used to monitor the audio levels and closed captioning.
3. In a pro AV setup such as a video wall, the integrator can send HDMI signals either via AV over IP or HDBaseT to the displays without having to put a physical receiver behind every display, which would require extra cabling and power supply. This makes the installations very easy to setup and maintain.

Other products in the series include high bandwidth NDI up to true UHD@60Hz at RGB 4:4:4 and HDBaseT.

There are several more products on our roadmap, which will include broadcast-quality 12G SDI interfaces that include tally (GPI and TSL), UMD, audio meters as well as closed-caption decoding, 12G SDI multiviewers, NDI multiviewers and ST-2110 decoders.

More general information on Intel SDM at: *https://www.intel.com/content/www/us/en/design/products-and-solutions/solutions/smart-display-module/overview.html.*

https://www.apantac.com/products/crescent/SDM

Avid

MediaCentral | Stream Remote Contribution Receiver

Enabling IP Contribution From Any Device, Anywhere Into Avid Production Environments

Avid MediaCentral | Stream is an agnostic and software-only solution that enables the ingest of incoming IP streams for television news and remote live TV production scenarios in both on-premises and cloud-based production workflows. Supporting IP contribution from anywhere on any device, MediaCentral | Stream unlocks the power of IP for production applications running on Avid's MediaCentral platform.

MediaCentral | Stream enables simple, secure and reliable contribution from multiple incoming IP streams into the MediaCentral platform for fast content turnaround delivered to linear and digital platforms. Users can preview incoming streams, record them in production-friendly formats and edit media while the recording is ongoing. With support for the two most common IP stream protocols, RTMP and SRT, users have a flexible and scalable architecture regardless of where the production is deployed.

MediaCentral | Stream simplifies the processes involved in remote IP contribution, while increasing revenue opportunities by reducing operational expenses, enabling greater coverage with fewer resources, and shortening time-to-air for breaking news. Content delivered via compressed IP streams can be used like any other content ingested into Avid production environments, such as via SDI recordings or file-based ingest. This avoids

disruption to workflows and makes it easier for media received via IP streams to be previewed and edited within MediaCentral l Cloud UX, Media Composer and other production tools.

Users can produce content for remote events faster, so they can be shared quicker. Teams can receive streams from remote senders in a variety of formats and have them available in the production system as growing media as quickly as possible. This lets them produce stories for digital distribution and linear broadcast even while the recording is ongoing, all safe in the knowledge that security is assured through end-to-end encryption and secure authentication processes.

Key Features and Benefits:
- Work from anywhere, with anyone — MediaCentral | Stream is ideal for teams incorporating content directly on-site and from home or from the field into production. The software's open architecture also enables compatibility with most of today's biggest industry partners, including Sony, TVU Networks, LiveU, Haivision and more.
- Capture and monetize the contribution over IP — Users have a flexible and easy-to-use software solution that allows them to capitalize on the rapidly increasing contribution over IP. Organizations can provide broader coverage of stories, offering new content and monetization possibilities.
- Shorten response time — With MediaCentral | Stream, users can edit media while it's being captured, allowing teams to deliver breaking stories faster. Users can beat the competition by sharing new footage directly to social media, a website and other digital platforms while the recording is in progress.
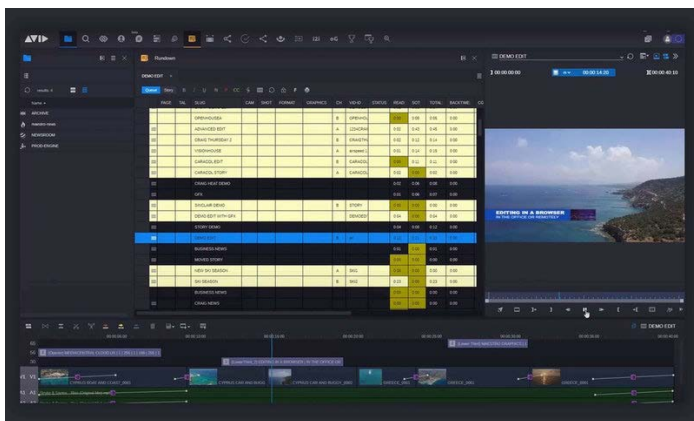- Gain better workflow and cost efficiency — MediaCentral | Stream simplifies the processes involved in remote IP contribution while reducing operational expenses.

https://www.avid.com/products/mediacentral/mediacentral-stream

Avid

Avid | Edit On Demand Cloud Subscription Service

Provides a Full Virtual Post-Production Environment in the Cloud

Avid | Edit On Demand is a flexible SaaS solution and subscription service that enables real-time and cloud video editing. To stay competitive, post-production organizations and post teams within news and broadcast organizations need the ability to take on new projects at every opportunity — often at short notice. However, having the necessary real estate, workstations, software, storage space and resources to add and manage everything isn't always readily available or cost-effective to own or maintain for limited peak use periods.

With Edit On Demand, users can easily ramp up new projects at a moment's notice, providing a full virtual post-production environment in the cloud. Teams can get up and running quickly, collaborating and editing remotely in a fully configured, ready-to-use, secure environment that includes Media Composer editing seats, Avid NEXIS cloud storage, Teradici Remote Desktop streaming, FileCatalyst file transfer and a user directory service in a secure Microsoft Azure cloud environment.

When time and gear are in short supply, Edit On Demand takes the stress out of meeting new production demands and starting new projects. Users have access to a fully provisioned collaborative editing suite, complete with shared storage that's accessible from anywhere in hours, not days. Teams can collabo-

rate in a truly remote fashion — whether onboarding a new editing team or expanding a new one, all editors need is their laptop or mobile device and the internet to connect to their workspace in the cloud. Edit On Demand also comes with Avid NEXIS cloud storage, allowing for immediate access to content and ensuring all assets and file transfers are encrypted and protected.

Available as a straightforward subscription with simple weekly or monthly subscriptions, users only pay for what they need. Users can easily add Media Composer seats and storage as projects grow and get simple subscription monitoring, management and billing, so they're always aware of usage to make more informed decisions.

Key Features and Benefits:
- Edit in the cloud — Boost efficiency and get everything needed to upload, edit, store and share bins, projects and media in the cloud.
- Collaborate remotely — Enable remote freelancers and editing teams to connect and contribute to a production using their own laptop or mobile device, eliminating the need to provide hardware, software or a facility.
- Get up and running fast — Automated cloud deployment provides a full production suite ready in a matter of hours. There's no need to architect, purchase, configure, network, test, administer and troubleshoot systems to capitalize on short-term project opportunities.
- Scale resources quickly — Easily grow a team anytime, from 1–30 simultaneous editors and up to 60 named users, by simply managing a subscription through the Edit On Demand portal. Users can also increase cloud capacity up to 200 TB with add-on storage.
- Simple pricing — No overages or hidden fees.

https://www.avid.com/products/avid-edit-on-demand

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Blackbird
Blackbird

The Cloud Native Video-Editing and Publishing Platform: Ultra-Fast, Efficient, Resilient

Blackbird is the world's fastest, most powerful professional cloud video-editing and publishing platform. Enabling remote editing, Blackbird provides rapid access to video content for the easy creation of clips, highlights and longer-form content to multiple devices and platforms.

A fully featured editor accessed through any browser, easy to learn and needing only limited bandwidth to use, Blackbird powers significant productivity and efficiency benefits for any enterprise organization working with video.

An ultra-green technology, Blackbird supports the carbon-reduction goals of the media production industry.

https://www.blackbird.video/solution/

Blackmagic Design
Blackmagic Web Presenter

Broadcast Transmitter for Streaming Age Includes Powerful H.264 Encoder for Live Streaming

Blackmagic Web Presenters, which include Blackmagic Web Presenter HD (US$495) and Blackmagic Web Presenter 4K (US$695), are self-contained streaming solutions that include a professional hardware streaming engine for direct streaming via Ethernet to YouTube, Facebook, Twitter, Twitch and more. Broadcasters can turn any live production into a global web broadcast because Blackmagic Web Presenter makes it easy to get the program onto popular streaming services. It's like a modern broadcast television transmitter for a new global streaming audience.

Blackmagic Web Presenter HD features broadcast-quality H.264 encoder, direct streaming in HD, USB webcam, 12G-SDI input with standards conversion, front panel with LCD and more. Blackmagic Web Presenter 4K includes all these features along with an upgraded Ultra HD resolution H.264 encoder for live streaming in native Ultra HD.

Blackmagic Web Presenter includes a 12G–SDI input with support for all HD and Ultra HD formats up to 2160p60. A 12–SDI loop output is included for looping video through more than one Web Presenter for streaming to multiple services. Blackmagic Web Presenter features Teranex conversion technology on the SDI input for incredibly clean-looking video. Blackmagic Web Presenter takes the incoming HD or Ultra HD input signal and automatically converts it to high-quality, low data rate 1080p HD or high-resolution 2160p60 Ultra HD, depending on the model, which is then sent to the hardware H.264 encoder for streaming.

Blackmagic Web Presenter features two USB connections that operate as a simple webcam source for plugging into any computer and working with any video software. The software is tricked into thinking the Web Presenter is a common webcam, but it's really a broadcast-quality SDI video source.

Traditional broadcast transmitters are critical for television

stations, however now the streaming server is just as critical. To help, Blackmagic Web Presenter includes a technical monitoring output. The graphics-based monitoring output includes a video view, audio meters with accurate ballistics, trend graphs for codec data rates and cache fill, plus a summary of the streaming settings and detailed SDI technical information. The technical monitoring output works in full 1080 HD and outputs to both SDI and HDMI.

Broadcasters use redundancy to help increase reliability, and Blackmagic Web Presenter includes redundant features to ensure customers stay online. With dual internet connections, users can connect using the built-in Ethernet or a tethered phone for 5G or 4G mobile data. Blackmagic Web Presenter works with the latest high-speed 5G and 4G phones, auto-detecting when a phone is connected and switching its internet connection to use it. Customers can select Ethernet or phone priority, making the mobile internet backup fully automatic. With both AC and DC inputs, customers can use a broadcast battery pack for redundant power.

Blackmagic Web Presenter allows customers to skip a computer or complicated streaming software. Simply connect an SDI video source, then connect to the internet using the built-in Ethernet connection. With settings built in for popular streaming platforms, simply enter a streaming key and press "on air."

https://www.blackmagicdesign.com/products/blackmagicwebpresenter

Blackmagic Design
Blackmagic Studio Camera

All-in-One Studio Camera With Advanced Broadcast Features and Extremely Portable Design

Blackmagic Studio Cameras, which include Blackmagic Studio Camera 4K Plus (US $1,295) and Blackmagic Studio Camera 4K Pro (US $1,795), have the same features as large studio cameras, miniaturized into a single compact and portable design. With digital film camera dynamic range and color science, the cameras can handle extremely difficult lighting conditions while producing cinematic looking images. The sensor features an ISO up to 25,600, so customers can create amazing images even in dimly lit venues. Advanced features include talkback, tally, camera control, built-in color corrector, Blackmagic RAW recording to USB disks, built-in microphones and much more.

Blackmagic Studio Camera 4K Plus is designed as the perfect studio camera for ATEM Mini live production switchers with a 4K sensor up to 25,600 ISO, MFT lens mount, HDMI out, 7-inch LCD with sunshade, built-in color correction and recording to USB disks. Designed for professional SDI or HDMI switchers, Blackmagic Studio Camera 4K Pro includes all these features while adding 12G-SDI, professional XLR audio, brighter HDR LCD, 5-pin talkback and 10G Ethernet as an alternative to SMPTE fiber, so it's much lower cost.

While Blackmagic Studio Camera is designed for live production, it's not limited to use with a live switcher. This is because it records Blackmagic RAW to USB disks, so it can be used in any situation where customers use a tripod.

Many expensive studio cameras are extremely large, so they're not very portable. Blackmagic Studio Camera has all the benefits of a large studio camera because it's a combination of camera and viewfinder all in a single compact design. The large 7-inch viewfinder makes it easy to track and frame shots for live productions, such as chat shows, television production, broadcast news, sports and more. The large, bright display with side handles, touch screen and physical controls make it easy to access camera menus and control brightness, contrast and focus peaking, while being comfortable enough to use for long periods of time, regardless of location or type of project. A tripod mount with mounting plate is also included for fast setup.

Blackmagic Studio Camera features an amazing 4K sensor, combined with Blackmagic Generation 5 Color Science, which gives customers the same imaging technology used in digital film cameras. When combined with the built-in DaVinci Resolve primary color corrector, the images are much better than a simple broadcast camera. The color corrector can even be controlled from the switcher. With 13 stops of dynamic range, the camera has darker blacks and brighter whites, perfect for color correction. The sensor features a resolution of 4096 x 2160, which is great for both HD and Ultra HD work. Plus, all models support from 23.98 fps up to 60 fps.

Blackmagic Studio Camera has lots of connections for both consumer and broadcast equipment. With the popular MFT lens mount, Blackmagic Studio Camera is compatible with a wide range of affordable photographic lenses, while the optional focus and zoom demands let customers adjust the lens from the tripod handles like a large studio camera.

https://www.blackmagicdesign.com/products/blackmagicstudiocamera

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WINNER

Boland Monitors
X4K31HDR5-OLED Broadcast Monitor
This Professional 4K-HDR Display Offers Unmatched
Black Levels and Incredible Contrast Ratios

The largest of Boland's new X-4K OLED monitor series, this 31-inch model features a true 10-bit panel and processor, with a dynamic 1,000,000:1 contrast ratio that guarantees ultra-deep black levels. 4K signal is delivered via 12G and 3G SDI (single or quad link), HDMI 2.0 and Sfp (2110) inputs. The next-generation X4K31HDR5-OLED offers numerous scopes and audio meters, 3D LUTs, time code, markers and multiple aspect functionality. All firmware updates are completed in-field using USB, and all X-4K Series models include VESA mount holes on the rear in addition to a desktop stand. The X-4K OLED monitor series is also available in 21- and 26-inch sizes.

http://www.bolandcom.com/product/x4k31hdr5-oled/

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Bridge Technologies
VB440 HDR

HDR Functionality Added to the VB440

As broadcast technology develops, so too do viewer expectations, and with the rise of HDR-ready TVs, viewers are becoming increasingly discerning in relation to image quality. But this represents a problem in the field of broadcast production, because the ability to work with both SDR and HDR in tandem — particularly in live or remote contexts — is both challenging and potentially expensive.

It is this challenge that the most recent addition to Bridge Technologies' award-winning VB440 probe addresses: a suite of unique, innovative new HDR tools that allow content producers to adapt their workflows to accommodate HDR in an efficient, accessible, intuitive and accurate manner.

Built as a monitoring solution for IP and SDI-encapsulated production environments, the VB440 delivers ultra-low latency analytics of compressed and uncompressed data to provide creatives and technicians alike with the deep insight they need to ensure error-free delivery of live and recorded broadcast, from any remote location across the globe.

In relation to the addition of HDR functionality, the VB440 starts from the point of being able to identify the type of coded stream coming in, be this HLG, PG, SLog3 or a number of other standards, either through manual setting or through automatic recognition from auxiliary NMOS signaling data. The user is then able to access any of the existing wide range of waveform scopes within the VB440 and apply them to this HDR stream. In addition though, the Graticule has been adjusted to accommodate the needs of HDR more comprehensively, including not only IRE but NITs graticules, as well as an ability to adjust Graticule sensitivity.

Furthermore, an HDR-specific CIE Chromacity scope has been added, which demonstrates the full colour gamut of a given video, and provides a number of options in order to suit the user's need. Of course, since HDR still represents a transitional standard that has not fully penetrated the market, the VB440 also facilitates data and image visualization according to SDR parameters.
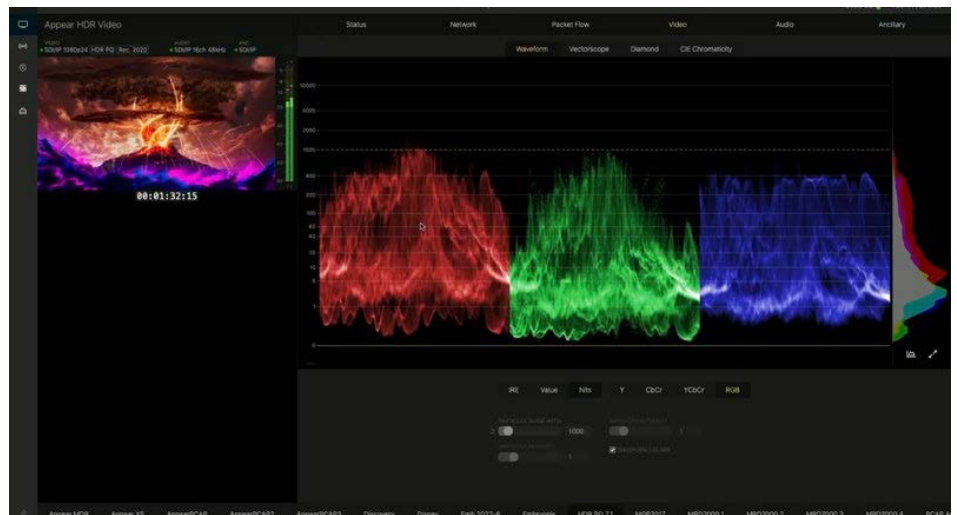
Whilst these data visualizations are key, what is most fundamental about the HDR capabilities of the VB440 is its ability to give a visual preview of an HDR output image through a non-HDR-compatible browser. This is achieved by converting the specific codings of the HDR image into the sRGB color space of the browser, thus effectively "mimicking" a localized preview of what the HDR output will be like for audiences. This is a unique and significant one-device-only capability that sets the VB440 apart from other technologies in the field, and provides unrivalled insight and control for creative production professionals.

More than this, because it facilitates full insight through any HTML-5 browser with ultra-low latency, the VB440 allows for full production capability to be achieved from anywhere in the world, in real time. The contribution this makes to outside, remote and distributed production cannot be understated — both in terms of facilitating exceptional production standards, and also cost reduction through the elimination of a need to equip facilities with specific HDR-capable equipment.

https://bridgetech.tv/home/

Canon
C300 Mark III

The Canon EOS C300 Mark III Is a Super 35mm Modular Workhorse

The C300 Mark III is one of the newest additions to Canon's robust and expansive line up of Cinema EOS digital cinema cameras. The next-generation Super 35mm workhorse features a new Dual Gain Output (DGO) sensor and, like the full-frame EOS C500 Mark II digital cinema camera, employs a modular design and an interchangeable lens mount optional accessory that allows users to easily customize the camera according to the needs of each project, making it an ideal tool for a wide range of video content production including cinema and broadcasting. The introduction of C300 Mark III, alongside the already announced C500 Mark II, signal Canon's equal and high attention to the two important constituencies of Super 35mm and full-frame content creation.

The newly developed 4K Super 35mm DGO imaging system generates high dynamic range and maintains low noise levels by reading out each photodiode with two different gains. One gain prioritizes saturation in highlight areas while the other suppresses noise in the shadows. The result is an image with up to 16+ stops of dynamic range, clean rich shadows and vibrant highlights in up to 4K/60p. In 2K recording mode, the EOS C300 Mark III camera features recording speeds up to 180p. Equipped with Canon's latest video imaging processor, the DIGIC DV 7, the camera achieves more fluid and efficient recording of 4K and HDR and can process high-speed video recording, including 4K at up to 120p.

The EOS C300 Mark III camera utilizes Cinema RAW Light, a very powerful and useful tool for helping to cut the data size of a file to about one-third to one-fifth of a similar Cinema RAW file, without losing grading flexibility. In addition to being able to record 4K and 2K RAW data internally without using an external recorder, the camera also supports XF-AVC (with a choice of Intra or LongGOP), offering flexible options in recording durations.

The EOS C300 Mark III camera is modular and customizable, just like the EOS C500 Mark II camera. Included with the camera are 13 accessories, such as a 4.3-inch LCD monitor and the GR-V1 grip. Users can also choose from a wide range of additional optional accessories that allow them to configure the EOS C300 Mark III camera to their preferences.

Optional accessories include the EVF-V70 electronic viewfinder, SU-15 shoulder support unit and EU-V1 and EU-V2 expansion units. The EU-V1 expansion unit allows for gen-lock, sync out, remote use and Ethernet connection; while EU-V2 expansion unit features those functions plus a V-mount battery connection, two analog XLR audio ports and 24-volt DC Out. Additionally, the mount kits (sold separately) allow users to exchange the EF mount with an EF cinema lock mount or PL mount.

https://www.usa.canon.com/internet/portal/us/home/about/newsroom/press-releases/press-release-details/2020/20200420-C300MKIII/20200420-C300MKIII

Canon

Canon RF5.2mm F2.8 L Dual Fisheye Lens

Virtual Reality Through New Lens: Canon's First Stereoscopic 3D VR Capture

The RF5.2mm F2.8 L Dual Fisheye lens is the world's first digital interchangeable lens capable of enabling stereoscopic 3D 180-degrees VR shooting to a single image sensor, simplifying the complexities of VR production for both seasoned and new filmmakers, photographers and videographers. Previously, VR has been viewed as a tedious development process, with complex hardware needed for VR creators. With this product however, Canon has developed an innovative way to produce impressive VR imagery to meet the demand for high-quality content from viewers with VR headsets and VR streaming platforms.

Designed to seamlessly mount on Canon's EOS R5 camera with compatible firmware, creators can go from traditional shooting to 3D stereoscopic capture with a simple lens swap. The lens features a 190-degree field of view captured from two separate optical systems to deliver outstanding, high-resolution results for 180-degree VR viewing. With an interpupillary distance of 60mm, natural parallax closely resembling human vision is possible producing a realistic VR experience.

From a quality perspective, ultra-low Dispersion glass is used, to minimize chromatic aberration despite the incredibly wide view. The L-series optics are engineered with Subwavelength Structure coating technology offering impressive flare control in backlit conditions. The aperture range of a bright f/2.8 to a deep depth of field of f/16 delivers versatile exposure control, with coordinated dual electromagnetic diaphragms, so the control of aperture settings is familiar and easy and no different than other RF lenses. The use of fluorine coating and dust-and-water-resistant seals provide peace of mind even in challenging conditions.

With use of the EOS R5 with the compatible Firmware Update, creators can enable a magic window UI overlay on the rear LCD screen that aids in the framing of their shot, whether delivering for an online platform like YouTube VR or for a headset. Additionally, there is focusing capability allowing the user to magnify up to 15x with MF Peaking and ability to confirm focus of each individual lens. Canon's EOS Utility and Camera Connect apps provide a remote live view image to help users compose and remotely record.

With these benefits this lens is an impressive tool to capture beautiful and engaging VR imagery for imagemakers who are covering news stories, shooting documentaries or capturing entertainment events for VR viewing.

The Canon EOS VR System's convenient workflow is a standout feature. Accomplished by recording left and right fisheye images to a single full-frame image sensor, this compact lens design solves many common VR stitching and synching challenges by recording one single image file. Canon is currently developing two paid subscription-based software solutions to streamline the post-production process. Canon's EOS VR Utility offers functionality to convert clips from a dual fisheye image to equirectangular with the ability to make quick edits and adjust the resolution and file format before export. With the EOS VR Plug-In for Adobe Premiere Pro, creators can automatically convert footage to equirectangular, and cut, color and add new dimension to stories within Adobe Premiere Pro, which also supports in-headset editing.

https://www.usa.canon.com/internet/portal/us/home/products/details/lenses/ef/vr/rf5-2mm-f2-8-l-dual-fisheye-lens

Canon
EOS M50 Mark II

The Canon EOS M50 Mark II Is a Strong Tool for Storytellers

EOS M50 Mark II Interchangeable Lens Camera is the successor to the #1 selling mirrorless camera in the U.S. market — the EOS M50. An all-in-one product for content creators with improved video features and autofocus capabilities, the EOS M50 Mark II is the latest, high-quality digital imaging camera in the notable EOS lineup.

For the family who strives for high-quality output when capturing their precious moments or for the budding social media creator, the added and improved capabilities of the EOS M50 Mark II camera make the upgrade to an ILC extremely appealing.

New Features Include:
• Improved autofocus including eye autofocus for stills and video
• Vertical video shooting support
• Vari-angle touchscreen LCD with newly added tap video record button and movie self-timer for better vlogging experience
• High-quality webcam capability, when used with compatible services, with the free EOS Webcam Utility software or Clean HDMI output
• Wireless YouTube Live streaming capability
• The ability to tap the screen to auto focus on your subject while looking through the EVF, helping to control who the main focus of the image is

The EOS M50 Mark II camera is inclusive of many of the beloved features of its predecessor. The EOS camera was designed with content creators in mind, for photography, videography and live streaming. The lightweight camera body and interchangeable lens functionality is perfect for vlogging and on-the-go social content, and it contains many similar features as Canon's full-frame professional mirrorless cameras, so users can expect a highly professional result. Users still get the impressive image quality of the 24.1 Megapixel CMOS sensor, power of the DIGIC 8 image processor, 4K UHD 24p and HD 120p for slow motion video and more, along with some additional boosts. The autofocus locks onto the subject faster, and Eye Detection is improved so it recognizes the eyes and face further away. Eye Detection can now even be used during video with Movie Servo AF, and you can use both Eye and Face Detection during Servo AF, giving the user added versatility and stability to keep the subject(s) in focus and as the center of attention.

For content creators, you can use the EOS M50 Mark II to livestream your content with built-in Wi-Fi, and use with the EOS Webcam Utility software for an easy webcam alternative. When a different angle is needed, you can shoot vertically in addition to horizontally, and the camera even offers clean HDMI output for high-resolution, high frame rate streaming.

https://www.usa.canon.com/internet/portal/us/home/about/newsroom/press-releases/press-release-details/2020/20201014-camera/

Canon
EOS C70

The Canon EOS C70 Is Canon's First-Ever RF Mount Cinema EOS Camera

The EOS C70 4K Digital Cinema Camera is Canon's first-ever RF mount Cinema EOS camera. The unique design of the EOS C70 camera puts a significant emphasis on operational convenience for the end-user. The small form-factor, weighing only 2.6 pounds, allows the camera to be easily handheld and dramatically enhances a videographer'ss mobility, providing a seamless bridge between the EOS and Cinema EOS families for cinematic applications. Cleverly designed, the camera features a slim, motorized ND filter unit — having a mere 6mm depth — that is built into the short flange back of the RF mount. The motorized 10-stop ND filter provides users with the flexibility to control exposure while keeping the desired depth-of-field and capturing images that feature the desired level of bokeh. Thirteen customizable buttons allow users to select from more than 80 functions to be assigned based on individual preferences.

The camera features Canon's innovative and next-generation Super 35mm DGO Sensor that further extends the high dynamic range and lowers noise levels by reading out each photodiode with two different gains. One gain prioritizes saturation — protecting detail in highlight areas — while the other suppresses noise in the shadows. The result is an image with up to 16-plus stops of total dynamic range, clean, rich shadows and vibrant highlights in up to 4K/60p or 2K/120p in Super16mm Crop mode. The EOS C70 camera also features Canon's recently developed DIGIC DV7 image processor that collects the extensive information captured from the DGO sensor and processes it into exceptional HDR imagery while offering choices between Canon Log 2 and 3, in addition to PQ and HLG gamma functionality. The C70 camera can also record 4K DCI or UHD up to 120fps and 2K DCI or HD up to 180 fps — with an important flexibility in the choice of codecs.

The camera supports XF-AVC format (in variable bit-rate), both Intra and Long GOP with MXF file format. The intra-frame format compresses the data after analyzing each frame separately, while Long GOP format compresses data at a higher rate, creating an even smaller file size. A secondary choice is Long GOP 10-bit 4:2:2/4:2:0 MP4/HEVC (a next-generation HDR video recording compression standard) with an MP4 file format — a first in the Cinema EOS line.

The camera's independent air intake system is separated from the electrical systems to protect the sensor from water, sand and dust. In addition, the camera also features two air outlet vents that allow uninterrupted recording for extended periods of time.

The Canon EOS C70 camera was designed to satisfy and delight a variety of users on the search for a high-powered piece of video equipment. Versatility is key in a world of fast-moving filmmaking and content creation, and the EOS C70 provides a familiar form and feature set to a wide spectrum of imaging customers.

Canon
EOS R5

The Canon EOS R5 Is a Next-Gen, Full-Frame Camera Designed for Action

The Canon EOS R5 builds off of the powerful legacy of Canon's full frame cameras offering next-generation refinements in image quality, performance and reliability. It's an ideal choice for a large range of photographic and cinematographic environments from weddings, portraits, sports, journalism, landscape, cinematography and more. It features a new 45-megapixel full-frame CMOS sensor and uncropped 8K video recording up to 29.97 fps.

As the new flagship model in the EOS R series lineup, the EOS R5 camera has features that pack a punch for a variety of users who create both still and video content. It has a powerful 45-megapixel full-frame CMOS sensor and is driven by the speedy DIGIC X image processor, giving wide dynamic range as well as boasting an ISO range of 100-51,200 that is expandable up to 102,400. In a camera full of eye-popping features, one that really stands out is the ability to record uncropped 8K RAW internal video recording up to 29.97 fps and 8K internal video

recording up to 29.97 fps in 4:2:2 10-bit Canon Log (H.265)/4:2:2 10-bit HDR PQ (H.265). The camera can also record 4K internal video recording up to 119.88 fps in 4:2:2 10-bit Canon Log (H.265)/4:2:2 10-bit HDR PQ (H.265). External recording in 4K is also available up to 59.94 fps. When in DCI modes, the 8K and 4K video recording is uncropped and Dual Pixel CMOS AF II is available in all 8K and 4K recording modes.

Additional features of the EOS R5 camera include:
• Dual-card slots: 1x CFexpress and 1x SD UHS-II
• Built-in 0.5-inch OLED EVF with approximately 5.76 million dots and a 119.88 fps refresh rate[vi]
• 3.2-inch 2.1 million dots vari-angle LCD touch screen
• 5 GHz/2.4 GHz built-in Wi-Fi and Bluetooth technology with the ability to utilize the image.canon application, as well as optional - - WFT-R10A wireless file transmitter with Ethernet support
• Enhanced operating controls such as rear-dial, multi-controller
• The ability to voice tag photos and videos
• Weather, drip and dust sealing on par with the EOS 5D series

Canon's all-new 45 Megapixel full-frame sensor is at the heart of the EOS R5's superb image quality, which also leads the way for impressive 8K DCI cinematic movie capture with the ability to extract 35.4 Megapixel still images. Focus and speed are paramount in the EOS R5, providing impressive continuous capture at speeds of up to 20 frames-per-second and with Dual Pixel CMOS AF II capability, to track split second movements of even the most elusive of subjects. With 1,053 Automatic AF zones, it is easier than ever to photograph people with the use of Eye, Face and Head Detection AF, or intuitively track the whole body, face or eye of cats, dogs, or birds with Animal Detection*2 AF. The 5-axis in-body image stabilization can effectively compensate for camera shake with approximately 8 stops of stabilization* with use of certain non-stabilized, and optically image stabilized lenses. Connectivity, like 5 GHz and 2.4 GHz Wi-Fi and Bluetooth, is also included.

https://www.usa.canon.com/internet/portal/us/home/products/details/cameras/eos-dslr-and-mirrorless-cameras/mirrorless/eos-r5

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Canon
EOS R3

The EOS R3 Is Canon's Most Technologically Advanced Full-Frame Mirrorless Camera Ever

The Canon EOS R3 is Canon's most technologically advanced full-frame mirrorless camera ever. Landing between the robust EOS R5 and Canon's flagship EOS-1D X Mark III, the Canon EOS R3 will be designed to satisfy the most demanding expectations in a pro camera — emphasizing speed, performance and reliability. The EOS R3 features Canon's first-ever full-frame, back-illuminated stacked CMOS image sensor, designed to deliver substantially faster read-out speeds, and produce much lower "rolling shutter" distortion than previous EOS models. Notably, it features enhanced AF performance and tracking capabilities, powered by Deep Learning technology, to enable better face, eye, head and body detection, for both humans and animals. Additionally, Eye Control AF, available for the first time in an EOS R series camera, will allow users to set the focus point in the viewfinder, by simply looking at it — used to create incredibly fast changes in where the camera focuses, or to set the initial point from which the EOS R3's AF system will track moving subjects. The EOS R3 is a solid, yet lightweight, magnesium alloy body and carries forward the integrated vertical grip, emphasizing both horizontal and vertical handling for challenging shooting situations. Additionally, the Electronic Shutter operation will enable continuous shooting up to 30fps (with RAW images), with full autofocus, in all auto exposure shooting modes. It shoots beautifully in extremely low-light and in high-quality 4K with Canon Log3 and oversampled 4K, and RAW movie internal recording.

The EOS R3 camera's features greatly emphasize superb AF performance and speed with fast-moving subjects. The core of the EOS R3 features a Canon designed and manufactured 24.1-megapixel back-illuminated stacked CMOS sensor. The sensor is the first of its kind from Canon, and when combined with the DIGIC X processor, delivers a high-speed readout allowing for continuous blackout-free shooting at up to 30 fps in electronic (silent) shutter mode and up to 12 fps in mechanical shutter, with minimum rolling electronic shutter distortion. The combination also increases the high sensitivity, light-capturing efficiency of a native ISO range of 100–102400, expandable up to 204,800 for still images. Like the EOS R5 and R6, the camera features the improved Dual Pixel CMOS AF II with 1,053 AF Points and evolved EOS iTR tracking down to EV -7.5 for subjects such as eye, face, head, animals2 and select cars and motorcycles.

Additional features of the EOS R3 Full-Frame Mirrorless Camera include:

• Canon's next-generation Multi-Function Shoe that is compatible with a variety of accessories including the Speedlite EL-1, and new accessories such as the ST-E10 Speedlite Transmitter
• External Mic and Smartphone Link Adapter
• One-piece magnesium alloy design, integrating the body with a vertical grip section
• Weather and dust resistance equivalent to EOS-1D camera models.
• Mobile File Transmitter application for iOS and Android devices allows photographers to transfer their images quickly and easily without the need for wired LAN equipment
• Built-in Wired LAN, 5 GHz Wi-Fi, USB and Bluetooth technology
• Dual-card slots, supporting one CF express and one UHS-II SD

https://www.usa.canon.com/internet/portal/us/home/products/details/cameras/eos-dslr-and-mirrorless-cameras/mirrorless/eos-r3/

Canon
CR-N500 PTZ

Canon's CR-N500 PTZ Camera's Ready for Integration Into a Variety of Environments

The Canon CR-N500 PTZ camera capitalizes on Canon's digital imaging and operational expertise from both professional camcorders and network cameras. This enables the camera to not only deliver brilliant 4K imagery thanks to Canon's CMOS sensors, DIGIC DV 6 Image Processor, and optical zoom lenses, but also smooth pan, tilt and zoom functionality that allows for on-air camera movement. It is designed for use in a wide-range of applications in broadcast, education, houses of worship, sports and corporate video, and for outdoor environments. The new outdoor PTZ camera supports 12G-SDI, and includes a durable, IP55-rated weather-resistant housing.

When combined, the 1.0-inch CMOS sensor, 3.2μm pixel pitch, and DIGIC DV 6 image processor featured in the CR-N500 4K UHD PTZ camera provide users with the capability to capture images with high sensitivity, low noise, and a minimum subject illumination of approximately 1.5 lux1.

Utilizing a 15x optical zoom 4K UHD lens, users will also experience cinematic images with shallow depth-of-field and beautifully blurred backgrounds with brilliant image quality. The 15x optical zoom covers a 35mm equivalent focal range of 25.5-382.5mm, and the camera is capable of a variable pan and tilt speed from 0.1–100 degrees per second to support smooth on-air movement or fast preset transitions.

An independent, built-in three-density ND filter and nine-bladed iris create natural bokeh effects, with diffused, diffracted light. The CR-N500 features Dual Pixel CMOS AF with dual pixel focus guide, as well as face detection and tracking. The CR-N500 also supports Canon Log 3 for color grading and wide dynamic range gamma of 800%, along with image quality mode and adjustment functions to enhance an operator's image customization capabilities from capture to post-production.

https://www.usa.canon.com/internet/portal/us/home/products/details/cameras/ptz-remote-cameras/cr-n500

Best in Market Awards 2021 Special Edition

Canon
CR-N300 PTZ

Canon's CR-N300 PTZ Produces Outstanding Image Quality for a Variety of Environments

The Canon CR-N300 PTZ is from a new line of cameras that capitalize on Canon's digital imaging and operational expertise from both professional camcorders and network cameras. This enables the cameras to not only deliver brilliant 4K imagery thanks to Canon's CMOS sensors, DIGIC DV 6 Image Processor, and optical zoom lenses, but also smooth pan, tilt and zoom functionality that allows for on-air camera movement. The new indoor PTZ cameras support various video interfaces, including HDMI, IP and 3G-SDI, and are also compatible with popular live production protocols like NDI|HX, RTMP and more.

The CR-N300 PTZ is designed for use in a wide-range of applications in broadcast, education, houses of worship, sports and corporate video, focusing on indoor environments.

The camera uses a 1/2.3-inch CMOS sensor, DIGIC DV 6 image processor and a 20x optical zoom lens with a 35mm equivalent focal range of 29.3–601mm. The camera features Canon's Hybrid AF system that combines high-precision contrast AF and high-speed phase-difference AF, allowing operators to gain focus and lock-in subjects even in dim or dark situations. The variable pan speed of the camera clocks in at 0.2–300 degrees per second and the variable tilt speed is 0.2–170 degrees per second. The CR-N300 can also be used as a webcam via a USB connection.

The CR-N300 is equipped with four unique scene modes: portrait, sports, low-light and spotlight, which allows users to select the mode most suitable for the desired subject.

- Portrait Mode achieves sharp focus while blurring the background.
- Sports Mode enhances the ability to capture moving objects.
- Low-Light Mode brightens images when in dim or dark shooting situations.
- Spotlight Mode allows users to capture beautiful images in brightly lit situations.

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WINNER

Canon
Cine-Servo 25-250mm
The Lens Is a Superb Combination of Focal Range and Compact Size

The CINE-SERVO 25-250mm T2.95-3.95 (CN10x25 IAS S) is a new CINE-SERVO cinema lens designed for use with 4K cameras. The lens provides cinematographers and broadcast operations with a compact, lightweight design (only 6.7 pounds) using Canon optical elements, while offering outstanding performance and reliability in professional shooting environments. The new CINE-SERVO 25-250mm lens adds a great deal of versatility to the CINE-SERVO lens family.

The new lens, which is available in both EF and PL mount, features 10x optical zoom, a built-in 1.5x extender and a powerful and removable servo motor drive unit, providing broadcast-friendly shoulder operation for ENG/EFP and documentary-style shooters. The lightweight design of the lens (6.7 pounds) is remarkable given the zoom range and feature set, especially when compared with other lenses of similar focal lengths. This outstanding model, as well as the Sumire Prime Lenses announced in 2019, have further strengthened Canon's robust lineup of Cinema Lenses.

The new lens is fully 4K-ready, with a high optical resolution and support for Super35mm large-format cameras. An 11-blade aperture diaphragm helps ensure an artistic and beautiful representation of out-of-focus areas.

The lens also features a high 10x zoom magnification, wide focal length range of 25mm to 250mm, and a 180-degree smooth rotating focus ring. Acknowledging that broadcasters often need to control zoom, focus and iris/aperture in different ways than filmmakers, Canon has developed this zoom lens with full external servo control for drama, documentary and other broadcast productions.

Similar to the existing award-winning 17-120mm and 50-1000mm lenses, the CINE-SERVO 25-250mm offers outstanding 4K optical performance thanks to its ultra-low dispersion glass and a large-diameter aspherical lens. Combined with Canon's unique optical design technology, these components work to help correct color fringing and limit chromatic aberration during operation. The lens features Canon's renowned warm color science and an 11-blade aperture that produces a beautiful, smooth bokeh.

The new lens is ideal for cameras with a Super 35mm sensor. While the 10x zoom covers a focal range of 25-250mm, the built-in extender stretches that range to an impressive 375mm with an added benefit of allowing for full-frame sensor coverage with only a stop of difference in light loss.

The servo drive unit included with the 25-250mm lens can be easily removed to allow for manual operation, and the gear pitch is compatible with standard cinema controls of zoom and focus. The EF mount version of the lens allows for the utilization of Canon's proprietary Dual Pixel CMOS AF, which provides users with smooth AF operation and high-speed tracking performance, and the PL mount version supports Cooke/i Technology. In addition, like the 17-120mm, the 25-250mm lens also features a macro function to enable close-up shooting.

https://www.usa.canon.com/internet/portal/us/home/products/details/lenses/cinema/cine-servo/cine-servo-25-250mm-t2-95-3-95-ef

Canon
DP-V3120 Reference Display

Canon's 31-Inch 4K HDR Professional Reference Display Features Extraordinary HDR Capability

Canon's 31-inch DP-V3120 4K Reference Display is designed to meet the unique set of challenges that come with HDR production. Offering stunning image quality with industry-leading 2,000 cd/m^2 high luminance, 2,000,000:1 contrast ratio, exceptional accuracy and consistency, wide colour gamut, as well as extensive HDR monitoring assist functions, the DP-V3120 is the perfect reference display for professionals creating stunning High Dynamic Range content.

The DP-V3120 delivers industry-leading 2,000 cd/m^2 full-screen brightness, supported by Canon's newly developed cutting-edge backlight system. This system includes highly efficient LEDs, with a precise LED control algorithm and advanced image processing, enabling the display to deliver a minimum black of 0.001 cd/m^2 and an outstanding 2,000,000:1 contrast ratio for accurate reproduction of shadow details and bright highlights. This backlight system incorporates a newly designed cooling mechanism, allowing the display to achieve high brightness continuously with quiet operation, making it an ideal tool for a grading suite. Additionally, Canon's innovative backlight system equips sensors across the entire unit, and intelligent auto-correction technology enables the display to sustain image accuracy during operation.

The DP-V3120 exceeds the Dolby Vision required monitor specifications including General Monitor Specifications and Grey Scale Reproduction in order to meet the requirement of Dolby Vision-certified post-production facility. With this achievement, Canon further proves its ability to support the efficient production of high-quality HDR visual content and meet the various needs of content production workflows.

Addressing the demand for excellence and efficiency in 4K HDR production workflows, the DP-V3120 features a range of advanced HDR monitoring functions in order to visualize HDR signal parameters such as HDR Reference white, signal levels and image brightness for accurate signal optimization. Equipped with a 12G-SDI interface, the DP-V3120 can support a 4K image via a single SDI cable. With its four 12G-SDI interface, the display can handle four different 4K signal inputs providing a four-screen split view, or can switch to a single 4K view, alternating the desired input. In addition to this, its four 12G-SDI interface terminals, enables the handling of a single 8K signal input.
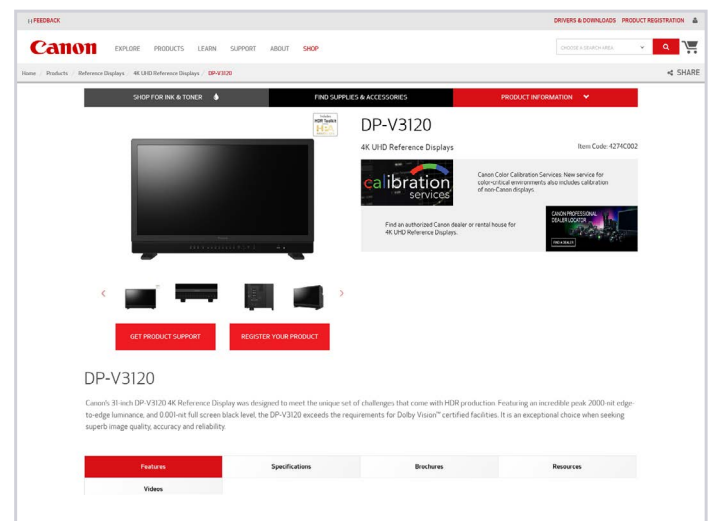
The DP-V3120 also supports the latest Video Payload ID to identify the signal's transfer characteristics and an Auto Setting function, providing the ability to switch display's Picture Mode settings automatically. In addition to this, the display can be remotely controlled by LAN connection enabling access to full menu controls, settings and link to other monitors, as well as access to display settings and signal information.

Canon's 31-inch DP-V3120 4K Reference Display is engineered to provide the highest level of image quality and versatility for demanding professionals in the cinema and broadcast industries. Canon Reference Displays feature the built-in HDR Toolkit, which was awarded the Hollywood Professional Association's 2018 Engineering Excellence Award. These tools help to ensure a finished product that delivers beautiful and vivid HDR imagery.

https://www.usa.canon.com/internet/portal/us/home/products/details/reference-displays/4k-uhd-reference-displays/dp-v3120

25

Cineo Lighting
Quantum II
Bigger. Brighter. Better

Following on the success of the Quantum 4×4 LED fixture, we are proud to present the Quantum II, the latest professional lighting tool from Cineo Lighting. The Quantum II now represents the latest technological advances offered by Cineo, adding the new C2OS touchscreen control console.

In addition to greatly expanded control features, the Quantum II output is nearly twice that of the original Quantum. The new Quantum II features our fourth-generation LED technology, improving the overall spectrum beyond the exceptional color quality of its predecessor.

Beyond the extraordinary white spectrum, Quantum II has full RGB capabilities, and can record, playback and offload an infinite number of lighting effects.

A full complement of remote control protocols are supported including wired DMX/RDM, LumenRadio and networking protocols including sACN and ArtNet.

https://cineolighting.com/products/quantum-2/

Clear-Com
Arcadia Central Station
A Next-Generation Scalable IP Platform, Integrating Wired and Wireless Partyline Systems

The Arcadia Central Station is a next-generation scalable IP intercom platform integrating wired and wireless partyline systems.

Arcadia provides support for the entire FreeSpeak family of digital wireless solutions — encompassing the 1.9 GHz, 2.4 GHz and 5 GHz bands — together with two-wire and four-wire devices, third-party Dante devices, and, in an upcoming release, HelixNet Digital Partyline. The system scales to meet different needs, starting with a base-level of 32 IP ports, and can be licensed in increments of 16 ports for up to 96 IP ports in a single RU device. This tremendously powerful platform will be updated with further capabilities in the future, making Arcadia the intercom centerpiece for a vast range of applications best served by partyline workflows.

The need for simple and quick adjustments to the system is reflected in Arcadia's two large front-panel touchscreens, with four rotary encoders to quickly scroll through menus or for use as a four-way key station. The system is configured and monitored through a new, redesigned version of Clear-Com's browser-based CCM software, featuring an intuitive interface that guides users through all steps of the process. A demo of the new CCM software is available.

"Arcadia Central Station is essentially the universal translator, integrating all our partyline systems together in a single, compact 1RU package. With the flexibility and power of a licensing-based model, functionality will increase over time and eventually this central station will become the ultimate group communications hub," says Bob Boster, president, Clear-Com.

"We see Arcadia leveraging our partyline heritage to deliver a group communications workflow platform that will allow for nearly endless expansion to support the vast majority of live sound applications, as well as many workflows in other markets including broadcast, aerospace and marine/offshore."

Arcadia was put through its paces at the annual St. Louis Independence Day Parade event, which is broadcast nationally. The response was unanimously positive, with Casey Hunter, assistant professor and director of studios at Webster University saying, "Setting [Arcadia] up was easy, has great flexibility, and the integration into other systems like Dante is amazing!" Hunter continued, "The fact that you can add transceivers, Dante, two-wire, four-wire and any other audio endpoint, is awesome for a live production."

Brian Marten, head audio engineer at the St. Louis Fox Theatre, was also working with Arcadia at the event, and he was especially excited about the user interface design. "The user interface made it easy to find what you needed, not only from the front menu, but also in the new CCM. This is what we've been wanting!"

Designed with input from Clear-Com's extensive live-sound user base, Arcadia represents the next evolution in partyline workflows, combining digital, analog and AoIP intercom technologies into a single integrated system. From the Broadway stage to a growing community congregation to the largest and most complex live events, Arcadia is ideally suited for a wide variety of applications, delivering incredible architectural flexibility with elegant simplicity for the end-user in a unique advancement for IP-based intercom.

https://www.clearcom.com/product-family/arcadia-central-station/

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NOMINEE

Cobalt Digital
Indigo ST 2110

Adding Native ST-2110 Support to 9904/9905 Cards With Multiple 25G Ethernet Interfaces
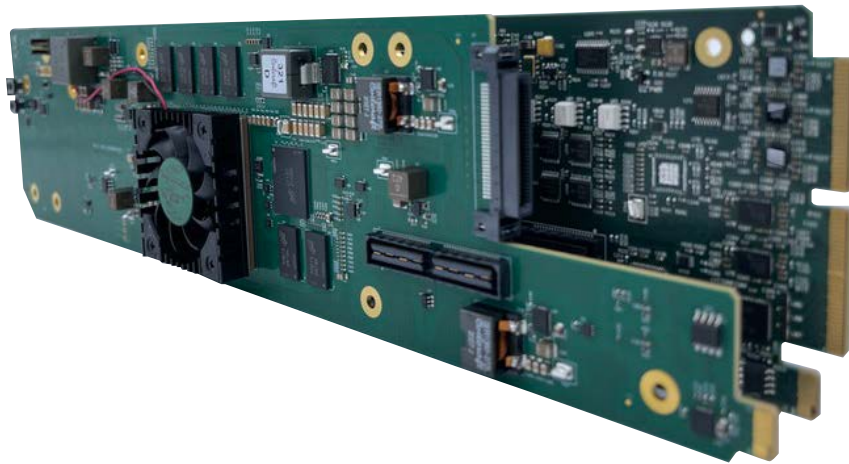
The Indigo ST 2110 product is a factory add-on option to Cobalt's 9904-UDX-4K and 9905-MPx cards. These cards include an advanced audio/video processing engine, capable of up/down/cross conversion, audio routing, color correction, 3D-LUT processing, as well as SL-HDR encoding and decoding. This option adds native SMPTE ST-2110 support for these cards, with multiple 25G Ethernet interfaces. With this option, all the advanced processing in these cards is now available with IP inputs and outputs, without the need for an external gateway. The Indigo ST 2110 product includes support for ST-2022-6 seamless redundancy switching, as well as IS-04/IS-05 NMOS for automatic discovery and configuration.

When the highly integrated Indigo ST 2110 add-on is combined with Cobalt'ss 9904-UDX-4K and 9905-MPx into a single package, it creates a powerful and dense product that is capable of natively processing HD, 3G and 4K IP streams with no quality compromises. No other solution in the market can achieve the density provided by the combination of Indigo ST 2110 and the 9904/9905. The included NMOS support makes interfacing it to an existing network very straightforward, as the devices are auto discovered by the network management. Since this is a compact openGear card, multiple devices can be combined into a single frame for multichannel operation, as well as offering the standard features of redundant hot-swappable power supplies and hot-swappable cards.

The transition from SDI to IP has been happening for a few years now. However, in most deployments, this is achieved by using gateways: an SDI signal comes in, it is converted to an IP stream by a gateway, traverses the network, and it is converted to SDI again for processing (scaling, color correction, etc.). After processing, the SDI signal is again converted by another gateway to an IP stream. This is cumbersome (multiple devices in the data path), error-prone and it gets expensive. Adding native ST-2110 interfaces to the audio/video processing elements, Cobalt is providing a cost-effective, easily manageable, integrated solution to this problem. Customers no longer need to put multiple boxes or processing elements in the data path, going back and forth between IP and SDI. By natively doing all the processing directly over IP, all this complexity and cost is avoided.

https://www.cobaltdigital.com/products/5150/indigo-2110-dc-01

Dalet
Dalet Pyramid

Cloud-Native Solution Enables Collaborative Storytelling 360 Approach to News Production and Multiplatform Distribution

Dalet Pyramid is the next-generation solution for Unified News Operations. Designed to accelerate the evolution of news organizations and serve distributed teams, Dalet Pyramid ushers in a new era of agility, flexibility and mobility for content creation. A virtual newsroom that accommodates both modern and linear end-to-end news workflows, the cloud-native Dalet Pyramid solution enables collaborative Storytelling 360 production and digital-first multiplatform distribution. Offered as a subscription, Dalet Pyramid can be deployed either as an extension to an existing Dalet Galaxy five installation or on its own running on-premises, in the cloud, or a mix of both.

With Dalet Pyramid news producers can create content from anywhere, for all audiences, with sophisticated media asset management and orchestration powering all ingest, production, delivery and archive workflows.

Dalet Pyramid's new agile architecture design facilitates collaboration at story-level with the industry's first Storytelling 360 approach and enables a truly virtual newsroom. Just like all Dalet offerings, Dalet Pyramid is a cloud-agnostic solution that supports multiple cloud providers, including industry leaders Amazon Web Services. It can also run in virtualized environments, offering unprecedented mobility that supports the industry's continued pivot to solutions designed to support remote productions.

Dalet Pyramid is not a piece of software you put in a newsroom. It is the newsroom itself, where planning, news production, asset and resource management, playout and multiplatform distribution have been combined into a unified system capable of conventional news production as well as more mainstream formats like current affairs shows.

Dalet Pyramid propels a Storytelling 360 workflow that lets users develop the various story angles for digital, social, TV and radio simultaneously. The rich web-based audio and video editor Dalet Pyramid Cut, an evolution of the industry-standard Dalet OneCut, brings the latest editing capabilities to journalists and craft editors. Its centralized media bin can store audio, video pictures, office documents, wires, contacts and more. Production tools are directly connected so users can ingest various sources directly into the story itself.

Dalet Pyramid's rich user experience features the breadth and depth of news production, planning and playout tools to facilitate faster breaking news across all viewing platforms. The underlying Dalet asset management and orchestration engine facilitates content flow from ingest through planning to distribution and archive. Users can contribute, produce and manage the full news story lifecycle from anywhere using smartphones, tablets and laptops connected to basic internet. The modern web-based user interface makes it easy to onboard staff and freelancers quickly, reducing training time.

Dalet Pyramid takes full advantage of the AI-powered Dalet Media Cortex capabilities, providing speech-to-text services as well as facial identification using both the AWS Celebrity engine and Microsoft Video Indexer, accelerating time-consuming transcription, indexing and captioning workflows. Robust APIs and panels such as Dalet Xtend for Adobe Creative Cloud enable extensive integrations, allowing customers to customize according to operational and business needs. New features are continuously developed and released seamlessly, eliminating downtime for major updates. This culminates in a solution that can adapt to changing environments quickly while reducing TCO.

https://www.dalet.com/products/pyramid/

Digital Nirvana
MetadataIQ

Simplifying and Automating Metadata Generation for Avid Assets

MetadataIQ is a SaaS-based offering from Digital Nirvana that automates the generation of speech-to-text and video intelligence metadata, increasing the efficiency of production, pre-production, and live content creation services for Avid PAM/MAM users.

MetadataIQ is specially designed for content producers using the Avid media platform. It provides them with a secure and scalable solution to have an efficient production, pre-production, and live content creation process. MetadataIQ automates the entire process of metadata generation, including transferring video assets from Avid and ingesting the metadata as markers along with the asset. The 100% automated generation and ingestion of relevant metadata as locators into Avid helps editors identify relevant content accurately, saving time and effort.

Key capabilities include:
• Off-the-shelf integration with Avid Interplay to automate the end-to-end speech-to-text generation and video intelligence metadata for Avid-based assets.
• Automatically submitting media for transcription, captioning and translations from within the existing workflow.
• Operators can create and ingest different kinds of metadata, including speech-to-text, facial recognition, OCR, logos and objects, each with customizable marker durations and color codes for easy identification — that can be accessed via the Avid MediaCentral environment.
• Editors can simply type a search term within Interplay or MediaCentral, identify the relevant clip, and create content.
• For VOD and content repurposing, video intelligence metadata aids in product placement/replacement and accurately identifying ad spots.

Key features include:
• **Automatic and Easy-to-Use:** The application is designed to automate the end-to-end process of creating transcription and video-based metadata for Avid-based assets. Automatically generated markers, customizable based on duration and color, are then ingested into the Avid Interplay, helping users search and retrieve content effortlessly within Avid.
• **Video Intelligence:** Integrated with video intelligence, MetadataIQ can provide logo detection, face recognition, object identification and shot-change identification.
• **Seamless Solution:** MetadataIQ integrates with the "Trance" platform to generate transcripts, captions and translations in all industry-supported formats. In-house teams can submit files from their existing workflow and receive the output as sidecar files or ingest them directly into Interplay as markers. MetadataIQ lives on the customer site for security reasons and can be installed on either a dedicated server or a virtual machine. The application extracts the original asset and creates a low-res proxy or audio-only version of the actual media file from the Avid watch folder. The asset is transferred to the cloud for the automatic generation of metadata. Upon process completion, the metadata is returned to the on-premises application, which ingests the metadata back into Avid Interplay with locators.
• **Secure:** The low-res proxy files transcoded on-premises are transferred to the cloud, where they are temporarily stored in encrypted storage only as long as they are required to process the job and are then erased. All transfers to and from the cloud are over TLS encrypted HTTP. Processed metadata is delivered back to MetadatIQ living within the customer's premises, from where they are converted into formats required for submission to AVID MAM, shared folder, or other systems based on customer-specific requirements.

https://digital-nirvana.com/products/automated-metadata-generation-metadataiq/

BEST IN MARKET 2021

tvtech

WINNER

disguise

disguise xR

disguise's Extended Reality Workflow Empowers New Opportunities to Tell Your Best Story

Have you ever read a book or watched a TV show and wondered what it was like to be completely immersed in that environment as if it were real? disguise xR is making this not only possible but easily achievable.

xR is short for extended reality. This is where photo-realistic content is generated by powerful graphics engines and displayed onto LED screens — immersing performers, crew and audiences in a completely virtual world. disguise xR is the workflow that is tying it all together.

Image credits: Hibino

This technology goes further than green screens, rendering more compelling content in real time for the entire production team and those on stage to see and be immersed in on set. Many industries are already seeing the impact. For example, filmmakers no longer need to shoot scenes and add CGI in post production. It can be done before and during shooting, allowing talent to see and interact with the graphics in real time and crew to make better-informed creative decisions earlier on. This process gives directors and designers more time control and faster calibration workflows within production environments. As broadcasters start reducing their carbon footprint, xR will allow them to shoot many locations in one studio — all in one day.

disguise xR's streamlined software workflow, combined with its high-performance, robust hardware makes extended reality production a reliable, repeatable and scalable experience. The disguise workflow integrates with leading LED and camera tracking technology, as well as graphics engines like Unreal Engine, creating a seamless workflow that controls the entire production

from one central software.

With disguise xR users can also pre-visualize their creative project before stepping on set, achieve spatial and color calibration of their LED stage within minutes of setting up, while also applying instant changes to their real-time content directly from the disguise software and see them immediately reflected throughout the production.

Users of disguise can also use disguise's "set extension" to turn a small LED set into a vast, virtual environment — with the CGI content all rendered from the camera's view and updating as the camera moves. The disguise workflow allows this by sending camera tracking information to the graphics engines.

Starting with disguise xR's first memorable realization in Katy Perry's performance of "Daisies" in the 2020 "American Idol" finale, disguise xR has since been used to realize over 400 projects, including the "Billie Eilish: Where Do We Go" livestream, TV Azteca's coverage of the Tokyo Olympic Games, iTV's coverage of the UEFA Euro 2020 Championships and the 2020 MTV VMAs. disguise xR is now even empowering in-game experiences such as Kaskade and J.Balvin concerts within Fortnite — opening up the gateways to the metaverse — which is predicted to become the "new internet" and a whole new platform for audiences to engage with.

With the disguise xR workflow, the virtual scenes users can create are not just beautiful to see but also give endless possibilities for how visual experiences can be created for a future filled with remote collaboration and a lower carbon footprint.

https://web.disguise.one/3FlcPIb

EditShare
Universal Media Projects

No Matter What Your Creative Tools Are, EditShare Solutions Keep Them in Sync

Universal Media Projects is the name for the new capability in Editshare FLOW that encapsulates all the elements of a media project necessary for it to be seamlessly transferred between multiple post-production tools and applications.

Specifically, EditShare's Universal Media Projects bring together the three titans of editing and post-production tools — DaVinci Resolve, Premiere Pro and Media Composer — into a free-flowing and ultra-productive workflow environment.

This capability arrived in 2021 and brought with it deep integrations into nonlinear editing tools including Adobe Premiere Pro, Blackmagic DaVinci Resolve and Avid MediaComposer. The integrations seamlessly transfer all the necessary project data, such as sequences, clips, bin, and markers between editorial tools such as nonlinear editors (NLEs). All relevant information is available remotely through a secure web interface.

It creates a metadata store that models all the key common entities of a project such as clips, subclips, sequences, etc., along with extended attributes to store NLE-specific data, enabling a continuous exchange of data between different editorial tools.

The FLOW panel adds the capability to import media and other associated data including markers on clips, rough-cut sequences and the locations of high-resolution and proxy media to both Adobe Premiere Pro and DaVinci Resolve. (EditShare was the first company to use the new integration features in Resolve 17.) In addition, the FLOW system can scan and access Avid Bin files to extract data for central management and to write back changes from the central datastore (including respecting Avid Bin locking and archive rules).

Video producers work with a wide array of tools and often need to work in more than one editorial tool during the lifecycle of a production — sometimes using different tools for different projects. Regardless of the tool, teams need to collaborate throughout, organizing and reviewing incoming footage, creating rough cuts, editing, finishing, reviewing and approving. By integrating with these tools and providing a central web experience, no matter where the production team is or whatever tools they use, they get real-time updates on every aspect of the project.

https://www.editshare.com/products/flow-media-management/

EVS
XtraMotion
Delivering Super Slow-Motion Replays From Any Camera Angle
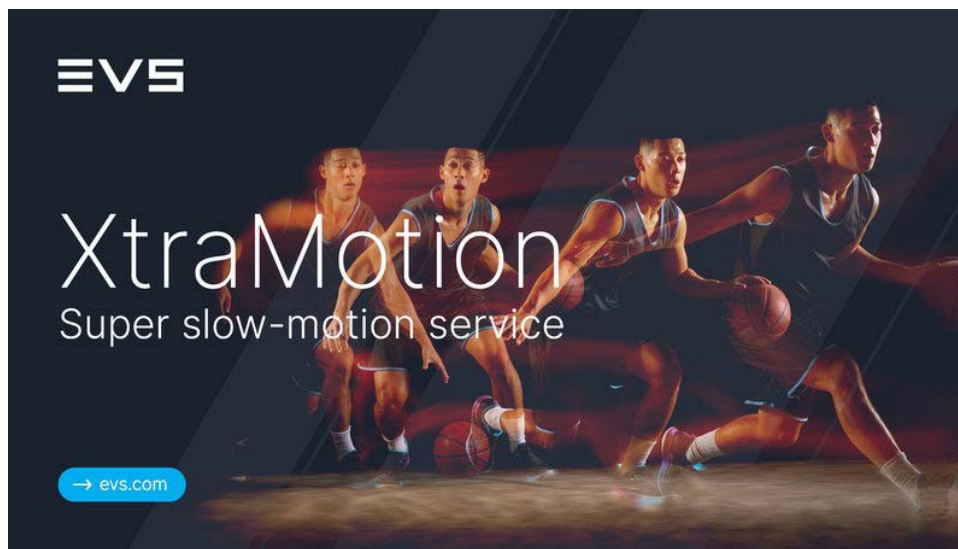
While super slow-motion is a much sought-after effect for replays in live sports productions, its usage is often constrained to a few carefully selected camera angles, due to high infrastructure costs and the fact that most point-of-view cameras do not support super slow-motion video.

XtraMotion changes the game. The new software application developed by EVS has been designed to allow broadcasters to deliver super slow-motion replays from virtually any angle they choose on a production. Based on both cloud processing and machine learning, the service enables the transformation of footage from any camera angle on a production into high-speed video using frame interpolation. As a result, productions can easily increase their super slow-motion coverage without any extra cost and without the need for additional hardware on site.

XtraMotion can handle any production format — from 1080i to 1080p as well as UHD-4K with HDR — and any original frame rate, enabling the transformation of a 60fps video into a very smooth 180fps video as well as a native 180fps into a 540fps video.

As a cloud service available on-demand, the decision to activate XtraMotion can be taken in instants and productions can also easily scale it to the capacity they need. It integrates tightly into the EVS live-production ecosystem, allowing replay operators to seamlessly clip any content from anywhere on the network, render it to super slow-motion with a simple touch of a button, and play it back with the desired frame rate seconds after.

In addition to replays and highlights, operators can also apply the XtraMotion process to openers and closers, as well as archived content, providing more opportunities to enhance the narrative of a production.

The launch of XtraMotion took place in May 2021, following a successful trial period with FOX Sports. It was first deployed as a Proof of Concept (POC) at Super Bowl LIV, in February 2020, after which FOX Sports took the decision to make XtraMotion an integral part of its productions. It was at Daytona 500 that XtraMotion truly demonstrated the extent of its storytelling capabilities by allowing viewers to watch super slow-motion replays from the in-car cameras — a first in the history of live sports broadcasting.

https://evs.com/products/live-replays-storytelling/xtramotion

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EVS
MediaInfra Strada
Turnkey Routing Solution for SDI to Full IP Infrastructures
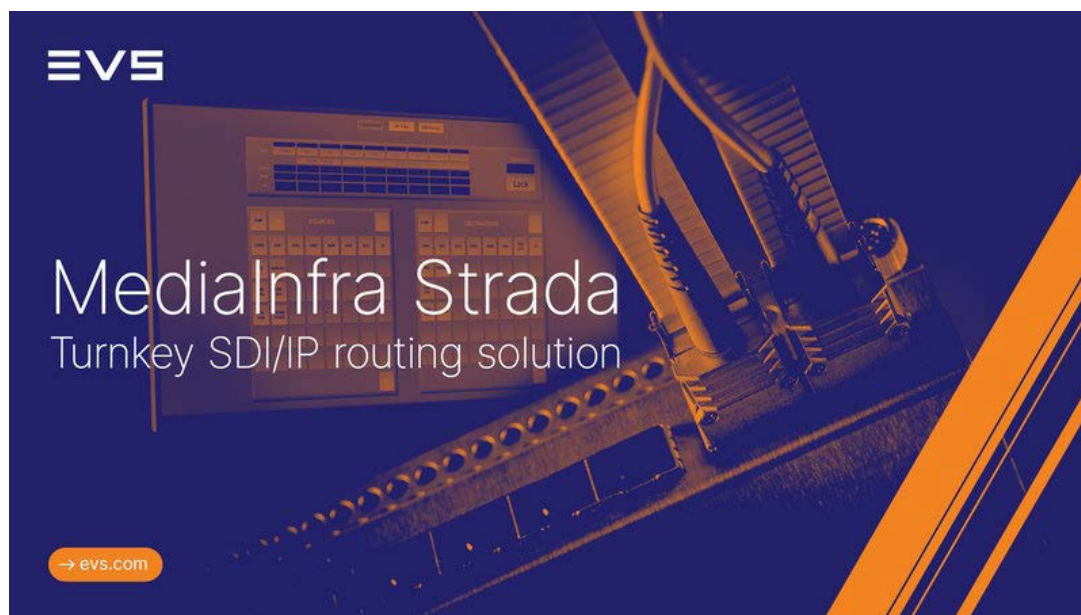
In today's industry, the transition to IP is very much ongoing. However, baseband SDI is still a reality and both signal formats are likely to coexist for some time.

To offer the highest level of flexibility within modern infrastructures, EVS has introduced MediaInfra Strada, a new turnkey routing solution designed to address all routing needs, in native SDI, pure IP, as well as in hybrid broadcast environments.

It provides broadcasters with an opportunity to easily and safely replace their end-of-life SDI router with a new solution that offers the same functional equivalent, but with the option to grow into a full IP backbone with minimal effort. As a result, they gain more processing power, and their broadcast infrastructures are ready to deliver all the game-changing benefits of IP in terms of agility and scalability.

The solution combines the capabilities of EVS' Cerebrum (broadcast control and monitoring system) and Neuron (network attached processor) product lines to provide advanced router

logics through customizable user interfaces, with flexible IP and SDI I/O for uncompressed real-time video and audio. Arista's Ethernet switches with 100 Gb/s ports complement the package for guaranteed high-performance IP network operations.

MediaInfra Strada is conveniently delivered as a single, compact and preconfigured system for quick and easy deployment. From a user perspective, the difference between handling SDI sources or IP streams goes unnoticed since all the underlying complexities are completely abstracted by the solution's user-friendly graphical interfaces. In addition, operators are free to modify their interfaces, and to create their own router panels as desired.

Finally, as a linearly expandable solution in a combination of inputs and outputs ranging from 256 I/O to 1024 I/O, users can enjoy a smooth path for their modernization towards a full IP infrastructure, while making sure all their investment is future-safe thanks to the solution's scalability

https://evs.com/solutions/mediainfra/strada

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BEST IN MARKET 2021

tvtech

WINNER

Flanders Scientific Inc.
XM312U - 5,000nit 31-Inch HDR Mastering Monitor
Five Times Brighter Than Most Professional HDR Displays
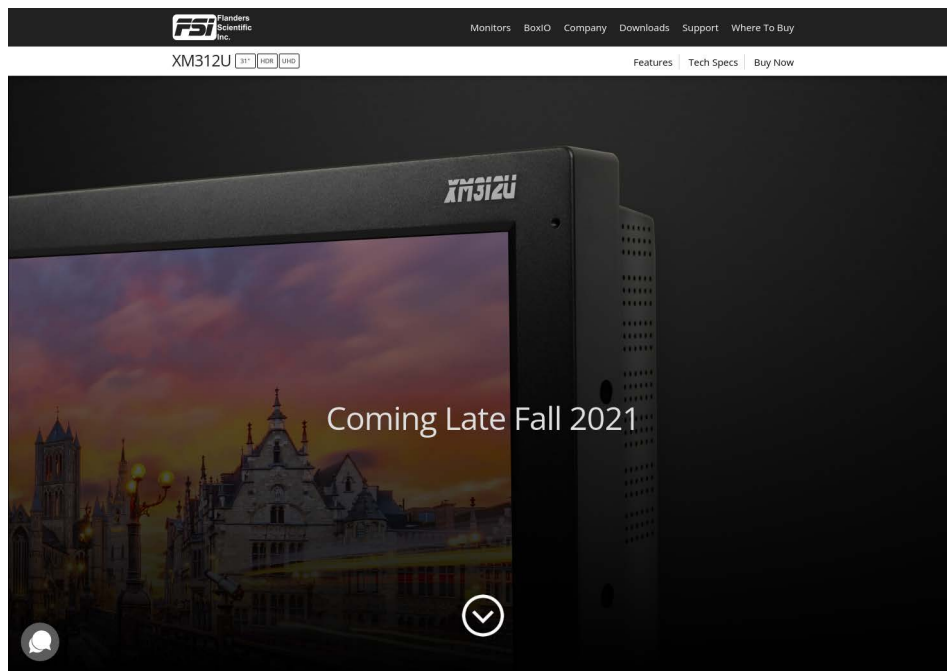
The XM312U is a 31-inch UHD resolution HDR and SDR reference master monitor with professional 12 Gbps SDI inputs. The XM312U qualifies as a Dolby Vision mastering monitor and has a peak luminance of over 5,000 cd/m^2, support for both PQ and HLG EOTFs, multiple color gamut selections, and a contrast ratio in excess of 5,000,000:1. These specifications make the XM312U ideal for a wide variety of demanding HDR workflows.

Many professional HDR displays have a peak luminance of just 1,000nits. With a peak luminance of over 5,000 nits, the XM312U is one of the brightest commercially available professional HDR monitors. The XM312U's industry-leading peak luminance isn't just about specular highlight capability. With a 5,000 nit capable HDR display, colorists have a much larger color volume to work with that contains a wider palette of bright saturated colors simply not available on dimmer displays. The XM312U achieves this with a full-array local dimming backlight with over 2,300 individually controlled LED elements. Compared to the award-winning XM310K that it replaces, the XM312U features a 20% improvement in the ratio of backlight zones to pixels, twice the panel static contrast ratio, and a peak luminance that is over 2,000nits brighter.

With a collection of features including Advanced Tetrahedral LUT Processing, False Color mode, Markers, Real-time Waveform and VectorScope, support for Multi-Cam Monitoring, and LiveGrade and Prelight Integration, the XM312U is well-suited for a wide variety of in-suite and on-set workflows.

These advancements combine for a truly unparalleled HDR mastering experience.

https://flandersscientific.com/XM312U/

Frame.io
Frame.io Camera to Cloud

Shooting to the Cloud: The Largest Change to Filmmaking in 100 Years

Over the past 100 years, there have only been two fundamental shifts in filmmaking technology. First, there was the shift from film to tape. More recently, there was the shift from tape to digital files. But there was still the need for physical media to be copied and shipped in order for post-production to begin.

Frame.io Camera-to-Cloud (C2C) fundamentally changes the way video is created by eliminating the need for physical media to be exchanged, making what was once a linear process more collaborative than ever before. It enables instant proxy uploads the moment cameras stop rolling, so editorial can begin within seconds after a take is captured. Frame.io C2C uploads are also instantly available for authorized users to view on- or off-set, allowing them to watch and participate in the production in real time.

Anyone who shoots video content can benefit from Frame.io C2C. Getting footage from the set into post production has always been a time-consuming process that requires backing up drives and shipping them to another post-production entity for transcoding before delivering them to editors. Additionally, by making on-set activity available to collaborators in remote locations, creatives can participate in a shoot from anywhere in the world.

This changes the game because, until now, video creators had to wait anywhere from hours to days to view what they'd shot. Shoots are expensive, and if there's been a mistake or insufficient coverage, the cost of reshooting after they've already moved on to a new setup, or having to fix the problem in post production, can have significant cost ramifications. Using Frame.io C2C means that feedback can be given immediately during a shoot, reducing the need for reshoots or post fixes. Frame.io C2C also alleviates the stress of not knowing if the shot is "in the can," so directors, cinematographers, editors and producers can stay focused on the creative process.

The Camera-to-Cloud workflow requires a Teradek CUBE655 to be paired with a C2C-compatible camera through Frame.io. So far, select ARRI, Panavision, RED, Sony, Canon and Panasonic cameras are supported, and the list continues to grow. Once authenticated, compact and high-quality H.264 proxy files with matching timecode and metadata to the original camera files are directly uploaded to Frame.io every time the camera is triggered via LTE, 5G or Wi-Fi. Plus, Sound Devices 888 or Scorpio field recorders can be paired to record, encode and send either proxy or full-bandwidth audio files to Frame.io, which automatically sync to the video — an industry first.

The H.264 proxies can be viewed on computers, iPhones and iPads via the Frame.io web and iOS apps. They're also available immediately in NLEs with Frame.io native integrations such as Adobe Premiere Pro, Final Cut Pro and DaVinci Resolve. This end-to-end workflow allows for immediate editing, and because timecode and metadata match the original camera files, proxies can later be swapped out for "hero" dailies, and can be easily relinked for final conform and grading for final delivery.

https://www.frame.io/c2c

BEST IN MARKET 2021
tvtech
NOMINEE

GeoComply
GeoGuard

Stops Advanced Geo-Piracy and Geolocation Fraud

During the COVID-19 pandemic, streaming services saw record subscriber growth. This surge in online streaming led to a corresponding increase in VPN and proxy usage, as viewers sought to spoof their location, bypass territorial restrictions and illegally access content.

While geo-piracy isn't new, for far too long the industry has accepted a +70 percent efficacy rate from VPN and DNS proxy detection solutions, which is unsustainable, given the rise in value and volume of premium content across streaming platforms. Without effective geo-piracy detection and blocking, OTT providers are unnecessarily suffering from revenue leakage, not to mention being in violation of their contractual territorial licensing agreements with rights owners.

Fortunately, there's an easy way to counter this threat — GeoComply's highly accurate VPN and proxy detection solution, GeoGuard, which recently won the 2021 CSI Magazine Award for Best Content Protection Technology. It is used by leading broadcasters and video streaming platforms, including the BBC, beIN Media and Amazon Prime Video, to detect and stop geo-piracy.

Recently, VPN providers upped their game by using more advanced techniques to bypass detection: hijacked residential IPs and targeted proxy-over-VPN attacks.

In 2021, GeoComply countered these new threats with a major upgrade to GeoGuard: implementing advanced algorithms and new detection processes that enable online broadcasters and OTT

services to stop these highly sophisticated forms of geo-piracy.

The enhanced GeoGuard is the industry's only solution to be independently rated by Kingsmead Security as 99.6 percent effective in detecting VPNs and DNS proxies — a major improvement on the industry's +70 percent efficacy rate. Combined with having an extremely low false positive rate thanks to being frequently updated, GeoGuard has earned the trust of Hollywood and major sports leagues around the world.

The New Version:
• Solves the increasing and ever-evolving threat from proxy-over-VPN attacks. For example, an OTT customer succeeded in blocking 87 percent of proxy-over-VPN attacks with GeoGuard, compared to only 1 percent previously.
• Dynamically tracks and flags compromised residential IPs. Free VPN solutions and other malicious apps hijack domestic IP addresses from compromised devices and resell them to premium VPN providers to enable users to appear as though they are a legitimate viewer in the territory of their choosing.
• Reduces operational and infrastructure costs by removing the need to support illegal users. For instance, a customer saved $500K a year on its CDN bill after implementing GeoGuard.
• Adds IPv6 detection. This allows OTT broadcasters to remain fully compliant with their contractual obligations while continuing to allow users to access their services on IPv6-only connections.
• Reduces credential sharing and fraud, e.g., the sharing of a streaming password among family and friends. A GeoGuard customer recently reduced credential sharing and fraud on its service by 66 percent.

GeoComply optimized the integration of GeoGuard with the two main content delivery networks for video streaming: Akamai and Amazon CloudFront. This enhancement allows the streaming services to simply "turn on" VPN and proxy detection, gaining the additional security provided through the detection of hijacked residential IPs and proxy-over-VPN attacks.

https://www.geocomply.com/products/geoguard/

Grass Valley
LDX 150

The LDX 150 Is Grass Valley's Highest Performing Live Broadcast Camera

Requiring the lowest latency, highest simultaneous signal counts, and highest number of operators to keep in sync, live productions are among the most demanding broadcast industry applications. But demand for premium live content is at an all time high, and along with production formats changing from event to event, creative teams are scattered in multiple locations, and time for training operators or maintaining equipment is limited.

Grass Valley's new camera innovation, the LDX 150, easily navigates those constraints and more. The LDX 150 is Grass Valley's highest performing live broadcast camera. The higher sensitivity (F11@2000 lux vs F9@2000 lux) of the LDX 150 with its three new Xenios imagers means users benefit from:

• Wider dynamic range in HDR mode
• Improved signal-to-noise ratio by reducing gain for cleaner images
• Greater depth of field by allowing smaller lens apertures for easier and better focusing

The LDX 150 is the only camera that brings triple speed UHD with global shutter and Wide Color Gamut (WCG) acquisition on a Native IP backbone.

At the heart of the camera is Grass Valley's all new Xenios imager. Based on decades of experience paired with the latest in technology, the imager has been designed from scratch to achieve the next step in broadcast imaging. The new Xenios imager, paired with the global shutter, means best sensitivity with increased sharpness in fine structures and life-like images; providing a stunning F11 sensitivity in UHD.

The LDX 150 with the Xenios imager also enables a wide dynamic range in HDR, an improved signal-to-noise ratio and additional depth of field, even in low light conditions. An improved pixel structure precisely directs the light onto the photodiode and reduces scattering loss. This means that the finest details are captured without losing their brilliance by blending into adjacent pixels. Additionally, it offers built-in JPEG XS compression that can be natively streamed over IP with no additional CCUs or server boxes.

For easy color grading, the LDX 150 can also be set to a compatible mode that matches with other LDX models and third-party solutions, opening up its capabilities to an even wider range of users. The LDX 150's base model is a single-speed HD camera that can connect to an XCU Universe UXF and can slide right into any existing baseband configuration. With additional software licenses, the LDX 150 offers triple-speed UHD, streaming directly into your IP infrastructure by using its Native IP capabilities.

https://www.grassvalley.com/products/cameras/ldx-100-series/ldx-150/

Interra Systems
ORION 2110 Probe

A Future-Proof, IP Probe for Broadcast Production for Assuring Exceptional Video Quality

ORION 2110 Probe – *for SDI-over-IP based Media Workflows*
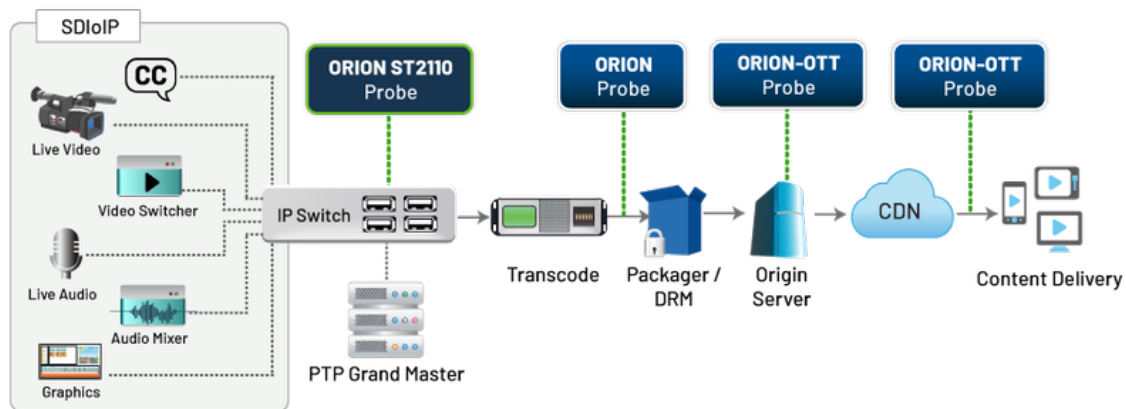
Today, broadcasters and streaming providers are finding that it is essential to deliver higher-resolution video, ensure better connectivity of infrastructure and offer content on all screens. The need for seamless interoperability, lower costs with standard IT infrastructure and greater flexibility in transmission of video — especially 4K/8K HDR content — is prompting broadcasters to transition from traditional serial digital interface (SDI) infrastructure to IP-based video networks. As the broadcast world transitions towards this shift to IP to simplify content preparation and delivery operations, having the capability to monitor the new and complex ST 2110 workflow is becoming increasingly important.

Interra Systems' new ORION 2110 Probe for IP-based media workflows supports the SMPTE ST 2110 standard, providing broadcasters with a future-proof, end-to-end monitoring solution for assuring exceptional video quality in an IP distribution environment. The ORION 2110 Probe performs comprehensive ST 2110 monitoring, including ST 2110 main and redundancy signals, and NMOS-based ST 2110 feed discovery in the network.

Interra Systems' ORION 2110 Probe is innovative because it addresses the diverse complexities and challenges of the SDI and IP environments, offering a simple, powerful approach to

content monitoring especially for production and contribution applications. It offers a rich set of REST APIs to ensure seamless integration with third-party software, including most network management systems.

The ORION 2110 Probe was developed with a smart feature set that includes validation of individual essences, SDP protocol checks and monitoring density, among others. Using the ORION 2110 Probe, broadcasters can ensure high quality and performance for all SDI-IP streams and take full advantage of the flexibility and benefits of the ST 2110 standard.

The addition of ORION 2110 Probe to Interra Systems' ORION monitoring platform enables media companies to rapidly detect video quality issues throughout the entire video workflow, including ingest, content preparation and delivery. Gaining insights about video errors as early as the ingest stage enables broadcasters to dramatically improve video quality of service and quality of experience.

IP is the future of broadcast and streaming architectures, and Interra Systems' ORION 2110 Probe deserves to win this award for empowering the broadcast and streaming industries to deliver superior-quality video experiences in the IP era.

https://www.interrasystems.com/ORION-2110-Probe.php

LiveU
LU800 PRO4
Multicamera Production Level Field Unit

The LU800 combines multicamera production and superior video and audio capabilities with mission-critical transmission in a native 5G unit. Designed from the ground up to unlock 5G potential, the unit offers unparalleled quality of service and resiliency.

The LU800 supports up to four fully frame-synced feeds in high resolution from a single unit, using powerful IP bonding of up to 14 connections. The unit also offers the highest-quality video performance, with up to 4Kp60 10-bit HDR transmission for optimal color depth and richness, as well as up to 16 audio channels for high-end productions.

Samuel Wasserman, LiveU's CEO, said, "Launching this ground-breaking product has taken on extra relevance, with the industry experiencing social distancing and budget limitations. There is an acute and growing need for high-quality, reliable and cost-effective solutions, supporting remote production (REMI) workflows. The LU800 offers unlimited possibilities for customers to enrich their productions and cover more events at a fraction of the cost of traditional transmission methods."

The LU800 provides new levels of resiliency, combining superior 5G performance with up to eight 5G internal, dual-SIM modems, supported by high-efficiency internal antennas. The unit has been optimized for 5G operations, addressing unique 5G requirements with maximum versatility and full support for 5G network evolution.

With the LU800, LiveU now offers a full end-to-end contribution, production and distribution solution. The unit's multicamera production streams are fully managed by the LiveU Central cloud-based management platform and automatically fed into the LiveU Matrix IP content management and distribution workflow.

https://go.liveu.tv/lu800

LiveU

LiveU Matrix Cloud Video Management & Distribution Solution

Featuring Dynamic Share: Complete/Affordable Replacement for Other Occasional Feed Sharing Solutions

Today's global audiences expect more immediacy, content and innovative new experiences brought to them live. News, sports, entertainment and a host of other vertical markets are tasked with producing more original live content than ever before. However, budgets, tech infrastructure (connectivity) and lack of resources (people) hold them back from supporting this demand.

LiveU Matrix has taken the news world by storm by disrupting the traditional content management and distribution workflow. Instead of relying on a satellite truck to deliver high-profile news and events, LiveU customers have been able to tap into this well of live feeds provided by media groups, affiliate/sister stations, or partner organizations — all over IP, which has significantly cut costs, reduced headaches and significantly increased the amount of content that can be shared, customized/localized and distributed to global audiences.

LiveU Matrix, the next-generation IP cloud video management platform, enables broadcasters to view, manage and distribute live content quickly and efficiently. The dynamic cloud platform makes it simple to curate content through one interface. Users can easily search, filter, preview and distribute live feeds to one station, multiple stations or thousands of end points within their entire affiliate network. The flexible interface can also be customized based on the user's role. LiveU Matrix gives full visibility into all feeds available and puts the broadcaster in the driver's

seat to manage and send content anywhere, without interruption or another piece of hardware.

Key Features Include:
- Previews of all available feeds — sneak peek before going to prime time
- Leverage customizable metadata to search and filter feeds
- Immediately distribute a live video without interrupting the current transmission
- Instant multimedia notifications delivered through the platform
- Real-time collaboration between the news desk, engineers and producers using the built-in chatroom

New Features:
- Using Matrix Dynamic Share, you can easily manage your destinations, enabling you to support your content strategy and monetization efforts. Dynamic sharing is a complete and affordable replacement for other occasional feed sharing solutions.
- Grow your exposure and content sharing capabilities, via the LiveU Global Directory. Leveraging our vast Global Directory, you get unlimited access to LiveU users worldwide, expanding your distribution options at a click of a button.
- Search, find and share content in just a few clicks! Matrix intuitive web-based platform is simple to use with an intuitive "Drag & Drop" mechanism, a comprehensive view of all live feeds and a wide range of content discovery tools (search, filter metadata and more).
- Manage your content from anywhere! Critical mostly during the COVID-19 era, Matrix works on all your devices (PC/tablet/phone) letting your news teams keep their content management routine, even when working from home.

https://go.liveu.tv/matrix

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Marketron
Marketron REV
The Platform That Powers Sales

Marketron REV is a sales growth platform purpose-built for broadcast TV and radio sales professionals. It brings the entire sales process together in a single platform, streamlining customer, proposal and order management processes. Sellers can focus on selling, not re-entering data between disparate systems.

Sellers can easily manage clients with a built-in CRM, convert proposals to linear TV and radio orders in seconds, ensure order accuracy with insights into real-time avails, offer the best price using dynamic pricing and then have the orders seamlessly flow into most traffic systems for execution.

Sales managers have access to a powerful and visual reporting suite that gives visibility into pipeline, committed orders, top sellers and how stations are performing against targets.

REV increases media companies' top-line revenue through the power of dynamic pricing that uses algorithms to automatically set spot prices based on current fill. Salesperson-specific limits on discounting protect margin and simplify approvals. Accelerate with REV.

https://www.marketron.com/revdemo/

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Maxon
Cinema 4D

3D Computer Animation, Modeling, Simulation and Rendering Software Offers Frictionless Creative Experience

Cinema 4D is a professional 3D modeling, animation, simulation and rendering software package. Its fast, powerful, flexible and reliable toolset makes 3D workflows more accessible and efficient for design, motion graphics, VFX, AR/MR/VR, game development and all types of visualization professionals. Cinema 4D produces stunning results, whether working on your own or with a team. Thanks to the friction-free experience afforded to users, Cinema 4D creations can be seen in almost every industry. From the next-generation electric vehicle UI in Cadillac's LYRIQ (*https://territorystudio.com/project/cadillac-lyriq/*) to visualizing the history of financial trading (*https://www.maxon.net/en/article/who-says-finance-cant-be-visually-interesting*) for Interactive Brokers' to Hollywood TV shows and films like "WandaVision" (*https://www.maxon.net/en/article/maxon-congratulates-perception-design-lab-for-wandavision-emmy-nomination*) and "Westworld" (*https://www.maxon.net/en/article/machine-dreams*), it's hard to consume content without coming across Cinema 4D.

With Cinema 4D R25, the best user interface has been made even better: this latest release features a new modern skin, user interface enhancements and an expansive preset system for optimizing your workflow. An updated scheme and icon set offers a fresh, modern spin on Cinema 4D's classic look that intuitively communicates what's important and puts more focus on your artwork. Dynamic palettes power new layouts that make great use of space and ensure the tools you need are always close at hand. Tabbed documents and layouts make it easy to flow between multiple projects and workflows. All-new Spline Import options allow users to easily use Illustrator, PDF and SVG vector artwork in their 3D scenes. Capsules allow anyone to tap into the power and flexibility of Cinema 4D's Scene Node system, with plug-in-like features directly in the Classic Object Manager.

Cinema 4D's new Scene Nodes core powers a flexible system for procedural scene creation, and allows plug-in-like functionality to be packaged and distributed as Capsule Assets. In Release 25, these Capsules can be directly used within Classic C4D as primitives, generators and geometry modifiers, so any user can tap into the power of Scene Nodes without sacrificing key Classic C4D features like MoGraph, Dynamics and Volumes. The possibilities within Cinema 4D's new Scene Node core continue to expand with new Spline and Data Integration functionality, which can be used while building powerful new Capsule Assets.

Beyond the innumerable use cases and applications for Cinema 4D, it is widely recognized as one of the easiest and most accessible 3D packages to learn and use. The recently announced Release 25 reveals numerous improvements to the user experience for even faster creative workflows. Building off of Cinema 4D Subscription Release 24 in April 2021, Cinema 4D Release 25 demonstrates Maxon's ability to enhance and increase user value on a regular basis to ensure ongoing creative success for its wide and varied network of users.

https://www.maxon.net/cinema-4d

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MediaKind
AI-Based Compression Technology

MediaKind's AI-Based Compression Technology (ACT) Is a
New Intelligent Compression Algorithm

MediaKind's AI-based Compression Technology (ACT) is a new intelligent compression algorithm. ACT enables significant operational and performance improvements using AI to select the most effective balance of compression methods in real time for the content type it's delivering.

ACT is based on technology researched and developed exclusively by MediaKind's dedicated in-house compression research team. This leading technology innovation powers MediaKind's Aquila Streaming and Aquila Broadcast solutions and sits at the core of the latest version of the MK Encoding Live product portfolio, where it can be applied to traditional linear and adaptive bitrate (ABR) encoding or transcoding. ACT offers an exciting and innovative way to significantly improve encoder performance, increase compute resource efficiency and reduce the costs of delivery and infrastructure by minimizing bandwidth.

Today's media landscape must serve a broader range of media platforms and consumption models than ever before. Broadcasters, channel originators, content owners and multi-channel distributors require workflows that allow them to flex their offerings. They also need to create unique, personalized content offerings that can serve audiences who are continually splitting their attention between linear TV and digital content.

A key component of any content workflow is compression. For content creators and owners, video encoding can be the most critical part of a media delivery workflow. It ensures the content is commercially viable for delivery and available to an increased number of viewers and devices. Content delivery can be very costly and video compression resources very compute-intensive,
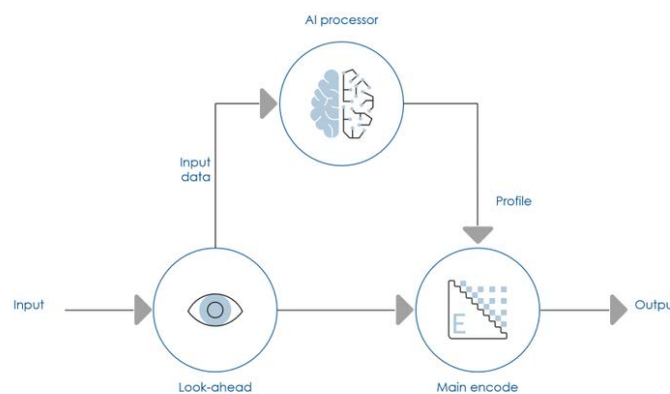
and there's always a balance between processing power and bitrate efficiency.

In a video encoder, AI can be used to understand the type of video content and then map how the encoder uses its processing options to achieve the best results. With the array of different content available, MediaKind's ACT can help to adaptively apply all available compute resource using the most beneficial balance between the possible encoding features. This process ensures that the processing power can be spent most effectively for any type of content.

With ACT, users benefit from optimal processing and a more advanced dynamic choice of processing for groups of tools, producing lower bitrates for a given amount of processing resource. The MediaKind algorithm adapts to the available resource to improve density. For example, when running a standard encode mode for four HD channels (allocating all the available CPU resources evenly per channel), ACT could allow users to run six channels instead by using the same infrastructure. In a situation where encode density is the most important consideration, ACT can increase channel density by up to 50%.

ACT also provides greater flexibility; it enables users to spin up new channels without the need for new infrastructure or reconfiguring existing services. Operational setup is also simplified, and infrastructure sizing is made much easier, meaning there is no need to select profiles ahead of time.

By integrating the pioneering capabilities of ACT within MediaKind's other solutions, the wider media industry can benefit from the optimal processing use and superior density that the algorithm ensures.

https://www.mediakind.com/blog/introducing-mediakinds-ai-based-compression-technology-act/

MediaKind
RX1

The RX1 Is a Multi-Codec Multi-Service Professional Decoder

The RX1 is a multi-codec multi-service professional decoder specifically designed to meet the needs of the professional live video contribution and primary distribution markets. Coupled with MediaKind's video contribution encoder CE1, RX1 powers a unique video contribution workflow that accommodates new industry standards and codecs as they emerge. Ideal for demanding live event coverage and remote/at-home production, RX1 empowers operators to embrace 4K video, create more revenue-generating services and leverage new IP infrastructure deployments. RX1 enables low cost and flexible carriage of the high data rate content, but with the flexibility and resiliency of traditional satellite connectivity.

MediaKind's multi-codec and multi-service professional decoder RX1 allows for deployment as an appliance, virtualized or into the cloud through a fully flexible platform. With the MediaKind accelerator module, users can benefit from additional processing power without increasing CPU loading on the most demanding services delivering high quality, high density, and ultra-low latency capability at an affordable cost.

Combined with MediaKind's next-generation media contribution encoder, the CE1, the RX1 enables an end-to-end media contribution workflow that is more resilient and future-ready than any existing professional media contribution processing and delivery solutions on the market today. The enhanced solution immediately responds to anticipated changes in professional media contribution and remote production applications.

It enables broadcasters, operators and service providers to transition to all-IP and the cloud, integrate existing and future codecs and standards, embrace new flexible business models and meet consumer demand for more immersive experiences with stunning quality content.

Combining CE1 and RX1 directly addresses the most demanding live event coverage challenges and use cases such as remote/at-home production.

The Cygnus RX1 can decode UHD (4K) HEVC, HD HEVC, MPEG-2 and MPEG-4 AVC compressed streams, whether 4:2:0 or 4:2:2, 8 bit or 10 bit and produce uncompressed outputs via a range of outputs. Different codec combinations can be utilized simultaneously to maintain flexibility for onward processing.

The RX1 decoding platform provides secure, high-quality professional content contribution. A unique feature of the RX1 can decode multiple compressed video components of up to 150 Mbit/s; for the very highest quality contribution links, even with the use of HEVC encoding, bit-rates greater than 60 Mbit/s may be required. The RX1, in conjunction with MediaKind's CE1, delivers an industry-beating, highly resilient cloud-ready, secure video contribution workflow, which enables the delivery of next-generation media experiences today and in the future. All broadcasters and content owners can invest with confidence, safe in the knowledge they will always remain current in a world of shifting media contribution technologies and infrastructure.

https://www.mediakind.com/video-decoding/cygnus-rx1/

MediaKind
MK Engage
A New D2C Solution for Video Production, Streaming and Audience Engagement

The global streaming market was valued at US $50.11 billion in 2020 and is expected to expand at a CAGR of 21.0% from 2021 to 2028 (Grand View Research). The proliferation of this market means that streaming services must now reach a level of technical maturity that can deliver the reach, scale and reliability that meets consumer demand.

This year saw the launch of MediaKind Engage, a new direct-to-consumer (D2C) solution for video production, streaming and audience engagement. This cloud-native technology service acts as a foundation for modern video workflows. Whether it be live productions with publishing and client applications, MK Engage exposes advanced workflows that have been built leveraging MediaKind's end-to-end portfolio, complemented with best-of-breed partner solutions. It allows sports entities, broadcasters, channel originators and content owners to create new D2C offerings that increase fan engagement opportunities, open flexible monetization methods and enable consumers to curate and personalize content experiences. The solution provides a fast and efficient service that drastically speeds up time-to-market and lowers setup costs, guaranteeing agility, quality and stability at scale, all while maximizing return on investment.

MediaKind Engage was designed to respond to the many organizations that need to compete with the features and functionality that other streaming media giants offer, on a fraction of these organizations' budgets. MediaKind Engage enables sports entities, broadcasters and content owners to create and monetize compelling, high-quality live and on-demand video and data services, no matter the company's size.

There are four core pillars of the MediaKind Engage solution:
1. Broadcast quality framework. MediaKind Engage handles all the fundamentals needed to deliver a streaming service. It provides broadcast-grade quality and availability, achieving
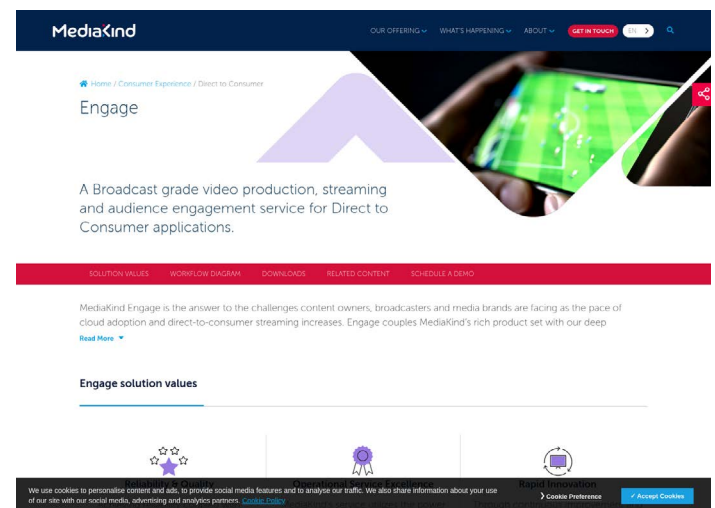
reliability of scale, including peak loads that enable users to cover some of the larger events that happen.
2. Operational excellence. The service is supported 24/7 by an expert operations team from MediaKind. Customers can choose the level of technical care they require to integrate with or enhance their own operations team as needed.
3. Continuous Improvement. MediaKind's ethos is to embrace modern, agile and DevOps models and act as an extension of its customers' engineering and products teams.
4. Reaching consumers. MediaKind provides a gateway service and experience that can be enriched and built upon. MediaKind Engage enables users to focus on specific areas that apply to their marketplace and customer base to provide a far better service to their consumers and gain a far better ROI on their content.

NAGRA

NAGRA Active Streaming Protection

Setting a New Standard for Virtual Cinema and Film Festival Experiences

The pandemic kept audiences from gathering in person, forcing festivals and live events to deliver content through online channels. As a result, there's been a major surge in online piracy. Eventive needed a way to securely adapt to this new environment to enable film festivals, distributors and live-event organizers to provide their content online to industry players and viewers while ensuring copyrighted materials are protected from content leaks and theft.

NAGRA Active Streaming Protection (ASP) provides OTT streaming video providers the ability to effectively manage security risks, going beyond multi-DRM to secure their content, service and revenue opportunities. NAGRA has designed a framework of multiple technologies working together to protect both operator content and their service against the threats exposed by delivering services over the internet to a variety of consumer devices that range from smartphones through tablets to streaming sticks to STBs /TVs.

With the digital shift opening the field of opportunity for piracy, it became clear to Eventive that security beyond DRM was needed to fully protect their clients' content and bottom line. Eventive partnered with NAGRA to launch the most rigorous content security program for film streaming ever deployed. Eventive already offered forensic watermarking required by certain studios for select content and special screenings, but the

solution was not scalable. NexGuard Streaming session-based watermarking, a module of NAGRA ASP, drives scalability for Eventive, efficiently tracking content streaming over Akamai's Content Delivery Network (CDN), easily scaling regardless of the number of concurrent viewers. In addition to conventional DRM measures, virtual screenings on Eventive VOD are secured with a NAGRA NexGuard invisible forensic watermark, identifying each individual user and session. Meaning any unauthorized use can be traced right back to the source. And a pre-roll piracy warning alerts users that their unique stream can be tracked.

For Eventive, preserving the artist's creative vision with secure content protection and high quality of experience is paramount. NAGRA ASP allows Eventive to increase the security of its virtual screening packages and on-demand content library without compromising delivery performance or client engagement. Content creators and exhibitors have seen the value of extending content availability with some festival partners reaching 10 times the audience they would have in person. With NAGRA ASP components providing studio-grade multi-DRM protection and forensic watermarking, Eventive has grown exponentially to serve millions of viewers. This new, higher-level security standard increases clients' confidence, helping Eventive win more film festivals and original content producer projects.

https://dtv.nagra.com/active-streaming-protection

BEST IN **MARKET** 2021

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NewTek
3Play 3P2
The Best Plays, Played Better

The NewTek 3Play 3P2 is a 10-channel replay solution, offering a mix of eight inputs via NDI, four inputs of SDI and two outputs of SDI or NDI. 3Play2 ensures that broadcasters and venue operators never miss an angle or unforgettable sporting moment with unparalleled connectivity and efficiency across the entire production workflow at a fraction of the cost of traditional replay systems. The NewTek 3Play 3P2 features include increased inputs, shareable playlists, pan-and-scan areas of interest, built-in NewTek NDI Telestrator capabilities, clip publishing and more, giving sports producers more capacity and opportunity to maximize the value and impact of live content as it plays out — in pristine 4K.

3Play 3P2's operator-centric workflow breaks the play down to bring your audience deeper into the game in real time and stunning 4K. The built-in features bring access to those vital plays within a game to fans faster, from more angles for unmatched viewing experiences.

The built-in playback zoom and tracking feature allows operators to select multiple points of interest and zoom in and out to capture an all-important play. The key-frameable feature allows operators to scrub clips, pinpointing desired timecodes of crucial plays.

Zoom and tracking are about getting those "areas of interest," like a toe touching out of bounds, by zooming and scanning. It is keyframe driven, giving users even more accuracy during fast action plays. With 4K60p recordings, this can be very useful. Breaking it down in granular detail with keyframes will produce better results and better replay.

The flexibility of a software-driven, network-based replay system is unparalleled. This intuitive and feature-rich 10 channel replay solution offers eight external inputs and two outputs. Inputs can be any combination of NDI sources with four convenient SDI connectors built directly into the chassis. The outputs can be independent or work together in a preview/program workflow including live animated, 3D-warped visual transitions delivered to both SDI and NDI destinations.

Operators also benefit from the shareable playlists, which allow NewTek TriCaster live production systems to work collaboratively. 3P2 and TriCaster operators can sync 3Play playlists over the network via NDI to create a unique collaborative experience for increased speed and flexibility in sports production workflows.

https://www.newtek.com/3play/3p2

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OWC

OWC Mercury Pro LTO

Cost-Effective, Easy-to-Use Archiving for M&E Pros, Corporations, Government Branches and Small Businesses

M&E professionals, corporations, government branches, and small businesses face the same challenge: how to manage an ever-increasing amount of more complex data. Higher resolution, complex audio and diverse formats are the project norm. Organizational content is projected to grow 50–70% annually as more data is digitalized. Licensing and regulatory compliance requirements are becoming more stringent. The answer, the Mercury Pro LTO provides top-end performance data integrity and utilizes industry standard Thunderbolt (Type-C) providing plug-and-play ease on Thunderbolt 3 and future Thunderbolt 4 equipped computers.

The OWC Mercury Pro LTO is the answer to this challenge. This easily integrated tape backup and archiving solution is a mission-critical requirement for protecting and preserving huge volumes of data for longer periods with familiar drag-and-drop operation, and better economies of scale than disk-based storage. Ruggedly small with a built-in handle, the Mercury Pro LTO is able to go on-set or move among studio, department or office computers for a shared data protection solution.

Configurable
Add up to a 16 TB SSD in the universal 2.5/3.5-inch drive expansion bay

Expansive
Utilize the second Thunderbolt 3 port3 to add up to five additional Thunderbolt devices or your choice of a USB-C or DisplayPort device

See More
DisplayPort 1.4 for connecting up to an 8K display. Charge while working. 85W of notebook charging.

Transportable
Compact form factor with built-in handles for moving between set and studio

Complete
Includes LTO-8 12 TB data tape, cleaning tape and Thunderbolt cable

Worry-Free
Up to three-year OWC Limited Warranty with lifetime expert support

https://eshop.macsales.com/shop/owc-mercury-pro-lto

OWC
OWC Jellyfish

High-Speed + Scalable + NAS + Built for Video
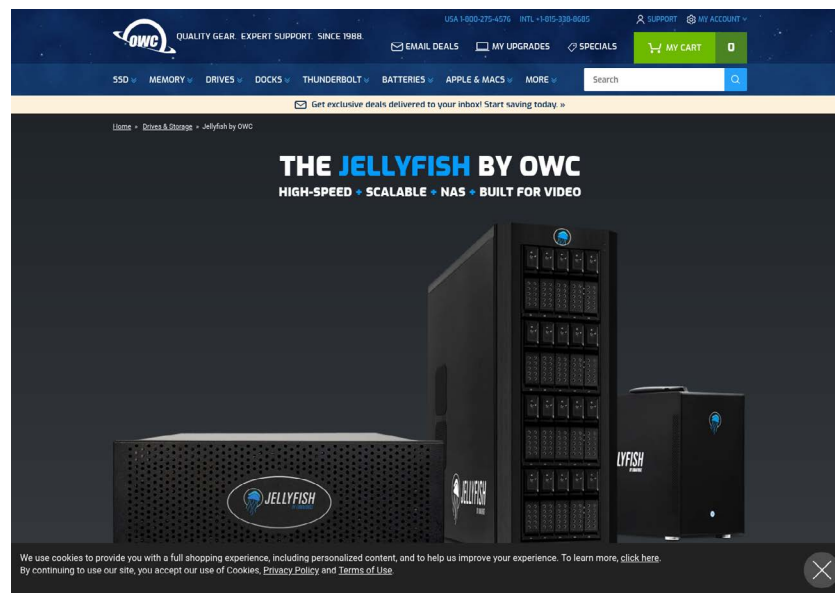
JELLYFISH MOBILE

The first plug-and-play video workflow server to come with a handle. The Jellyfish Mobile was designed to be on-the-go or, at least, out of the server room. It excels with teams of four to six editors working with 4K media on the road or at the office.

- 1 GbE/10 GbE connectivity for up to 14 workstations
- Remote access for your whole team and more
- 32 TB–96 TB RAW storage capacity
- Expand up to 3x capacity with expansion unit add-ons

JELLYFISH TOWER

The Jellyfish Tower matches the ease-of-use and plug-and-play magic powers of the Mobile and is as powerful as something you'd find in your server room. It's quiet enough to stand on its own in your edit bay and powerful enough to take on 6+ editors working with 4K media and beyond.

- 1 GbE/10 GbE/25 GbE/50 GbE connections
- Remote access for your whole team and more
- 80 TB–240 TB RAW storage capacity
- Expand up to 4x capacity with expansion unit add-ons

JELLYFISH RACK

Our most powerful plug-and-play solution, intended to live alongside all your other fancy server room equipment. Jellyfish Rack is the preferred solution for ultra-high-bandwidth connectivity (25 GbE/50 GbE) and can seamlessly merge into the most complex enterprise network environments.

- 1 GbE/10 GbE/25 GbE/50 GbE connections
- Remote access for your whole team and more
- 80 TB–240 TB RAW storage capacity
- Expand up to 4x capacity with expansion unit add-ons

https://eshop.macsales.com/shop/jellyfish-nas-storage

PHABRIX
QxL

The World's Most Compact, Feature-Rich 25G IP ST 2110 Rasterizer

PHABRIX QxL is the world's most flexible and compact, feature-rich 25 GbE UHD rasterizer, conceived from the outset to meet the requirements of professional broadcast media IP workflows.

For real-time UHD IP workflows on 25G networks, the QxL rasterizer provides support for HD/3G 2110 and 2022-6 payloads on generic 10G/25G SFP28 interfaces. The QxL is fully 10G/25G IP-enabled as standard, with support for JT-NM TR 1001-1:2018, ST 2110-20 (video), 2110-30 (PCM) and 2110-31 (AES transport) audio, 2110-40 ANC media flows, all with 2022-7 Seamless IP Protection Switching (SIPS). Dual independent PTP engines on both media ports are provided for fully redundant media network operation with AMWA NMOS IS-04 discovery and IS-05 device connection management.

Its flexible architecture offers in-field license upgrades for UHD/4K, HDR, PCAP, Dolby E decode, and Extended UHD format support, as well as engineering grade data view and ANC packet inspection tools, allowing you to tailor your system to your specific needs while retaining full flexibility for the future. A factory fitted hardware option provides RTE real-time SDI eye and jitter analysis with the further option of a highly advanced SDI-STRESS toolset.

The QxL IP JT-NM TR 1001-1:2018 toolset provides support for DHCP on all IP ports, unicast DNS-SD, AMWA NMOS IS-04 Discovery and Registration, IS-05 Connection management, system resource and Network Topology Discovery using Link Layer Discovery protocol (LLDP).

The QxL supports IP media as standard, an SDI I/O option provides 12G/6G/3G/HD-SDI single, dual, and quad link support with optional Real Time Eye (RTE) 12G-SDI Eye and Jitter physical layer analysis.

A flexible, user-friendly GUI provides up to 16 simultaneous instrument windows. Configuration presets provide rapid recall of different audio and video instrument, traffic and workflow settings.

The user interface and stereo monitoring bus are available locally in both HDMI and SDI formats with eight channels of embedded audio. Audio is also available as 4x AES pairs. Remote operation is possible using either KVM, VNC over the management port, or as ST 2110-20/-30 flows over the 25GE media ports.

A suite of operator level IP flow health and PTP monitoring tools are provided along with warnings and alarms. For detailed analysis and debug, the new IP-Measure toolset provides advanced engineering-grade information including four 2022-7 Packet Interval Time (PIT) displays, media port network statistics, real-time measurements of Flow to PTP relationships and latency plus real-time measures of 2110-21 Cinst and Vrx for both Gapped and Linear senders.

The SDI options provide the advanced SDI connectivity and analysis features that PHABRIX is famous for including the unique SDI-STRESS toolset pioneered by the Qx, its smaller sibling.

Its latest features include a new Dolby E license offering a Dolby E 8 channel decoder, Dolby metadata display, Dolby E, D, D+, ED2 stream detection and two-channel downmix metering. Also available, the enhanced NMOS IS-04/-05 sender tools and a new 10G/25G full line rate PCAP capture tool with programable PCAP capture.

https://www.phabrix.com/products/qxl/

BEST IN MARKET 2021
tvtech
NOMINEE

Quantum Corp.
StorNext 7

Virtualized, Containerized, Ready to Deploy Anywhere With Creative Collaboration at Speed

The newest version of StorNext is a major architectural leap forward for the platform — with an all-new virtualized, containerized architecture making the leading shared storage platform easier to use, easier to manage and ready to deploy in minutes on converged systems like the Quantum H4000 or in the cloud.

StorNext is proud to be at the heart of award-winning creative workflows. It enables creative teams to collaborate within the same files at the highest possible speeds, and at the lowest possible latencies demanded by today's ultra-high resolution and VFX-rich workflows.

In the past this required several hardware systems working together to deliver an end-to-end shared storage and file orchestration environment, but StorNext 7 takes advantage of a containerized architecture that gathers the entire environment into a single platform. This makes deployment, and updating the underlying components, as simple as updating the individual containers and allows for the broadest range of deployment choices.

StorNext 7 is optimized for NVMe storage and delivers the highest possible streaming performance as shown in recent SPEC-SFS streaming video performance tests using only a few hardware components to create the environment. The software also introduced Storage Pools, which enables administrators to define pools of NVMe, SSD and HDD within their file system and create policies to move files and folders between those pools automatically.

StorNext 7 is dramatically easier to use and manage with an all-new user interface powered by REST API. This gives users new ways to query file system's metadata, automate data movement, configure and manage file systems, and build custom dashboards for the ultimate solution integration.

StorNext 7 is powering a new generation of shared storage at speed for customers who want to build highly reliable shared storage workflows for their content production operations. The StorNext 7 platform uniquely takes advantage of the fastest speeds and lowest latency connections within a customer's facility — and extends seamlessly to remote clients and producers over the network, and to the cloud.

StorNext 7 is available via a simplified, capacity-based licensing model that better aligns software services with customer value and eliminates the need for separate licenses.

https://www.quantum.com/en/products/file-system/stornext/

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WINNER

Quantum Corp.
StorNext 7 on Quantum H4000

Deploy a Complete High-Performance Shared Storage Environment in Minutes

StorNext 7 on the new Quantum H4000 – taking productivity to the edge: a StorNext environment in only 2U that gets you racked and running in minutes.
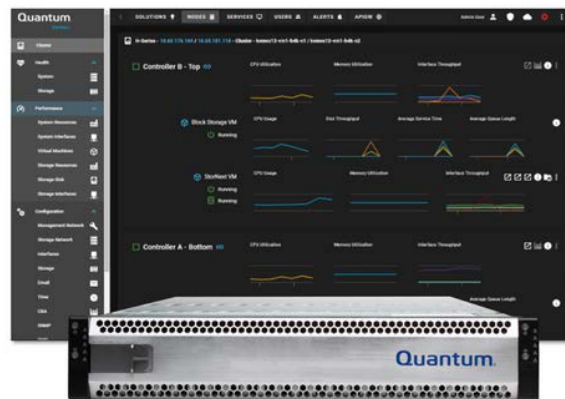
The Quantum H4000 Series is a line of high-performance storage appliances for hosting the latest StorNext 7 File System. The H4000 Series takes advantage of the latest StorNext 7 software-defined architecture, featuring an all-new virtualized, containerized architecture making the power of the leading shared storage platform easier to use and manage.

StorNext is proud to be at the heart of award-winning creative workflows. It enables creative teams to collaborate within the same files at the highest possible speeds, and at the lowest possible latencies demanded by today's ultra-high resolution and VFX-rich workflows.

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The new Quantum H4000 converged storage appliance has all the power and capability of StorNext and delivers a complete shared storage environment in only two rack units. Within minutes it can be racked and running in any location to deliver

performance and collaboration wherever needed in your organization.

The Quantum H4000 uses the fastest available architecture — PCIe 4 for 12 GB/s SAS hardware communication throughout — and high-clock, high core-count processors. It's highly flexible and available in two main configurations — one with 12 bays for spinning hard drives, SSD and SSD Flash, and one with 24 bays for 2.5-inch form factor storage like 10K SAS or MORE SSD or SSD Flash storage modules. It's available in two server form factors, 2U12 and 2U24, that supports storage up to 160 TB, or 307 TB of actual formatted storage, with three PCIe v4 slots. Additionally, it has two highly available controllers that will failover one to the other with fully redundant power and cooling.

StorNext 7 on the Quantum H4000 opens a world of new deployment possibilities for consolidating legacy shared storage systems into a single, end-to-end StorNext workflow. It also allows users to rapid add in new capabilities for a new project, office or department, without needing to extend existing infrastructures.

This new ease of deployment with such a compact system means users can shift collaboration closer to the action for live event production, on location for camera file ingest or to support on-set VFX and video wall workflows.

https://www.quantum.com/en/products/file-system/stornext/h4000-series/

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BEST IN MARKET 2021

tvtech

WINNER

Ross Video
Ultrix Acuity Hyper-Converged Production Platform

Combines Ultrix Routing/Processing With the Creative Capabilities of Acuity Switcher

Ultrix Acuity combines the routing and AV processing capabilities of Ultrix with the creative capabilities of Acuity production switcher.

Ultrix Acuity takes routing, audio mixing, multiviewers, trays of frame syncs and audio embedders/de-embedders — all solutions that have traditionally filled multiple equipment racks — and compresses them all down to a single 5RU chassis. Ultrix Acuity is therefore ideal for environments where size really matters, such as OB vans and mobile units. Add 2RU of rackmounted redundant power and the result is a complete system in 7RU that can outperform packages requiring multiple racks, complex cabling and control system integrations.

As with the current Ultrix solution, Ultrix Acuity is based on our Software Defined Production philosophy, ensuring that future-proofing is never a concern. The Software Defined Production Engine (SDPE) from Ross removes the need for costly "forklift" upgrades by providing base hardware that can grow via conven-

ient and relatively inexpensive software licenses. Ultrix Acuity's SDPE backbone will, therefore, reduce the uncertainty around meeting future creative or technical requirements.

The flexible architecture of Ultrix Acuity means that format and connectivity challenges simply disappear. Transition from HD to UHD with a simple software license. Mix SDI and IP sources in the same frame transparently. Use sophisticated tie-line management tools to incorporate the system into a larger distributed routing fabric. In short, as your needs and requirements change, so the unrivalled flexibility of Ultrix Acuity can easily keep pace. Ultrix Acuity also provides excellent return on investment — expensive power, cooling, maintenance and support costs are significantly lower. In addition, Ultrix Acuity can become one node of a larger distributed routing environment, reducing the incremental cost of adding I/O and further production switchers.

https://www.rossvideo.com/products-services/acquisition-production/production-switchers/ultrix-acuity-production-switcher/

Ross Video
TouchDrive Next-Generation Production Switcher Panel Series for Carbonite

Smartphone-Style Touch Technology for Carbonite Production Switchers

TouchDrive is a new family of control panels that has been designed with the technical director at heart and will completely reinvigorate the relationship between the TD and their production switcher. TouchDrive brings the same touch technology we all know and love from the world of smartphones to video production switchers — even gestures. Every display on the control panel is touch-enabled. All of them. This allows features to be dropped right under the fingertips of the TD. These high-resolution displays, based on IPS LCD technology rather than monochromatic OLEDs that fade over time, make source and device control faster and enable functions like bus map creation without having to dive into menus. If you see a readout you want to change, just touch it. It's incredibly intuitive!

The new curved-panel design puts every button within easy reach — we have kept and increased the number of tactile buttons that our customers love — and the custom color schemes enable TDs to configure and organize the panel look to their specific preference.

TouchDrive also includes a built-in DashBoard computer, enables integrated DashBoard control for various Ross products (e.g. XPression graphics, Ultrix routing, Tria replay and many more) and features convenient power/display/control connections for an additional external display. Available in five different sizes, from a single row 15 button panel to a three-row 25 button panel, TouchDrive replaces all current Carbonite Black models except for the compact Carbonite Black Solo.

https://www.rossvideo.com/products-services/acquisition-production/production-switchers/touchdrive-production-switcher/

SmallHD
22-Inch OLED 4K Production Monitor
Reference-Grade 4K OLED

Setting a new standard for color purists, this stunning 4K color reference monitor boasts many of the advanced features that OLED users demand. OLED 22 is the first lightweight 4K OLED production monitor equipped with a feature set that finally enables critical monitoring of 4K images, both on set and in the color suite.

OLED 22's hardware design is built around the Small4K Video Processing Architecture, which provides unparalleled input/output options with eight 12G-SDI and two HDMI 2.0 ports, all of which enable 4K signal processing. Housed in a rugged, unibody, milled-aluminum chassis that includes 36 individual 1/4–20-inch mounting points along the top and sides, the OLED 22 weighs in at a featherweight total of 9.3 pounds/4.2 kilograms. A removable handle and feet allow for convenient portability.

The OLED 22 display has virtually no image degradation at any viewing angle, providing a real-time image as vivid and pristine as a final output, whether on set or in post.

Monitor specs check off an impressive list of desired features: 21.6-inch/55cm screen size, >1,000,000:1 contrast ratio with an absolute black point, 10-bit color depth for nuanced color fidelity, 3840 x 2160 resolution, 350nit brightness level, and 100% P3/135% Rec 709 color gamuts that generate true-to-life color reproduction.

Power options include two hot-swappable power inputs: one 3-pin XLR and a slide-on Dual Battery Plate (Gold Mount and V-Mount options, sold separately), which can be attached via the built-in Smart Rail on the rear side of the monitor. Two 2-pin locking accessory outputs add power flexibility for additional devices.

For complete, untethered freedom, OLED 22 is Teradek Bolt 4K-compatible: an ideal combination for cable-free, zero-delay video monitoring in 4K 10-bit HDR.

OLED 22 offers SmallHD's industry-standard internal toolset: PageOS 4. With this software, users gain access to a diverse and customizable array of curated exposure tools and workflows for enhanced production functionality. Beyond a host of improvements for simplicity and speed, PageOS 4 supports a streamlined color-calibration experience with Color Pipe, an intuitive rendering tool that accurately converts log formats into SDR and HDR. PageOS 4 includes significant upgrades in user page presets, 4K HDR (PQ) waveforms, improved false color and dual/quad viewing options — as well as retaining the same dependable features known to users of previous PageOS-equipped monitors.

Highlights
• 21.6-inch/55cm OLED
• 3840x2160 resolution
• >1,000,000:1 contrast
• 350nits
• 10-bit color depth
• Weight: 9.35 pounds/ 4.2kilograms (with handle and feet)

Key Platform Highlights
• PageOS 4 software platform
• 4K HDR waveform and scopes
• Dual and Quad-view (feature coming soon)
• Color Pipe HDR color rendering
• Monitor Calibration Wizard
• Small4K Video Processing Architecture
• Inputs: 4x 12G-SDI , 1x HDMI 2.0
• Outputs: 4x 12G-SDI, 1x HDMI 2.0 (feature coming soon)
• Unibody Smart Chassis
• Dovetail Mounting Rail for battery and accessory mounting
• Interchangeable mounting points
• 2x 2-pin accessory power outputs
• Power: Hot-swappable dual inputs: 1x 3-pin XLR, 1x Dual-GM/ VM Battery Plate (sold separately)

https://smallhd.com/products/oled22

BEST IN MARKET 2021
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WINNER

Sony Electronics
HDC-F5500

Super 35mm System Camera With 4K CMOS Global Shutter Image Sensor

Sony's new HDC-F5500 system camera boasts a highly sensitive Super 35mm, 4K CMOS global shutter image sensor that enables lush images with several available color gamuts, as well the use of PL mount 35mm lenses. The addition of a Super 35mm system camera builds on Sony's industry-standard HDC lineup and serves as a powerful tool for those in need of creative expression with cinematic bokeh — in a system camera form factor and workflow. The global shutter imager prevents rolling shutter distortion and flash band. The HDC-F5500 features a high frame rate capability of 120fps, making it ideal for sports and live entertainment production. The camera's high sensitivity and low noise also enhance wide aperture 35mm lenses for capturing action in any lighting conditions.

The HDC-F5500 system camera responds to the market's desire to integrate the "cinematic look" into sports and entertainment productions to heighten emotion and enable more connected storytelling. It combines Sony's expertise with 35mm cinema and studio cameras, offering a new Super 35mm system camera that matches perfectly and easily works alongside additional Sony products and solutions.

The HDC-F5500 features a motorized eight-step ND filter adopted in Sony's VENICE, which can be controlled locally or remotely. It also allows for the precise selection of focus depth as well as controlled capture of fast-moving subjects, even in bright lighting. Another highlight is the system camera's wide color gamut. Support for BT.2020, S-Gamut3/S-Gamut3.cine and HLG enhance creativity and reality and match seamlessly with the color science driving Sony's camera lineup.

https://pro.sony/ue_US/products/4k-and-hd-camera-systems/super-35mm-4k-cmos-camera-system

SSIMWAVE Inc
SSIMPLUS Live Monitor

Live Video Quality Assurance That Correlates With Human Vision Across Your Network

Fast identification and automated resolution of issues across a content distribution platform are essential to subscriber satisfaction, retention and monetization. A complete monitoring platform that accurately assesses viewer experience, from content creation to consumption, and not just QoS/QoE using a single pane of glass provides the greatest ability to solve issues quickly and minimize subscriber churn.

SSIMPLUS Live Monitor is a unified end-to-end platform that monitors Viewer Experience at scale using automation. Using the only quality metric that is correlated to human vision, it can trace your video quality throughout distribution while improving mean time to resolution (MTTR) by 80%.

The Live Monitor uses computationally efficient software-based probes to monitor content at all points in the video distribution and streaming pipeline, including:
• Source validation for Linear Channels and Events
• Encoding performance and packaging validation
• Content delivery and Playback monitoring

Live Monitor easily monitors each service across multiple monitoring points in a correlated fashion. For example, a three-point deployment may constitute 1) Source; 2) Encoder output; and 3) STB output. Live Monitor shows where, and by how much, viewer experience is negatively impacted across the monitoring points in the processing and delivery workflow. This set of capabilities is enabled using the two-time Emmy Award-winning SSIMPLUS Viewer Score, the most accurate metric for perceptual quality measurement. SSIMPLUS software probes mimic the human visual system and take the most accurate measurements of how subscribers perceive video at each stage of a delivery chain.

Live Monitor optimizes operations and uses an AI-based alerting approach to increase operations teams' engagement resulting in a significant reduction of user-impacting events. This allows service providers such as Rogers Communications not only to manage and track SLA with their partners but also to optimize and improve subscriber satisfaction.

To drive deeper engagement with their customers and to win new subscribers, Rogers needed to provide a high-quality viewing experience in a highly competitive marketplace. With SSIMPLUS Live Monitor, Rogers was able to successfully launch IPTV services in the market with greater control and insight into their subscribers' viewing experiences. This includes improved video quality, millisecond accurate end-to-end latency tracking, and the capability to catch and identify issues impacting the viewing experience before customer complaints. This improved MTTR by 80%, resulting in a better customer experience.

SSIMPLUS Live Monitor enables streaming providers to accurately assess quality drop-offs from the point they ingest video to the point at which they hand it off to partners or subscribers. On the Viewer Experience scale of 1 to 100, typically sources perform at low 80s, encoded outputs perform at low 70s and playback experience at mid-60s. The best-performing streaming workflows deliver playback experience in the mid-80s, so there is a huge gap between typical and best-performing streaming services. With the use of the automation solution provided by SSIMWAVE, users deliver target experiences while avoiding high operational costs and enjoy the peace of mind that comes from the only end-to-end solution that works across broadcast, OTT streaming and cable workflows.

https://www.ssimwave.com/products/ssimplus-livemonitor/

Telos Alliance
Telos Infinity Virtual Intercom Platform
First, We Broke the Matrix. Now, We're Putting Intercom in the Cloud.

Telos Infinity Virtual Intercom Platform (VIP) is the first fully featured cloud-based intercom system. It delivers sophisticated comms virtually, making cloud-based media production workflows available on any device — smartphone, laptop, desktop or tablet. Users can even use third-party control devices, like Elgato's Stream Deck, to control Telos Infinity VIP. Now you can harness Telos Infinity IP Intercom's award-winning performance, scalability, ease of integration and operational/cost efficiencies anywhere — At Home, On-Prem, Site-to-Site or in the Cloud.

Telos Infinity VIP
• **Cost-Efficient**: Less Maintenance, Infrastructure, Space Required
• **Scaleable**: Pay for Only What You Need
• **Ease of Use**: Virtual Panels on Familiar Devices (Smartphone, Computer, Tablet)
• **Workflow Flexibility**: At Home, On-Prem, Site-to-Site, In the Cloud
• Reliable, Proven Cloud Workflows
• Flexible Deployment Options
• TelosCare PLUS Service Option for Premium Service & Support

Deployment Options
Meeting users where they are on the path toward virtualization, Telos Alliance offers several deployment options for VIP, which scales to suit users' varying requirements, from a few remote smartphone VIP instances to an enterprise solution requiring hundreds of instances.

• **On-Prem**: Use Telos Infinity VIP hardware appliance or your own server for on-prem installations.
• **Integrated**: For both On-Prem or Cloud versions, Telos Infinity VIP can be integrated with Telos Infinity hardware comms, or any third-party intercom or audio subsystem using AES67 or SMPTE 2110-30 connectivity.
• **Cloud Server**: Software for supported Cloud platform installations. A complete communications infrastructure in the Cloud with connectivity options for integration with third-party Cloud-based and On-Prem audio subsystems.
• **Software as a Service (SaaS)**: Various third-party Telos Alliance partners will offer a Telos Infinity VIP SaaS option, allowing users to lease it in a virtual environment.

Contact us today to design your Telos Infinity VIP Cloud-Based Intercom System: Inquiry@TelosAlliance.com

https://www.telosalliance.com/ip-intercom-communications/telos-infinity/VIP-virtual-intercom-platform

Teradek LLC
Spark 4K

Wireless Video Transmission Solution for Pro A/V

Here's what sets Spark 4K apart from others in class:
• The only pro A/V video transport solution to combine wireless reliability, 4K HDR quality, zero-delay transmission, that can transmit long range up to 500-feet line of sight.
• Reliable because it uses the 5 GHz frequency, which is less susceptible to interference. It is the only A/V wireless video solution to use the Academy Award-winning technology that enables sending high-quality video with low latency over the 5 GHz frequency
• A visually lossless protocol
• Video feed is transmissible at up to a 4Kp30 resolution with 10-bit 4:2:2 color
• Zero-delay transmission (less than 1 millisecond) with long range and versatility

With the massive spike in streaming events and the subsequent demand for in-person events post-COVID, the expectation for engaging, high-quality content has never been higher. Spark 4K not only enables production crews to elevate the quality of their events, but it reduces setup and breakdown times, and improves the overall dynamic of the viewer's experience.

Spark 4K represents Teradek's response to the growing demand for practical and high-quality video transport solutions; a demand that has been exponentially driven by the COVID-19 pandemic as schools, churches and businesses turned to live streaming events to stay engaged.

The first of its kind, Spark 4K offers 4K HDR video transmission for up to 500 feet line of sight with no perceivable delay over the 5 GHz band.

As light as a baseball and as small as a cassette tape, Spark 4K's transmitter and receiver units complement most A/V gear and workflows. Its versatile design for tabletop or camera mounting makes it a compact and robust multifunctional video solution. Dual-powering options and internal battery life of more than two hours provide mobility without compromising on signal integrity. Its multicasting abilities send multiple video feeds to receivers that are HDMI-compatible with computers/laptops, projectors, switchers, monitors, TV screens and LED video walls.

http://tdek.co/spark4k-pr

Triveni Digital
StreamScope Enterprise

A Powerful, Enterprise Platform for Monitoring ATSC 1.0/ATSC 3.0 Service Quality Assurance

NextGen TV broadcast technology is complex. ATSC 3.0 delivery combines new data-oriented services with traditional linear television programs and the addition of interactivity and broadcaster applications. Broadcasters will need to operate both ATSC 1.0 and ATSC 3.0 simultaneously for the foreseeable future, and enterprise wide visibility into service assurance issues can optimize error resolution.

Triveni Digital's newly enhanced StreamScope Enterprise is a centralized software solution for maintaining video quality of service (QoS) and regulatory compliance throughout DTV enterprises. With StreamScope Enterprise, users can quickly detect, isolate and resolve issues. Furthermore, the enterprise-based solution makes it easy for users to share expertise and applications, as needed. By helping broadcasters and MSOs prevent problems that degrade service quality, StreamScope Enterprise reduces system downtime and operational costs.

StreamScope Enterprise offers the following unique new features and benefits:

• Comprehensive enterprise monitoring: Utilizing StreamScope Enterprise, users can now connect to an expanding range of enterprise platforms, including Triveni Digital's ATSC 3.0 Broadcast Gateway scheduler, GuideBuilder XM ATSC 3.0 Transport Encoder, StreamScope XM for ATSC 3.0 broadcast streams and StreamScope MT-60 Analyzer for ATSC 1.0 input analysis. Being

able to monitor and manage the entire ATSC 1.0 and ATSC 3.0 equipment fleet with a centralized solution versus using multiple management systems is cost-effective and speeds up the resolution of QoS issues.

• Simple software upgrades and configuration: New, centralized fleet management functionalities on StreamScope Enterprise simplify software upgrades and system configuration across the enterprise. Users no longer need to separately update and configure each system across the enterprise, saving significant time and resources.

• Guaranteed backup and restoration: StreamScope Enterprise ensures seamless system backup and restoration in the event of an outage.

With StreamScope Enterprise, broadcasters and MSOs can manage a diverse range of quality assurance elements, view overall system status and launch problem-solving sessions for specific faults detected in ATSC 1.0 and ATSC 3.0 environments. The centralized video quality management solution allows users to view the status of ATSC 1.0 and ATSC 3.0 services in real time from the same dashboard. Custom dashboards are also available to streamline the transition to NextGen TV.

In the broadcast environment, there is an increasing trend toward multiple stations sharing facilities as well as more centralized operations with smaller technical staffs to support them. Broadcasters are operating in an increasingly complex, multi-vendor environment that necessitates tools for quick problem identification and isolation across multiple air chain elements.

Triveni Digital's StreamScope Enterprise deserves to win this award because it enables users to efficiently manage a variety of quality assurance elements in ATSC 1.0 and ATSC 3.0 environments, with powerful analysis, robust monitoring, user-friendly dashboards and seamless system upgrades and configuration. StreamScope Enterprise is empowering broadcasters and MSOs to deliver exceptional quality television services, reduce capex and opex, and streamline their operations during the transition to NextGen TV.

http://www.trivenidigital.com/products/streamscope-enterprise-video-quality-management-system.php

TVU Networks
TVU Channel

The Easy-to-Operate, Infrastructure-Free 24/7 Channel Solution
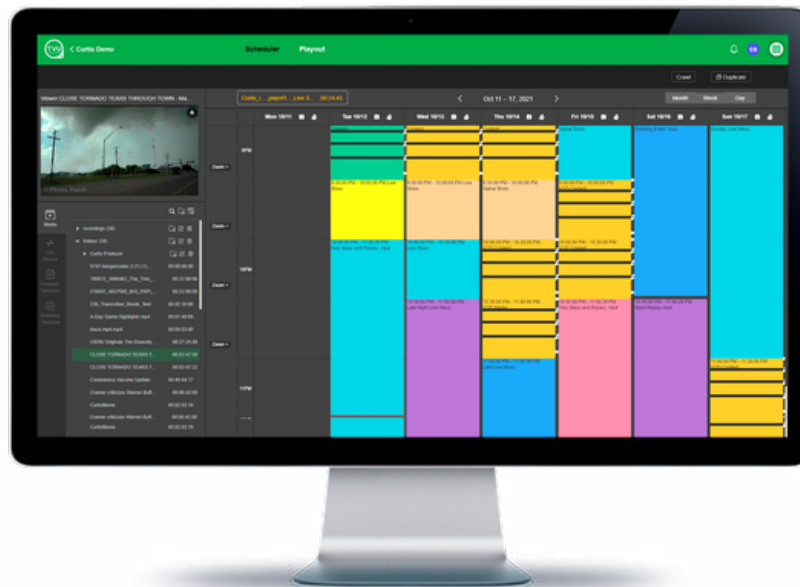
TVU Channel is a fully cloud-based solution that allows broadcasters to schedule live and VOD programming with full SCTE ad insertion support. It also allows broadcasters to set up multiple encoders for delivery to CDNs, OVPs or edge devices for traditional linear workflows from a simple web browser interface. TVU Channel does not require infrastructure, can operate 24/7 and can be used for traditional linear channel television playout, an OTT channel, unique pop-up channel or direct send to social media.

Since TVU Channel is completely cloud-based, it can be quickly deployed without the requirement of traditional infrastructure and can be accessed from anywhere from a smart device or laptop and internet connection. It features pay-as-you-go or monthly pricing, avoiding unnecessary expenditures. There's also no complicated licensing or configuration in order to start using it.

TVU Channel provides extensive support for ad insertion including scheduled breaks, manual breaks and pass-through of SCTE decoration. It provides direct support from multiple OVP, CDN and social media partners. TVU Channel also includes as-run logs for verification and auditing purposes.

It was designed for fast setup without the need for extensive training. The building and managing of channels is as simple as managing an ordinary website calendar.

It's fully compatible with commercial scheduling programs such as BFX, Wide Orbit and others. With TVU Channel, it's easy to transition content and metadata from major PAM, MAM and editing tools into playlists.

TVU Channel provides additional robust professional features including: template program presets, program interrupt for instant changes, automated record function, scheduled or manual graphic overlay insertions, clip editing, variable program storage and others.

TVU Channel works with TVU's family of solutions and other edge devices for the ingest of live content via SDI/SMPTE 2110/NDI as well as output for traditional linear channel use cases.

https://www.tvunetworks.com

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NOMINEE

Vislink
Quantum IP-Native Wireless Camera Receiver
Delivering Remote Production Efficiencies for Immersive Wireless Camera Feeds

As a receiver for wireless camera feeds, Vislink's IP-native Quantum receiver allows ingest of free-roaming wireless camera feeds into live event video productions. Their ability to provide a camera feed from the heart of the action with point-of-view shots, free from the hinderances of cables allows the director to create a sense of viewer involvement in the unfolding action of the televised event like no other.

Content rights holders are discovering that wireless camera images that the Quantum receiver delivers are a powerful tool in extending viewer engagement through social media channels. Research shows (Conviva "State of Streaming" report) that just a 30% increase in video media in social postings increases fan engagement by over 100%. The up-close content from the wireless camera workflow carries the greatest impact to highlight key moments of action and deliver personalized stories about individuals to lock-in a fan base.

Vislink's Quantum receiver moves wireless camera workflows forward dramatically by putting IP connectivity at its heart. As an IP-native device, Vislink's Quantum receiver enables live event producers to implement more efficient remote production techniques on their wireless camera feeds.

By enabling content producers to move to remote production, they can gain the benefits of increased operational efficiencies. Production staff can cover multiple events over the course of the day; there are reduced on-site costs; and operations can be more environmentally sustainable. By contributing video feeds directly to the production center, Quantum users can remove the need to purchase additional contribution video equipment — typically delivering a 30% reduction in capex costs on a live wireless camera event.

Perhaps the greatest financial benefit comes from the Quantum receiver having the ability to move video data over the unmanaged internet through SRT technology. By utilizing the lower data carriage opex costs and widespread availability of internet access points, content producers can seek to grow their business and monetize new events that were not previously financially viable.

Wireless camera receivers have often used multiple RF inputs with diversity reception techniques to provide robust data recovery from the transmission. Vislink's Quantum wireless camera receiver delivers a step-change in performance to support 16x RF inputs. With this improved capability, not only can production companies have greater certainty of reception robustness, they can now deploy wireless camera feeds over wide area events with simpler RF architectures benefiting from faster and lower cost rigging for the event.

As a combined RF demodulator and video decoder, Vislink's Quantum receiver implements latest, low latency HEVC video decoding. Not only does this technology enable 4K and HDR workflows for tent-pole events but it also delivers significant benefits for HD workflows too. By using more efficient HEVC video compression, production teams can reduce their HD transmission video bit rates (while maintaining video quality) and reconfigure the RF parameters to a more robust modulation (without increasing occupied bandwidth). With these changes the Quantum's HEVC capability can enable a doubling of RF transmission range for the wireless camera giving the event director greater creative freedom and engage viewers more.

https://www.vislink.com/product/quantum-receiver/

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NOMINEE

Vizrt Group
Vizrt Live Production Solution
NDI-Native Production Control Cloud

Vizrt Live Production in the cloud is the fast and reliable cloud-based production solution for everything from traditional programming to live event streaming. Vizrt Live Production in the cloud combines Viz Vectar Plus, Viz Engine, Viz Trio and Viz Mosart into a single, fast, cloud-deployable solution, Vizrt brings best of breed performance in switching, real-time graphics, video and production automation to where customers need them — in the cloud, remotely, locally or any hybrid.

Increasing flexibility while reducing risk, broadcasters can utilize Vizrt Live Production in the cloud to spin up and down capacity according to their needs and pace — and can rethink their approach to the traditional control room.

Vizrt Live Production ensures that broadcasters and other media organizations always have access to the right resources to meet their production needs. Fast deployment with Vizrt's cloud-competent Customer Success team to best-of-breed cloud data centers like AWS, Azure and Google allows customers to set up and produce in a short amount of time. Combined with flexible annual or month-to-month plans, this means customers can deploy the tools they need where and when they need them — flexibility that extends into the realities of production as well.

With Vizrt Live Production, sources can be brought in from all around the world via NDI. Broadcasters are not tied to a physical location and can now use the best team for every production. The producer monitors the production from a hotel in New York, the technical director operates production automation or switcher from an office in Atlanta, while the graphics artist delivers stunning Vizrt graphics from their living room in Los Angeles.

Vizrt Live Production is the first production system in the world to be NDI-native, fully exploiting all the latest NDI capabilities, including connectivity across both WAN and LAN networks, running onsite and in the cloud on the same sync, audio-over-IP integration with digital audio systems, and the ability to bring in any camera with a browser as a source, from anywhere in the world.

From agile productions and OB in the cloud, to disaster recovery and distributed productions, Vizrt Live Production in the cloud allows anyone to work with sources and crews located anywhere in the world — on the same system, the same production and in perfect sync.

Today's storytellers have used NDI and Vizrt products to produce hundreds of thousands of hours of premium quality broadcast content, reaching and delighting audiences despite a challenging production environment. Vizrt Live Production evolves these battle-tested workflows into a seamless, deployment-agnostic solution designed to help create more stories, better told.

https://www.vizrt.com/flexible-access/production-control/live-production

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Wheatstone Corp.
Tekton 32

Super Compact, Adaptable TV Console Ideal for Both Automated and Hands-On Production

Tekton 32 is the first IP audio console made specifically to adapt to today's television production environments, from multi-use newsrooms and small remote vans to fast-paced sports venues and resource-intensive production houses.

Tekton 32 packs a ton of flexibility plus 32 input channels (layered on 16 physical faders) in a 39 x 17 x 3 $^{1/8}$-inch frame. All 32 channels can integrate seamlessly with major production automation systems and the surface supports 5.1 surround bussing and processing.

Unique to this IP audio console are its programmable soft knobs and controls. Customize the surface once and forget it or create entirely separate work surfaces for each show or talent team by programming any number of soft controls either on-the-spot or stored as presets.

All routing and control for the Tekton 32 is handled by WheatNet IP audio network, an AES67-compliant and SMPTE 2110-supported IP audio network. If it's on the network, it's routable, programmable and accessible — often automatically. For example, when a field reporter's mic turns on, the correct mix-minus can be automatically sent back to the field reporter's headset for IFB.

This console also has the best of both worlds, with a tactile surface on the one hand and interface to a standard touch-screen on the other. Move faders and cue events on the surface. Pinch and drag EQ settings from the touchscreen.

https://www.wheatstone.com/television-products1/tv-audio-consoles/tekton-32

Zero Density
RealityHub

One HMTL5-Based Hub to Control, Customize, Automate and Integrate Broadcast Graphics

RealityHub brings ecosystem connectivity, automation and workflow integration from a single hub, not just for 2D broadcast graphics but also virtual studio and AR graphics. RealityHub provides a unified, HTML5 dynamic user interface for entire Reality and Unreal ecosystem.

Users can configure and customize their system and workflow with ease. Reality Hub redefines the control applications by upgrading them to a web-based technology where users can access from their tablet or phone. Its drag & drop user interface design capability requires no coding and users can define rules, organize, and customize their data to tightly match the design.

RealityHub users have a powerful in-browser scripting interface for rapid development of data transformations, logics, unit conversions and much more scripting options, leveraging the popular and well-known programming language, Javascript. Scripting helps users skip management of complex application development projects for most of their custom workflow needs.

RealityHub is a fully modular system where the core is very thin and with an open-source API. For advanced custom functionality, RealityHub server and client modules can be developed using the API, taking full advantage of RealityHub core and its existing modules. Status updates, metrics and data changes can also be displayed instantly updated in real time on the front end of the custom modules. The modules communicate and fully integrate with native modules and other third-party modules through RealityHub core.

RealityHub provides a comprehensive REST API for developers to control playout flow, data feeds and actions from their custom applications.

RealityHub has a holistic and brand-new approach to broadcast graphics. Besides AR and virtual studio graphics where Unreal is rapidly growing, RealityHub allows broadcasters to utilize Unreal Engine for other broadcast graphics such as channel branding, lower-third graphics, bumpers, full-screen infographics, sport/news graphics, tickers etc. — all in real time. RealityHub utilizes Unreal UMG module to replace and upgrade all broadcast graphics systems.

RealityHub also creates ideal workflows for remote production with multiple live video preview capability. Anytime on any point of the production pipeline users can choose and monitor high-quality, low-latency video. Users can also monitor individual color channels to fine-tune their compositing and keying pipeline.

RealityHub manages all types of data with ease. It creates bridges between any data and any engine whether to be broadcast engines such as UE or Reality Engine, mechanic engines, robotic cameras or studio lights. It also integrates with any external data sources such as weather and finance, in addition to providing newsroom integration with MOS or any proprietary protocol. Last, but not least, integration with studio automation systems allows users to control all daily operations and live/recorded events from a single hub.

As RealityHub uses the latest technologies in its infrastructure, it is flexible and open to new features for a few lifetimes. Ultimate control never required less control.

https://www.zerodensity.tv/products/reality-hub/

Zixi
Software-Defined Video Platform (SDVP)
Zixi Is Streaming the World's Most Valuable Content Over IP

Zixi is the creator of the Software-Defined Video Platform, the only platform enabling dependable, live broadcast-quality video over any IP network, any protocol, any cloud and any edge device. Zixi's Software-Defined Video Platform enables media and entertainment companies to migrate their workflow control points from on-premise infrastructures with local operational and engineering resources to remotely managed workflows that leverage existing infrastructures and extend those capabilities to the cloud (public and private) while allowing the agility, flexibility, scale and security with the Quality of Service that professional broadcast requires.

Zixi is a one-stop-shop provider of the most advanced and lowest-latency streaming protocol, detailed analytics/logistics, remote monitoring and management, AI and machine-learning tools. Their SDVP helps organizations of all sizes build the most efficient, quality and cost-effective infrastructure with a variety of resources, including the help of their knowledgeable solutions engineers.

The Zixi platform is the only platform making it easy and economical for media organizations to source, manage, localize and distribute live events and 24/7 live linear channels in broadcast QoS, securely and at scale, using any form of IP network or hybrid environment.

Zixi ensures its customers and partners receive broadcast-quality live video contribution, transport, and delivery over IP by bringing hardware, software and cloud solutions under one platform. The Zixi Software-Defined Video Platform consists of a tight integration of four crucial elements. First are the protocols, including the time-tested Zixi protocol, which has been in mission-critical use for over a decade, as well as newer protocols such as RIST and SRT and common industry protocols such as RTP, RTMP, HLS and DASH. In total Zixi supports 17 different protocols and containers — the only software platform designed for live video to do so. Second is the Zixi Video Solutions Stack, which is the software that manages all the protocols and collects analytics and layers intelligence on top of the protocols such as bonding and hitless failover.

Third is the ZEN Master control plane that allows users to intelligently provision, deploy, manage and monitor thousands of content channels across the Zixi Enabled Network. The fourth element is the Zixi Intelligent Data Platform, which brings together cutting-edge data analytics tools with prescriptive solutions to help stay ahead of issues before they become serious complications. The IDP provides users dashboard views of their infrastructure and stays atop the health of crucial components within a given system, learning and improving the experience continuously for both the back-of-house developers/engineers as well as end-users.

For over 10+ years the Zixi Enabled Network, Zixi's worldwide network of interconnected devices and users, has grown to over 300 OEM and Service Provider Partners, adding 100 partners in the past year alone that span every portion of the end-to-end broadcast workflow. Partners include AWS, Blackbird, Evertz, Microsoft, IBM, Vimond and MediaKind. Zixi serves well over 700 customers, with 20,000+ channel services delivered daily to 100,000+ endpoints globally. Some of Zixi's recent customers include Warner Media, Vimeo, FuboTV, Univision, Music Choice and the U.S. Agency for Global Media.

https://zixi.com/

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Zixi
ZEN Master

Video Management Software for Complete Visibility Across the Media Supply Chain

With Zixi's ZEN Master cloud-based control plane, users can cost-effectively manage and monitor complex deployments at scale and configure and orchestrate live broadcast channels across protocols and the Zixi Enabled Network of integrated devices and applications.

ZEN Master allows for control of edge, network and cloud devices with full telemetry and visualization of network streams by offering essential tools like workflow visualization, alerting, history, automation, scheduling, reporting and root cause analysis across complex media supply chains.

ZEN Master enables secure remote workflow management with visual tools to configure, orchestrate, manage and monitor live broadcast channels at scale across industry protocols and an entire supply chain of integrated services and devices:
• Visibility across any protocol, IP network, cloud, service provider and edge device
• Remote workflow management with telemetry across metrics at an atomic level
• Perform Root Cause Analysis across the media supply chain
• Abstract complexity to reduce engineering requirements and leverage operational resources
• Democratized access with geographic agility

ZEN Master is the live video orchestration and telemetry control plane that enables Zixi users to manage large-scale configuration and monitoring of the Zixi Enabled Network, Zixi's live-streaming platform, devices and appliances. With ZEN Master video management software, media organizations can extend their reach, increase production speed and dramatically reduce operational costs.

Centralized Stream Management

ZEN Master makes it easy to manage inputs and outputs for hundreds of live video and Zixi streams at scale. With just a few clicks, and with automatic configuration details for network resources and distribution targets, this video management software allows users to create new live channels and spin up required streams on the fly. Zixi simplifies management of broadcast streams across industry protocols whether signal paths are point-to-point, one-to-many, multicloud or multi-CDN. ZEN Master allows for:
• Central, permission-based access to the entire Zixi Enabled Network
• Operational and administrative views
• Global monitoring of all live-streaming activity across connected Zixi nodes
• Orchestration of inputs and outputs across the supply chain
• Easy connection to Amazon Web Services Auto-Scaling Clusters for immediate, automatic redundant scaling
• Rapid troubleshooting with immediate access to logs, performance graphs and direct access to all Zixi nodes
• System Health

With the ZEN Master control plane users can easily manage system health by quickly verifying that all sources are connected and providing content. A single user interface enables users to manage an entire operation or to drill down to monitor networks at the stream and device level. Users can watch feeds in real time from Zixi Broadcaster or a CDN egress point, and automatic alerts can be set for specific monitoring thresholds.

https://zixi.com/video-streaming-solutions/zen-master/

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BEST IN MARKET 2021

TVBEUROPE

NOMINEE

Amazon Web Services
AWS Elemental Link UHD
Simple, Cost-Effective and Secure UHD Live Video Encoding

AWS Elemental Link UHD is an intuitive encoding device that connects a live video source, like a camera or video production equipment on the ground, to AWS Elemental MediaLive in the cloud, enabling broadcast-grade live video streaming of ultra-high definition (UHD) video with up to 10-bit color depth and high dynamic range (HDR) support. Launched in June 2021, the portable device improves the quality and reliability of UHD live video streams for production professionals in the field while reducing the cost and complexity of equipment needed to move live video signals from on-premises technology into the cloud. Link UHD ships fully configured to a user's AWS account, offering an easy, cost-efficient way to transfer UHD video securely and reliably to MediaLive for delivery to viewers on a range of device types. Both high HDR 10 and HLG video outputs are supported. Using the device is as simple as connecting it to power, Ethernet, and a video source. It can be controlled remotely and monitored from anywhere with an internet connection using the AWS Management Console.

Available for $4,995 USD per device (excluding customs clearance, duty, tax and shipping), AWS Elemental Link UHD provides a more cost-efficient approach to cloud video contribution compared to traditional methods. The compact device requires minimal power and cooling requirements and is easy to own and operate. With silent, fanless operation, the device is also well-suited for low-noise environments like sporting and event venues, studios or conference rooms. It also maximizes the quality of the UHD video sent to the cloud, adapting automatically to changes in network conditions. To deliver the best possible video, Link UHD devices encode using the HEVC (High Efficiency Video Coding) codec, which is up to 50 percent more efficient than the AVC (Advanced Video Coding) AVC codec.

For high resiliency video transport, AWS Elemental Link UHD uses the Zixi delivery protocol, which combines content-aware and network-adaptive forward error correction with error recovery, while minimizing latency. Encoded video is encrypted using AES-128 and rotating keys from AWS Key Management Service (AWS KMS). The device also uses a network-aware adaptive bitrate algorithm, adjusting in real time to changes in network conditions. This closed-loop feedback system minimizes packet loss to keep the video signal stable, even if network issues occur.

Link UHD is a valuable tool in live production and streaming environments, especially as companies try to minimize the amount of staff located on-site during a global pandemic. Even a non-technical person can plug in a Link UHD device on-site and, after that, control the remainder of the stream configuration from the cloud. For the many reasons outlined above, AWS Elemental Link UHD is a prime candidate for a best in market award this year.

https://aws.amazon.com/medialive/features/link/

Amazon Web Services
AWS Cloud Digital Interface (AWS CDI)
Reliable, Uncompressed Live Video Transport in the Cloud

AWS Cloud Digital Interface (AWS CDI) is an advanced networking technology for transport of high-quality uncompressed video up to 4K resolution at 60 frames per second on AWS, with high reliability and low network latency. Much like Serial Digital Interface (SDI) technology helped to advance digital video through connectivity, AWS CDI paves the way to more robust cloud-based live video workflows by forging connections between cloud-based technologies including AWS Media Services, AWS Partners and Independent Software Vendors (ISVs).

Highly interoperable, AWS CDI combines the scalability and agility of AWS with the raw performance of on-premises standards. The AWS CDI software development kit (SDK), an open source project released under the two-clause BSD license, provides the schema necessary to ensure reliable communications between cloud-based broadcast and live production applications.

With AWS CDI, broadcasters and live production professionals can tap into the benefits of the cloud to work in a more flexible, scalable manner when working with uncompressed video. AWS CDI links cloud-based applications from different vendors with incredibly high-data transfer speeds and latency as low as 8 milliseconds, or less than one frame of video for 60 frames per second content. The net result is higher-quality video in the cloud with no generational loss due to encode/decode processing and the ability to build uncompressed live video workflows in the cloud that previously could only be done on the ground.

JPEG-XS compression makes high-bandwidth cloud ingest possible. JPEG XS is a visually lossless, low-complexity, and low-latency video codec that lends itself to hybrid video workflows, reducing the throughput strain as customers shift to playout in the cloud. Newly launched AWS Elemental Live with JPEG XS encoding provides the bridge needed to move uncompressed video to and from the cloud, working alongside AWS Elemental MediaConnect, a transport service for live video.

As the entire production process moves into the cloud, workflows can link with converged (OTT and primary screen) distribution headends, unifying production, broadcast and content delivery. Applications that integrate the AWS CDI SDK move traditionally complex parts of broadcast workflows into the cloud, enabling ISVs and broadcasters to build a production environment that can grow and shrink to make each live production more commercially viable, setting the stage to democratize access to broadcast TV. For consumers, this means more varied and curated content experiences, and for the streaming production community easier access to professional-grade tools to elevate content quality without breaking the bank.

Examples of technology partners harnessing AWS CDI in production include Evertz and Grabyo. Evertz leverages the AWS CDI SDK to take feeds directly from Evertz Overture compositing engine into AWS Elemental MediaLive, without additional encoding required. The company also uses AWS CDI to support FOX with live production switching between multiple sources. For Grabyo, AWS CDI allows it to move data between multiple Amazon EC2 instances, so they can add sophistication and horizontal scaling capability to their live production application. AWS CDI is a game-changing technology for the industry paving the way for a more innovative future.

https://aws.amazon.com/media-services/resources/cdi/

Blackbird
Blackbird

The Cloud Native Video-Editing and Publishing Platform: Ultra-Fast, Efficient, Resilient

Blackbird is the world's fastest, most powerful professional cloud video-editing and publishing platform. Enabling remote editing, Blackbird provides rapid access to video content for the easy creation of clips, highlights and longer-form content to multiple devices and platforms.

A fully featured editor accessed through any browser, easy to learn and needing only limited bandwidth to use, Blackbird powers significant productivity and efficiency benefits for any enterprise organization working with video.

An ultra-green technology, Blackbird supports the carbon reduction goals of the media production industry.

https://www.blackbird.video/solution/

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BEST IN **MARKET** 2021

TVB EUROPE

WINNER

Boland Monitors
X4K31HDR5-OLED Broadcast Monitor

This Professional 4K-HDR Display Offers Unmatched

Black Levels and Incredible Contrast Ratios

The largest of Boland's new X-4K OLED monitor series, this 31-inch model features a true 10-bit panel and processor, with a dynamic 1,000,000:1 contrast ratio that guarantees ultra-deep black levels. 4K signal is delivered via 12G and 3G SDI (single or quad link), HDMI 2.0 and Sfp (2110) inputs. The next-generation X4K31HDR5-OLED offers numerous scopes and audio meters, 3D LUTs, time code, markers and multiple aspect functionality. All firmware updates are completed in-field using USB, and all X-4K Series models include VESA mount holes on the rear in addition to a desktop stand. The X-4K OLED monitor series is also available in 21- and 26-inch sizes.

http://www.bolandcom.com/product/x4k31hdr5-oled/

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Clear-Com
Station-IC Virtual Desktop Client
Virtual Client Facilitates Scalable Intercom User Station on User's Windows/MacOS Desktop
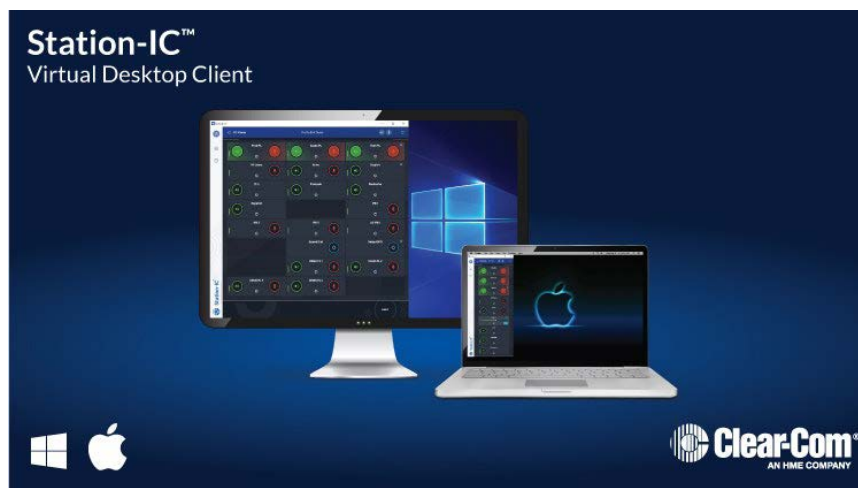
Bringing Clear-Com's award-winning Agent-IC Mobile Intercom App's intuitive UI to the desktop, the Station-IC Virtual Desktop Client allows LQ Series of IP interface users to assign up to 24 channels with individual Talk and Listen keys and level control as well as optional Call signal, LQ Network Control Events and Remote Mic Kill keys for the individual channel.

Clear-Com's new Station-IC Virtual Client, a Mac- and Windows-based software application, is now available for LQ devices as well as Clear-Com's Eclipse Digital intercom Matrix. Full integration with the wide variety of LQ interfaces offers channel-based routing, which allows Station-IC to connect to Clear-Com's Encore Partyline systems, TW Partyline, HelixNet, Two-Way radios, SIP telephone lines, GPIO signaling and to any other intercom, or audio, system via four-wire.

Stations-IC's Flexible application window can be scaled to the Desktop while the Compact Mode allows users to access their most important keys for the minimum space. Incoming Call signals are shown on a dedicated Reply key and in the Notifications of the Mac or Windows Operating System. Designed to be quick to deploy with a straightforward configuration process and minimal network configuration, users can be communicating in a matter of minutes.

Clear-Com offers Station-IC Event and Subscription licenses to better meet the needs of a broad range of applications. For production companies that need to ramp up their intercom instances for a one-off event or other users who need intercom capabilities for a shorter amount of time, the Event license is a cost-effective and flexible solution available in one week or one month increments. For broadcast studios, theaters and other users who will be using Station-IC as part of their everyday workflow, the annual Subscription license offers a lower cost-per-day and the ability to be transferred between computers as needed.

"So many of our users have fully embraced the versatility of the LQ Series of IP Interfaces, and we are pleased to be able to offer the Station-IC software to what has grown into a very substantial user base," remarks Kari Eythorsson, product manager for Clear-Com. "We look forward to seeing the many ways in which our user community will implement Station-IC now that it's available for LQ."

Station-IC is available to download and try in demo mode from the Clear-Com website at *www.clearcom.com/station-ic*.

https://www.clearcom.com/product-family/station-ic/

BEST IN MARKET 2021
TVB EUROPE
NOMINEE

Colorfront
Streaming Server

Sub-Second Latency, Robust Reference-Quality, Secure, Streaming Video Encoder From Live Video
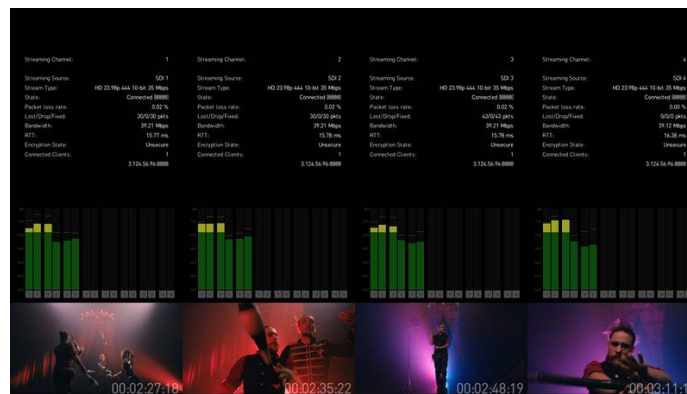
Colorfront 's advanced Streaming Server appliance offers a professional remote video and audio monitoring solution with a secure, reference-quality and low-latency viewing experience that is suitable for critical QC or client approval, and supports a wide range of display options including:

- Apple's XDR display
- prosumer OLED TVs
- professional HDR reference monitors
- digital projection theaters
- emissive cinema walls

The 1RU Streaming Server can live stream color and frame-accurate footage in reference quality 4K HDR from third-party grading, editorial and VFX applications — such as Blackmagic Resolve, FilmLight Baselight, Adobe Premiere and Avid Media Composer — to multiple remote clients simultaneously, anywhere in the world.

Key Features Include:
- SRT (Secure Reliable Transport Protocol) to deliver pristine quality live video with multichannel audio over the public internet to multiple remote clients concurrently

- sub-second latency for interactive streaming sessions while maintaining robustness under various network conditions
- supports HD, 2K and 4K, and stereo 3D content
- displays HDR10 or Dolby Vision content with the appropriate content mapping for HDR or SDR monitors
- 256-bit AES encryption, visible and forensic watermarking to ensure content security and protection

On the client side, inexpensive hardware configurations support Colorfront's complementary Streaming Player application to enable color-accurate viewing and QC on a range of professional 4K HDR reference displays and prosumer screens for minimal outlay, such as:

- AJA T-Tap Pro allows users to connect to a prosumer OLED and drive it in Dolby Vision, PQ, Hybrid Log Gamma (HLG) and HDR10
- Blackmagic Design UltraStudio 4K Mini enables 4K HDR output via both SDI and HDMI
- Apple M1 Mac mini allows connection to an Apple Pro Display XDR directly via Thunderbolt 3 or to a prosumer OLED monitor via the HDMI output

https://colorfront.com/STREAMING

Firstlight Media
Firstlight Media OTT Platform
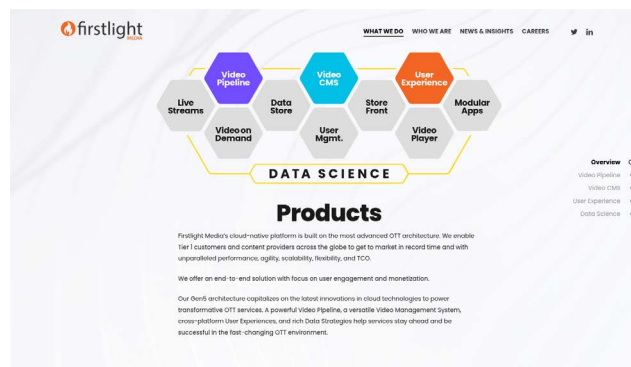## A Cloud-Native OTT Breakthrough: Broadcast Quality and Reliability, Digital Agility and Personalization

Rapid changes in streaming technology and higher consumer expectations are creating a need for OTT, pay-TV, telco and MVPD providers to free themselves from legacy systems. Firstlight Media's transformative end-to-end platform is the first to harness a cloud-native architecture — Firstlight Media's Gen5 architecture — to enable services that combine the quality and reliability of broadcast with the agility and personalization of digital.

Gen5 is a quantum leap in OTT innovation. Unlike monolithic TV Everywhere or hybrid cloud platforms, Gen5 is cloud-based. It leverages cloud-native technologies, including containers, micro-services, a service mesh, APIs and immutable infrastructure. The tech stack provides significantly better performance, a modular approach for feature expansion, continuous integration/continuous delivery (CI/CD) for rapid iteration and built-in scalability, observability and security. Business benefits include:
• Time-to-market is days and weeks rather than months and years of earlier generations.
• Savings of >40% over legacy architectures, including reductions in Development Effort (50% less); Maintenance Effort (40% less); Cloud Speed (40% faster); Third Party Speed (25% faster); and Transformation Speed (50% faster).
• Future-proofing to meet the demands of high concurrency, ultra-low latency, and resiliency expected of OTT video.

Firstlight Media's OTT Platform is the fastest, most efficient and most powerful path to market for any service configuration. Its high level of performance, extensibility, agility, scalability and TCO advantages expand OTT providers' ability to offer market-defining services while leveraging the power of cloud economics. The plat-

form complements Gen5 capabilities with infrastructure clout: a Video Pipeline that supports cloud streaming at scale for VOD/live events and advanced workflows (i.e. ad management, blackouts and content localization); a Video CMS that combines human curation, best-in-class recommendations/personalization and cloud orchestration to drive user experiences behind the scenes; an unparalleled User Experience that leverages ultra-low latency, interactivity, real-time data and social engagement to reduce churn and drive loyalty; and a Data Pipeline with rich data/analytics that help OTT providers optimize performance, understand consumer needs, deliver recommendations, drive monetization and shape service decisions.

Using the power of Gen5, the Firstlight Media OTT Platform outperforms legacy online video platforms in critical areas — delivering premium video, handling complex use cases and scaling to millions of viewers. It supports immersive sports, live experiences and personalized entertainment on any screen and has already achieved multiple industry firsts:
• First cloud-native, broadcast-quality digital sports service — Rogers Sports & Media's reimagined SN NOW sports service launched this fall. Rather than one-size-fits-all telecasts, the Firstlight Media platform enables immersive telecast and fan experiences that are personalized to each individual viewer.
• First credits-based, multi-tenant digital entertainment service — The Firstlight Media OTT Platform is enabling Struum to handle one of OTT's most complex use cases — enabling content discovery and channel management across more than 60 providers, as well as a unique credits-base subscription model – in less than three months.

https://firstlight.ai/products/#overview

BEST IN MARKET 2021
TVB EUROPE
WINNER

Ross Video
Ultrix Acuity Hyper-Converged Production Platform

Combines Ultrix Routing/Processing With the Creative Capabilities of Acuity Switcher

Ultrix Acuity combines the routing and AV processing capabilities of Ultrix with the creative capabilities of Acuity production switcher.

Ultrix Acuity takes routing, audio mixing, multiviewers, trays of frame syncs and audio embedders/de-embedders — all solutions that have traditionally filled multiple equipment racks — and compresses them all down to a single 5RU chassis. Ultrix Acuity is therefore ideal for environments where size really matters, such as OB vans and mobile units. Add 2RU of rackmounted redundant power and the result is a complete system in 7RU that can outperform packages requiring multiple racks, complex cabling and control system integrations.

As with the current Ultrix solution, Ultrix Acuity is based on our Software Defined Production philosophy, ensuring that future-proofing is never a concern. The Software Defined Production Engine (SDPE) from Ross removes the need for costly "forklift" upgrades by providing base hardware that can grow via conven-ient and relatively inexpensive software licenses. Ultrix Acuity's SDPE backbone will, therefore, reduce the uncertainty around meeting future creative or technical requirements.

The flexible architecture of Ultrix Acuity means that format and connectivity challenges simply disappear. Transition from HD to UHD with a simple software license. Mix SDI and IP sources in the same frame transparently. Use sophisticated tie-line management tools to incorporate the system into a larger distributed routing fabric. In short, as your needs and requirements change, so the unrivalled flexibility of Ultrix Acuity can easily keep pace. Ultrix Acuity also provides excellent return on investment — expensive power, cooling, maintenance and support costs are significantly lower. In addition, Ultrix Acuity can become one node of a larger distributed routing environment, reducing the incremental cost of adding I/O and further production switchers.

https://www.rossvideo.com/products-services/acquisition-production/production-switchers/ultrix-acuity-production-switcher/

BEST IN MARKET 2021
TVB EUROPE
NOMINEE

Ross Video
TouchDrive Next-Generation Production Switcher Panel Series for Carbonite

Smartphone-Style Touch Technology for Carbonite Production Switchers

TouchDrive is a new family of control panels that has been designed with the technical director at heart and will completely reinvigorate the relationship between the TD and their production switcher. TouchDrive brings the same touch technology we all know and love from the world of smartphones to video production switchers — even gestures. Every display on the control panel is touch-enabled. All of them. This allows features to be dropped right under the fingertips of the TD. These high-resolution displays, based on IPS LCD technology rather than monochromatic OLEDs that fade over time, make source and device control faster and enable functions like bus map creation without having to dive into menus. If you see a readout you want to change, just touch it. It's incredibly intuitive!

The new curved-panel design puts every button within easy reach — we have kept and increased the number of tactile buttons that our customers love — and the custom color schemes enable TDs to configure and organize the panel look to their specific preference.

TouchDrive also includes a built-in DashBoard computer, enables integrated DashBoard control for various Ross products (e.g. XPression graphics, Ultrix routing, Tria replay and many more) and features convenient power/display/control connections for an additional external display. Available in five different sizes, from a single row 15 button panel to a three-row 25 button panel, TouchDrive replaces all current Carbonite Black models except for the compact Carbonite Black Solo.

https://www.rossvideo.com/products-services/acquisition-production/production-switchers/touchdrive-production-switcher/

SDVI
Rally Insight Data Analytics Service
Leveraging Granular Metadata at Scale for Unprecedented
Supply Chain Visualization and Optimization

The Rally Insight data analytics service transforms the immense volume of supply chain data gathered by the SDVI Rally media supply chain platform into actionable intelligence.

The Rally platform collects data at every step of every supply chain and brings it into a cloud-based data lake. The new Rally Insight service enhances media organizations' ability to extract meaningful information from this massive amount of data by organizing and visualizing all supply chain data into more relevant views.

Custom charting and dashboards create rich visualizations that empower users to spot trends, identify outlier data points, and understand costs and time associated with any media process more quickly. Visualizations can correlate supply chain data (cost, duration, tool usage, etc.) with custom media metadata (title, episode, season, etc.) to provide more relevant results when analyzing specific media-related metrics.

Generic business data visualization tools fail to address the unique characteristics (i.e., metadata) of media content, and this lack of sophistication can make it difficult for media supply chain operators to perform relevant analysis of this data. Built specifically to handle media supply chain data, Rally Insight makes it easy.

By filtering and presenting the data collected by the Rally platform, Rally Insight gives organizations a new level of intelligence about their operations and the content that flows through them so that they can make faster, better decisions. Right out of the box, dashboards and customizable charts facilitate fast and easy data visualization, enabling operators to filter and group data by show, season, project or any other custom metadata. The result is easy access to the information that matters most to users.

The accurate, granular cost and usage data supplied by Rally Insight enables media companies to better understand the true cost of their content preparation, improve accountability with more relevant reporting, and make faster, better-informed decisions about taking on new projects.

Rally Insight provides a level of visibility into supply chain operations that hasn't existed before, giving supply chain operators time and cost information for the resources being consumed and identifying further optimization opportunities. For the first time, operators have accurate cost and resource usage information at a per-unit level and for every job/task. Access to this granular data has never been possible before, and it results in more accurate matching of costs to revenues, better predictability prior to taking on new projects, and faster identification of supply chain optimizations that were previously not observed.

https://www.sdvi.com/rally-insight

BEST IN MARKET 2021
TVBEUROPE
WINNER

SmallHD
22-Inch OLED 4K Production Monitor
Reference-Grade 4K OLED

Setting a new standard for color purists, this stunning 4K color reference monitor boasts many of the advanced features that OLED users demand. OLED 22 is the first lightweight 4K OLED production monitor equipped with a feature set that finally enables critical monitoring of 4K images, both on set and in the color suite.

OLED 22's hardware design is built around the Small4K Video Processing Architecture, which provides unparalleled input/output options with eight 12G-SDI and two HDMI 2.0 ports, all of which enable 4K signal processing. Housed in a rugged, unibody, milled-aluminum chassis that includes 36 individual 1/4–20-inch mounting points along the top and sides, the OLED 22 weighs in at a featherweight total of 9.3 pounds/4.2 kilograms. A removable handle and feet allow for convenient portability.

The OLED 22 display has virtually no image degradation at any viewing angle, providing a real-time image as vivid and pristine as a final output, whether on set or in post.

Monitor specs check off an impressive list of desired features: 21.6-inch/55cm screen size, >1,000,000:1 contrast ratio with an absolute black point, 10-bit color depth for nuanced color fidelity, 3840 x 2160 resolution, 350nit brightness level, and 100% P3/135% Rec 709 color gamuts that generate true-to-life color reproduction.

Power options include two hot-swappable power inputs: one 3-pin XLR and a slide-on Dual Battery Plate (Gold Mount and V-Mount options, sold separately), which can be attached via the built-in Smart Rail on the rear side of the monitor. Two 2-pin locking accessory outputs add power flexibility for additional devices.

For complete, untethered freedom, OLED 22 is Teradek Bolt 4K-compatible: an ideal combination for cable-free, zero-delay video monitoring in 4K 10-bit HDR.

OLED 22 offers SmallHD's industry-standard internal toolset: PageOS 4. With this software, users gain access to a diverse and customizable array of curated exposure tools and workflows for enhanced production functionality. Beyond a host of improvements for simplicity and speed, PageOS 4 supports a streamlined color-calibration experience with Color Pipe, an intuitive rendering tool that accurately converts log formats into SDR and HDR. PageOS 4 includes significant upgrades in user page presets, 4K HDR (PQ) waveforms, improved false color and dual/quad viewing options — as well as retaining the same dependable features known to users of previous PageOS-equipped monitors.

Highlights
• 21.6-inch/55cm OLED
• 3840x2160 resolution
• >1,000,000:1 contrast
• 350nits
• 10-bit color depth
• Weight: 9.35 pounds/ 4.2kilograms (with handle and feet)

Key Platform Highlights
• PageOS 4 software platform
• 4K HDR waveform and scopes
• Dual and Quad-view (feature coming soon)
• Color Pipe HDR color rendering
• Monitor Calibration Wizard
• Small4K Video Processing Architecture
• Inputs: 4x 12G-SDI , 1x HDMI 2.0
• Outputs: 4x 12G-SDI, 1x HDMI 2.0 (feature coming soon)
• Unibody Smart Chassis
• Dovetail Mounting Rail for battery and accessory mounting
• Interchangeable mounting points
• 2x 2-pin accessory power outputs
• Power: Hot-swappable dual inputs: 1x 3-pin XLR, 1x Dual-GM/ VM Battery Plate (sold separately)

https://smallhd.com/products/oled22

Synamedia
Synamedia Clarissa
Transforming Data Into Valuable Video Business Insights
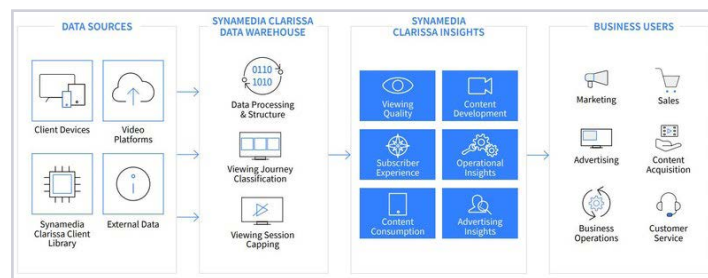
Synamedia Clarissa is the industry's first business insights solution to take a holistic view of traditional pay-TV and OTT businesses and reveal critical behavioral and consumption insights. The solution transforms data into insights that enable operators to address a multitude of complex and unique challenges, and lead companies to new opportunities for revenue and growth.

To engage viewers and keep them coming back, we need to know exactly what they want, when and where. Through collected data, our customers are able to get a deep understanding of each user and incorporate those insights into a scalable and agile cloud-based SaaS solution with end-to-end video ecosystem visibility. These insights can be applied to boost engagement, reduce churn, increase ARPU, reduce costs and more.

Pay-TV providers already have access to an abundance of data across their video ecosystem, however few are getting the full value of that data and utilizing it in ways that can transform their business.

Understanding the right way to use data can take some of the guesswork out of business decisions. Clarissa brings together previously isolated data sets to achieve a comprehensive view across its four applications: viewing quality, user experience, content consumption and advertising insights. By putting together data, Clarissa is able to provide insights that allow customers to understand what content their users consume, where and on what device, ultimately providing clarity on performance across all video services.

As the industry's first business insight solution to take a uni-versal view of traditional pay-TV and OTT businesses, Synamedia is steps ahead of its competitors when it comes to business intelligence. What really sets Clarissa apart is the comprehensibility it provides, making the solution suitable for all our customers. While some competitors have attempted to tackle business insights, the level of data-based insights Clarissa can provide — from content consumption, UI and navigation, device and account security, to advertising management, QoE/QoS and much more — is unparalleled.

At its core, Clarissa is about helping our customers keep their users engaged, by delivering the right content, at the right time, in the right way. By utilizing potential revenue-generating data and business insights — that other solutions overlook — Clarissa provides our customers with a universal view of viewing quality, providing dashboards with quantifiable insights about users' external factors to viewing; content consumption, giving them a better understanding of where engagement drops off and picks up; viewer experience, providing insights into the process of finding the right content; and advertising insights, allowing customers to segment ads by behavior to create specific value for advertising.

With Clarissa's insights that segment and characterize your audiences while accurately measuring response and reach, our customers can activate compelling, insight-driven and personalized experiences in their service.

Clarissa brings a unique kind of data-driven intelligence that empowers customers to deliver the right content, increase engagement and reduce subscriber churn.

https://www.synamedia.com/video-solutions/analytics/

BEST IN MARKET 2021

TVBEUROPE

WINNER

Telos Alliance

Telos Infinity Virtual Intercom Platform

First, We Broke the Matrix. Now, We're Putting Intercom in the Cloud.

Telos Infinity Virtual Intercom Platform (VIP) is the first fully featured cloud-based intercom system. It delivers sophisticated comms virtually, making cloud-based media production workflows available on any device — smartphone, laptop, desktop or tablet. Users can even use third-party control devices, like Elgato's Stream Deck, to control Telos Infinity VIP. Now you can harness Telos Infinity IP Intercom's award-winning performance, scalability, ease of integration and operational/cost efficiencies anywhere — At Home, On-Prem, Site-to-Site or in the Cloud.

Telos Infinity VIP
- **Cost-Efficient**: Less Maintenance, Infrastructure, Space Required
- **Scaleable**: Pay for Only What You Need
- **Ease of Use**: Virtual Panels on Familiar Devices (Smartphone, Computer, Tablet)
- **Workflow Flexibility**: At Home, On-Prem, Site-to-Site, In the Cloud
- Reliable, Proven Cloud Workflows
- Flexible Deployment Options
- TelosCare PLUS Service Option for Premium Service & Support

Deployment Options
Meeting users where they are on the path toward virtualization, Telos Alliance offers several deployment options for VIP, which scales to suit users' varying requirements, from a few remote smartphone VIP instances to an enterprise solution requiring hundreds of instances.

- **On-Prem**: Use Telos Infinity VIP hardware appliance or your own server for on-prem installations.
- **Integrated**: For both On-Prem or Cloud versions, Telos Infinity VIP can be integrated with Telos Infinity hardware comms, or any third-party intercom or audio subsystem using AES67 or SMPTE 2110-30 connectivity.
- **Cloud Server**: Software for supported Cloud platform installations. A complete communications infrastructure in the Cloud with connectivity options for integration with third-party Cloud-based and On-Prem audio subsystems.
- **Software as a Service (SaaS)**: Various third-party Telos Alliance partners will offer a Telos Infinity VIP SaaS option, allowing users to lease it in a virtual environment.

Contact us today to design your Telos Infinity VIP Cloud-Based Intercom System: *Inquiry@TelosAlliance.com*

https://www.telosalliance.com/ip-intercom-communications/telos-infinity/VIP-virtual-intercom-platform

Teradek LLC
Spark 4K

Wireless Video Transmission Solution for Pro A/V

Here's what sets Spark 4K apart from others in class:
- The only pro A/V video transport solution to combine wireless reliability, 4K HDR quality, zero-delay transmission, that can transmit long range up to 500-feet line of sight.
- Reliable because it uses the 5 GHz frequency, which is less susceptible to interference. It is the only A/V wireless video solution to use the Academy Award-winning technology that enables sending high-quality video with low latency over the 5 GHz frequency
- A visually lossless protocol
- Video feed is transmissible at up to a 4Kp30 resolution with 10-bit 4:2:2 color
- Zero-delay transmission (less than 1 millisecond) with long range and versatility

With the massive spike in streaming events and the subsequent demand for in-person events post-COVID, the expectation for engaging, high-quality content has never been higher. Spark 4K not only enables production crews to elevate the quality of their events, but it reduces setup and breakdown times, and improves the overall dynamic of the viewer's experience.

Spark 4K represents Teradek's response to the growing demand for practical and high-quality video transport solutions; a demand that has been exponentially driven by the COVID-19 pandemic as schools, churches and businesses turned to live streaming events to stay engaged.

The first of its kind, Spark 4K offers 4K HDR video transmission for up to 500 feet line of sight with no perceivable delay over the 5 GHz band.

As light as a baseball and as small as a cassette tape, Spark 4K's transmitter and receiver units complement most A/V gear and workflows. Its versatile design for tabletop or camera mounting makes it a compact and robust multifunctional video solution. Dual-powering options and internal battery life of more than two hours provide mobility without compromising on signal integrity. Its multicasting abilities send multiple video feeds to receivers that are HDMI-compatible with computers/laptops, projectors, switchers, monitors, TV screens and LED video walls.

http://tdek.co/spark4k-pr

Vislink
Quantum IP-Native Wireless Camera Receiver

Delivering Remote Production Efficiencies for Immersive Wireless Camera Feeds

As a receiver for wireless camera feeds, Vislink's IP-native Quantum receiver allows ingest of free-roaming wireless camera feeds into live event video productions. Their ability to provide a camera feed from the heart of the action with point-of-view shots, free from the hinderances of cables allows the director to create a sense of viewer involvement in the unfolding action of the televised event like no other.

Content rights holders are discovering that wireless camera images that the Quantum receiver delivers are a powerful tool in extending viewer engagement through social media channels. Research shows (Conviva "State of Streaming" report) that just a 30% increase in video media in social postings increases fan engagement by over 100%. The up-close content from the wireless camera workflow carries the greatest impact to highlight key moments of action and deliver personalized stories about individuals to lock-in a fan base.

Vislink's Quantum receiver moves wireless camera workflows forward dramatically by putting IP connectivity at its heart. As an IP-native device, Vislink's Quantum receiver enables live event producers to implement more efficient remote production techniques on their wireless camera feeds.

By enabling content producers to move to remote production, they can gain the benefits of increased operational efficiencies. Production staff can cover multiple events over the course of the day; there are reduced on-site costs; and operations can be more environmentally sustainable. By contributing video feeds directly to the production center, Quantum users can remove the need to purchase additional contribution video equipment — typically delivering a 30% reduction in capex costs on a live wireless camera event.

Perhaps the greatest financial benefit comes from the Quantum receiver having the ability to move video data over the unmanaged internet through SRT technology. By utilizing the lower data carriage opex costs and widespread availability of internet access points, content producers can seek to grow their business and monetize new events that were not previously financially viable.

Wireless camera receivers have often used multiple RF inputs with diversity reception techniques to provide robust data recovery from the transmission. Vislink's Quantum wireless camera receiver delivers a step-change in performance to support 16x RF inputs. With this improved capability, not only can production companies have greater certainty of reception robustness, they can now deploy wireless camera feeds over wide area events with simpler RF architectures benefiting from faster and lower cost rigging for the event.

As a combined RF demodulator and video decoder, Vislink's Quantum receiver implements latest, low latency HEVC video decoding. Not only does this technology enable 4K and HDR workflows for tent-pole events but it also delivers significant benefits for HD workflows too. By using more efficient HEVC video compression, production teams can reduce their HD transmission video bit rates (while maintaining video quality) and reconfigure the RF parameters to a more robust modulation (without increasing occupied bandwidth). With these changes the Quantum's HEVC capability can enable a doubling of RF transmission range for the wireless camera giving the event director greater creative freedom and engage viewers more.

https://www.vislink.com/product/quantum-receiver/

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Wheatstone Corp.
Tekton 32

Super Compact, Adaptable TV Console Ideal for Both Automated and Hands-On Production

Tekton 32 is the first IP audio console made specifically to adapt to today's television production environments, from multi-use newsrooms and small remote vans to fast-paced sports venues and resource-intensive production houses.

Tekton 32 packs a ton of flexibility plus 32 input channels (layered on 16 physical faders) in a 39 x 17 x 3 $^{1/8}$-inch frame. All 32 channels can integrate seamlessly with major production automation systems and the surface supports 5.1 surround bussing and processing.

Unique to this IP audio console are its programmable soft knobs and controls. Customize the surface once and forget it or create entirely separate work surfaces for each show or talent team by programming any number of soft controls either on-the-spot or stored as presets.

All routing and control for the Tekton 32 is handled by WheatNet IP audio network, an AES67-compliant and SMPTE 2110-supported IP audio network. If it's on the network, it's routable, programmable and accessible — often automatically. For example, when a field reporter's mic turns on, the correct mix-minus can be automatically sent back to the field reporter's headset for IFB.

This console also has the best of both worlds, with a tactile surface on the one hand and interface to a standard touchscreen on the other. Move faders and cue events on the surface. Pinch and drag EQ settings from the touchscreen.

https://www.wheatstone.com/television-products1/tv-audio-consoles/tekton-32

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BEST IN MARKET 2021
B+C Broadcasting+Cable

WINNER

Amazon Web Services
AWS Elemental Link UHD
Simple, Cost-Effective and Secure UHD Live Video Encoding

AWS Elemental Link UHD is an intuitive encoding device that connects a live video source, like a camera or video production equipment on the ground, to AWS Elemental MediaLive in the cloud, enabling broadcast-grade live video streaming of ultra-high definition (UHD) video with up to 10-bit color depth and high dynamic range (HDR) support. Launched in June 2021, the portable device improves the quality and reliability of UHD live video streams for production professionals in the field while reducing the cost and complexity of equipment needed to move live video signals from on-premises technology into the cloud. Link UHD ships fully configured to a user's AWS account, offering an easy, cost-efficient way to transfer UHD video securely and reliably to MediaLive for delivery to viewers on a range of device types. Both high HDR 10 and HLG video outputs are supported. Using the device is as simple as connecting it to power, Ethernet, and a video source. It can be controlled remotely and monitored from anywhere with an internet connection using the AWS Management Console.

Available for $4,995 USD per device (excluding customs clearance, duty, tax and shipping), AWS Elemental Link UHD provides a more cost-efficient approach to cloud video contribution compared to traditional methods. The compact device requires minimal power and cooling requirements and is easy to own and operate. With silent, fanless operation, the device is also well-suited for low-noise environments like sporting and event venues, studios or conference rooms. It also maximizes the quality of the UHD video sent to the cloud, adapting automatically to changes in network conditions. To deliver the best possible video, Link UHD devices encode using the HEVC (High Efficiency Video Coding) codec, which is up to 50 percent more efficient than the AVC (Advanced Video Coding) AVC codec.

For high resiliency video transport, AWS Elemental Link UHD uses the Zixi delivery protocol, which combines content-aware and network-adaptive forward error correction with error recovery, while minimizing latency. Encoded video is encrypted using AES-128 and rotating keys from AWS Key Management Service (AWS KMS). The device also uses a network-aware adaptive bitrate algorithm, adjusting in real time to changes in network conditions. This closed-loop feedback system minimizes packet loss to keep the video signal stable, even if network issues occur.

Link UHD is a valuable tool in live production and streaming environments, especially as companies try to minimize the amount of staff located on-site during a global pandemic. Even a non-technical person can plug in a Link UHD device on-site and, after that, control the remainder of the stream configuration from the cloud. For the many reasons outlined above, AWS Elemental Link UHD is a prime candidate for a best in market award this year.

https://aws.amazon.com/medialive/features/link/

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Amazon Web Services
AWS Cloud Digital Interface (AWS CDI)
Reliable, Uncompressed Live Video Transport in the Cloud

AWS Cloud Digital Interface (AWS CDI) is an advanced networking technology for transport of high-quality uncompressed video up to 4K resolution at 60 frames per second on AWS, with high reliability and low network latency. Much like Serial Digital Interface (SDI) technology helped to advance digital video through connectivity, AWS CDI paves the way to more robust cloud-based live video workflows by forging connections between cloud-based technologies including AWS Media Services, AWS Partners and Independent Software Vendors (ISVs).

Highly interoperable, AWS CDI combines the scalability and agility of AWS with the raw performance of on-premises standards. The AWS CDI software development kit (SDK), an open source project released under the two-clause BSD license, provides the schema necessary to ensure reliable communications between cloud-based broadcast and live production applications.

With AWS CDI, broadcasters and live production professionals can tap into the benefits of the cloud to work in a more flexible, scalable manner when working with uncompressed video. AWS CDI links cloud-based applications from different vendors with incredibly high-data transfer speeds and latency as low as 8 milliseconds, or less than one frame of video for 60 frames per second content. The net result is higher-quality video in the cloud with no generational loss due to encode/decode processing and the ability to build uncompressed live video workflows in the cloud that previously could only be done on the ground.

JPEG-XS compression makes high-bandwidth cloud ingest possible. JPEG XS is a visually lossless, low-complexity, and low-latency video codec that lends itself to hybrid video work-flows, reducing the throughput strain as customers shift to playout in the cloud. Newly launched AWS Elemental Live with JPEG XS encoding provides the bridge needed to move uncompressed video to and from the cloud, working alongside AWS Elemental MediaConnect, a transport service for live video.

As the entire production process moves into the cloud, workflows can link with converged (OTT and primary screen) distribution headends, unifying production, broadcast and content delivery. Applications that integrate the AWS CDI SDK move traditionally complex parts of broadcast workflows into the cloud, enabling ISVs and broadcasters to build a production environment that can grow and shrink to make each live production more commercially viable, setting the stage to democratize access to broadcast TV. For consumers, this means more varied and curated content experiences, and for the streaming production community easier access to professional-grade tools to elevate content quality without breaking the bank.

Examples of technology partners harnessing AWS CDI in production include Evertz and Grabyo. Evertz leverages the AWS CDI SDK to take feeds directly from Evertz Overture compositing engine into AWS Elemental MediaLive, without additional encoding required. The company also uses AWS CDI to support FOX with live production switching between multiple sources. For Grabyo, AWS CDI allows it to move data between multiple Amazon EC2 instances, so they can add sophistication and horizontal scaling capability to their live production application. AWS CDI is a game-changing technology for the industry paving the way for a more innovative future.

https://aws.amazon.com/media-services/resources/cdi/

BEST IN MARKET 2021

B+C Broadcasting+Cable

WINNER

Marketron
Marketron REV
The Platform That Powers Sales

Marketron REV is a sales growth platform purpose-built for broadcast TV and radio sales professionals. It brings the entire sales process together in a single platform, streamlining customer, proposal and order management processes. Sellers can focus on selling, not re-entering data between disparate systems.

Sellers can easily manage clients with a built-in CRM, convert proposals to linear TV and radio orders in seconds, ensure order accuracy with insights into real-time avails, offer the best price using dynamic pricing and then have the orders seamlessly flow into most traffic systems for execution.

Sales managers have access to a powerful and visual reporting suite that gives visibility into pipeline, committed orders, top sellers and how stations are performing against targets.

REV increases media companies' top-line revenue through the power of dynamic pricing that uses algorithms to automatically set spot prices based on current fill. Salesperson-specific limits on discounting protect margin and simplify approvals. Accelerate with REV.

🔍 https://www.marketron.com/revdemo/

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BEST IN MARKET 2021
B+C Broadcasting+Cable
WINNER

Ross Video
Ultrix Acuity Hyper-Converged Production Platform

Combines Ultrix Routing/Processing With the Creative Capabilities of Acuity Switcher

Ultrix Acuity combines the routing and AV processing capabilities of Ultrix with the creative capabilities of Acuity production switcher.

Ultrix Acuity takes routing, audio mixing, multiviewers, trays of frame syncs and audio embedders/de-embedders — all solutions that have traditionally filled multiple equipment racks — and compresses them all down to a single 5RU chassis. Ultrix Acuity is therefore ideal for environments where size really matters, such as OB vans and mobile units. Add 2RU of rackmounted redundant power and the result is a complete system in 7RU that can outperform packages requiring multiple racks, complex cabling and control system integrations.

As with the current Ultrix solution, Ultrix Acuity is based on our Software Defined Production philosophy, ensuring that future-proofing is never a concern. The Software Defined Production Engine (SDPE) from Ross removes the need for costly "forklift" upgrades by providing base hardware that can grow via conven-ient and relatively inexpensive software licenses. Ultrix Acuity's SDPE backbone will, therefore, reduce the uncertainty around meeting future creative or technical requirements.

The flexible architecture of Ultrix Acuity means that format and connectivity challenges simply disappear. Transition from HD to UHD with a simple software license. Mix SDI and IP sources in the same frame transparently. Use sophisticated tie-line management tools to incorporate the system into a larger distributed routing fabric. In short, as your needs and requirements change, so the unrivalled flexibility of Ultrix Acuity can easily keep pace. Ultrix Acuity also provides excellent return on investment — expensive power, cooling, maintenance and support costs are significantly lower. In addition, Ultrix Acuity can become one node of a larger distributed routing environment, reducing the incremental cost of adding I/O and further production switchers.

https://www.rossvideo.com/products-services/acquisition-production/production-switchers/ultrix-acuity-production-switcher/

Zixi
Software-Defined Video Platform (SDVP)

Zixi Is Streaming the World's Most Valuable Content Over IP

Zixi is the creator of the Software-Defined Video Platform, the only platform enabling dependable, live broadcast-quality video over any IP network, any protocol, any cloud and any edge device. Zixi's Software-Defined Video Platform enables media and entertainment companies to migrate their workflow control points from on-premise infrastructures with local operational and engineering resources to remotely managed workflows that leverage existing infrastructures and extend those capabilities to the cloud (public and private) while allowing the agility, flexibility, scale and security with the Quality of Service that professional broadcast requires.

Zixi is a one-stop-shop provider of the most advanced and lowest-latency streaming protocol, detailed analytics/logistics, remote monitoring and management, AI and machine-learning tools. Their SDVP helps organizations of all sizes build the most efficient, quality and cost-effective infrastructure with a variety of resources, including the help of their knowledgeable solutions engineers.

The Zixi platform is the only platform making it easy and economical for media organizations to source, manage, localize and distribute live events and 24/7 live linear channels in broadcast QoS, securely and at scale, using any form of IP network or hybrid environment.

Zixi ensures its customers and partners receive broadcast-quality live video contribution, transport, and delivery over IP by bringing hardware, software and cloud solutions under one platform. The Zixi Software-Defined Video Platform consists of a tight integration of four crucial elements. First are the protocols, including the time-tested Zixi protocol, which has been in mission-critical use for over a decade, as well as newer protocols such as RIST and SRT and common industry protocols such as RTP, RTMP, HLS and DASH. In total Zixi supports 17 different protocols and containers — the only software platform designed for live video to do so. Second is the Zixi Video Solutions Stack, which is the software that manages all the protocols and collects analytics and layers intelligence on top of the protocols such as bonding and hitless failover.

Third is the ZEN Master control plane that allows users to intelligently provision, deploy, manage and monitor thousands of content channels across the Zixi Enabled Network. The fourth element is the Zixi Intelligent Data Platform, which brings together cutting-edge data analytics tools with prescriptive solutions to help stay ahead of issues before they become serious complications. The IDP provides users dashboard views of their infrastructure and stays atop the health of crucial components within a given system, learning and improving the experience continuously for both the back-of-house developers/engineers as well as end-users.

For over 10+ years the Zixi Enabled Network, Zixi's worldwide network of interconnected devices and users, has grown to over 300 OEM and Service Provider Partners, adding 100 partners in the past year alone that span every portion of the end-to-end broadcast workflow. Partners include AWS, Blackbird, Evertz, Microsoft, IBM, Vimond and MediaKind. Zixi serves well over 700 customers, with 20,000+ channel services delivered daily to 100,000+ endpoints globally. Some of Zixi's recent customers include Warner Media, Vimeo, FuboTV, Univision, Music Choice and the U.S. Agency for Global Media.

https://zixi.com/

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BEST IN MARKET 2021

NEXT|TV

WINNER

ATEN Technology Inc.

UC9040 StreamLIVE PRO All-in-One Multichannel AV Mixer

Live Streaming Made Easier Than Ever

ATEN Technology Inc.'s UC9040 StreamLIVE PRO All-in-One Multichannel AV Mixer is a portable, all-in-one, multichannel audio/video mixer device that integrates a 1080p video capture, video recorder, video switch, stream broadcaster, video converter, video splitter and audio mixer into one compact box to eliminate the hassle of working with different AV equipment. The StreamLIVE PRO makes HDMI video sources broadcast for higher-quality livestream to CDN platforms such as YouTube Live, Facebook and Twitch.

Additionally, the StreamLIVE HD provides an intuitive app, OnAir Pro App, making it easy to monitor, edit image layouts and DVE, PiP or PbP settings. There are eight stunning DVE transitions including circle drop, window slice, polka dot, circle open, fade, heart, cross hatch and random square. The StreamLIVE PRO is PC and software-free. It supports Android APP, simulta-

neous streaming and recording, Restful API control and OnAir remote control application support with Chromebook. Its well-designed control panel makes livestreaming operations seamless. Video and audio levels can be monitored and previewed before going live with a web broadcast. Simply connect video/audio sources, and an Ethernet with an ATEN app-installed iPad/Android tablet, to livestream quickly and easily.

The StreamLIVE PRO has an ergonomic and practical design, flexible enough to fit all independent livestreaming broadcasting environments. With a rich feature set, the StreamLIVE PRO addresses the challenges that independent livestreaming broadcasters encounter and provides an easy-to-use solution.

ATEN's UC9040 StreamLIVE PRO is available for purchase and shipping now through ATEN's distribution and reseller partners: *http://www.aten.com/us/en/where-to-buy/*.

https://www.aten.com/global/en/products/usb-&-thunderbolt/content-creation/uc9040/

Brightcove

Brightcove Cloud Playout

Seamlessly Program Playouts of On-Demand and Live Video Into a Single Stream
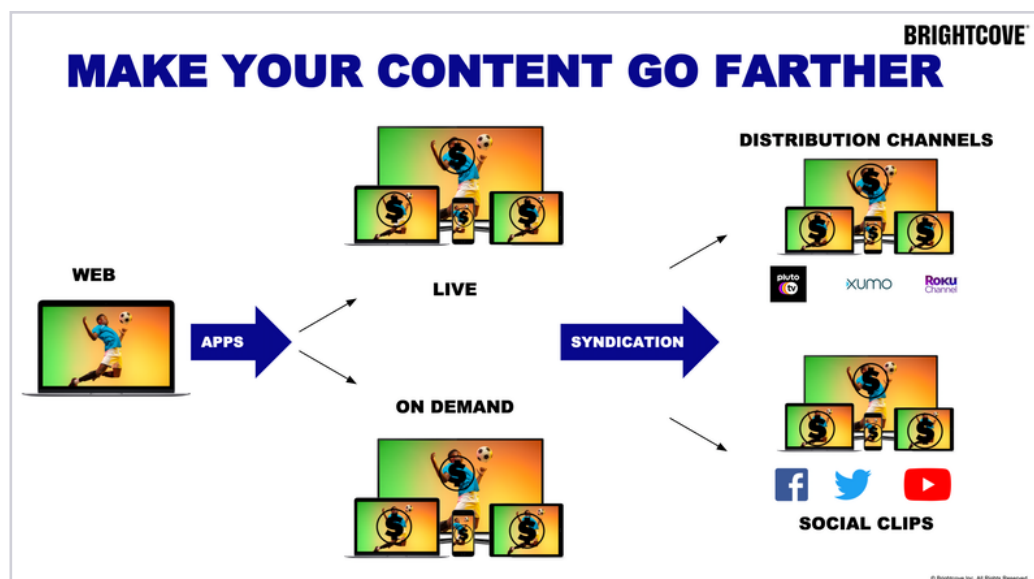
Brightcove Cloud Playout is a new feature that enhances Brightcove's end-to-end video platform and allows users to create a video playlist and schedule it to run at a specific time or looped to run 24/7. The addition makes the Brightcove platform one of the few online video providers to offer this capability. Cloud Playout strengthens Brightcove's Technology and Engineering Emmy Award-winning offerings by enabling customers to save even more time and money by consolidating all video needs on a single platform.

Cloud Playout enables content owners and organizations to quickly and seamlessly program a scheduled playout of on-demand video assets and live footage or events into a single stream. This provides a broadcast-grade "live TV" experience that leverages prerecorded content to increase audience engagement and create new revenue opportunities. It works directly with Brightcove's Video Cloud, eliminating complicated integrations for either new or existing users because Cloud Playout connects all of Brightcove's video offerings in a seamless fashion.

Customers also benefit from a highly streamlined workflow, as all video needs are met within Brightcove's singular all-inclusive platform. Revising playout schedules or making bulk edits is easy with a simple drag-and-drop interface — creating a simple method for leveraging content for revenue.

Users can monetize ad breaks with Brightcove's Server-Side Ad Insertion. This lets you cue ads with existing SCTE35 markers or insert your own house ads. You also have the capability to push your channel to any of your owned-and-operated properties, to an Amazon cloud or to a third-party destination via RTMP output, allowing users to stream content wherever they'd like. Cloud Playout also automatically optimizes video for whatever device an audience is watching on so everyone has a great experience.

Early adopters of Cloud Playout include long-time Brightcove client AMC, global entertainment destination BookMyShow, and SXSW Online, who utilized Brightcove's Cloud Playout technology for its 2021 virtual conference last March.

https://www.brightcove.com

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Firstlight Media
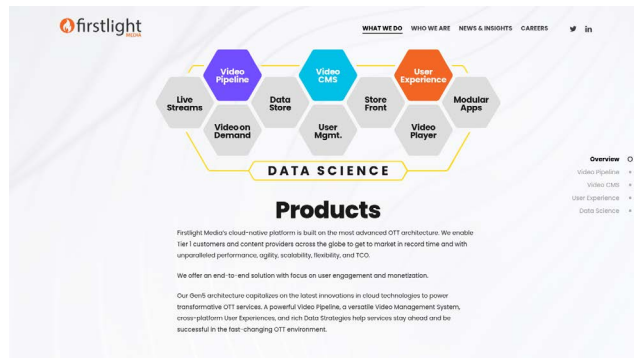# Firstlight Media OTT Platform

A Cloud-Native OTT Breakthrough: Broadcast Quality and Reliability, Digital Agility and Personalization

Rapid changes in streaming technology and higher consumer expectations are creating a need for OTT, pay-TV, telco and MVPD providers to free themselves from legacy systems. Firstlight Media's transformative end-to-end platform is the first to harness a cloud-native architecture — Firstlight Media's Gen5 architecture — to enable services that combine the quality and reliability of broadcast with the agility and personalization of digital.

Gen5 is a quantum leap in OTT innovation. Unlike monolithic TV Everywhere or hybrid cloud platforms, Gen5 is cloud-based. It leverages cloud-native technologies, including containers, microservices, a service mesh, APIs and immutable infrastructure. The tech stack provides significantly better performance, a modular approach for feature expansion, continuous integration/continuous delivery (CI/CD) for rapid iteration and built-in scalability, observability and security. Business benefits include:
- Time-to-market is days and weeks rather than months and years of earlier generations.
- Savings of >40% over legacy architectures, including reductions in Development Effort (50% less); Maintenance Effort (40% less); Cloud Speed (40% faster); Third Party Speed (25% faster); and Transformation Speed (50% faster).
- Future-proofing to meet the demands of high concurrency, ultra-low latency, and resiliency expected of OTT video.

Firstlight Media's OTT Platform is the fastest, most efficient and most powerful path to market for any service configuration. Its high level of performance, extensibility, agility, scalability and TCO advantages expand OTT providers' ability to offer market-defining services while leveraging the power of cloud economics. The plat-

form complements Gen5 capabilities with infrastructure clout: a Video Pipeline that supports cloud streaming at scale for VOD/live events and advanced workflows (i.e. ad management, blackouts and content localization); a Video CMS that combines human curation, best-in-class recommendations/personalization and cloud orchestration to drive user experiences behind the scenes; an unparalleled User Experience that leverages ultra-low latency, interactivity, real-time data and social engagement to reduce churn and drive loyalty; and a Data Pipeline with rich data/analytics that help OTT providers optimize performance, understand consumer needs, deliver recommendations, drive monetization and shape service decisions.

Using the power of Gen5, the Firstlight Media OTT Platform outperforms legacy online video platforms in critical areas — delivering premium video, handling complex use cases and scaling to millions of viewers. It supports immersive sports, live experiences and personalized entertainment on any screen and has already achieved multiple industry firsts:
- First cloud-native, broadcast-quality digital sports service — Rogers Sports & Media's reimagined SN NOW sports service launched this fall. Rather than one-size-fits-all telecasts, the Firstlight Media platform enables immersive telecast and fan experiences that are personalized to each individual viewer.
- First credits-based, multi-tenant digital entertainment service — The Firstlight Media OTT Platform is enabling Struum to handle one of OTT's most complex use cases — enabling content discovery and channel management across more than 60 providers, as well as a unique credits-base subscription model – in less than three months.

https://firstlight.ai/products/#overview

Marketron
Marketron REV
The Platform That Powers Sales

Marketron REV is a sales growth platform purpose-built for broadcast TV and radio sales professionals. It brings the entire sales process together in a single platform, streamlining customer, proposal and order management processes. Sellers can focus on selling, not re-entering data between disparate systems.

Sellers can easily manage clients with a built-in CRM, convert proposals to linear TV and radio orders in seconds, ensure order accuracy with insights into real-time avails, offer the best price using dynamic pricing and then have the orders seamlessly flow into most traffic systems for execution.

Sales managers have access to a powerful and visual reporting suite that gives visibility into pipeline, committed orders, top sellers and how stations are performing against targets.

REV increases media companies' top-line revenue through the power of dynamic pricing that uses algorithms to automatically set spot prices based on current fill. Salesperson-specific limits on discounting protect margin and simplify approvals. Accelerate with REV.
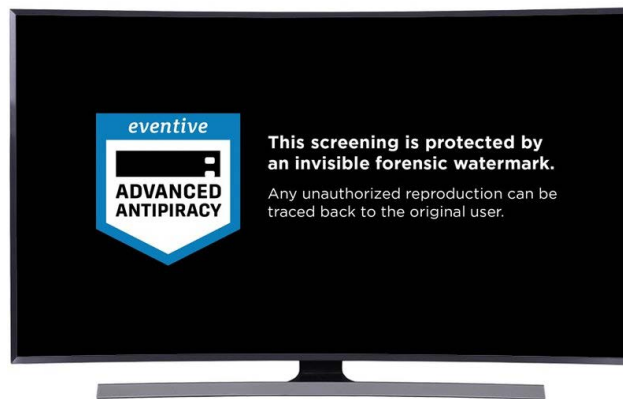
https://www.marketron.com/revdemo/

NAGRA

NAGRA Active Streaming Protection

Setting a New Standard for Virtual Cinema and Film Festival Experiences

The pandemic kept audiences from gathering in person, forcing festivals and live events to deliver content through online channels. As a result, there's been a major surge in online piracy. Eventive needed a way to securely adapt to this new environment to enable film festivals, distributors and live-event organizers to provide their content online to industry players and viewers while ensuring copyrighted materials are protected from content leaks and theft.

NAGRA Active Streaming Protection (ASP) provides OTT streaming video providers the ability to effectively manage security risks, going beyond multi-DRM to secure their content, service and revenue opportunities. NAGRA has designed a framework of multiple technologies working together to protect both operator content and their service against the threats exposed by delivering services over the internet to a variety of consumer devices that range from smartphones through tablets to streaming sticks to STBs /TVs.

With the digital shift opening the field of opportunity for piracy, it became clear to Eventive that security beyond DRM was needed to fully protect their clients' content and bottom line. Eventive partnered with NAGRA to launch the most rigorous content security program for film streaming ever deployed. Eventive already offered forensic watermarking required by certain studios for select content and special screenings, but the

solution was not scalable. NexGuard Streaming session-based watermarking, a module of NAGRA ASP, drives scalability for Eventive, efficiently tracking content streaming over Akamai's Content Delivery Network (CDN), easily scaling regardless of the number of concurrent viewers. In addition to conventional DRM measures, virtual screenings on Eventive VOD are secured with a NAGRA NexGuard invisible forensic watermark, identifying each individual user and session. Meaning any unauthorized use can be traced right back to the source. And a pre-roll piracy warning alerts users that their unique stream can be tracked.

For Eventive, preserving the artist's creative vision with secure content protection and high quality of experience is paramount. NAGRA ASP allows Eventive to increase the security of its virtual screening packages and on-demand content library without compromising delivery performance or client engagement. Content creators and exhibitors have seen the value of extending content availability with some festival partners reaching 10 times the audience they would have in person. With NAGRA ASP components providing studio-grade multi-DRM protection and forensic watermarking, Eventive has grown exponentially to serve millions of viewers. This new, higher-level security standard increases clients' confidence, helping Eventive win more film festivals and original content producer projects.

https://dtv.nagra.com/active-streaming-protection

Synamedia
Synamedia OTT ServiceGuard
First Solution on the Market to Protect Content Across All Open Platforms
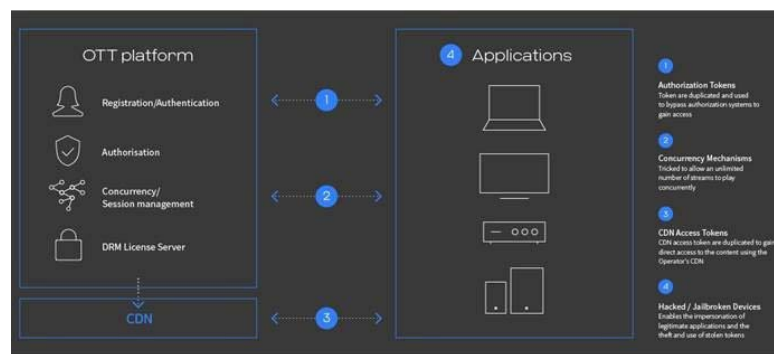
As OTT pirate operations continue to evolve, it is crucial that content owners and service providers place a stronger focus on piracy prevention, especially at the distribution level. Synamedia OTT ServiceGuard is the first solution on the market to protect content across all open platforms — whether mobile, browsers or smart TVs — and the first solution to extend the service protection to the service provider's content delivery network (CDN). By expanding protection to the CDN, this solution plays a pivotal role in stopping pirates from stealing content at the point of distribution.

It's no surprise that piracy is a growing problem in the media and entertainment industry, especially with Parks Associates' prediction that the value of pirated video services will exceed $67 billion worldwide by 2023. However, as video piracy has now evolved into a fully industrialized marketplace parallel to the legal streaming landscape, and continues to cost content owners both revenue and subscribers, it's imperative to turn to solutions that address the root causes rather than the symptoms.

While it's important to invest in anti-piracy efforts, current approaches including DRM, client hardening and concurrency limits, don't always provide sufficient protection against today's sophisticated pirates. And content owners and service providers are realizing this the hard way — despite their substantial investment in combatting piracy, their premium content is still being leaked. This is why OTT ServiceGuard is a gamechanger — the solution address weaknesses that make it easy for pirates

to steal content and steal entire OTT services. OTT ServiceGuard provides the secure distribution of content on open platforms by validating that only legitimate subscribers and applications are granted access and receive content. The solution gives each client a unique identity that is not cloneable and allocates secure keys for signing service requests, ensuring all client messages are validated for their authenticity and origin. This is important as some pirate tactics easily bypass the security measures that content owners and service providers typically put in place.

Synamedia OTT ServiceGuard is available as a service and is quick to deploy. As a single offering that supports all client devices, it is easily integrated with existing OTT infrastructure without impacting the user experience or any existing application-service communications. OTT ServiceGuard addresses the protection of all types of client with a simple software library that can be integrated in the normal development pipeline. The solution does not require special expertise or support knowledge and adds zero overhead to release schedules or communications costs. It also supports any multi-DRM solution, including Synamedia's multi-DRM solution.

Synamedia has taken on the challenge of educating the industry about the scale and implications of OTT piracy. With its newest security solution, it is now possible to address the root cause of OTT piracy, secure platforms and protect high-value content including premium movie, TV and sports content.

https://www.synamedia.com/video-solutions/video-security/ott-serviceguard/

BEST IN MARKET 2021

NEXT | TV

WINNER

Wheatstone Corp.
Tekton 32

Super Compact, Adaptable TV Console Ideal for Both Automated and Hands-On Production

Tekton 32 is the first IP audio console made specifically to adapt to today's television production environments, from multi-use newsrooms and small remote vans to fast-paced sports venues and resource-intensive production houses.

Tekton 32 packs a ton of flexibility plus 32 input channels (layered on 16 physical faders) in a 39 x 17 x 3 1/8 -inch frame. All 32 channels can integrate seamlessly with major production automation systems and the surface supports 5.1 surround bussing and processing.

Unique to this IP audio console are its programmable soft knobs and controls. Customize the surface once and forget it or create entirely separate work surfaces for each show or talent team by programming any number of soft controls either on-the-spot or stored as presets.

All routing and control for the Tekton 32 is handled by WheatNet IP audio network, an AES67-compliant and SMPTE 2110-supported IP audio network. If it's on the network, it's routable, programmable and accessible — often automatically. For example, when a field reporter's mic turns on, the correct mix-minus can be automatically sent back to the field reporter's headset for IFB.

This console also has the best of both worlds, with a tactile surface on the one hand and interface to a standard touchscreen on the other. Move faders and cue events on the surface. Pinch and drag EQ settings from the touchscreen.

https://www.wheatstone.com/television-products1/tv-audio-consoles/tekton-32

BEST IN MARKET 2021

NEXT | TV

NOMINEE

Whip Media
Whip Media Exchange

A Data and AI-Powered Content Rights Marketplace That Predicts Content Performance

The Demand Score™ for title indicated is for demonstration purposes only. Actual scores are based on a number of factors including territory, platform, target audience and other consumer and financial attributes.
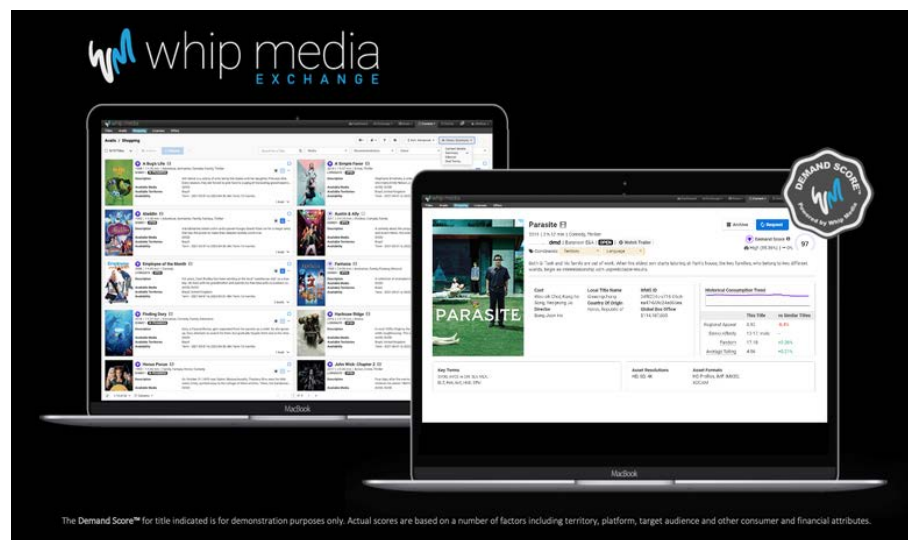
The entertainment industry has been evolving rapidly with major companies engaging in a streaming arms race. While 2020 brought a seismic shift that changed consumers' viewing habits, most of these companies are still filling their platforms the old-fashioned way: through a combination of gut instinct and manual processes. Most deals are still done by phone, email and in-person film markets, using spreadsheets and walled-off, proprietary analysis.

Distribution and programming executives are faced with a plethora of new business models, global expansion and an insatiable appetite for video content. To face the demand for content, they need more comprehensive information, faster, to make better decisions in an ever-more dynamic marketplace. Enter the Whip Media Exchange.

The Exchange is an online content marketplace that serves as a central hub for discovering, buying and selling content rights, enriched with "Demand Scores" and other key predictive insights. The Score is an index between 1 and 200 that predicts how a title will perform on a given platform in a specific territory and availability window — essentially the industry's first recommendation engine for buyers and sellers. Using Whip Media's repository of first-party data combined with advanced machine-learning analysis, the Exchange provides buyers and sellers with instant due diligence through these predictive analytics. Combined with sophisticated tools to streamline licensing workflows, the Exchange delivers a fast and simple onramp to getting deals done.

The Exchange enables sellers to curate content offers for specific buyers by window and territory, ensuring that when buyers view listings they are certain the content is available for them.

The analytics tools inherent in the Exchange allow for a much more informed licensing decision process for many scenarios. For example, a buyer might need a certain number of hours to fill with children's content, or content produced in a specific European country to meet local production requirements. Or, a seller might have lots of children's content but not know which buyers are in the market for their titles. The Exchange makes it easy to quickly see all available options for these types of situations — and to select the content that not only meets the criteria but also has the highest likelihood of performing well. The Exchange's workflow tools then make it easy to make offers, respond to requests and get deals done.

An imbalanced marketplace is made easier to navigate by the Exchange. While big players don't need help in finding one another at conferences or from long-standing relationships, smaller companies on both the buyer and seller sides have a harder time making contact and vetting one another. The Exchange makes it easy to see who else is out there, what they're buying or selling, and how that content is expected to perform for each client. Buyers know how offered content will stack up versus what they've already got, and sellers know how their catalogs should play on each platform in each territory. Major companies including Lionsgate, Globo and Univision are using the Exchange among dozens more.

https://www.whipmedia.com/exchange/

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BEST IN MARKET 2021
SOUND & VIDEO CONTRACTOR
WINNER

AVer Information Inc.
AVer TR313 4K AI Auto Tracking Camera

Deliver Professional-Grade Lectures, Sermons, Trainings or Whatever You Need to Stream

The TR313 includes 12X optical zoom and 12X digital zoom to offer the range and picture quality to produce big-time productions. It features an 8MP camera with ultra HD 4K resolution. The TR313 uses advanced artificial intelligence (AI) technology with a Human Detection algorithm that allows you to track your speaker (full or half body) or preset shoot zones so you're free to present and let the camera do the rest.

Just like other AVer PTZ auto tracking cameras in this generation, the tracking offers two specific modes: Presenter Tracking (full or half body) and Zone Tracking without requiring any physical lanyard. With 3G-SDI/HDMI/IP/USB output, PoE+, Visca control, SRT-Ready and compatibility with all popular video platforms, you have all you need to connect with ease in any environment. Includes a ceiling mount to keep clear of live audiences below.

What sets it apart from other products in this category?

1) Advanced artificial intelligence technology with a Human Detection algorithm allows you to track your speaker (full or half body) or preset shoot zones without the use of a physical lanyard. It will track a presenter wearing a PPE mask to support safety precautions.

2) Four simultaneous video outputs, 3G-SDI/HDMI/IP/USB, and is SRT-Ready.

3) Three free software options for camera controllers including CaptureShare for desktop and AVer PTZ Control Panel for iPad. PTZ Management gives AV managers and IT administrators simultaneous control of up to 128 cameras from any PC operating Windows 10. A fourth new software application, PTZ Link adds voice tracking capabilities when paired with select Shure microphones.

https://averusa.com/products/ptz-camera/tr313

BEST IN MARKET 2021

SOUND & VIDEO CONTRACTOR

WINNER

AVer Information Inc.
CAM130

AVer's CAM130 Is a USB Conference Camera With Intelligent Fill-In Lighting

Designed for virtual communicators, the AVer CAM130 is a USB conference camera solution with a built-in microphone. The CAM130 enables users to brighten their virtual workspace with revolutionary, intelligent fill-in lighting. The CAM130 packs a full suite of professional features into one portable device — creating the ideal solution for huddle rooms, phone booths and those working remotely.

Its compact and versatile design easily mounts on top of a 13-inch monitor, on a tripod or upside down to fit a variety of meeting spaces. With a dual field of view, the CAM130 allows users to pick from 90-degree or 120-degree FOV for full room coverage, while the privacy shutter provides peace of mind while the camera is not in use. The camera features 10 presets and is compatible with various applications, including Zoom, Microsoft Teams, Skype, Skype for Business, Google Meet and many others.

By incorporating the perfect amount of professional lighting to illuminate the workspace, the CAM130 helps users declutter their desk and eliminate bulky light rings or light cubes. The camera automatically adjusts brightness levels and memorizes settings to present the user in the best light. Users can also manually adjust the color temperature and light level through simple buttons on the back of the camera, through the AVer remote control (purchased separately) or through AVer's free PTZApp 2 software.

The CAM130 employs high-quality sensors and multi-lens glass to produce 4K video with brilliant color. It promotes a simplified user experience by incorporating a built-in unidirectional microphone, USB plug and play and 4X zoom via ePTZ. Users' meetings remain secure and efficient with AVer's SmartFrame — next-generation facial and body detection technology that ensures everyone is visible on the screen, even with masks on.

https://www.averusa.com/products/conference-camera/cam130

BEST IN MARKET 2021

SOUND & VIDEO CONTRACTOR

WINNER

Jabra
PanaCast 20

Introducing Intelligent Personal Video That Works for You

With flexible working here to stay, it's time to upgrade to the next generation of professional personal video collaboration with PanaCast 20 with integrated artificial intelligence.

Good Things Come in Small Packages
Sleek and portable, PanaCast 20 may be tiny but hides a big brain. The 13-megapixel camera delivers 4K Ultra-HD video, while AI-powered features enhance your video collaboration.

Intelligence Matters. Here's Why.
PanaCast 20 is engineered with AI that does the thinking for you, with Intelli-

gent Zoom, Intelligent Lighting Optimization and Picture-in-Picture features delivering picture-perfect, immersive collaboration. So, whether you call in from the kitchen table or the office cubicle, PanaCast 20 takes your video conferencing to the next level.

Easy to Use
PanaCast 20 works with all leading UC platforms, enabling you to get more from your UC investment. Designed to be plug-and-play, you simply clip PanaCast 20 onto any computer screen or monitor and plug in, for effortless connection in seconds. And with a pro-

tective carry case, it's ideal for use on the go, at home or back in the office.

Collaborate in Confidence
A powerful on-board Edge AI chipset reduces the risk of a data breach, while the integrated privacy cover guarantees privacy when it's needed.

Integrated AI Video Solution
As PanaCast 20 is an integrated video solution, there's no need for accessories like lighting rings. Simply use with industry-leading Jabra headsets or speakerphones for an incredible collaboration experience.

https://www.jabra.com/business/video-conferencing/jabra-panacast-20

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BEST IN MARKET 2021

SOUND & VIDEO CONTRACTOR

WINNER

NETGEAR Business
M4250 AV Line Switches

Network Switches Engineered for AV Over IP With Ground-Breaking AV GUI

For years, the AV world has had to use switches designed for IT uses, which meant tedious, complicated setup and configuration, not to mention an industrial design that was not conducive to the refined aesthetics of the AV industry.

The new NETGEAR AV Line of M4250 switches encompasses 11 models that are designed from the ground up for pro AV with input from integrators, consultants and end users. Starting from the outside appearance, they look unlike any other network switch with a beautiful, sleek appearance and ports on the back of the chassis (but we include reverse-mount rack ears, too).

And we know that mounting in a rack isn't always desired — sometimes the switch needs to be mounted behind a display or way up on a truss for live performances. So, we included multiple threaded mounting holes and even a VESA pattern on the bottom.

Did I mention the fans in the M4250 switches can be turned off if the PoE load and temperature conditions permit? This means that these switches can be used in noise-sensitive environments like conference rooms or broadcast studios.

Now for the most loved part of our switches — the new, ground-breaking AV GUI. Rather than requiring integrators to wade through a multi-page configuration guide and step through a dozen menus to enter parameters for a particular application, we have a better approach — profiles. Yep, sim-

ple enough, we use profiles for the various types of AV over IP signals that a user can assign to a port or group of ports and — Bingo! — we configure the switch for you. We have partnered with all kinds of AV over IP manufacturers big and small to certify their equipment and ensure we have the right configuration that will just work.

The M4250 AV GUI is especially helpful in these early days of AV over IP when many AV people don't know all the complicated IT parameters that need to be set up. Heck, this even helps the IT-trained integrator. And rest assured that we didn't limit the access to the entire switch configuration, either. The full web or command line GUI is available when needed to verify settings or make a little tweak based on a specific implementation needed.

Recognizing that the market needed a multitude of configuration options, the 11 models in the M4250 series of AV Line switches include a range of port counts and PoE+ and PoE++ options for powering all kinds of devices. Our largest M4250 switch delivers 40 ports with up to 90 watts per port of PoE++ and a 2,880-watt PoE budget!

The M4250 AV Line of switches designed for AV over IP along with our free Pro AV Engineering Services team to help design your network illustrate just how committed NETGEAR is to this market making our switches the most recommended switch in the world for AV over IP.

🔍 https://www.netgear.com/avline

PTZOptics
SuperJoy
Multi-Modal PTZ Joystick With Network and Serial Control

The SuperJoy puts sophisticated multicamera pan, tilt and zoom operations at the fingertips of users of any ability level. Featuring simultaneous IP, NDI and serial camera control for a variety of brands, the SuperJoy can easily slot into and improve any PTZ camera production workflow.

The SuperJoy offers both powerful presets and real-time fine-tuning for sophisticated users. The joystick can be programmed with up to 255 PTZ camera presets, including nine "quick presets." Users can also create camera control groups, allowing them to easily change scenes. Powerful Super-Preset buttons are programmable to trigger synchronized multi-preset commands across up to five unique camera groups with up to eight cameras each. The Superjoy also has four customizable buttons that can be configured to send custom commands via HTTP, UART, TCP or UDP to network-based equipment including lights, speakers and displays. Practically any device that can be controlled over IP can be triggered by the SuperJoy.

The SuperJoy is designed to be a pleasure to use. Ergonomic, rubberized controls and pressure-sensitive dials offer precise, on-the-fly tuning. Using incremental buttons, the operator can adjust pan, tilt, zoom and preset speed. The SuperJoy also has knobs to make minute adjustments to zoom, focus, iris/shutter settings, and red and blue gain. An HDMI video output provides a 1080p video preview for any camera connected to the Super-Joy with an available RTSP video feed. Status-responsive backlit buttons and knobs indicate available camera modes, while optional tablet/computer control allows operators to monitor production remotely.

The SuperJoy is also designed to accommodate varying skill levels, offering unparalleled flexibility for production teams of all backgrounds and experiences. The built-in "basic mode" and "basic-plus" modes disable most control other than single-camera joystick control and presets. "Matrix mode" enables operators to call presets across up to three cameras. The SuperJoy's unique combination of advanced configurability and guardrails allow expert users to program custom buttons for production automation, while simplifying the operation experience for novices.

The SuperJoy is an ideal — and surprisingly affordable — choice for video production crews looking to improve their workflows and streamline their production processes. Available starting at $899, this powerful and versatile device can suit most systems and budgets.

https://ptzoptics.com/superjoy/

Ross Video
Ultrix Acuity Hyper-Converged Production Platform

Combines Ultrix Routing/Processing With the Creative Capabilities of Acuity Switcher

Ultrix Acuity combines the routing and AV processing capabilities of Ultrix with the creative capabilities of Acuity production switcher.

Ultrix Acuity takes routing, audio mixing, multiviewers, trays of frame syncs and audio embedders/de-embedders — all solutions that have traditionally filled multiple equipment racks — and compresses them all down to a single 5RU chassis. Ultrix Acuity is therefore ideal for environments where size really matters, such as OB vans and mobile units. Add 2RU of rackmounted redundant power and the result is a complete system in 7RU that can outperform packages requiring multiple racks, complex cabling and control system integrations.

As with the current Ultrix solution, Ultrix Acuity is based on our Software Defined Production philosophy, ensuring that futureproofing is never a concern. The Software Defined Production Engine (SDPE) from Ross removes the need for costly "forklift" upgrades by providing base hardware that can grow via conven-

ient and relatively inexpensive software licenses. Ultrix Acuity's SDPE backbone will, therefore, reduce the uncertainty around meeting future creative or technical requirements.

The flexible architecture of Ultrix Acuity means that format and connectivity challenges simply disappear. Transition from HD to UHD with a simple software license. Mix SDI and IP sources in the same frame transparently. Use sophisticated tie-line management tools to incorporate the system into a larger distributed routing fabric. In short, as your needs and requirements change, so the unrivalled flexibility of Ultrix Acuity can easily keep pace. Ultrix Acuity also provides excellent return on investment — expensive power, cooling, maintenance and support costs are significantly lower. In addition, Ultrix Acuity can become one node of a larger distributed routing environment, reducing the incremental cost of adding I/O and further production switchers.

https://www.rossvideo.com/products-services/acquisition-production/production-switchers/ultrix-acuity-production-switcher/

BEST IN MARKET 2021
SOUND&VIDEO CONTRACTOR
WINNER

Ross Video
TouchDrive Next-Generation Production Switcher Panel Series for Carbonite
Smartphone-Style Touch Technology for Carbonite Production Switchers

TouchDrive is a new family of control panels that has been designed with the technical director at heart and will completely reinvigorate the relationship between the TD and their production switcher. TouchDrive brings the same touch technology we all know and love from the world of smartphones to video production switchers — even gestures. Every display on the control panel is touch-enabled. All of them. This allows features to be dropped right under the fingertips of the TD. These high-resolution displays, based on IPS LCD technology rather than monochromatic OLEDs that fade over time, make source and device control faster and enable functions like bus map creation without having to dive into menus. If you see a readout you want to change, just touch it. It's incredibly intuitive!

The new curved-panel design puts every button within easy reach — we have kept and increased the number of tactile buttons that our customers love — and the custom color schemes enable TDs to configure and organize the panel look to their specific preference.

TouchDrive also includes a built-in DashBoard computer, enables integrated DashBoard control for various Ross products (e.g. XPression graphics, Ultrix routing, Tria replay and many more) and features convenient power/display/control connections for an additional external display. Available in five different sizes, from a single row 15 button panel to a three-row 25 button panel, TouchDrive replaces all current Carbonite Black models except for the compact Carbonite Black Solo.

https://www.rossvideo.com/products-services/acquisition-production/production-switchers/touchdrive-production-switcher/

Teradek LLC
Spark 4K

Wireless Video Transmission Solution for Pro A/V

Here's what sets Spark 4K apart from others in class:
- The only pro A/V video transport solution to combine wireless reliability, 4K HDR quality, zero-delay transmission, that can transmit long range up to 500-feet line of sight.
- Reliable because it uses the 5 GHz frequency, which is less susceptible to interference. It is the only A/V wireless video solution to use the Academy Award-winning technology that enables sending high-quality video with low latency over the 5 GHz frequency
- A visually lossless protocol
- Video feed is transmissible at up to a 4Kp30 resolution with 10-bit 4:2:2 color
- Zero-delay transmission (less than 1 millisecond) with long range and versatility

With the massive spike in streaming events and the subsequent demand for in-person events post-COVID, the expectation for engaging, high-quality content has never been higher. Spark 4K not only enables production crews to elevate the quality of their events, but it reduces setup and breakdown times, and improves the overall dynamic of the viewer's experience.

Spark 4K represents Teradek's response to the growing demand for practical and high-quality video transport solutions; a demand that has been exponentially driven by the COVID-19 pandemic as schools, churches and businesses turned to live streaming events to stay engaged.

The first of its kind, Spark 4K offers 4K HDR video transmission for up to 500 feet line of sight with no perceivable delay over the 5 GHz band.

As light as a baseball and as small as a cassette tape, Spark 4K's transmitter and receiver units complement most A/V gear and workflows. Its versatile design for tabletop or camera mounting makes it a compact and robust multifunctional video solution. Dual-powering options and internal battery life of more than two hours provide mobility without compromising on signal integrity. Its multicasting abilities send multiple video feeds to receivers that are HDMI-compatible with computers/laptops, projectors, switchers, monitors, TV screens and LED video walls.

http://tdek.co/spark4k-pr

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ANGRY AUDIO
Headphone Disconnector
Magnetic Release Prevents Damage to Headphones

Angry Audio introduces the Headphone Disconnector. Insert it between your equipment and your headphone cable. The exclusive magnetic coupled connector is designed to release gracefully when you forget you're wearing headphones and walk away from the console. This prevents damage to your headphones, cables and equipment. It might even prevent injury.

The magnets have been carefully engineered for optimum holding strength. Designed to come apart quickly in the event of excessive force, but strong enough to stay together during normal use. Additionally, the magnets are oriented so that the connector cannot be plugged in backwards.

Available with 1/4-inch or 1/8-inch (6.3mm and 3.5mm) connectors. There are even versions that can be used as adapters to convert a plug in one size to a jack in a different size. Shipping now with a list price of $29.

https://angryaudio.com/headphonedisconnector/

BEST IN **MARKET** 2021
RADIOWORLD
WINNER

Inovonics Inc.
551 HD Radio Modulation Monitor
The Ultimate Choice for Advanced FM and HD Radio Signal Monitoring

The 551 HD Radio Modulation Monitor is the ultimate choice for advanced FM and HD Radio signal monitoring, whether you are at the transmitter site or halfway around the world. Simultaneously monitor in real time the off-air FM modulation along with up to four HD Radio channels.

A high-resolution 9-inch LCD Touch Screen displays all the essential modulation data for accurate readings in a graphic format. The 551 collects histograms of signal parameters and displays HD Radio album artwork, station logos and similar visuals on the front-panel display and remote web interface. The 551 includes a built-in BandScanner, a real-time clock and full SNMP functionality.

Rear-panel alarms constantly check for audio loss, RF loss, multipath and overmodulation, while advanced notifications alert personnel with email or SMS messaging when any or all of the alarms occur. SNMP is fully supported.

Features:
• Monitors off-air FM and HD Radio (HD1-HD8) on the Touch Display and remotely via the web
• Displays HD Radio album artwork amd station logos on the front-panel display and web interface
• Spectrum graphs for RF Baseband, MPX and Left/Right Audio. O-Scope views for MPS, Pilot, RDS and Audio Channels
• Measures real-time audio diversity delay between the FM and HD1 broadcast
• Off-air program audio available simultaneously FM & HD1 – HD4 as L/R-analog, AES3-digital and Dante AES67 AoIP streaming
• Multi-listener Internet IP stream and front-panel headphone jack

https://www.inovonicsbroadcast.com/product/551

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BEST IN MARKET 2021
RADIOWORLD

NOMINEE

Marketron
Marketron REV
The Platform That Powers Sales

Marketron REV is a sales growth platform purpose-built for broadcast TV and radio sales professionals. It brings the entire sales process together in a single platform, streamlining customer, proposal and order management processes. Sellers can focus on selling, not re-entering data between disparate systems.

Sellers can easily manage clients with a built-in CRM, convert proposals to linear TV and radio orders in seconds, ensure order accuracy with insights into real-time avails, offer the best price using dynamic pricing and then have the orders seamlessly flow into most traffic systems for execution.

Sales managers have access to a powerful and visual reporting suite that gives visibility into pipeline, committed orders, top sellers and how stations are performing against targets.

REV increases media companies' top-line revenue through the power of dynamic pricing that uses algorithms to automatically set spot prices based on current fill. Salesperson-specific limits on discounting protect margin and simplify approvals. Accelerate with REV.

https://www.marketron.com/revdemo/

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BEST IN MARKET 2021

RADIOWORLD

NOMINEE

Shure Inc.
Microflex MX415DUAL/C
Dual Cartridge Microphone

Delivers Extraordinary Audio for Live Events and Broadcasts

Whether it's a high-stakes press conference or a top-tier broadcast, premier events require flawless and consistent audio for recording feeds. Shure understands the need for reliable sound is paramount in these circumstances. For years, the company has developed products specifically to address this market. Shure's new Microflex MX415DUAL/C Dual Cartridge Gooseneck Microphone is the most recent addition to the company's popular Microflex wired line and aims to deliver exceptional audio. The low-profile gooseneck microphone provides maximum versatility and a streamlined appearance for situations where great sound and looks go hand-in-hand.

With the unique dual capsule design, every detail is captured by two cardioid cartridges simultaneously, each to a separate output preamp. The cartridges are also interchangeable to accommodate other Microflex polar patterns for increased flexibility. The microphone ensures dependable, multi-feed audio with a sleek appearance for major broadcast events, corporate presentations and other critical use cases. To avoid electrical interference between the microphones, each audio signal path is isolated with its own ground. With the integrated CommShield technology, RF interference from mobile phones is rejected, resulting in a clean signal — keeping the attention on the speech. The MX415DUAL/C has a 15-inch overall length and is equipped with a flexible gooseneck to provide optimal mic adjustment. Plus, it ships with a variety of mounting accessories for easy installation in any table, lectern or podium.

Additional features for the MX415DUAL include:
• Two 5-foot (1.5 meter) cables exiting from the bottom of mic, terminating in two TQG 4-pin female connectors
• Two external in-line preamps with 3-pin XLR connectors
• Included shock mount provides more than 20 dB of isolation from surface vibration noise

• Foam windscreen and mesh ball grille included for pop protection
• Full accessory kit included to accommodate temporary or permanent installations

The MX415DUAL/C provides the same superb sound customers expect from Shure and the Microflex wired line by delivering consistent, high-quality audio capture. The new microphone is ideal for applications that require premium results where failure isn't an option.

https://www.shure.com/en-US/products/microphones/mx415dual

BEST IN MARKET 2021

RADIOWORLD

WINNER

Telos Alliance

Axia Quasar SR AoIP Mixing Console

The Power of Simplicity

Introducing the New Axia Quasar SR AoIP Mixing Console — The Power of Simplicity.

Axia Quasar AoIP consoles are the ultimate mixing machines, putting power at your fingertips for the best content creation in broadcast. Now with two models to choose from, XR and SR — the Quasar family offers broadcast engineers and less-seasoned board operators alike boundless production possibilities, modularity, scalability and workflow flexibility.

Quasar SR is the direct replacement for Axia's best-selling Fusion console and is comparable in both price and feature set but also delivers all the power, ergonomics, industrial design and star appeal of our flagship Quasar XR console.

Quasar SR is not reserved for the most knowledgeable broadcaster but is approachable to any board operator thanks to its streamlined surface design. Quasar SR uses the same frame, power supply and master module as Quasar XR, but the fader modules are non-motorized, and there are fewer, larger and easier-to-reach buttons on each channel strip.

The Pinnacle of Console Design

Quasar SR delivers exquisite appearance and high-quality architecture, including scratch-resistant work surfaces and components rugged enough for a lifetime of use. All parts subject to wear are industrial-, automotive- or even avionics-grade. The absence of an overbridge makes for easy desk installation, and the console is fanless for quiet operation with redundant load-sharing power supply units. High-resolution color TFT displays and RGB pushbuttons are used throughout.

With a sleek, easy-to-operate, industrial-grade 12.1-inch touchscreen user interface that is so familiar, Quasar SR operation is possible within minutes. Two types of UIs are available — Expert and Simplified — to cover all user workflow requirements. Quasar does not require an external display, although you can connect an external to duplicate the touchscreen interface. All Quasar consoles offer touch-sensitive encoders, faders and user buttons, offering responsive user interaction and bringing Quasar's dynamic UI closer to your fingertips.

Remote Control and Monitoring

Quasar Soft is an optional upgrade for Quasar SR that allows remote control of the console from your browser. You can generate up to eight HTML5 pages and configure them to display any of the 64 input channels, plus a small monitor section or even the entire master section of the console. Included as part of the Quasar Soft license, Quasar Cast is a remote monitoring solution that lets you listen to any Livewire stream in the network through the same web browser.

Quasar Engine

The Quasar Engine provides bulletproof signal processing for Quasar consoles and is a must-have for the operation of your XR or SR console. Allowing you to pay only for the number of channels you need, the Quasar Engine is modular, starting at 16 channels and scaling up in blocks of 16 channels up to 64 channels. This 1RU native AoIP powerhouse includes four-band fully parametric EQ, powerful dynamics processing and automixer on every channel, four program buses and eight auxiliary buses. Four Surface Layers and a Virtual Mixer (VMix) with 16 independent five-channel V-Mixers extend the mixing capacity of your Quasar console far beyond physical fader count.

https://TelosAlliance.com/Quasar

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Tieline, the Codec Co.
Gateway 4
The Powerful DSP-Based Codec Designed for Live Remotes, STLs and Inter-Studio Links

The Gateway 4 is a powerful DSP-based 1RU IP codec designed for live remote broadcasting applications, as well as STL or SSL links. The Gateway 4 includes support for AES67, ST 2110-30, RAVENNA, AES3 and analog I/O as standard. An optional WheatNet-IP card can also be purchased. This provides a flexible platform for routing audio between a range of equipment using proprietary AoIP protocols like WheatNet-IP, as well as devices supporting RAVENNA, AES67 and ST 2110-30.

The Gateway 4 supports four full-duplex audio channels in 1RU to provide two stereo connections, or one stereo and two mono connections, or up to four mono connections. The codec also supports multiple unicasting to up to 20 endpoints and multicasting.

Applications
The new generation Gateway 4 delivers best-in-class DSP-based reliability and performance for a range of broadcast streaming applications and is ideal for:
- Remote broadcast applications
- Studio-to-transmitter links (STLs)
- Studio-to-studio links (SSLs)

For large networks the Gateway 4 is ideal for transmitter site links, remote trucks or rackmounted remote kits. It supports a full-duplex stereo connection, plus a separate IFB communications channel and is ideal to use with the ViA remote codec.

For affiliates and smaller stations, it can be used to transport studio-to-studio links, or a stereo studio-to-transmitter link signal plus another stereo connection or additional stereo and mono remote connections.

Interoperability and Redundancy
The Gateway 4 seamlessly integrates with all Tieline IP codecs and delivers hitless packet switching using SmartStream PLUS redundant streaming, plus bandwidth aggregation using Fuse-IP technologies over internet connections. The codec features dual internal power supplies, dual LAN ports and dual AoIP ports.

Gateway 4 is interoperable with all Tieline IP codecs and compatible over SIP with all EBU N/ACIP Tech 3326 and 3368 compliant codecs and devices. For AoIP streaming the codec supports:
- AES67- and ST 2110-30-compliant digital audio streaming between equipment from vendors supporting these standards.
- Installation of an optional WheatNet-IP card to interface directly with a WheatNet-IP network. Codecs then appear as Blades and seamlessly support stream discovery, advertisement and control using Wheatstone's Navigator software.
- NMOS IS-04 and IS-05, providing discovery, registration and control for ST 2110 AoIP streaming. NMOS brings a new level of interoperability and control with networked equipment throughout the broadcast plant.
- RAVENNA: Many broadcast networks around the world use RAVENNA for stream discovery and advertisement. RAVENNA integration allows Tieline codecs to easily stream over RAVENNA AoIP networks.

Unique Benefits
The Gateway 4 codec includes EQ and a dynamic range compressor on all inputs. The codec also supports streaming four channels of phase-aligned audio, as well as ISDN connections over an optional internal Euro ISDN module.

Remote Control Capabilities
Gateway is fully configurable using the embedded HTML5 Toolbox Web-GUI interface. Plus, Tieline's Cloud Codec Controller and the latest cloud computing technologies deliver secure real-time monitoring and remote control of all Gateway 4 codec functions from anywhere with an internet connection.

https://tieline.com/gateway-4/

Wheatstone Corp.
Blade 4

The Most Significant AoIP Improvement to Come Out of Recent Times

Times are changing and AoIP is changing, too. Blade 4 is Wheatstone's fourth-generation WheatNet-IP I/O unit and the most significant AoIP improvement to come out of recent times.

Unique to Blade 4 is its integration of key studio elements into one native AoIP environment, including audio processing, codecs, mixing, routing, control and operating system. It has a built-in OS for running apps and customized scripts for specialized software, metering apps and virtual interfaces. Also included are Opus, MP3 and AAC codecs for streaming audio between the station studio and home studios, plus modern add-ons such as dual audio clip players enhanced to play compressed or uncompressed audio files from the built-in USB ports to virtually eliminate memory storage issues.

Blade 4 is fully AES67-compliant for interoperability with a wide range of AES67 networks and devices and supports SMPTE ST 2110, including the NMOS discovery standard for AES67 and next-generation television networks.

Blade 4 puts both I/O and intelligence into one AoIP environment for everything from routing audio, mixing sounds and processing feeds, to turning mics on or off, controlling consoles and triggering mix-minus presets by show, location or talent. Blade 4 can be added to existing WheatNet-IP audio networks, a complete IP audio ecosystem of consoles, talent stations, I/O units, accessories, virtual tools, UIs and appliances.

BEST IN MARKET 2021
RADIOWORLD
NOMINEE

WideOrbit
WO Automation for Radio Version 5

Say Hello to Simplified Radio Automation That's Centralized, Scalable and Remotely Accessible

Radio broadcasters face the challenge of providing talent with remote access to the tools and systems needed to keep stations running and on-air. Today's distributed operations and remote requirements demand a robust, flexible, scalable and user-friendly automation system to keep listeners engaged around the clock.

WO Automation for Radio supports all operating models — live-assist, fully automated and everything in between — making it easy for broadcasters of any size to deliver compelling news, sports and music programming, even while taking operations fully remote.

With the new WO Automation for Radio version 5, you'll be able to:
- Access the entire in-studio experience remotely, from home or on the go
- Leverage talent across stations and markets
- Improve efficiency by integrating with other systems you use everyday

WO Automation for Radio version 5 also includes the following powerful features:
- **Radio Client:** Allows talent in any market to manage stations in real time, from anywhere
- **Remote Management:** Access from anywhere there's an internet connection, via native desktop apps for macOS, Windows, Linux and a mobile iOS app
- **Multi-Market Voice Tracking:** Record voice tracks remotely to leverage talent across markets
- **WO Traffic integration:** Live log editing, playlist delivery, real-time reconciliation and auto run-date sync

WO Automation for Radio Mobile
WO Automation for Radio Mobile is a native iOS app that supplements our native desktop apps and allows users to remotely control WO Automation for Radio from any iOS device, whether that's from home or while on the go. Staff can modify programming instantly and talent can control the station while on-air.

- **Up-to-the-minute coverage:** Immediately respond to local situations, like severe weather, breaking news and emergencies, to captivate audiences and keep talent engaged with your audience.
- **Seamless connectivity anywhere:** Reliable access to full station control, instant recording and on-the-fly voice tracking right from your iPhone or iPad.
- **Optimized resources:** Eliminate unnecessary in-station costs and unreliable third-party viewing solutions.

https://www.wideorbit.com/products/automation-radio/

BEST IN MARKET 2021

MIX PROSOUND

WINNER

NUGEN Audio

Paragon Reverb

True Convolution Reverb With the Flexibility of a Classic Algorithmic Reverb

As the world's first 3D-compatible convolution reverb, unlike any other on the market, Paragon offers full control of the decay, room size and brightness via state-of-the-art resynthesis modelled on 3D recordings of real spaces. Perfect for TV and film scoring applications, it also provides an unprecedented level of tweak-ability, with zero time-stretching, which means no artifacts. Additionally, Paragon features spectral analysis and precise EQ of the Impulse Responses (IR).

With purity of sound at the forefront of this plug-in, Paragon reverb operates in up to 7.1.2 channels of audio, making it ideal for surround and immersive applications, including Dolby Atmos bed tracks. Further, it features individually configurable crosstalk per channel, unique technology for resynthesis of authentic IRs, HPF and LPF per channel and switchable LFE.

Paragon has been incredibly well-received by the film and TV industry since its release. Different from any other convolution reverb on the market, NUGEN Audio's Paragon plug-in eliminates the need for enormous IR libraries. This technology not only enables users to reduce the sheer volume of recordings, it also encourages a greater level of creativity.

In a recent software update, NUGEN Audio also implemented outdoor IRs, new presets and an improved browser, with "search," "tagging" and "favorite" functions. These elements are especially important to people working on movies and TV shows with exterior scenes, which are found in nearly every production. Additionally, the new browser makes it easier for users to organize their presets, further expediting the creative process.

Using state-of-the-art technology developed alongside the University of York's Dr. Jez Wells, 3D Impulse Responses are analyzed, decomposed and resynthesized to create new authentic spaces. This ensures a small digital footprint for the IR library and makes it possible to configure limitless combinations of spaces with just a few adjustments to the settings. The IR panel also enables users to make changes to the frequency response of real spaces by EQ'ing the reverb model and altering the frequency-dependent decay rate. Unlike traditional convolution reverbs, Paragon does not use static IRs, which provide a wider scope to transparently transform the sound of a space.

Additionally, Paragon's crosstalk feature creates a sense of liveliness and interaction between channels and allows users to produce surround reverb from mono or stereo sources. It also offers the control and flexibility to determine how reverb from each channel interacts with other channels, increasing dialog intelligibility.

In addition to its Atmos application, NUGEN Audio's Paragon reverb plug-in is well-suited to creating immersive reverb in mono, stereo and surround formats. It is ideal for recreating authentic sounds of real spaces and manipulating IRs while still maintaining true convolution characteristics.

https://nugenaudio.com/paragon

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OWC

OWC Thunderbolt Dock

Massively Expand Your Connectivity: Add More Thunderbolt Ports and Works With USB-C

Three Thunderbolt ports and four USB ports empower you to connect to past, present and future devices. Up to two 4K displays or a 5K/6K/8K display, high-performance storage including NVMe SSDs, A/V mixers, phones, tablets, even desktop accessories like a keyboard or mouse. With the OWC Thunderbolt Dock, an entire world of USB and Thunderbolt accessories is ready for you to connect and expand your capabilities.

Massively expand the Thunderbolt functionality of your Apple M1 Mac, any Apple "Intel" Mac with Thunderbolt 3 or any Thunderbolt 4 PC . You can also use the OWC Thunderbolt Dock with non-Thunderbolt USB-C machines like Chromebooks and iPads

too. Gain convenient access to portable gear, headphones and SD cards. Add your favorite Thunderbolt and USB devices, Gigabit Ethernet and an SD card reader to your workflow ... all while keeping your space free of cable clutter.

Daisy chains are perfect for connecting a lot of devices to a single port, but remove any device other than the last one and you're left with the hassle of disconnecting and reconnecting devices. The OWC Thunderbolt Dock lets you create three separate "tree branch" device chains, so you can remove devices from one chain without affecting or disconnecting the others. You can even add three Thunderbolt bus-powered devices.

https://eshop.macsales.com/shop/owc-thunderbolt-dock

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OWC

OWC Envoy Pro SX

The Super-Fast, Xtremely Rugged, Portable SSD

This little beast of an SSD handles all data storage and backup challenges like a real superhero when put to the test. The OWC Envoy Pro SX is versatile enough to be used as a bus-powered drive for daily storage and backup tasks. It can handle workflows easily handle the speed demands of production-level audio, design and photography workflows. And it serves up real-world performance speeds up to 2847 MBps with modern Thunderbolt and USB4 equipped Macs and PCs.

Built along the OWC Envoy Pro EX's award-winning lineage, this tiny but mighty 1/2 pound portable drive is 1/3 smaller. It features a removable Thunderbolt cable and is test certified to handle the nastiest environments. From managing obstacles in the field to crushing deadlines at home, the OWC Envoy Pro SX lets you unleash your productivity power without needing a cape or mask.

The grooved fins on the OWC Envoy Pro SX's matte black aluminum chassis transform it into a highly effective heat sink. Even after a diabolically long file transfer, the stealthy and silent OWC Envoy Pro SX stays reliably fast. The OWC Envoy Pro SX is fully compatible with macOS and Windows built-in encryption, so you can add peace of mind password security to your data whenever you need it. Whatever your data journey, the OWC Envoy Pro SX stands ready to deliver a crushing blow to time-robbing work and play challenges in the blink of an eye.

OWC Envoy Pro SX Highlights:
- **Lightning Fast:** Advanced OWC Aura Pro SSD storage technology with TRIM support works with Thunderbolt to deliver the fastest and most reliable performance available in a portable drive
- **Super Versatile:** Perfect for audio, video, photography, graphics, gaming and general data storage/backup uses
- **Xtremely Portable:** Bus-powered and smaller than most compact smartphones
- **Xtremely Rugged:** Certified dust-proof, drop-proof and water-proof, too
- **Silently Cool:** Fan-less, heat-dissipating aluminum housing for distraction-free operation
- **Secure:** Non-skid rubber feet keep the OWC Envoy Pro SX in place
- Informative: LED for at-a-glance confirmation of power and activity status
- **Connected:** Included Thunderbolt cable plugs into Thunderbolt and USB4 Macs and PCs
- **Worry-Free Reliability:** Three-Year OWC Limited Warranty

https://eshop.macsales.com/shop/owc-envoy-pro-sx

Shure Inc.
ADX5D Axient Digital Dual-Channel Portable Wireless Receiver

Supports Broadcast and Film Professionals With Premium Portable Wireless Capabilities

Shure's Axient Digital has been the standard for superb sound, RF spectrum stability, workflow control and scalability since its release. To help bring unmatched wireless capabilities to new and existing Axient Digital customers, Shure debuted the Axient Digital ADX5D Portable Receiver — a dual-channel, portable wireless slot receiver that provides superior RF performance, spectral efficiency and transparent audio quality.

Shure designed ADX5D in a portable form factor for professionals in the field or on the go. ADX5D is ideal for environments like sports/events broadcasting, electronic news gathering (ENG), film/episodic television and electronic field production (EFP). The portable receiver supports the demand for a remote wireless solution that ensures the message is clearly delivered.

- **Audio Quality and RF Performance** — Since it was designed for productions that demand maximum signal stability, ADX5D is able to support the most extreme wireless needs. True digital diversity technology helps significantly mitigate the potential for signal fades or interference that can cause dropouts. It also supports wide dynamic range, AES-256 encryption and 2ms latency from the mic transducer to the analog output. A wide tuning band ensures reliable operation in any environment.
- **Portability and Convenience** — ADX5D functions as an on-the-go wireless receiver, offering the power and performance of Axient Digital, but in a portable form factor. It can easily slot inside and connect directly to the audio inputs of a professional broadcast camera, enabling streamlined connectivity of the two devices. The portability also provides convenience and flexibility, especially for film and TV sound mixers who often have discrete powering, audio-routing and/or RF-distributing gear in their portable recording bags.
- **Completes the Axient Digital Ecosystem** — Flawless RF, exceptional audio quality and system scalability are desired by today's broadcast and film professionals. ADX5D naturally com-

plements the existing solutions in Shure's expansive portfolio, including AXT600 Spectrum Manager, Wireless Workbench and all Axient Digital transmitters, including ADX1M Micro Bodypack.

ADX5D's new firmware update includes two new features:
- **Party Dial** — Allows users to switch between RF channels on the ADX5D receiver from a preselected group of frequencies. It is especially useful for sound professionals who are using one ADX5D receiver and need to quickly switch between multiple Axient Digital transmitters.
- **Optimized Menu Structure** — Places commonly used features just a few clicks away from each other. It enables camera operators and sound professionals with an efficient way to access tools such as adjusting audio and RF parameters. The enhanced Shortcut Menu offers easy access to critical features, like IR Sync and Headphone Adjustments. It also serves as rapid access to the Home Screen and Channel Switching.

For sound mixers, producers and engineers who need to move around efficiently and effectively on-set, ADX5D allows them to easily transition from cart to bag — whether on location or in the studio.

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Mix PROSOUND

NOMINEE

THX Ltd.

THX Onyx

Best Portable DAC/Amp Empowering Chrystal-Clear Audio From Laptop or Smart Phone

THX Onyx brings high-fidelity mobile audio to everyone, everywhere. THX Onyx is a portable DAC/Amplifier that makes high-quality, studio-grade audio available to everyone, everywhere from audiophile, to gamer, to those on the go who want to enjoy music, games and movies with the purest undiluted audio, the way the content creator intended it to be enjoyed.

It's a perfect companion product for anyone who wants to experience high-quality, undistorted, undiluted audio when listening on headphones and headsets and over desktop speakers. From music lovers, creators and mixers to new and experienced gamers, to streamers and movie buffs, THX Onyx is an easy-to-use, cost-effective (versus other similarly performing equipment) portable DAC/Amp that enhances the audio for digital entertainment enjoyed through devices with a USB connection.

Specifically, THX Onyx is for anyone who listens to content on their smartphone, tablet or laptop and wants to enjoy the highest quality in audio, including: music lovers, movie fans, audiophiles, gamers, music producers and creators and more.

THX Onyx improves the audio output exponentially from your mobile phone or laptop when listening over headphones, providing enhanced enjoyment of music, movies and games with THX AAA for ultra-low distortion and maximum dynamic range.

THX AAA technology ensures the ultimate no-compromise headphone audio experience by delivering the world's highest fidelity audio with infinitesimally low levels of noise, distortion and power consumption.

Key Features
- THX Achromatic Audio Amplifier (THX AAA) technology
- Master Quality Authenticated (MQA) renderer to reproduce digital master recordings
- ESS ES9281PRO DAC for flagship studio sound quality
- Cross-platform compatibility for convenient plug-and-play
- Magnetic cable management to keep headphone wires neat and tangle-free
- Plug and Play: Works with PC, Mac, Android and iOS, plugs into any USB-C or USB port, and requires no drivers or installation. PC is for Windows 10 only with Windows OS. iOS requires the slim Apple Lightning to USB Camera Adapter, sold separately.

🔍 https://www.thx.com/blog/thx-launches-dacamp-thx-onyx/

Best in Market 2021 — Mix ProSound News — WINNER

Wholegrain Digital Systems LLC
DynPEQ Plug-In Family
Dynamic Parametric Equalizers for Digital Audio
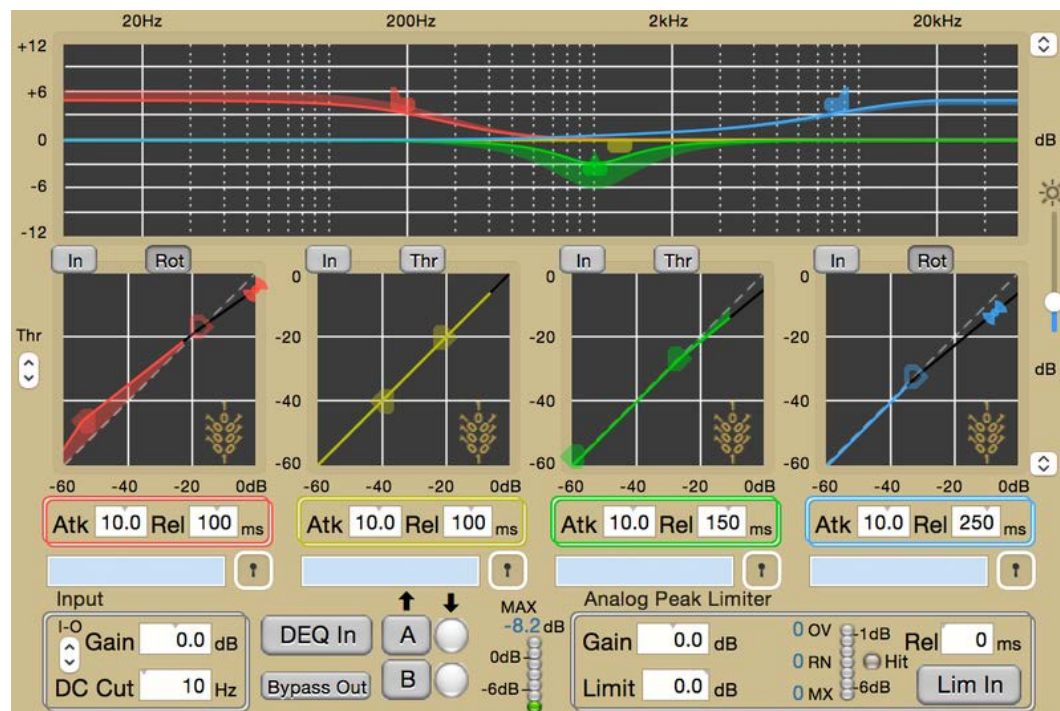
Parametric equalization was conceived as an alternative to equalizers of the time which mapped each frequency to one controlling band. As graphic and crossover EQs are effective for an audiological model, they fit closely at the playback end of the audio chain.

The problem bands encountered in recording, mixing and mastering are a broader set that knows not of crossover points. The heart of DynPEQ is a traditional parametric equalizer. Center/cutoff frequency and Q define the band to apply dynamics. The principles used in finding parametric EQ bands extend intuitively for band dynamics.

DynPEQ's time-domain IIR processing avoids STFT granularity and ensemble averaging, allowing real-time reaction at low latency. It calculates the total RMS level of the sidechain for a fast and smooth control signal, eliminating the need to extend release time.

The DynPEQ design allows for detailed and robust control of the audio spectrum, prompting Darwin Grosse to write the following in the June 2017 issue of Recording Magazine: "Perhaps the aspect that has me most interested in using this product is the way it makes me think about my work — while it is clearly both an EQ and a compressor/expander, it is viable to approach it like a super-EQ."

https://www.dynpeq.com