



Production Technology & Services – Solutions guide



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Products

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	DashBoard Ultritouch Quorum PowerPlay OverDrive		Streamline Graphics Streamline Production Streamline Pro		Media I/O softGear
54	News	58	Camera motion systems	74	Motion graphics
	Inception Inception Live		ACIDCam Furio CamBot Pan Tilt Heads PTZ-12G+ Control Systems for Studio Robotics spidercam		XPression XPression Tessera PIERO
80	Video servers & protection delay	88	Connectivity & Multiviewers	96	Production switchers
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	openTruck		Rocket Surgery Ross Production Services Training & Support		

Let's make it real.

MOTION GRAPHICS

XPRESSION
XPRESSION GO! SERIES
XPRESSION TESSERA
XPRESSION CLIPS
XPRESSION MAPS
XPRESSION MAPS TOUCH!
XPRESSION TICK-IT!
XPRESSION ELECT-IT!
XPRESSION TOUCH FACTORY
XPRESSION TELESTRATE



PIERO | Sports Analysis graphics
PIERO BROADCAST
PIERO CLUB
PIERO LIVE | Soccer, Rugby, AFL and NFL productions

VIDEO SERVERS

PRODUCTION

TRIA EXPRESS DUET
TRIA+
TRIA+ UHD

PRESENTATION

KIVA+
KIVA EXPRESS DUET

REPLAY

MIRA Express
MIRA+



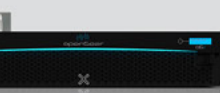
PROTECTION DELAY

AIRCLEANER-2



HYPERCONVERGED SOLUTIONS

NK | Cost-effective, high-performance router
ULTRIX | UHD and IP routing, multiviewers, A/V signal processing
ULTRIX FR12 | Larger-scale Hyperconverged Solutions with Smart Door
ULTRICOOL | Smart, directional 1RU rack mount cooling system
ULTRICORE | Fully featured connectivity control system
ULTRITOUCH | System control and monitoring panel



OPENGear | Modular signal processing
MASTER CONTROL SWITCHERS | Master control and branding
IGGY | AES67 and ST 2110 AUDIO BRIDGE platform
NEWT | COMPACT UHD-OVER-IP SDI / HDMI CONVERTER
RAPTOR | ST 2110 Gateway
TALLY CONTROL | Signal tracing and monitoring
MASTER SYNC GENERATORS | System timing solutions
AUDIO MONITORING BRIDGES | 1RU and 2RU monitoring tools
GEARLITE CONVERTERS | SDI and fiber mini converters
AUDIENCE MEASUREMENT | Audience engagement measurement

ACQUISITION, TRANSCODE & PLAYOUT

MEDIA I/O |
Software-based Ingest, and
Playout solution

SOFTGEAR |
Software Microservice
Media Processing platform

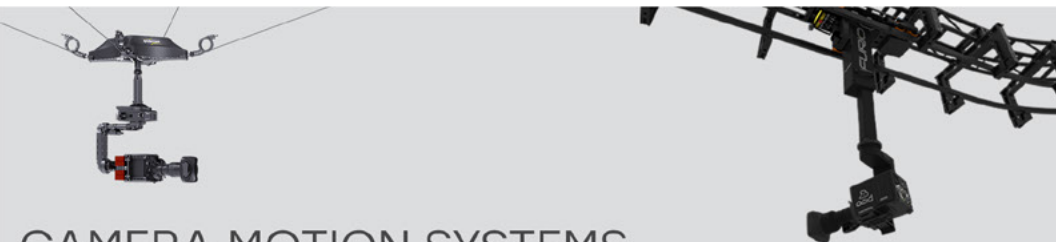


PRODUCTION TECHNOLOGY & SERVICES

VIRTUAL PRODUCTION SOLUTIONS

LUCID STUDIO |
Control system & workflow

VOYAGER |
EPIC Unreal Engine
ARVS Renderer



CAMERA MOTION SYSTEMS

PAN AND TILT HEADS | X300, X350, VR0, VR600, 520PT, 600PT, 700PT
BLACKBIRD | C2, S2 and SE Elevation systems
CAMBOT | 600XY-S2, 600XY-S3, 700XY Free-Roaming pedestals
FURIO | SE+ & S2+ Floor Rail Systems and SkyDolly Ceiling-Mounted Rail systems
SMARTSHELL | Robotic Camera Control system
VISION[A]RY | Facial & Body Tracking system
ACID CAMERAS | Z50-UCHR, H200-UCHR and PTZ-12G+
SPIDERCAM | Cable-based camera systems

SERVICES

ROSS PRODUCTION SERVICES |
Live Event productions & rentals

ROCKET SURGERY |
Graphics creation



MEDIA ASSET MANAGEMENT

STREAMLINE PRO | Video Asset Management
STREAMLINE | Graphic Asset Management
EVO | Networked Storage



CONTROL SYSTEMS

OVERDRIVE | Automated Production Control
DASHBOARD | Facility control
QUORUM | Meeting Production system
ULTRITOUCH | Touch Screen control
POWERPLAY | Event Control system



NEWS

INCEPTION | Academic, Express, Standard, Enterprise
INCEPTION LIVE
INCEPTION.CLOUD
HORIZON | Enterprise connector



PRODUCTION SWITCHERS



CARBONITE

TOUCHDRIVE PANELS | TD4, TD3, TD3S, TD2, TD2S, TD1, TD1C
CARBONITE BLACK SOLO / SOLO13 | Compact Production Switcher
CARBONITE ULTRA | 1RU SD/HD/UHD Production Switcher
CARBONITE ULTRA 60 | SD / HD / UHD Production Switcher with up to 60 inputs and 25 outputs
ULTRIX CARBONITE | Mid-Sized HD/UHD Hyperconverged Production Platform

ACUITY

ACUITY PANELS | 1S/1SDD, 2M/2MDD, 2X/2XDD, 3M/3MDD, 3/3DD, 4/4DD
ULTRIX ACUITY | HD/UHD Hyperconverged Production Platform

GRAPHITE

GRAPHITE | All-in-One SD/HD Production System
GRAPHITE PPC | All-in-One Portable SD/HD Production Center
GRAPHITE CPC | Cloud Production Center



IP, SDI & hybrid systems and software-defined production

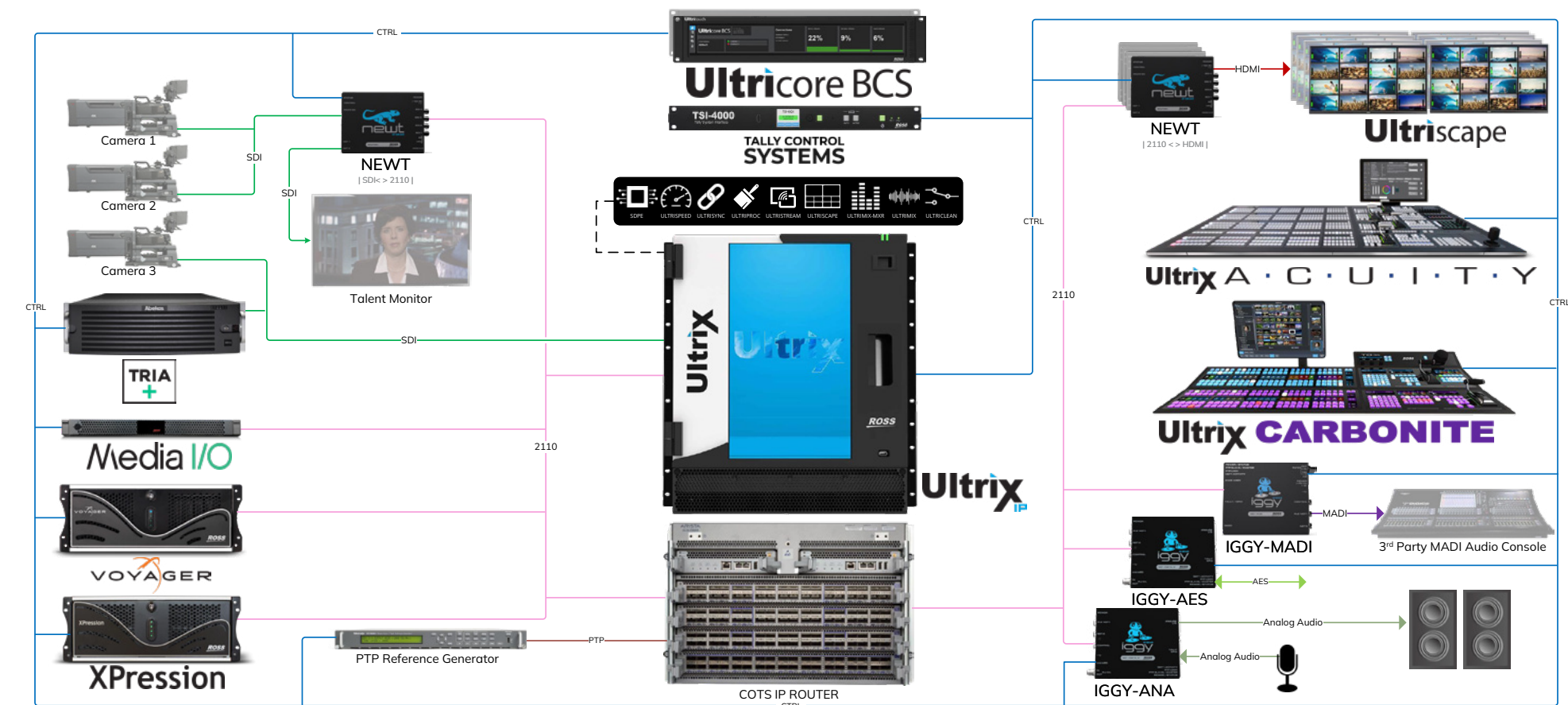
Flexibility, Agility and Scalability

There is much excitement around the potential of IP connected systems to create more flexible, agile and scalable production environments.

Ross is at the forefront as a leader in IP connectivity with in-house core technology development for key popular technology standards including SMPTE ST 2110 and AES67 technology, while continuing to push forward with SDI connected environments at the same time. Hybrid IP/SDI environments will be the norm for the foreseeable future in live production as system engineers leverage the best that each technology has to offer.

Whether IP or SDI, agility comes from flexible processing engines and the notion of Software-Defined Production – Ross' term for agile, multi-function processing hardware that can add functionality through software licenses. The benefits are a flexible and scalable pool of resources that can grow as your needs change.

Ross IP / SDI hybrid solution



ULTRIX

- Software-defined Platform
- 1RU | 2RU | 5RU
- SMPTE 2110 IP Blade = 16x16 2022-7in 3G | UHD = 8x8 or 4x4 in 2022-7
- SDI / IP Gateway
- IP MultiViewer
- Hyperconverged with Acuity & Carbonite

ULTRIX ACUITY

- Supported in 5RU / 12RU frame
- Uses software-defined production engine for each ME (occupies 1 slot each)
- HD / 3G / UHD
- 5RU = up to 4 ME's | 12RU = up to 8 ME's
- Supports mix of Baseband & IP sources
- Supports all Ultrix Software-defined Features
- Add I/O by trading ME's
- Access to all I/O

ULTRIX CARBONITE

- Supported in All Ultrix Frames
- Uses software-defined Production engine for entire Switcher (occupies 1 slot)
- 18 input Carbonite Ultra embedded in Ultrix Frame
- Supports all Ultrix Software and hardware options

ULTRICORE-BCS

- Ultricore – BCS : Large Scale control system
- Ultricore – IP : SMPTE 2110 Routing and control
- Supports NMOS IS-04 & IS-05
- Optional Ember+ Support
- Dashboard and Ultritouch control

XPRESSION

- Available in 1RU / 2RU / 4RU
- XPression graphics available with IP I/O
- All XPression versions supported
- SMPTE ST 2022-6/7 & ST 2110
- 10GbE or 25GbE connections

NEWT | IGGY

- NEWT**
 - Compact IP to SDI and HDMI conversion
 - SMPTE ST 2110 & ST 2022 7
 - Open Control, including NMOS
 - 4 x 3G-SDI or 1 x UHD HDMI 2.0
- IGGY**
 - MADI <=> AES-67 / SMPTE 2110
 - AES <=> AES-67 / SMPTE 2110
 - Analog Audio <=> AES-67 / SMPTE 2110



12G SDI, HDR, WCG AND 4K UHD

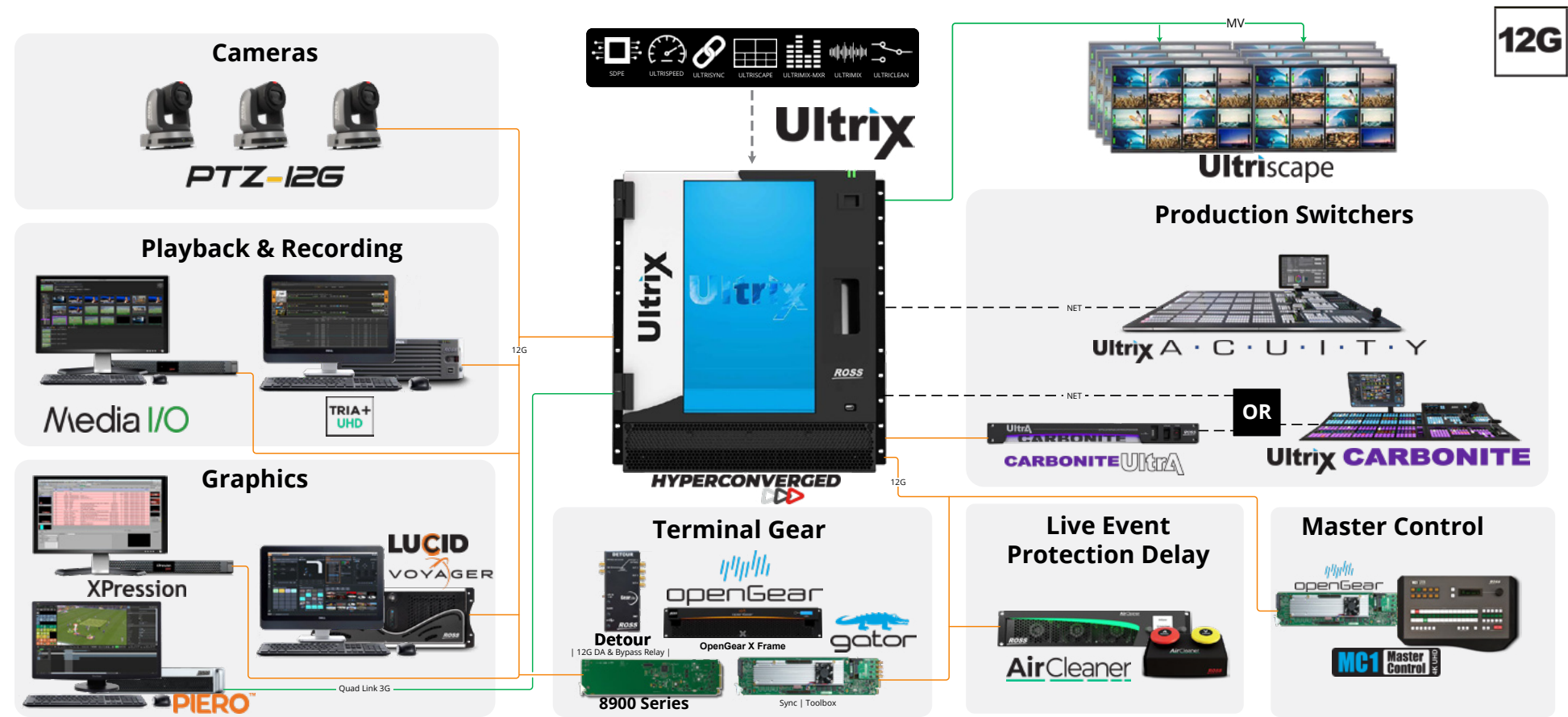
4K UHD production solutions

4K UHD is rapidly becoming an in-demand production format as the worlds television manufacturers cease production of High Definition displays in favor of 4K UHD displays with support for High Dynamic Range (HDR) and Wide Color Gamut (WCG) and as live web streaming and broadcasting begin to transition to 4K UHD. Ross has a growing 4K UHD portfolio that will have you producing impressive results for these new large format displays.

The next generation of Serial Digital Interconnect (SDI), 12G extends SDI into 4K UHD applications with the plug & play ease-of-use and reliability that we know and love from SDI. Ross has been a pioneer in 12G SDI which has now been broadly adopted with a large ecosystem of products and vendors supporting the standard.

4K
UHD

Ross 4K UHD solution



XPRESSION	MEDIA IO TRIA+ UHD	OPENGear	ULTRIX	ULTRIX ACUITY	ULTRIX CARBONITE	MC1 UHD
12G <ul style="list-style-type: none">• Single Link UHD over 12Gb/s SDI• 1x 12G SDI Fill / Key Output• 4RU / 1RU Versions• Hardware works with Prime, BlueBox, and Studio• Also available in portable XPression GO! Series	TriA+ UHD Production Server <ul style="list-style-type: none">• 2x Bi-Directional 12G• XAVC Codec• Growing File Export Media IO <ul style="list-style-type: none">• 2x Channels configurable 12G• Multi-Codec Support• Live Proxy File• Local or External storage	<ul style="list-style-type: none">• 8900-Series 12G Distribution• AMX-8952 – Audio Mux / Dmux• SHC-8932-F – UHD to HDMI converter• GATOR-TOOLBOX – Up/Down/Cross with HDR Conversion with 3D luts & Standards Conversion• GATOR-SYNC 4 Channel UHD Frame Sync• TES-8943 – 12G SCTE 104 / Data - Inserter & Extractor• SFC-6901 – 4x UHD Fiber RX/ TX or Bi-directional variants	<ul style="list-style-type: none">• 16x-288x UHD Routing Platform• 12Gb/s 10 Bit Video Routing• Advanced Audio Embedding/ De-embedding and Processing• Video Clean/Quiet switching• Up to 487x Multiviewers• 3G Q2SI <-> UHD Gearboxing• 12G Frame Syncs on every input*	<ul style="list-style-type: none">• Software-defined Production Engine replaces Ultrix I/O with Acuity ME's• Up to 8 ME's 6 Keyers per ME• 6x 2D DVE's 2x Chroma Keyers - per ME• 2 PV 4 PGM's Per ME• 4 Media Stores W/ Alpha per ME• Full 12G Single link• Supports all Ultrix Software-defined Features• Only supported in Ultrix 5 /12RU frame	<ul style="list-style-type: none">• Software-defined Production Engine replaces Ultrix I/O with Carbonite Production Switcher• 2 ME + 2 MiniME UHD• 22 In HD/12G 22 Out HD/12G• 6x 2D DVE system wide• 2x Chroma Keyers System Wide• 1x UHD MultiViewers	<ul style="list-style-type: none">• Full single link 12G support• Software-defined Features• 2 External Keyer inputs• 2 Internal Keyers with Media Store• 1x 2D DVE for Squeeze back• AES inputs for VO and EAS Tone• Compact 2 Slot version available w/o AES• Pairs Perfectly with Ultrix



Corporate

Modern corporations leverage video to connect with new and existing customers, employees, partners, and shareholders. Ross can help you take advantage of this opportunity with tailored solutions that fit a wide range of budgets.

LIVE EVENTS

Remove the stress from hosting live events with broadcast quality and reliable technology. The tailored easy to use solutions make your staff more efficient and supports a wide variety of web, social platforms, screen sizes and more.

INTERNAL COMMUNICATION

Adopt the video-memo to produce more effective communication within your organization, bring people together from anywhere in the world, and utilize your facilities to its maximum capability with the best technology.

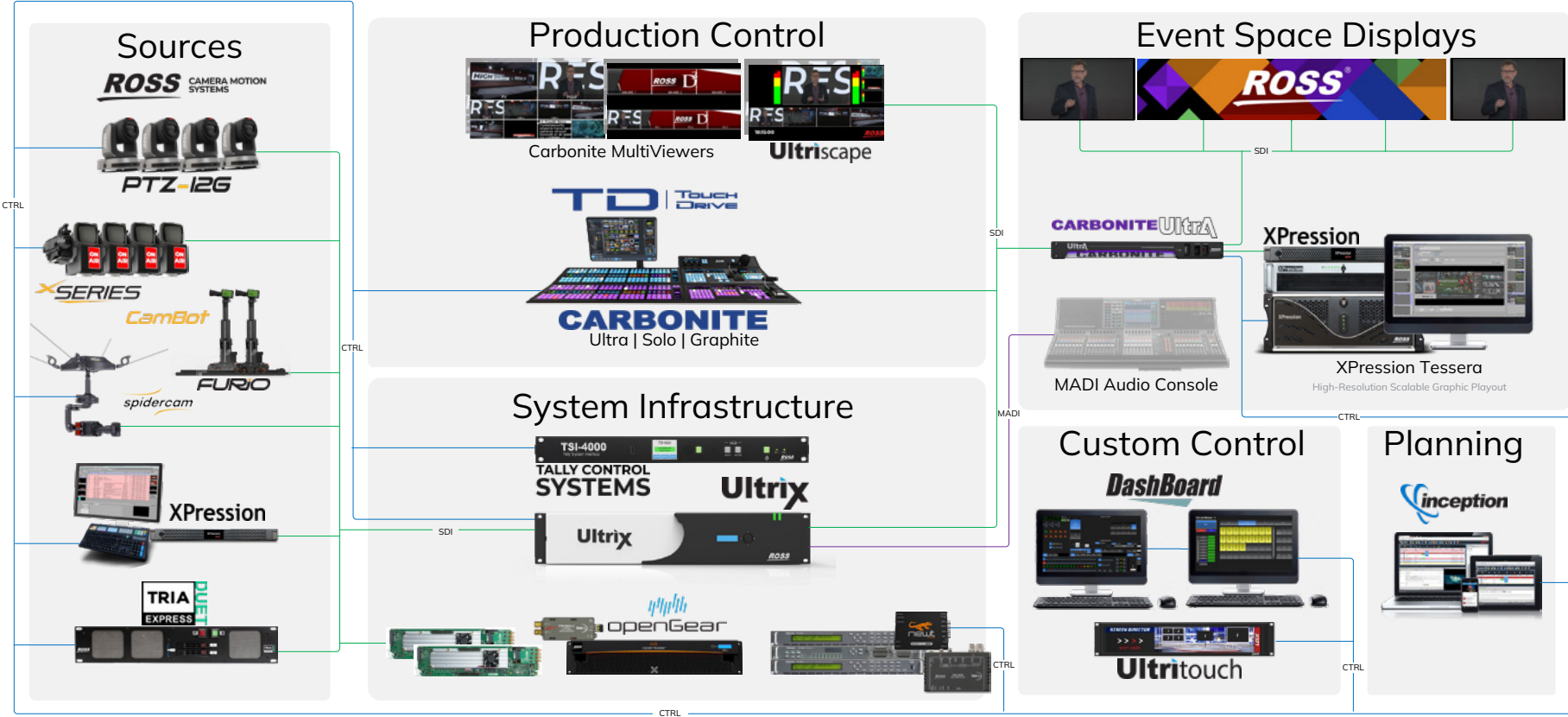
EXTERNAL COMMUNICATION

Increase engagement, awareness and promote industry experts to differentiate your company's brand. Leverage collaborative live streams, real-time presentations, and integrated social media outreach to get your message viewed around the globe.

E LEARNING

Train employees and educate customers in person and/or remotely to reduce costs, lessen you carbon footprint and reach a wider audience. Utilize cutting edge technology to promote creativity for more visualized learning experience while maintaining interaction.

Ross corporate live event solution



ULTRIX	CARBONITE GRAPHITE	XPRESSION	DASHBOARD
<ul style="list-style-type: none"> • Software-defined Routing • 1RU – 5RU : 16x16 to 144x144 • 12G / 6G / 3G / HD / SD • UltraScape: MultiViewers • UltraSync: 3G Frame Syncs • Add Fiber HDMI MADI With SFP Slots • Up to 3072 x 3072 Audio matrix • Dashboard control + RossTalk 	<ul style="list-style-type: none"> • 13 - 36 Inputs, 8 – 25 outputs • 1ME – 3ME + 4 MiniMEs • Mix and match panels and frames and All in one Systems • Multi-panel support • Robust Hardware • Big Switcher features • Dashboard Control + RossTalk 	<ul style="list-style-type: none"> • Available in 1RU / 2RU / 4RU • Robust Graphic & Clip play back • Dynamic Data driven Graphics including Social media with Ross Inception • XPression Tesseract licenses allows for large canvases by linking multiple XPression Engines together • Software-defined Production licensing model with no hardware changes • RossTalk and native API integration to DashBoard 	<ul style="list-style-type: none"> • Free Mac PC Linux Software • Control and Monitor RossVideo products • Add more Dashboard stations to separate out operator positions • Custom Panels for Custom operation & Workflows to minimize Operators • Send Rosstalk commands to Dashboard and use as a custom protocol translator



Instruct students for industry jobs utilizing industry-standard Ross Solutions for Education

Education

Training the next generation of video production professionals doesn't have to come with compromise. Teaching with industry-leading tools from Ross provides students with the foundation needed to become top industry operators.

TEACH PRODUCTION WORKFLOW

Ross solutions are great for teaching both traditional and modern workflows. Technology has enabled whole new ways of producing and delivering television and Ross can help modernize your curriculum to ground students in traditional methods while expanding their knowledge into new areas like automated production, augmented reality and social media.

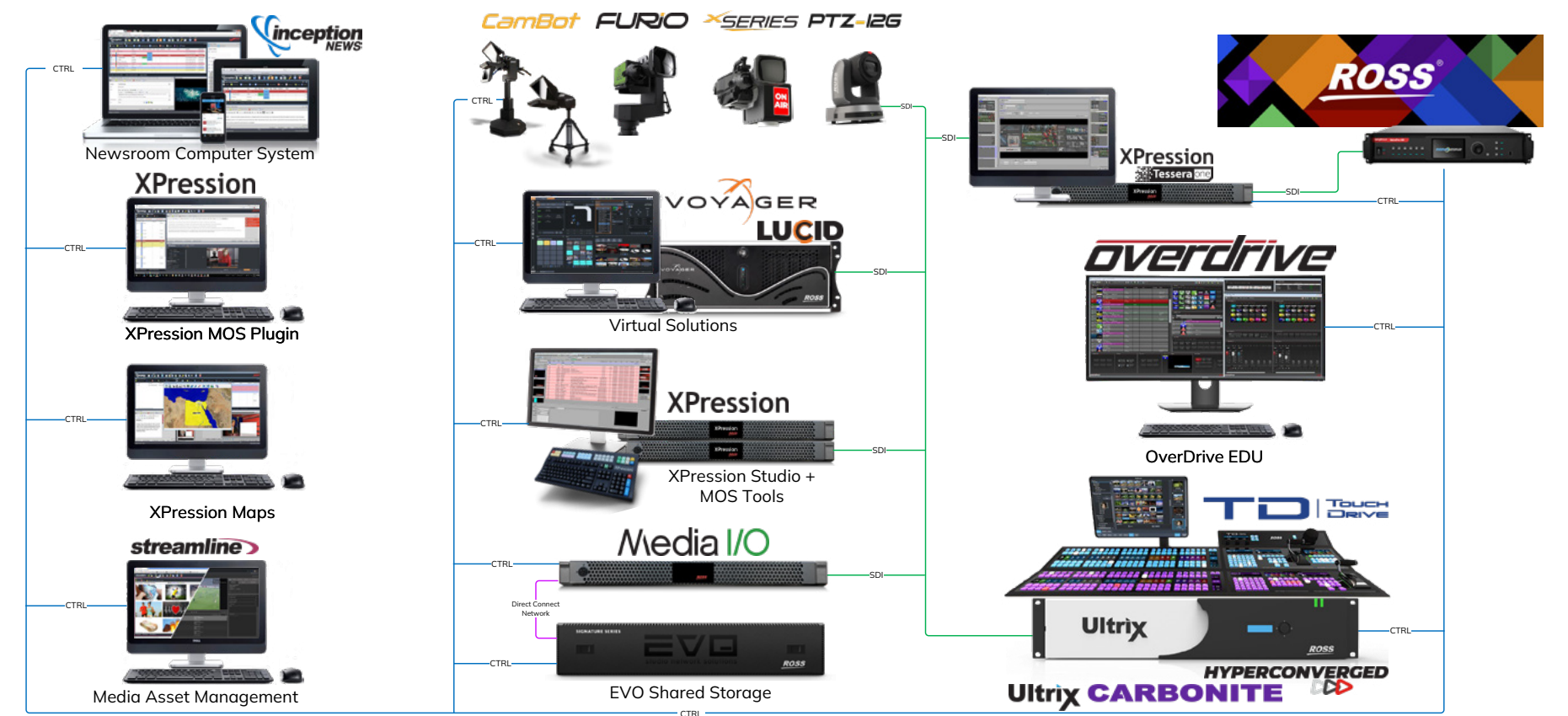
INVEST IN FLEXIBILITY

Easily transform a control room to suit different types of productions - from news to sports to live auditorium productions and everything in between. This gives students exposure to a broad range of production experiences and a path to potential job opportunities.

SCALE YOUR SOLUTION

Ross has a deep portfolio of products, enabling you to start small and add equipment as the educational program grows. Easily add licenses / users, link chassis together, unlock features and swap out hardware when it's time to expand.

Ross education solution



INCEPTION	STREAMLINE	XPRESSION	ULTRIX CARBONITE	MEDIA I/O	OVERDRIVE	CAMERA MOTION SYSTEMS
<ul style="list-style-type: none"> Local and cloud hosted options Manage live event rundowns with multi-user collaboration Messaging and alert notification Publish to web and social Search for user generated content on social media and push directly to onscreen graphics 	<ul style="list-style-type: none"> Organize assets for video production Search, download and edit assets with NLEs Quickly create sequences in a web browser with Rough Cuts Access live ingesting feeds from Media I/O directly in a web browser Full-Fill Inception placeholders from MAM Virtualize the full platform or host in a private cloud 	<ul style="list-style-type: none"> Real-time motion graphics and 3D Rendering Designer friendly, easily building complicated graphics Easy to use and operate Full MOS integration Software-defined to add channels and features as needed 	<ul style="list-style-type: none"> Hyperconverged Router & Switcher Software-defined architecture Highly popular Mid Sized Production Switcher Easy to learn and operate Big switcher power at a fraction of the price Robust Hardware with multiple Panel and frame Options ULTRIX 	<ul style="list-style-type: none"> Built for speed and News Production Highly flexible broadcast codec support AMP & VDCP control support Schedule ingests of feeds Playout with MOS rundowns SDI, ST.2110, NDI and SRT support Record and Playout directly from shared storage Virtualization Ready 	<ul style="list-style-type: none"> #1 Automated Production Control System Control all Devices for flawless production execution Full MOS Support Control both Ross and 3rd Party Devices 	<ul style="list-style-type: none"> Wide range of PT / PTL / XY Peds and Tracked systems PTZ Camera systems Unified Smart Shell Control System Dashboard Control Options Motion Director live correction during recalls Fully integrated into OverDrive





Productions in a League of their own

Esports

The esports world has exploded, as have the scale and demands of productions supporting this major industry. Working closely with leading esports companies, Ross is pioneering the development of unique esports oriented production solutions. Whether online battles, small venue, or full arenas, Ross offers esports solutions to fit them all.

BRING THE SIZZLE

Deliver the excitement and experience of the game to your viewers with a world class production. Captivate fans with game characters and environments brought to life through augmented reality and virtual sets. Ross brings the best of live sports and broadcast production technology to the task of putting on an amazing esports event.

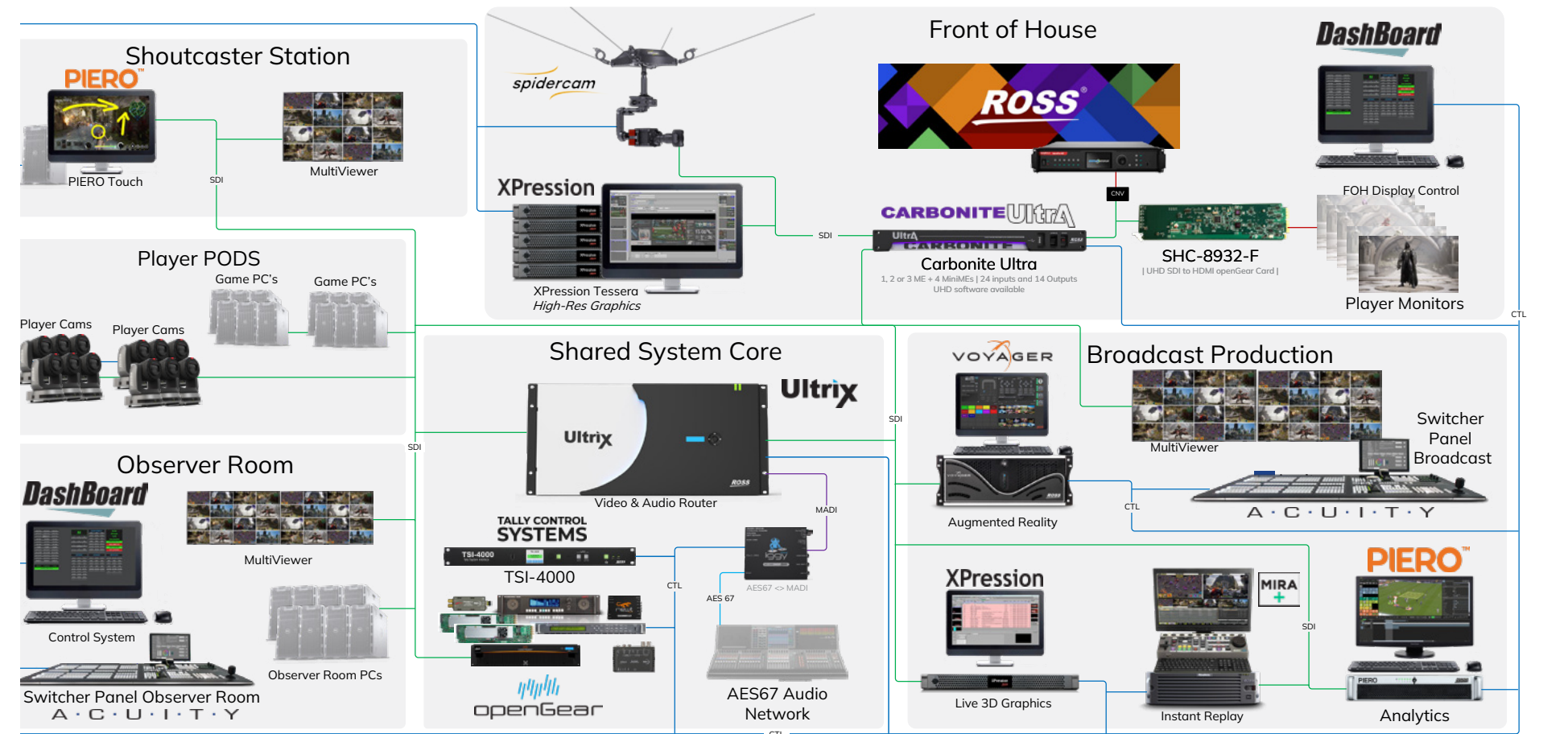
UNIFY THE PRODUCTION

Bring the operation all together with a tightly integrated workflow. Ross solutions provide more efficient use of equipment and simplified operation supporting the key elements you need including Shoutcaster, Player Pods, Observer Rooms, Player Streams, Front of House screens and Broadcast & Streaming outputs. Our esports-optimized DashBoard control panels automate workflow, offering simplified customized operation in the exact places you need it.

CHOOSE A GREAT PARTNER

Ross technology has a proven track record of product performance in the most demanding live production applications gained from over 45 years of experience. Well known for top-notch technical support, you can count on Ross to be there when you need it most.

Ross Esports solution



ULTRIX	DASHBOARD	XPRESSION	VOYAGER	ACUITY CARBONITE	MIRA+	PIERO
<ul style="list-style-type: none">Saleable Routing PlatformSDI / IP / Fiber RoutingFull MADI Audio integrationOptional 3G & UHD Frame SyncsClean / Quiet Switch on every outputIntegrated MultiViewers with up to 100 PIPs per Head	<ul style="list-style-type: none">Runs on any PC on the networkBuild easy to use Touch Screen based custom workflows for any operatorControl and Monitor all Ross GearRoss Purchased Panels for robust turnkey applications	<ul style="list-style-type: none">Real-time motion graphics and 3D renderingLive TelestrationXPression DataLinq interfacing to real-time scoring data-driven graphics	<ul style="list-style-type: none">Live Unreal Engine for Broadcast useFull Augmented Reality, Virtual sets & Extended RealityCan drive large LED DisplaysPaired with tracking data and Lucid Studio virtual production control	<p>Acuity</p> <ul style="list-style-type: none">Large I/O and up to 8 ME'sSuperior Device control & AutomationSupports up to 9 panels per Frame <p>Carbonite</p> <ul style="list-style-type: none">Mosaic: Large screen Display processorUltra: Mid size software-defined production switcher	<ul style="list-style-type: none">Robust Server ArchitectureQuorum fast clip recallsEasy to use Replay interface with no Mouse clicksAdvanced Playlist supportMulti-User configurationsFully configurable Bi-directional ChannelsDirect integration with Piero for better, and faster analytics	<ul style="list-style-type: none">Seamless integration with Mira+Touch and iPad integration for Talent useWide range of visual effects complete with easy to incorporate branding and sponsorship opportunities





Government

Broadcast technology is increasingly being used by national agencies, state governments, and local communities to make information more accessible to constituents. City, state and national governments require different levels of scalability. Ross has a cost-effective solution for every size.

PRODUCE EFFICIENTLY, ACCURATELY AND FLEXIBLY

Make training staff and getting on air quick and easy with a seamlessly integrated solution from Ross. Control cameras, graphics, and switching all from a responsive and intuitive user interface. Keep the production flexible and engaging by quickly changing camera angles, shots, and graphical content with no added complexity.

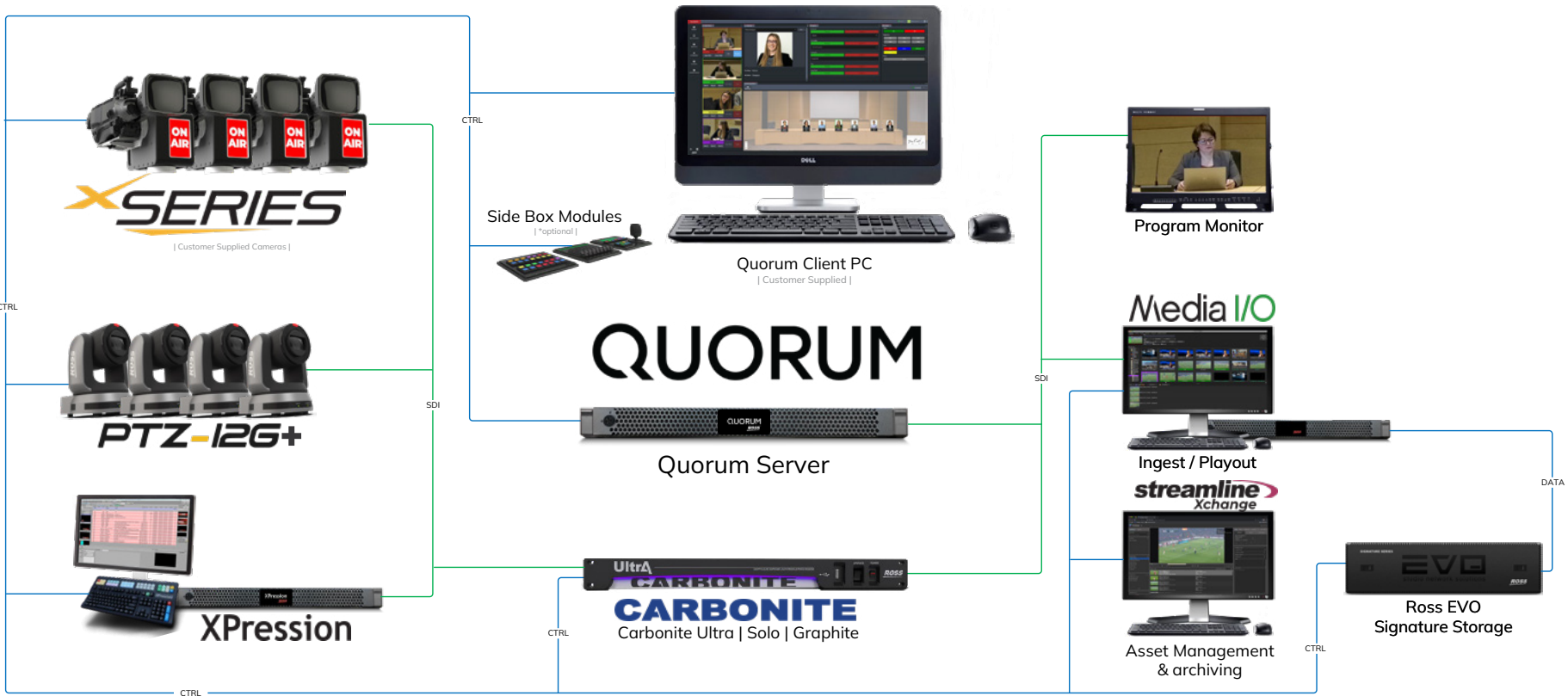
MAXIMIZE BUDGET

Single user workflows allow for coverage of more committee meetings and assemblies making sure nothing gets missed because of operational budgets or staffing limitations.

CHOOSE A PROVEN SOLUTION

By choosing Ross you'll be in good company. Ross provides the technology that legislatures all over the world rely on.

Ross government production solution



QUORUM	XPRESSION	CARBONITE	X-SERIES	PTZ-12G+	MEDIA I/O
<ul style="list-style-type: none">• Easy to use web platform• Touch friendly interface• Control Cameras, Graphics and switching from a single interface• Pair with a Microphone system for added Automation• Long list of device support	<ul style="list-style-type: none">• High quality graphics• Unlimited layering on a single output• Full data integration from Quorum• XPression Prime, BlueBox, Studio and GO!/GO2! editions to fit any budget• Intuitive designing of complex graphics	<ul style="list-style-type: none">• A Range of panels and frames to fit any budget• Robust hardware for long lasting solutions• Can be ran under Quorum or operated stand alone• Easy to learn and intuitive design	<ul style="list-style-type: none">• X-300 & X-350• 15lb Payload Capacity• Multiple Mounting options• Smooth on air movements• Dashboard or Smartshell Control• Robust Design	<ul style="list-style-type: none">• 12G SDI PTZ Camera• 30x Optical Zoom• Unlimited presets via Dashboard• POE + IP Control for simplified cabling• Fast Pan & Tilt Speeds	<ul style="list-style-type: none">• Multi-channel ingest and payout• Multi-codec support• Works with internal or external storage• Live Proxy file• Seamless integration with Primestream• Archiving workflows available



Production solutions empowering creative Worship experiences

Worship production

We want to give you the best tools to tell your story through production experiences, whether it's through IMAG, Broadcast, Multi-campus, or Scenic displays we make accomplishing your goals easier and more effective.

MAKING THE COMPLICATED SIMPLE

We all know that your church experiences happen because of your amazing volunteers and the help that they provide. We care not only about creating robust hardware but also incredible user experiences that lower the learning curve for your volunteers and help them operate the equipment with confidence.

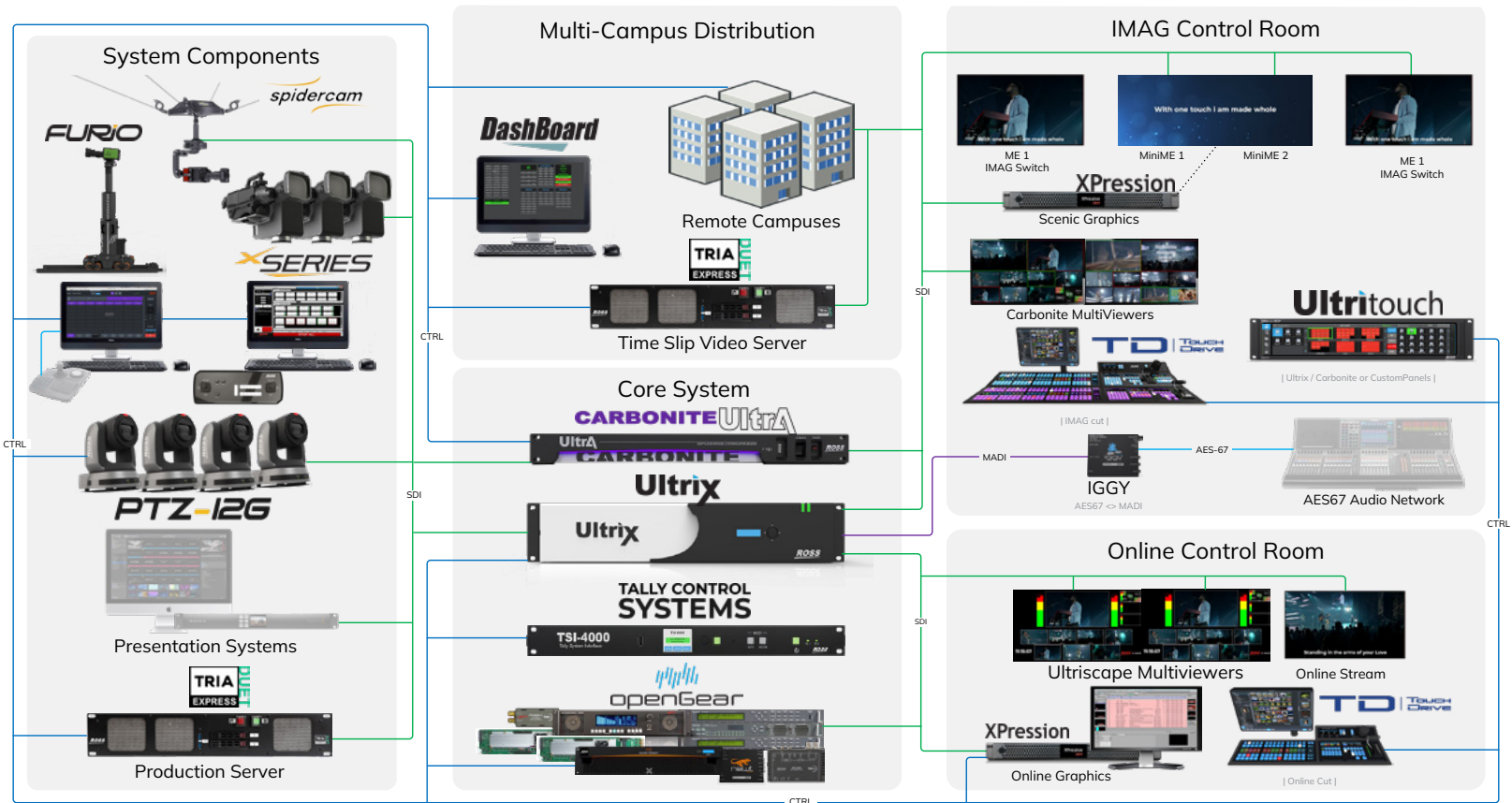
EMPOWERING WORSHIP INNOVATION

Having Ross as a partner will empower your team to take storytelling to the next level and produce the best worship experience possible. Our innovation in the operator and technician experience, as well in things like LED scenic experience, IMAG and Broadcast video switching, video routing, and graphics and video server solutions will help share your most important message.

BETTER TOGETHER

Ross Video wants to help you not only have a better worship experience, but also become a better artist, technician, and producer. Leveraging what brings us together, we can support each other and become better together.

Ross worship production solution



CARBONITE

- Multiple Frame and Panel sizes Including software control with Dashboard
- Up to 3 Control surfaces per frame
- Software upgradeable ME's, Frame Syncs, and Multiviewers
- Powerful Custom Controls for executing complex production elements seamlessly
- Easy to learn and Volunteer Friendly

ULTRIX

- 1RU – 5RU frame size going from 16x16 to 160 x 160 Routing Matrix
- Full audio Matrix including audio shuffling and non-Blocking MADI audio
- Software-defined MultiViewers and frame syncs
- Clean switch on every output
- Dashboard Controlled + Rosstalk integration

DASHBOARD

- Free software for Mac | PC | Linux
- Control & Monitoring of most Ross products
- Build custom panels for simplified workflows controlling multiple devices including 3rd Party.
- Ultritouch control panel for Router control or Custom panel Operation

TRIA EXPRESS DUET

- Hardware base Video server for frame accurate playback with multiple channels of audio
- 2x Bi-Directional Channels + 2x optional software-defined playout channels
- Multiple frame sizes available
- Rock solid recording capabilities
- Time slip capabilities for multi-Campus production
- Supports Timecode Chasing

ROBOTIC SYSTEMS

- CamBot | Furio | X-Series PT heads
- Furio & Sky Dolly System
- spidercam cable-based camera system
- Dashboard control of PT Heads
- Smartshell control System for large systems
- Smartshell PTZ control for unified control system on select PTZ cameras

XPRESSION

- Available in 1RU / 2RU / 4RU & portable solutions
- Robust graphic & clip play back
- Dynamic data driven graphics including social media with Ross Inception
- XPression Tessera licenses allows for large canvases by linking multiple XPression engines together
- Software-defined production licensing model with no hardware changes
- RossTalk and native API integration to DashBoard





Mobile

The amount of content being captured has only increased, from large national and international events to regional and local events. Ross has been on the forefront of redesigning the mobile market in a cost-efficient way that doesn't compromise quality. You can achieve that big-budget production look at a fraction of the price.

A NEW STANDARD IN MOBILE PRODUCTIONS

The openTruck initiative from Ross has paved the way for new ideas and workflows. Using partnerships with equipment manufacturers, system integrators, truck-builders, mobile producers, and freelance operators Ross has redefined truck production capability. This blueprint enables full-featured mobile productions with network-quality output, ensuring consistent performance and results—every time, all the time.

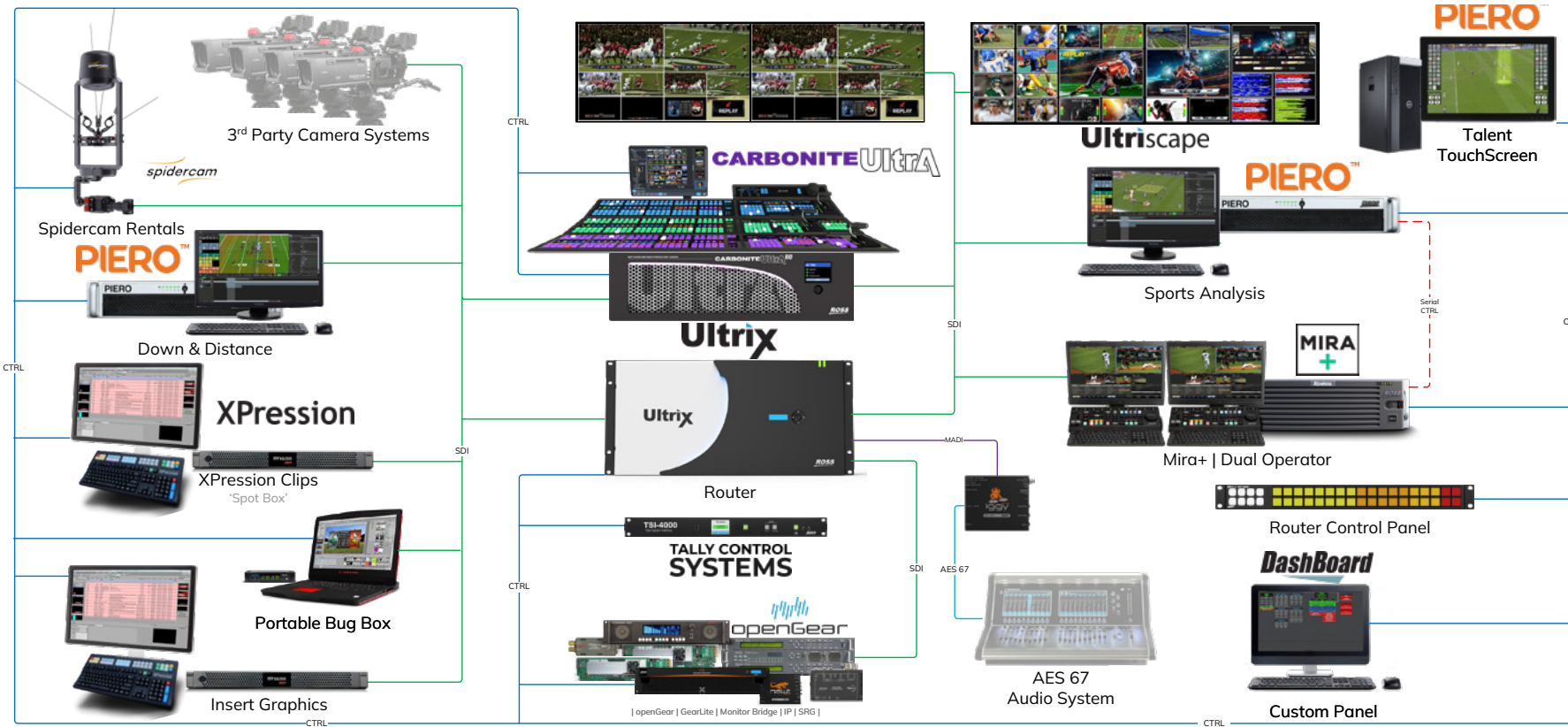
BIG PRODUCTIONS ON-THE-GO

A suite of best-in-class production tools from Ross include production switching, real-time motion graphics, flexible control, content management, versatile signal processing, and compact routing solutions. These solutions are well suited to the special needs of the mobile production environment, with compact sizes, low power consumption, flexibility of use, and ease of set-up and configuration.

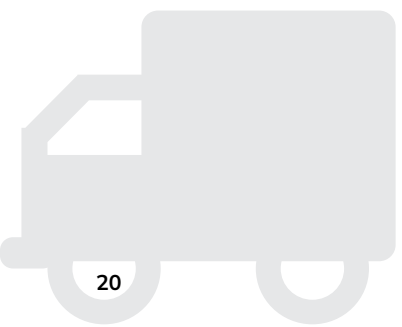
BUILT FOR LIFE ON THE ROAD

Planning mobile space for future expansion, extra operator stations, and rental equipment can be a compromise. When space is limited, equipment designed for high-density is important. Ross products are not only built to be compact and highly-efficient, but also robust, and up to the challenges of life on the road.

Ross mobile solution



CARBONITE	XPRESSION	MIRA+ TRIA+	ULTRIX	DASHBOARD	PIERO
<ul style="list-style-type: none">• 1ME - 3MEs + 4 MiniME• Big switcher power in a mid sized design• Easy to use and operate• Extensive device control• DashBoard menu control• Easy to use custom controls for building and executing complex effects	<ul style="list-style-type: none">• Real-time motion and 3D rendering graphics• Full data integration from a wide variety of data sources• Easy to build highly complex graphics• Integrated video playback engine• Great for: Insert graphics, spot box, bug• Box, telestration, and virtual production	<p>Mira+ Replay</p> <ul style="list-style-type: none">• Robust Replay server• Multiple operators on a single server• Easily trade content between servers <p>Tria+</p> <ul style="list-style-type: none">• Robust video playout and record• Native video + key playback for spot box link functionality	<ul style="list-style-type: none">• 12G/6G/3G/HD/SD & IP Routing in the same Chassis• Full audio Mux/Dmux on all SDI I/O with full MADI Integration and channel shuffling• Software-defined MultiViewers and frame syncs• Clean switch on every output• Compact, Robust design	<ul style="list-style-type: none">• Free software for Mac, PC and Linux• Control and monitoring for all Ross devices• Build custom panels for: simple operation, separating out operation, Data driven panels such as advanced stats and Bug operations	<ul style="list-style-type: none">• Broadcast Live• Sports analysis tool• Covers over 20 sports• Touch & iPad integration• Wide range of analysis effects• Custom branding and graphics





News

Ross Newsroom yields powerful efficiencies that ensure you can provide your audience with vital information without skipping a beat. From planning to playout, Ross newsroom solutions ensure every part moves in sync. Whether you're seeking an all-in-one platform that integrates seamlessly with your existing workflow or building from the ground up, we have the solutions to meet your needs. Created for the demands of the world's busiest 24/7 newsrooms, our newsroom platform accelerates your creation process and makes your life simpler.

NEVER MISS A STORY

Because news never stops, an efficient newsroom is vital. To reduce the time it takes to get a story to your audience, an integrated workflow paired with the most cutting-edge production technology will ensure your newsroom is running at top speed.

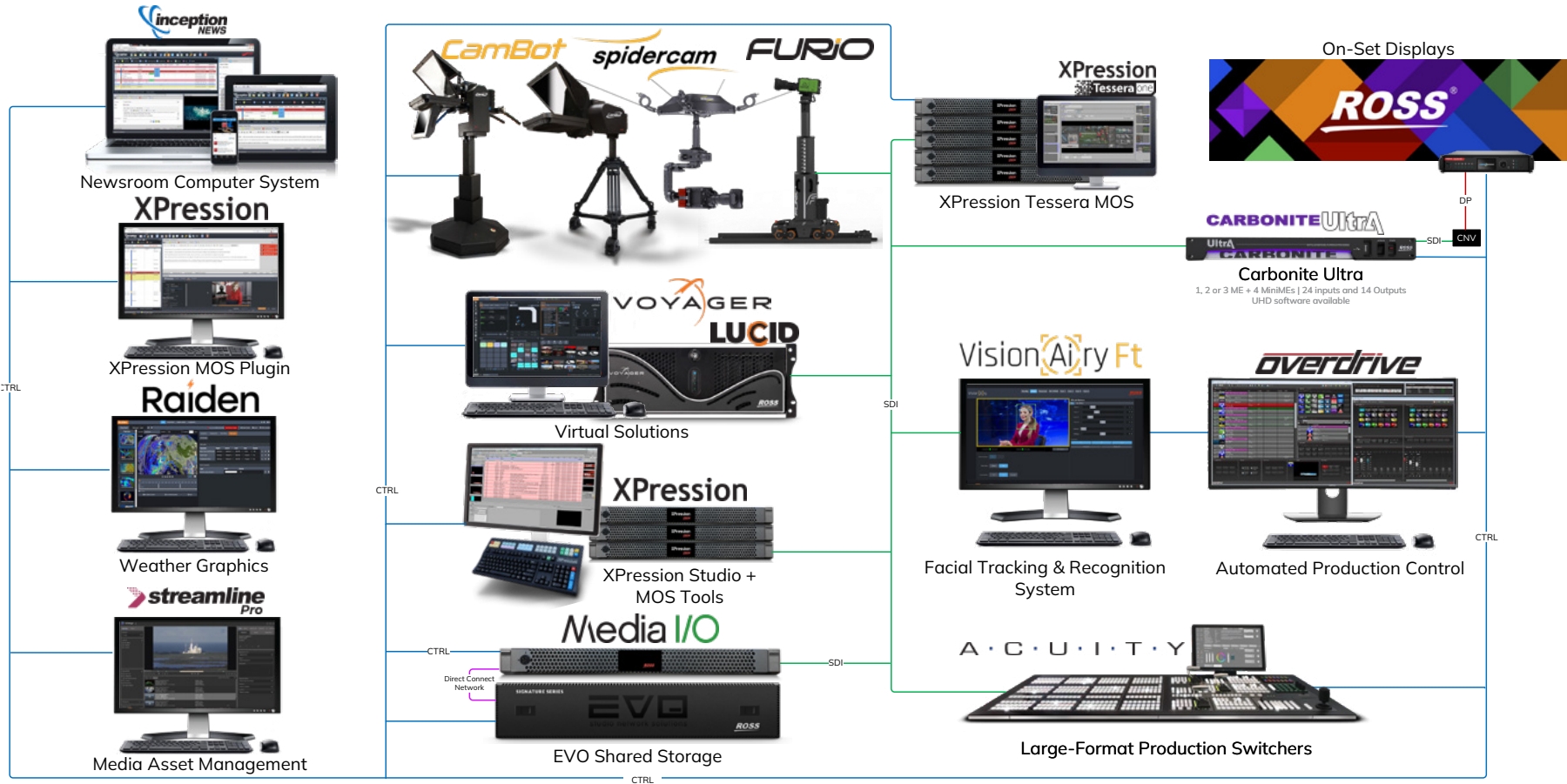
ENGAGE MORE VIEWERS

Ross applies a unique story-based approach to easily create and package content for cross-platform distribution. Create and monetize more news content streams and produce new types of unique programming.

BUILT FOR BREAKING NEWS

Newscasts are typically scripted workflows, but, when breaking news happens it is important to have a system flexible enough to jump in and out of breaking stories. Don't sacrifice the quality of a newscast when the big stories hit.

Ross news solution



INCEPTION	STREAMLINE	XPRESSION	ACUITY	MEDIA I/O	OVERDRIVE	CAMERA MOTION SYSTEMS
<ul style="list-style-type: none">• Manage show rundowns with robust timing options and MOS device integrations• Local and cloud hosted options• Manage live event rundowns with multiuser collaboration• Messaging and alert notifications• Publish to web and social• Search for user generated content on social media and push directly to onscreen graphics• Track, plan and assign coverage of events and story ideas	<ul style="list-style-type: none">• Organize assets for video production• Search, download and edit assets with NLEs• Quickly create sequences in a web browser with Rough Cuts• Access live ingesting feeds from Media I/O directly in a web browser• Full-Fill Inception placeholders from MAM• Virtualize the full platform or host in a private cloud	<ul style="list-style-type: none">• Real-time motion and 3D rendering graphics• Easy to use and operate• Full MOS integration• Software-defined to add Channels and features as needed	<ul style="list-style-type: none">• Large format Production Switcher• Long list of Ross and 3rd party device control for tight automation• Provides the most functionality with Overdrive• Robust Hardware with multiple Panel and frame Options• Hyperconverged with Ultrix	<ul style="list-style-type: none">• Built for speed and News Production• Highly flexible broadcast codec support• VDCP control support• Schedule ingests of feeds• Playout with MOS rundowns• SDI, ST.2110, NDI and SRT support• Record and Playout directly from shared storage• Virtualization Ready	<ul style="list-style-type: none">• #1 Automated Production Control System• Control all Devices for flawless production execution• Full MOS Support• Control both Ross and 3rd Party Devices• Deliver content to multiple platforms effortlessly with QuickTurn• Flexible control options for any type of production	<ul style="list-style-type: none">• Wide range of PT / PTL / XY Peds and Rail systems• Unified Smart Shell Control System• Motion Director live correction during recalls• Fully integrated into OverDrive• Vision[ai]ry: AI - Based Facial and Body tracking and Recognition System



Sport and live events

Today's fans and sponsors expect more, and Ross has deep venue experience that can get you where you want to go. With a range of specialized technology as well as collaborating with you on creative content, we have the solutions to help you create memorable moments for your fans while delighting your sponsors.

UP YOUR CREATIVE GAME

Realize a grander vision with new and innovative game-day productions that are guaranteed to captivate and inform your audience. Go beyond simple graphics, animations, and statistics displays, to fully 3D environments driven by real-time data and even fan-interactive games. Tie in mechanical and electrical devices like IP TV, water cannons, neon signs, and stadium lighting for complete venue control. Ross gives you access to technology and experts with the know-how to make it all happen.

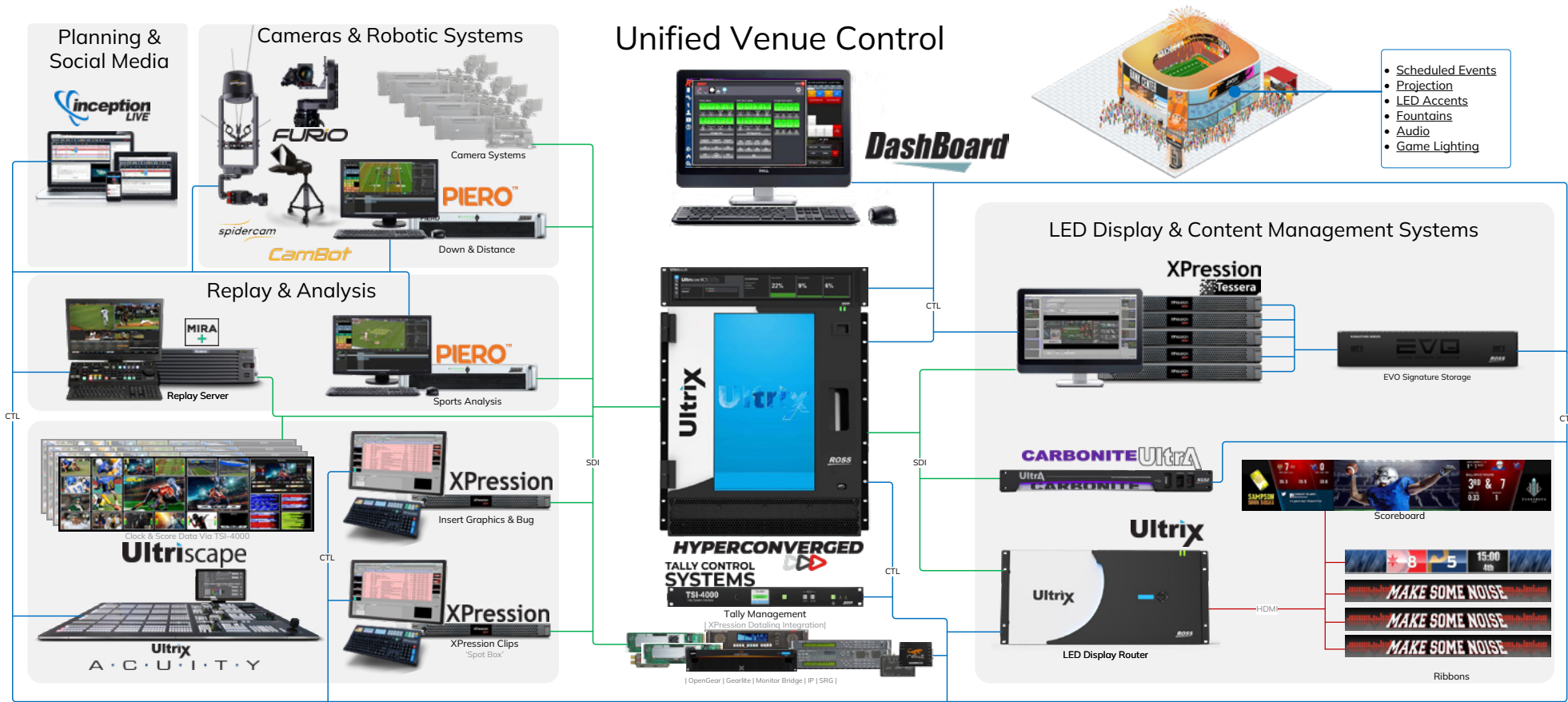
GO BIG

Modern venues are incorporating massive screen sizes at higher pixel resolutions to integrate scoring, stats, social media, closed captioning, and more. The Ross LED Content Management Solution meets this challenge with the ability to feed infinite canvas sizes across multiple screen formats of various sizes and custom shapes - all pixel-accurate.

DAZZLE FANS, DRIVE REVENUE

Increase engagement. Increase attendance. Increase sponsorship. Keep your fans' eyes on your screens and coming back for more with a top-notch game day production, made easy with the Ross Unified Venue Solution. Deliver unrivaled impact for your sponsors with Moments of Exclusivity - branding the entire venue with the touch of a button!

Ross sports venue solution



DASHBOARD

- Unified Venue Control: Video Production, LED Display, and game day elements
- Customizable User Interfaces (unique per operator position / function)
- RossTalk and Native API support protocols to Ross and 3rd party systems

XPRESSION

- Available in HD-SDI, 12G, and SMTPE IP
- Standard formats
- Single Solution: Insert GFX, LED playback, Clips / Effects, Concourse branding L-Bar, Telestration, Augmented Reality & Unlimited Canvas / resolution support with Tessaera
- HDR capable
- Software-defined Production: upgrade from single to 4 channel systems with license
- RossTalk and native API integration to Dashboard

CARBONITE MOSAIC

- Large Screen Video Image Processor (20,736,000 Pixels)
- Up to 10 discreet canvases
- Low Latency (1 Frame Delay)
- 36 inputs x 22 outputs
- 5 layers per canvas
- Internal Media Playback
- RossTalk protocol support

ULTRIX ACUITY

- Unmatched Devices Control of Ross and 3rd parties
- Up to 8 ME's. Up to 9 Control Panels
- HDR SUPPORT
- 12gb/s SDI & SMPTE 2110
- Integrated into Ultrix platform
- Integrated MultiViewers, audio and More

MIRA+

- Feature Rich, intuitive operation
- Dual User configurations
- Playback over Network on multiple Miras
- 1080P Native | Super Slow mo
- Advanced Integration with PIERO

PIERO

- Broadcast | Live | Club Versions
- Down & Distance
- Sports Analysis tool
- Covers over 20 Sports
- Touch & iPad Integration
- Wide range of Analysis Effects
- Custom Branding and Graphics
- Augmented Reality Engine



Virtual studio

Today's technology can produce a hyper-realistic virtual environment. To obtain best results, a compelling 3D design with precision camera tracking, keying, and calibration are essential. A Ross end-to-end virtual solution, now with a new state-of-the-art chroma-keyer, provides the highest level of quality and realism all supported with flexible and easy-to-use workflows.

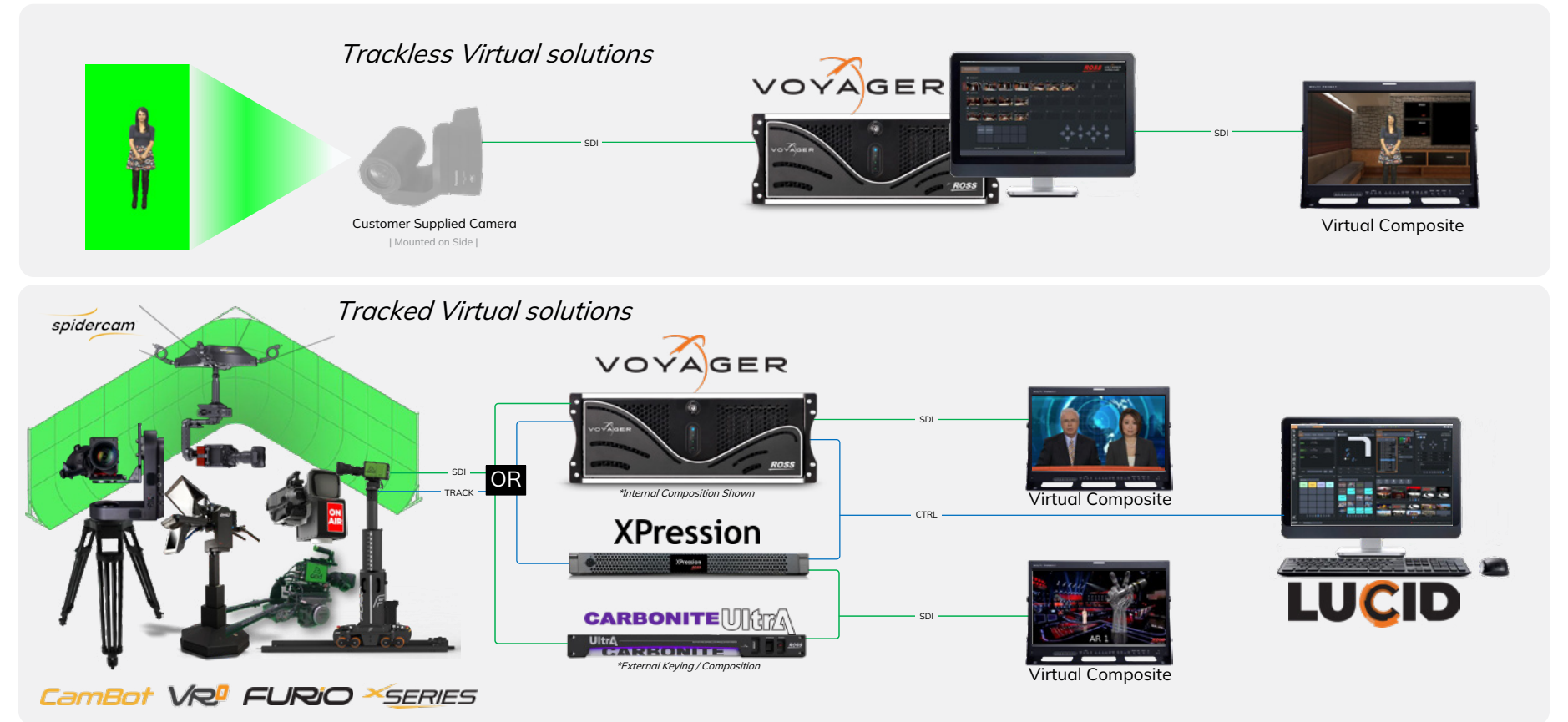
A STUDIO SOLUTION FOR EVERY SITUATION

Virtual production can provide savings in multiple ways leading to a higher ROI. Ross offers solutions to support most any budget. Ross' new Voyager Trackless solution is a virtual studio in a box, providing all the tools to create compelling content. Lucid Studio, Ross' tracked control interface, is a feature rich yet easy to use control system for your chroma key and XR studios. Whatever your virtual studio needs are, Ross has a solution for you and an upgrade path to support your growing needs.

FLEXIBILITY AND SPACE SAVINGS

Virtual studios are perfect for small studios by saving on space needed for physical set pieces and storage. Quickly change between virtual environments in seconds rather than waiting to move physical set pieces.

Ross virtual solution



LUCID STUDIO

- Virtual Production Control
- Control all camera chains from one interface
- Quickly build and save tracking calibrations
- Control 3D objects, camera moves and more with RossTalk triggers
- Newsroom and data integration

VOYAGER

- Hyper realistic rendering built on the Unreal Engine
- Support for both External and Internal compositing
- Internal or External Chroma keying
- Tracked & Trackless Solutions

XPRESSION

- User friendly design and playback system
- MOS capable virtual engine
- Built for dynamic data driven graphics
- Single platform for insert graphics, augmented reality, virtual sets, and monitor walls
- Internal & external composition
- Tracked & Trackless Solutions

CAMERA MOTION SYSTEMS

- Furio**
 - Tracking PT Heads, Lifts & Dolly systems
- CamBot**
 - Heavy duty robust XY Pedestals with tracking data
- spidercam**
 - Cable-based camera systems with integrated tracking
- X350**
 - PT Head with full suite of camera connectivity options and virtual tracking data
- VR0**
 - Tracking data module for encoded Tripods & Lenses

CARBONITE ULTRA

- SD / HD / 3G / UHD
- Input Video Delay
- Up to 4x Chroma Keyers
- Composite on SW or Feed
- External Fill / Key
- Control Via Panel or Dashboard



XR virtual LED studio

Ross Video offers complete XR Virtual LED studio solutions that combine LED backdrops, set extensions, AR foreground elements, best-in-class studio control and proven workflows. Our rendering platform, VoyagerXR, is powered by Epic Games' Unreal engine and Nvidia's professional Quadro series graphics cards providing unprecedented rendering quality and performance. Coupled with Lucid Studio, Ross's virtual production control software, everything you need to produce state-of-the-art virtual productions is at your fingertips in an intuitive interface.

IMMERSIVE PRODUCTION

Ross Video's XR Virtual LED Studio solutions enable on-set talent to see the virtual environment they are performing in. This improves talent performance and confidence while reducing the time needed for rehearsals.

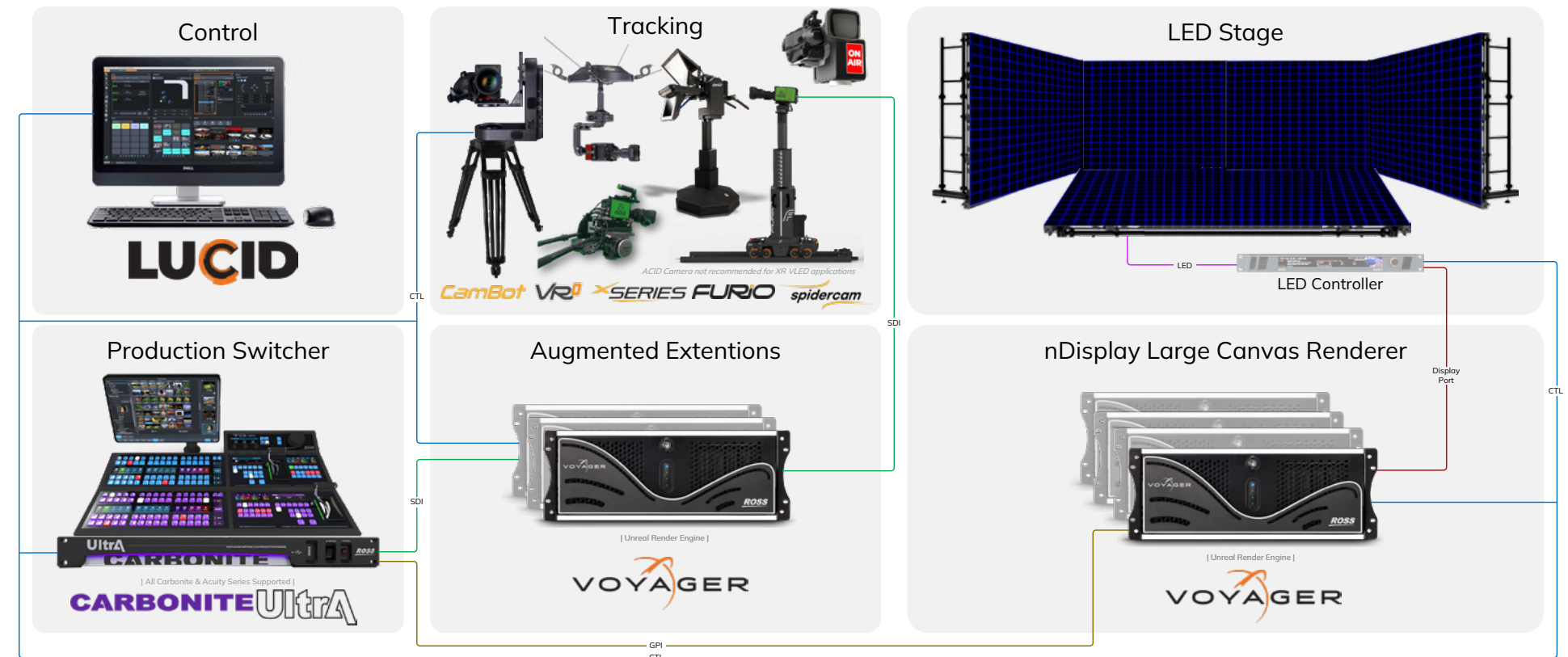
COST SAVINGS AND FLEXIBILITY

XR Virtual LED Studio solutions can result in significant cost savings by reducing the need to maintain physical sets and to shoot on location.

COMPLETE END-TO-END SOLUTION

Ross Video's XR solution integrates with Furio and Cambot robotic systems, XPression motion graphics, production switchers and Ultrix routers. This means you get peace of mind and unique benefits such as LED and set extension automatic color matching and direct control of the LED processor.

Ross XR solution



LUCID STUDIO

- Full virtual control & calibration platform
- Lens curve library & creation tool
- Full control over 3D objects, video, & live inputs
- Event macros
- Color matching
- Visual logic
- MOS protocol & RossTalk support
- Full integration with D3 LED processor

VOYAGER

- Unreal live production render engine
- HD / UHD & IP workflows
- nDisplay via display port & quadro sync
- Dynamic data integration
- Virtual camera moves
- Fully integrates with LUCID

CAMERA MOTION SYSTEMS

- Furio**
 - Tracking PT heads, lifts, and dolly systems
- CamBot**
 - Heavy duty robust XY pedestals with tracking data
- Spidercam**
 - Cable based camera system with integrated tracking
- VR0**
 - Tracking data module for encoded tripods and lenses

CARBONITE

- SD / HD / 3G / 12G
- 23.98/24/25/29.97/30/50/59.94/60 hz support (1080 & UHD formats)
- GPI triggers & RossTalk support
- Dashboard support
- Input delay / format conversion / color correction & proc amp



Master control solutions

Master your channel payout with Ross Master Control solutions. Ross provides a comprehensive set of tools that integrate into a seamless workflow, offering reliability, flexibility, and scalability. This allows you to deliver content to your audience without compromise. Ross provides tools to define your brand, and protect your revenue stream, from content creation and payout to securing your content and ensuring regulatory compliance.

INTEGRATED SOLUTION

Ross provides a comprehensive suite of Master Control solutions to allow media distributors to deliver their content to their audience. This ranges from content payout and graphics creation to the underlying plumbing that allows the connectivity and signaling.

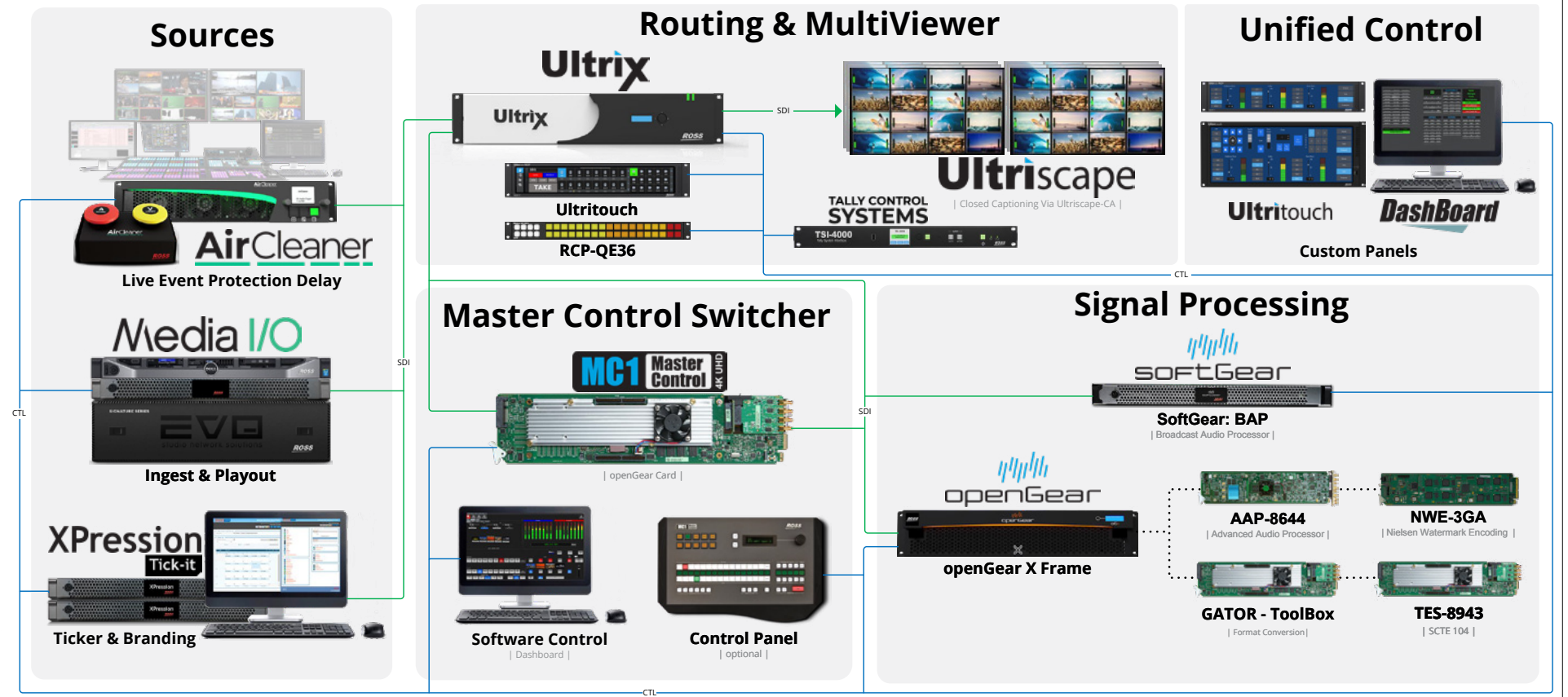
CONTROL

Ross solutions work under a unified DashBoard control system and a common remote API (RossTalk). Not only does this provide a single UI umbrella for individual products, but also enables customized workflows that link multiple products together into task-focused user experiences.

SOLID INVESTMENT

Invest in a solution that protects your channel brand and revenue. Maximize your channel's monetary potential with world-class graphics and branding. Keep your channel on-air with proven, reliable solutions.

Ross master control solution



MC1-UHD

- SD/HD/3G/UHD Master control Switcher
- Presmaster Protocol
- 2x External Keys
- 1x 2D DVE for Squeeze back
- EAS Insertion
- openGear Card
- Dashboard controlled

MEDIA I/O

- Multi Channel payout
- Live ingest
- Scheduling

AIR CLEANER 2

- Live Event Production Delay
- Video & Audio support
- HD/3G/UHD• SDI or ST-2110
- Up to 2 user stations
- Physical Push button
- Dashboard Controlled

XPRESSION TICK-IT

- Browser based access
- Traffic integration
- Advanced scheduling
- Multi-channel scalability
- Manual or automated control

ULTRIX

- SD/HD/3G/UHD
- SDI / ST2110
- 16x16 - 160x160
- Software-defined
- Ultriscap MultiViewer w/ Closed Captioning

OPENGEAR

- Loudness Processing
- Dolby Encoding
- Watermarking
- SCTE 104
- Format Conversion
- Distribution

SOFTGEAR

- Broadcast Audio Processor**
- Loudness Processing
- Dolby Encoding
- Watermarking



Hyperconverged Solutions

Hyperconvergence is combining what were formerly multiple independent products into a unified, software-defined package that works together. Much like your mobile phone, which combines a phone, map, GPS navigation, calendar, camera and more, a Hyperconverged platform combines many elements of your infrastructure and production core into a single, integrated solution.

SOFTWARE-ENABLED INTEGRATION

Integrate signal routing, distribution, processing, audio mixers, production switchers and more into a single platform, vastly reducing your rack space and cabling requirements. Hyperconverged systems are easily expanded with software options, making it easier to rework from event to event than hardware-only systems to more closely match each event's unique needs. Handle facility upgrades with less cabling and racking.

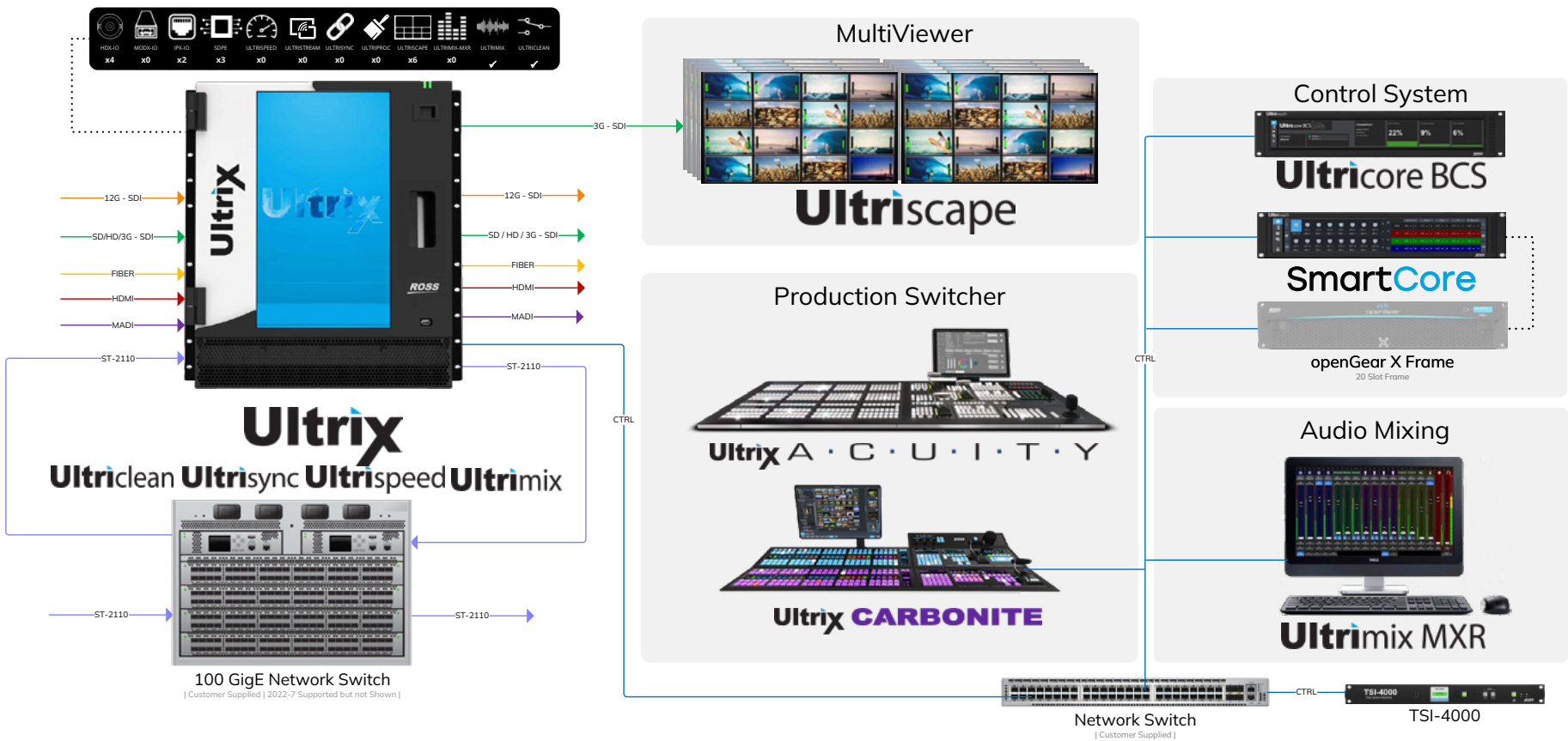
SUSTAINABLE

Not only do Hyperconverged systems consume less rack space in your plant or truck, but they also consume less power and require less cooling, making it an ideal part of sustainability initiatives, while simultaneously reducing TCO.

STREAMLINED OPERATION

Hyperconverged systems are ready to go on-air quicker than systems made up of multiple devices. With fewer boxes to rack and less cables to run, save time and money getting your production on air. Streamline your operational efficiency through integrated workflows working together under common control surfaces and unified user experience.

Hyperconverged solutions

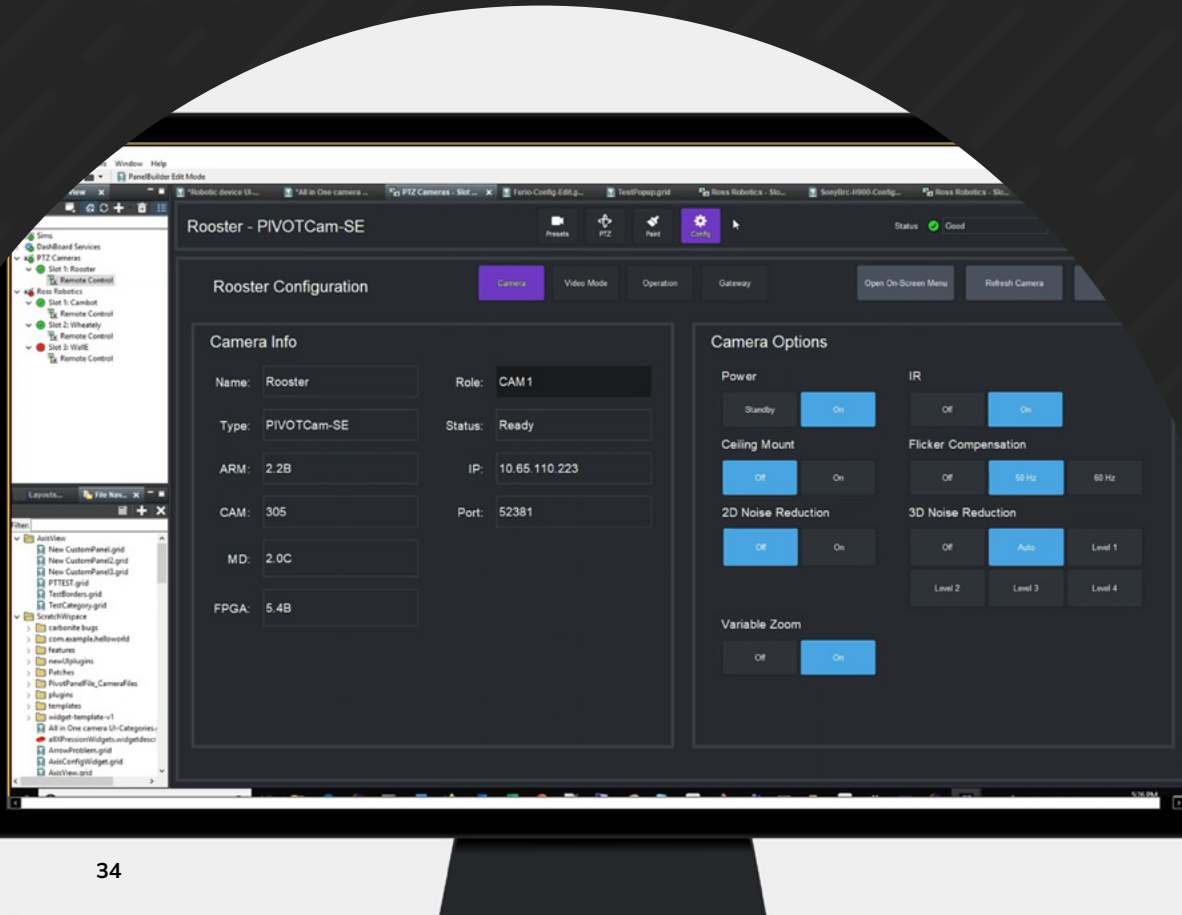


ULTRIX	ULTRISCAPE	ULTRIMIX-MXR	ULTRIX IP	ULTRIX ACUITY	ULTRIX CARBONITE
<ul style="list-style-type: none"> • Software-defined Platform • SD / HD / 3G / UHD • Ultrimix • Ultriclean • Ultrasync / ultisync-UHD • SDI / Fiber / HDMI / MADI / ST-2110 	<ul style="list-style-type: none"> • Software-defined MultiViewer • Optional Closed captions • Up to 100 PIP's per Head • Up to 48 MultiViewers per Frame • Only consumes 1 Output per Head • Full Tally Integration 	<ul style="list-style-type: none"> • Software-defined Audio mixer • Dashboard controlled • 1 large or multiple partitioned audio mixers • Available in all Ultrix Frames • MADI / SDI / ST-2110 audio integration 	<ul style="list-style-type: none"> • ST-2110 I/O Blades • Ultrix Integrated IP Gateway • ST-2022-7 support • Ultracore-BCS + Ultracore-IP -IP Control System 	<ul style="list-style-type: none"> • Uses SDPE Blade for each Acuity ME • Max of 8 ME / 6 Keys per ME • HD / 3G / UHD • SDPE Blade takes 1 slot in Ultrix Frame • 5RU / 12RU Frame Only • Fully integrated into Ultrix Platform 	<ul style="list-style-type: none"> • Uses SDPE Blade for Full Carbonite Switcher • Up to 2 ME's (6 Keyers) & 4 MiniME's • Fits in both Ultrix FR2 / FR5 / FR12 Frames • Multiple SDPE Blades can be in one Ultrix Frame • HD / 3G / UHD



DASHBOARD FACILITY CONTROL SYSTEM

DashBoard is an open software platform from Ross for facility control and monitoring that enables users to quickly build unique, tailored CustomPanels that make complex operations simple.



DashBoard is a software application that provides control and monitoring to hundreds of products from more than 80 partners within the openGear and DashBoard Connect ecosystem, and of course most Ross products. Its ability to craft application specific solutions across this breadth of products is what makes DashBoard so special.

CUSTOM

DashBoard PanelBuilder is a powerful tool used for creating custom interfaces for products from Ross, and partner companies. CustomPanels built with PanelBuilder are used by major broadcasters and large sports venues around the world.

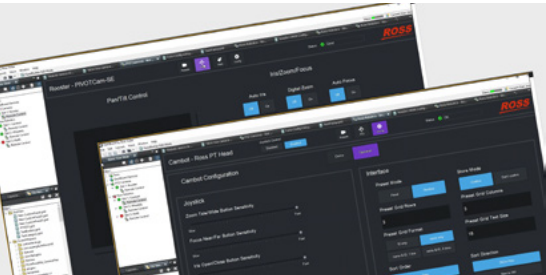
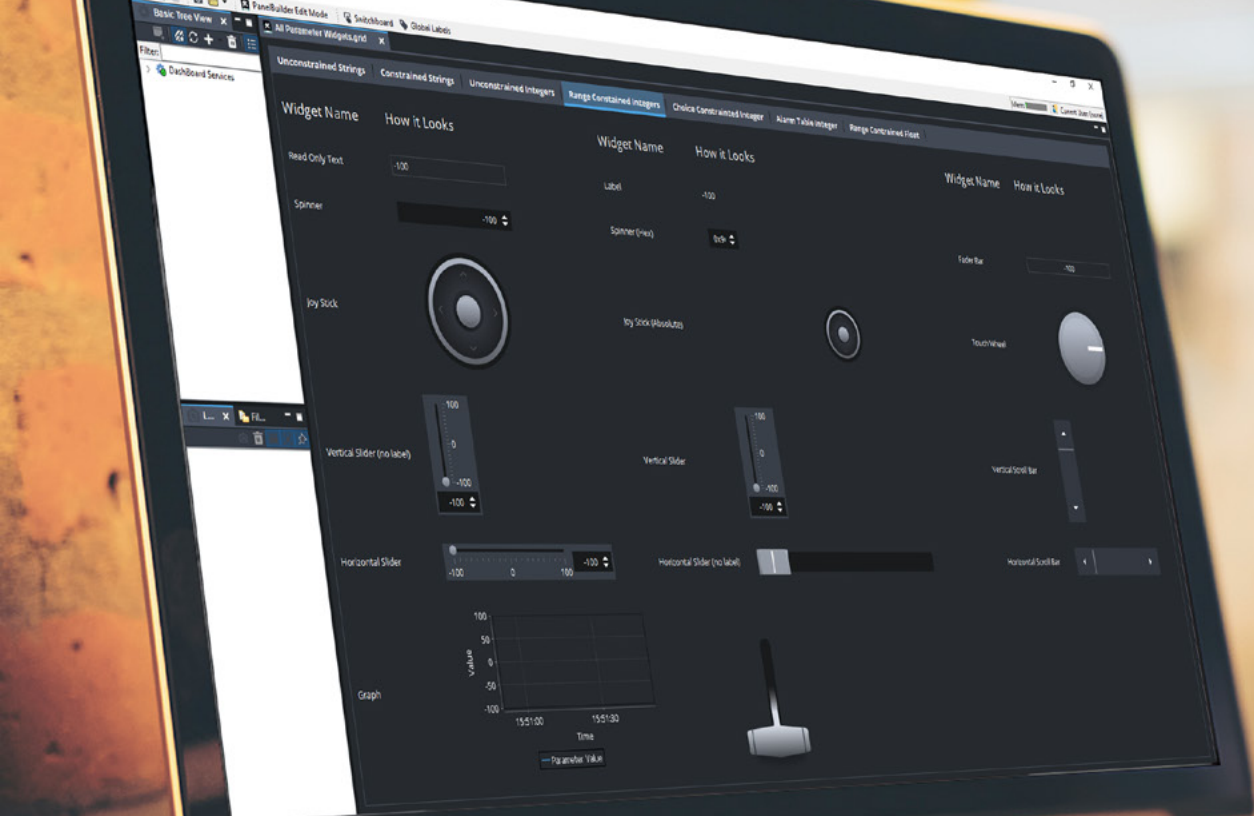
OPEN

The Emmy®-award winning openGear platform is designed to work with DashBoard as the front end UI for the more than 80 openGear partners using OGP (openGear Protocol).

FREE

Download DashBoard for free to start building panels and monitoring your openGear devices. Training and professional services are available to help you get the most out of DashBoard and your production equipment.

OPEN. CUSTOM. CONTROL.



CONTROL & MONITORING

DashBoard is a primary control system from Ross. It is the only open application that allows full and complete native control running on any compatible computer system and / or Ultritouch. DashBoard panels automate workflow and offer simplified operation to any production.



PANELBUILDER™

Integrate control of multiple devices into a single, logically laid-out control surface and allow your operators to focus on the production, not on the equipment being used.



DASHBOARD CONNECT™

DashBoard Connect opens the DashBoard control and monitoring system beyond openGear® frame based products. DashBoard Connect is for products that benefit from integration to the DashBoard control system. With DashBoard Connect, any equipment that has an Ethernet connection can appear in DashBoard.



ULTRITOUCH TOUCHSCREEN CONTROL SYSTEM

Ultritouch is a no-compromise, 2RU pr 4RU touchscreen-based facility control panel powered by DashBoard and guaranteed to fit your workflow.

Have you ever wished you could build a control panel to fit your workflow without compromising? So did we. That's why we created Ultritouch - allowing easy creation of custom control panels designed around your needs.

TOUCHSCREEN OPERATION

SmartTouch™ functionality provides traditional control with modern workflows.

SYSTEM-WIDE CONTROL

Control your Ross solutions from a single hardware based panel. Open control with DashBoard provides full customization based on user need.

ROBUST

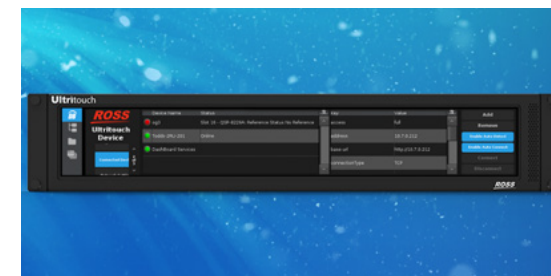
Redundant power, redundant control ports, HDMI output, USB 2.0 connectivity, audio speakers and a tough gorilla glass touch surface combine to provide a complete control and monitoring solution.



THE NEXT WAVE IN
CONTROL PANELS

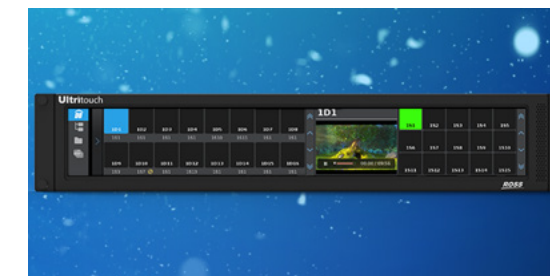
Ultritouch

SOTIS
SCREENCALL
TECHNOLOGY INNOVATION AWARD 2018



EASY SYSTEMIZATION

Basic DashBoard connectivity and custom panels brings the ability to control Ross products the way you do now. Optional software licenses allow for more advanced and targeted control of specific devices and workflows.



ADAPTS TO YOUR WORKFLOW

Ultritouch adapts to your needs. It can be set up quickly to perform traditional applications like router, multiviewer, and signal processing control. But it's real power is the ability to do virtually anything you want, in the way you want to do it. Your panel, your workflow, own it.



INTEGRATED DESIGN

Any device that supports OGP protocol and can be discovered in the DashBoard menu tree can be configured to be controlled with Ultritouch.



QUORUM MEETING PRODUCTION SYSTEM

The next generation legislative production solution.

Designed to simplify and automate the acquisition of legislative and other meeting-based events while providing professional broadcast production values.



Governments and legislators need to document both the audio and video of their meetings. Ideally this would be from multiple angles at very high quality. Often with out access to the facilities and skills they need.

Quorum introduces automation to control cameras, add graphics, and monitor microphones. Operators without technical backgrounds can use Quorum's intuitive interface designed for anyone to use to produce professional results where every nuance is captured accurately.

READ THE ROOM

Adjust to changes that happen quickly and easily. Quorum is able to easily accommodate switching seating arrangements, adding participants, adjust cameras, and any other unforeseen events.

OPERATOR EFFICIENCY

Simplified control of broadcast equipment and automation means one operator can effectively produce an entire high-quality broadcast, using just a simple web-client.

EMPLOYEE GROWTH

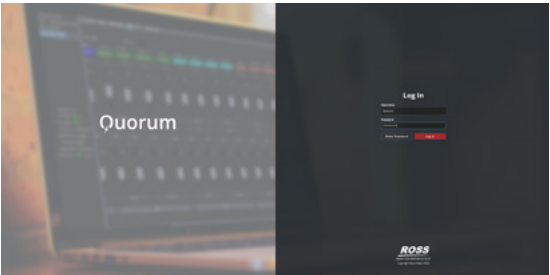
Only 30 minutes of operator training is needed to be able to broadcast effectively. No detailed technical knowledge required, allowing a subject matter expert to follow the conversation.

SIMPLIFIED MEETING BROADCASTS QUORUM



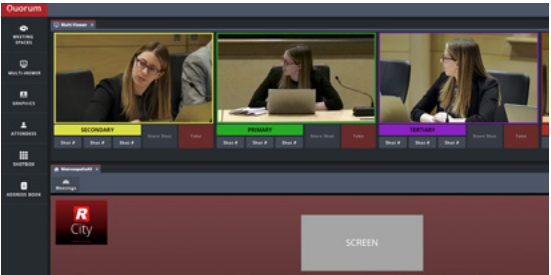
TAILORED TO YOUR FACILITY

Load your room plan and position representatives and participants relative to where they are actually seated.



USER MANAGEMENT

Give the right people, the right privileges, to perform the right tasks.



MULTIPLE CAMERA OPTIONS

Three preview cameras, each with three quick shot recalls, are available to best capture next speaker.



POWERPLAY EVENT CONTROL SYSTEM

PowerPlay is an Event Control System that allows users to centralize device control to a single server and simplify playout and scheduling of production and environmental devices for any live event – venue, corporate, faith-based, or broadcast.

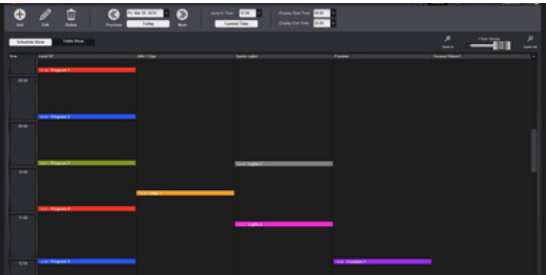
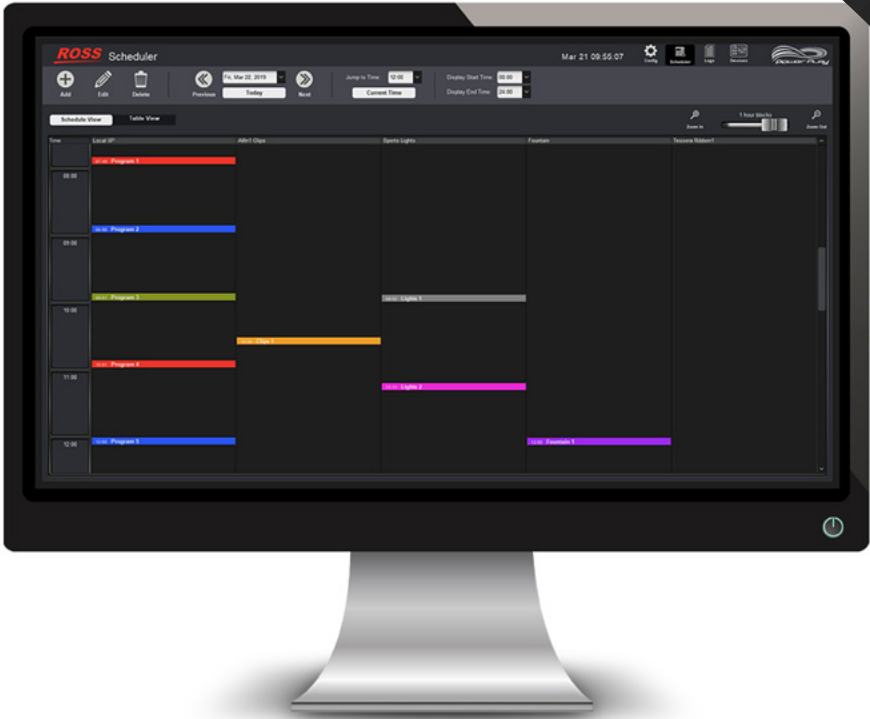
With PowerPlay, event playback can be fully automated based on a time-of-day schedule. The system is perfect for any scenario where timed and scheduled events need to be automatically triggered before, during, or after a live event. PowerPlay is the ideal solution for pre-event and post-event content, digital signage, advertisements, and more.

CENTRALIZED DEVICE CONTROL SOLUTION
PowerPlay is built using the DashBoard framework and offers device control that is centralized on powerful enterprise-class servers.

RENOWNED DEVICE CONTROL LIBRARY
Out of the box, PowerPlay can integrate with XPression Graphics, XPression Clips, Abekas video servers and DashBoard custom panels. You can also add an optional CustomControl engine to access and control hundreds of 3rd party devices.

FULLY SCHEDULED AUTOMATION
With the ability to schedule digital signage, advertisements, and time-of-day events, PowerPlay provides you with the power to monetize your production and engage audiences more efficiently.

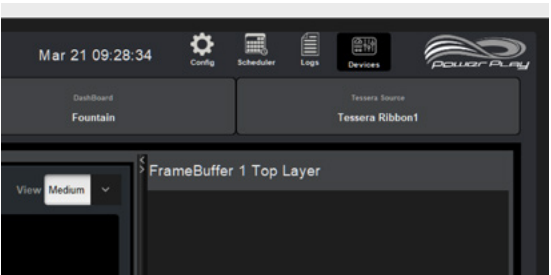
SIMPLIFYING LIVE EVENTS



SCHEDULER
Using the Scheduler feature, you can trigger events at specific times and designate them as one-time or recurring events. You can also easily import and export schedules and view scheduled events in a simple 'outlook-like' format.



DEVICE BROWSER
Each device output is browsable, searchable, and can be manually triggered in a common interface.



DEVICE MANAGER
The Device Manager allows you to easily define, manage, and configure main and backup devices.



OVERDRIVE AUTOMATED PRODUCTION CONTROL

OverDrive is the most advanced Automated Production Control System on the planet, enabling the most sophisticated productions to be executed cleanly and consistently, while delivering substantial savings in operational costs.



OverDrive allows you to get to air faster, deliver content quicker and produce more than you thought possible. Most organizations are grappling with the need to produce more with less, addressing not just linear channel production but content for the web, social and OTT. Automated Production Control, by making your staff much more efficient, provides the extra resources needed to expand your team's output.

CONTROL EVERYTHING

OverDrive provides dynamic control of Audio Mixers, Routers, Graphics Systems, Robotic cameras and more. APC makes it possible to produce sophisticated sequences frame accurately - to a level of complexity not easily achieved in manual environments.

FLEXIBLE CONTROL

Perform manual, semi-automated or fully automated productions at any time from the same control room, using the same equipment. Powerful features allow for quick changes and variable options to present content. Everything is always at the operator's fingertips whether from OverDrive's customizable UI or a dedicated panel.

WISE INVESTMENT

OverDrive is available with flexible licensing including perpetual and subscription options to fit your budgetary needs. Automated Production Control with OverDrive is one of the only solutions in the industry that can provide immediate ROI.

FLEXIBLE.
POWERFUL.
CONTROL.

overdrive



DELIVER CONTENT

OverDrive's QuickTurn allows you to re-purpose content for multiple platforms. You can and easily record any segment ready to be published or for future use. OverDrive and Streamline Xchange work together to fulfill a media placeholder to be reused without editing or manual intervention.



SIDEBOX MODULES

SideBox modules are control panels for those who prefer a dedicated control surface. These work in conjunction with OverDrive's touch screen interface, keyboard and mouse allowing multiple ways for the operator to interact with the system. With the included in-desk / on-desk mounting kit, multiple combinations of SideBoxes can be ordered to fit your production needs.



DEVICE INTEGRATION

OverDrive has the most extensive library of supported 3rd party devices and MOS tools, permitting you to choose from the best in putting your APC system together. Ross Interface Engineering and Quality Assurance Teams are continually adding new devices, along with advancing and retesting currently available interfaces.



STREAMLINE GRAPHICS MEDIA ASSET MANAGEMENT

Streamline Graphics combines the entire Media Asset Management process into a single platform, providing everyone from graphic artists to journalists easy access to existing assets and collaborate on new content.



Streamline Graphics is designed to pair with the XPression motion graphics workflow to make finding the right image or video faster and easier than ever. Increase graphics usage and improve accuracy using Streamline Graphics to create a searchable database of assets and (optional) approval workflows.

IMPROVE COMMUNICATION

Utilize the built-in work order management system and user messaging capabilities to increase communication between newsroom staff and your graphics team. Users can upload requests, track progress and provide feedback without leaving the user interface.

ACCESS AND ARCHITECTURE

Streamline Graphics requires no software installs on client machines. This increases the flexibility of devices that can be used to create content and decreases the amount of time it takes to perform upgrades. Streamline Graphics can be accessed from Mac and PC platforms on a variety of web browsers.. It is also accessible directly inside the XPression MOS plugin.

FLEXIBILITY AND SCALE

From Streamline Graphics to Streamline Enterprise, there is a feature set and configuration model for the smallest newsrooms to the world's largest broadcasters. With a scalable feature set and both purchase and subscription models available, Streamline can empower any newsroom regardless of size.

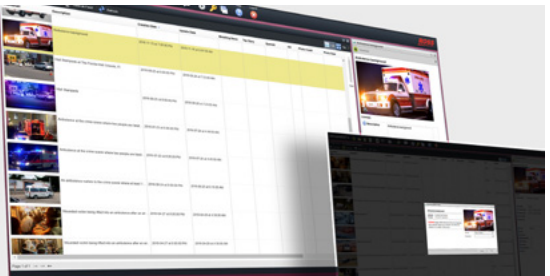
ORGANIZING CREATIVITY & OPTIMIZING ABILITIES



Asset Thumbnail	Name	Status	Requested	Due
	Soccer Goatee.	Assigned	2014-05-26 at 4:07:23 PM (11 minutes ago)	2014-05-26 at 4:30:00 PM (10 minutes)
	Arial Image of R.	Assigned	2014-05-26 at 4:05:43 PM (13 minutes ago)	2014-05-26 at 4:48:00 PM (28 minutes)
	Jogging	Completed	2014-05-26 at 4:08:56 PM (10 minutes ago)	2014-05-26 at 6:31:00 PM (2 hours, 11 minutes)
	test	Assigned	2014-05-24 at 1:28:34 PM (2 days, 2 hours, 50 minutes ago)	2014-05-29 at 12:00:00 PM (2 days, 7 hours, 40 minutes)

WORK ORDER MANAGEMENT

Streamline Graphics includes a powerful Work Order Management system that allows newsroom staff to request, track and provide feedback on required assets. Requests can include notes and supporting documents to help the graphic team understand exactly what is needed. Work orders can be assigned to a graphics artist and deadlines can be tracked with a customizable dashboard.



INTEGRATED IMAGE LIBRARIES

Because Streamline Graphics is integrated into the XPression MOS plugin, users can browse, download and select images from third party libraries like MGN Online and AP GraphicsBank directly from the plugin.



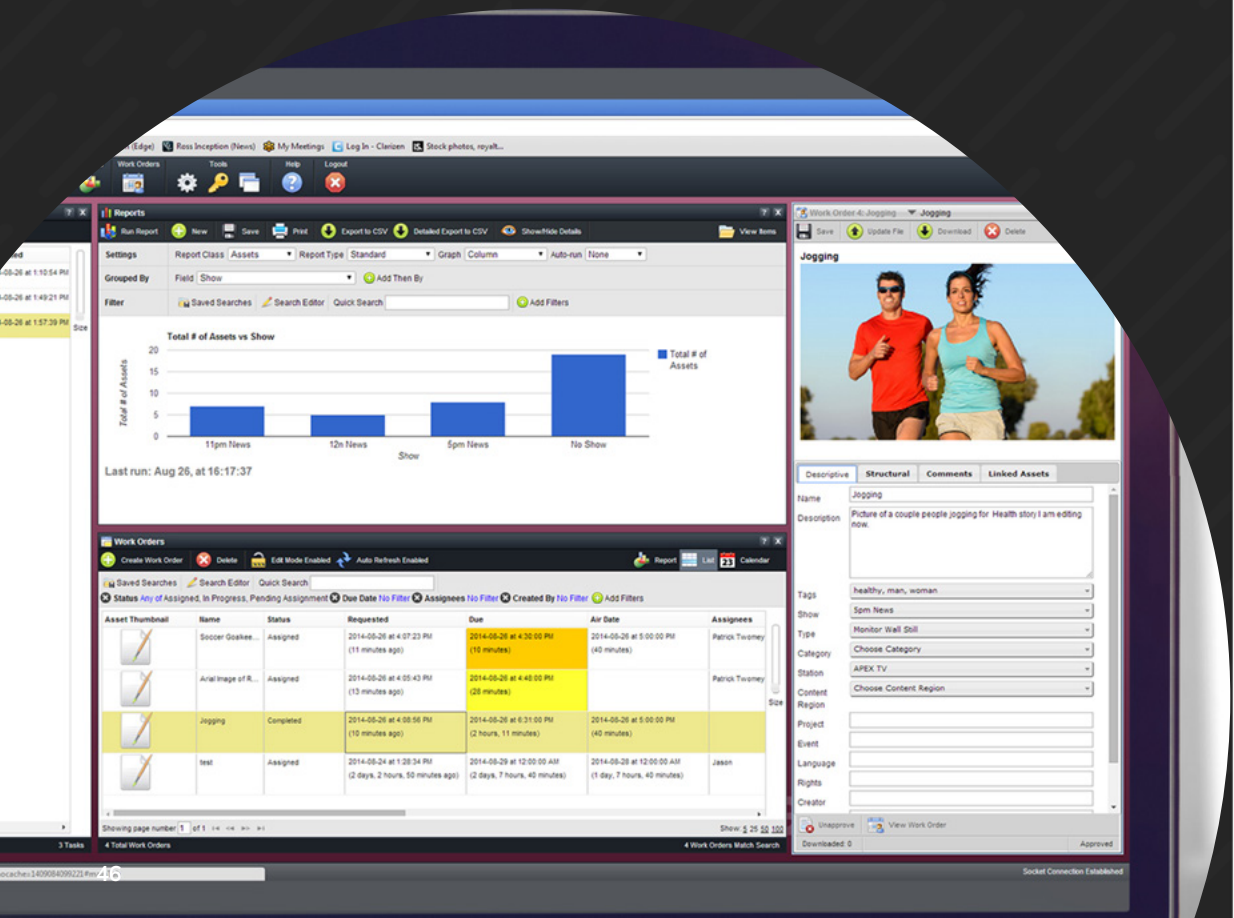
USER DEFINED METADATA

Streamline allows each customer to define what attributes they want to assign to their asset, and embed that data into common image files' XMP metadata space. This data is accessible in XPression to manipulate the look and text in a graphic beyond the image itself.



STREAMLINE PRODUCTION ASSET MANAGEMENT

Streamline Production is designed to bridge the gap between the newsroom computer system (NRCS) and playout server. Create placeholders, search customizable metadata and select the clip needed to tell the story with a rules-based workflow designed to move content between locations and servers.



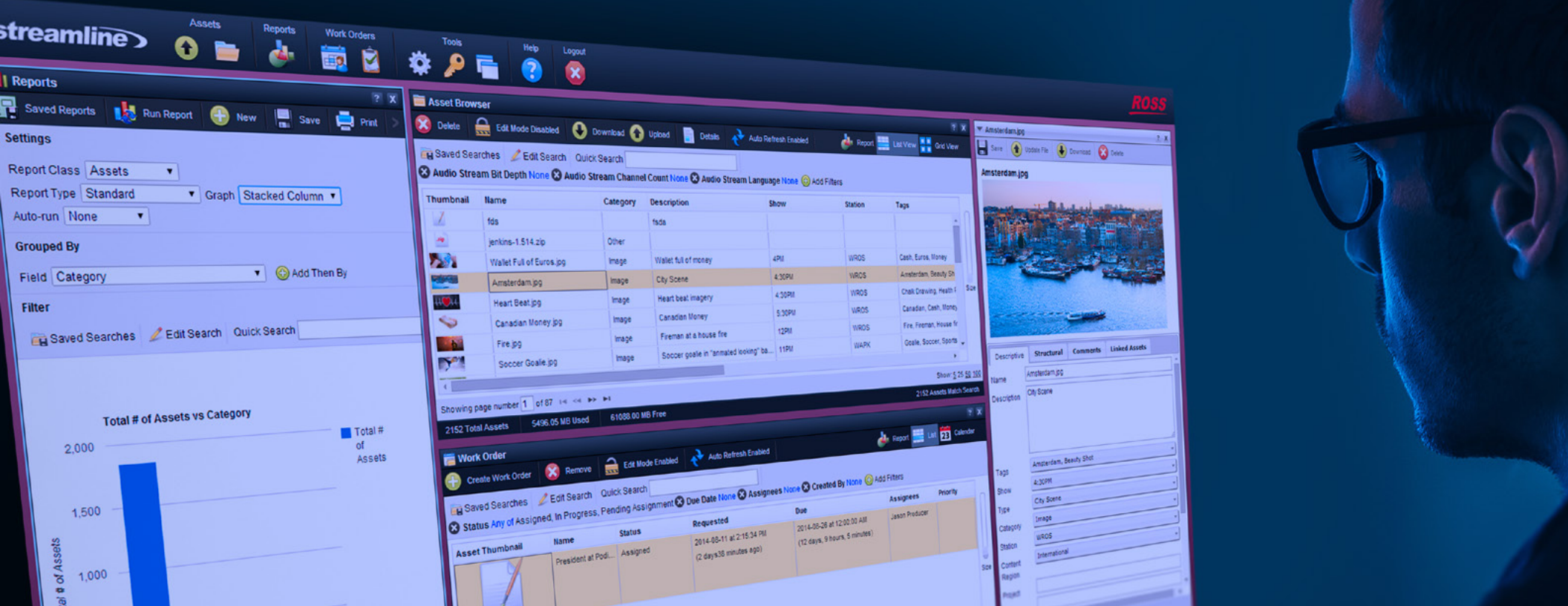
Streamline Production seamlessly ties asset creation, organization, file management and playout together in the video production workflow.

INCREASE EFFICIENCY
Use customizable metadata fields to search for existing clips and view a proxy preview of the clip from a web browser or plugin in the NRCS. If the clip doesn't exist yet, add a placeholder to the story and receive status updates on each placeholder.

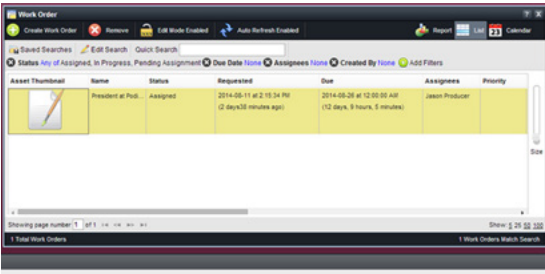
ACCESS AND ARCHITECTURE
Streamline Production requires no software installs on client machines and is available as an HTML MOS plugin or in a web browser. This increases the flexibility of devices that can be used to create content and decreases the amount of time it takes to perform upgrades. Streamline Production can be accessed from Mac and PC platforms on a variety of web browsers.

FLEXIBILITY AND SCALE
From Streamline Production to Streamline Enterprise, there is a feature set and configuration model to meet the needs of small newsrooms to the world's largest broadcasters. With a scalable feature set and both purchase and subscription models available, Streamline can empower any newsroom regardless of size.

ORGANIZING CONTENT & CONNECTING WORKFLOWS



AUTOMATED ORGANIZATION
Content can be ingested, copied or moved based on rules set up in Streamline Production. Index content from a variety of file storage systems including on premise and cloud options. Move content between servers and file storage locations with automated rules. Delete content using lifecycle rules for playout servers.



INTEGRATED WORKFLOWS
Streamline Production pairs with Streamline Play to form an end-to-end playout workflow. Select videos or create placeholders in Streamline Production > Target a storage location or playout device such as Media I/O > Streamline Play receives clip playlist from the real-time NRCS (updated in real-time as changes are made) > Streamline Play triggers clip playout.



STREAMLINE.CLOUD
Streamline.cloud offers the ability to add Streamline functionality to your workflow without the need to maintain on premise servers and software. Streamline.cloud is hosted in the cloud and maintained by Ross. Choose from monthly and annual subscriptions.



STREAMLINE PRO MEDIA ASSET MANAGEMENT

Streamline Pro is an award-winning Media Asset Management platform proven to arm some of the world’s top media creatives with the best-in-class solutions to manage all their content. When combined with the rest of Ross’ suite of products, it seamlessly integrates file-based workflows with signal-based infrastructures to offer single and multi-site operations global access to their content and workflows.



Streamline Xchange supports a comprehensive range of workflows for live-feeds and file-based content, enabling users to streamline editing, newsroom metadata logging, control room layout, and seamlessly share, edit, review and approve content prior to either broadcasting live, automate on-demand play-out, or publish to a wide range of OTT platforms.

DISCOVER YOUR ASSETS

Access all of your production assets and associated metadata in and out of your facility from a single, unified UI, with powerful search capabilities and real-time playback.

TAG IT FOR LATER

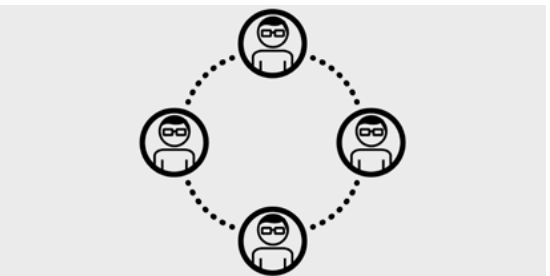
Add markers with descriptive comments and sub-clip video or live feeds to facilitate easy search and retrieval of relevant content.

ADD FLEXIBILITY

Archive and restore content to local and cloud-based archive solutions from any location and across multiple storage tiers.

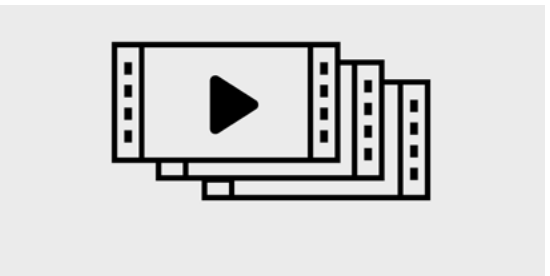


OPTIMIZE YOUR
MEDIA CREATIVITY



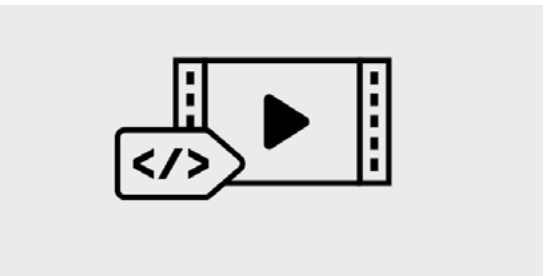
CREATIVE INTEGRATIONS

Improve productivity by seamlessly connecting your video, graphics, and visual FX teams with tools to locate, manage, and import assets and projects without ever needing to leave creative tools such as Adobe Creative Cloud and Apple Final Cut Pro.



ROUGH CUT EDITING

Easily gather videos into an organized rough cut while settings in and out points to prepare a creative story for exporting to playback systems or for creative finishing in Adobe Premiere Pro directly from a web interface.



TIME-BASED LOGGING

Streamline Xchange MAM provides powerful metadata-tagging tools that allow for logging live or pre-recorded video. These tools contain configurable user interfaces that enable content loggers to easily tag video with defined metadata – making assets easier to manage, automate and ultimately monetize.



MEDIA I/O SOFTWARE-BASED INGEST, AND PLAYOUT SOLUTION

Media I/O streamlines today's demanding HD and UHD workflows so you can easily get content on air quickly.



Media I/O is an award-winning, recording, playout and transcode solution for capturing content from virtually any source while transcoding it live for fast integration into any production, management, and delivery workflow. The platform offers support for a greater number of input sources, workflows, and formats than any other live recording solution on the market.

FLEXIBILITY

Media I/O is built completely on a software-based framework that allows for both on-premises and cloud-based architectures to give you the ultimate flexibility in hosting your solution. All channels can easily change from ingest to playout to transcode and all industry-standard Codecs and wrappers are supported out of the box on every channel.

SCALABILITY

With support for all forms of I/O and the best channel density in the business, Media I/O gives you and your engineering department a highly flexible and scalable software solution that can grow with your business goals and workflow needs with minimal space and power footprint.

SPEED

Media I/O gives you instant access to live ingesting content and allows for edit-while-ingest to accelerate the production process for both logging and editing workflows.

INTEGRATION

Enables seamless production workflows by being tightly integrated with Streamline MAM, OverDrive, and Inception

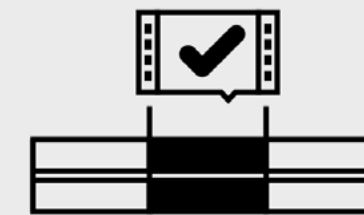
CAPTURE ALL YOUR LIVE FEEDS
& QUICKLY PLAY THEM OUT

Media I/O



LIVE CAPTURE

Capture SDI, web, camera, and broadcast sources such as HLS, MPEG Dash, and RTSP streams in single or multiple self-contained file formats.



EDITING INTEGRATION

Preview live recordings inside your Web browser and edit while capturing streams in Adobe Premiere Pro and Apple Final Cut Pro as part of our Media Asset Management solutions.



IP-READY

Supports software-driven IP workflows using NewTek NDI, SRT and SMPTE 2110 IP streams with compatible hardware.



SOFTGEAR VIRTUALIZED MEDIA PROCESSING PLATFORM

softGear™ is the future-facing software technology platform that creates new ways to acquire, process, manage and distribute content. softGear utilizes microservices that can be chained together in custom configurations to build scalable workflows while preserving high-quality performance and reliability.

As the demand for new content grows, you need more versatile ways to create new workflows with more efficiencies to reduce your initial investment. With the goal of increasing flexibility, cost reduction, and investment protection, our team created the softGear platform based on a microservices architecture that empowers media processing applications with reliable real-time performance in audio and video processing environments.

EASY TO USE INTERFACE

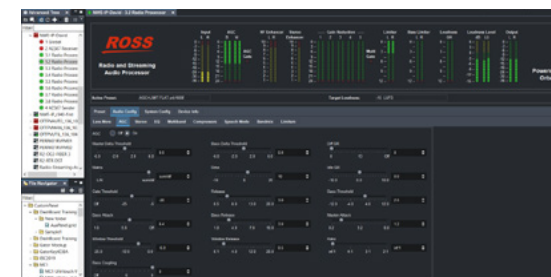
The DashBoard interface can be deployed across numerous product applications to simplify operational command and control. Get consistency in your multi-channel distribution through a centralized control interface.

COTS BASED

Since softGear™ based solutions do not require specialized hardware, products using the platform are faster and easier to provision and deploy. The platform also enables solutions to be more scalable, flexible, and easy to upgrade in the field.

SOFTWARE BASED PROCESSING

In the softGear architecture, algorithms are implemented in software encapsulated Docker containers, targeting x86 or GPU rather than FPGA or DSP. In addition, media processing services are deployed as microservices, instead of proprietary physical cards.



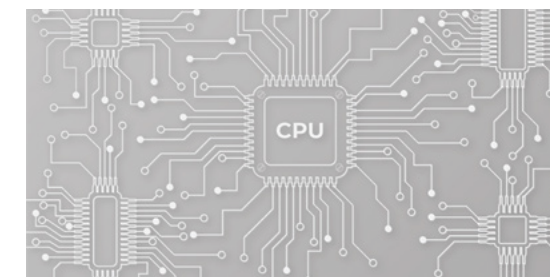
COMMON UI

As requirements change, softGear allows you to repurpose existing systems by creating new workflows via a single user interface.



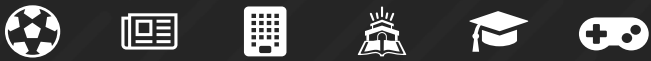
SOFTWARE MEDIA PROCESSING

Since softGear™ solutions are based on software SDKs and do not require specialized hardware, the platform can enable these solutions more quickly and they become easier to provision and deploy.



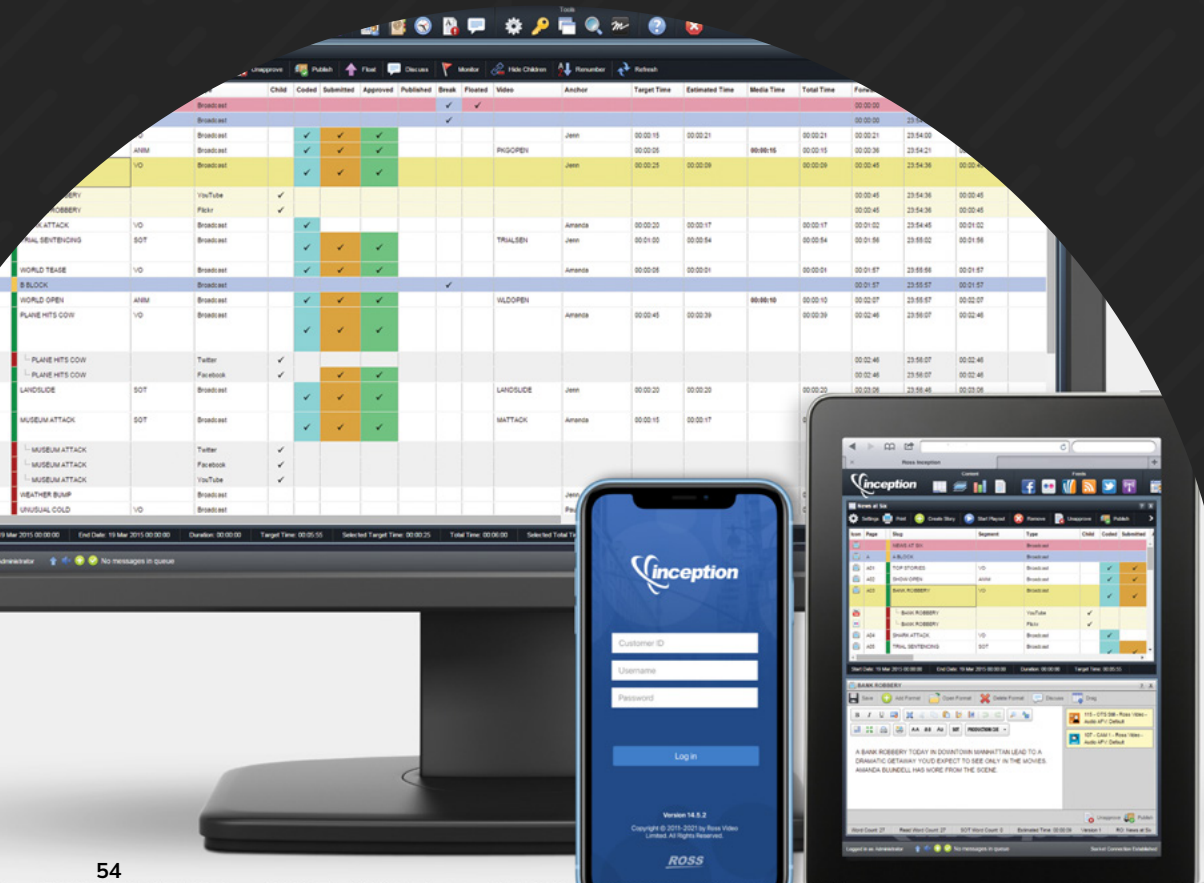
FIELD UPGRADABLE

softGear's media processing units are based on software, so their processing algorithms can be updated with new software releases in the field. This model allows updated systems to be created without hardware redesign.



INCEPTION STORY-CENTRIC NEWSROOM COMPUTER SYSTEM

An innovative newsroom computer system and social media management tool all-in-one. Inception News makes it easy to discover and publish stories as they happen.



Inception News brings broadcast, social and web content creators together with one system designed to handle every step of the editorial process including planning, multi-platform content creation and live show rundowns.

INCREASE COMMUNICATION

By centralizing web, social media and broadcast workflows into a single platform, teams can easily share content and information using Inception's built-in messaging and contextual discussions.

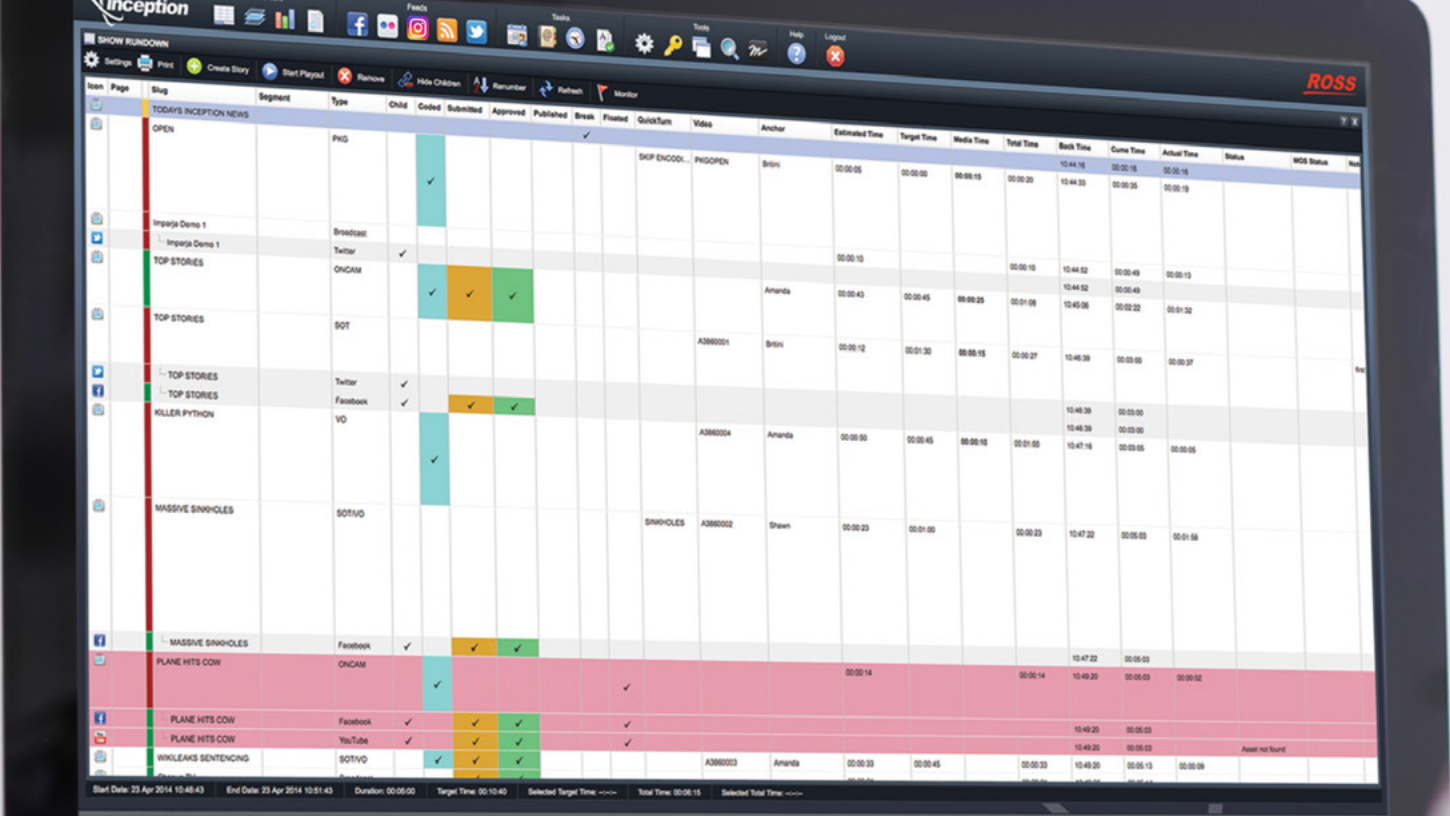
SOCIAL & WEB ENGAGEMENT

Create interactive polls and search social media in real-time while building playlists based on comments, photos and other content which feeds directly into on-air graphics.

FLEXIBILITY AND SCALE

From the smallest newsrooms to the world's largest broadcasters, Inception scales to meet any size operation and workflow with both subscription and purchase models available.

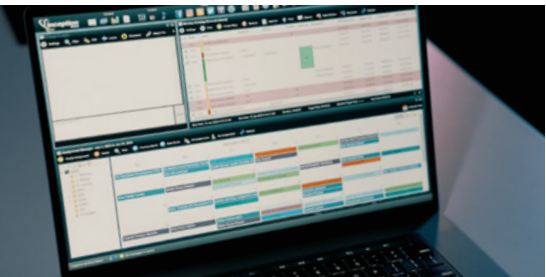
YOUR MULTI-PLATFORM NEWSROOM



Icon	Slug	Segment
Local		
Evening news	STUDENTS PASSING OUT	1SHOT
Morning news	STUDENTS PASSING OUT	
Politics	STUDENTS PASSING OUT	
Special Projects	STUDENTS PASSING OUT	
Sports	STUDENTS PASSING OUT	BUMP
Templates	STUDENTS PASSING OUT	
Twitter	STUDENTS PASSING OUT	
Weather	STUDENTS PASSING OUT	

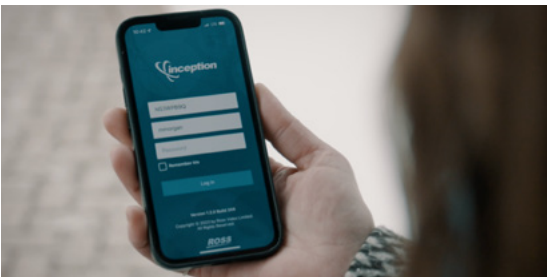
STORY-CENTRIC WORKFLOWS

Create multi-platform content based on specific user permissions, optional approval workflows, and publishing schedules. Quickly reformat a traditional broadcast story for social media or web in just a few clicks, or, break a story on the web and use that information to write your broadcast script.



POWERFUL PLANNING

Track events, story ideas and follow-ups using Inception's Assignment Manager. Collect research, assign staff and track progress to increase visibility and improve communication.



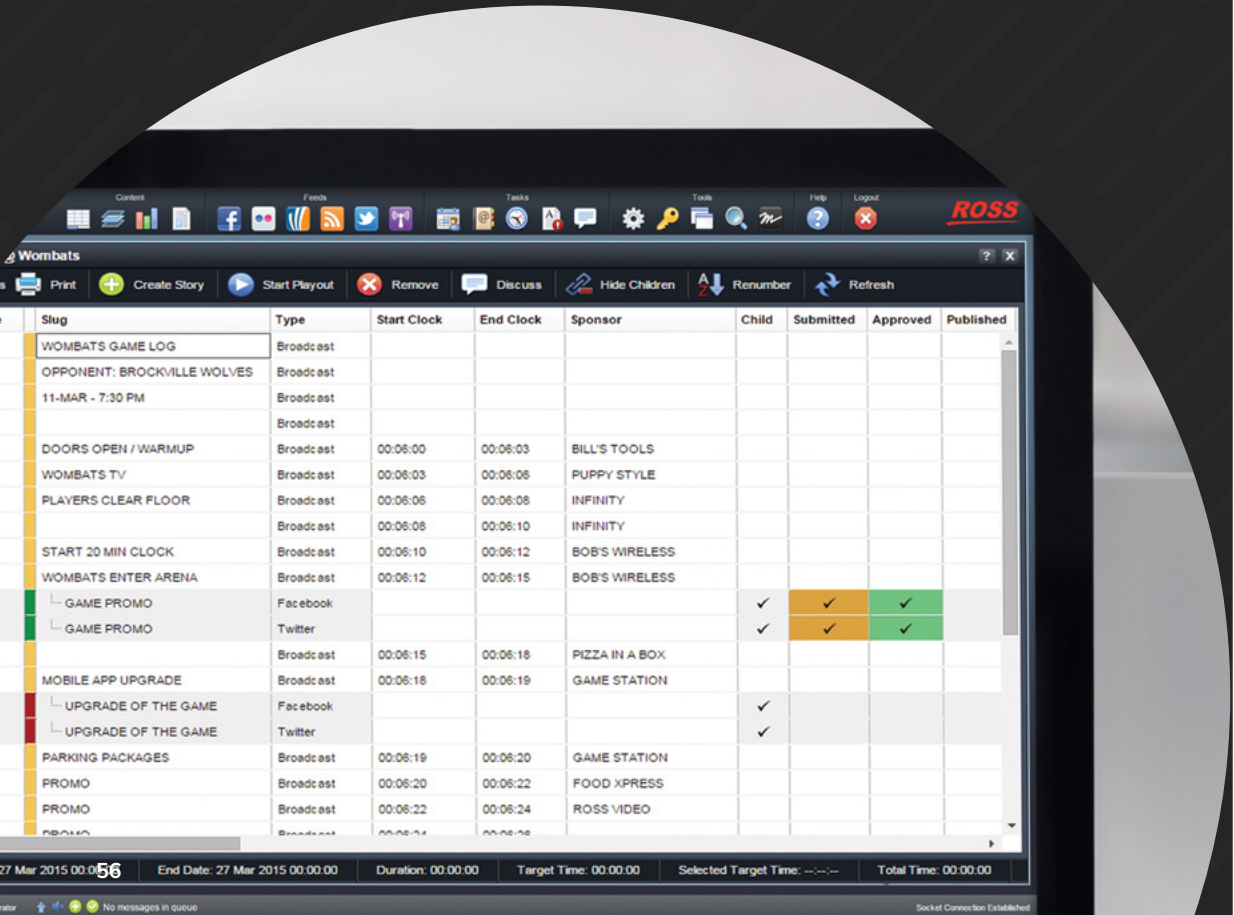
TAKE IT ANYWHERE

Inception is browser-based and can be used on Macs, PC's, tablets and mobile phones. Create and edit content from anywhere, message team members on the go and see assignment updates in real-time.



INCEPTION LIVE LIVE EVENT AND SOCIAL MEDIA MANAGER

Manage game day or live event rundowns from anywhere with a collaborative tool to plan, write and time everything from sponsor graphics to scripts for your host. Use the same tool to engage the audience with real-time social media publishing and searching.



Whether your team is in the same building or spread across the world, Inception Live presents a collaborative and tailored platform to plan, write and publish content for live event rundowns, social media and the web.

INCREASE COMMUNICATION

By centralizing web, social media and broadcast workflows into a single platform, everyone from marketing to production teams can contribute and have visibility of the event rundown. Built-in messaging tools allow everyone to communicate easily whether working in the same building or around the world.

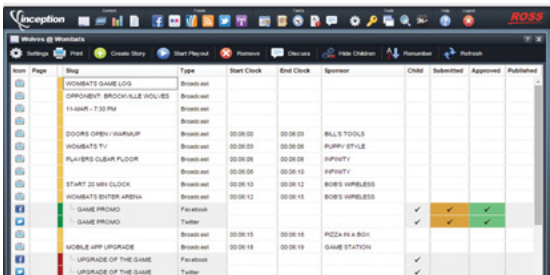
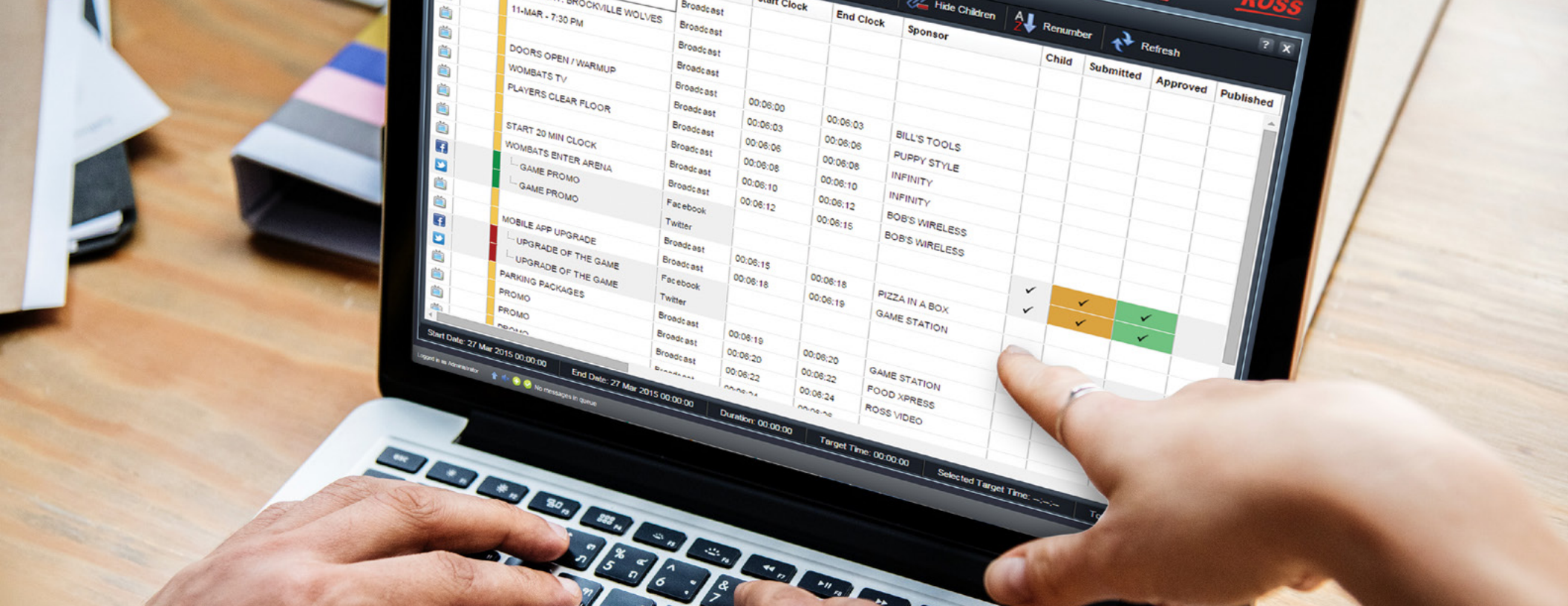
EASY ACCESS

Eliminate printed materials by storing everything in a shared workspace, accessible from anywhere. Inception Live can be accessed using a variety of web browsers on Macs, PC's, tablets and mobile devices. Special views are offered for tablet workflows including the ability to swipe between scripts or track timing of the show.

INCREASE ACCURACY AND EFFICIENCY

Use templates and drag-and-drop workflows to easily reuse and share content between rundowns. With real-time updates, all users see the same information at the same time which cuts down on mistakes and redundant work. Approval workflows and content history allow you to control quality and track changes.

OPTIMIZED FOR LIVE



CUSTOMIZABLE INTERFACE

Tailor the user-interface to your production with user-definable columns to track everything from ribbon boards to sponsor messages. Each user can select the information they see and how they see it while still receiving updates as changes are made.



AUDIENCE ENGAGEMENT

Get content from your audience onto the screen, fast. Create keyword, hashtag or geolocation searches to discover content on Twitter, Facebook and Instagram. Drag and drop comments, photos and videos directly from social media searches into a graphics playlist. Use word filters and an optional approval process to keep inappropriate content off the screen.



INCEPTION.CLOUD

Inception.cloud offers the ability to add Inception functionality to your workflow without the need to maintain on premise servers and software. Inception.cloud is hosted in the cloud and maintained by Ross. Choose from monthly and annual subscriptions.



ACIDCAM FULL CHROMINANCE BROADCAST VIDEO CAMERAS

Studio production cameras with best-in-class resolution, sensitivity and signal to noise ratio, plus, unique, patented UltrachromeHR outputs offering full 4:4:4 data for chroma keying and live virtual applications.



ACID cameras are precise imaging systems engineered for maximum HD performance in any studio production. Using the latest camera technology, they provide superior edge-definition and natural image composition within virtual environments.

GO VIRTUAL

ACIDCam integrates seamlessly into Ross Virtual Solutions. When combined with Ross' next-generation UltrachromeHR chroma keyer, ACIDCam delivers stunning images for live virtual broadcasts.

MULTIPLE OPTIONS

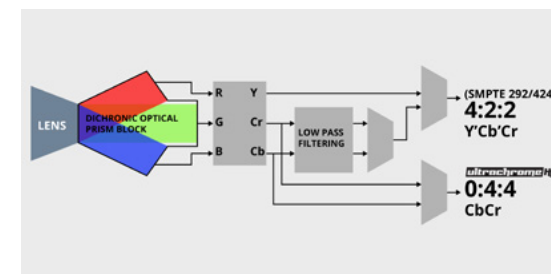
Maximize your budget with two ACID camera options. The H200 is an excellent high-end performer that offers 1080p, CMOS sensors and HDR capabilities. Also available is the economical Z50 model, which offers UltraChrome with 1080i resolution and SD compatibility.

COMPACT DESIGN

Compact and lightweight, these rugged cameras can be mounted in a variety of locations, such as on a tripod, jib, or mounted on a robot where placing an operator is not possible.

A HEIGHTENED
VISUAL EXPERIENCE

acidcam



OWN EVERY PIXEL

Create beautiful, clean, true high-resolution keys using the patented 0:4:4 UltrachromeHR output, a signal that contains full bandwidth color information for complete 4:4:4 data into the UltrachromeHR Chroma Keying System.



BE CREATIVE

ACIDCam incorporates the latest developments in HDR technology through Hybrid Log Gamma (HLG) and Perceptual Quantization (PQ) to capture the full breadth of colors and contrast in any scene.



CAPTURE THE DETAILS

Obtain high quality images in lower light, with Dynamic Noise Reduction from the H200-UCHR providing a signal-to-noise ratio beyond 64 dB, and the budget friendly Z50-UCHR achieving a 58 dB signal-to-noise ratio.



FURIO ROBOTIC CAMERA DOLLY SYSTEM

With the unrivaled ability to produce silky smooth, sweeping on-air dolly shots, which can then be precisely repeated over and over again at the push of a button, Furio allows producers to create more dynamic looks – while also delivering higher quality and repeatability, and lowering operating costs.



As a modular system, Furio is available in a wide variety of configurations, with multiple platforms, lifts and heads to choose from. Select the towering height and range of the SE 3-stage lift, the more economical S2 2-stage lift, or a fixed column – or mount the head directly on the dolly. Integrate the rails into the floor or suspend them from the ceiling to free up space. The system can then be paired with either a X350, VR100 or VR600 pan and tilt head, depending on payload requirements.

VISUAL IMPACT

Our MotionDirector technology allows operators to create distinctive shots with more fluid and dramatic visuals that make productions come to life, capturing and holding the audience's attention. Furio's eye-catching aesthetics provide a cutting-edge look to programs, not only behind the camera, but also in front of it.

ALWAYS ON TRACK

Furios's absolute rail encoder technology provides reliable, accurate tracking data regardless of traction or accumulation of dust and dirt, without the need for homing or recalibration – perfect for virtual and augmented reality

PRACTICAL PERFORMANCE

Furio SE+ and SkyDolly deliver much more than just beauty shots. With the payload capacity to support a full-sized prompter, they can also serve as the primary camera in a newsroom production, providing maximum flexibility and practicality.

THE SMART EVOLUTION
OF CAMERA ROBOTICS

FURIO



SAFETY FIRST

SkyDolly sits on top of the rails, while a second set of safety rails above the dolly ensures that it can never fall from the sky. Additionally, tether points for the head, column, and payload, and a remote E-stop make SkyDolly the safest ceiling mounted system ever.



TRACK STAR

The Furio Dolly is designed with our unique StableTrac technology to provide even greater stability.

Furio rides on precision extruded aluminium rails and a collision avoidance module allows up to 4 Dollies* to safely share the same track for increased flexibility.

*limited to 2 dollies on SkyDolly



BLACKBIRD

The revolutionary BlackBird base provides an ultra-stable platform for combining smooth vertical movement with pan, tilt, and zoom to create dynamic on-air moving shots in an automated environment.



FURIO LIVE LIVE EVENT CAMERA DOLLY SYSTEM

Furio Live is the ultimate next-generation remote control camera system for live productions. Combining a high speed dolly, silky-smooth lift, and ultra-fast pan & tilt head with two intuitive and responsive control systems, Furio Live delivers a unique combination of speed, fluidity, and responsiveness in a compact and modular package – perfect for capturing all the action at live events.



Save time and money with a system designed from the ground up to be fast and easy to setup and configure. Furio Live can be located in places that were previously impossible, discretely delivering stunning visual perspectives at your command.

GET CREATIVE

Make shots you only dreamed of previously, thanks to Furio's speed, smoothness, and range.

SETUP QUICKLY

Specifically designed for rapid setup and tear down, with fewer cables, built-in power bar and cable management features, and integrated camera balancing plate with tool-less quick-lock adjustments.

BUDGET FRIENDLY

Benefit from lowest total cost of ownership with the safest, most robust and reliable dolly system, coupled with the best support in the industry.

NEXT GENERATION REMOTE
CONTROL CAMERA SYSTEMS

FURIO



OUTPERFORM

High speed Furio SE dolly travels at speeds up to 3 m/s (straight track), with a range of nearly 100 m.

Ultra-fast pan & tilt head (up to 180 degrees/sec) covers all the action, from any angle.



WORRY-FREE

Two lift options to choose from: The SE Lift featuring 3-stage Carbon fiber construction that delivers over 2.2 m (7' 2") of height and 85 cm (33") of extension, or the more cost-effective 2-stage S2 Lift.



STAY IN CONTROL

Choose from two responsive and intuitive control platforms: modular joystick console, or remote pan bar.



CAMBOT FREE ROAMING PEDESTALS

With three distinct models, the mid-sized 600XY-S2 and 600XY-S3, to the extra high-payload 700XY, the CamBot series of free-roaming pedestals have been designed to suit a wide variety of studio applications and capital budgets.



CamBot's pedestal base features the industry's best accuracy and floor repeatability, fast and easy targeting, and a straight-forward design that provides years of reliable, low-maintenance operation.

UNBEATABLE FLEXIBILITY

CamBot XY pedestals provide the ultimate in flexibility, allowing the camera to be positioned anywhere around the studio floor, while providing remote control/programming of all camera axes, including pan, tilt, zoom, focus, elevation, and floor position.

UNIQUE DESIGN

The CamBot's unique two-wheeled design eliminates the wheel-scrubbing that results in the rapid accumulation of floor-error that plagues caster-based designs. And when re-targeting is periodically required (typically just once a day), millimeter accuracy is quickly restored by optical pattern recognition-based targeting technology that takes less than a second to complete.

PERFECT AUTOMATION PARTNER

Consistent preset recalls combined with an open API and networked control architecture make CamBot Pedestals the perfect robotic camera system for Automated Production Control solutions, including Ross OverDrive, and all major 3rd Party solutions.

RELIABLY ACCURATE
ROBOTIC PEDESTALS

CamBot



POWER LIFTER

With a payload capacity that can reach 200 lbs / 90 kg, CamBot pedestals can support some of the largest box lenses and studio cameras still in use today.



VIRTUALLY UNBEATABLE

All CamBot XY-pedestals offer high resolution virtual tracking data on all seven axes which, combined with their unbeatable floor accuracy, makes them ideal for augmented reality or virtual sets.



BLACKBIRD C2

Our entry-level system is based on the 2-stage C2 lift with integrated electronics that comes from the original CamBot 600PTZ. Dubbed the C2 lift to reflect its CamBot heritage, it is paired with the 600PT to create our most cost effective robotic elevation solution.



PAN & TILT HEADS

STUDIO ROBOTIC CAMERA SYSTEMS

With a wide range of pan and tilt heads, Ross Robotics has a model suitable for just about any application, from extremely large payloads of up to 90 kgs (200 lbs) to ultra-quiet, compact heads that are perfect for mounting in hard-to-reach places where space is at a premium; all with industry-leading pan and tilt speeds. In addition to fully robotic heads, Ross also offers the VRzero encoder interface module packaged with Cartoni manual fluid heads to provide accurate virtual tracking data for manually operated cameras.



Ross pan and tilt heads are based on decades of industry experience, combining proven mechanical design with advanced motion control algorithms to produce superior smoothness, accuracy and robustness across the range.

STRONGER, FASTER

Both fast and accurate, Ross pan and tilt heads can quickly position the camera for the next shot, without requiring manual touch-ups, so that it is immediately ready when needed. This is accomplished even with class-leading payload capacities that provide the flexibility to mount just about any camera, lens, and prompter configuration.

TRACKER

The X350 and VR series heads (including the VR0 and manual encoded heads) provide accurate tracking data on pan, tilt, zoom and focus position, making them perfect for virtual sets or augmented reality. And tracking data is always included for free, making them perfectly affordable.

IN CONTROL

All our PT heads can be controlled from Ross Video's DashBoard control system at no extra charge. Combine this with a Monogram Creative Console modular joystick package to create the ultimate low-cost control system.

SOPHISTICATED PAN & TILT HEADS FOR PRECISION MOVEMENTS



MOUNT UP

Ross heads are available with a variety of mounting options that allow them to be placed on top of tripods or pedestals, hung upside down from the ceiling or trusses, or bolted to a wall, desktop or alcove. VR-series heads and the X350 can also be mounted on any Furio Lift, Dolly or BlackBird.



NO BACKLASH

X-Series, 500, 600 and 700 series heads feature special gearboxes that eliminate backlash, as well as high-resolution servos to produce smooth and highly repeatable movements.



LOCALLY CONTROLLED

PT series heads offer an optional Local Control module that provides a local interface for releasing robotic control of the head and permitting it to be positioned using manual pan bars. Returning to remote robotic control is as easy as flicking a switch and does not require homing to re-establish accuracy of presets.



FULL 4K UHD PTZ CAMERA

The PTZ-12G+ is a broadcast-ready 4K UHD PTZ camera that is ideal for a wide variety of applications including houses of worship, live broadcast, corporate board rooms, auditoriums and TV studios. The perfect addition to any video production now with Genlock input, NDI HX3 and SDI 12G output, the PTZ-12G+ is quiet, fast, accurate and has 30x zoom for those close-up shots.



COMPACT,
HIGH PERFORMANCE PTZ

PTZ+

These high-performance PTZs are fully integrated into the Ross eco-system, where our SmartShell and (free) DashBoard control systems allow for unlimited presets, enabling a single operator to control any combination of Ross robotic products and any number of cameras.

SUPERIOR QUALITY

The PTZ's 9.17 megapixel 1/1.8" CMOS sensor captures full 4K UHD and 1080pHD video up to 60fps, combined with fast, smooth movement. The addition of the 30x optical and 12x digital zoom allows creative, exceptional shots in all environments.

ADVANCED FUNCTIONS

This new PTZ is tightly integrated with Ross' Vision{Ai] ry face and object recognition software. It outputs Free-D positional data for use with VR/AR/XR engines in virtual production.

NDI HX3 V5 is now certified which adds network genlock and 4K video streaming.

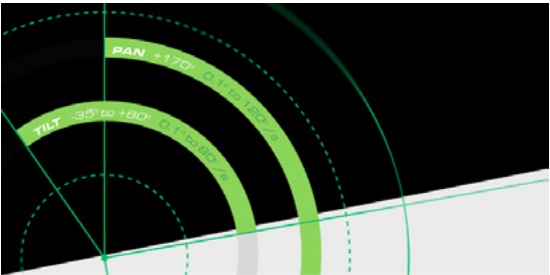
EFFORTLESS CONTROL

Users can create their own PTZ custom panels and choose to store and recall presets either on-camera or locally on the control system. No additional hardware required.



SEE CLEARLY

The PTZs deliver full 4K UHD 60 fps, allowing the cameras to capture action in high definition, quickly and accurately employing high-contrast optics up to 30x zoom with a 63° horizontal FOV.



BE ON TARGET

The PTZ offers fast and efficient pan/tilt/zoom and focus control with accurate preset recalls. A large rotation angle range, ultra-smooth PTZ mechanism, and preset positions come together for fast, up to 300°/sec movement and smooth maneuvering of the camera.



COMPACT DESIGN WITH EASY SETUP

The compact design allows the PTZ to be positioned anywhere and integrate into any broadcast setup. Utilizing the VISCA protocol, it is seamlessly controlled by ROSS' Dashboard and SmartShell robotic control systems. It outputs standard IP networking with POE+, the PTZ can easily be combined with the Ross Robotics solutions to get that extra shot or in stand-alone applications.



CONTROL SYSTEMS FOR STUDIO ROBOTICS SMARTSHELL, VISION[AI]RY, AND MOTIONDIRECTOR

Ross Video offers a range of robotic control options that can be scaled and combined to create the perfect control solution for any market application. From our free DashBoard plugin for controlling core functions to our Enterprise-level SmartShell control platform, we can create a workflow solution that is perfect for your environment – including a hands-free automated workflow using our AI-based framing software, Vision[Ai]ry, in combination with Ross OverDrive APC.



All Ross Studio Robotic systems can be directly controlled from a wide range of control platforms using an open API that allows complete control of every feature of the robots. Whether you have Furio dollies, free-roaming CamBot pedestals, BlackBird PTL pedestals, PT heads, or even PTZ cameras, all your Ross robotic systems can be controlled by a common control system using a centralized Ethernet-based architecture. Our graphical user interfaces (GUI) provide simple, easy-to-use interfaces for creating, managing, and recalling shots on all your Ross Robotic cameras, helping deliver consistent, high-quality productions without sacrificing creativity.

UNLIMITED CREATIVITY

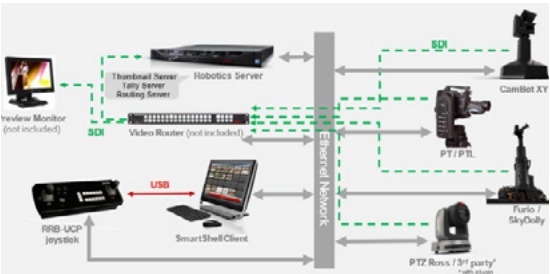
Operators are free to create a virtually unlimited library of shots, each of which can be instantly recalled from any control system with a TCP connection to the robot. With our MotionDirector technology, they also have the ability to create signature beauty shots by simply dragging and dropping keyframes into a timeline – or recording manual movements that can then be perfectly reproduced time after time, at the press of a button.

PERSONALIZATION

SmartShell offers user settings that can be saved and uploaded from a file, allowing each operator to tailor the interface to their specific preferences, from joystick configuration to the layout of shots in the matrix for a particular show. With our DashBoard plugin, we can go even further, creating custom UIs that combine control of much more than just the robotic camera, but also graphics, switching, routing, audio, and so much more.

SCALABLE

Our control solutions scale easily from a simple two camera studio to a cross-country network of studios and control rooms, where any robot can be controlled from any control room, including home-based remote terminals hosted in the cloud. Combine SmartShell with other Ross applications, such as Vision[Ai]ry, DashBoard, OverDrive (APC) and Lucid Studio (VS/AR) to create a complete robotic camera control solution for manual and automated workflows.



IP-BASED CONTROL

Each SmartShell control station communicates with the robots over an Ethernet infrastructure using an open API, simplifying integration into new or existing facilities.

Presets and moves are stored on the robots. This distributed network architecture is not only more robust, but also enables remote and automated production.



ALWAYS IN-FRAME

Vision[Ai]ry improves quality and consistency by automatically correcting the camera position, whether for day-to-day variations of talent seating position, posture, or height – or to track the on-air movements of the studio talent. Using AI-based facial recognition algorithms, it tracks the position of the subject and drives the robotic camera axes to provide smooth, consistently well-framed images at all times, eliminating the reliance on a skilled operator.



FLEXIBLE CREATIVITY

As real-life productions can be unpredictable, MotionDirector gives the operator the precision and predictability of a pre-programmed trajectory, combined with the flexibility to make in-flight joystick and time corrections while a programmed movement is in progress.



SPIDERCAM CABLE-BASED CAMERA SOLUTIONS

Create stunning views that will enthrall your audience and provide greater accessibility to your event. Suspended from a cable-driven system, spidercam provides maximum creative freedom with a range of 360° dynamic and stationary images, unreachable by traditional cameras or solutions.



The spidercam portfolio covers a diverse range of production applications, with different systems tailored to meet the needs of the environment. Each solution combines a Winch system (defines the maximum operating area and maximum speed) and a dolly (defines the payload, flying height and stability), to provide exceptional and immersive images.

FREEDOM TO ACHIEVE

With a flexible range of camera angles, offering steady shots like a stationary camera or dynamic moves like a crane, spidercam can reach virtually any position in the flying area, opening up new possibilities and bringing the event to life.

CONNECT

spidercam's fibre optic connections ensure no loss of return video. The signals for the camera, RCP, lens, microphone, speaker, tally, and genlock communications are all transmitted via a fiber core within the catenary cables to provide consistent, interference-free transmission.

INTEGRATE

spidercam systems support different remote heads and can be outfitted with a variety of broadcast and film cameras (or even specialty sensors or monitoring equipment) and lenses. Further options include mixed/ augmented reality support, a two-way audio interview platform (spidercom), a multi-purpose screen, and more.

DYNAMIC, FLEXIBLE CABLE-
BASED CAMERA SOLUTIONS



SAFETY

spidercam maintains full compliance with global safety standards, and Ross offers regular maintenance and support. Our pilots and technicians are specially trained to ensure a safe working environment on productions. spidercam's safety features include software assistance, emergency stops, dual safety brakes, constant system monitoring as well as cable lifetime tracking (heatmap).



WORKFLOW

With integrated tracking data, spidercam enables integration with Ross graphics and render engines, as well as 3rd Party render sets. The system's UI provides operators with full creativity via the joysticks, and the ability to record and play back moves to ensure perfectly repeatable movements.



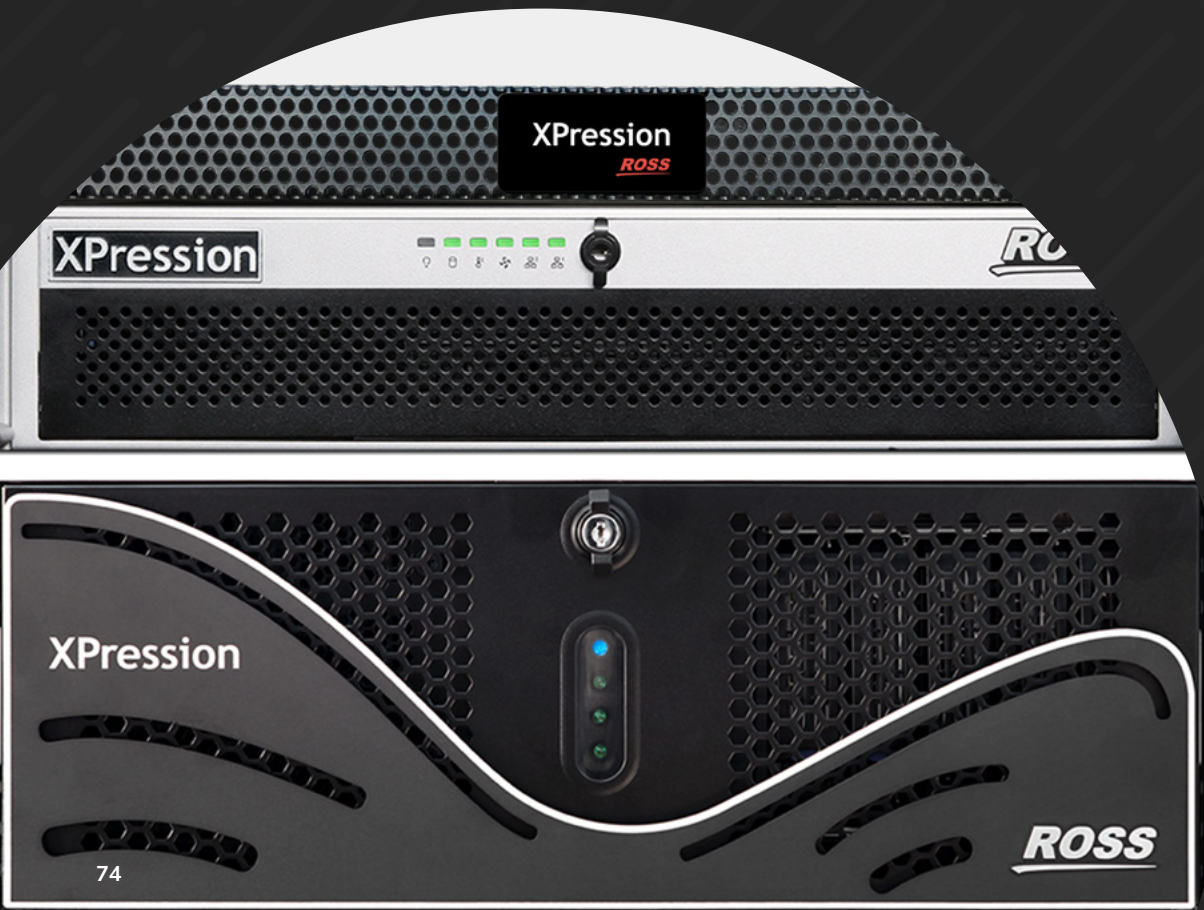
RELIABLE AND VERSATILE

Manufactured from high-quality aluminum at its core, spidercam systems are built with synthetic catenary cables and designed to withstand outdoor conditions. spidercam can be installed in every kind of indoor or outdoor venue, from news studios to football stadiums.



XPRESSION MOTION GRAPHICS SYSTEM

XPression has changed the real-time production graphics game - a 3D motion graphics system that is powerful, yet easy to use.



XPression is inspired by and continues to be developed to meet the needs of the world's top real-time motion graphics creative teams who are tasked with creating eye-catching graphics - often driven with real-time data and produced on tight timelines. XPression delivers results for the most demanding productions - from Hollywood to top network television and sports arenas all over the world while it's ease of use and affordability make it available to all.

MAXIMIZE CREATIVE OUTPUT

XPression is a joy to create and operate graphics on employing a clean user interface, logical menus, and controls. XPression shortens your learning curve, fosters creative flow and maximizes productive output.

OPTIMIZE WORKFLOW

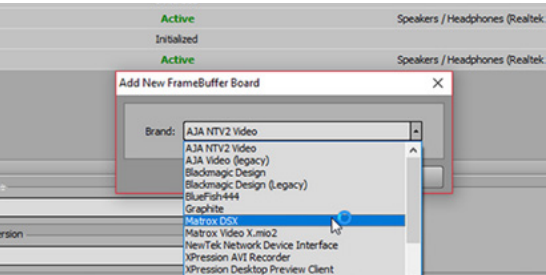
XPression offers workflow tools and integration options that generate significant efficiencies for News, Sports and Entertainment environments. Implement a journalist self-serve graphics workflow for news with a centralized art department, easily tie in Twitter, Instagram and other feeds for text, images and polls, drive and entire stadium with a single button push – solutions like these are all available with XPression.

BUY ONCE, ENJOY FOREVER

Always enjoy state-of-the art graphics. Once you buy XPression and keep software maintenance current, you never have to buy it again. As a Windows product that runs on standard off-the-shelf computer hardware, XPression licenses can migrate from machine to machine, taking advantage of accelerated CPU and GPU performance over time.

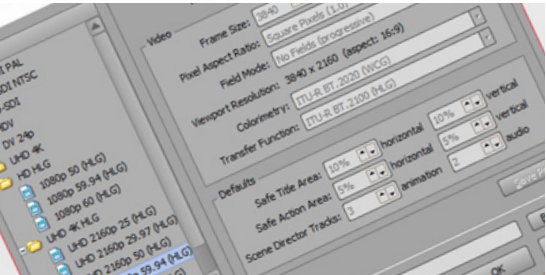
IMAGINATION REALIZED

XPression



OPEN HARDWARE

XPression supports multiple broadcast video I/O formats in HD-SDI, 12G and SMPTE IP Standards. using hardware from a wide selection of I/O card vendors. Rendering is done in the GPU, which allows XPression to work with various hardware frame buffer vendor solutions, rather than just one XPression supports I/O hardware from Matrox®, AJA®, Blackmagic Design®, and Bluefish444 and NDI™ .



SCALABLE

HDR and Wide Color Gamut are more important to many of our customers, than UHD, but the latest XPression Video Codec provides both. Add that to existing support for 48-bit and 64-bit image formats for stunning HDR content in HD or UHD.



A VARIETY OF FORM FACTORS

Ross Video offers XPression systems in a variety of form factors to assure there is a perfect fit for your requirements. XPression is sold as software licensing and supported by either your hardware or a variety of hardware configurations.



XPRESSION TESSERA REAL-TIME CONTENT IN LARGE CANVASES

XPression Tesseract has created a new way to tell stories in large format video displays. Tesseract is an entire workflow for displaying large canvases across an almost limitless output display size.



XPression Tesseract allows designers to work in canvases much larger than traditional broadcast formats. The improvements in technology have brought down the cost of expansive video displays at the same pace that the facilities have increased their desire to fill the walls with pixels. Ross Video's XPression allows users to remain pixel-accurate in displays up to one billion pixels by one billion pixels.

CAPITALIZE ON WHAT YOU KNOW HOW TO USE

XPression Tesseract is based on the same core workflows of XPression Studio. Scenes with Infinite layering, Transition Logic, and Take IDs are the core of XPression Tesseract. Utilize a simple region mapping workflow to define what content plays on what region of the overall displays and span your canvas across regions of the final output to fill the wall.

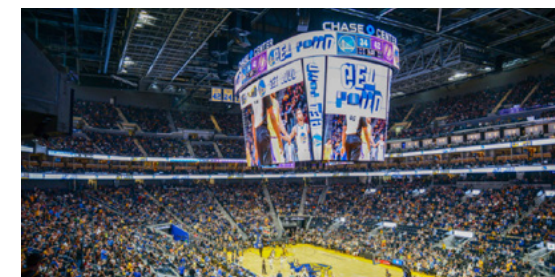
SCALABLE SOLUTIONS

Available in three configuration formats, XPression Tesseract can properly fit into your workflows and budgets. From huge mega stadium displays to small gymnasiums and TV studios, Ross Video can offer a solution for your needs. Control XPression Tesseract using the traditional tools of Ross Video. The XPression Sequencer, the XPression Remote Sequencer, DashBoard, Carbonite, Acuity, OverDrive, or any system that can use RossTalk. Utilize these control surfaces together to unleash the amazing power of XPression Tesseract.

MOS WORKFLOWS

Not only is XPression Tesseract the most powerful solution for driving video displays, but if you are working with a MOS newsroom, XPression Tesseract can be populated by your newsroom team the same way they build a traditional over-the-shoulder graphic. Create XPression Tesseract scenes with replaceable objects and drag-and-drop content into the templates to quickly create topical monitor wall solutions at the last second.

XPression
Tesseract



XPRESSION TESSERA

The original version of XPression Tesseract allows users to create massive canvases and split them up into regions that span across multiple XPression engines and outputs. The distributed rendering is triggered from an XPression Tesseract Master workstation which synchronizes the outputs for a seamless presentation.



XPRESSION TESSERA SE

XPression Tesseract SE leverages the power of XPression Tesseract but keeps it to the outputs of the single engine of XPression which it runs on. Get the power to scale your canvas on to more than 16 million pixels. Control XPression Tesseract SE from the XPression Sequencer.



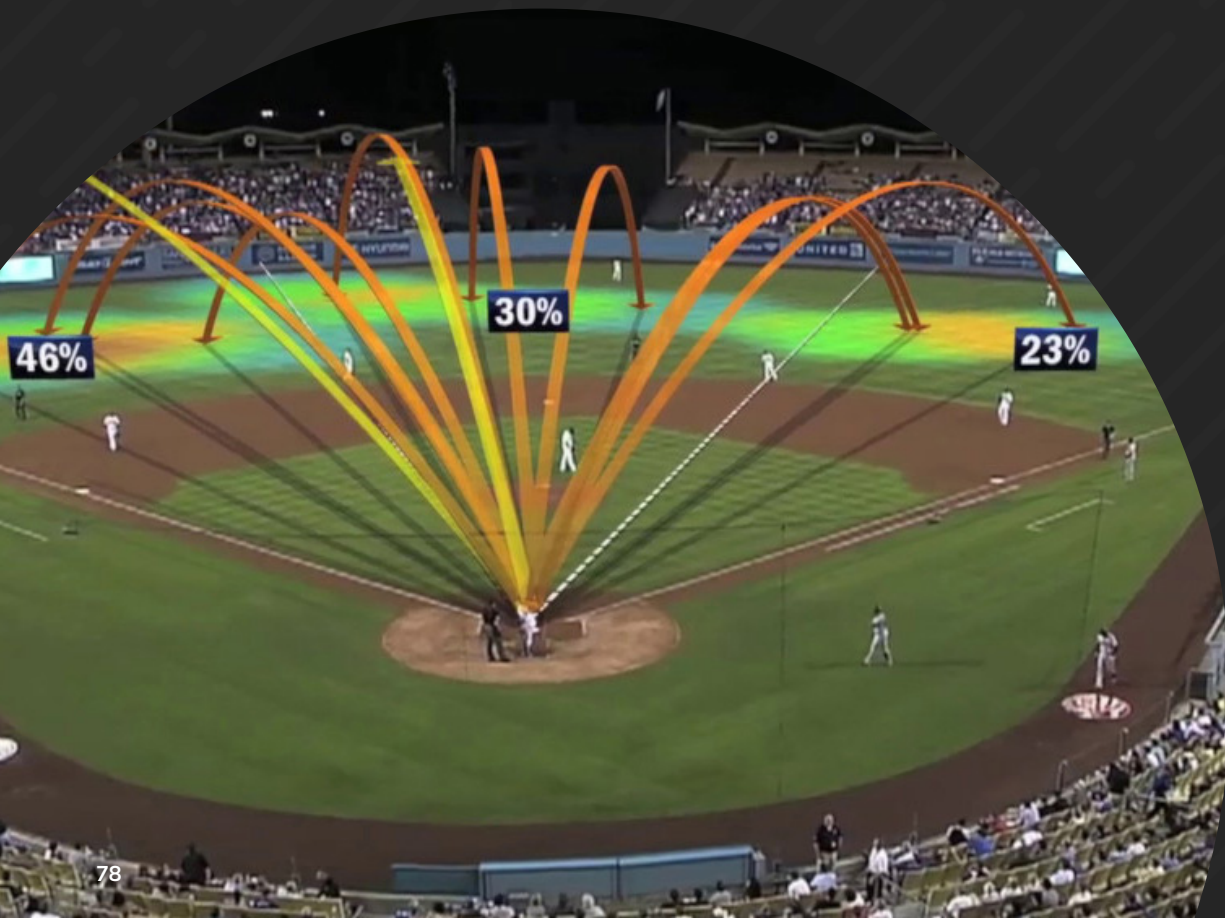
XPRESSION TESSERA ONE

XPression Tesseract One is a single-engine configuration but has been bundled together as a complete LED content creation solution. Two low-latency inputs allow for real-time video input without lip-flap. This makes XPression Tesseract One the ideal solution for smaller venue live sporting events as well as studio monitor walls with remote contributors talking with hosts in the studio.



PIERO SPORTS GRAPHICS ANALYSIS

PIERO is an award-winning sports analysis tool from Ross Video. PIERO's systems use image recognition or encoded camera heads to overlay tactical graphics on sports content. PIERO brings new angles to every game, on the screen and in the studio, with visually engaging and informative effects.



Inspired by top Sport Productions and Pro Clubs, PIERO is continually developed to support presenters and video analysts around the world. PIERO high quality graphics improve storytelling and maximize communication efficiency to its targeted audience.

COMPREHENSIVE FEATURE SET

PIERO tracks camera movements using image recognition technology. It works on content produced locally and remotely. Its wide range of effects delivers high-impact technical analysis and increases sponsorship opportunities. These effects are compatible with more than 20 major sports and can be customized for pre-recorded shows and live productions.

TOUCH SCREEN MODULE

PIERO's customizable touchscreen interface provides a simple way to add graphics live on air. The Touch and iPad Apps are a great choice for remote productions. They are optimized to allow presenters and coaches to tell a story quickly and easily wherever they are.

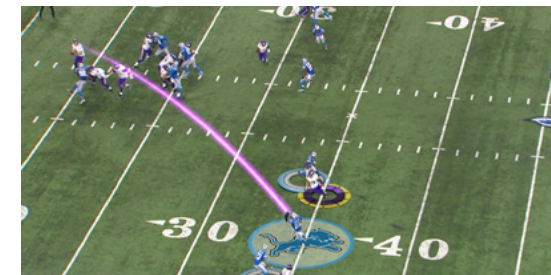
AUGMENTED REALITY MODULE

PIERO's Unreal plugin for Voyager offers a new set of dynamic graphics! Visualize game data on the studio floor for immediate analysis of tactics and plays. The optimized workflow ensures graphics are ready in seconds. Extract players from the video or use 3D characters with custom 3D stadiums to enhance viewing experience.

STATE-OF-THE-ART SPORTS GRAPHICS AND ANALYSIS

PIERO™

TVB EUROPE
BEST OF SHOW
AWARDS 2019



PIERO BROADCAST

PIERO Broadcast is a 3D sports graphics analysis system. It offers a broad range of effects such as moveable players, 3D tactical replays, data visualization, dynamic telestration tools, line-up formations and speed & distance measurements. Use PIERO Touch and Unreal modules to create advanced visuals for sport productions.



PIERO LIVE

PIERO Live is a powerful real time graphics solution. It is designed for real time down and distance, offside line, tied to field scores and data visualization graphics. The solution tracks the camera movement optically in real time.



PIERO CLUB

PIERO Club is a 3D graphics system designed for professional sports clubs. The perfect interface between coaching staff and players. It maximizes communication efficiency and engages players using high quality analysis graphics. Ideal for touchscreen presentations and pre/post game analysis.



KIVA PRESENTATION SERVERS

Our Kiva+ and Kiva Express Duet Presentation Servers delivers a reliable and responsive operator-driven digital media playout solution for live sports & entertainment venues as well as live media production studios.



With Kiva+, all your live productions are instantly simplified. Incoming media assets are quickly ingested, efficiently organized, and easily presented on-demand during live events at sports & entertainment venues and media production studios.

INTUITIVE

With a simple click, the highly intuitive operator-driven Kiva Presenter user interface presents a variety of digital media into live productions with unparalleled flexibility and ease. These media include motion video clips, ‘fill+matte’ stills and animations, surround-sound audio, and sponsored adverts.

ROCK-SOLID

Both our premium Kiva+ and economical Kiva Express Duet presentation video servers are built upon reliable Ross-designed media processing engines, ensuring your live productions will never suffer from video playout stutters, audio dropouts, user interface freezes, or unexpected hang-ups.

ONE-, TWO-, OR THREE-CHANNEL MODELS

Kiva+ is available with either one-, two-, or three-channel pairs, while Kiva Express Duet features one channel pair—letting you choose the model and video channel pair option that best fits your live production needs and budget. The One-Channel model features one baseband audio+video recording input, one Video+Key PVW Player output, and one Video+Key PGM Player output. The Kiva+ Two-Channel model simply doubles these video channel resources, while the Kiva+ Three-Channel model triples them.

PRESENT WITH CONFIDENCE



AUDIO AGILITY

Sound is equally as important as the visuals in your live productions, and Kiva cleanly handles the complex audio needs required by live event presentations. That’s why digital audio captured, stored, and presented by Kiva is handled with 48kHz, 24-bit professional quality—with an AES and embedded audio router built right into Kiva.



CONNECTIVITY GALORE

Kiva+ is designed with modern USB and Ethernet connectivity to handle every possible media file ingest scenario. No matter the format, digital media files can be quickly ingested and transcoded into Kiva+ from a wide range of external sources—including from portable USB drives, memory sticks, and fast internet download.



REMOTE CONTROL

Kiva+ features all the RS422 and Ethernet protocols required for external control from remote production switchers, third-party control panels and user-defined Ross DashBoard panels. These devices can all trigger playout operations in the PVW and PGM players across multiple Kiva servers connected on a local control network.



MIRA REPLAY SYSTEMS

Achieve impressive slow-motion instant replays for all your live events and sports broadcasts with an extremely flexible and very powerful multi-channel replay system.



Driven from a unique, ergonomically-designed control surface and purpose-built replay application, you are able to execute live slow-motion instant replays with the greatest of ease, quickly clip and tag content, ingest and export media files, and create engaging game-break highlights that will captivate your audiences.

SINGLE OR DUAL-USER WORKFLOW

Share the load with Mira+ by splitting / sharing server resources—so two operators can work independently on two replay events or work in collaboration on the same replay event.

RELIABLE PROTECTED MEDIA

Ensure maximum reliability, with standard dual-redundant, hot-swappable power supplies. For ease of maintenance, all premium Mira+ servers feature hot-swappable chassis fans and media disk drives.

FILE-BASED OPERATIONS

Integrated media file import and export tools reduce cost and simplify your workflows.

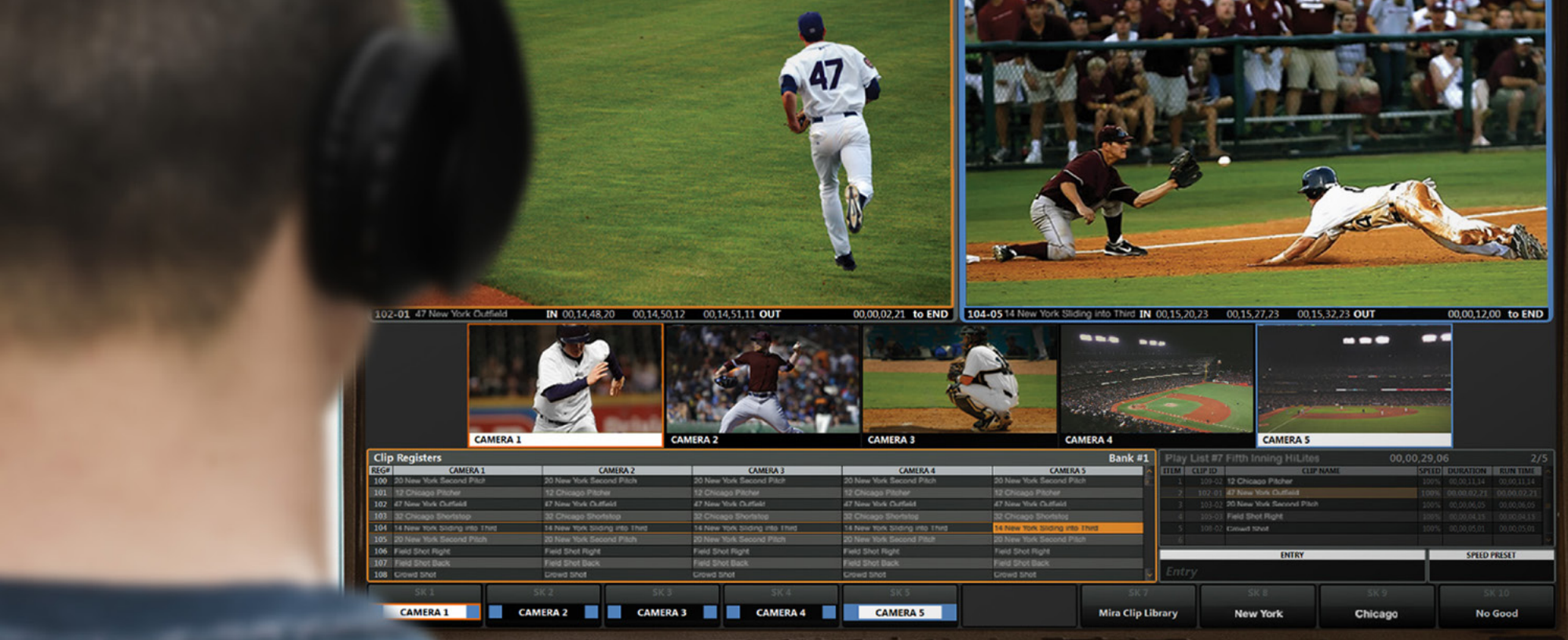
CLIP NETWORKING

Multiple Mira+ servers can be interconnected with 10G Ethernet or multiple Mira Express servers can be interconnected with 1G Ethernet, with clips played between the same model of server to provide even more angles of slow-motion replay.

PIERO INTEGRATION

Tight integration between Piero Broadcast and Mira replay gets sports graphics analysis on-air much faster than any other replay system in the world!

THE ULTIMATE REPLAY SYSTEM



CONTROL SURFACE & APPLICATION

Mira Control Surface features a “wide and slim” ergonomic design, for ease of use and smooth replay operations. All buttons on the control surface are logically grouped and color-coded to function, with generous spacing around every button. The Mira Replay graphical user interface complements the Control Surface with a single “heads-up display” for monitoring, clip/playlist management, and media export.



MIRA+

Mira+ is a premium 8- or 12-channel replay system with 280 or 560 hours of storage. The impressive Mira+ feature set provides all the resources you need to handle larger events including symmetric video channels, dual-user workflows, content sharing between multiple Mira+ servers, and background growing file export to NAS via 10G Ethernet.



MIRA EXPRESS

Mira Express transfers the core Mira+ feature set onto an SSD hardware platform for a professional four-camera / two-playout replay system. The “Clips” SSD drive stores media used all season long, while the “Events” SSD stores the four-camera recordings. Mira Express is available at an incredible value that makes it a great choice for low- and mid-market sports.



TRIA PRODUCTION VIDEO SERVERS

Today's live production environments demand cost-effective playback of video, key and audio content. Tria is the ultimate production server that provides the flexible, feature-rich, multi-channel capability you need to deliver compelling live programming.



The incredibly flexible architecture of Tria production servers ensures seamless integration into a wide variety of live production workflows including animated switcher transtions, on-set display feeds, live video ingest and content recording and playback during live shows.

SIMPLE FILE MANAGEMENT
Integrated media file import and export dramatically simplifies file-based workflows. Files are automatically matched to the production video standard on import, and the exporter quickly gets captured media into external craft editing systems and other downstream equipment.

FILE & FORMAT DIVERSITY
Compatible with the spectrum of resolutions and formats, including UHD-4K and 1080p Full HD. A wide variety of the most popular self-contained media files can be ingested and exported with ease.

CLIP NETWORKING
Quickly and easily share media clips between any number of Tria production servers interconnected via 1G or 10G Ethernet, depending upon Tria model. No matter where a given clip is stored—any clip can be played back in real-time across the network.

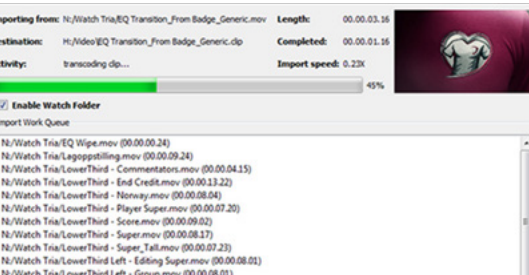
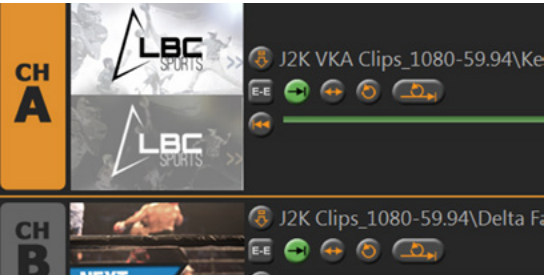
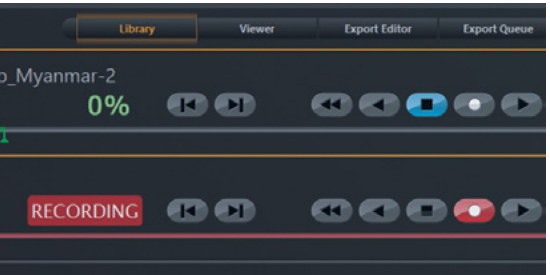
THE ULTIMATE PRODUCTION SERVER



TRIA+
The premium Tria+ production video server is available with four, eight, or twelve symmetric video channels and every video channel can instantly switch between record and play. With three different storage options to choose from, Tria+ meets all production requirements while staying within capex budgets.

TRIA+ UHD
This Tria+ model provides two symmetrical UHD-4K video channels featuring single-link 12G SDI I/O connectivity. Tria+ UHD can also operate in 1080p video standards with 3G SDI I/O connectivity.

TRIA EXPRESS DUET
The cost-effective Tria Express Duet production video server provides broadcast-level quality and reliability at an unbeatable price. With 2-channel and 4-channel models to choose from, Tria Express Duet is a versatile system that fits perfectly into a wide range of live production applications.





AIRCLEANER-2

LIVE EVENT PROTECTION DELAY

Our second-generation AirCleaner-2 provides an “electronic insurance policy” against broadcasting unwanted, offensive content to live audiences. All broadcasts are easily made safe with this flexible, feature-rich digital delay system that lets you apply a variety of subtle video and audio concealment techniques.



The simple set up, personalization, and operation of AirCleaner-2 ensures all undesirable video and audio content are confidently and effectively concealed from your live audience.

TWO-BUTTON CONTROL

Straight-forward to control with two large panic buttons: one for audio (red); and one for video (yellow). Simply press & hold to clean up your broadcast.

REACTION TIME COMPENSATION

Compensates for the reaction time of human operators to an observed visual or sound event, ensuring all unwanted content is cleanly concealed in its entirety.

CONCEAL CONTENT SMOOTHLY

The audience experience is minimally interrupted with subtle yet effective video and audio concealment techniques.

DUAL-USER OPTION

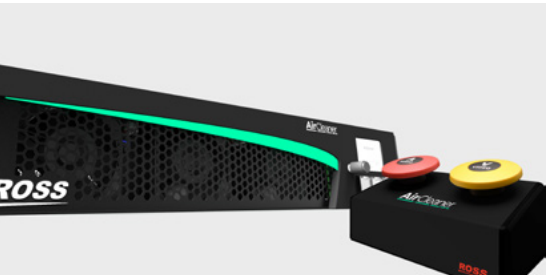
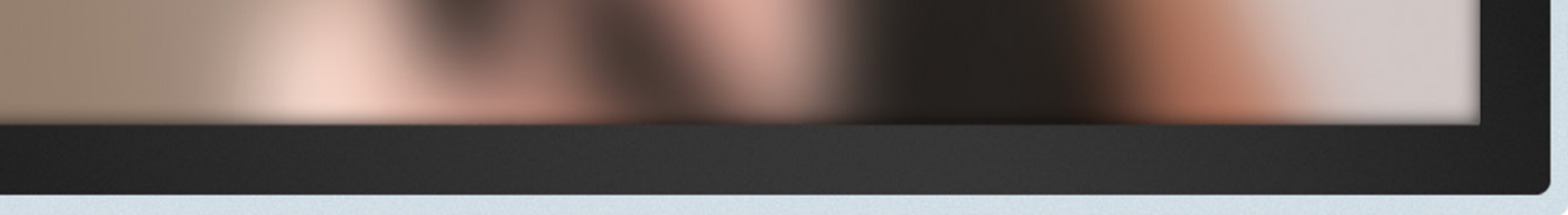
Ensure complete concealment with unique Dual-User control that easily divides delay time between two Users; if the first User misses a concealment, the second User can make the concealment

DASHBOARD PANELS

AirCleaner-2 comes standard with two DashBoard panels: the Configuration Panel for remote system setup, and the Control Panel for remote User control that duplicates the functionality of the AirCleaner hardware control panel.

KEEP IT CLEAN

AirCleaner



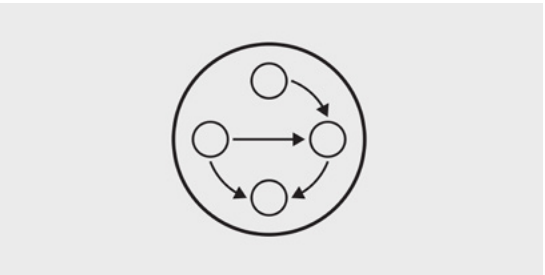
SIMPLE SETUP

Simple configuration and programming of AirCleaner-2 are managed via the LCD panel on the front of the chassis or from a remote custom DashBoard panel. Delay settings and other setup parameters are saved in up to three non-volatile memories.



CONTROL PANEL

The control panel has one button for audio and one for video. After setting up the delay time and operator reaction times, make concealments by pressing & holding the button for as long as the offence takes place. AirCleaner-2 can conceal audio and video separately or simultaneously.



CONCEALMENT CHOICES

AirCleaner-2 conceals offensive live content by using an integrated effects engine to blur out visual obscenities with variable video defocus. The unique audio Jumble feature scrambles audio to make speech unintelligible—while maintaining audio levels and spoken continuity.



ULTRIX SOFTWARE-DEFINED ROUTING PLATFORM

Ultrix 12G Router is the ultimate routing, multiviewer, and signal processing platform for studios, OB vans, and flypacks.

Ultrix is a powerful, state-of -the-art software-defined routing platform that lets you realize significant cost, space and power efficiently with unprecedented flexibility and agility. As well Ultrix provides you with the peace of mind that comes with an extremely reliable system designed for future requirements.

SOFTWARE-DEFINED
Easily add new features through additional software licenses. No additional hardware required.

INTEGRATED DESIGN
The Ultrix 12G Router is infrastructure in a box. Video/ audio routing, multiviewers, audio processing, frame synchronizers, clean/quiet switching, UHD gearboxing and more all unified in one single chassis.

SAVE MONEY
Because of its size, base feature set, and software capabilities, owners save significant money on upfront capital costs. Additionally, the advanced architecture provides significant ROI in terms of power, cooling, shipping, and space costs.



THE NEXT WAVE IN ROUTING

Ultrix



RICH MULTIVIEWER CAPABILITIES
Up to 27 Independent multiviewer heads in a single 5RU chassis. Each head supports up to 100 PIPs. Completely independent and individually controllable providing superior flexibility.



AUDIO PROCESSING & ROUTING FABRIC
Up to 3kx3k audio routing and processing fabric comes standard with Ultrix. Up to 2kx2k embedded, and 1kx1k discrete audio supported. Route, process, and configure down to a mono channel, regardless of I/O.



TRANSPORT FLEXIBILITY
Ultrix allows for routing and processing signals through a wide variety of transport topologies. Use any combination of Coax, SFP, or IP I/O cards to deploy complete broadcast solutions for SDI, hybrid, or even pure-IP topologies.



ULTRIX IP AWARDS



ULTRICORE CONNECTIVITY CONTROL SYSTEM

Ultracore is a fully featured connectivity control system that goes beyond traditional routing configuration and control. Ultracore makes it quick and easy to configure a system and gives staff an intuitive and powerful set of controls to make operations run smoothly.



Ultracore was designed to handle all the usual router requirements while also harnessing the power of Ultrix, a new breed of modern connectivity platform. Ultrix is much more than just routing - the platform includes major features like audio and video processing, multiviewing, and more.

FEATURE RICH

System discovery, database creation, and hardware and software panel configuration are all included with Ultracore and accessible from one UI.

EASY SYSTEMIZATION

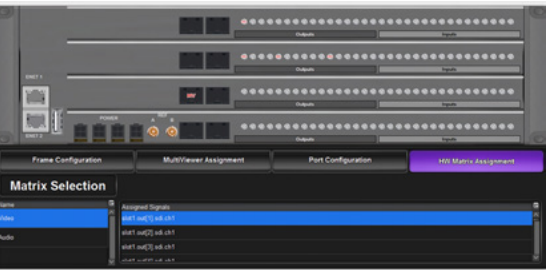
To ensure interoperability and easy interfacing to other third-party control and automation devices within your facility, Ultracore supports industry standard protocols including Probel SW-P-08, GVG Native, NV9000, Ember+, and TSL 3.1, and 5.0 for multiviewer tally.

INTEGRATED DESIGN

Ultracore's integrated control system design provides router, multiviewer, and processing configuration and control all from one system.

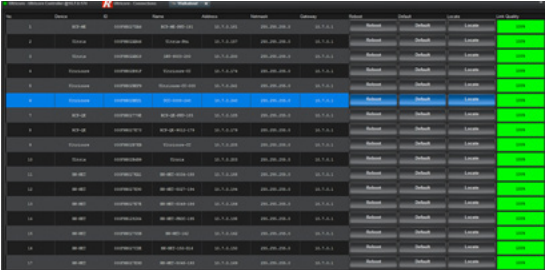
INTEGRATED,
POWERFUL CONTROL

Ultracore



SIMPLE OPERATION

Use Ultracore to quickly route hundreds of video signals and thousands of audio channels anywhere by name. This creates a simple easy to use interface that allows operators to do their jobs quickly.



QUICK SETUP

Discover and create system views quickly with the Walkabout system tool, and generate logical databases efficiently with the system fill tool. Configuration changes are pushed to system clients with no downtime.



EXTENSIBLE CONTROL

Ultracore-BCS is a powerful external control system for both traditional and modern workflows. Software licenses can be added to provide powerful feature enhancements to enable users the same workflows in single frame, IP, or distributed topology environments.



ULTRISCAPE SOFTWARE-DEFINED MULTIVIEWER PLATFORM

Ultriscape is the ultimate multiviewer platform for Studios, OB Vans, and Flypacks. As the world's first software-defined multiviewer, customers realize significant cost, space, and power efficiencies with unparalleled flexibility and agility.



Ultriscape, is an integrated MultiViewer within the Ultrix platform. It is the worlds first software enabled MultiViewer that is housed inside a routing platform, and is also the first MultiViewer that can support single link 12Gb/s signals.

FLEXIBLE

Each multiviewer head is completely independent, offering tremendous flexibility for layouts and control.

INTEGRATED DESIGN

Ultriscape is an integrated multiviewer within the Ultrix platform. Therefore, it can be added to extensive routing, audio processing, and synchronization capabilities to create a completely integrated solution.

PAY AS YOU GO

The software-defined architecture means you simply buy what you need, when you need it. No need to make critical design decisions upfront, simply add appropriate multiviewer outputs when they are required.

WORLD'S FIRST SCALABLE,
SOFTWARE ENABLED
MULTIVIEWER

Ultriscape



SOFTWARE-DEFINED

Add multiviewer heads by purchasing software licenses. Up to 6 outputs in a 1RU, 12 outputs in a 2RU, and 27 outputs in a 5RU.



RICH MULTIVIEWER CAPABILITIES

Each multiviewer head supports up to 100 PIPs. Completely independent and individually controllable providing superior flexibility.



INDUSTRY LEADING QUALITY

Pristine image quality, and low latency make Ultriscape ideal for the most demanding applications and venues.



NK ROUTING PLATFORM

The NK Series routing family is a cost effective, high performance routing platform for studios, OB vans, and flypacks. NK Series is compact, robust, and simple to use.

With a variety of frame sizes and format choices NK routers excel in providing high quality routing in a cost-effective manner.

CONTROL FRIENDLY

NK Series are based on DashBoard control and can be configured to seamlessly fit within the Ross Ecosystem, as well as be a part of an Ultrix routing system.

MODULAR

Some NK Series frames have the ability to expand with additional I/O modules.

BUDGET FRIENDLY

Comprehensive range of sizes and formats to meet any budget.



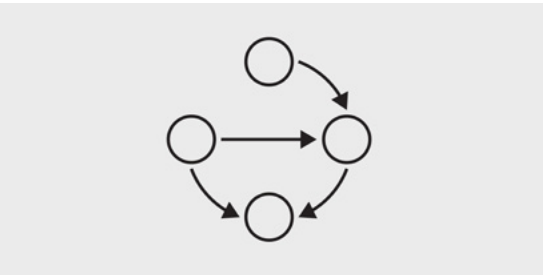
COST EFFECTIVE
HIGH-PERFORMANCE
ROUTING PLATFORM



COMPREHENSIVE FORMAT SUPPORT
From analog audio to 3G SDI, NK Series supports a wide range of signal types.



SIZE FLEXIBILITY
With matrix sizes from 16x4 up to 72x72, NK Series can scale appropriately for the workflow that is required.



INDUSTRY STANDARD CONTROL
Industry standard routing control means easy integration into automation systems as well as 3rd party router control systems.



TOUCHDRIVE TOUCH-ENABLED SWITCHER PANEL SERIES

TouchDrive control surfaces have been designed from the ground up to address the needs of Technical Directors and Vision Mixers who are tasked with managing complex switcher effects in often stressful, fast-paced live production environments.



TouchDrive is another step in the success story that is Carbonite. As production requirements have grown, Carbonite has evolved to keep pace. TouchDrive, the latest step in this evolution, is a tribute to the feedback from thousands of Technical Directors and Vision Mixers around the world.

CONFIDENT CONTROL

High-resolution, rich color touch displays provide clear visual cues that make everyday operations such as configuring bus maps, delegating key buses or selecting transition types faster, more efficient and less prone to error.

INTEGRATED MENU SYSTEM

The built-in DashBoard computer provides easy access to all configuration and control menus without the need for an external computer and Live Assist can automatically open menus based on button selection.

SECURE INVESTMENT

TouchDrive works with Carbonite Ultra, Carbonite Black Plus, Ultrix Acuity, Ultrix Carbonite and Graphite systems, making it a sound investment for today and tomorrow.

FEEL THE DIFFERENCE



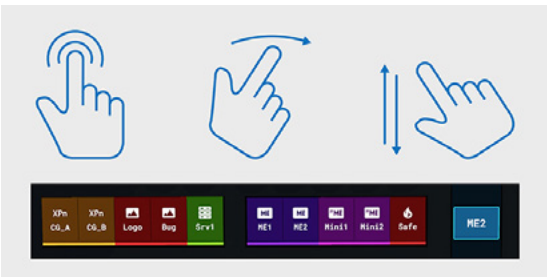
TOUCHMAP™

Creating bus maps has never been easier. Select a crosspoint button, tap to open a Source Group, and select the source on the touch display. Done!



BUILT-IN DASHBOARD

TouchDrive is the first Carbonite control surface to incorporate a DashBoard computer right in the panel. Use our 15.6" touchscreen or a standard monitor – either way, DashBoard operations have never been easier.



GESTURES

Selected menus are complemented with touch gestures. For example, swipe the display to view different wipe patterns, then tap the display to select the desired pattern.



ULTRIX ACUITY HYPERCONVERGED PRODUCTION PLATFORM

The power of Ross Video's flagship production switcher and the game-changing feature set of its flexible hybrid routing platform have been merged to create a complete, future-proof production solution that is truly greater than the sum of its parts.



Ultrix Acuity replaces racks of standalone equipment, such as a facility router, audio processors, mixers, embedders, de-embedders, and multiviewers with a single frame and power chassis.

COMFORTABLY FAMILIAR

As game-changing as Ultrix Acuity is, operators might not even notice because they'll continue to work as they always have, using the same control surfaces they've become accustomed to.

SIZE MATTERS

For space-constrained applications such as OB vans and mobile units, the 5RU chassis and 2RU rackmount redundant power system provide a complete routing and production package.

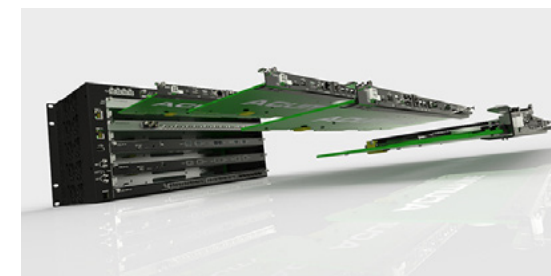
Larger installations, or those that require greater I/O density, can opt for the 12RU routing frame.

FUTURE CONFIDENT

Ross developed the concept of the Software-Defined Production Engine – SDPE. The idea is to avoid costly “forklift” upgrades by providing base hardware that can grow with simple, cost-effective software licenses. Ultrix Acuity was designed and engineered using an SDPE platform so new functionality or enhanced features can be easily added.

GREATER THAN THE SUM
OF ITS PARTS

Ultrix
A · C · U · I · T · Y



INTEGRATED PRODUCTION PLATFORM

Acuity video switcher boards have been re-engineered to tightly integrate into the Ultrix audio/video processing platform. This allows Acuity to access and feed Ultrix inputs and outputs and leverage Ultrix features such as Frame Syncs, MultiViewers, and audio processing. This offers the best of all worlds, within a frame that is much easier and simpler to install and maintain.



MULTIPLE I/O OPTIONS

Ultrix Acuity offers a range of I/O boards that can be mixed and matched within the frame. Choose boards with HD-BNCs, RJ-45 connectors, even user-definable SFPs, and populate available slots in any combination.



FIELD-UPGRADABLE

The Software-Defined Production Engine at the heart of Ultrix Acuity allows easy upgrades and feature additions. Enable 12G operation, add user-configurable MultiViewers, Frame Syncs, 3D DVEs, or Ultrimix-MXR quickly and easily with available software licenses.



ULTRIX CARBONITE HYPERCONVERGED PRODUCTION PLATFORM

The Ultrix Carbonite Production Platform combines the routing and processing capabilities of Ultrix with the sophisticated creative capabilities of Carbonite, the world's most popular mid-size production switcher. This hyperconverged system creates a new standard in performance, flexibility and value, unmatched by any standalone system available today.



The Ultrix Carbonite platform is based on the concept of the Software-Defined Production Engine (SDPE). As production requirements change, the SDPE backbone enables users to add new features and functionality through simple cost-effective software licenses rather than through costly hardware updates.

COMFORTABLY FAMILIAR

Ultrix Carbonite is fully compatible with the TouchDrive family of control surfaces as well as DashBoard, Ross Video's powerful command and configuration software application. Operators already familiar with Carbonite's intuitive auto-delegation and menu system will feel right at home.

MIX AND MATCH FEARLESSLY

Ultrix Carbonite is the ideal solution for mid-size facilities confronted with mixed or changing signal formats or connectivity schemes. Any of the three available Ultrix I/O boards (SDI, IP or SFP) can be installed in available slots and mixed as needed, providing maximum flexibility and convenience both now and in the future.

ROI & TCO

This compact, single-chassis solution consumes less power, takes up less space, and requires less cooling compared to equivalent racks of equipment it can replace. This vastly simplifies system design and equipment installation. Combining the routing platform with the production switcher shrinks the number of inter-rack failure points and reduces maintenance requirements.

HYPERCONVERGED PRODUCTION Ultrix CARBONITE



CARBONITE SDPE

Each Carbonite SDPE blade is a fully independent switcher that provides up to 3 full M/E and 4 MiniME banks (2 MiniME banks in UHD). Each full M/E bank has 6 keyers, and the MiniME banks have 2 keyers each. The 18 Carbonite inputs come directly from the Ultrix I/O matrix and its 18 outputs re-enter Ultrix as sources



SIGNAL PROCESSING

Ultrix Carbonite is a comprehensive signal processing toolbox housed in the Ultrix frame. Input Frame Synchronisers and Format Converters (FSFC) can be used to adjust incoming signal formats while Processing Amplifiers and Colour Correctors can be applied to any input.



MIXED FORMATS & CONNECTIVITY

Comprehensive multiviewer capability has always been part of Carbonite and this continues in Ultrix Carbonite. In addition to Ultrix MultiViewers, the Carbonite SDPE blade provides 2 Production MultiViewers in HD (1 in UHD) that can access the full range of Carbonite-derived signals.



CARBONITE ULTRA MID-SIZED PRODUCTION SWITCHER

Carbonite Ultra packs big switcher power and performance into a compact, 1RU footprint. This budget-friendly powerhouse is equally at-home in HD or UHD environments.



Built on the foundation of Carbonite, the world's most popular mid-sized production switcher, Carbonite Ultra represents almost a half-century of experience developing professional quality, cutting-edge live production products.

PROCESSING POWERHOUSE

Carbonite Ultra goes beyond bread-and-butter transitions and layering effects with frame syncs, format converters, multiviewers, chroma keyers, an audio mixer/processor and more...all in a single 1RU frame.

AFFORDABLY ATTRACTIVE

Carbonite Ultra's entry-level price point, including high-end features normally found on much more expensive products, is the lowest of any Ross mid-size production switcher ever.

FUTURE SECURE

Like all Ross production switchers, Carbonite Ultra owners receive no-cost software upgrades for the life of the product. That means Carbonite Ultra's functionality and feature set can continue to grow...at no cost.

THE WORLDS MOST POPULAR
SWITCHER - REDEFINED

CARBONITE Ultra



FORMAT FLEXIBLE

Carbonite Ultra supports most common video formats and frame rates from SD all the way to UHD making this platform exceptionally versatile for facilities facing mixed signal formats.



ME & MINIME RESOURCES

Carbonite Ultra packs substantial transition and layering power into its compact 1RU chassis. With up to three full MEs and four MiniMEs in HD or 2 full MEs and two MiniMEs in UHD, each with dedicated full-function keyers, Carbonite Ultra can power even complex productions easily and efficiently.



FAMILIAR CONTROL

Carbonite Ultra can be controlled using DashBoard, Ross Video's command and control software application, or with any of the groundbreaking TouchDrive physical panels. These panels feature high resolution color touch displays that provide clear visual operator feedback.



CARBONITE ULTRA 60

A NEW CLASS OF PRODUCTION SWITCHER

Bigger, faster, & more powerful. Carbonite Ultra 60 offers big switcher performance in a single cost-efficient hardware platform.



Carbonite Ultra was designed to deliver outstanding speed and performance along with rock-solid reliability and ease of use. Carbonite Ultra 60 takes those attributes to the next level with more I/O and a new modular frame.

MORE IS BETTER

Carbonite Ultra 60 provides up to 60 inputs and 25 outputs in HD or UHD. The switcher is built in a modular 3RU frame, which allows facilities to start with a lower number of inputs and outputs and then upgrade to the maximum as needs increase.

PROVEN PEDIGREE

Although Ultra 60 is a new hardware platform designed to provide incredible performance and outstanding reliability, it shares the DNA of Carbonite Ultra, our 1RU best-in-show production powerhouse.

FORMAT FREINDLY

From SD to UHD, Carbonite Ultra 60 supports most major formats and frame rates. With HDR and WCG support built in, Carbonite Ultra60 is the perfect system to grow with.

BIGGER. FASTER.
MORE POWERFUL

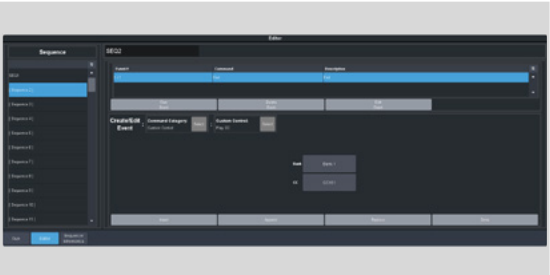
CARBONITEUltra**60**



EXTENSIVE COMPOSITING

Carbonite Ultra 60 has ample capacity for advanced multi-layer effects and transitions with up to 26 independently controllable keyers in both HD and UHD, and up to 3 transition keyers.

In addition, the UltraScene Advanced Compositing Engine adds 4 more paired compositing engines without consuming ME or MiniME resources.



PRODUCTION SEQUENCER

Stack switcher events such as transitions or recalls into one of five available Sequencer lists and then execute each one in turn with a simple mouse click. Sequencers allow any operator to execute a series of events repeatedly without errors.



CONTROL OPTIONS

Since production requirements can vary, Carbonite Ultra 60 offers multiple control options ranging from the incredible TouchDrive series of panels to DashBoard-enabled virtual panels and ViewControl, a Ross-exclusive system that allows even inexperienced operators to confidently manage complex productions.



CARBONITE BLACK SOLO COMPACT PRODUCTION SWITCHER

Despite being Ross Video’s smallest production switcher, Carbonite Black Solo provides a professional-quality toolset at a surprisingly affordable price.



Just because a production is “smaller,” doesn’t mean the demands are fewer. That’s why Ross Video packed the professional-quality features of Carbonite into a “right-sized” 1 ME production switcher.

BUDGET FRIENDLY

Affordability could be one of Carbonite Black Solo’s best features. With Carbonite Black Solo, professional features are within reach of even the smallest production facilities.

ONE-BUTTON PLAYOUT

Carbonite Black Solo features a powerful macro system that allows operators to easily create customized sequences for controlling switcher events and external devices. Its on-board memory system with flexible store and recall functionality provides simple, one-button access to operator-built effects.

LIVE PRODUCTION HUB

Carbonite Black Solo includes a suite of features and additional software for creating media-rich, visually compelling productions, including; Four MediaStore channels that can display still or animated content, USB Clip Player for H.264 file playback and XPression LiveCG software for creating high-quality still graphics that can be displayed using the MediaStores.

NO ORDINARY COMPACT PRODUCTION SWITCHER

CARBONITE BLACK SOLO



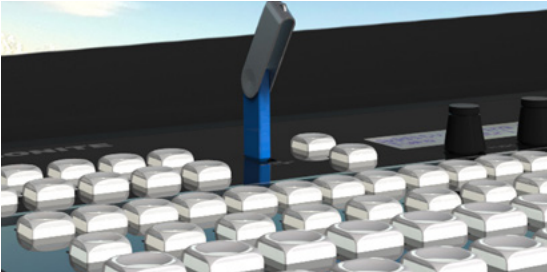
POWERFUL PRODUCTION ENGINE

In addition to a fully-featured Mix/Effects bank, Carbonite Black Solo provides two independent MiniMEs that can be used as additional compositing and layering engines.



SIMPLE CONTROL

Carbonite Black Solo is part of Ross Video’s DashBoard control ecosystem. DashBoard extends configuration and control of Black Solo to any network-connected computer making remote system monitoring or multi-user operations simple. If desired, the available dedicated Control Panel puts all operational parameters at the operator’s fingertips.



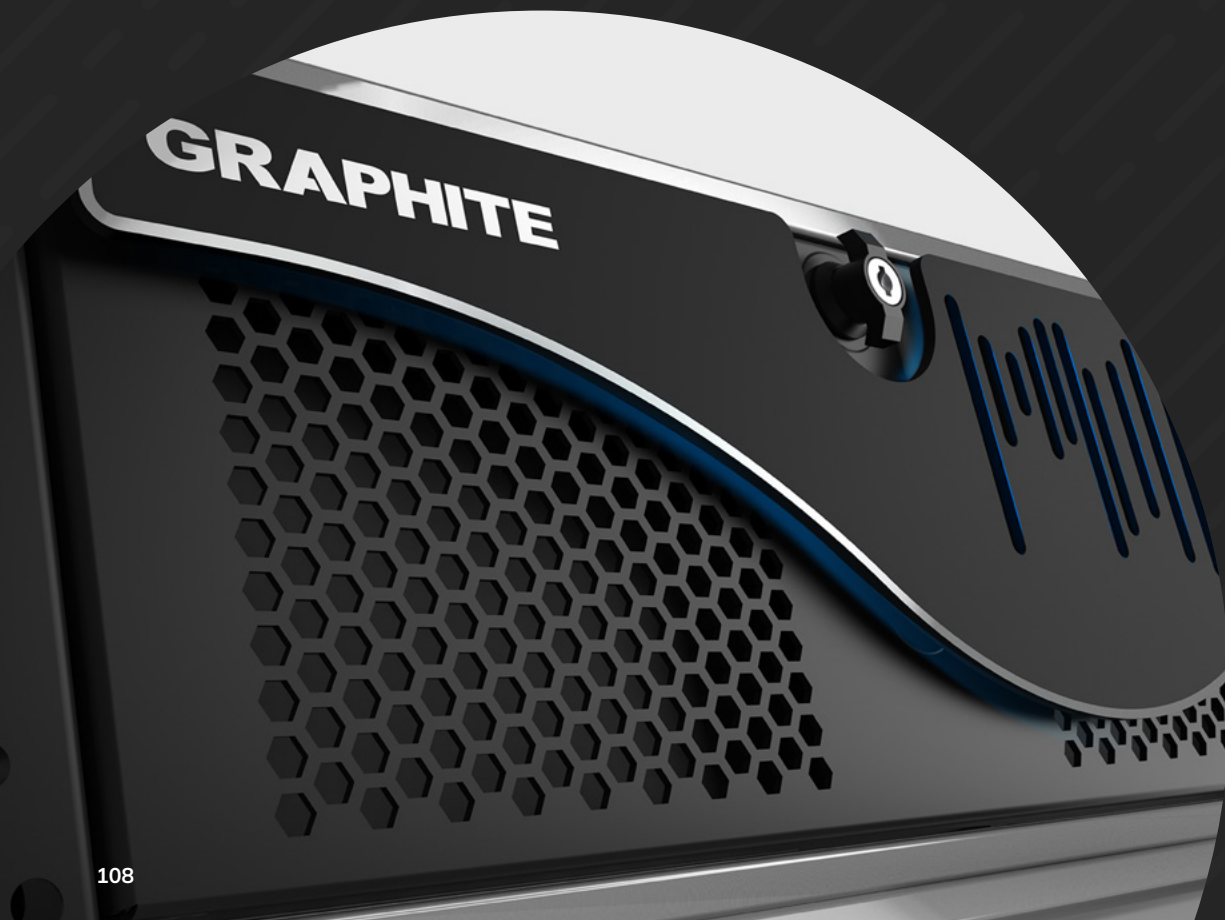
MEDIA CONTROL

In addition to on-board media players for stills and short animations, Carbonite Black Solo features a dedicated, single-channel clip player that uses a connected USB media drive to provide controlled playback of user-created content.



GRAPHITE ALL-IN-ONE PRODUCTION SYSTEM

Real Switcher. Real Graphics. Real Audio. Graphite is an all-inclusive system that combines big switcher performance with 3D graphics, instant access clip servers and pristine audio clarity.



With a full suite of production tools available, Graphite is a reliable, hardware-based alternative to software-only all-in-one production systems.

FULLY-EQUIPPED SYSTEM

Graphite is designed to be a complete production solution right out of the box. Setup and configuration is simple and straightforward and the system even includes customizable graphics packages designed to get production up and running faster and more easily.

FLEXIBLE WORKFLOW

Using Graphite's extensive toolset and intuitive controls, a single operator can manage an entire show using a single tabbed DashBoard screen and/or physical control panel. For a distributed workflow with separate operators (T.D., Audio, Graphics, etc.), simply connect multiple DashBoard computers together.

INCREMENTAL GROWTH

Graphite's M/E count and input matrix can be easily upgraded via cost-effective software licenses. Additional hardware and software components that enable production automation, MOS workflows, or multi-studio operations can be added at any time.

PURE PRODUCTION POWER

GRAPHITE



CARBONITE SWITCHER

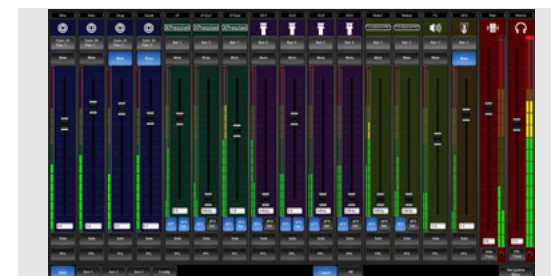
Graphite contains the full Carbonite feature set, with up to 2 powerful MEs and 4 MiniMEs.

Each ME has four powerful keys as well as an additional fifth transition keyer for animated Media Wipes and DVE transitions. Additionally each MiniME includes an independent mixer and 2 keyers.



XPRESSION GRAPHICS AND CLIPS

XPression Graphite is a motion graphics engine with near limitless layering on a single channel with true 3D objects and animation. In addition, Graphite includes two channels of XPression Clips to record, catalog and playout clips - with instant recall times and back-to-back clip transitions.



RAVE AUDIO MIXER

Handle demanding live audio with RAVE, Graphite's hardware-based 48-channel digital audio mixer. RAVE provides access to audio from embedded SDI inputs and internal XPression/PC sources.



GRAPHITE PORTABLE PRODUCTION CENTER (PPC)

Graphite PPC offers the same all-in-one production solution as Graphite but comes neatly housed in a compact, wheeled carrying case.



Graphite PPC is an all-in-one production solution that goes anywhere. This highly portable system can be used for in-venue screens, streaming and broadcast. Best of all, PPC can be set up in minutes and only requires a single operator to produce dazzling high-impact productions.

CREATE CONTENT ANYWHERE

The incredible Graphite feature set - Carbonite switcher, RAVE audio engine, XPression 3D graphics and XPression Clips - is packed into an easily transportable soft-shell carrying case complete with a pull-out handle and wheels.

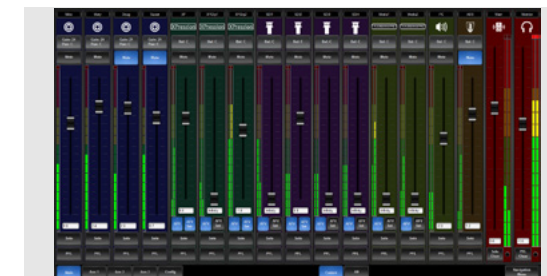
ULTRA-QUIET OPERATIONS

Soundless fan cooling means Graphite PPC can be deployed just about anywhere, even in studios with live microphones.

UNBEATABLE VALUE

Graphite PPC puts high-end, true hardware-based production power within reach of just about any facility.

GRAPHITE ON-THE-GO GRAPHITE



UNMATCHED AUDIO

The Ross Audio Video Engine (RAVE) is Graphite's internal, hardware-based 48-fader audio mixer with high quality 24-bit processing. RAVE can access all 16 embedded channels of each SDI input and independently assign them to available faders.



DASHBOARD CONTROL

DashBoard provides full control of Graphite's switcher and audio mixer and can even recall XPression graphics. DashBoard CustomPanels can provide task-specific user interfaces that simplify operations, including control of Ross and many third-party devices.



GRAPHITE PCIe

The Graphite PCIe efficiently distributes the system workload, eliminating the performance issues traditionally associated with all-in-one systems. The PCIe card, which is common to both Graphite and Graphite PPC, drives the internal Carbonite switcher, RAVE audio mixer, and switcher frame buffers.



GRAPHITE CLOUD PRODUCTION CENTER

The Graphite Cloud Production Centre (CPC) offers a cloud-enabled solution with the same capabilities as the standalone Graphite and ultra-portable Graphite PPC.



Graphite CPC provides a feature-rich production switcher, audio mixer, clip playback and graphics engine optimized for cloud-based production and distribution. It provides facilities a streamlined workflow for producing high-quality programming without the need for in-house hardware.

MAXIMUM FLEXIBILITY
Different platform choices and flexible licensing options assure scale when needed without unnecessary costs.

MULTIFACETED CLOUD OPERATIONS
Graphite CPC is just one component of a complete Ross virtual ecosystem that can grow and diversify as needs change.

NO-COMPROMISE PERFORMANCE
Graphite CPC provides convenient, cost-effective, cloud-based production capability without sacrificing reliability or quality.

CLOUD-BASED PRODUCTION

GRAPHITE

Cloud Production Center



CLOUD VIDEO TRANSPORT
Graphite CPC supports cloud native transport streams and standard interoperability protocols for seamless content transfers.



XPRESSION GRAPHICS
XPression is included with Graphite CPC for high-quality graphics and animations.



OPERATIONALLY FAMILIAR
Since Graphite CPC uses the same toolset as every Graphite, training time and expense are minimized.



LUCID STUDIO VIRTUAL SOLUTIONS CONTROL

Lucid Studio is a highly flexible and customizable control platform with an easy-to-use intuitive graphical user interface.

Lucid provides seamless integration with tracking systems and real-time 3D rendering engines such as XPression and Voyager. Lucid Studio offers unparalleled customizability, flexibility and accessibility to all types of operations and workflows. Lucid Studio is used for virtual set camera calibration, scene manipulation, media replacement, event triggering, sequencer triggering, MOS newsroom integration, animation control, robotic camera movement control and much more.

CUSTOMIZABLE INTERFACE

The highly flexible UI allows the user to customize the GUI based on the production stage. Saving and recalling layouts reduces reaction time, streamlines the production, and significantly increases the speed of operation while reducing the risks of human errors.

PRODUCTION CONTROL

Lucid was designed to optimize live production operations and increase operator efficiency. Real-time reaction to changing production circumstances and needs was never easier or faster.

EXTENSIVE INTEGRATION

Lucid Studio supports most tracking system, tracking protocols, and camera mounts in the industry. Don't make compromises; work with the right tracking solution for your production.

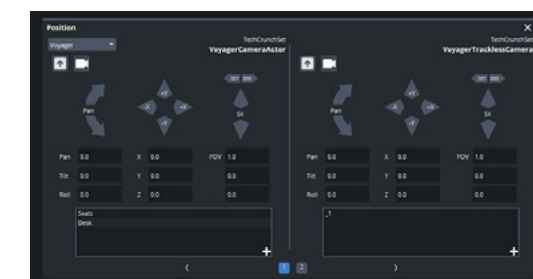
THE CONTROL CENTER FOR VIRTUAL SOLUTIONS

LUCID



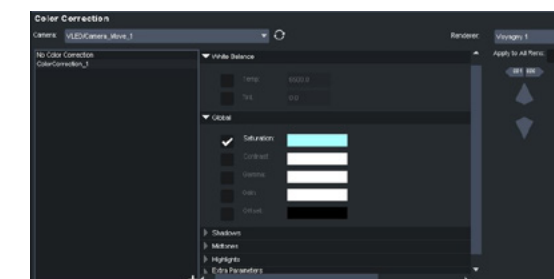
OPTIMAL 3RD PARTY INTEGRATION

Lucid Studio includes Streamdeck integration and can communicate with 3rd party devices via a Restful API and GPI commands.



DIRECT CONTROL

Lucid Studio allows the operator direct access to objects in the scene, and the ability to move, rotate, scale, save and animate them without going into the editor on the engine. In this way, last second changes can take place easily and effortlessly.



COLOR MATCHING

Lucid Studio provides color correction capabilities for LED volumes by matching the LED to the AR or Set Extension through the lens of the camera.



VOYAGER UNREAL VIRTUAL RENDER PLATFORM

Based on the Unreal gaming engine, Voyager provides photo-realistic scenery in any virtual or augmented studio environment.



NOW SUPPORTING UNREAL 5.1

Voyager enables the creation of even the most complex graphical elements quickly, easily, and accurately, producing unprecedented realism like never before.

SUPERIOR GRAPHICS CAPABILITIES

The Unreal gaming engine utilizes advanced graphics features like collision, particles, dynamic texture, real-time reflections, skeleton animation, cloth animation and real-time shadows.

FLEXIBLE WORKFLOW

With Lucid Studio and Lucid Track, any combination of tracking devices, protocols, camera mounts, and engines is achievable within the same environment.

REAL TIME REACTIVENESS

Voyager enables real time control over scene elements, in PIE mode, without the need to package the project to go on-air.



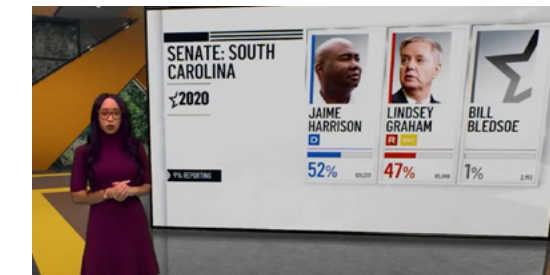
HYPER-REALISTIC RENDERING

VOYAGER



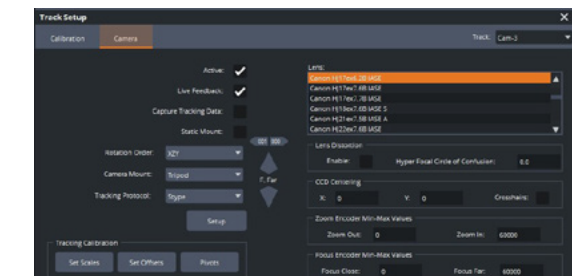
REAL-TIME DYNAMIC SHADERS

Unreal4 allows the use of shaders to create realistic looking effects. From dynamic shadows, live-lights and light blooms, to reflections and refractions. These shaders and effects are applicable both in Augmented Reality and Virtual Studio environment.



DATA INTEGRATION

Through its integration with XPression's Datalinq™, binding data to your Voyager scenes is powerful but yet easy to manage for the most common data sources such as sports, tickers, elections and more!



WORKFLOW AND CONTROL

Through the use of Lucid Studio it is possible to control the Unreal engine, control tracking devices and lens data, make last second changes in real-time, connect to external data sources, and integrate the Unreal platform with MOS based newsroom control systems.



TRACKLESS STUDIO VIRTUAL PRODUCTION

Trackless virtual systems are all-in-one engines that require no external action on the part of the camera in order to create movement. They use a stationary physical camera, with all the camera movement being done within the graphics engine. This eliminates the need for physical tracking equipment.



Built with an intuitive purpose-built interface, Ross Trackless Studio leverages years of experience with virtual sets and augmented reality to bring quality virtual sets to even the most basic productions.

LOOKS REAL

Combining virtual camera moves and the same high-quality virtual sets as tracked implementations creates excellent productions.

SHORTENED LEARNING CURVE

Leverages years of experience with virtual sets and augmented reality to bring quality virtual sets to even the most basic productions.

SMALL STUDIO. BIG IMPACT.

All camera moves are done virtually inside the scene, eliminating the need for a large studio space.



ALL-IN-ONE VIRTUAL PRODUCTION

ROSS VOYAGER
Trackless Studio



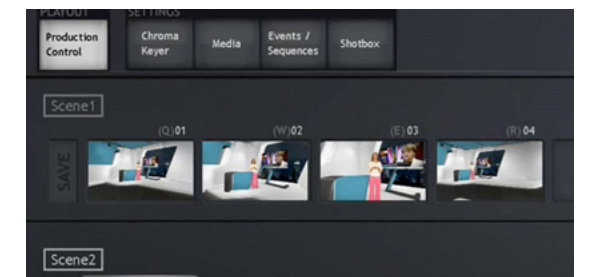
FULLY 3D ENVIRONMENTS

Voyager Trackless utilizes Epic's Unreal Render engine providing the highest level of real-time rendering of your fully 3D environment.



FULL CONTROL

Move cameras, talent, or virtual set pieces with ease. Create camera moves and transitions. Switch between cameras easily.



USE UP TO FOUR CAMERAS

Multi-camera support (3 inputs in HD, 1 in UHD).



MC1 MASTER CONTROL

MC1 is a cost-effective, modular Master Control Switcher and Branding solution. The MC1 system scales from stand-alone branding to multi-channel master control installations adapting easily to manual or automated control.



As part of an integrated solution, MC1 delivers the complete functionality of a Master Control system, offering Multiviewers, frame synchronizers and advanced audio connectivity.

MIX, KEY, BRAND

At its core, MC1 is a powerful AV mixer, offering 4 keyers, logo payout, transitions with full preview. You get the tools you need to build your on-air brand in SD, HD or UHD without compromise.

FLEXIBLE CONTROL

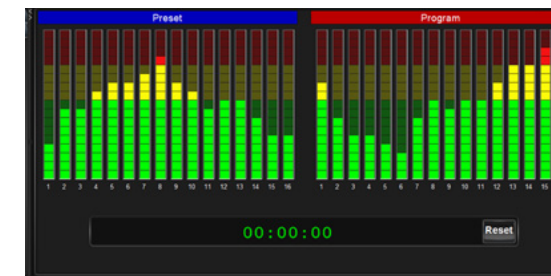
Manage multiple Master Controls with ease from an intuitive DashBoard touchscreen or tactile hardware control panel. Run in manual or automated or semi-automated, supporting most popular automation systems.

ROBUST

It features hardware bypass to keep your channel on air in any situation. MC1 can also be used as great backup to Channel-in-a-box and IP layout systems.

COST-EFFECTIVE
MASTER CONTROL

MC1 Master Control 4K UHD



AUDIO CONTROL

MC1 features flexible audio shuffling, ensuring all your audio channels are in order, with adjustable gain and downmix. Each source can be independently configured with multiple presets to handle changing feeds with ease.



AUDIO MIXING

An integrated multi-channel audio mixer allows simultaneous mixing of up to 16 audio channels, complete with programmable transition types and rates.

At the push of a button, a program audio can be ducked (to a user-selected level) and VO inserted, with fully programmable audio gain level.



SQUEEZEBACK

Perform smooth on-air Squeezeback transitions to reveal another video source or graphic with ease. Squeezebacks can be integrated into standard transitions, either with or without keys. Squeezeback size, position and aspect can be stored as preset for clean, repeatable squeezes every time!



OPENGear OGX MODULAR PLATFORM

openGear® is the industry standard platform of choice for modular signal processing. As the world’s first modular infrastructure platform open to other manufacturers, openGear provides solutions derived from hundreds of individual cards from dozens of companies. This cooperative effort gives users best of breed product and budget options, all while ensuring common control and monitoring within the DashBoard ecosystem.



We decided that we should create an industry standard for terminal equipment. This fit perfectly with our code of ethics “#1: We will always act in our customers’ best interest”

CONTROL

DashBoard provides one unified control system across openGear products from all manufacturers. This allows for easy setup, monitoring, alarms and management. With the included CustomPanel Panel Builder, it is easy to create custom workflows across multiple products to suit your exact needs.

OPEN

The Emmy®-award winning openGear platform, designed by Ross has been adopted by dozens of manufacturers offering hundreds of signal processing solutions. This provides you with the freedom to choose best in breed solutions to meet your needs and budget.

RELIABLE

oGx is the 4th generation openGear modular infrastructure platform built for 24/7 operation. Featuring redundant power and cooling, service is a snap with zero downtime. Front-loading modules and passive backplane ensure ease of maintenance and maximum reliability.

THE INDUSTRY
STANDARD OF CHOICE



SDI, IP OR HYBRID

The oGx platform has been designed to meet the demands of today’s complex IP and hybrid infrastructures. With lots of power and cooling, and careful consideration to shielding, the most complex processing can be achieved, supporting evolving IP and UHD applications.



DATASAFE

DataSafe dramatically reduces downtime when failed modules are swapped out. All module parameters are stored on the local frame network card and automatically restored when a hot-swap is performed.



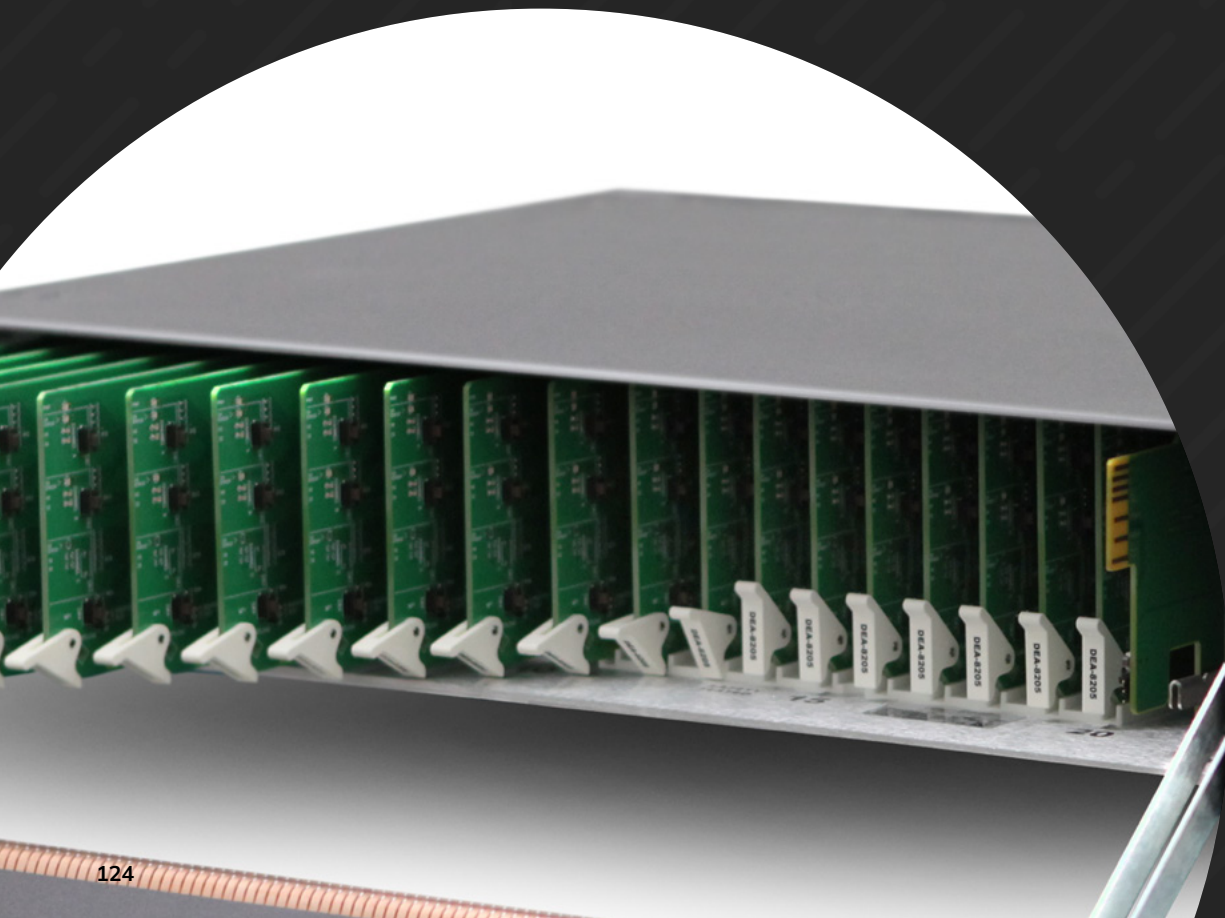
SNMP

SNMP is loaded direct to the frame eliminating the need for any external gateways and runs on a separate software port allowing for simultaneous control from both DashBoard and SNMP clients.



OPENGear MODULAR INFRASTRUCTURE

Ross openGear is a wide range of modular infrastructure products designed to manage analog, SD, HD, UHD and IP signal-types and ranging from signal conversion and processing to signal distribution and keying with solutions for all your audio, video, and metadata needs.



Built on over 40 year's history of technical excellence, Ross leads the industry, in mission-critical and cost-effective solutions designed for existing and evolving standards.

SOLUTIONS

Ross openGear offers a variety of solutions for Distribution, Conversion, Keying & Branding, Processing & Monitoring, Fiber, Timing & Sync, Audio Embedding and Data processing.

CONTROL

DashBoard provides unified control across all of our openGear products. This allows for easy configuration and full feature control with monitoring, alarms and management. The included PanelBuilder software makes it easy to create custom workflows across multiple products to suit your exact needs. DashBoard can also be paired with our 2RU rackmount Ultritouch, for the ultimate convenience.

SERVICEABILITY

openGear modular infrastructure is built for 24 / 7 operation. Front-loading modules with passive backplanes (no active components) and DataSafe backup ensure ease of maintenance and maximum reliability.

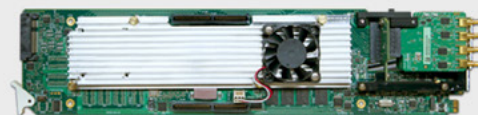
THE INDUSTRY
STANDARD OF CHOICE



SOLUTIONS



DISTRIBUTION



CONVERSION



KEYING & BRANDING



PROCESSING & MONITORING



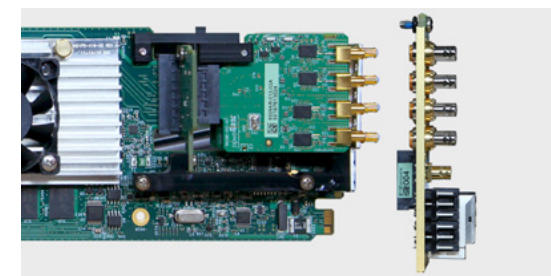
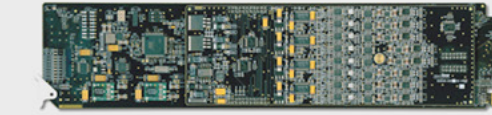
FIBER

TIMING & SYNC

AUDIO EMBEDDING

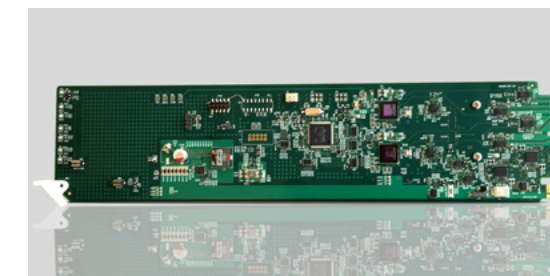
DATA SOLUTIONS

**AUDIO WATERMARKING
/ AUDIENCE MEASUREMENT**



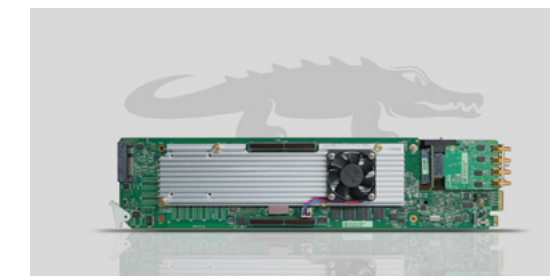
SMART MODULAR DESIGN

openGear modular products offer the flexibility of independent rear modules for connectivity to a wide array of interfaces such as BNC, twisted-pair audio, and fiber, supporting analog to UHD and IP. The independent rear modules are available in different I/O configurations for select cards, including high density split rear modules allowing up to 20 independent openGear® cards in the oGx frame.



MODULAR SDI/HDMI CONVERSION

The SHC-8932-F solves the challenge of merging SDI and HDMI worlds. The most demanding displays from studio monitors to large LED walls can be masterfully driven up to UHD resolutions. At two conversion paths per card fed by fiber or copper, the SHC-8932-F shines where space and budget are at a premium.



OPENGear UNLOCKS THE POTENTIAL OF UHD AND HDR NOW AND IN THE FUTURE

Gator is the ultimate in adaptation, bringing software-defined UHD media processing functions to baseband infrastructure, including synchronization, format and frame rate conversion, and master control. Beyond Gator, a portfolio of UHD products is available to also address audio embedding, fiber, and HDMI conversion.



GEARLITE, NEWT AND IGGY POINT OF USE MODULES

A range of modules designed for point of use conversion and processing of audio and video signals, GearLite, NEWT and IGGY are system problem solvers.



It can take a lot of different pieces to make a smoothly running system. Timing, interconnect, and monitoring points are crucial to keep operations efficient and quality high. The Ross point-of-use modules are renowned for their performance and reliability.

SOLUTION FOR EVERY FORMAT

Solve system connectivity challenges using a wide range of solutions with support for video and audio standards such as AES/EBU, AES67, MADI, HDMI, 12G-SDI, Fiber SDI, ST 2110 IP Video and more.

FITS RIGHT IN

Easy to install with a range of mounting options including wall, rack mount and VESA. Locking signal and power connections let you deploy these modules anywhere with confidence.

HIGH QUALITY

Get quality signal processing with Ross Point of Use Modules developed to the same exacting standards as our openGear modular platform.

SMALL AND
POWERFUL



IGGY

Our live audio-over-IP to MADI, ANA and AES/EBU converters, offer the most broadly interoperable, flexible and robust AES67 & ST 2110 implementation on the market today.



NEWT

SMPTE ST 2110 to SDI and HDMI conversion with UHD support. Flexible audio and video mapping along with NMOS and Ember+ control integration.



DETOUR

12G Distribution Amplifier with bypass relay. Great for 12G UHD systems and redundancy applications.

TVTechnology
**PRODUCT
INNOVATION**
Awards 2017

VIDEOEDGE
**PRODUCT
INNOVATION**
Awards 2017



SPG8000A AND SRG-2200 MASTER SYNC GENERATORS

Sync Generator solutions from Ross provide you with accurate, reliable system timing that is the critical heartbeat to your production facility.



Dependable timing is the heartbeat of a facility. The SPG and SRG Series provide an accurate dependable and flexible drumbeat for the rest of the facility to follow with confidence. With, flexible timing and signal generation, these master sync generators address the requirements from simple fly packs to large multi-format institutions.

CHOICE

Ross offers Master Reference generators for any application. From a small openGear card, ideal for fly-packs and remote locations, up to fully-redundant, PTP capable SRG-Series platforms for large multi-format facilities.

FLEXIBLE

The SPG and SRG-series Master Sync Generators support a wide range of output signals and formats from composite to UHD. These reference generators can even provide multiple video standards simultaneously. Integrated video pattern generators with idents and motion are great for remote feeds.

RELIABLE

Built to last and with redundancy in mind, Sync Generators from Ross will keep the heartbeat of your facility alive. All units feature redundant power and easy servicing. Automatic changeover units are available to ensure you never skip a beat.

SYNC PULSE GENERATORS



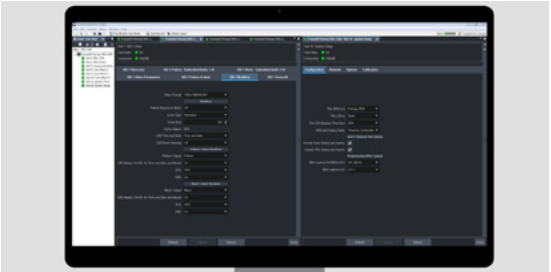
SYSTEM WIDE TIMING

Synchronize virtually anything in your facility from a wide range of video and audio outputs ensuring the distribution of reference signals from a single source.



MISSION CRITICAL

Pair a redundant system with an Automatic Changeover Switch (ACO) to provide superior performance and reliability in the most critical of environments.



MULTIPLE MODES OF OPERATION

Set up as a master sync system in freerun, lock to GPS, PTP and NTP, or even lock to another Master Generator as a system slave. Ross timing solutions can meet the needs of any system.



OPENTRUCK MOBILE PRODUCTION

openTruck™ delivers huge opportunities in the regional sports and live-event market by enabling production companies to build and staff trucks that meet the demanding requirements of today’s sophisticated media delivery networks.



openTruck™ delivers a standardized yet customizable way to design a new generation of cost-effective remote production vehicles that deliver the highest quality video and audio content from sports and other live events.

EXPAND COVERAGE

Coverage of local and regional sporting and other live events, including things like political rallies, music concerts and festivals, has traditionally been resource intensive. openTruck delivers huge opportunities for these applications by enabling production companies to cost-effectively build and staff mobile production implementations that meet the demanding requirements of today’s sophisticated media-delivery networks.

A GROUNDBREAKING MOBILE MODEL

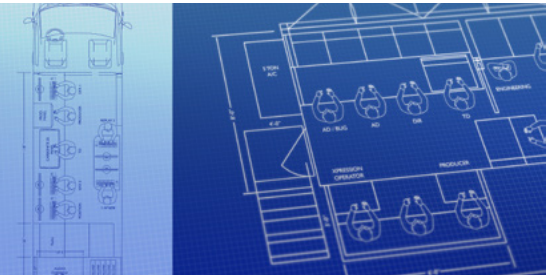
openTruck’s proven blueprints include open protocols, specifications and schematics. Some design models specify a number of Ross products, which must be used for an implementation to qualify as openTruck. Other products are optional and can be selected from leading technology suppliers many of which are participants in the openTruck initiative.

MAXIMIZE PHYSICAL SPACE. MINIMIZE RISK. DELIVER GREAT CONTENT.

Rather than using overly expensive technologies that lack smooth integration, this new construct emphasizes equipment and workflows that complement each other for better efficiencies at lower costs.

BEST-IN-CLASS SYSTEMS.
SEAMLESS INTEGRATION

openTruck



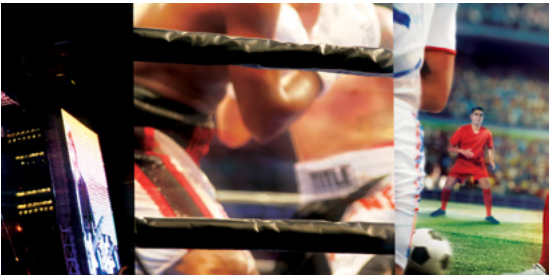
OPENTRUCK LAYOUTS

openTruck is versatile and can be deployed in everything from a flight pack to a truck body of your choosing that provides sufficient operator space and payload.



OPENCREW COMMUNITY

openCrew provides a talented pool of operators listed in the openCrew community and available for openTruck operators to hire. Having experienced professionals that know the equipment and processes is key to ensuring the delivery of a predictable and consistent production with outstanding results.



QUALITY AND AFFORDABILITY UNITED

With openTruck™, broadcasters and other producers get reliable and ready access to less-expensive production models while maintaining the high-quality production values, sophisticated graphics packages and consistency of final product that ensure a healthy return on investment.

For XPression, Voyager, and DashBoard customers in broadcast and venue production, Ross' Rocket Surgery offers unmatched design, production, and data integration expertise because we have exclusive insight and input into Ross systems.

Rocket Surgery is a worldwide collection of highly talented Realtime graphics & broadcast professionals and software developers who specialize in creating and delivering advanced solutions combining graphic design, workflow, data management, and control applications.

Rocket Surgery is much more than graphic design. It is a Ross Solutions Center with a focus on control and workflow development.

Rocket Surgery are XPression designers and integration experts. They are also Unreal designers for Voyager & LUCID, virtual reality integration experts, and operators.

Rocket Surgery developers are experts in developing DashBoard control solutions and data shaping & parsing for all Ross Products that can have a DashBoard application. They are also experts in working with 3rd party protocols to create control solutions for non-Ross products.

Rocket Surgery innovates new solutions for customers to meet their specific needs.



For live sports and broadcast applications, the Rocket can design entirely new looks, offering art direction as well as hands-on graphic design. The Rocket can also take the look designed or provided and integrate it with XPression.

The Rocket can design virtual sets and augmented reality assets for either XPression or Voyager.

The Rocket also has its own virtual production company to staff your event and run the virtual show.

Graphics are only part of the story; device and playback control are what make it all sing, and Rocket Surgery creates scalable DashBoard control systems specific to customer needs.



ROSS PRODUCTION SERVICES MOBILE SOLUTION

With its new generation of cost-effective, full service, remote-production vehicles, Ross Production Services (RPS) delivers consistent, high-quality video and audio content from sports and other live events, and ensures a predictable production experience and outstanding results—all the time, every time.



RPS trucks are designed around powerful best-in-class broadcast systems using the Ross openTruck design model. Highly-interoperable, these systems combine leading technology from Ross and other vendors designed to fit and work together seamlessly.

HIGH QUALITY REMOTE & STUDIO BROADCASTS

Full HD video transmission over satellite and fiber connectivity. HD quality streaming to all popular devices. Access to sophisticated graphics packages and other customization services.

MOBILE FLEXIBILITY

Modular architecture combined with custom-configurable workflows, make for efficient productions which can scale to suit any event.

PROVEN

Leverage the most experienced team in mobile production. Customers include ESPN, NBC, Fox, Red Bull, and many others. Ross Production Services delivers results for demanding customers while meeting the reality of today's budgets.

THE NEXT GENERATION MOBILE PRODUCTION



TRUCK, TRAILER OR FLIGHTPACK

As the pioneer of mobile productions, RPS provides the ultimate in versatility and agility, allowing rapid deployment between events and locations, 24 hours a day 7 days a week.



STUDIO PRODUCTION

In 2015, RPS began operation of Blackdoor Studios, a complete production facility utilizing the equipment and workflow found in our mobile units, complemented by two green screen rooms paired with Ross ACIDCam.



CUSTOM ENGINEERING & CONSULTING

RPS has a unique partnership with Ross, that lets us scale up or down for each individual production. Not sure which equipment you need? RPS offers dedicated EIC's that can recommend the perfect solution.



SUPPORT & SERVICES

TECHNICAL SUPPORT

No charge for the life of your Ross product. Ross will always take your call, answer your emails and point you in the right direction. Ross prides itself in the quality of its products, but if problems occur, help is as close as the nearest telephone. A 24 Hour Hot Line service ensures you have access to technical expertise around the clock. After-sales service and technical support is provided directly by Ross personnel. During business hours (Eastern time), technical support personnel are available by telephone any time. After hours and on weekends, a direct emergency technical support phone line is available. If the technical support personnel who is on call does not answer this line immediately, a voice message can be left and your call will be returned shortly.

www.rossvideo.com/support

WEB RESOURCES

The Ross website offers tips and techniques. Some products have forums that you can join to network and share experiences with other users and Ross staff. The “Ask the Product Manager” feature in each product area on the website permits you to directly connect with Ross Product Management staff to ask a technical question or suggest a new feature or product.

USER MANUALS

Manuals are continually updated. Each Ross product is provided with a comprehensive user guide that covers operation, installation and maintenance of your Ross product. These are updated and available simultaneously with new software releases. These are available for download from the Ross web or FTP site at no additional charge.

ROSSCARE+ WARRANTY

Ross products are covered with a full one year transferable warranty which includes advance replacement service. Ross has a network of strategically located, global logistics hubs to provide prompt local delivery of necessary replacement parts. This quick ship service is available to all customers during their warranty period.

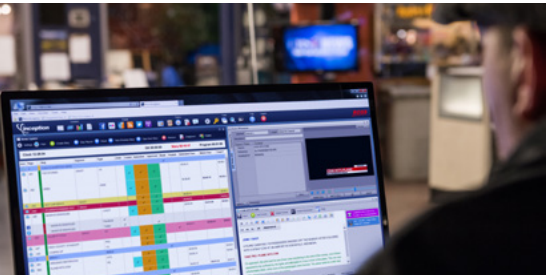
ROSSCARE+ EXTENDED WARRANTY

RossCare+ Extended Warranty for a fixed annual fee extends the warranty period on your Ross hardware, providing total protection against unexpected repair fees. The program also includes our Advanced Exchange Program, to get you back online as quickly as possible.

ROSSCARE+ SOFTWARE MAINTENANCE

RossCare+ Software Maintenance is available for “software centric” products and keeps you current by offering access to ongoing software updates. Ross invests 25% of our annual revenue into research and development. A current Software Maintenance program means you can take advantage of the most current feature set of your product.

RossCare+



ONSITE COMMISSIONING

Get the advantage of Ross technical experts to assist you in shaking down your Ross equipment, configuring it and helping you get it up and running. This team has been there/ done that and will save your staff valuable time in bringing your new system online.



ONSITE OPERATIONAL TRAINING

Ross trainers don’t just know the product, they understand the live production environment. They can assist you in getting the most out of your new Ross product in a way that is relevant to your production.

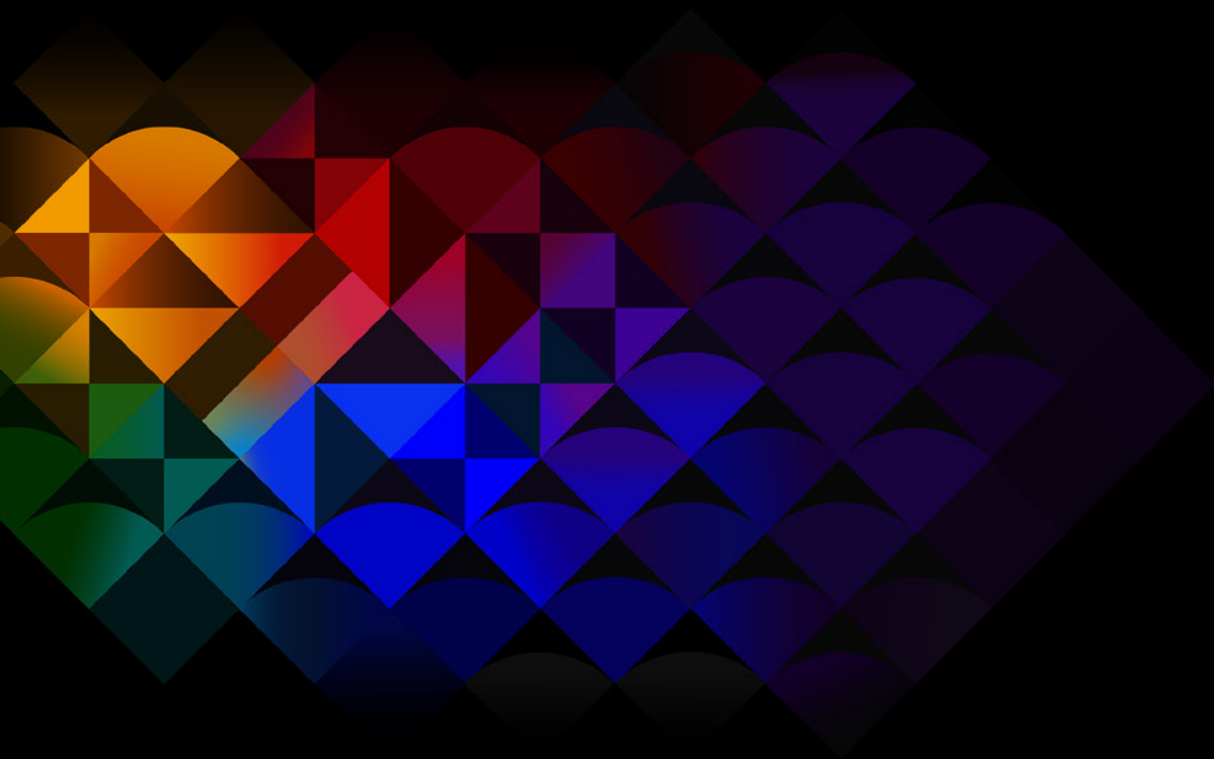


ONSITE TECHNICAL TRAINING

Ross technical staff are available to travel to your site to lead your technical staff through the key aspects of configuring, maintaining and troubleshooting your Ross equipment. Technical courses can be tailored to meet the specific needs of your organization.

NOTES:

NOTES:



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rossvideo.com

ROSS VIDEO

SOLUTIONS

Broadcast & Production
Augmented Reality & Virtual Sets
Sport & Live Events
Legislative
Mobile Production
Worship Production
Education
Corporate

PRODUCTS

Acquisition, Transcode & Playout
Production Switchers
Motion Graphics & Clip Servers
Replay & Production Servers
Robotic & Camera Systems
Control Systems
Routing Infrastructure
Signal Processing Infrastructure
News, Live & Social Production Management
Media Asset Management

SERVICES

Creative Services
Mobile Production

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