

Abekas

TRIA EXPRESS



The Ultimate Production Server

ROSS[®]
LIVING LIVE!

Deliver Content Quickly and Easily

Seamless integration of “Video+Key+Audio” clip playback is accomplished with a cost-effective, multi-channel production server featuring comprehensive switcher/vision mixer integration. The fast, intuitive interface provides predictable and precise operation to streamline live productions.

Fast and flexible media import/export tools, combined with live video recording, provides ideal integration into a wide variety of live production environments.

Deliver More Creativity

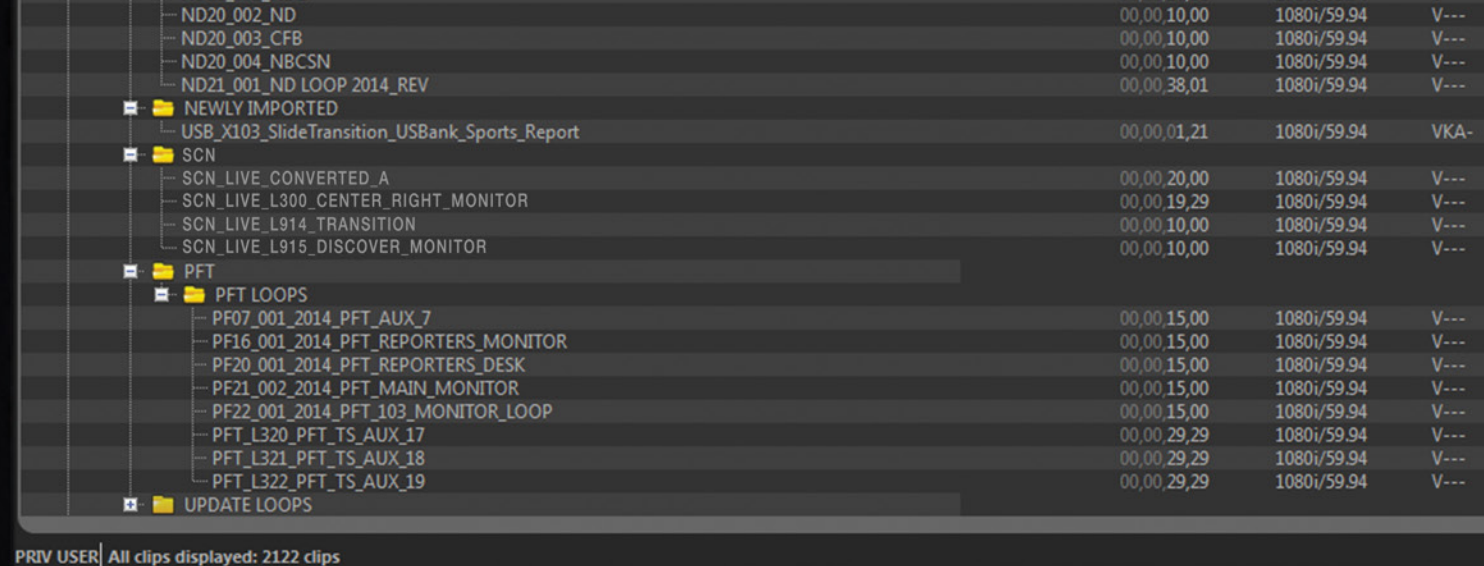
- Enhances live production environments as a stand-alone video production server that integrates well with production switchers/vision mixers
- Includes just the right feature set to support a wide range of live production applications
- Provides different channel count configurations to match various production requirements

File It Fast

- Streamlines media file workflows with built-in Media File Import and Export tools
- Imports a wide variety of media file codecs and wrappers
- Software Transcoder imports media files without using a video channel
- Handles Video+Key clips as a single asset, rather than two

Connect Together

- Features HD-SDI video input for base-band video ingest
- Provides “Video+Key” channel pairs for feeding keyer inputs of video switchers/vision mixers
- Integrates RS-422 serial and Ethernet control from production switchers/vision mixers
- Delivers predictable and precise video clip recall for live productions



ND20_002_ND	00,00,10,00	1080i/59.94	V---
ND20_003_CFB	00,00,10,00	1080i/59.94	V---
ND20_004_NBCSN	00,00,10,00	1080i/59.94	V---
ND21_001_ND LOOP 2014_REV	00,00,38,01	1080i/59.94	V---
NEWLY IMPORTED			
USB_X103_SlideTransition_USBank_Sports_Report	00,00,01,21	1080i/59.94	VKA-
SCN			
SCN_LIVE_CONVERTED_A	00,00,20,00	1080i/59.94	V---
SCN_LIVE_L300_CENTER_RIGHT_MONITOR	00,00,19,29	1080i/59.94	V---
SCN_LIVE_L914_TRANSITION	00,00,10,00	1080i/59.94	V---
SCN_LIVE_L915_DISCOVER_MONITOR	00,00,10,00	1080i/59.94	V---
PFT			
PFT LOOPS			
PF07_001_2014_PFT_AUX_7	00,00,15,00	1080i/59.94	V---
PF16_001_2014_PFT_REPORTERS_MONITOR	00,00,15,00	1080i/59.94	V---
PF20_001_2014_PFT_REPORTERS_DESK	00,00,15,00	1080i/59.94	V---
PF21_002_2014_PFT_MAIN_MONITOR	00,00,15,00	1080i/59.94	V---
PF22_001_2014_PFT_103_MONITOR_LOOP	00,00,15,00	1080i/59.94	V---
PFT_L320_PFT_TS_AUX_17	00,00,29,29	1080i/59.94	V---
PFT_L321_PFT_TS_AUX_18	00,00,29,29	1080i/59.94	V---
PFT_L322_PFT_TS_AUX_19	00,00,29,29	1080i/59.94	V---
UPDATE LOOPS			

PRIV USER | All clips displayed: 2122 clips

“Tria Explorer” graphical user interface

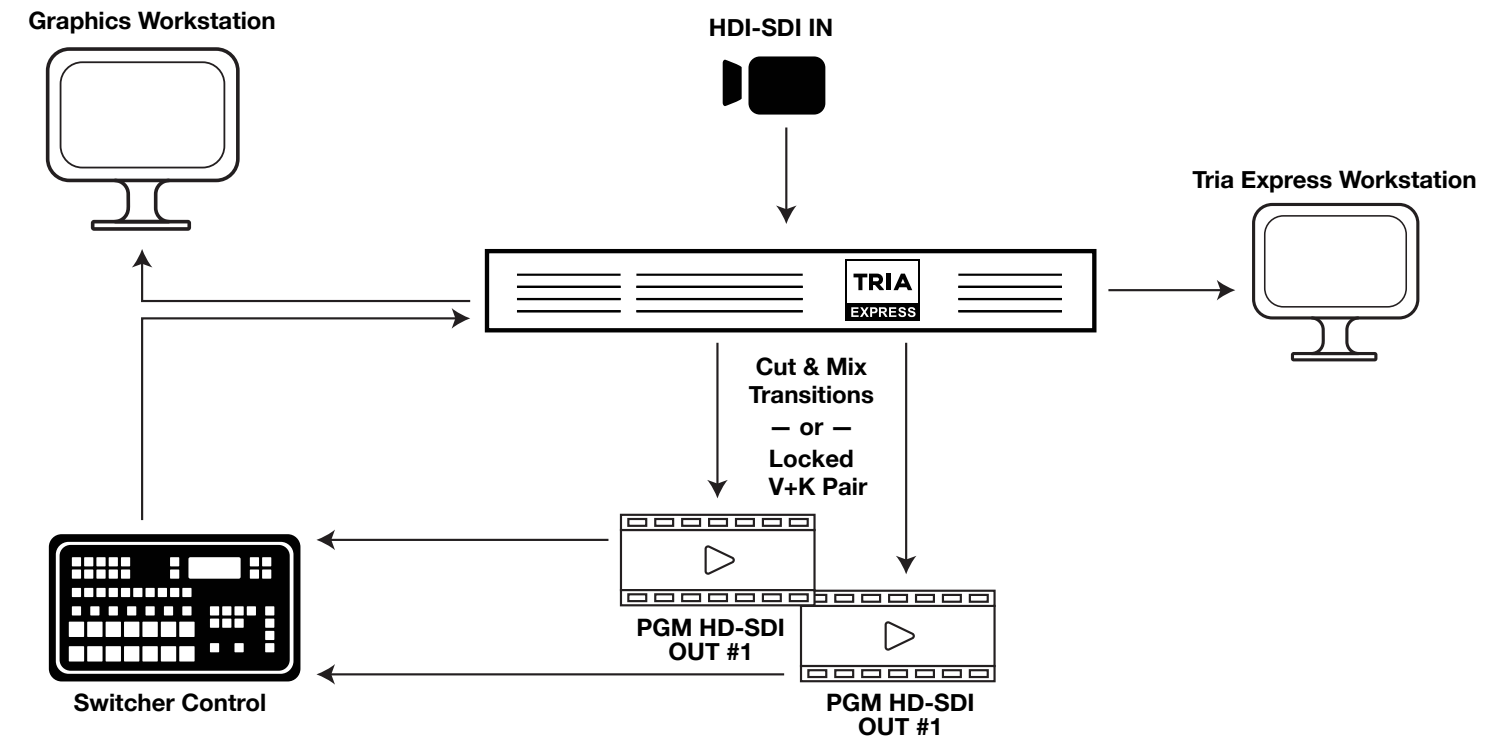


Tria Express™ Production Server Chassis - Front Panel

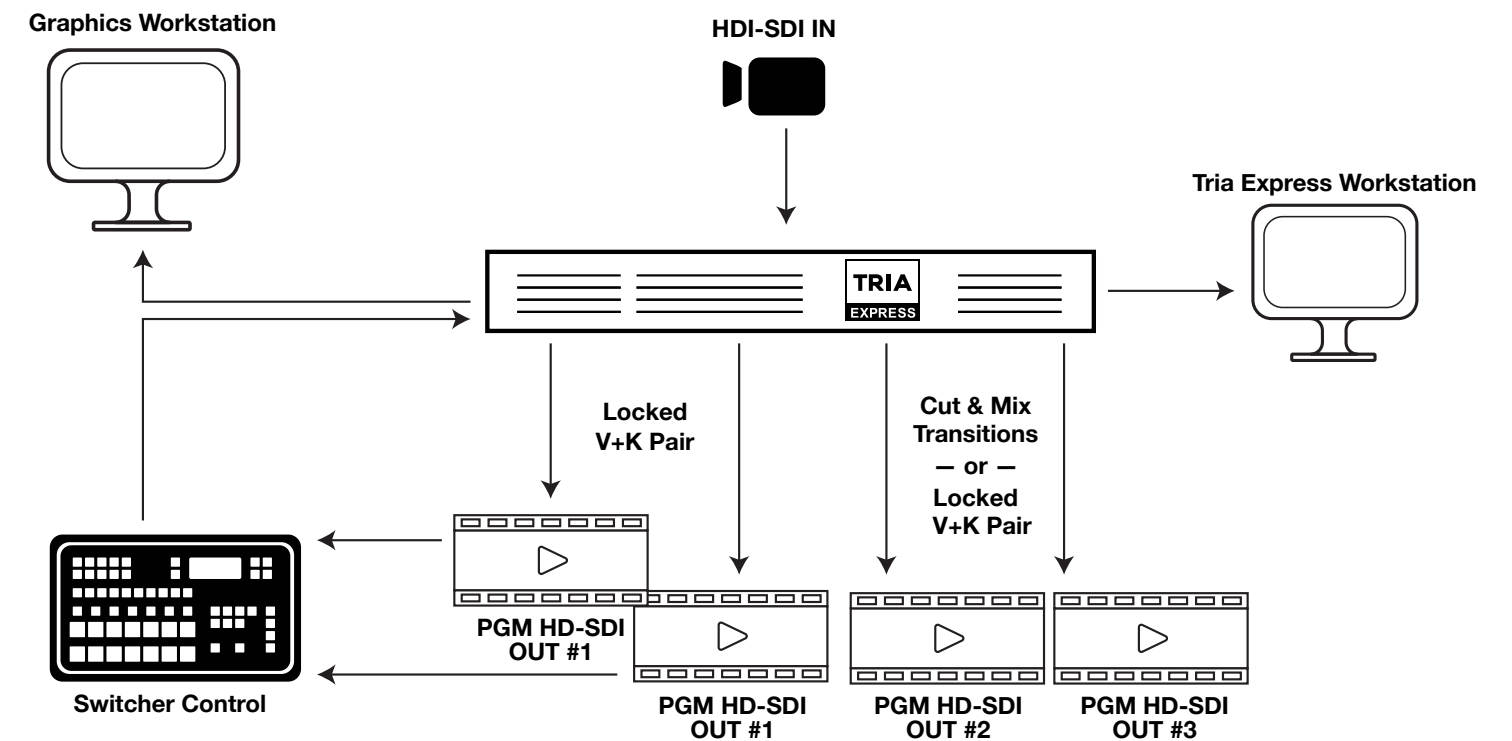
KEY BENEFITS

- **Production Integration**
Contribute clips, finished video segments, and animated transitions for use with switchers and on-set displays
- **File-Based Operations**
Fast media files ingest and export with a wide range of format support
- **Advanced Media Storage**
Highly reliable media storage on SSD, in a variety of capacities
- **Comprehensive Capabilities**
Advanced production server solution that includes clip ingest, trimming, and management
- **Advanced Playlist and Timecode Chase Functions**
Create Playlists with programmable flags to have items pause on first/last frame, loop playback, and to advance items with transition effects; also create Timecode Chase clip lists—with precise playout dictated by incoming LTC
- **Efficient Operations**
A clean and uncluttered user interface based upon widely-understood “VTR Transport” operational paradigm
- **Comprehensive Control**
Dedicated RS-422 serial and Ethernet control ports with a wide range of control protocols for switcher integration

Tria Express: 2-PGM OUT



Tria Express: 3-PGM OUT



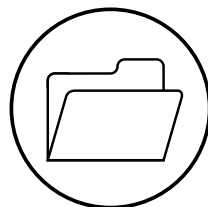


Easy Live Production

To meet the artistic demands of live program creation, production switchers typically feature a connected production server for playing animated transitions and video clips, and delivering animated video to on-set displays.

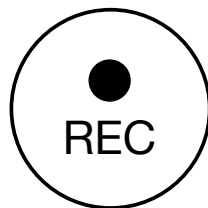
Specifically designed to be the ideal switcher companion, Tria Express is the most advanced and feature-rich video production server in the industry, and one that can be tailored to meet your specific production needs.

The entry-level Tria Express with 2-PGM outputs provides two independent “video+audio” output channels that can be easily reconfigured by the user as a single “VKA output” channel. The Tria Express with 3-PGM outputs offers three “video+audio” output channels—one of which also features a dedicated key output—with the two “video+audio” channels easily reconfigured as a second “VKA output” channel.



Fast File Import and Export

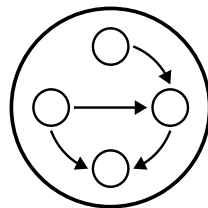
The Tria Express file import/export utility provides the widest range of format support of any video production server. This ensures the fastest time-to-air for any content you receive or produce.



Live Recording

Tria Express is the only video production server at its price point that offers live video recording. Tria Express operators can easily capture content such as crowd shots at live events; live program output; or any video feed—which enables time savings and greater creative flexibility. Because all video channels have access to the shared clip library, one video channel can record a clip while another channel plays out that same clip, even while it continues to grow.

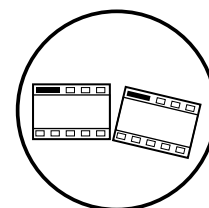
Some switchers offer internal frame buffers for storing graphics and images. These can be offloaded in seconds by configuring Tria Express to record them in real time.



Flexible Architecture

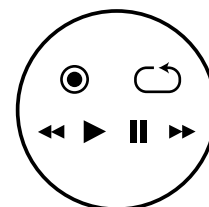
Because every Tria Express server can be configured with a key channel output, keys or mattes can be easily imported and played back without having to “gang” channels together; as is the case with other more expensive production servers.

When a media file with alpha is imported, Tria Express creates a single clip asset in the clip library. Each asset can include a video layer, key layer, and up to eight audio tracks. Only one media asset is required throughout Tria Express server’s VKA ingest and playback process, significantly streamlining workflow management. This unique approach requires only a single serial control port on the production switcher to control VKA clip load and play.



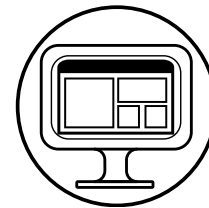
Clip Trimming and Naming

Heads and tails of clips can be easily trimmed to remove unwanted content by using built-in trimming tools. In addition, many smaller “child” clips can be created and trimmed from a single long “parent” clip; with each child clip having its own identity. Unlike other production servers, Tria Express uses multi-character clip names, so the operator sees the descriptive “5 O-Clock news bumper,” rather than a meaningless name such as “CL00812.”



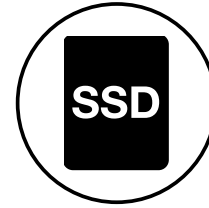
Enhanced Playback Features

Intuitive controls provide unmatched Playlist creation and editing. Playlist playout flags permit list items to be “paused” on first and/or last frame, and items to be looped. List items can be programmed with either CUT or MIX transitions between them, to give you unmatched creativity. You can also create Timecode Chase clip lists—with precise playout dictated by incoming LTC.



Unparalleled Switcher Interface

When Tria Express channels are connected to a switcher via a dedicated RS-422 interface, or via Ethernet, the system becomes even more productive. VKA clip playback can be combined with switcher transitions and effects, all controlled directly from the control surface of most switchers. With the most comprehensive interface and fastest response time available, you can rely upon Tria Express in the heat of your live productions.



Reliable and Portable SSD Media

Highly dependable media storage is achieved with a single 2.5” Solid State Disk (SSD).

The SSD is accessible from the front of the Tria Express chassis—providing the flexibility for you to transport a prepared library of clips from one Tria Express server to another. A variety of SSD capacities are offered to satisfy a wide range of storage requirements.

SPECIFICATIONS

KEY FEATURES

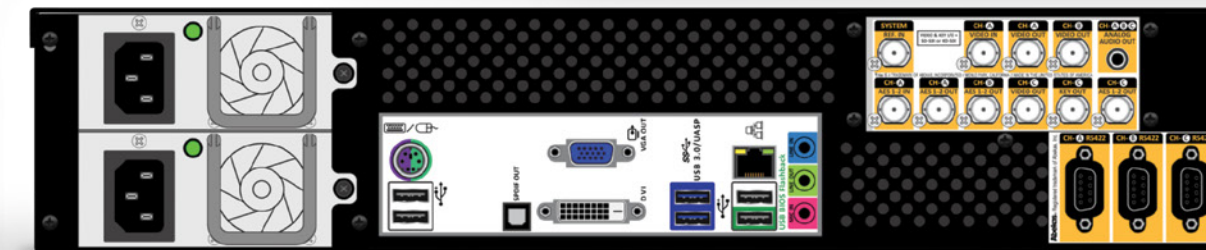
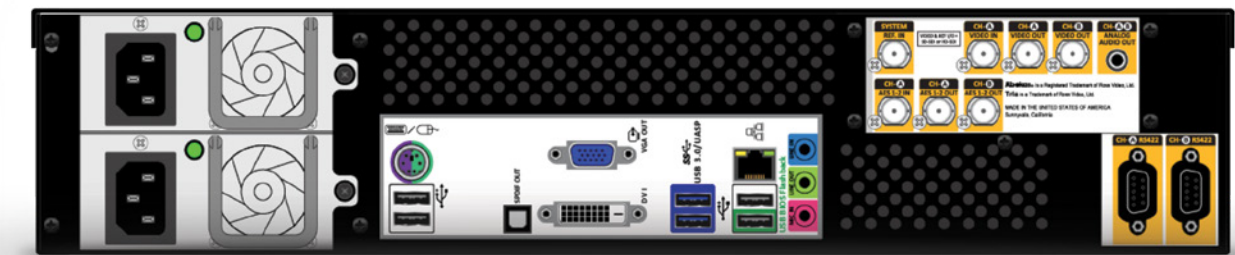
- 2-PGM HD/SD Output Model:
 - (2) Video+Audio OUT
 - IN available on one Video+Audio OUT
 - Re-configurable as:
 - (1) Video+Key+Audio OUT
 - IN available on one Video+Audio OUT
- 3-PGM HD/SD Output Model:
 - (2) Video+Audio OUT | (1) Video+Key+Audio OUT
 - IN available on one Video+Audio OUT
 - Re-configurable as:
 - (2) Video+Key+Audio OUT
 - IN available on one Video+Key+Audio OUT
- Tria Express with AVC-Intra video hardware:
 - 1080p 3G I/O with no channel count reduction
 - VANC record & file import preserves timecode & closed-captioning
- Graphical user interface with clip management and live video thumbnails
- Sophisticated Playlists with advanced playout features
- Timecode Chase clip lists, with precise playout dictated by incoming LTC
- Integrated Media File Import and Export tools
- Uncompressed digital audio with AC-3 and Dolby-E support
- Built-in Input/Output Audio Router
- Shared media storage on single SSD
- Range of Media Storage capacity options
- DashBoard and Tria Ethernet API is freely available to program custom control interfaces
- Dual, hot-swap redundant power supply
- Housed in compact 2RU server chassis

SUPPORTED VIDEO FORMATS			
Native Codecs:	Choose Tria Express model with one native recording & playout video codec:		
	• AVC-Intra model: HD@100Mb/s & 200Mb/s		
	• JPEG-2000 model: SD & HD @ 15Mb/s to 200Mb/s		
HD Video	• 1080p /50	/59.94	(AVC-Intra)
	• 1080i /50	/59.94	(ALL models)
	• 720p /50	/59.94	(ALL models)
SD Video	• 625i /50		(JPEG-2000)
	• 525i /59.94		(JPEG-2000)
CHASSIS PHYSICAL & ELECTRICAL			
• Dimensions: 2RU Height / Depth = 16.0 in (40.6 cm) / Rackmount Slides included			
• Maximum Weight: <30lbs. (13.6 kg)			
• Maximum Power: <155 Watts / 100-240 VAC / 50-60Hz (Auto-sensing power input)			
SAFETY & EMISSIONS			
• TUV	• FCC Class A	• CE	
ANALOG AUDIO MONITORING OUTPUT			
Analog Audio:			
• Unbalanced, line-level at: -10 dBV.....(1) Female 3.5mm			
• 2-Tracks (1 stereo pair) / Selectable to monitor any video channel output stereo pair			
ANALOG REFERENCE INPUT			
Tri-level HD or Composite Analog SD; Terminating.....(1) Female BNC			
DIGITAL VIDEO INPUT			
HD Video:			
• HD-SDI SMPTE 292M (10-bit at 1.5 Gb/s).....(1) Female BNC			
SD Video:			
• HD-SDI SMPTE 259M (10-bit at 270 Mb/s).....(1) Female BNC			

DIGITAL VIDEO & KEY OUTPUTS	
HD Video:	• HD-SDI SMPTE 292M (10-bit at 1.5 Gb/s).....(2) or (4) Female BNC
SD Video:	• HD-SDI SMPTE 259M (10-bit at 270 Mb/s).....(2) or (4) Female BNC
DIGITAL AUDIO INPUTS	
AES Digital Audio Input:	• 2-tracks (1 stereo pair; 48kHz at 24-bits).....(1) F-BNC
Embedded in HD Video:	• Embedded in HD-SDI video input: 8-tracks, 48kHz at 24-bits
Embedded in SD Video:	• Embedded in SD-SDI video input: 4-tracks, 48kHz at 20-bits
DIGITAL AUDIO OUTPUT	
AES Digital Audio Outputs:	• 2-tracks (1 stereo pair; 48kHz at 24-bits)..... (2) or (3) F-BNC
Embedded in HD Video:	• Embedded in HD-SDI video outputs: 8-tracks, 48kHz at 24-bits
Embedded in SD Video output only:	• Embedded in SD-SDI video outputs: 4-tracks, 48kHz at 20-bits

DATA / CONTROL	
• RS-422: Sony; VDCP; & Odetics protocols.....(3) Female DB-9	
• Monitor with 1920x1080 native resolution is required:	
• DVI Output.....(1) Female DVI-D	
• HDMI Output.....(1) Female HDMI	
• VGA Output.....(1) Female DB-15	
• Gigabit Ethernet (10-T / 100-T / 1000-T) with AMP and Louth protocols....(1) Female RJ45	
• USB 2.0 Hi-Speed "Series A" Receptacle.....Female USB-A	
• USB 3.0 Super-Speed "Series A" Receptacle.....Female USB-A	
• QWERTY Keyboard & Mouse set (included).....PS/2 or use USB-A	

Tria Express 2-PGM Out



Tria Express 3-PGM Out

MOTION GRAPHICS

XPRESSION | Single, Triple, UHD Flex, Prime, Go!, Designer, Developer
XPRESSION CLIPS
XPRESSION TESSERA
XPRESSION MAPS
XPRESSION TELESTRATE
XPRESSION TOUCH FACTORY
XPRESSION TICK IT



2RU

4RU

CREATIVE SERVICES

ROCKET SURGERY | Graphics Creation



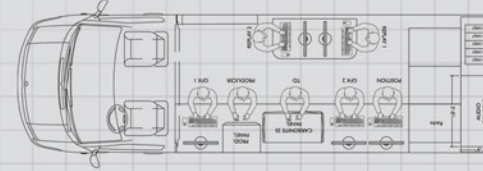
STUDIO IN A BOX

GRAPHITE | All-in-One Live Production Vehicle



OPENTRUCK

OPENTRUCK | Flight Case through to 40-foot Truck Designs



PRODUCTION SERVICES

ROSS MOBILE PRODUCTIONS



ASSET MANAGEMENT

STREAMLINE GRAPHICS
STREAMLINE PRODUCTION
STREAMLINE.CLOUD



CAMERAS

ACID CAMERA | H200-UCHR, Z50-UCHR
PIVOTCAM | PivotCam SE



CHROMA KEYING

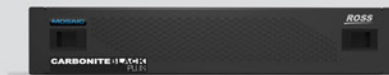
ULTRACHROME HR



* Carbonite Black Chassis with UltraChroma HR Software

MULTI-SCREEN IMAGE PROCESSING

CARBONITE MOSAIC



INFRASTRUCTURE

ULTRIX 12G & IP ROUTER | 16x - 144x
NK ROUTER | 16x4 - 144x144
OPENGEAR | Modular Signal Processing, oGx Frame
MASTER CONTROL | MC1 openGear Card, MC1 Panel
NIELSEN | Watermarks Encoder



GATOR | 12G UHD Signal Processor
RAPTOR EDGE | IP Gateway & Processor
NEWT | IP Point of Use Gateway
GEARLITE | Point of Use Signal Processing
ULTRITOUCH | Soft Touch Control Panel
AUDIO MONITORING | MB-651, MB-652
MASTER SYNC & REFERENCE | SRG-2200, SRG-4400, ACO-4400

NEWS & SOCIAL MEDIA

INCEPTION NEWS | Academic, Express, Standard, Enterprise
INCEPTION LIVE
INCEPTION SOCIAL
INCEPTION.CLOUD
HORIZON



CONTROL SYSTEMS

OVERDRIVE | Express, Prime, Premium
OVERDRIVE + GRAPHITE
DASHBOARD
LIGHTNING CONTROL SYSTEM
ULTRITOUCH CONTROL PANEL



IP TECHNOLOGY

OEM PRODUCTS | Market Ready Modules & System-on-Chip



VIDEO SERVERS, REPLAY & DELAY

ABEKAS MIRA+ | Replay System
ABEKAS MIRA EXPRESS | Replay Server
ABEKAS TRIA+ | Production Server
ABEKAS TRIA EXPRESS | Video Clip Server

ABEKAS TRIA NEWS | News Playback Server
ABEKAS AIRCLEANER | Live Event Delay



PRODUCTION SWITCHERS

ACUITY | Panel: A1s, A2m, A2x, A3m, A3, A4 Frame: 4RU, 8RU
CARBONITE BLACK | Panel: C1, C1s, C2, C2s, C3s, C3x Frame: 2RU
CARBONITE BLACK PLUS
CARBONITE BLACK PLUS 12G
CARBONITE BLACK SOLO
CARBONITE BLACK SOLO 13
CARBONITE ULTRA
ACUITY & CARBONITE IP SOLUTION



ROBOTICS

FURIO SE LIVE | Live Head, SE Dolly and SE Lift; PanBar and Joystick Controls
FURIO SE STUDIO | VR100, VR600 Heads; SE & S2 Lifts; SE BlackBird; VRO | Manual Fluid Head with Tracking
CAMBOT | 520PT, 600PT, 700PT Heads; 600 BlackBird; 600XY & 700XY Free-Roaming Peds
SMARTSHELL | Robotic Camera Control System



VIRTUAL & AUGMENTED REALITY

TRACKLESS VIRTUAL
UX VIRTUAL TRACKING SYSTEM
UNREAL ENGINE



Abekas



Ross Video has a complete range of technical services available to ensure that your Abekas Tria Express installation is a success.

Operational Training can be provided at Ross Video, on-site or on the web. Experienced Ross operators will teach your staff to get the most out of your new system, and enhance your productions.

Commissioning is a service to help get your Abekas Tria Express system properly configured, connected and installed. This service is performed by factory trained Ross technical staff.

Technical Training can be provided at Ross Video, on-site or over the web. Technical training will teach your engineering staff the technical details of the system you have purchased. System configuration, interfaces, databases, and routine maintenance procedures are some of the topics covered.

Abekas Tria Express comes standard with a 1 year comprehensive warranty. **Extended Warranties** on hardware and software maintenance are available for an annual fee.

Technical advice is available on-line, by telephone, or email to Ross Video – **Included for the life of your system.**

Contact Us

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Technical Support

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Email: techsupport@rossvideo.com



www.rossvideo.com

ROSS VIDEO LIVING LIVE!

SOLUTIONS

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- Augmented Reality & Virtual Sets
- Sport & Live Events
- Legislative
- Mobile Production
- House of Worship
- Education
- Corporate

PRODUCTS

- 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 & Storage

SERVICES

- Creative Services
- Mobile Production

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