

# PIVOT



Pan. Tilt. Zoom. Repeat.



## Articulate

PIVOTCam offers high performance image capture with quiet and accurate PTZ functionality, at a fantastic value. Get on-the scene fast watching, following, and twisting to capture those pivotal moments.

With included wall and ceiling mounts, PIVOTCam permits you to creatively utilize space in your venue. This makes PIVOTCam the perfect companion for engaging assembly, auditorium, venue, and POV productions.

### BE ON TARGET

- Perform fast and efficient Pan / Tilt / Zoom and Focus control with preset recalls.
- Operates reliably and quietly making it ideal for a wide range of live production environments.
- Versatile PTZ Camera, that can be mounted virtually anywhere.

### SEE CLEARLY

- Produce spectacular video images under a wide range of lighting conditions.
- Beautiful high definition 3G 1080P visuals with low noise and high sensitivity.
- High quality Olympus optics provide 20x optical zoom.
- Ultra-low noise with leading edge CMOS sensor technology.

### CONNECT IN

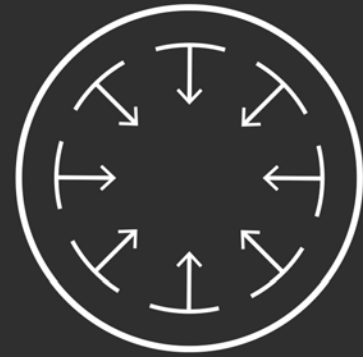
- Camera control fully integrated with Ross production switchers
- Total Production control via DashBoard and the Lightning Control System, including 128 presets for store and recall of shots
- Simple integration with existing camera control systems via VISCA protocols

# Key Benefits



## QUALITY IMAGE

Create better images with an advanced HD CMOS Sensor that offers flexible SD & HD formats, along with an ultra-low signal to noise ratio.



## VERSATILE

Place and shoot from virtually anywhere thanks to small footprint and included, flexible mounting systems.



## STEALTHY PERFORMANCE

Silently perform smooth and quick maneuvers to get on the next shot unobtrusively.



## LIGHTING RESILIENT

Optimal performance in any lighting condition, the advantage of an image sensor with high sensitivity and low noise.



## CONTROL CHOICES

Efficiently prepare your shots via Ross control systems or with your existing VISCA camera control devices.



## NUMEROUS APPLICATIONS

Cover and capture the best quality results in a wide range of venues where distances and lighting can be challenging.



## SIMPLE CONNECTIVITY

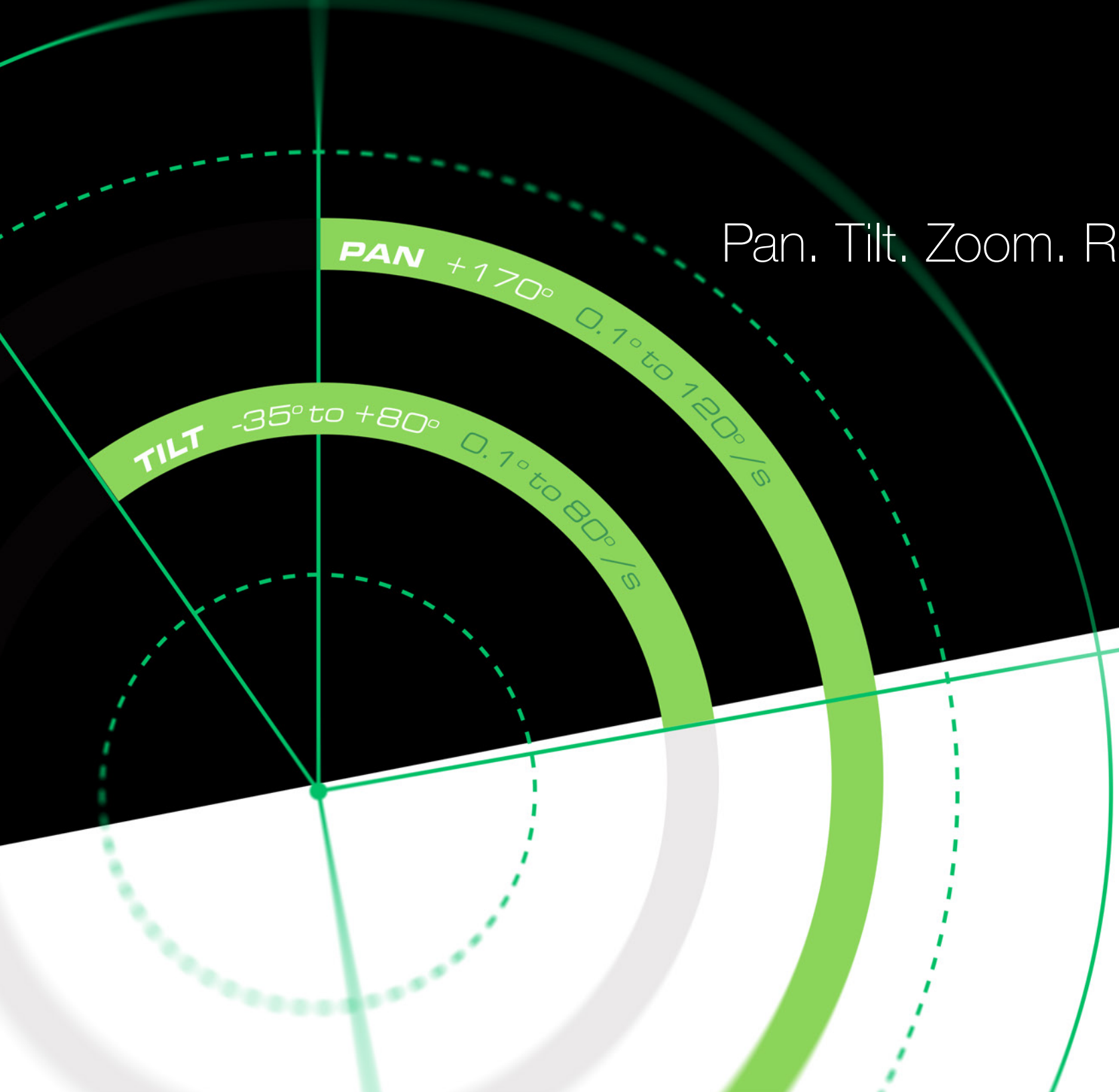
Easy connection to multiple cameras. Choices include, daisy chain RS232/RS485, ethernet connectivity via optional converter, or a combination of both.



## EXCELLENT VALUE

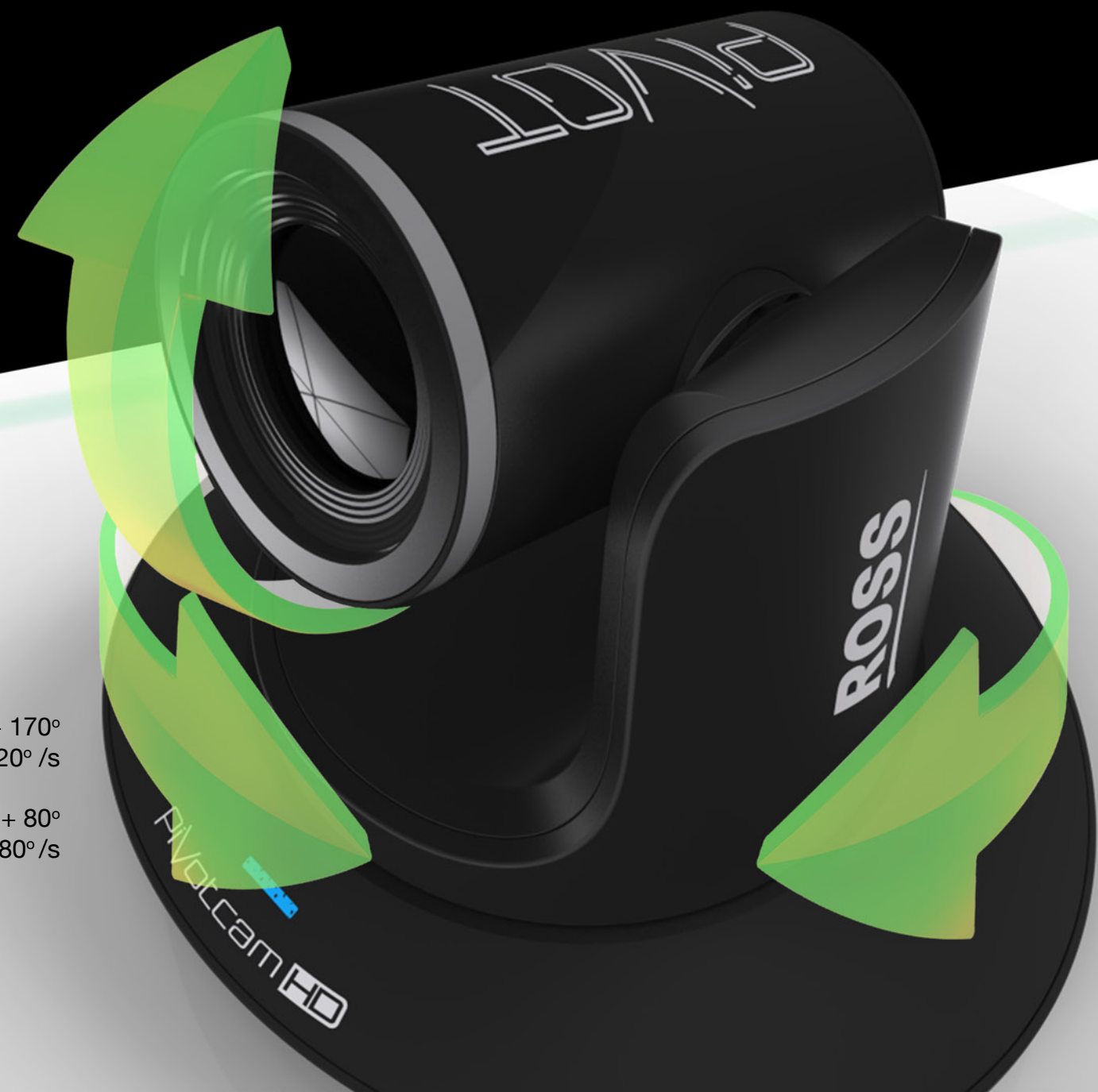
The best performer at it's price point.

Pan. Tilt. Zoom. Repeat.



**PAN ANGLE:** + 170°  
**PAN SPEED:** 0.1° to 120° /s

**TILT ANGLE:** -35° to + 80°  
**TILT SPEED:** 0.1° to 80° /s





## See Clearly

PIVOTcam is tailored for on-the-fly productions and variable conditions; substantially reducing the burden on operators during the heat of production. It compensates for distances, quick movements, and everyday lighting. Simply focus on getting the shot that you want and let PIVOT do the rest. These capabilities are possible because of an Advanced HD CMOS Sensor and Olympus Zoom optics that offer the following features:

### **HIGH-QUALITY ZOOM OPTICS**

Cover distance with 20x true optical zoom, with additional 12 x digital zoom for situations with additional space to cover.

### **OPERATIONAL FLEXIBILITY**

Fine tune your shots or let PIVOT do it for you. Choose between auto or manual operation of focus, iris, and white balance.

### **ULTRA-LOW SIGNAL TO NOISE**

Optimal performance in low-light conditions found outside a traditional studio environment. The Advanced HD CMOS Sensor confers ultra-low noise (74 dB) and high sensitivity. PIVOT is ideal for assemblies, auditoriums, theaters, board rooms, and any other everyday environment that has not been designed specifically for video productions.

### **HIGH DEFINITION**

Flexible formats including 720p, 1080i and 1080p.

# Numerous Control Options

## SWITCHER JOYSTICK CONTROL

Users of Ross Video production switchers, including the world's most popular mid-sized switcher – Carbonite, the new Graphite All-In-One Production System and the flagship Acuity series; will enjoy manual on-the-fly control of PIVOTCams from the switcher joystick.

## DASHBOARD SOFTWARE

Like all Ross products, PIVOTCam is integrated within the DashBoard Control System. Operate PIVOTCam through DashBoard software panels, which also offers recallable preset shot maneuvers. Create executable blueprints for your shows.

## LIGHTNING CONTROL SYSTEM

Lightning Control System is a DashBoard-based application which completely streamlines assembly meeting productions. A simple touchscreen interface permits users to select which individual they want to put on air and overlay the program out with associated graphics. PIVOTCam's preset shots and tight integration with DashBoard make it the perfect fit with this system. PIVOT and LCS are the conclusive choice for assembly productions.

## OVERDRIVE AUTOMATED PRODUCTION CONTROL (APC)

OverDrive is the most advanced APC system on the planet, enabling the most sophisticated productions to be executed cleanly and consistently. APC, once thought only for scripted productions, now excels at unscripted shows like sports, talk shows, and elections.

OverDrive controls the devices used in a production environment, and with PIVOTCam can intelligently recall shots and adjust camera positions before going to air.



# Adaptive and Simple Setup

- Standard VISCA protocols and serial control to plug into your existing production system and start shooting.
- Included wall and ceiling mounting brackets, place PIVOTCams virtually anywhere in your shooting location.
- IP to serial converters provide full ethernet control, with serial links that can daisy-chain between seven cameras.



Daisy Chain Configuration | MAX of 7 Cameras



1-to-1 IP to Serial Converter Configuration





# PIVOTCam Applications

## LIVE EVENT PRODUCTIONS

**Concerts | House of Worship Services | Theatre Performances | Political Rallies**

These productions tend to involve large scale performances and large audiences, both of which are easy to cover by crafty use of PTZ cameras. Smart placement of PIVOTCams provides unique angles to create visually-stunning performances, and DashBoard permits fast and precise recalls for shots of the captivated audience. Producers of live events instantly notice the improvements in their productions by the creative incorporation of PIVOTCams.

## BROADCAST POV

PIVOTCam provides shows with additional angles from those hard-to-reach areas that traditional broadcast cameras simply cannot access. The silent, small profile design of PIVOT makes it a great fit even for small studios and quiet spaces. The complete IP control through DashBoard and production switcher integration are huge assets in breaking news situations where staffing may be scarce.

## ASSEMBLY PRODUCTIONS

**Legislative Assemblies | Corporate Meetings | Educational Symposiums | Conferences**

These productions generally involve substantial space, multiple angles, and numerous subjects to be captured at any given point. Multiple PIVOTCams set-up throughout the production space with ceiling or wall mounts provide maximum visibility. Use with Lightning Control System for best results!



# PIVOTCam Specs

## PIVOT CAMERA MODELS

PIVOTCam-20

Features	
Sensor	1/1.8 Advanced HD CMOS
Signal to Noise Ratio	75dB
Formats	1080p 59.94 / 50 1080p 29.97/25 1080i 59.94/50 720p 59.94/50 720p 29.97/25
Total Pixels	1952x1241, 2.42M
Active Pixels	1920x1080, 2.07M
Lens	20 x Optical Zoom 12 x Digital Zoom f=6.7-134.5mm, F1.5-F3.4
Minimum Illumination	0.2 Lux (Day) / 0.1 Lux (Night) / 0.005 Lux (DSS on)
Exposure	1/8 to 1/10000 (manual mode)
Video Output	DVI-I / 3G -SDI
Rotation Angle	Pan + 170° / Tilt - 35° to +80°
Rotation Speed	Pan 0.1° to 120°/s / Tilt 0.1° to 80°/s

Control and Operation	
Control Input / Output	VISCA RS-232C / RS-485 In: Mini Din 8-pin type VISCA RS-232C / RS-485 Out: Mini Din 8-pin type *VISCA RS-485: 2 wire only
Daisy Chain	Up to 7 connections supported
Installation Method	Desktop or Suspended
Presets	128 presents in camera / Infinite presets in DashBoard
Ross Control Methods	Ross Production Switchers, DashBoard, and LCS

Build	
Input Voltage	12V DC, 100-220V AC (50-60Hz)
Current Consumption	2 A max (12 v DC)
Operating Temperature	-10oC to 60oC
Storage Temperature	-40oC to 60oC
Dimensions	220mm x 173mm x 117mm (8.7in x 6.8in x 4.6in)
Mass	1.25kg (2.8lbs)
Tripod Mount	1/4 inch

# ROSS VIDEO Production Technology Experts

## MOTION GRAPHICS

**XPRESSION** | Studio, BlueBox, Prime, Go!, Designer, Developer, Quad  
**XPRESSION CLIPS**  
**XPRESSION TESSERA**  
**XPRESSION MAPS**  
**XPRESSION TELESTRATE**  
**XPRESSION TOUCH FACTORY**  
**XPRESSION BRAND IT**  
**XPRESSION TICK IT**



## CREATIVE SERVICES

**ROCKET SURGERY** | Graphics Creation



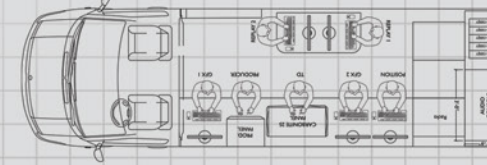
## STUDIO IN A BOX

**GRAPHITE** | All-in-One Live Production Vehicle



## OPENTRUCK

**OPENTRUCK** | Flight Case through 40-foot Truck Designs



## PRODUCTION SERVICES

**ROSS MOBILE PRODUCTIONS**



ASSET MANAGEMENT



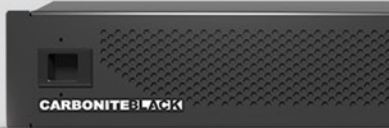
## CAMERAS

**ACID CAMERA** | H200-UCHR, Z50-UCHR  
**PIVOTCAM** | PIVOTCam-20



## CHROMA KEYING

**ULTRACHROME HR**



\* Carbonite Black Chassis with UltraChroma HR Software

## NEWS & SOCIAL MEDIA

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



## CONTROL SYSTEMS

**OVERDRIVE** | Premiere, Prime, Express  
**DASHBOARD**  
**LIGHTNING CONTROL SYSTEM**



## 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**

## IP TECHNOLOGY

**COVELOZ** | OEM Hardware, Virtual Chip, Engineering Services

**COVELOZ**



## INFRASTRUCTURE

**ULTRIX ROUTER** | 16x16-72x72  
**NK ROUTER** | 16x4 -144x144  
**OPENGear** | Modular Signal Processing  
**MASTER CONTROL** | MC1 openGear Card, MC1 Panel  
**NIELSEN** | Watermarks Encoder

**RAPTOR EDGE** | IP Gateway & Processor  
**GEARLITE** | Point of Use Signal Processing  
**AUDIO MONITORING** | MB 651, MB-652  
**MASTER SYNC & REFERENCE** | SRG-2200, SRG-4400, ACO-4400



## VIDEO SERVERS & REPLAY

**ABEKAS MIRA** | Replay, Production Server  
**MIRA EXPRESS** | Replay Server  
**ABEKAS TRIA** | Production Server  
**ABEKAS AIR CHANNEL** | Profanity Delay



## ROBOTICS

**FURIO SE LIVE** | Live Head, SE Dolly and SE Lift; PanBar and Joystick Controls  
**FURIO SE STUDIO** | VR100, VR600 Heads; SE Lift and SE Dolly; SE BlackBird  
**CAMBOT** | 520PT, 600PT, 700PT Heads; 600 PTZ; 600XY & 700XY Free-Roaming Peds  
**SMARTSHELL** | Robotic Camera Control System



## VIRTUAL & AUGMENTED REALITY

**TRACKLESS VIRTUAL UX VIRTUAL TRACKING SYSTEM FRONTIER**





# PIVOT

Ross Video has a complete range of technical services available to ensure that your PIVOTCam 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 camera 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.

PIVOTCam 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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[www.rossvideo.com](http://www.rossvideo.com)

## ROSS VIDEO LIVE PRODUCTION EXPERTS

### SOLUTIONS

- Broadcast & Production
- 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

### SERVICES

- Creative Services
- Mobile Production

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**ROSS**  
Production Technology Experts