

**ROSS** Robotics

| PAN TILT HEADS



**ROSS**<sup>®</sup>  
LIVING LIVE!

# | PAN TILT ZOOM FOCUS

The Ross Family of pan tilt heads provide an option for almost any project. From extremely large payloads of up to 90 kgs (200 lbs) to ultra-quiet, compact heads that are perfect for mounting in smaller studios where space is at a premium; all with industry-leading performance. 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.

## SMOOTH

300, 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.

## TRACKED

The X350 and VR series heads provide accurate tracking data on pan, tilt, zoom and focus position, making them perfect for virtual sets or augmented reality.

## FLEXIBLE

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 a ceiling or trusses, or bolted to a wall, desktop or alcove.

## 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.

## POWERED BY MOTION DIRECTOR

The VR and X-series of heads unleash the full power of MotionDirector, combining the unequaled beauty of naturally smooth and synchronized programmed key-framed moves, with the flexibility to make in-flight manual corrections from the joystick panel. Because the real-world can be unpredictable, and you need a robotic system that gives you the ability to adapt to everything it can throw at you.

## DASHBOARD ENABLED

Perfect for simplified productions, all Ross pan and tilt heads are controllable from DashBoard at no cost.



\*Shown with Cartoni eSensor fluid head



# | SPECIFICATIONS



\*Packaged with Cartoni eSensor  
or eMagnum fluid heads

| STANDARD PT HEAD SPECIFICATIONS |                             |                             |                             |                             |
|---------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
|                                 | X300                        | 520PT                       | 600PT                       | 700PT                       |
| MAX. NET PAYLOAD                | 6.8 kg (15 lbs)             | 30 kg (70 lbs)              | 57 kg (125 lbs)             | 90 kg (200 lbs)             |
| MIN.- MAX. PAN/TILT SPEED       | 0.01 to 45°/sec             | 0.001 – 90 °/sec            | 0.001 – 90 °/sec            | 0.001 – 90 °/sec            |
| PAN/TILT REPEATABILITY          | ±0.05deg                    | < 0.02deg                   | < 0.02deg                   | < 0.02deg                   |
| MAX. PROMPTER SIZE              | None                        | Max. 15"                    | Max. 19"                    | Virtually unlimited         |
| WEIGHT PAN/TILT HEAD            | 5.0 kg (11lbs)              | 9.1kg (21lbs)               | 22.6 kg (50lbs)             | 32.6 kg (72lbs)             |
| LENS SUPPORT                    | Analog, Digital             | Analog, Digital             | Analog, Digital             | Analog, Digital             |
| POWER REQUIREMENT               | 48V DC brick<br>100-240V AC | 48V DC brick<br>100-240V AC | 48V DC brick<br>100-240V AC | 48V DC brick<br>100-240V AC |
| TRACKING FOR VS/AR              | No                          | No                          | No                          | No                          |

| VR-READY PT HEAD SPECIFICATIONS |   |                             |                               |                             |
|---------------------------------|---|-----------------------------|-------------------------------|-----------------------------|
|                                 | VR0   | X350                        | VR100                         | VR600                       |
| MAX. NET* PAYLOAD               | eSensor: 35 kg (77lbs)<br>eMagnum: 95 kg (209lbs)   | 6.8 kg (15 lbs)             | 20 kg (44 lbs)                | 57 kg (125 lbs)             |
| MIN.- MAX. PAN/TILT SPEED       | Manual  | 0.01 to 45°/sec             | 0.001 – 60 °/sec              | 0.001 – 90 °/sec            |
| PAN/TILT REPEATABILITY          | Manual  | ±0.05deg                    | < 0.02deg                     | < 0.02deg                   |
| MAX. PROMPTER SIZE              | None  | None                        | Max. 12"                      | Max. 20"                    |
| WEIGHT PAN/TILT HEAD            | eSensor: 6.5 kg (14.3lbs)<br>eMagnum: 19 Kg (42lbs) | 5.3 kg (11.7 lbs)           | 15 kg (35 lbs)                | 25 kg (55 lbs)              |
| LENS SUPPORT                    | Digital   | Analog, Digital             | Digital                       | Digital                     |
| POWER REQUIREMENT               | 24 V DC brick<br>100-240 V AC                       | 48V DC brick<br>100-240V AC | 24 V DC brick<br>100-240 V AC | 48V DC brick<br>100-240V AC |
| TRACKING FOR VS/AR              | YES   | YES                         | YES                           | YES                         |

# **ROSS** Robotics

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Ross Video has a complete range of technical services available to ensure that your Ross Robotics 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 production 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.

Your Ross Robotics 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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## ROSS VIDEO LIVING LIVE!

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Augmented Reality & Virtual Sets

Sport & Live Events

Legislative

Mobile Production

House of Worship

Education

Corporate

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Production Switchers

Motion Graphics & Clip Servers

Replay & Production Servers

Robotic & Camera Systems

Control Systems

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News, Live & Social Production Management

Asset Management & Storage

### SERVICES

Creative Services

Mobile Production

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