

VR_6

Motion Control Remote Head



- Loads up to 20 kg
- Dual Axis Slip Rings
- HD through Slip Rings option
- Integrated Camera CCU Data
- Integrated Lens Drive
- High Dynamic Range
- Repeatability better than 0.003deg.
- Virtual Reality capable
- Time Lapse and Stop Frame capable

The new **VR_6 Remote Head** is an extremely accurate, live action or motion controlled remote head for the most demanding applications. Our unique, automatic calibration routine, each time the head is powered up gives an absolute accuracy of better than 0.01 deg. and a repeatability of better than 0.003 deg. to any position over the full 360deg. rotation in both axes. This is made possible using 20 bit resolution for both pan and tilt axes.

All power and signals are routed through the slip rings which are fitted to both axes. Our **HD-through-slip-rings** technology delivers HDSDI on the base. Power, genlock, video, CCU data, control data, etc. are also routed via the slip rings.



The standard speed range is from 360deg. over 8 hours to 90deg/sec. For very fast applications this can be speeded up. The **VR_6** can be fully proportionally controlled from a joystick or used in motion control modes. In Motion Control mode all parameters are individually adjustable, ramp up, top speed, ramp down, for each axis, including zoom. Focus position is also controlled. Up to 99 moves and positions can be stored in the unit.

It can also be used for 'Time-Lapse' shots or for 'Stop-Frame' animation. In either of these modes the final playback speed can be previewed as a real-time move before setting it to perform the recording of the shot.

Mechanics

The **VR_6** is machined from solid billets of Aluminium Alloy. Once assembled the combination of deep machinings, diagonal ribs and box section construction make it extremely rigid and capable of delivering tight shots on long lenses. Mechanical backlash is extremely low and compensated in the electronics. Clutches are fitted on both axis to aid rigging and protect the servo gearboxes from damage. The tilt clutch is externally adjustable to aid camera balancing and has a hollow shaft to allow cable routing. The unit can be C of G balanced for perfect control.

Data Control

Control data is sent using RS485 which allows ranges of over 1km on twisted pair cable. For camera control this is converted to the appropriate camera protocol inside the head for communication with the camera. This can be RS232, RS485, LANC or many other standards.

A single Bradley Engineering system can support up to 99 cameras, each with individual control over the same data path.

Camera & Lens Control

Various camera and lens protocols can be programmed into the **VR_6** enabling full remote control over the single serial data link.

Alternatively, 4 additional circuits are provided for proprietary CCU control when required.

A 12v @ 3A camera PSU is also built into the unit. This derives power from the main input for the head.

Two 12 pin Hirose lens control sockets are fitted on the front of the camera support saddle. Other sockets are fitted on the rear. This arrangement ensures that the camera and lens cables do not interfere with the movement.



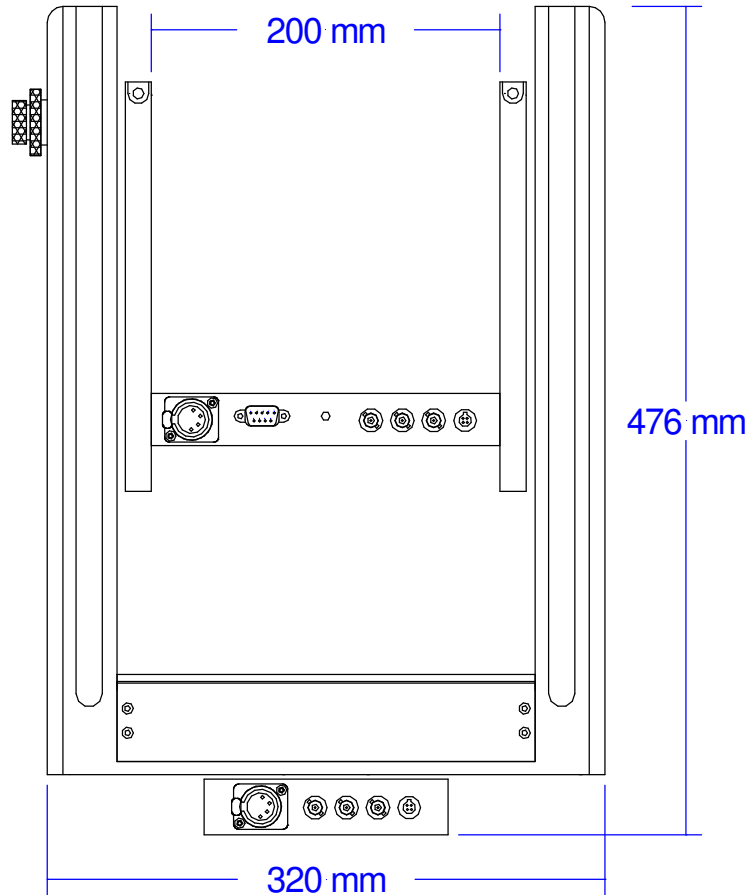
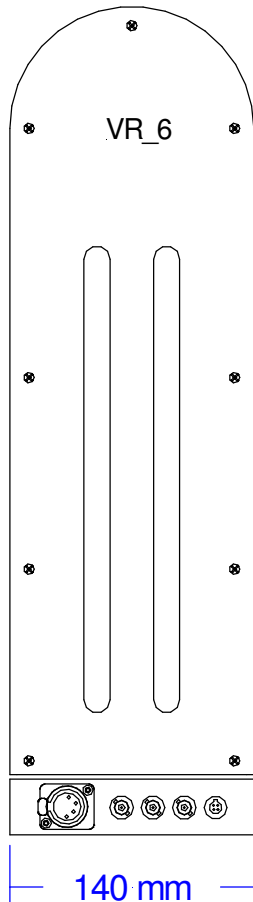
A tally light is fitted to the front with additional outputs on the rear. Internal drivers are provided for digital or analogue lens control and are routed to the lens control sockets.

Status Display

On the side of the unit is an LCD display showing status information and settings. This displays the head ident number and also shows other information, eg: voltage, transmitted functions, errors, etc.

Dimensions

VR_6 Remote Head



Support Equipment

There is a full range of additional equipment available to complement any remote system;

Data repeaters, Data Splitters, Joystick Controllers, Camera RCPs, Data Routers, Auxiliary Interface units, Radio Data Transmitters, etc.



Multi Function Controller



Motion Controller

Specifications

Weight: 8k g
Capacity: 20 kg
Power: 12 - 18v @ 5A (max.)
Data: RS 485

Base Connections:

XLR4	- Power & Data input
BNC	- Genlock in
USB	- Advanced PC control & factory setups
Dsub 15	- Component out / CCU data in
BNC	- HDSDI out

Saddle Connections:

XLR4	- Regulated camera power
3 x BNC	- Pr, Y, Pb
Dsub 9	- Data & Power out
Hirose 4 pin	- CCU data
Hirose 12 pin	- Lens control #1
Hirose 12 pin	- Lens control #2
BNC	- Genlock

Specifications subject to change without notice

David Bradley Engineering Ltd - www.bradeng.com

