

## FH-155 & FHR-155

Heavy Payload Robotic and Manual Heads



## Powerful support for superior productions

- + Deliver high quality output
  - Smooth camera and lens motion control; near silent when moving
- Create the production you choose
  - Versatile design with manual, VR/AR and integrated StarTracker options
- + Ensure consistent production values
  - High repeatability and accuracy at all speeds; optional real-time roaming pedestal tracking with no calibration
- + Gain long-term peace of mind
  - Ultra-reliable communications protocol compatible with current & future Vinten developments





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#### Powerful support for superior productions

Vinten's heavy payload robotic heads are designed to ensure that larger camera/lens/prompter packages don't limit your production values.

Both 155 heads combine sophisticated software and mechanical engineering to deliver exceptionally accurate and smooth movement. Operators can have total confidence in the heads' capabilities as the system will deliver remarkable control and repeatability at all speeds.

The 155 heads have a lighter weight construction, and a 3 port Ethernet switch built-in to simplify integration with robotic pedestals and IP prompting equipment. Designed to be near silent when moving, the heads are ideal for environments with ultra-critical noise limits.

For studios requiring full flexibility, the FH-155 includes a manual mode of operation with continuously adjustable servo controlled drag offering smooth, intuitive pan and tilt movement. The drag system is powerful enough to manage even the heaviest payloads and switching between robotic and manual mode can be done either at the head or controller.





StarTracker camera and electonics mounted inside head.

### VR/AR options including integrated StarTracker

VR variants of the 155 heads deliver data in 22 bit accuracy to ensure precise rendering by the Virtual Reality engine. Where floor movement is required an optional StarTracker optical camera tracking system can also be built into the heads to create a sleek, integrated system. This will track both manual and FP-188/210 pedestals anywhere in the studio, providing an absolute reference that is drift-free and removes the need for homing operations after the initial calibration.

Create a production that will engage your audience for longer with high quality output supported by Vinten.



# **Technical Specification**

	FH-155	FHR-155
Part number	V4155-0001	V4155-0011
Physical Data		
Max. payload	70 kg (155 lb)	70 kg (155 lb)
Cradle	Standard	Standard
Height	490 mm (19.3 in.)	490 mm (19.3 in.)
Length	436 mm (17.2 in.)	436 mm (17.2 in.)
Width	235 mm (9.3 in.)	235 mm (9.3 in.)
Weight	22.5 kg (50 lb)	22.5 kg (50 lb)
Rated load inertia	7.5 kg m2 (178 lb ft2)	7.5 kg m2 (178 lb ft2)
Operating Data		
Temperature range, IP	+5°C to +40°C (+41°F to +104°F), IP40 non-condensing	+5°C to +40°C (+41°F to +104°F), IP40 non-condensing
Motor noise	41dBA @ Max speed	41dBA @ Max speed
Tilt range	±50° (payload dependent)	±50° (payload dependent)
Pan range	359°	359°
Angular velocity [min]	0.05°/s	0.05°/s
Angular velocity (max)	60°/s	60°/s
Angular acceleration (typical)	60°/s²	60°/s²
Angular acceleration (peak)	120°/s²	120°/s²
Shot Recall Repeatability	±60 arcseconds (±0.016°)	±60 arcseconds (±0.016°)
VR System Resolution Accuracy	22 Bit, >0.01° *where fitted	22 Bit, >0.01° *where fitted
Manual control	Yes	No
Drag	Continuous Drag Adjust- ment, Servo Controlled	No
Lens control	Full-servo Canon and Fujinon lenses	Full-servo Canon and Fujinon lenses
Network	IP Ethernet, RJ45	IP Ethernet, RJ45
Genlock	Black burst/tri-level, Micro BNC	Black burst/tri-level, Micro BNC
Aux port	26 pin (configurable)	26 pin (configurable)
VR tracking data output	Option, Ethernet UDP or Serial RS232/422	Option, Ethernet UDP or Serial RS232/422
Electrical Data		
Power consumption	175W	175W
Power input	Autoranging 100–240V AC, 50/60 Hz	Autoranging 100–240V AC, 50/60 Hz





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Optional Variants		
	FH-155	FHR-155
Head with integrated StarTracker	V4155-0002	V4155-0012
Head with ultra-high accuracy 22 bit encoder	V4155-0003	V4155-0013
Head with StarTracker and 22 bit encoder	V4155-0004	V4155-0014
Mounting supports and adaptors		
Vinten HD Quickfix® adaptor		3490-3
Mitchell Centre Screw		3724-3
Vinten HDT-1 single-stage tripod		3901-3
Vinten HDT-2 two-stage tripod		3902-3
User-replaceable parts		
Fuse (rating: T3.15A, 250V AC)		C301-092
Power connector (Neutrik NAC3FX)		C003-439
Power cable (2 m/6.6 ft, with IEC plug)		V4101-5008
Vinten spanner		J551-001



