

RB06VH4

Upright Robotic Pan and Tilt Head System

The SEEDER RB06VH4 vertical robotic pan & tilt head system adopts an L-shaped robotic pan-tilt head, enabling intelligent and automatic shooting. Designed for professional broadcast-level production, it is ideal for real-scene and virtual production (AR, VR, XR, MR) in studios or live event environments. The robotic head ensures smooth motion starts and stops without any shake, delivering high-quality footage. Operating at <20 dB, meeting the demands of professional studios.



Applications

1. Enables Automated Camera Operation
2. Standardizes opening and closing shots for news & feature programmes
3. Ensures high precision for combined live-action & virtual production
4. Provides professional tracking data for virtual production at large live events
5. Enables automated camera positions in OB vans & large studios
6. Provides telephoto image stabilization for UHD camera operation
7. Minimizes human shooting errors for high-profile live productions
8. Enables smooth remote camera motion over the network

Basic Functions		
Built-in System	Embedded OS; standalone operation without an external control panel	
Motion Range	5-axis motion: Pan, Tilt, Zoom, Focus, Iris	
Mounting Method	Standard and Inverted Mounting	
Robotic Head	L-shaped Robotic Head	
Mounting Interface	100 mm bowl, dovetail clamp	
Start/Stop Anti-shake	Anti-shake for rapid start/stop	
Acceleration/deceleration	Automatic acceleration/deceleration based on motion position and duration; smooth 16-point curved motion	
Position Memory	Permanent storage of preset motion and tracking positions	
Motion Path	Automatic motion path planning	
Max. Camera Height	Adjustable according to tripod or pedestal	
Auto Tracking	Pan-tilt head automatically tracks the primary subject	
Safety Limits	Pan; Tilt — 4-direction protection	
Safety Power Switch	Main chassis power button	
Backup Power	Supports V-mount professional battery power	
Scene Sequence Combination	Motion trigger at any point within sequences & scenes; freely combinable sequences for flexible operation	
Flexible Motion Control	Motion interruption with target switching; manual/auto pause; adjustable dwell time	
Loop Timing Control	Seamless continuous looping; per-sequence independent loop/reverse settings; high-precision countdown timer	
Advanced Tracking Capability	HD-SDI input; CPU-based face tracking; reduced hardware dependency; improved shooting performance	
Safe Collaborative Control	Multi-console coordinated control with priority management	
VR Tracking Specifications		
Electronic Leveling	Electronic leveling system for the robotic head	
Virtual Tracking Accuracy	23-bit absolute encoder; 8.3M/360°; <0.000043°	
Tracking Sync	Supports BB and 3G/1.5G/SD-SDI reference input with loop-through and internal sync	
Tracking Output	3-way directional UDP output supported	
Movement Specifications		
Head Pan	±170°, 0–10°/s, accuracy 0.001°	
Head Tilt	±55°, 0–10°/s, accuracy 0.001°	
Basic Specifications		
Third-Party Control	Free standard TCP/IP control protocol	
Scene backup	Scene file import/export/backup	
Operation monitoring	Long-term system log recording and storage	
Operating Noise	<20 dB	
Motion Storage	32 programs × 16 sequences × 16 scenes = 8192 scenes	
Keyframes per Sequence	16, supporting 16-point curvilinear motion	
Head Payload	6 kg	
Total Weight	4.1 kg	
Input Voltage	90–264 V	
Maximum Power	50 W	
Configuration list		
1. L-shaped omnidirectional robotic pan and tilt head ×1 set		
2. Robotic control software ×1 set		
3. Control cables ×1 set		
Optional Feature	Model	Description
Tracking Output	RBVR	Directional UDP 3-channel tracking output supported
AI Auto Tracking	RBAI	HDSDI input from the primary camera with AI face and skeletal tracking for low-latency automatic camera tracking
Control panel	RBCS300、RBCS300PRO、RBCS1	RB Series control panel
Scene Composition Snapshots	RBCS300PRO	Supports scene preset composition snapshot capture
AI Module	RBAI+	Supports Bluetooth app control and voice control

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Ordering Information

Product Model	Product Name
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