

VIRTUAL STUDIO PEDESTAL SYSTEM

TP200VR/300VR SYSTEM

VR Data

SHOTOKU VR Data Protocol D1 by RS422 (PAN / TILT / ZOOM / FOCUS / X / Y / Z) with X-Y Tracking

FEATURES

- Lightweight Two Stage Pneumatic VR Pedestal : TP200VR
- High Resolution Robust EFP VR Head: SX300VR
- Highly Accurate, Real-Time VR Data Output
- Mechanical Pan/Tilt/Zoom/Focus/X/Y/Z Tracking
- Fast & Simple Referencing using Origin Sheet on Studio Floor
- Any Studio can become a Virtual Studio
- Unlimited X-Y Tracking Area
- RS422 Serial Data Output
- Industry Standard Data Protocols
- Compatible with all leading Graphics Systems
- SPi-TOUCH 2-point Calibration (Optional)



3D VR tracking. Keep it simple.

Shotoku's TP200VR pedestal and SX300VR head combine to produce an industry-leading VR tracking system without compromise in accuracy or ease of operation. Both products offer Shotoku's well-known light-touch control and robust stability to match even the most demanding applications. Highly accurate Pan, Tilt, Zoom, Focus, X, Y and Height data output keeps the VR graphics system precisely synchronised to the camera's floor position, orientation and height.

Shotoku's long experience in the design, development and support of high performance VR tracking systems has provided a deep understanding of the unique demands of VR production. Tracking systems must be precise, but also highly reliable, simple to use, and with full broadcast quality operation at all times. The TP200VR/300VR system meets all these challenging demands in a lightweight, cost effective package requiring no complex set-up or specialist operations. Minimal user intervention is required, so the VR tracking system becomes effectively invisible, enabling the operator to focus entirely on camera operation rather than the tracking.

Zoom and Focus data is gathered directly from VR-ready lenses or Shotoku's own externally mounted lens encoder units for existing non-VR ENG lenses.

A simple reference tile marks the home position and the pedestal is moved on and off the tile for a reference to be made. A single, clearly identified, hardware push-button is all that is required to initiate the reference process. From then on the system constantly tracks all axes of movement and provides the VR graphics system with a single, combined position and orientation of the camera along with lens position data. Tracking data is provided to the VR Graphics system in industry standard protocol formats supported by all leading VR systems.

SPECIFICATIONS

Model	TP200VR/300VR System
System Payload	40kg / 88lbs
System Max. Height	1,754mm
System Min. Height	984mm
System Weight	114kg / 251lbs
VR Pan & Tilt Head	SX300VR
Head Payload	40kg / 88lbs
Pan Range	±360°
Tilt Range	±90°
Counterbalance	Continuously Adjustable Perfect Counterbalance
Pan & Tilt Drag	Continuously Adjustable VISCAM Fluid-Leaf System
Camera Fixing	Two-direction Sliding Quick Release Plate with 2 pcs of 3/8" screw
Pan Bar	Two Telescopic Pan Bars (TJ-60) are included
Dimensions	288mm(W) x 235mm(H) x 155mm(D)
Weight	9.5kg / 20.9lbs
Mount	M40 Mini Mitchell
Pan Resolution	640,000 counts per 360°
Tilt Resolution	640,000 counts per 360°
Data Box Connectivity	SHOTOKU SPi-4 TO-25

SPECIFICATIONS

VR Pedestal	TP200VR	
Mount	M40 Mini Mitchell(for SX300VR)	M70 Mitchell(for TE-23VR)
Max. Payload		80kg / 176lbs
Max. Height	1,510mm / 4'11"	1,525mm / 5'
Min. Height	740mm / 2'5"	755mm / 2'6"
Stroke		770mm / 2'6"
Tracking Width		1,015mm / 3'10"
Transit Width		898mm / 2'11"
Weight		98kg / 215.6lbs
Cable Guard Adjustment Range		1mm ~ 23mm
Wheel Diameter		126mm / 5"
Steering Ring Diameter		660mm / 2'2"
Accuracy(Origin Setting)		X-Y-Z: below ± 5 mm, θ : below $\pm 0.1^\circ$
Accuracy(Travelling)		below $\pm 1\%$ of travel distance
Accuracy(Height)		below 0.2mm
X-Y Reset Time by Origin Sheet		within 5 seconds
VR Data Box	SPI-4 TO-25	
Input Voltage		DC12V
Temperature		0°C - 40°C
Humidity		MAX. 85%
Dimensions		145mm(W) x 150mm(H) x 40mm(D)
Weight		0.42kg / 0.93lbs
Input Signal		CAMERA SYNC, PAN / TILT, ZOOM / FOCUS, PEDESTAL(X-Y-Z)
Output Signal to Graphic Computer		VR Data: SHOTOKU VR Data Protocol D1 by RS422 (PAN / TILT / ZOOM / FOCUS / X / Y / Z)
Output Data Speed		38,400bps
VR Data Processing Time		Below 1msec(1/1000 sec)
Power Supply for SPI-4 TO-25	Power Supply TO-26	
Output Voltage		DC12V
Input Voltage		AC85V-AC250V
Dimensions		145mm(W) x 150mm(H) x 40mm(D)
Weight		0.71kg / 1.57lbs
Standard Cable	Standard Cable Set 1	
		Head, B.B., VR Data Cable 10m
Lens Position Data	TY-05	
Lens Encoder Unit		TY-05C for Canon Portable Lens, TY-05F for Fujinon Portable Lens For zoom/focus virtual encoder built-in lens of Canon & Fujinon, SHOTOKU Lens Interface Cable (" I/F Cable ") is available with SPI-4 TO-25.
X-Y Calibration Tool	Black & White Origin Sheet	
Dimensions & Colour		t1.0 x 300 x 600 (Black): 1 sheet, t1.0 x 300 x 900 (Black): 1 sheet t1.0 x 300 x 900 (White): 1 sheet
OPTION	SPI-TOUCH TO-32	
2pt Calibration System		2nd X-Y origin resetting method (2-points calibration method) by pan & tilt angle VR data offsetting by cameraman is available