VR SHOTOKU X-Y TRACKING VR DOLLY CRANE SYSTEM FOR VIRTUAL STUDIO

TK-53LVR/TI-04VR SYSTEM & TK-53VR/TI-04VR SYSTEM

SHOTOKU is the only VR Tracking equipment maker in the world providing true X-Y tracking VR Dolly crane systems. The TK-53LVR/TI-04VR System is the top model among the SHOTOKU VR crane product range.

VR Data

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

FEATURES

1. Vibration-free Rigid Twin Arm Structure
2. Pan Bar Control Unit for Optimal Pan & Tilt Operation
3. One-man Operation (camera & crane arm)
4. X-Y Tracking VR Steering Dolly calibrated by Origin Sheet on studio floor ONLY
5. Quick Origin Point Resetting
6. Unlimited X-Y Tracking Area , No Restriction by Min. Ceiling Height
7. No Target on Ceiling/Floor/Wall , No Infrared Sensor, No Affection to Lighting Arrangement (Any studio can be virtual studio very easily)
8. Reliable , Accurate & No Delay VR Data Output to Graphic Computer by RS422 Cable
9. SPi-TOUCH 2pt Calibration

photo: TK-53LVR/TI-04VR System

SPECIFICATIONS

Model	**TK-53LVR/TI-04VRsystem**	**TK-53VR/TI-04VRsystem**
System Overall Length	4,861mm	4,011mm
System Max. Lens Axis Height	3,850mm	3,099mm
Total Weight	approx. 560kg / 1,232 lbs	480kg / 1,056 lbs

Remote VR Head	**TG-13VR**
Max. Payload	10 kg / 22 lbs
Head Max. Speed	90°per second
Camera Pan Range	240°
Camera Tilt Range	+ 60° / - 90°
Head Pan Resolution	86,400 counts per 360°
Head Tilt Resolution	86,400 counts per 360°

Crane Arm	**TK-53(L)VRII**
Arm Pan Resolution	640,000 counts per 360°
Arm Tilt Resolution	640,000 counts per 360°

Pan Bar Operation Unit	**TK-53(L)VRII Pan Bar Operation Unit**
Pan & Tilt Drag	Continuously adjustable VISCAM Fluid-Leaf System

VR Dolly	**TI-04VR**
Accuracy (Origin Setting)	X-Y: below ±5mm, θ: below ±0.1°
Accuracy (Travelling)	below ±1% of travel distance
X-Y Reset Time by Origin Sheet	Within 5 seconds
Resolution	X-Y: 0.02mm θ: ±0.01°

VR Data Box	**SPI-3 TO-18 for Crane**
Input Voltage	24V
Temperature	0°C - 40°C
Humidity	Max. 85%
Dimensions	200mm(W) x 45mm(H) x 150mm(D)
Input Signal	CAMERA SYNC, PAN/TILT, ZOOM/FOCUS, CRANE PAN/TILT, VR Dolly(X-Y)
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-3 TO-18	**Power Supply TO-21**
Output Voltage	24V
Input Voltage	AC 85V-265V

Lens Position Data	**TY-05**
Lens Encoder Unit	TY-05C: for Canon Portable Lens, TY-05F: for Fujinon Portable Lens

Notes: For zoom/focus virtual encoder built-in lens of Canon & Fujinon, SHOTOKU Lens Interface Cable (" I/F Cable ") is available with Lens I/F BOX TO-22.

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

2pt Calibration System	**SPi-TOUCH TO-32**
	2nd X-Y origin resetting method (2-points calibration method) by pan & tilt angle VR data offsetting by cameraman is available