



Overview

Product name	STEVE-6DL
Description	A hexapod (6 degrees of freedom) for OIS tests of digital cameras with accurate movement and high velocity, software-controlled, CIPA-compliant (the hexapod is a 3 rd party product. Image Engineering is not the manufacturer of the hexapod).

Features

Vibration Unit (Hexapod) as provided by the manufacturer

Active axes	X, Y, Z, θ_X (roll), θ_Y	$_{f}$ (pitch), θ _z (yaw)
Travel range*	X, Y: Z: θ _x , θ _y : θ _z :	±50 mm ±25 mm ±15° ±30°
Single-actuator design resolution	0.5 µm	
Min. incremental motion	X, Υ: Ζ: θ _X , θ _Y , θ _Z :	3 μm 1 μm 5 μrad
Backlash	X, Y: Z: θ _X , θ _Y : θ _Z :	3 μm 0.2 μm 20 μrad 30 μrad
Repeatability	X, Y: Z: θ _X , θ _Y : θ _Z :	±0.5 μm ±0.4 μm ±7 μrad ±12 μrad
Max. velocity	X, Y, Z: θ_X , θ_Y , θ_Z :	50 mm/s 600 mrad/s
Typ. velocity	X, Y, Z: θ_X , θ_Y , θ_Z :	30 mm/s 300 mrad/s



STEVE-6DL datasheet

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	 14.74	1.27% 1.110	

Accessories	•	Base plate with additional quick-release plate (1/4" and 3/8" UNC screw)
	•	iQ-Mobilemount to mount mobile devices on STEVE-6D

Software

System requirements	PC with Windows 7 operating system (or higher) Ethernet port	
Functions	 Vibration control module: Sine wave generator CIPA waveform included Custom waveforms iQ-Trigger/iQ-Trigger-T control Data analysis module: TE261 image analysis CIPA standard DC-011 method Graphical presentation of results Export of numerical results and PDF reports 	
API (C++)	Available as a separate option: iQ-Drive API, version 2.0.0	

General description hardware

Power supply/consumption	110 V / 230 V, 200 W
Ports	1 x Ethernet port for connection of Controller Unit to PC 1 x I/O port for iQ-Trigger/iQ-Trigger-T 1 x port for power supply
Dimension [W x H x D]	348 x 328 x 348 mm (hexapod) 320 x 103 x 150 mm (Controller Unit)
Weight	12 kg (hexapod) 2.8 kg (Controller Unit)
Camera mount	Quick-release plate with $\frac{1}{4}$ and $\frac{3}{6}$ UNC screw
Operating conditions	5 - 40 °C
Contents	Hexapod, quick-release plate, controller unit, cable, adapter, STEVE-6D software, user manual iQ-Mobilemount, iQ-Trigger (iQ-Trigger hydraulic finger, L-shaped holder, Manfrotto plate 405, iQ-Trigger USB-Box, wired remote control, power supply, USB cable, iQ- Trigger API)

Requirements of the device under test (DUT)

Max. DUT height/depth	Unlimited (refer to max. DUT weight)	
Max. DUT weight	10 kg (base plate horizontal) 3 kg (any orientation)	
Holding force, de-energized	15 N (base plate horizontal) 5 N (any orientation)	

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Miscellaneous

Certificate	Hexapod CIPA certified for DC-011
Standard	Slanted edge analysis according to ISO 12233:2014 IS performance calculation based on CIPA DC-011
Additional	STEVE-6D mounting for IS tests: Honeycomb Breadboard; stable, heavy table

* The travel ranges of the individual coordinates (X, Y, Z, θ_X , θ_Y , θ_Z) are interdependent. The data for each axis in this table shows its maximum travel, where all other axes are at zero positions. The available travel may be less if the other linear or rotational coordinates are not zero.

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