STEVE

STABILIZATION EVALUATION EQUIPMENT

GENERAL INFORMATION

STEVE is designed for qualitative analysis of image stabilizing systems under reproducible, realistic conditions. The basis for these conditions is provided by the studies of physiological properties of human handshake and the functionality of modern stabilizing systems.

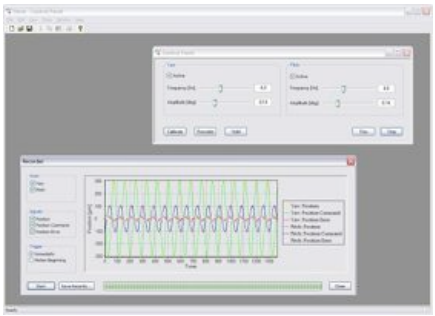
Cameras up to 5 kilograms can be mounted on the device. An adjustable KAISER slider allows to move the camera forth and back to the correct position. Justifying vertical position is also possible. The moving frequency and the angle can be chosen within the range (healthy) human tremors are occurring, too. The frequency up to 12 Hz and the angle up to 0.5 degrees for yaw axis and 0.5 degrees for pitch can be set. It is possible to move just yaw or pitch or to move both of them together. The frequency and angle can be set for each direction individually. A well-defined movement in yaw and pitch axis is produced and logged. The type of movement can be as simple as a sine wave or an individual setting e.g. to simulate a real handshake.

The device is delivered with camera mount and a controller box with a USB interface to the computer. To run the software provided with STEVE a Windows computer with a USB interface is required. A solid table or pedestal is useful.

The Slanted Edge Chart (TE 261) is excellent to be used in combination with STEVE. By measuring the width of the edge the effectivity of an antishake-mechanism in a camera device can be determined. One image is done moving the camera without antishake and one image is done moving the camera with antishake. If the width of the slanted edge reduces to 1/4 for example this would have happened using a shutter speed of 1/4 of the time too. In this case the antishake is like „winning“ two f-stops.

SCOPE OF DELIVERY

HARDWARE	SOFTWARE
• Vibration Unit • Controller Unit • Connecting Cables • Automatic Shutter Release Finger (optional)	STEVE Control Panel for Windows XP



TECHNICAL DATA

Hardware . Vibration Unit	
Movement Directions	Yaw (rotation about vertical axis) Pitch (rotation about horizontal axis)
Max. Amplitude	0.5 degrees (Yaw), 0.5 degrees (Pitch)* optimized for 0.1 – 0.2 degrees
Frequency Range	0.1 – 12 Hz** optimized for 4 Hz
Weight	approx. 15 kg
Dimensions (WxHxD)	70.5 x 35.5 x 27.5 cm

* when moving in both directions simultaneously the resulting amplitude will be greater than a single amplitude for each axis

** choosing the higher frequencies can lead to less precise movement or amplitude overshoot

Hardware . Controller Unit	
Power Supply	100-120 V (AC, 50-60Hz) 200-240 V (AC, 50-60Hz)
Power Consumption	max. 150 W
PC Interface	USB 1.1 (USB 2.0 compatible)
Cable Length	approx. 2m
Weight	6 kg
Dimensions (WxHxD)	30 x 40 x 15.5 cm

Software	
Operating System	Microsoft Windows XP with Service Pack 3 Microsoft Windows Vista (not tested) Microsoft Windows 7 (32 Bit and 64 Bit)
RAM	at least 512 MB (1 GB recommended)
3rd Party Software	Microsoft Visual C++ 2005 Redistributable Package* Driver for USB-to-Serial converter*

* Required 3rd party software is included in scope of supply