

Display Motion Artifact Test System

Motion Master™ Features

The Motion Master™ performs rapid measurements of Motion-Picture Response-Time (MPRT), Moving-Edge Blur (VESA 309-1), and other motion artifact measurements. The system software automates measurement of moving-edge blur at various combinations of gray-levels and stores the results on the PC for later analysis. The analysis portion of the software allows you to recall previously stored measurements, adjust measurement parameters and report the results as a 3-D graph or table of Extended-Blur Edge Time (E-BET) values.

Key Features

Easy to use: Simply align the camera with the display, adjust the lens magnification, focus and start making measurements.

Automated operation: Enter the list of gray-levels to measure and the software performs the measurements and stores the data automatically.

Accurate: The system includes Westar's T-Drive™ to provide a stable video source for accurate measurements.

Versatile: The CCD camera-based system allows measurement of motion artifacts on all display technologies: LCD, PDP, RPTV, CRT...

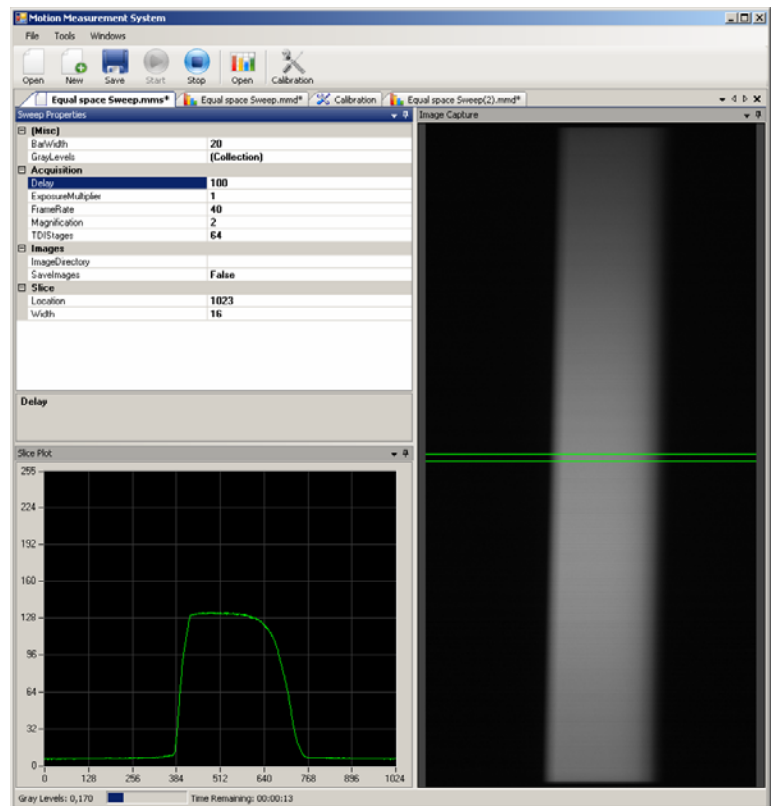
Reliable: With no moving parts, the system is more reliable than moving pursuit camera systems.

Motion Master™ Includes:

- PC with Frame Grabber Card
- Motion Master™ Software
- CCD camera
- Zoom Lens w/ photopic filter
- T-Drive™ Display Drive System
- Camera Tripod



Easy Measurement Set-up



Acquisition Interface captures images for later analysis

Call us at 636-300-5115 or e-mail us at sales@westar.com

Motion Master™ Specifications:

Component	Parameter	Specification
Sample Display	Working distance	>850mm (with std lens)
	Pixel pitch	>130um (with std. lens)
	Display horizontal resolution	>320 pixels
CCD Camera	Resolution	2048 X >2048 pixels
	Timing resolution	20us to 1ms (0.26ms to 0.52ms typical)
	Interface	CameraLink™
	Exposure time	>64ms
Software Output	Blur Image	Directory of gray to gray images
	Blur response curve	Filtered response curve, can be exported as comma delimited file
	EBET Table	Table of response in msec
	EBET Graph	3-D Graph, user selectable perspective
	Blur width measurement thresholds	User selectable (typically 10% and 90%)
Signal Generation	Drive System	Westar T-Drive™
	Video Interfaces	TMDS (DVI, HDMI digital), analog RGB, LVDS, parallel TTL
Utilities	System Power	120 / 220 VAC, 50-60 Hz;

Motion Master™ Edge-Blur Analysis Tool:

The screenshot shows the Motion Measurement System interface with the Edge-Blur Analysis Tool. Callouts highlight key features:

- User defined analysis settings:** A callout points to the 'Misc' settings panel, which includes fields for Acquisition Date (12/18/2006 1:02:17 PM), LevelHi (80), LevelLo (10), Lowpass Butterworth Filter (On), Cutoff Frequency (1000), and Order (3).
- Numeric results of EBET:** A callout points to the 'Response Times' table, which displays a grid of numerical values representing edge blur response times in milliseconds.
- Edge-blur profile:** A callout points to the 'Transition' graph, which shows a 2D plot of the edge-blur profile with a green curve and a blue baseline.
- Graphical results of E-BET:** A callout points to the 'Response Times Plot', which is a 3D bar chart showing the distribution of response times across the image area.

	0	42	85	128	170	212	255
0	0	13.0	13.8	14.1	14.1	14.1	13.8
42	25.8		21.1	19.5	19.5	19.6	20.3
85	33.3	30.2		28.1	27.9	27.9	27.3
128	34.9	32.3	30.5		29.2	31.0	32.3
170	36.7	35.4	33.9	31.8		34.4	34.9
212	37.2	37.0	35.2	34.4			40.4
255	34.4	33.9	33.1	34.6	33.9	38.6	