LED-Panel

Accurate camera timing measurements

The LED-Panel, now in its fifth version (V5), is a solution for measuring and analyzing all of the relevant timing features. It is also optimized to evaluate the autofocus performance of your digital camera.

Main Features

- Measure all timing parameters
- Multiple IR versions available
- Applicable to ISO 15781 and IEC 62676-5
- Command line interface and control software

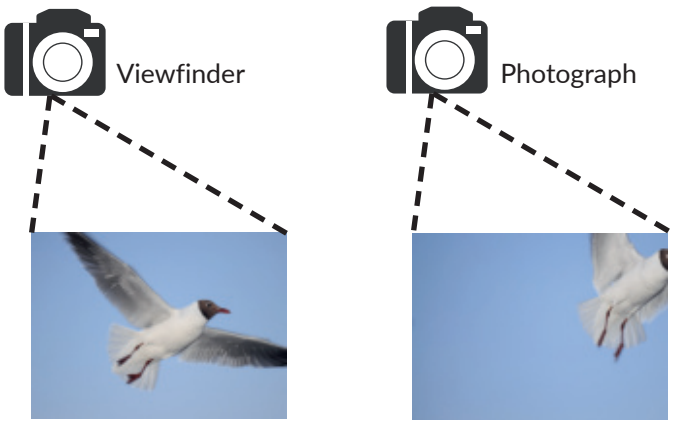
Software INCLUDED

API AVAILABLE

Standard COMPLIANT

LED-Panel IR and API

The LED-Panel IR expands the testing range to the infrared region. It is available with a peak wavelength of either 850 nm or 940 nm. We also offer the C++ API (as a separate option) to modify various LED-Panel functions for specific requirements.



Shooting time lag, subject missed

Timing measurement solution

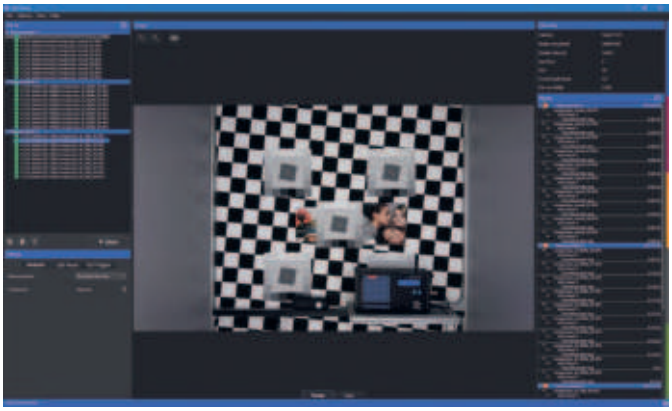
Timing measurement device

The primary function of the LED-Panel is to determine the most important timing values for a digital camera system. You can separately measure shooting time lag and shutter release time lag and then subtract them from one another to determine the precise autofocus performance of the camera.

The LED-Panel uses control software, command-line software, and a USB interface to control the device. The device consists of a 10 x 10 LED light board that can be adjusted for different frequencies to suit testing needs.

Measurable Parameters

- Shooting time lag
- Shutter lag with and without autofocus
- Autofocus time
- Negative shooting time lag
- Burst frame rate
- Display refresh rate
- Exposure time
- Rolling shutter speed



LED-Panel software

At a Glance	LED-Panel / LED-Panel VIS-IR
Principle	Array of LEDs to perform timing measurements on digital cameras
Number of LEDs	110 (array of 10 x 10 LEDs, 1 row with 10 LEDs for multiplying counts)
Manual control	LED-Panel: diffuse, peak wavelength 630 nm (red), viewing angle 100° LED-Panel (525): diffuse, peak wavelength 525 nm (green), viewing angle 50° LED-Panel IR (850): diffuse, peak wavelength 850 nm (NIR), viewing angle 80° LED-Panel IR (940): diffuse, peak wavelength 940 nm (NIR), viewing angle 90°
Operating mode	External trigger, internal single trigger, continuous trigger
Adjustable times	20 µs to 10 s (depending on measurement mode)
Maximum reading measurement time	1000 x of set time
LED running directions	Left to right, right to left, top to bottom, bottom to top
Frame Rate measurement frequency	Adjustable from 1.0 Hz to 200 Hz
Software system reqirements	PC with Windows 7 operating system (or higher) and USB port

LED-Panel-250331