MatchID Metrology beyond colors

Optimized and Synchronized Image Grabbing

Description

The MatchID Grabber is a module that allows you to optimize and record experimental images. The platform is open, allowing to use your own hardware. Dedicated tools ensure the quality of your images in terms of DIC performance, following the tagline of Metrology beyond colors.

Combined with the MatchID trigger box one can achieve the optimum spatial and temporal performance of your experimental setup for an unlimited amount of quasistatic cameras involved.



Open Platform

- Compatible cameras:
 FLIR USB3 Cameras
 AVT USB3 and GigE cameras
- DAQ:NI USB devices
- MatchID Hardware: Trigger box, and camera breakout (add 8 cameras)

Optimized Images

- ✓ Optimize light conditions using histogram and over exposure tools
- ✓ Live **camera noise** evaluation
- Camera alignment tools
- Speckle quality: real-time speckle analysis

Extra Features

- ✓ Real-time DIC
- ✓ Live Experimental Feedback
- Multi PC configuration for multi camera applications

- \checkmark Open platform, compatible with your own or MatchID hardware
- \checkmark Dedicated tools for optimizing image quality , designed for DIC only
- ✓ Live DIC functions for real-time DIC analysis
- ✓ Flexible hardware system, allowing and synchronizing for 10+ cameras



Optimized experimental images, by using dedicated tools:

- Live Histogram
- Over-exposure indication
- Live speckle analysis
- Camera alignment tools
- Live camera noise
- Lens focus tools
- Grid pitch tool



MatchID's Live Experimental Feedback (LEF) module allows seamless control of your test system, by directly feeding back DIC measurements in real time.

Apart from point tracking and extensometry, the LEF-module allows for real-time full-field DIC tests, giving you direct insights into the real-time evolution and behaviour of your experiments. Feedback can be done digitally (RS232) or analog (using MatchID Trigger box).

This enables the user to display full-field measurements in real-time, both in 2D as in Stereo experiments .





Using the MatchID Trigger box, a hardware timed, multi-camera setup can be achieved.

To process all data entering at the highest possible frame rate, multiple pc's can be used. All computers are controlled simultaneously via a master / slave configuration. All cameras are timed using one trigger box and a camera break out unit.



Multi-Camera Solution

Dedicated Tools