

Mixed-brand Imaging Systems

PIV, Micro PIV, Volumetric Velocimetry, PLIF, Shadow Imaging and Flow Visualization



Protect your investment by replacing only defective system components

If you have an unsupported PIV, Micro PIV, Volumetric Velocimetry, PLIF, Shadow Imaging or Flow Visualization system, we can help.

Modern Imaging systems are quite modular and as a result many hardware components are interchangeable between your current system and the Dantec Imaging software; DynamicStudio. Almost all Lasers and LEDs can be synchronized to image acquisitions from within DynamicStudio either via your current synchronizer hardware or using our state of the art Advanced Synchronizer. Most Scientific High Speed cameras and a huge variety of traditional low speed 'Double Frame' cameras have been integrated into DynamicStudio, enabling precise synchronization and image capture in the same software platform. For many legacy systems the only item required is the DynamicStudio software.

In case your hardware device is not supported by DynamicStudio and your project relies on it, we may even offer a custom implementation of this device into our software.

Upgrade path

- Protect your investment by replacing only the faulty or unsupported system components
- Most Time-resolved systems only need a software upgrade
- Many double frame camera systems can be supported by simply upgrading the frame grabber card
- Specific items can be implemented into the to our software platform DynamicStudio on request

Which system components can be retained?

Illumination Units: the most common light sources are Lasers or LEDs, both are based on 5V TTL pulses for synchronization and can be retained.

Cameras can be categorized into two groups, high-speed cameras that typically do not use frame grabbers, and Double Shutter cameras that in most cases use Framegrabber, USB3 or GigE as interface to the PC. DynamicStudio supports most high-speed cameras directly already. If your camera uses a framegrabber, you may only need to exchange the framegrabber for it to be usable in the Dantec software platform.

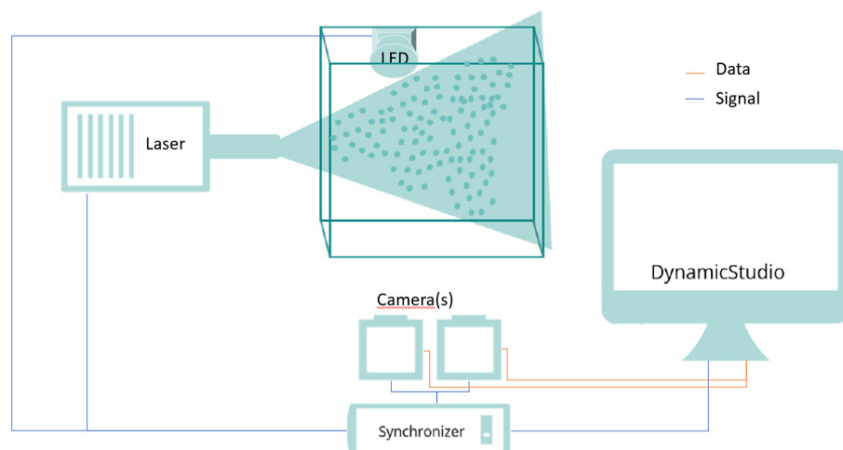
Image Intensifiers are controlled via TTL pulses and can be retained.

Microscopes are not interfaced to the software, so they can be retained without any problem.

Camera Accessories are a wide range of products such as lenses and filters. Most of these items can be retained.



Synchronization and PC: If your legacy system uses a Berkeley 575 synchronizer this device is already directly supported in DynamicStudio and can be retained. Alternatively, the Dantec Advanced Synchronizer can be added for systems using alternative timing units. The PC can be used if it is running on a 64-bit version of Windows 10 or 11 preferably with Intel CPU's and Nvidia GPU's.



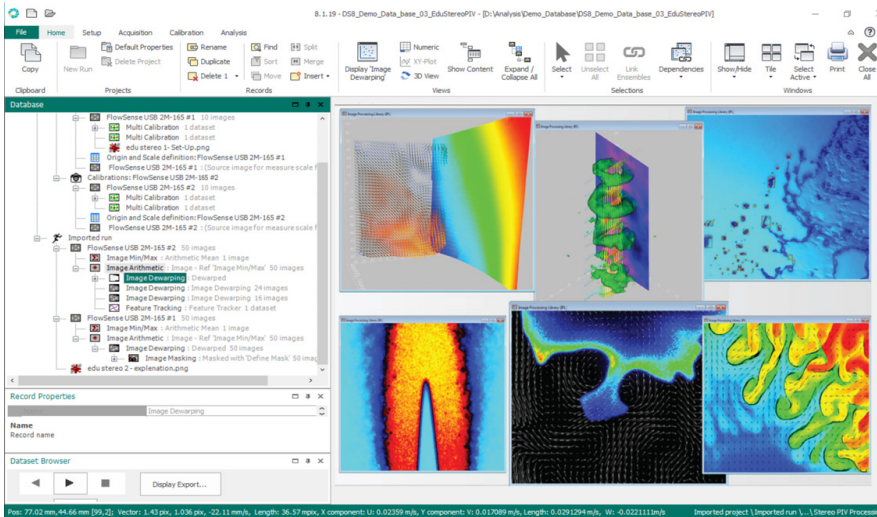
Main components of imaging systems, many of them are supported by our imaging software DynamicStudio.

Which Imaging systems can be upgraded and how?

DynamicStudio has synchronization, image acquisition and data processing routines for PIV, Micro PIV, Volumetric PIV, 3D PTV, PLIF, Shadow or Flow Visualization. Any of these systems can be upgraded and supported by DynamicStudio. To find out what is possible, please create a list of items you have, if possible including the name of the manufacturer of the OEM components, and contact one of our sales representatives.

DynamicStudio Scientific imaging software platform

DynamicStudio is a complete software platform designed to support a wide range of imaging measurements within fluid dynamics, solid mechanics, microfluidics, spray/particle analysis, mixing and combustion diagnostics, and flow visualization. Wizards and assistance tools guide the user to configure the hardware setup and optimize the image acquisition parameters.



Order information

The items needed for two typical systems where most hardware components can be re-used are listed below.

Framegrabber-based camera system upgrade

Item no.	Specification									
9086C9011	Upgrade kit from MixedBrand imaging systems, where all hardware except the frame grabber is supported by DynamicStudio already. Includes:									
	<table border="0"> <tr> <td>Framegrabber</td> <td>81C81</td> <td>CoaXpress12 Frame Grabber or</td> </tr> <tr> <td></td> <td>38A0617</td> <td>High performance Camera Link For other frame grabbers please ask your local sales Representative what may be possible</td> </tr> </table>	Framegrabber	81C81	CoaXpress12 Frame Grabber or		38A0617	High performance Camera Link For other frame grabbers please ask your local sales Representative what may be possible			
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	80S85	Liquid and Gas LIF Add-on for DynamicStudio								
	80S48	Shadow Sizing Add-on for DynamicStudio								

None Framegrabber-based camera system upgrade

Item no.	Specification	
9086C9021	Upgrade kit for imaging systems, where all hardware is supported by DynamicStudio. Includes:	
	Camera Device registration	80S301
	DynamicStudio Base package	80S57
	+ one Add-on of choice from	
	80S58	2D PIV Add-on for DynamicStudio
	80S85	Liquid and Gas LIF Add-on for DynamicStudio
	80S48	Shadow Sizing Add-on for DynamicStudio