

A New Level of Performance

Streams™ 5 Video Recording Software

Extreme performance for the most demanding recording apps

Stated simply, IO Industries Streams™ 5 is designed to handle all of the data recording requirements for an application.

Whether your needs are to record a single video camera in the lab, or 15 high-speed cameras at a rocket launch, Streams 5 has the capability. But Streams 5 is about much more than video recording. It provides simultaneous data recording from a variety of streaming devices, synchronizing these data streams using computer time, GPS time, or IRIG-B time. This makes Streams 5 a perfect match for apps such as airborne recording systems, where requirements often extend to recording data from multiple cameras, a GPS receiver, an altimeter, and a navigational instrument.

Loaded with easy-to-use, powerful features

The Streams 5 user-interface provides independent controls, operating status, and data viewing for each device in a consistent manner. Data can be viewed as instantaneous, time series, or numeric text for each device type, which in the case of a video stream, corresponds to single frame, thumbnail sequence, and pixel values.

Recording can be started and stopped using a variety of hardware and software triggering methods. Frame capture rates are selectable, and can be scheduled using scripts. Events of interest can be marked during or after recording for quick reference. Data management tools safeguard your data, while providing convenient access to recordings for playback and analysis.

Built on a wealth of experience

With over a decade of experience in designing video recording software to meet the needs of our customers, IO Industries has compiled a wealth of knowledge. Increasingly, application

requirements have tended towards the use of multiple video cameras, and a variety of other streaming devices. Our principal goal in designing Streams 5 was to develop a tool that could be used just as easily to record multiple cameras as it could be to record a single camera, and to provide similar accommodation for other streaming devices. To this end, we have succeeded. We believe you will be favorably impressed with Streams 5.

Compatible with high-performance hardware

Streams 5 ships with frame grabber drivers for many popular manufacturers, including IO Industries' own DVR Express® CLI60 and CLFC video recorder cards. This support means Streams 5 is compatible with most commercially available video cameras including high-speed CMOS cameras from Basler, Mikrotrotron, Photon Focus, Dalsa, VDS Vosskuehler, and others. A growing list of GPS receivers, IRIG-B receivers, and other streaming devices is also supported. Visit the IO Industries website for a list of compatible hardware.

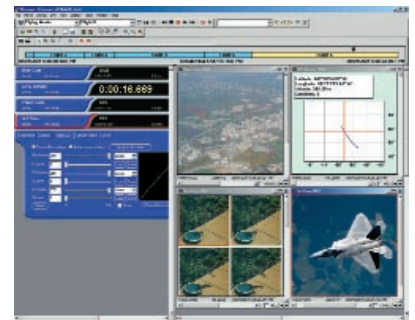
Applications in Science, the Military, Industry, and Entertainment

- General Video Recording
- PIV (Particle Image Velocimetry), 1D/2D/3D
- Remote Sensing
- Confocal Microscopy
- Industrial Process Recording
- Road and Rail Inspection
- High-Resolution Surveillance
- Projectile Recording
- Materials Testing
- Crash Tests
- Explosives Testing
- Special Effects Recording
- Sports Motion Recording
- Digital Cinema
- Computer Display (DVI output) Recording



Streams 5

Synchronized data recording for video cameras and other devices.



Streams 5 Highlights

- Real-time synchronized data recording to hard disk from multiple devices with synchronized playback
- Supports most analog and digital video cameras; GPS receivers; IRIG-B receivers; altimeters; IMU/INS devices; sound cards; and general-purpose data acquisition cards
- Synchronization of data streams using computer time, IRIG-B time, GPS time
- Automatic cataloging of recordings within video library provides quick access for playback
- Multiple triggering methods by hardware or software, with pre-trigger recording
- Event marking during or after recording
- Compressed or uncompressed video recording
- Image rendering techniques include programmable output lookup tables, Bayer color demosaicing, YUV to RGB, two point non-uniformity correction, and more
- Supports custom real-time image analysis during recording
- Image import/export to AVI, JPEG, TIFF, text, and raw binary files
- Networking support for control of multiple video recording workstations
- Scripting for automation of recording procedures

IO INDUSTRIES
The Experts in DVR Technology