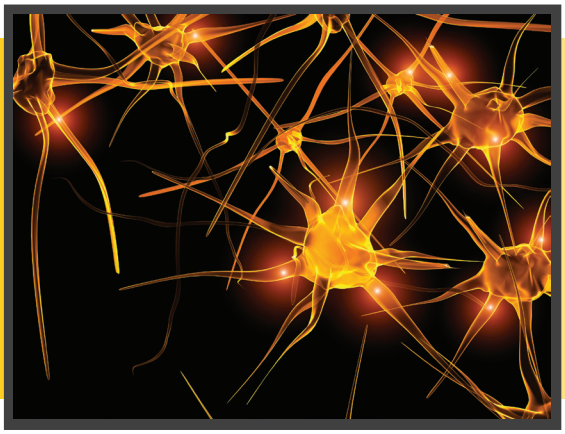
PINNACLE TECHNOLOGY

SYNCHRONIZED VIDEO



Pinnacle's **SYNCHRONIZED VIDEO SYSTEM** can record up to four simultaneous experiments on one computer. Our Sirenia® software automatically synchronizes recorded video with EEG/EMG, biosensor, and accelerometer data to provide an accurate visual representation of animal activity and behavior. The synchronized video package is compatible with all tethered and wireless Pinnacle hardware systems. Order it as an accessory to a new system, or easily integrate it into your current Pinnacle setup.

KEY FEATURES

Synchronize Video with physiological data

Supports color or grayscale

Compression options for optimal file size

Operates in low-light or no-light conditions

Flexible camera positioning

Easy system setup

COMMON USES

- CLASSIFY SEIZURE EVENTS
- VERIFY SLEEP STATES
- ANALYZE BEHAVIOR

ACQUIRE

Pinnacle's Sirenia® software uses frame-by-frame timestamping to synchronize video within 100 milliseconds for simultaneous EEG, EMG, or biosensor data.

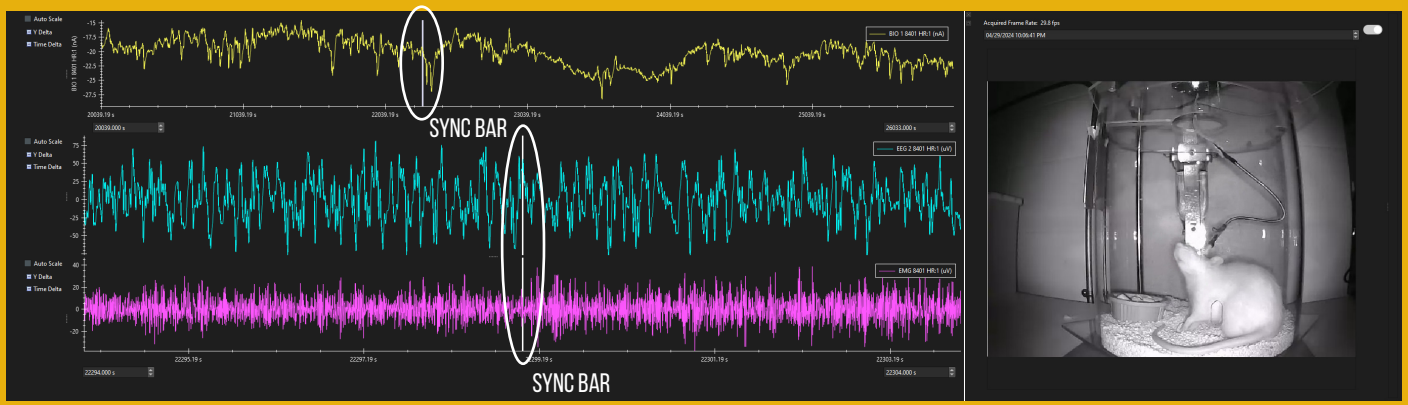
ANALYZE

The **Sync Bar** allows users to easily match the displayed video frame with corresponding data for accurate visual representation of animal activity.

MANAGE

Quickly extract and export key video segments for sharing, storage, or long-term archival. Export in WebM format for easy integration into presentations.

View data and video simultaneously on the same screen.



Captured video is displayed live on screen in conjunction with EEG/EMG, biosensor, and accelerometer data as it is streamed from the animal. In playback mode, video is synchronized with other recorded data, allowing EEG/EMG waveforms or biosensor activity to be analyzed along with an accurate visual representation of animal activity during data collection.

VIDEO SYSTEM

The video system consists of two components—an Acquisition Workstation and a USB camera package. Together, they provide everything you need to incorporate video capture into your research.

ACQUISITION WORKSTATION

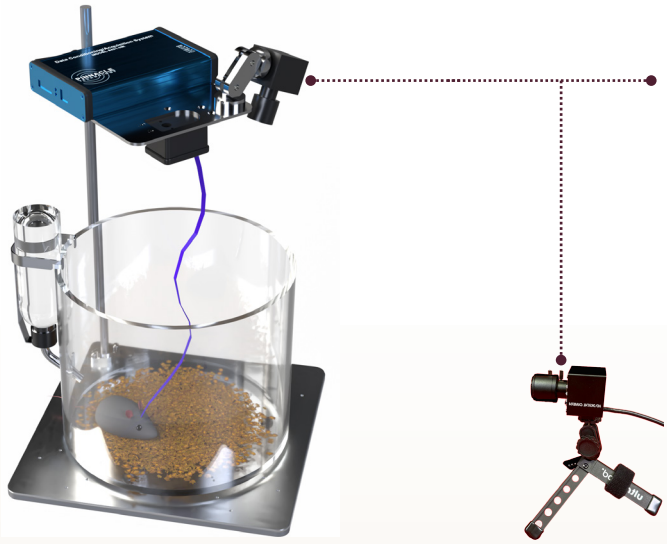
The Acquisition Workstation is a preconfigured package optimized for use with Pinnacle hardware.

This high-performance system ensures smooth operation of acquisition and analysis software. Twelve dedicated USB ports and a built-in power strip make setup simple and keep cables organized. Pre-installed Sirenia® Acquisition software synchronizes video with EEG/EMG and other physiological data. With strong processing power, ample storage, and optimized configurations, the system is ready for high-throughput experiments.

Current specifications are available at pinnaclet.com/synchronized-video.

USB CAMERA PACKAGE

Each USB camera package includes a camera, mounting accessories, and a Sirenia video license key.



USB CAMERA

The low-latency USB camera uses a single cable for both power and data transfer. A built-in IR source adapts to lighting conditions, delivering high-quality video even in low light or complete darkness. The camera connects directly via USB—no capture card required—and offers multiple mounting options, including tripod compatibility for low-angle recording.

CAMERA FEATURES			
Lens	2.8–12 mm variable (external)	**IR Source**	Integrated
Max Resolution	640 x 480 pixels	**Color/Grayscale**	Both
Max Frame Rate	30 fps	**Interface**	USB 2.1

SIRENIA® XY TRACKING

SIRENIA® XY TRACKING detects and analyzes animal movement within the cage. Users can monitor locomotor behavior in real time or from previously recorded video. The software can be calibrated for different cage types, supports both tethered and wireless animals, and is compatible with Pinnacle's sleep deprivation system. Features include customizable zone detection, quadrant analysis, and movement trajectory plots displaying recent activity.