

Synchronized Video for PiezoSleep™

Integrated video solution

The Synchronized Video module supports **up to 16** cameras, providing an easy-to-use platform for collecting synchronized video alongside PiezoSleep data

Versatile behavior analysis

The Video Annotation app allows efficient navigation and marking of the onset and duration of any visually observed behavior



Applications

Behavioral Phenotyping:

 Track abnormal motor behaviors such as tremor, stereotypies, scratching



Pharmacological Studies:

Monitor drug-induced behavioral changes

Data Quality Control:

- Verify animal well-being, housing conditions
- Resolve ambiguity in data

Epilepsy:

- Mark onset, duration, and severity of seizuresSleep:
- Verify sleep-wake state

System Highlights

Record up to 16 cameras in sync with PiezoSleep data

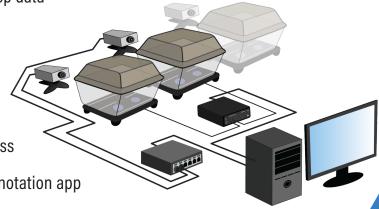
High resolution video (up to 1920 x 1080p)

Plug-and-Play setup via Power over Ethernet

Optional integrated infrared illumination

Standard video file formats for convenient access

Efficient behavior annotation with the Video Annotation app

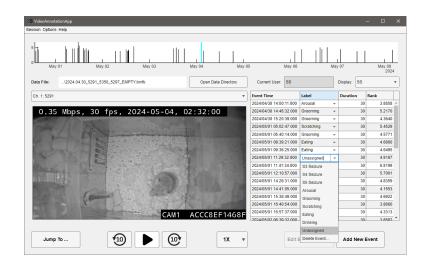


Versatile Video Annotation

Signal Solutions' Video Annotation app allows efficient review and annotation of video recordings.

Use the Video Annotation app to:

- Define user-specified labels to suit many research applications
- Mark onset and duration of a given behavior
- Export labeled events for quantitative analysis



Technical Details

MODEL	IR-SOURCE	MAX FRAME RATE	MAX RESOLUTION	LENS (FOCAL LENGTH)
AXIS Dome Camera	Integrated	60 fps	1920 x 1080	Fixed (2.9mm)
AXIS Box Camera	External	30 fps	1920 x 1080	Varifocal (3 – 10mm)



Compatability

Synchronized Video module compatible with PiezoSleep v4.x and later.

Contact Signal Solutions (inifo@sigsoln.com) for specific compatability information

Computer System Requirements

System benchmarks performed using a Dell Precision 3470 laptop (Windows 10 Professional, Intel Core i7 processor, 16 GB RAM, 2TB NVMe SSD). The number of cameras, resolution and frame rates may be impacted by computer processor speed, storage media interface, and/or additional programs running simultaneously. It is strongly recommended to connect cameras through a gigabit-PoE (IEEE 802.3af/802.3at) switch via an on-board gigabit Ethernet port. An internal Solid State drive (SSD) is required.