

# Avisoft-RECORDER

Avisoft-RECORDER is a versatile PC-based multichannel triggering harddisk recording software that has been adopted to the special needs of bioacoustic research. Possible applications are:

Long-term monitoring and recording both in the laboratory and in the field.

Pre-trigger recording of sporadic vocalizations.

Multichannel real-time spectrographic display.

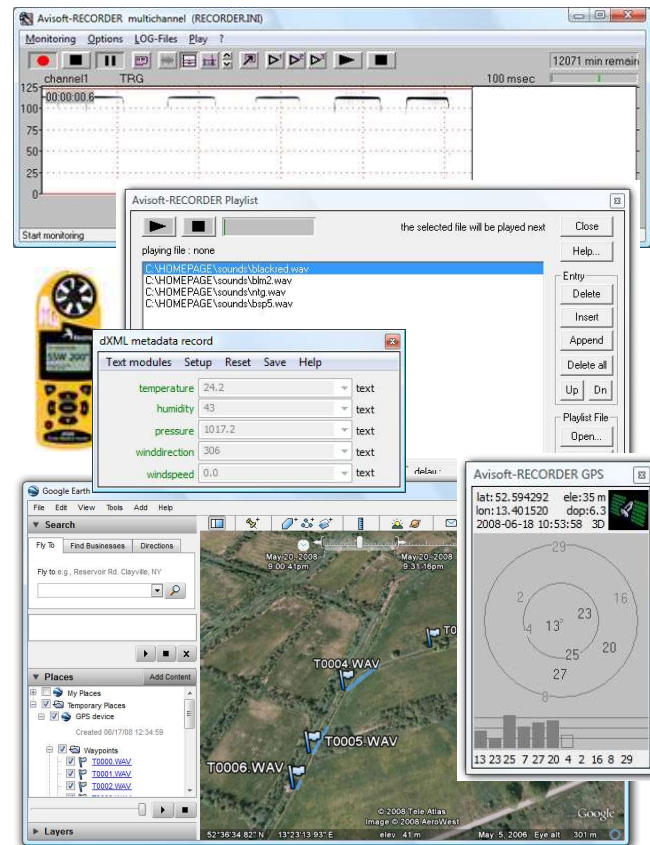
High-speed harddisk-recording with sampling rates of up to 1 MHz with various data acquisition boards and soundcards.

Payback with both standard soundcards and high-speed output streaming devices (with playlist support).

Real-time call parameter measurement and classification tools.

Acquiring GPS location data from NMEA 0183 or Windows location API compatible GPS receiver devices

Weather data logging from Kestrel 4xxx Weather Tracker, Davis Instruments Vantage Pro and many other weather stations.



# Avisoft-SASLab Pro

Avisoft-SASLab Pro is a powerful Windows application for investigating animal acoustic communication. It provides a broad range of processing and analysis tools that can greatly increase the efficiency in extensive sound analysis projects.

## Avisoft-SASLab Pro is compatible:

Supports all common sound cards, compact flash and harddisk audio recorders

Imports uncompressed soundfiles that have been recorded with third-party sound recording/processing tools (.WAV .AIF, .SND, .AU, various binary formats and .txt)

Exports images and measurement results either as files (.wmf .bmp, .tif, .txt, .htm, .xml, .sql), via the clipboard or through DDE directly into Excel

## Avisoft-SASLab Pro is comprehensive:

Flexible cursors for measuring spectrogram structures

Versatile automated sound parameter measurement and classification facilities (event detection, analysis, classification and statistics)

Automated classification of syllables by means of spectrogram cross-correlation with templates

Labeling option for single point and time section labels

Synthesizer for generating artificial songs and calls by mouse drawing of the parameter evolution (fundamental frequency, envelope, harmonics, frequency and amplitude modulation).

A dedicated pulse train analysis tool supports the investigation of temporal patterns of both simple pulse trains or series of sound bursts (e.g. song elements)

Georeferencing .wav files that have been recorded with a digital field recorder by using GPS track log data

User-defined XML metadatabase with integrated query facilities.

and much more ...

Visit [www.avisoft.com](http://www.avisoft.com) for further information.

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# Avisoft Bioacoustics

Hardware and Software for Investigating Animal Acoustic Communication

# Avisoft Bioacoustics UltraSoundGate

PC-based ultrasound recording and playback systems for applications both in the lab and in the field

Its modular concept allows to optimize the system for a wide range of different applications

The rugged and compact unit is made of high-quality components. It's aluminium housing provides maximum reliability in the field.



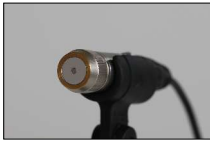
The trigger button allows to control the Avisoft-RECORDER software remotely

TTL-compatible digital input



A rugged input connector allows to attach various microphones or other signal sources

The electret condenser microphone is very compact and rugged (better reliability in humid environments).



Charge amplifier with adjustable high-pass filter for connecting passive hydrophones



Direct sampling at up to 1 MHz at 16 bit resolution enables superior sound quality.

Very sensitive externally polarized solid-dielectric condenser microphone with a flat frequency response between 15 and 200 kHz.

Power module and low-noise preamplifier for directly connecting 1/4" or 1/8" measurement microphones



Rugged USB interface for streaming the digitized ultrasounds into a laptop PC (bus-powered operation)



Acoustic monitor (bat detector functionality)

UltraSoundGate 116Hm for hand-held use in the field



Gain control knob with a wide 40 dB gain range



A peak level and overload indicator helps adjusting the gain appropriately.

Electrostatic speaker



Dynamic speaker



UltraSoundGate Player 116

Small-sized tablet PCs can be mounted directly on the USG 116Hm, which creates a compact and light-weight bat recorder with integrated GPS logging functionality.



UltraSoundGate 116H for lab use



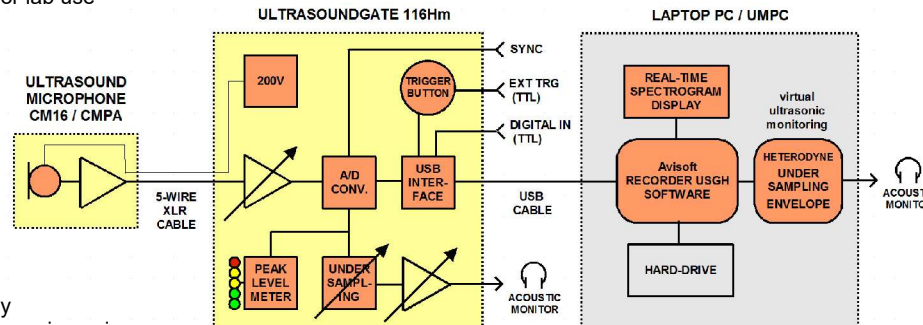
USG 416H (4 channels)



## System requirements

IBM-compatible PC, 900 MHz or more with at least one USB 2.0 port, running Windows Vista, 7, 8, 10 or 11

The UltraSoundGate system has been developed by Avisoft Bioacoustics having more than 25 years of experience in designing animal sound analysis software, digital signal processing systems and ultrasound recording / detecting equipment.



## Powerful Recording Software

The accompanying Avisoft-RECORDER USGH software saves the incoming sounds onto the PC harddrive and provides a real-time spectrogram display, numerous triggering options including sound-activated and timer controlled modes. A GPS data acquisition option supports the geographic documentation of field surveys.

**Recording ultrasound has never been easier!**