

LAAR bioacoustic

Laar TR 30 time expansion bat detector

A reliable and accurate response to various types of bats can only be achieved by using a computer-controlled bio-acoustic system. Throughout the world the **Laar TR 30** time expansion, ultrasound frequency converter provides high sensitive model. .

The outstanding feature of Laar time expansion detectors is its broadband, realtime monitoring control. All incoming call events are continuously stored in a ring memory. If an interesting bat call sequence is heard, the recording can be stopped by pressing a switch. Past calls are then replayed, the period being expanded by a time factor of ten. This brings the signals within the audible range and, more importantly, a computer can be used for additional processing of the signals, which is virtually impossible with detectors operating in accordance with the heterodyne principle. In practice the expanded signals are transferred to a tape machine or notebook computer. Evaluation takes place on a computer in the laboratory.

For environmental education/field trips the time expansion unit can be fitted with an external loudspeaker. The time expansion signals in a bat call sequence are replayed until the equipment is switched back to stand-by mode. One interesting side effect that can be observed on field trips is that, even if flying activity, over which one has no influence, is not very intensive, it is still possible to demonstrate acoustic activity to listeners at the site.

The Laar TR 30 is supplied with headphones, a battery and A-kustika 2.0 CD-ROM with acoustic information. In addition to a small database of European bat calls, the CD also contains a call analysis program, SASLab Light, providing a rapid introduction to bioacoustics. For more extensive analyses we recommend the programs BVLSpectrogram V8, SASLab Plus and SASLab Professional. More details can be found in our special catalogue of software and media.



Laar TR 30

Order-No.: 180029

Optional
LSP 50
External speaker f. excursions

Technical datas	Ultrasonic time expansion detector Laar TR 30
Circuit	AD/DA Sampling with circuit memory and realtime monitor control
Frequency range	15 - 120 KHz/15 - 160 KHz (400 KHz)
Resolution	8 Bit AD/DA Sampling with manual dynamic control
Recording time	4.09 seconds/ 250 KHz; 2,56 seconds/ 400 KHz
Microphon unit	Electret-Condensor-Microphone
Output	1 x headphones/speaker, 1 x tape
Input	Ext. Microphone
Memory size	1 MB
Sampling rate	250 KHz / 400 KHz
Power supply	1 x 9V-Block.
Dimensions	157mm x 84mm x 30mm
Weight	Ca. 200 g