ERGONEERS

FROM SCIENCE TO INNOVATION

AUDIO
CAN BUS
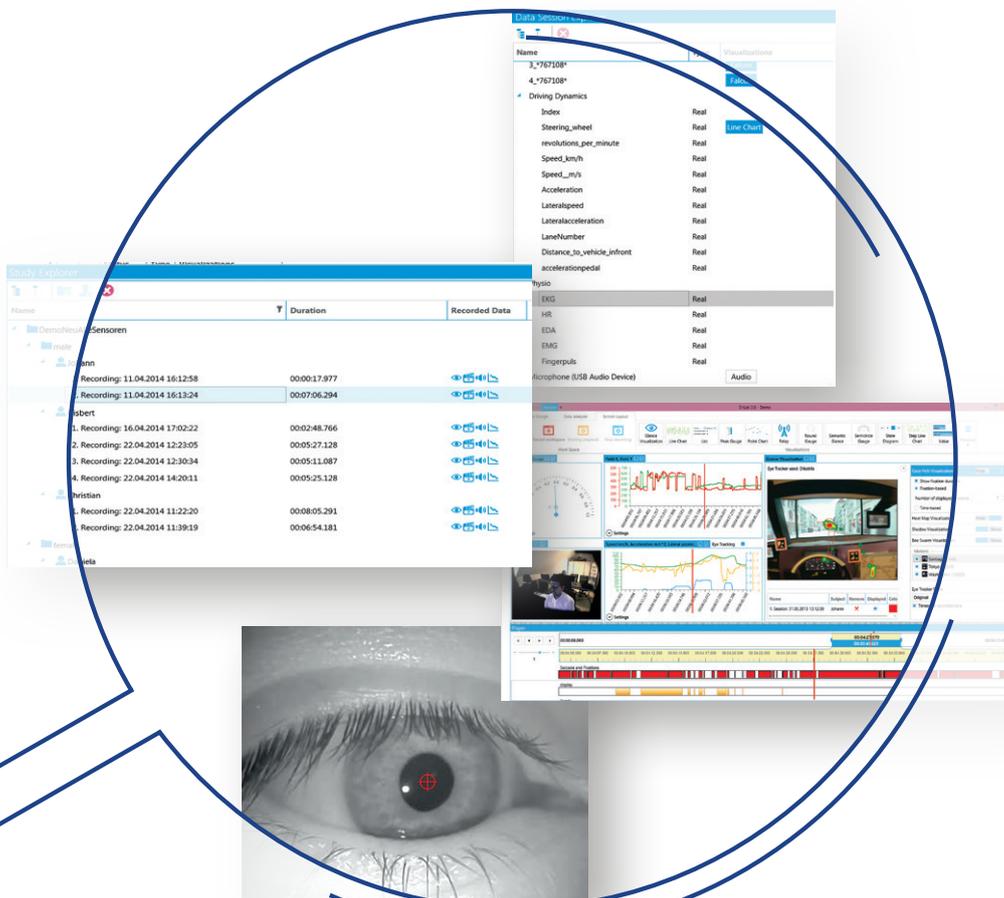DATA STREAM
EYE TRACKING
HEAD TRACKING
PHYSIOLOGY
VIDEO

D-LAB

DATA ACQUISITION PLATFORM FOR BEHAVIORAL RESEARCH

D-LAB

MULTI SENSOR – FREQUENCY INDEPENDENT – ACROSS MULTIPLE SUBJECTS

If analyzing human behavior is essential to your research then Ergoneers has the perfect solution: D-Lab. A number of freely configurable modules plug into the robust D-Lab framework. This gives you greatest possible flexibility as all modules are designed to work perfectly together. All incoming data channels are recorded fully in sync to give a holistic view to a person's behavior. D-Lab provides you with efficient and reliable support through all phases of your ergonomic and usability studies. It helps to plan your studies, record data from various channels and generate the final results via automated analysis. With D-Lab, you can generate high-level, valid, verifiable and reproducible results which are compliant with international standards. As all modules are completely scalable and flexible you can combine your measurement hardware to best suit your needs and create a unique and personalized D-Lab environment.

AVAILABLE MODULES

D-Lab is your powerful, all-purpose tool for synchronous data capture and analysis for user and behavioral research. Combining its measurement and analysis modules flexibly enables you to tailor D-Lab to your exact requirements.

D-LAB AUDIO
Record up to 16 audio signals synchronously, with complete analysis by selective track replay. D-Lab Audio also supports commenting and retrospective think aloud operations.

D-LAB CAN BUS
With the D-Lab CAN Bus module, you can record data from the CAN bus of a vehicle. The analysis of CAN measurement data ranges from visualizing them using various charts to processing the readings with the D-Lab scripting language and statistical analysis.

D-LAB DATA STREAM
The perfect module to record and analyze any TCP/IP traffic. With this flexible interface it is easy to connect TCP/IP sensors such as simulators, GPS devices, vehicles or other equipment.

D-LAB EYE TRACKING
For real-time visualization, data capture and automatic analysis of human gaze behavior. Our software platform for eye tracking works with remote and wearable eye trackers and comes with a plugin for ICA (Index of cognitive activity).

D-LAB HEAD TRACKING
Enrich your studies by measuring the head position of your subjects. D-Lab Head Tracking calculates exactly the position and angles of the head in our coordinate system. Values for x, y and z are given back in centimeter, alpha, beta and gamma in degree.

D-LAB PHYSIOLOGY
Provides flexible measurement of physiological values such as EEG, EMG, ECG, pulse rate, skin conductance, respiration and more. Enjoy synchronous replay and precise analysis with D-Lab's scripting language and statistical processing.

D-LAB VIDEO
A module for video-based evaluation of subject behavior. D-Lab Video facilitates recordings of several video channels such as PAL cameras, DVI signals or full HD IP cameras with PTZ function, together with high precision qualitative and quantitative analysis methods.

D-LAB MEETS EVERY REQUIREMENT

It doesn't matter if you want to perform an eye tracking study with a head mounted or remote eye tracker to calculate heatmaps, understand what's going on in a car while testing a new HMI or analyze behavior just by observing people with video cameras. D-Lab supports you in these and many other research tasks. But D-Lab doesn't stop there! Combine some or all D-Lab modules and find dependencies between the different channels by using our scripting language. Stream out recorded data in real time or export raw and processed data to third party applications. With D-Lab you will be much faster to get your results regardless how complicated your research question might be.

PLAN – MEASURE – ANALYZE

D-Lab allows you to create highly personalized experimental designs as well as tracking how your project is progressing. During the planning phase, D-Lab supports all your activities – from selection of test subjects to defining tasks or configuring recording sensors. During the measurement process, you can monitor all channels in real time to detect and mark observations immediately.

With our D-Lab analysis function, you can synchronously play back single measurement data, as well as precisely analyze gaze behavior, actions, verbal comments, physiological reactions, motions and gestures. You'll also benefit from the wide range of statistical functions in D-Lab, along with the possibility to generate convincing statistics, visualizations and demo videos.

The data acquisition platform D-Lab provides a crystal clear overview of each experiment across all subjects with valuable and comprehensive results.

INNOVATIVE TOOLS FOR BEHAVIORAL RESEARCH

SOFTWARE   >>   D-LAB, SILAB
HARDWARE >>   DIKABLIS, VEHICLE TESTING KIT, IR MARKER, THIRD-PARTY-PRODUCTS