



# D-LAB

## CONNECT



D-LAB Connect allows synchronous recording of multiple data channels from different frequencies from nearly any kind of data source. With this software module you can record, visualize and analyze TCP/IP data, data from motion capture systems or physiological data from various sensors or physio devices. Therefore you are able to gather great insights in your subjects' states and reactions to better understand their behavior. The powerful and freely configurable diagrams and the integrated statistics function enable to visualize and precisely analyze the recorded data streams from other computers, motion capture systems or physio recorders. Easily analyze joint angles or acceleration from an inertial motion capture system or physiological values such as EEG, EMG, ECG, heart rate, skin conductance, temperature, and many others.

# D-LAB CONNECT

D-LAB data acquisition platform for behavioral research 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. D-LAB can cope with different frequencies for each of the data channels, works across multiple subjects and records all input data synchronously. With its modular structure it can be used for just one sensor type – such as D-LAB Connect – or in combination with many other input channels like eye tracking or video.

## PLAN

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Definition of Tasks

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Group subjects in different categories

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Live data visualizations of all channels: line, point & step charts, peak chart, gauges, state diagram, map

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Multi data charts (of the same subject)

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Real time access to all available data

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## MEASURE

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Live data visualizations: line, point & step charts, peak chart, gauges, state diagram, map

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Multi data charts (of the same subject)

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Real time access to all recorded data

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Real time comments

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Real time task triggering

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## ANALYSE

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Data visualizations: line, point & step charts, peak chart, gauges, state diagram, map

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Calculation of different statistical metrics

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Export of all recorded and computed data as text files

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Multi data charts (of the same subject)

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Task based analysis

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Task based data export

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Time Line visualisation of triggered tasks and events

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Analyse Latitude, Longitude, Height, time of GPS data

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Analyse joint angles, center of mass and other data from motion capture system

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Multi subject charts

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Definition and calculation of user defined values based on all recorded data (scripting language)

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Visualize position on maps

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## SUPPORTED PHYSIOLOGICAL DEVICES

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Varioport device, BECKER Meditech

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Enobio, Neuroelectrics

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E4, Empatica

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Procomp Infinity, Thought Technology

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## SUPPORTED MOTION CAPTURE SYSTEM

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MVN Awiinda, Xsens

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## SUPPORTED TCP/IP CONNECTIONS

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D-LAB act as server

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TCP/IP clients can push data to D-LAB

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IP address range freely configurable

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IP port number freely configurable

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## SUPPORTED SMARTPHONE APP

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SensorConnect for Android, Ergoneers

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