

Course Overview

If you currently use PowerLab and LabChart in your psychophysiology research, this course will ensure you are getting maximum potential from LabChart. You will receive advice on the best LabChart settings for your particular measurements and experience a wide range of specialised LabChart analysis features. You will learn how to integrate LabChart with other psychophysiology software such as E-Prime and SuperLab, how to automate recording and analysis and how to determine heart rate variability.

As well as extensive instruction by ADInstruments staff, you will be guided through a series of exercises using relevant data files to consolidate your learning. There will be opportunity to discuss requirements specific to your own experimental set-up and access to your own hardware terminal. Our experienced staff will ensure that you receive the level of attention you require.

Who should attend?

This course is useful for all psychophysiologicalists who wish to better understand and utilise the potential of LabChart for displaying and analysing their data. It will also suit researchers who are interested in developing the range of parameters they measure, and those who wish to learn more about LabChart's specific analysis Modules.

You will ideally have some experience with PowerLab systems and LabChart software, equivalent to our LabChart Level I and II training courses. This course will, however, cover recording settings in some detail.

Learning Outcomes

At the end of this training course you will be able to:

- Use LabChart tools designed to increase accuracy when recording psychophysiology signals
- Make use of relevant formatting, display and processing features in LabChart
- Understand and use the specialised recording and analysis Extensions and Modules

Course Agenda

Measuring Psychophysiological Signals

- An overview of waveforms commonly measured in psychophysiology, including ECG, Respiration, GSR and EEG
- Creating the right LabChart settings for psychophysiological measurements

LabChart Features for Psychophysiological Signals

- Cyclic Measurements including detection customisation for your waveform
- Waveform processing functions including Filters and Integrals
- Extracting data for further analysis
- Relevant Extensions including Event Manager

Integrating the PowerLab with Simulation Software (SuperLab/E-Prime)

- Compatible hardware devices
- Using the PowerLab digital inputs and outputs
- Preset Comments for automating LabChart annotation

HRV Module

- When to use the HRV Module
- Creating the correct settings for your signal type
- Assessing ectopic beats and artefacts and removing them from analysis
- HRV Plot and Report overview
- Adding parameters to Data Pad and export options

Video Capture Module

- Applications for the Video Capture Module
- Synchronising LabChart recordings with video images
- Video playback
- Finding events in the video based on data changes in LabChart

Improve LabChart Functionality

- Find LabChart features, Extensions and Modules in the Feature Manager