



Bring active learning to your lab or classroom with ADInstruments' easy-to-use hardware and interactive content.

Our customizable teaching systems provide all the hardware, software, lessons and experiments you need to create a stimulating learning environment that guides your students to connect theory and practice.

Students record and analyze their own biological signals, deepening their understanding of scientific concepts - from introductory to advanced studies.

Each Teaching System provides:

- PowerLab multi-purpose data acquisition hardware
- LabChart research grade software
- Learning software including self-guided exercises with blended learning options
- An expansive range of transducers and accessories

Our systems include pedagogically designed learning software that is proven to increase student engagement and improve pass rates, in options to suit your specific technological requirements.



Highlights

- Active learning exercises for deepening student understanding
- Ready-to-teach exercises
- Complete tools for cardiovascular, respiratory, psychophysiology teaching exercises plus more
- Reliable, easy-to-use systems with research-grade hardware and blended learning software
- Customizable systems with cost-effective kits for specialty areas



Courses and Content:

Medicine • Human Physiology • Psychophysiology • Exercise Physiology
Animal Physiology • Nursing • Biochemistry • Neuroscience • Pharmacology



Multi-purpose Teaching Systems

Choose from a range of teaching systems to suit your needs and budget. Whichever system you choose, you can add specialist systems and kits to extend the capabilities of your base system.

Multi-Purpose System

+

Specialist Teaching System

+

Specialty Kit



Above: Ultimate Teaching System

System includes:

- PowerLab 26T, with up to four general purpose inputs, human approved Dual Bio Amp, variable, analog voltage output and a human-approved Isolated Stimulator.
- LabChart for high quality data analysis
- Learning software to suit your specific technology and teaching needs (*talk to us for advice on which is right for you*)
- Human Respiratory Kit
- Nerve and Muscle Kit II, or Nerve and Muscle Kit III
- Pulse Transducer
- 5 Lead Shielded Bio Amp Cable
- Shielded Lead Wires (5 snap-on)
- Stimulating Bar Electrode
- BNC to DIN Smart Adapter (2)
- Respiratory Belt Transducer
- Grip Force Transducer
- Sphygmomanometer
- Cardio Microphone
- Headphones
- Push Button Switch
- Dry Earth Strap
- EEG Flat Electrodes
- Reusable ECG Electrodes
- Disposable ECG Electrodes (100 pk)
- Abrasive Gel
- Electrode Cream
- Electrode Paste
- Alcohol Swabs
- Teaching System Case

Options for Teaching Systems include:

Intermediate Teaching System

This system is a comprehensive starter system for human cardiovascular, muscle and breathing exercises. It provides the hardware and software for human physiology experiments including breathing, heart sounds, blood pressure, ECG, muscle, EMG & reflexes and EEG measurements.

Advanced Teaching System

Extend the Intermediate Teaching System into human spirometry by including a Spirometer Pod, Respiratory Flow Head and related accessories. Conduct human physiology experiments such as breathing, respiratory, blood pressure, ECG, muscle, EMG & reflexes and EEG measurements.

Ultimate Teaching System

Provides all the hardware and software material to conduct a wide range of human physiology experiments, including breathing, respiratory, cardiovascular, muscle & reflexes, biopotentials (ECG, EEG, EMG and EOG). This system also includes the tools for studying physiological principles using animal tissues including nerve, skeletal, smooth and cardiac muscle.



The **PowerLab26T**, included in this system, features a dual Bio Amp, an isolated stimulator, trigger input, 4 analog inputs, 8 digital inputs and 8 digital outputs. With a maximum 100 kS/s sample rate and >95 dB CMRR, the 26T is used in a wide range of research applications.

Add a Specialist Teaching System

Add any additional specialist systems to suit your specific teaching needs. For a complete list of Teaching Systems and their components visit adi.to/completesystems

Specialist Teaching Systems include:

- **Human Physiology System** • **Animal Physiology System** • **Psychophysiology Teaching System**
- **Health Science Teaching System** • **Human NIBP Nano System** • **Neurobiology Teaching System**



Above: Psychophysiology Teaching System

Example Specialty Teaching System:

Psychophysiology Teaching System

This teaching bundle offers the PowerLab 26T together with signal conditioners and transducers to meet the needs of Psychology courses.

System includes:

- PowerLab 26T
- LabChart for high quality data analysis
- Learning software to suit your specific technology and teaching needs *(talk to us for advice on which is right for you)*
- Pulse Transducer
- 5 Lead Shielded Bio Amp Cable
- Shielded Lead Wires (5 snap-on)
- Stimulating Bar Electrode
- BNC to DIN Smart Adapter (2)
- GSR Amp (including Finger Electrodes)
- Thermistor Pod
- Skin Temperature Probe
- Respiratory Belt Transducer
- Push Button Switch
- Dry Earth Strap
- EEG Flat Electrodes
- Reusable ECG Electrodes
- Disposable ECG Electrodes (100 pk)
- Abrasive Gel
- Electrode Cream
- Electrode Paste
- Alcohol Swabs

Expand your System by adding Specialty Kits



Above: Nerve and Muscle Kit III

Example Specialty Kit:

Nerve and Muscle Kit III

Ideal for conducting experiments using isolated animal nerve, skeletal, smooth and cardiac muscle preparations. Includes a Teaching Force Transducer, Nerve Chamber, Stimulating and Needle Electrodes, Muscle Holder, Shielded Lead Wires with Micro-hooks, Manipulator and Stand.

Specialty Kits include:

- **EOG Kit**
- **Pharmacology Kits**
- **Exercise Breathing Kit**
- **Physiology Accessory Kit**
- **Exercise Physiology Kit**
- **Psychophysiology Kit**
- **Human Respiratory Kit**
- **Reflex Kit**
- **Isolated Heart Kit**
- **Wireless Heart Rate Kit**
- **Nerve and Muscle Kits**
- **Biochemistry Kit**

For a complete list of Specialty Kits and their contents visit:
adi.to/completesystems



PowerLab: Data acquisition for your life science classroom experiments

PowerLab is simple to set up, connecting directly to Windows and Macintosh computers via USB port, and is automatically detected by LabChart.

PowerLab T Series

The T Series PowerLab is an economically priced high quality DAQ unit with built-in, fully isolated, two-channel bio amplifier, isolated stimulator, separate non-isolated analog inputs and a differential-mode analog output. T Series PowerLabs include LabChart and a suite of learning software preconfigured with a full range of teaching experiments.

PowerLab 26T (LTS)

Integrated data recording, Bio Amp, isolated stimulator, trigger input, 4 analog inputs, 8 digital inputs, 8 digital outputs, LabChart and LabTutor software.

PowerLab 15T (LTS)

Entry level integrated data recording featuring a dual Bio Amp, an isolated stimulator and 2 analog inputs.

LabChart

All your analysis in one place

Research-grade software for recording and analyzing life science data.

LabChart data analysis software lets students gather biological signals from multiple sources simultaneously and apply calculations and plots as their experiments unfold.

To save you valuable time in creating course materials, we have developed over 150 LabChart exercises for:

- Animal physiology
- Biochemistry
- Biology
- Human physiology
- Psychophysiology

Each teaching exercise includes Instructor Guides, Student Protocols, Settings Files and preconfigured Laboratory reports. Any of these exercises can be customized quickly and set up easily for your laboratory class.

90 of the top 100 Universities in the world use PowerLab

PowerLab 26 Series

Suitable for teaching applications, both 26 Series PowerLabs have a TTL trigger input, analog inputs and 2 analog outputs (differential mode only). While cost-effective, the 26 Series have a maximum 100 kS/s sample rate and >95 dB CMRR and are used in a wide range of research applications. 26 Series PowerLabs come with LabChart data acquisition and analysis software.



PowerLab 4/26 (above)

Economically priced 4 channel data acquisition featuring 4 analog inputs.

PowerLab 2/26

Entry level 2 channel data acquisition with 2 analog inputs.



LabChart lets you do the basics with a minimum of fuss. Advanced features stay out of the way until you need them.

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