

MLT185/ST Headstage EX

Transducer Series

Description

The MLT185/ST is an AC-coupled, differential headstage that can be mounted in a micromanipulator (MLA40 available separately) for recording extracellular animal nerve signals for teaching. The headstage has three input sockets that can be connected to a pre-configured detachable electrode tip. Two detachable electrode tips are supplied; stainless steel (black) and silver (grey) electrodes. The back of the headstage has two leads; an alligator clip used as ground, and a Smart DIN connector connected to any PowerLab Pod input and is automatically recognised.



Operation

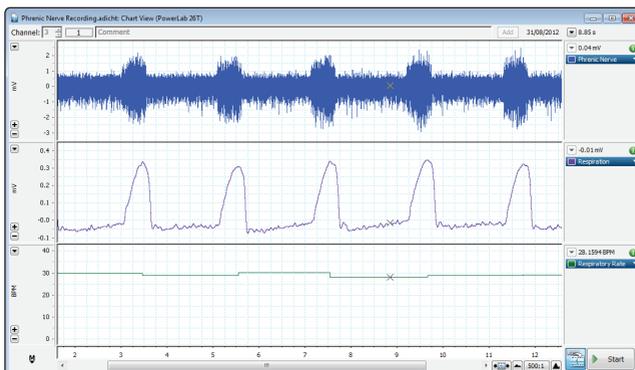
To use the MLT185/ST Headstage EX, plug the headstage into a PowerLab's Pod input. Next connect the detachable electrode tip to the headstage. Sealing the joint between the electrode tip and the headstage by tape is recommended to prevent possible fluid seeping between the interfaces. The lead with alligator clip should be used as ground/earth in this configuration.

Alternatively, the headstage can be connected directly to metal wire electrodes (connectors supplied) instead of using the electrode tips. Position the stainless-steel tube as required by using micromanipulator.

Application

The MLT185/ST Headstage EX is designed for recording extracellular animal nerve signals for teaching.

Typical Data

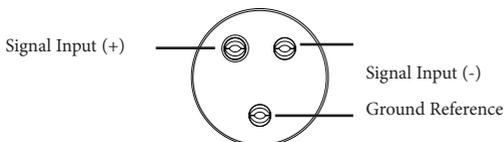


Extracellular recording from a phrenic nerve (Channel 1)

Caution

Read “Statement of Intended Use” on our website or in “Getting Started with PowerLab” before use.

Technical Diagram



Cleaning and Sterilizing

Headstage surface and cable may be cleaned by wiping with a mild detergent solution and then wiped with a clean lint free cloth moistened with alcohol. Refer to manufacturer's instructions for cleaning and sterilizing metal electrodes.

Specifications

Input:	Differential
Input connector:	WPI 220-883-S02 to suit male 220-P02
Impedance:	100 M Ω
Gain:	x100
Low-pass filter:	5000 Hz (-3dB frequency)
High-pass filter:	100 Hz (-3dB frequency)
Input leakage current:	~1 pA
CMRR:	97-100dB, typical @ 200Hz-1000Hz
Noise (rti):	100 Hz to 5 kHz <2 μ Vrms
Power:	from Pod port of PowerLab
Electrode impedance:	<300 k Ω , suitable for metal microelectrodes
Dimensions:	Cylinder 8 mm OD, 100 mm long
Tube Material:	Stainless Steel 304
Electrode Tips:	Stainless Steel 316, ~0.64 mm wire diameter (Black) Silver, ~0.64 mm wire diameter (Grey)
Cable length:	2.9 m

All specifications were tested at the time of printing and are subject to change.

Ordering Information

MLT185/ST Headstage EX

For use with:

Any PowerLab with a Pod port.

Any version of LabChart (Windows and Mac).

ADINSTRUMENTS.com

ISO 9001:2008 Certified Quality Management System

WARRANTY: ADInstruments PowerLab data acquisition units (Product Number Prefix: PL), Front-end Signal Conditioners (Product Number Prefix: FE) are warranted against defects in materials and workmanship for a period of 5 years from the date of purchase. Other PowerLab data acquisition units and ADInstruments manufactured Front-end and Pod Signal Conditioners, and Instruments are warranted of a period of 3 years from the date of purchase. Third party products are covered by the manufacturer's warranty. Warranties are void if the product has been damaged due to negligence. Consumables and electrodes are not covered by a warranty. All questions regarding service and warranty should be directed to your nearest ADInstruments representative.