

MLT1060EC IR Plethysmograph - Ear Clip II

Transducer Series

Description

The MLT1060EC IR Plethysmograph – Ear Clip II has an infrared photoelectric sensor which can record changes in pulsatile blood flow from the ear. It operates by recording changes in blood volume as the arterial pulse expands and contracts the microvasculature. The IR Plethysmograph – Ear Clip II is made from black acrylonitrile butadiene styrene (ABS) and has a lead length of 1.3 m, making it suitable for attaching to the ear when running on a treadmill. It can be plugged directly into any ADInstruments PowerLab Pod port.



Operation

The ear clip uses infrared light transmitted through the tissue, and so works best on fleshy areas such as the earlobe. The amplitude of the signal depends primarily on the volume of blood in the capillary bed directly beneath the sensor, so it may be necessary to move the sensor around to find the best signal.

Ambient light may affect the output: if it does, a covering of black, opaque material over the sensor and location should remove such interference.

Note:

The IR Plethysmographs are normally used with AC coupling in the Input Amplifier dialog box (in LabChart software) turned on.

Application

The IR Plethysmographs can be used to record changes in blood volume as the arterial pulse expands and contracts the microvasculature.

Caution

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

- Do not use with Electrocautery devices
- Do not immerse the device in fluids
- Do not handle the device by its cable.

Specifications

Excitation:	5 V DC
Output:	20 mV (site dependant)
Output impedance:	33 k Ω
Wavelength:	930 to 950 nm
Dimensions:	32 mm x 16 mm x 8 mm (l x w x h)
Material	(ABS)
Weight:	13 g
Connector:	8-pin DIN

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

Ordering Information:

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For use with:
Any PowerLab Pod Port