

Biopac Student Lab® Lesson 17 HEART SOUNDS

Procedure

Rev. 01152013

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II. EXPERIMENTAL OBJECTIVES

- 1. To listen to human heart sounds and describe them qualitatively in terms of intensity or loudness, pitch, and duration.
- To correlate the human heart sounds with the opening and closing of cardiac valves during the cardiac cycle and with systole and diastole of the ventricles.
- 3. To determine the nature of the change in the relationship between electrical and mechanical events of the cardiac cycle as heart rate increases.

III. MATERIALS

- BIOPAC Stethoscope (\$\$30L)
- BIOPAC Electrode Lead Set (SS2L)
- BIOPAC Disposable Electrodes (EL503,) 3 electrodes per Subject
- BIOPAC Electrode Gel (GEL1) and Abrasive Pad (ELPAD)
- Biopac Student Lab System: BSL 4 software, MP36, MP35 or MP45 hardware
- Computer System (Windows 8, 7, Vista, XP, Mac OS X 10.5 10.8)

IV. EXPERIMENTAL METHODS

A. SETUP

FAST TRACK Setup

- Turn the computer ON.
 - If using an MP36/35 unit, turn it OFF.
 - If using an MP45, make sure USB cable. is connected and "Ready" light is ON.
- Plug the equipment in as follows:

Stethoscope (SS30L) - CH 1 Electrode lead set (SS2L) — CH 2.

Turn ON the MP36/35 unit.

Detailed Explanation of Setup Steps



Fig. 17.5 MP3X (top) and MP45 (bottom) equipment connections

Setup continues....

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