

## Experiment HP-2: The Galvanic Skin Response (GSR) and Emotion

### Equipment Required

PC or Mac Computer

IWX/214, USB cable, IWX/214 power supply

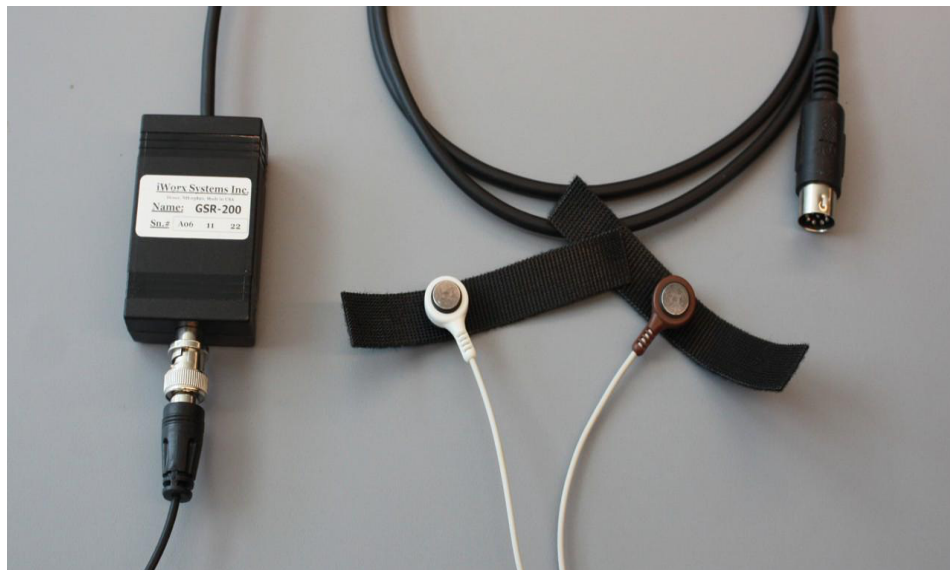
GSR-200 GSR amplifier, electrodes, and extension cable

### Start the Software

1. Click on LabScribe
2. Click Settings → Human Psychophysiology → GSR-A
3. Once the settings file has been loaded, click the **Experiment** button on the toolbar to open any of the following documents:
  - Appendix
  - Background
  - Labs
  - Setup (opens automatically)

### GSR Setup

1. Locate the GSR-200 galvanic skin response amplifier, male-male DIN8 cable, and GSR electrodes ([Figure HP-2-S1](#)) in the iWorx kit.



*Figure HP-2-S1: The GSR-200 galvanic skin response amplifier.*

2. Plug one end of the male-male DIN8 cable into the female DIN8 connector on the GSR-200 galvanic skin response amplifier. Plug the other end of the DIN8 cable into the Channel 4 input of the iWX/214 ([Figure HP-2-S2](#)).

### Calibration of GSR Amplifier

1. Place the GRS electrodes on the lab bench so they are not touching any surfaces.
2. Click on the Record button; record data for 1 minute.
3. Click on the Stop button.



*Figure HP-2-S2: The equipment needed to record GSR.*

4. Set the baseline to zero:
  - Click the down arrow to the left of the GSR channel to open the Channel Menu
  - Click Units - Click Set Offset ([Figure HP-2-S3](#))
  - Set the offset to 0 and check Apply to all blocks
  - Click OK.

**Note:** The GSR-200 galvanic skin response amplifier is factory calibrated so that an output of 1 Volt is equal to 5 microSiemens ( $\mu S$ ). This calibration factor is programmed into the LabScribe recording software by the GSR-A-LS2 settings file used in this experiment.

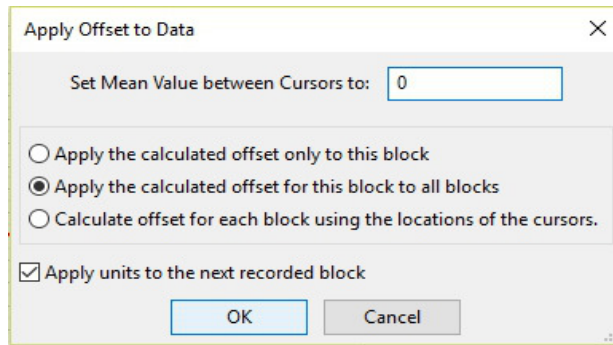


Figure HP-2-S3: Apply Offset window for setting the GSR unit to “0”.

5. To check the programming of the calibration:

- Click on the arrow next to the title of the Skin Conductance Level channel to open the channel menu.
- Select Units from the channel menu and Simple from the Units submenu.
- The Simple Units Calibration window will appear with the values for the two-point calibration of the GSR-200 amplifier already entered.

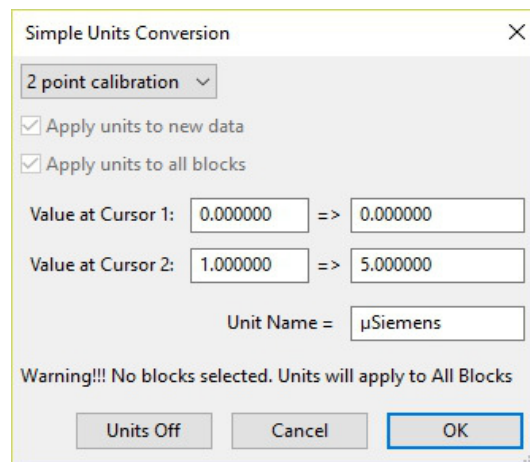


Figure HP-2-S4: Simple Units Conversion window for GSR-200 amplifier.