

Experiment HH-5: The Diving Reflex

Equipment Required

PC or Mac Computer

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

PT-104 Pulse plethysmograph

Three pans, each with 3” of water at 5, 15, or 25°C

RM-204 Respiration monitor (optional)

Start the Software

1. Click on LabScribe
2. Click Settings → Human Heart → Diving Reflex
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)

Pulse Transducer Setup

1. Locate the PT-104 pulse plethysmograph ([Figure HH-5-S1](#)) in the iWorx kit.



Figure HH-5-S1: The PT-104 pulse plethysmograph.

2. Plug the DIN8 connector to the PT-104 (plethysmograph) into the Channel 3 input of the IWX/214 ([Figure HH-5-S2](#)).
3. Place the plethysmograph on the volar surface (where the fingerprints are located) of the distal segment of the left middle finger or thumb, and wrap the Velcro strap around the end of the finger to attach the unit firmly in place.
4. Instruct the subject to sit quietly.



Figure HH-5-S2: The PT-104 connected to the IWX/214.

Optional Experiment

Use the C-AAMI cable to record an ECG as well as the pulse and heart rate.

Use the RM-204 Respiration Monitor as shown in the lab.