

Data Logger Preparation

Lab Guide

Task

Prepare and assemble the data logger and cables. Load the data logger software.

What You Need

Data Logger/Sensor Assembly

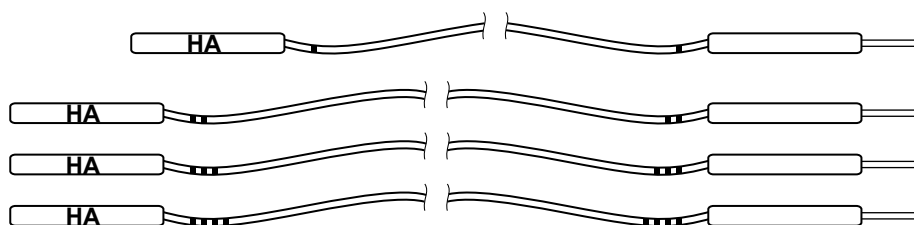
- H08-006-04 HOBO H8 4-Channel External
- TMC1-HA Wide-range temperature sensor, 0.3 m (1 ft) cable (1)
- TMC20-HA Wide-range temperature sensor, 6.1 m (20 ft) cable (3)
- Water tight box such as Rubbermaid #1 square sandwich box (~0.5 L volume)
- CaSO_4 or other dehydrating agent (100 mL)
- Strain-relief connectors (4) Sealcon, item CD07AA-GY (nylon strain relief fitting) and item NP07-GY (locking nut)

Computer interface

- BoxCar Pro® v.3.5+ or v.4.0 software
- PC or MAC computer interface cable

In the Lab

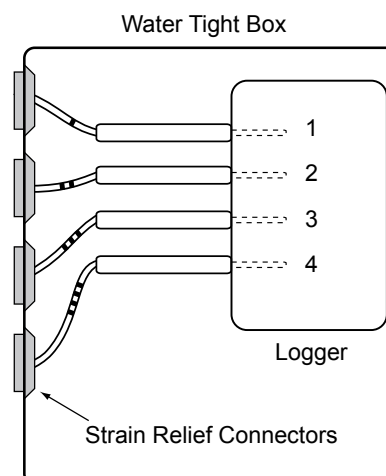
1. Use a permanent marker to mark BOTH ends of four TMC6-HA sensor cables. Place marks about 1 cm from the reinforced plug tip. Use 1,2,3 or 4 lines drawn completely around each cable. Label the short cable number 1.



2. Seal cables and data logger in a water-tight box

Option A) Using strain relief connectors:

- Drill or punch out four equally-spaced, 12 mm (1/2") holes in sidewall.
- Install strain relief connectors, using a bit of silicon sealant around the threads.
- Insert sensor cables through connectors and plug into appropriate data logger sockets.



OR

Option B) Using wire ties and silicon sealant:

- Drill four equally-spaced, 5 mm (1/4") holes in a sidewall.
- Insert sensor cables through the sidewall and plug into appropriate data logger sockets.
- Fasten wire ties snugly against inside wall.
- Fasten wire ties snugly against outside wall.
- Apply silicon sealant around wires and between wire ties and hole in the side wall.
- Let dry/cure for 24 hrs.

3. Load the Boxcar Pro software on your computer. If you are using a MAC, you must download the software from: www.onsetcomp.com/Support/2543_MacBCP.html

- Follow the software installation instructions on page 1 of the BoxCar Pro® User's Manual.
- Connect the serial cable to a PC (9-pin, D-type) COM port OR to a MAC (8-pin, O-type) modem port.
- Check the date and time on your computer to ensure that they are correct.
- Run c:\Bxcrpro3\Bxcrpro.exe (default location) or double click on the BoxCar Pro® icon.

Note: Newer iMAC/G3 and G4 Apple computers with USB ports require additional cable adapters.