

# HOBO® Data Loggers pH

## pH Logger Components



## Download and open HOBOMobile

1. Download HOBOMobile® to your phone or tablet.
2. Open HOBOMobile. If prompted, enable Bluetooth® in your device settings.
3. Wake up the logger by pushing the switch on the mounting end of the logger into the gap beneath the mounting lanyard (see diagram on back). Tap the Devices icon and then tap Loggers at the top of the screen. The logger should appear in the list. If it does not, make sure it is within range of your phone or tablet.

## Calibrate the Logger

*Manufacture recommendations to calibrate every 4 weeks.*

1. Pour each calibration solution into its own beaker (for two-point calibrations, use pH 7.00 and pH 4.01, or pH 7.00 and pH 10.00 solution; for three-point calibration, use pH 7.00, pH 4.01, and pH 10.00 solution). You will need enough solution in the beaker to cover the sensor end cap and closure cap on the logger.
2. Unscrew the clear storage cap filled with storage solution and remove it from the logger. Keep the cap filled with storage solution nearby in case you need to reinstall it after calibrating and before deploying the logger.
3. Use a squirt bottle to rinse the pH sensor with deionized or distilled water.
4. In HOBOMobile, tap the Devices icon and then tap Loggers at the top of the screen. Tap the logger in the list.

# HOBO® Data Loggers pH (continued)

## Calibrate the Logger (continued)

5. Once connected, tap Yes if prompted to calibrate the logger. Otherwise, select pH Calibration.
6. Select the calibration type (two-point using pH 7.00 and 4.01 solution, two-point using pH 7.00 and 10.00 solution, or three-point using pH 7.00, 4.01, and 10.00 solution). Tap Start Calibration.
7. Place the sensor end of the logger in the pH 7.00 solution. Make sure the sensor end cap, temperature sensor, and closure cap are submerged in the solution as shown in the illustration. Follow the instructions on the screen. Once the pH reading is stable, tap Confirm Buffer.
8. Rinse the pH sensor with deionized or distilled water. Tap Next Buffer.
9. Place the sensor end of the logger in either the pH 4.01 or 10.00 solution as prompted in HOBOMobile. Follow the instructions on the screen. Once the pH reading is stable, tap Confirm Buffer.
10. If you selected three-point calibration, repeat steps i–j.
11. Tap Save Calibration.
12. Rinse the pH sensor with deionized or distilled water.
13. If you will not be deploying the logger immediately, place the pH electrode back into the storage solution

## Launch the Logger

1. Tap Configure from the Connected screen in HOBOMobile. If the logger is not connected, tap the Devices icon and then tap Loggers at the top of the screen. Select the logger.
2. Choose the logger settings. Choose “Bluetooth Always Off”: The logger will only advertise when you wake it up by pushing the switch on the mounting end of the logger.
3. Type description of purpose in ‘Name’ box.  
For example: YYYY.MM.DD - Business Code - Deployment Location
4. Set range for the deployment by selecting 30 minutes.
5. Select any other launch settings and click Start. Logging will begin based on the settings you selected.



Push switch into the gap beneath the mounting lanyard to start or stop logging or to wake up the logger

## Deploy the Logger

1. Remove the clear storage cap from the logger if installed and replace it with the closure cap.
2. Make sure logger is fully submerged. Move around slightly to eliminate any bubbles
3. Insert the logger in a PVC or ABS pipe for protection The pipe should have enough holes to ensure good circulation of water to the sensor may have formed.

# HOBO® Data Loggers pH (continued)

## Download Data from the Logger

1. Open HOBOMobile.
2. Push the switch on the logger for 1 second to wake it up.
3. Tap the Devices icon and then tap Loggers at the top of the screen in HOBOMobile.
4. Tap the logger to connect to it.
5. Once connected, tap Readout.
6. The data file from the logger is saved to your device. Tap the Data Files icon and then tap the mini-graph to view a larger version of the graph or to share the file.

## Email Data File

1. Select “Data files” at the bottom of screen.
2. Select “Select” on top right corner of screen.
3. Select the file being sent.
4. Select “Share” on bottom left side of screen.
5. Select file type “HOBO”.
6. Select “Outlook” as app to send email.
7. Email data file to yourself.
8. Repeat steps to send file as a “CSV”.

## Battery Maintenance

The battery life of the logger is 3 years when Bluetooth Always Off setting is on. Expected battery life varies based

1. Wipe the logger clean and dry it completely.
2. Unscrew the closure cap on the mounting end of the logger.
3. Pull the mounting end cap and attached battery holder straight out from the logger body without twisting.
4. Remove the battery strap. Insert a flat-head screwdriver into the hole on the strap to lift it off the battery.
5. Remove the battery and install a new one.
6. Using your finger, spread a small dot of silicone-based grease along both O-rings on the mounting end cap.
7. Place the battery strap back in place, using the notches on both sides of the holder to align it and guide it into place until you hear a click.
8. Reinstall the battery holder and attached mounting end cap. Use the alignment tab on the battery holder and the arrow on the logger housing as a guide as you fit the small tab in the mounting end cap into the small groove on the logger housing.

# HOBO® Data Loggers pH (continued)

## Reference:

Quick Start for the HOBO® MX pH and Temperature Logger (MX2501)

[https://www.onsetcomp.com/files/manual\\_pdfs/22510-1%20MAN-MX2501-QSG.pdf](https://www.onsetcomp.com/files/manual_pdfs/22510-1%20MAN-MX2501-QSG.pdf)

HOBO® MX pH and Temperature Logger (MX2501) Manual

[https://www.onsetcomp.com/files/manual\\_pdfs/22511-M%20MX2501%20Manual.pdf](https://www.onsetcomp.com/files/manual_pdfs/22511-M%20MX2501%20Manual.pdf)