

## Quick Start for the HOBO® MX20L Water Level Logger

### Barometric pressure data is required to get water level

You need barometric pressure data near the site where you are deploying the logger to obtain accurate water level data. (Typically within 10 miles is close enough.) We recommend using one of the following to log barometric pressure:

- Use an MX20L-04; it's your easiest option.
- Use barometric pressure data from an MX802 or MX2001 logger.
- Use barometric pressure data from other sources that can export a CSV file. See the [HOBOconnect® User Guide](#) for CSV formatting requirements.

Deploy the barometric pressure logger for the same duration as you deploy the water level logger. You can use a fixed barometric pressure when you process the data, but that does not compensate for barometric pressure changes during your deployment.

**Note:** You can remove the end cap to see the LED inside the logger; the logger is still waterproof. You do not need to remove the end cap to configure the logger or download the data.



- 1** Open HOBOconnect. ([Download](#) and install it first, if necessary.)



- 2** Wake up the logger using the magnetic activation fob. To do so, hold the magnetic fob on the WAKE magnet icon as shown in the illustration to the right.



**Important:** When storing or transporting the logger, keep the magnetic fob (or any other magnet) a minimum of 1" away from the logger so that you do not inadvertently drain the logger's battery.



- 3** In HOBOconnect, select Devices, select the tile of the HOBO MX20L Water Level Logger you want to configure, and select Customize Configuration & Start. Under Logger Settings, enter the logging interval and other settings. **Note:** When the "On Button Push" configuration option is enabled for certain settings, you will use the magnetic fob to activate it. To maximize battery life, confirm that Show LED and Bluetooth Always On are both set to OFF. Make sure that Temperature and Absolute Pressure are enabled. Once the logger configuration is what you want, tap Start.



- 4** Deploy the logger, making sure the end cap is in place. **Warning:** Do not overtighten it. Take water level reference readings at the beginning and end of each deployment. Enter these readings and the times of these readings into your field notes to refer to later when you process the data to get water level.



- 5** To download data from the logger, turn on Bluetooth communication by holding the magnetic fob on the WAKE magnet icon. In HOBOconnect, select Devices, select the tile of the HOBO MX20L Water Level Logger, and then select Download Data. Select Export & Share as needed. You may want to wait on exporting and sharing the data until after you have added the water level channel in step 7.



- 6** Stop the logger or restart it and redeploy it as necessary.



- 7** In HOBOconnect, select Data to view a graph of the downloaded data. On the graph screen, click the Water Level Assistant icon (that looks like a ruler) to link the barometric pressure file. Enter the reference water level that you took at the beginning of the deployment and enter a water density. The Water Level Assistant adds the water level channel. (**Note:** The Water Level Assistant is the same as the Barometric Compensation Assistant in HOBOware.) To see the water level on the graph, tap the icon that looks like a graph and scroll down to select the water level channel. To save the resulting water level data, you must export the data as an XLSX or CSV file (the HOBOfile will not include the water level data).



For detailed specifications and information about this logger, refer to the complete product guide. Go to [HOBO MX20L Water Level Logger User Guide](#) or scan the code below.