## 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 MX800 Series 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®. (<u>Download</u> and install it first, if necessary.)



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

**Important:** In normal operation (when not waking the logger), keep the magnetic fob a minimum of 1" away from the logger so that you do not inadvertently drain the logger's battery.





- In HOBOconnect, select Devices, select the tile of the MX20L you want to configure, select Customize Configuration & Start. Select Logger Settings to enter your logging interval and settings. To maximize battery life, set the Power Saving Mode to Bluetooth Always Off. Make sure that Temperature and Absolute Pressure are enabled. Once the logger configuration is what you want, tap Start.
- 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.



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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 MX20L, 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.



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.



For detailed specifications and information about this logger, refer to the complete product guide. Go to <u>HOBO MX20L Water Level Logger User Guide</u> or scan the code below.



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