

## HALO<sup>®</sup> FC2142 pH Probe

Thank you for selecting a Hanna Instruments<sup>®</sup> product. Please read this instruction guide before using the HALO probe with the Hanna Lab App or with HI2202 edge<sup>®</sup> blu pH Bluetooth<sup>®</sup> meter. For additional information on probe maintenance and calibration consult the Hanna Lab App “HELP” section or the edge blu instruction manual.

**IMPORTANT!** During servicing and measurement, handle the probe with care. Do not drop probe on a hard surface. It will permanently damage the probe. Utilize the clear protective cap to protect and keep the pH bulb hydrated during transport and storage.

### PREPARATION

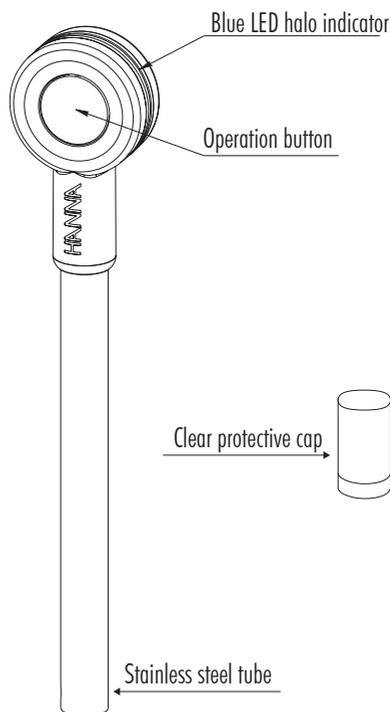
Remove the probe from the clear protective cap. Save the cap for probe storage.

1. Rinse off any storage solution or salts that may be on the probe's body.
2. Verify if there is solution inside the pH bulb. Shake the probe down to restore continuity as the solution may have moved up the stem during shipping.

### CONNECTION

#### Using Hanna Lab App

1. To begin using the HALO probe, start the Hanna Lab application and tap the Bluetooth icon\*.
2. Press the operation button located on the top of the probe. The blue LED halo will begin to flash every half second, indicating the probe is in discoverable mode. The probe ID will appear in the probes list.
3. Select the probe ID from the probes list and the blue LED will slow down and flash every 2 seconds.



\* The Bluetooth word mark and logos are registered trademarks owned by Bluetooth SIG, Inc.

## Using edge<sup>®</sup> blu

1. To begin using the HALO<sup>®</sup> probe, turn on the edge blu. The meter will start scanning for probes.
2. Press the operation button located on the top of the probe. The blue LED halo will begin to flash every half second, indicating it's in discoverable mode. The probe ID will appear in the probes list.
3. Select your probe from the probes list and press **CFM**. Whilst connecting, the blue LED will flash 4 times per second. Once connected, it will slow down and flash every 2 seconds.

## MEASUREMENT SETUP

1. Calibrate the pH probe.
2. Take measurements using the pH probe.
3. When probe is not in use, place the clear protective cap over glass bulb.

## MEASUREMENT GUIDES

1. Always clamp or support the probe during use.
2. Frequent calibrations are suggested for critical pH applications.
3. To eliminate thermal or sample gradients, stir buffers and samples using a magnetic stirrer.

## CALIBRATION

1. Calibration can be performed using up to five calibration buffers. For accurate measurements, a minimum of a three-point calibration is recommended.
2. Enter calibration screen (using Hanna Lab App or edge blu).
3. Place the probe in the first buffer.
4. Confirm the calibration point when the reading is stable.
5. Repeat the procedure for up to five calibration points. For details, please see edge blu instruction manual or Hanna Lab App "HELP" section.

## STORAGE

1. Rinse off the **FC2142** HALO probe with deionized water to remove sample.
2. Blot off using a soft tissue.
3. Pour 1 cm of **HI70300** storage solution into the clear protective cap. Place probe bulb into the cap.