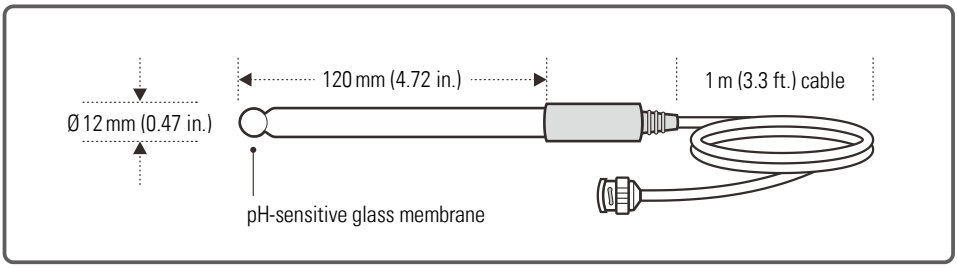
Prior to Use

Remove the protective cap from the the bottom of the electrode and keep in a safe place for future long term storage. After rinsing the pH-sensitive glass membrane with distilled water, the electrode is ready for use.

During shipment it is possible for air bubbles to move into the pH-sensitive glass membrane. To remove the air, shake down the electrode in the same manner as a clinical thermometer until the glass bulb is filled with solution.



Measurement

Place the electrode in the sample solution and stir gently. Wait until the reading stabilizes.

Cleaning the Electrode

Since pH-sensitive glass membrane is susceptible to contamination, thoroughly clean as necessary after each use.

- General Cleaning
  Rinse the electrode with distilled water and soak in 3M KCl solution.

- Salt Deposits
  Dissolve the deposit by immersing the electrode in warm tap water. Rinse the electrode with distilled water and soak in 3M KCl solution.

- Clogged Liquid Junction
  1. Heat a diluted KCl solution to 60°C (140°F).
  2. Place the electrode into the heated solution for 10 minutes.
  3. Allow the electrode to cool in unheated KCl solution.

Storing the Electrode

For best results, we recommend to soak the electrode in 3M KCl solution always. If above solution is not available, use a pH 4.01 buffer solution.

- DO NOT store the electrode in distilled or deionized water that will deplete the hydration layer of the pH-sensitive membrane and render the electrode useless.
- If you do not use the electrode for a period longer than 1 month, store the electrode in storage solution.

Reactivating the Electrode

If the pH-sensitive membrane has dried out, the electrode response will become sluggish. Immerse the electrode in a pH 4.01 buffer solution for about 30 minutes to rehydrate. If this fails, the electrode requires activation.

1. Soak the electrode in 0.1M HCl for 10 minutes.
2. Remove and rinse with distilled water, then place into 0.1M NaOH for 10 minutes.
3. Remove and rinse again, and soak in 3M KCl solution for at least 6 hours.

If these steps fail to restore the response, replace the electrode.

Optional Accessories

Order Code	Description
PHCS-USA	pH 4.01, 7.00, 10.01 buffer solutions, 480 ml
PHCS-ES	pH electrode storage solution, 480 ml
PHCS-A	Electrode cleaning solution, removes acidic deposits, 480 ml
PHCS-B	Electrode cleaning solution, removes bacterial contaminants, 480 ml
PHCS-G	Electrode cleaning solution, removes oil and grease, 480 ml
PHCS-O	Electrode cleaning solution, removes organic contaminants, 480 ml
PHCS-P	Electrode cleaning solution, removes protein residues, 480 ml