

PHAMP-1 Battery-Powered pH/ORP Pre-Amplifier

Product Instructions

Introduction

The PHAMP-1 is a battery-powered unity-gain preamplifier that allows the user to run cables up to 1000 feet between the electrode and pH/ORP controller/meter. The PHAMP-1 should be located close to the electrode for optimum use (suggested maximum distance is 25 feet (7.5m)). High impedance pH signals are reduced from megohms to under 20,000 ohms. By locating the device near the electrode, you can enhance the service life of your electrodes by eliminating noise from cable runs. Sealed to keep out moisture, the PHAMP-1 is self powered by two 3 volt lithium cells and has an estimated lifetime of three years.

Installation

Install the BNC connector from the pH or ORP electrode cable into the BNR connector as shown in FIG 1. Install extension cable at BNC connector as shown in FIG 2.

Maintenance

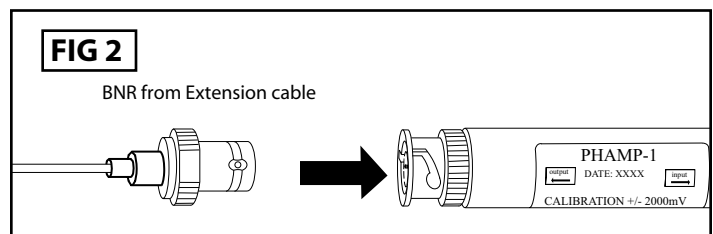
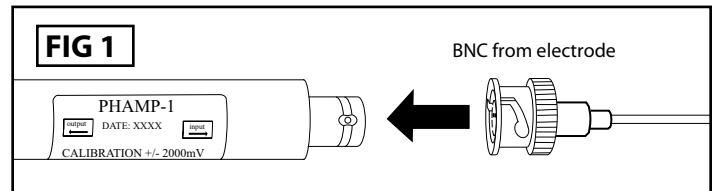
No maintenance required. Just keep the connectors dry.

Troubleshooting

If the output of the PHAMP-1 is always 0mV, (pH7.0) then there is either a short in the cables or the batteries are expired and it is time to buy another PHAMP-1. Check cable for continuity. If OK, then replace PHAMP-1.

SPECIFICATIONS

Dimensions	0.63" diameter x 4.00" length (see outline drawing on the right)
Materials of Construction	Stainless steel
Power Requirement	N/A powered by 2 each 3 Volt Lithium cells (not replaceable)
Input	pH or ORP electrode with BNC connector impedance $<10^{13}$ Ohms
Output	mV unity gain, $<20,000$ Ohm resistance
Output Offset	2 mV max (0.03 pH units)
Operating Temperature	0-60 deg C
Weight	2 oz. (5.87 gram)



OUTLINE & DIMENSIONS PHAMP-1

