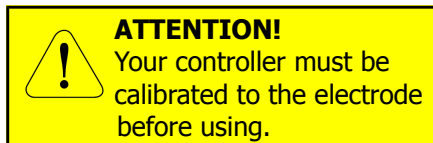




#11578  
P-1 to P-2  
Upgrade Kit

## UNPACKING

Please open and inspect your package upon receipt. Your package was packed with great care and all the necessary packing materials to arrive to you undamaged. If you do find an item that is broken or damaged, you must contact the delivering carrier to report the claim.



# UPGRADE INSTRUCTIONS RATIO:GUARD® MODEL P-2 pH INDICATOR/CONTROLLER

This kit enables P-1 or P-1S pH Monitors to use H.E. Anderson's new pH probe and converter box.

## GETTING TECHNICAL ASSISTANCE

**The H.E. Anderson Company** is dedicated to assisting our customers with installation and use of our products. Our technical staff are available each weekday from 8:30am to 4:30pm central time. You may call us toll free at **1-800-331-9620** from anywhere in the U.S.A. and Canada. If no one is available, we will promptly return your call.

**Before you call**, review this manual. You may find the answer to your question here. But if not, reviewing the manual will help us to help you.

If you need an additional owners manual for **any** H.E. Anderson Company product, please visit our website at <http://heanderson.com/manuals.php>

Before returning items for repair or credit, please fill out, print and enclose the Return Information Form, on our website at <http://heanderson.com/return.php>, with your return. Please ship items to:

H.E. Anderson Company  
2100 Anderson Drive  
Muskogee, OK 74403



**H.E. Anderson**  
COMPANY

www.heanderson.com  
Phone 1-800-331-9620



**Warning:** Disconnect power to the P-1 Monitor/Controller box before attempting installation of new converter box and probe.

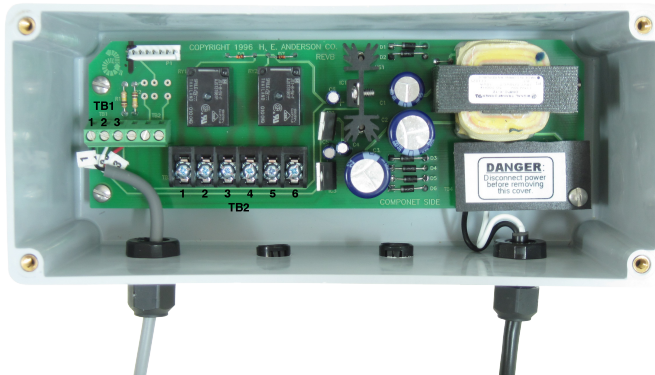
## Installation

1. Remove the lid from the box by unscrewing the 4 screws on each corner of the lid.
2. Disconnect and remove the old probe cable from terminal block inside the P-1 box.
3. Loosen the strain connector and remove the old pH probe cable from the box.
4. Insert the the new cable from the converter box through the strain connector and connect the wires to the proper terminal block inside the P-1 Monitor/Controller box. Make the following connections:

Black wire to #1 terminal

White wire to #2 terminal

Red wire to #3 terminal



*P-1 Backboard*

5. Tighten the strain connector. The new probe will come already wired to the converter box.
6. Calibrate the new pH probe. The procedure for calibrating a pH probe can be found on our manuals page located at:

<http://heanderson.com/manuals.php>

## SPECIFICATIONS Model P-2

### Range

0–14 pH indication, 1–13 pH

### Accuracy\*

Within 0.05 pH @ 77°F (25°C)

### Display

0.7 in. LCD numeric

### Outputs

10 amp. SPDT contact outputs for both high and low alarms

Optional output latching

### Enclosure

Water resistant with gasketed cover;  
Sealed front panel

### Power Requirements

120 VAC (Model P-2S)

12 VDC (Model P-2D)

### Setpoint Memory Retention

Greater than seven days with zero power.

\*If properly calibrated to electrode, using standard buffers.

11494 - pH Electrode (P-1S Style) - No longer available

11578 - P-1S to P-2S pH Upgrade - Includes all need items to upgrade the box and replace the probe; See below instructions for cable when upgrading).

Cable Size requirements when upgrading P-1S to P-2S:

Use existing cable for cables up to 50 ft in length.

Use 18-3 for cable runs 50ft to 100ft in length.

Use 18-5 for cable runs up to 200ft in length.

(use 2 conductors for connections 1 & 3 on both terminal blocks).