

Figure 1
J Plus Controller

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.

Ratio Feeder®

Series J Plus Quick Start Guide

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, we suggest that you review this manual. You may find the answer to your question here. But even if you do not, reviewing the manual will help us to help you.

There is some information you should have available when you call. You should know the program number and serial number of your control unit. Also, you should note the number of pumpers of each type, and their model numbers. We may not need all this information, but having it available at the start can some times save a lot of time and trouble for you. You may record the information be low for convenient reference. **NOTE:** The program number can be displayed by pressing both the **↑** and **↓** keys together.

SERIAL _____	PROGRAM NUMBER _____
PUMPER #1 _____	PUMPER #6 _____
PUMPER #2 _____	PUMPER #7 _____
PUMPER #3 _____	PUMPER #8 _____
PUMPER #4 _____	PUMPER #9 _____
PUMPER #5 _____	PUMPER #10 _____

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



J PLUS QUICK START INFORMATION

MODEL NO. _____ SERIAL NO. _____

Do all wiring before connecting power. Use a surge suppressor on the incoming AC power line. Plug in the power cord and watch the LCD display. If it does not come on, unplug the power and check the wiring.

This unit was ordered with the following capacities or settings:

Customer Requested _____ Default _____
 Program Number _____
 K Factor _____ [Pulses per unit volume (gallons or liters)]
 Maximum Flow _____
 VPS* #1 _____ *VPS = Volume Per Stroke (gallons or liters)
 VPS #2 _____
 VPS #3 _____
 VPS #4 _____

With the above settings, pumpers will have the following chemical to water feed ratio capacities (At dial setting 10).

BASE #1 = (VPS #1 x N) ÷ 80 = _____ **N=3785(gal.), N=1000(liters)**
 H8 1: _____ (BASE #1) H4, P4 1: _____ (BASE #1 x 2)
 H2, P2 1: _____ (BASE #1 x 4) H1, P1, A10 1: _____ (BASE #1 x 8)
 A3 1: _____ (BASE #1 x 26.7)

BASE #2 = (VPS #2 x N) ÷ 80 = _____
 H8 1: _____ (BASE #1) H4, P4 1: _____ (BASE #1 x 2)
 H2, P2 1: _____ (BASE #1 x 4) H1, P1, A10 1: _____ (BASE #1 x 8)
 A3 1: _____ (BASE #1 x 26.7)

BASE #3 = (VPS #3 x N) ÷ 80 = _____
 H8 1: _____ (BASE #1) H4, P4 1: _____ (BASE #1 x 2)
 H2, P2 1: _____ (BASE #1 x 4) H1, P1, A10 1: _____ (BASE #1 x 8)
 A3 1: _____ (BASE #1 x 26.7)

BASE #4 = (VPS #4 x N) ÷ 80 = _____
 H8 1: _____ (BASE #1) H4, P4 1: _____ (BASE #1 x 2)
 H2, P2 1: _____ (BASE #1 x 4) H1, P1, A10 1: _____ (BASE #1 x 8)
 A3 1: _____ (BASE #1 x 26.7)

If more than one pumper is used to pump the same chemical, divide the ratio (BASE) by the number of pumpers used for that chemical.

To verify the settings, press the indicated keys.

SET To display the K FACTOR
SET + ↑ To display Volume Per Stroke (gallons or liters), VPS #1 (2 outputs)
SET + ↓ To display VPS #2 (2 out puts)
SET + ↑ or ↓ To sequence VPS #1-4 (4 out puts)
↑ + ↓ To display the PROGRAM NUMBER

To change a setting, first display it; then press **SET** and **ENTER** together until the display blinks. Then use **↑** or **↓** to set. Then press **ENTER**.

IMPORTANT! READ YOUR MANUAL

If the PROGRAM NUMBER, the K FACTOR, or the Volume Per Stroke are changed, the feed ratio will also change. **Be careful!** See the section **Setting The Outputs**, page 6, for more in formation about changing any settings, or contact the factory.

NOTE: The K FACTOR can be changed only during the first minute after power-up. (See **Setting The K Factor**, page.6)

Meter & Valve Connections

- The controller should be mounted before making these connections.
- Disconnect the controller from electrical power.
- Remove the four screws that secure the front panel.
- Remove the safety shield.
- Connect the flow meter cable. The terminals on the flow sensor terminal block are labeled 1, 2, & 3, both on the terminal board and on the meter cable. Be certain to match numbers when connecting these wires. If you need a longer cable, use the color coding to be sure that these connections are correct.
NOTE: On 2-output models the sensor terminal block is detachable which makes connecting the cable much easier.



WARNING! Connecting the flow sensor incorrectly can damage the flow sensor electronics.

- Connect one or more manifold valve cables. Valve connections are not polarized. Connection order does not matter.
- Replace the protective shield.
- If you have disconnected the front panel from the rear panel be sure the ribbon cable is inserted as shown below. It is the same for both models. The marked edge of the cable should be on the left.



WARNING! Connecting the ribbon cable incorrectly can damage the controller electronics.

- Replace the front panel and secure with four screws.
- You are now ready to connect electrical power to the controller.

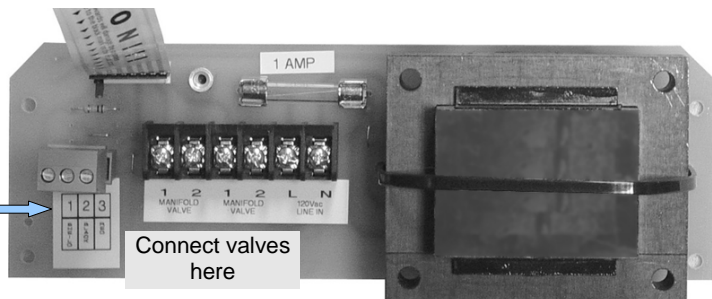
Disconnect power before removing front panel.

Units shown with safety shield removed.

Connect flow meter wires as numbered.

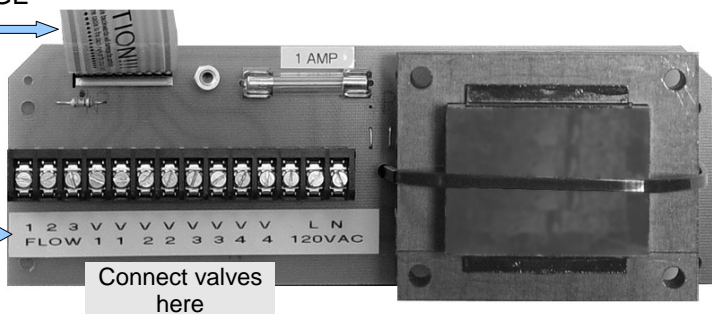
Valve connections are not polarized. Connection order does not matter.

Connect flow meter here



MARKED EDGE THIS SIDE

Connect flow meter here



Start-Up Check List for Anderson J+ Systems w/ E-1S & P-2S Monitors

Starting up your Anderson system for the first time Please review all related Anderson manuals to familiarize yourself with your Anderson components and their parts. Having an understanding of what your system consists of and their properties will greatly assist you in its use, setup, and maintenance.

Have available all possibly needed tools and supplies for start-up: Small flat blade screwdriver, #2 Phillips screwdriver, Large flat blade screwdriver, 5/16" and 1/4" nut drivers, set of channel lock pliers, 1/2" open ended wrench, 500ml graduated beaker, 5 gallon or larger graduated bucket, pH calibration kit, Isopropyl alcohol, distilled water, proper dress and safety equipment for solutions being injected.

- 1. While Anderson equipment is unplugged; SLOWLY fill all plumbing while venting air from system. Continue until all air is removed and lines are completely flushed of any contamination or debris.
- 2. Pressure up all plumbing while checking for leaks. If leak is found; correct and start again at step one.
- 3. Verify proper connections and wiring of all the Anderson electronic equipment.
- 4. Power up equipment and verify power indication from J+, E-1S, P-1S, and the water meter. If "8888" is displayed on any box; IMMEDIATELY remove power and check your connections.
- 5. Isolate pH & EC probe loop from the other plumbing and relieve pressure from the loop.
- 6. Remove, clean, and replace the EC probe (Use a solvent that will remove all film from the two electrodes. Isopropyl alcohol works in most installations)
- 7. Remove, calibrate, and replace the pH probe (Follow pH probe calibration instructions)
- 8. Pressurize the pH & EC probe loop and check for leaks. Check displays for proper indication.
- 9. Program "High" and "Low" set points in the EC and pH monitors if desired by the user.
- 10. Prime pumpers (Follow Pumper instructions) and verify proper manifold and pumper function.
- 11. Set each pumper to user required level using stroke control shaft. (See Pumper manual for details)
- 12. Verify "K" setting and check for proper meter function by measuring a known quantity of water.
- 13. Verify "GPS" setting and set for the user's desired ratio of injection.
- 14. Initial setup is now complete and the system is ready to use. Start and stop your Anderson injector system using a valve downstream of the injector to control water flow thru the injector.