FLOWMARK

FlowMark Model Mark-III-WW Installation Operation Manual

EPA Est.#: 92852-FL-1

Record Information About Your System

Date Purchased: _____

Date Installed:

Serial Number: _____

Local Representative: _____

For assistance please call your local representative or call (386)453-5091

Check Contents:

Please inspect the package for the following contents and any damage that may have occurred during shipping.

- 1. FlowMark Controller
- 2. Treatment Pads
- 3. Cable Tie Wraps
- 4. PVC Pipe Cover
- 5. Weather Stripping
- 6. Installation Manual
- 7. Warranty Card

Power Requirement

All FlowMark Systems are fitted with a auto-switching power supply that can accept 110VAC or 220 VAC power input. Systems are supplied with a molded 110 VAC Power Cord that can be plugged in to any 110 VAC wall outlet. If you choose to run the unit on 220 VAC simply cut the male plug off the power cord and wire the three wires accordingly:

White: Hot Leg

Black: Hot Leg

Green: Ground

Note: The FlowMark controller draws less than 60 watts of power and is best left running continuously, even when water flow stops.

Choosing The Best Treatment Location

Since no pipes have to be cut to install FlowMark you can test the results in various locations to find the one that provides the maximum benefit. In some cases best results were attained when installing on the floc tube.

As a rule you should install up stream of the first chemical injection point which is usually the coagulant. Some plants introduce coagulant far upstream of the clarifier so in these cases install up stream of the flocculant injection point.

Pipe Construction Material:

FlowMark will work on any type of pipe but non-ferrous (PVC, SS etc.) is always the first choice if possible because the FlowMark treatment is immediate. If only steel pipe is available it will still work but may take up to 24 hours for maximum results.

***Warning: The FlowMark treatment pads may interfere with magnetic flow-meter operation. Maintain a minimum of 5 feet clearance from magnetic flow-meter pick-up.

Installing Your FlowMark Treatment Pads:

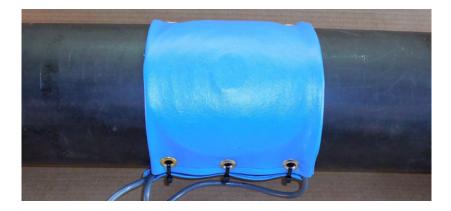
The treatment pads can be installed on horizontal or vertical piping.

Two treatment pads are included with this model FlowMark system.

- 1. Decide if you want to use option 1 install or option 2 install as seen in pictures below.
- 2. Select the treatment pad with 2 wires coming out of it for the first pad. The single wire pad is used for the second pad and the cable provided connects the two.
- 3. Form the shape of the treatment pad to the pipe shape by squeezing the pad with both hands into the position you have selected.
- 4. Insert cable ties through the grommets at each end of the pad.
- 5. Gradually tighten the cable ties to hold the treatment pads firmly in place. Do not over tighten cable ties as it may cause grommet to pull out of material.
- 6. Repeat the above process with the second pad installing on the same pipe with a small space between the two treatment pads or install opposing as seen in bottom picture.



Off-Set Install



Opposing Install

Treatment Pads can be installed off-set or opposing each other

Installing the Pipe Cover:

Two sections of white PVC pipe cover with the FlowMark label are included to provide a finished look to the installation.

- 1. Hold the pipe cover up to the area where the first treatment pad has been installed and mark the pipe where the end will be.
- 2. Install two pieces of weather stripping around the pipe inside the lines just marked on the pipe.
- 3. Open the pipe cover and install it over your treatment pad installation with the label facing you.
- 4. Remove adhesive strip from the pipe cover to seal the installation.

Note: It may be difficult to hold the pipe cover open using two hands due to the strong memory of the product. A second person helping will make it much easier.





Hold Pipe Cover up to Install area and mark length. Install weather stripping inside the line at each end.



Remove adhesive strip and seal cover tightly.



Finished look.

Mounting the Control Panel:

Choose a solid wall for mounting the control panel within 20 feet of the first treatment pad location.

Use lag bolts or tap cons and secure four mounting brackets to the wall.



Connecting and Powering the Unit:

Connect the 20' long signal cable to the treatment pad connector and the control panel connector by inserting the male connector into the female connector. Push together until a click is heard to lock the connector.

Be sure to neatly route the signal cable between the Controller and the Treatment Pads to avoid damage.

Plug the FlowMark Controller into a 110 VAC outlet and observe the yellow and blue lights.

YELLOW LIGHT ON=	Power to the Controller

BLUE LIGHT ON = Treatment Active.

Trouble Shooting:

Both Yellow and Blue Lights OFF... Check GFI or Circuit Breaker and reset.

Yellow Light ON and Blue Light OFF... Check signal cable connection or find damage to signal cable and repair.

Adjusting the FlowMark Signal

Inside the controller panel you will find a dial marked 0 through 10. This dial adjusts the amplitude delivered to the treatment pads. Each application may require a different setting so it is important to spend the time trying various settings. More is not always better so start at a low number and work your way up.

A setting between 3 and 5 is most common but some may require more of less amplitude.

Things to Look For: The FlowMark signal neutralizes some of the negative charge that holds colloids in suspension. When first energized you may notice foam rising through the sludge blanket and or excess foam in the effluent water. Foam indicates chemical overdose so gradually reduce coagulant and flocculant dose while monitoring effluent and sludge quality.