



## INTELLIGENT VALVE MONITOR™

for reliable designs and peace of mind™

## IVM6000™-LP Line Powered Version

Works with all 6000 series K-RAIN® indexing valves

### Easy to install & retrofit:

- 10 minute install or retrofit over valve
- No modifications to inlet or outlet piping
- No extra sensors required



### 100% detection of uneven distribution caused by:

- Broken stem spring
- Inadequate flow to seat disk
- Faulty installation
- Flow interruptions, air pockets
- Pump/control panel problems
- Wrong cam or broken cam
- Siphoning through valve
- Back pressure on valve
- Debris inside valve
- Freezing of valve or piping



Unexpected, undetected indexing valve malfunctions can cause costly problems for system designers, irrigation system operators and owners. Zone overloading and water runoff, or dry, dead grass can all be caused by valve problems. This wastes precious water resources and can result in costly fines for violation of municipal water restrictions. Preventing such unfortunate situations has traditionally required frequent site visits and inspections, however this increases Operation & Maintenance costs.

**Introducing the first electronic monitor and early-warning alert system for 6000 series indexing valves by K-RAIN®.**

**The IVM6000™-LP Intelligent Valve Monitor™ ensures reliable designs and peace of mind, by confirming even distribution to all zones, as well as providing early detection and immediate alert of valve malfunctions.**

Simply replace the valve's original rubber disk and stem assembly (RDSA) with the sensor enabled RDSA supplied with the IVM6000™. Slide the monitor down over the valve and supply low voltage line power. Connect the alarm output to any standard third party pump control panel or our IVM alarm box, and the IVM6000 is ready to provide immediate notification of any valve malfunctions. The internal micro-processor logs data, analyzing valve activity for over ten different error conditions.

The mechanical distributing valve + Intelligent Valve Monitor™ combination offers superior reliability and control system simplicity compared to using solenoid valves for zoning irrigation systems. It is also much less costly than using larger pumps, or multiple pumps which increases control panel complexity.



**DYNAMIC**  
MONITORS.COM

Toll free 1-888-747-7645  
Direct 1-902-628-1705  
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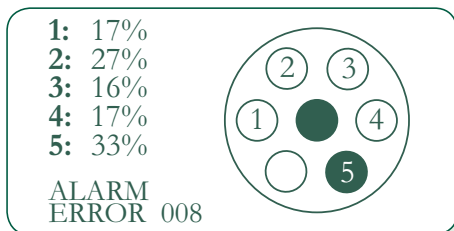
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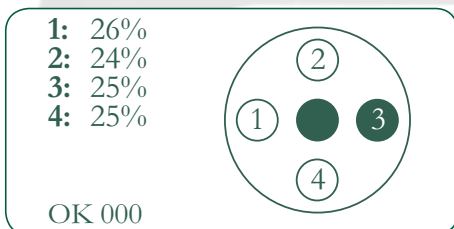
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Valve operation is tracked and real-time status of relative distribution is provided on the LCD display.



6605 - Outlet 5 active, status ALARM



6404 - Outlet 3 active, status OK

Alarm Event	Description / Explanation
Percent Deviation Exceeded	Uneven distribution has occurred.
Inlet No Outlet	RDSA is not fully seating in "down" position. Water is flowing out of all outlets at the same time.
Outlet No Inlet	RDSA may not be returning to the fully "up" position. Check for broken stem spring or debris.
Outlet is Stuck	Valve does not cycle to next outlet.
Cam Mismatch	Incorrect or damaged valve cam.
Out of Sequence	Outlets were not activated in correct order.
Outlet on Too Long	Maximum pump dose time pre-set value exceeded.
Outlet off Too Early	Minimum pump dose time pre-set value not met.
Temperature Alarm	Below minimum or exceeded maximum temperature value.
Device Reset	Possible power failure

## Product Specifications

**Valve/Cam Model:** All 6000 series. 2, 3, 4, 5 or 6 outlets.

**Line power:** Any from 6V ~ 30V AC or DC. Use standard 24V AC (40VA) transformer

**Power consumption:** <50mA @ 24V AC, <1.2Watts max

**Alarm output:** Relay contact ratings 1A/30V DC max, 0.5A/125V AC max.

**Event Storage:** Records all events with 255+ repeat counts on each entry.

**Dimensions:** 9.5" x 8.5" x 7.5" (high) (240mm x 216mm x 191mm)

**Shipping Dimensions:** 10" x 10" x 10" box

**Cable:** 24 AWG 4/8 Conductor, Direct bury, 10 ft (3.0m) standard

**Weight:** approx. 2 lbs 15 oz (1325g)

**Materials:** Case ABS, Lens: Polycarbonate

**Measurement resolution:** 1 second

**Operating Temperature:** -20°C to 50°C (-4°F to 122°F)

**Storage Temperature:** -40°C to 80°C (-40°F to 176°F)

### Other user adjustable parameters:

- Allowable outlet percent variation
- Valve model/cam
- Alarm error sensitivity (Low, Medium, High)
- Minimum, maximum (pump dose) on time
- Minimum, maximum alarm temperatures
- Date and time
- Lifetime and resettable counters/timers
- LCD backlight

### Installation:

Slides down over top of valve. Replace original rubber disk and stem assembly (RDSA) with one supplied with monitor.



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