

### Remote Reader Installation:

1. Locate the remote in a convenient location. If outdoors, note temperature range. Protect remote from direct exposure to the elements.
2. Wire remote reader to electric contact meter.
3. It is recommended that the remote reader be kept away from solenoids, contactors, fans, and other inductive devices.
4. If the "MJLR" remote style meter is installed outdoors, the meter and counter must be protected from direct exposure to the elements.
5. The remote reader advances 1 digit for each contact received from the meter\*.

*\*Exception: The remote reader for the 1½" and 2" meters registering in Liters will advance 1 digit for every 10 Liters of water that passes through the meter.*

## INSTALLATION AND MAINTENANCE INSTRUCTIONS

### OF CARLON'S

## MJL & MJLR SERIES METERS



### CARLON METER WARRANTY

Carlon Meter, Inc. (hereinafter Carlon or "the company") warrants products of its manufacture to be free of defects in material or workmanship. Liability under this warranty extends for twelve (12) months from the date of installation. Liability is limited to repair or replacement of any failed product or assembly proven to be defective in material or workmanship upon manufacturer's examination. Removal and installation costs are not included under this warranty. Manufacturer's liability shall never exceed selling price of the meter of assembly in question. Carlon disclaims all liability for damage its products caused as the result of improper installation, maintenance, use or attempts to operate products beyond their intended functionality, intentionally or otherwise. Carlon is not responsible for damages, injuries or expenses incurred through the use of its products. The above warranty is in lieu of all other warranties, either express or implied. No agent of the company is authorized to alter or otherwise revise this warranty.



*Leaders in water measurement and control*

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**Mounting Position:** Carlon recommends installing meters horizontally with the register facing up for maximum service life. Vertical mounting *may* result in some amount of reduced service life. Meters should not be installed where temperatures are outside the range of 35-120°F. Carlon provides threaded couplings for easier installation to piping and recommends 10 diameters of straight pipe on both sides of the meter to achieve the most accurate measurement of water volume.

Multijets are very simple in their internal construction. The only moving part in the water stream is a turbine, driven by the water flow. The meters do have a built-in strainer on the inlet side which traps larger particles from entering the meter turbine chamber.

### **Meter Installation Instructions:**

1. Flush the line thoroughly after plumbing changes to eliminate the possibility of foreign materials damaging the meter.
2. Do not exceed maximum operating pressure of 150 psi.
3. Install meter horizontally with the register facing up and the inlet port facing the supply water line.
4. Protect meter from freezing and from heat in excess of 120°F. For outdoor installation, protect meter from direct exposure to the elements.
5. Protect meter from any backflow of water opposite indicated flow direction.
6. To reduce potential harmful effects to equipment from “water hammer” caused by quick closing valves, it is suggested that you purchase and install a slow-closing solenoid valve.
7. It is recommended that if there is any possibility that the water supply contains foreign materials, a strainer be installed between the supply and the meter.
8. It is not recommended that the meter run for long periods of time at the maximum flow rating as excess wear will result and the life of the meter will be reduced.

### **Meter Installation Continued...**

- Straight unobstructed pipe section upstream of meter as follows:

Inlet Path – One Bend = 10 X Diameter of Pipe

Two Bends or One Tee and One Bend or Bends at random = 25 X Diameter of Pipe

Valves (check, gate, etc) = 12 X Diameter of Pipe

- Straight unobstructed pipe section downstream of meter should be 5 X Diameter of Pipe

**MJLR Meters:** In addition to the multi-jet meters, a reed switch is supplied, set to activate every time a gallon of water passes through the meter. There is 25 feet of wire provided to allow mounting the non-adjustable remote reader in an easily read, convenient location. Additional wire can be provided, if necessary. The remote reader furnished with the meter is battery operated, self powered with an 8 digit LCD display. It receives the signal from the reed switch on the meter and is connected by using the two-wire, no polarity cable provided.

**Display:** Liquid Crystal, 8 Digit, .315” high

**Housing:** NEMA-1

**Dimensions:** Depth 3 ½”, Width 2 ½”, Height 1 ¾”

**Operating Temperature:** 35° to 120° F

**Meter Maintenance:** The only suggested maintenance is to annually remove the meter from the water line, and gently back flush the meter to remove particles that may have been trapped by the strainer. Back flushing is running the water into the meter from the outlet side, instead of the normal flow direction.

The above maintenance is all that is required. If some unusual evidence of meter performance is observed during maintenance, please call the factory at 1-616-842-0420. A broken tamperproof wire and seal indicates the meter may have been disassembled.