

# M-8200

## PRECISION™ MANIFOLD SERIES

This is the Installation Reference Guide for the M-8200 Precision™ Manifold Series. The full instructions can be found at [www.legendhydronics.com](http://www.legendhydronics.com) or by calling 866-752-2055.

### Assembly

A complete manifold consists of both a **Supply** and **Return Header**, each with a **Integrated Adapter Assembly** (M-8200P manifolds) **End Plug** and **Manifold Mounting Brackets**. These components are shipped together, requiring minimal assembly. Follow steps 2 through 5 in the M-8200 Full Installation Guide, as needed if assembly assistance is required for reconfiguration, replacement, etc. The Headers in the M-8200 Manifold Series are one piece, brass bar with built-in loop isolation valves (supply & return) and flow gauges (supply only) that require no assembly or tightening.

### Balance Valve Operation

To open the Balancing Valves: remove the protective, plastic cap (**1a**); loosen the Memory Stop and position it at the outer most setting by un-threading it counter-clockwise with the 10mm flat head tool provided or a flat tip screw driver, until it stops (**1b**); turn the valve head with the 5 mm hex key provided, counter-clockwise until it is un-threaded to its outer most position (**1c**). (they are normally shipped in the open position). The Balancing Valves can be closed and the memory stops tightened by turning them clockwise and threading them into the supply header farther. The flow rate of each loop is changed by opening and closing the corresponding Balance Valve. The flow rate is indicated on its corresponding flow gauge, located on the top of the supply header. Remove the protective black plastic covers on each gauge. The scale on each gauge reads from 0 to 2 gpm with 0 gpm at the top of the gauge. The colored indicator rests at the top of the gauge with no flow and lowers down the scale as the flow increases (**1d**).

### Circuit Isolation Valve Operation

The Circuit Isolation Valves on each loop of the return header can be fully opened by turning the large white handle counter-clockwise until it stops (**2**). They are closed by turning the large white handle clockwise until it stops. Remove the protective clear plastic cover before operating the valve. They are normally shipped in the open position.

### Connecting the Radiant Tubing

Manifold tube connectors are not included with the manifold; they are sold separately. Use the appropriate tube connectors for the type and size (below a through g/h) of radiant tubing.

**Note:** For complete list of tube connector sizes and tubing options, contact your local Legend Hydronics Supplier or visit [www.legendhydronics.com](http://www.legendhydronics.com)

#### For 5/16", 3/8", 1/2" & 5/8" radiant tubing (Tube & Composite Tube Connectors) connections (3)

- Remove the protective red plastic cover from the manifold tube port.
- Ensure that the tubing is cut squarely using a proper tube cutter.
- Slide the hex nut (with the threads towards the manifold) onto the tubing.
- Slide the split ring washer onto the tubing.
- Insert the barbed end adaptor into the tubing until flush with the end of the tubing.
- Place the end adaptor into the selected port ensuring that the o-ring is seated properly into the manifold port.
- Hand-tighten the hex nut onto the male threads of the manifold port while supporting the tube and keeping the end adaptor square in the port. It should turn smoothly as the fitting is aligned (3a).
- Once the hex nut is hand tight, use a 1-1/8" (29 mm) wrench and turn it no more than 1/2 turn.

**CAUTION:** Do not over tighten, as this may destroy the integral o-ring.

To connect 3/4" radiant tubing, follow the steps above (a through h) and add the included 3/4" adaptor; or see the full installation guide.

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