

M-8000 Installation Reference Guide

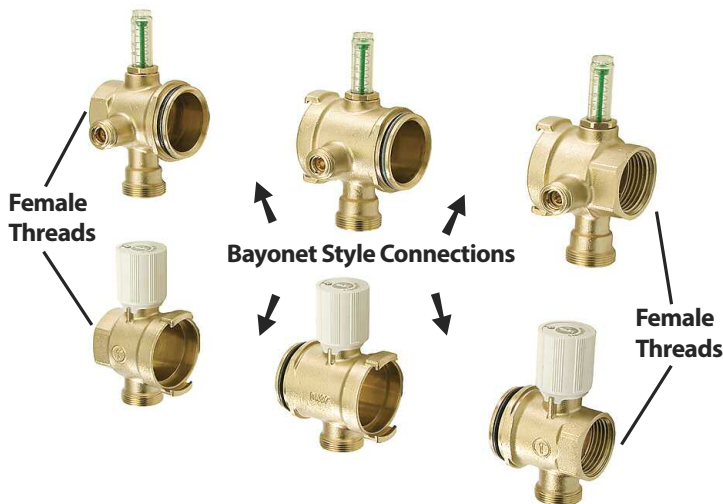
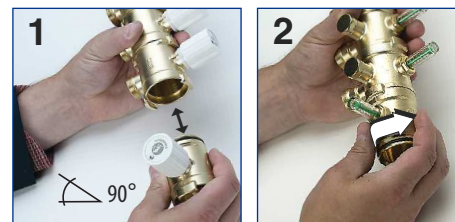
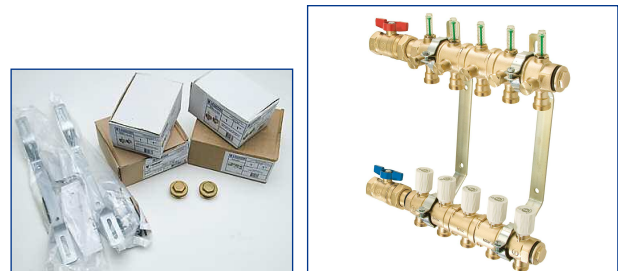
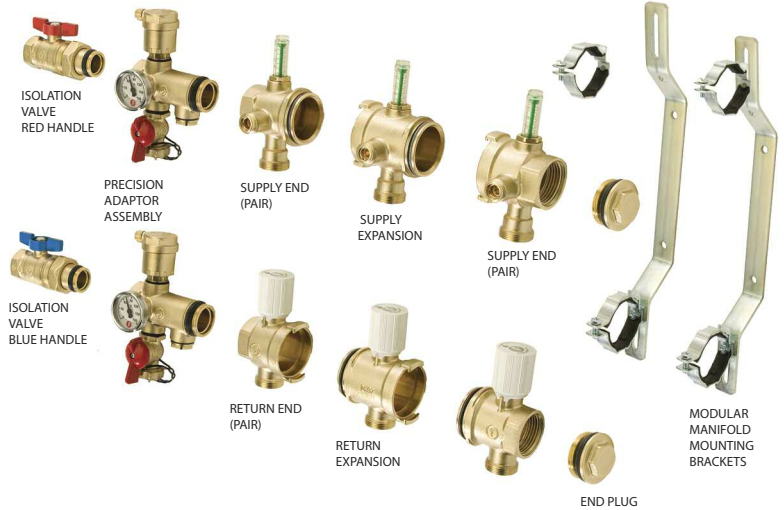
MODULAR™ Manifold Series

This is the Installation Reference Guide for the M-8000 Modular™ Manifold Series. The full instructions can be found at www.legendhydronics.com or by calling 1-866-752-2055

Assemble Manifold Components

A complete manifold consists of both a supply and return header. The M-8000 Modular Manifold headers consist of **End pairs** and **Expansion pieces**, for both supply and return. Each piece of the End pair has one side female threads for connecting to the other manifold components and one side bayonet style connection for attachment to another End piece (for a two station manifold) or an Expansion piece (more than two station manifolds) (photo). End pairs and Expansion pieces should connect supply to supply or return to return, only, however; all connections are made in the same way as described below (a through c).

- Align the male end (with EPDM o-ring, remove the protective clear plastic cover) of one piece with the female end of the second piece, with bayonet style connection so that the male end grooves are 90 degrees off center from the female end slots (1).
- Insert the male end into the female end and twist the pieces into alignment making sure that the male end grooves and female end slots engage (2).
- Repeat steps a. & b. above for all pieces of each manifold header (supply and return). Each header must have 1 End pair and from 0 to as many Expansion pieces as required for the project (10 maximum for 1" manifolds & 12 maximum for 1-1/4" manifolds), connected in between the End pairs (3).



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M-8000

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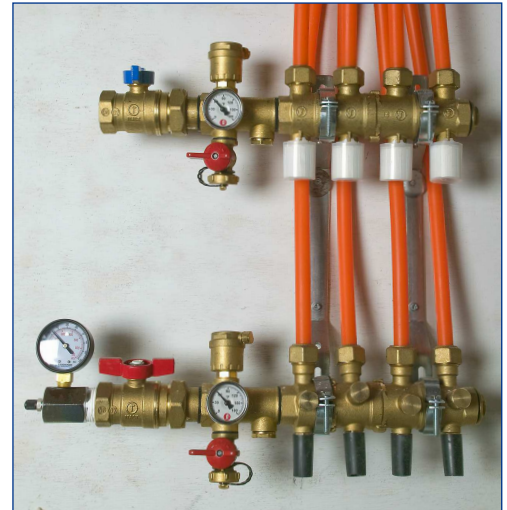
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This is the Installation Reference Guide for the M-8000 Modular™ Mainfold Series. the full instructions can be found at www.legendhydronics.com or by calling 1-866-752-2055

Balance Valve Operation

To open the Balancing Valves: remove the protective plastic cap (2a); 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 (2b); turn the valve head with the 5 mm hex key provided, counter-clockwise until it is un-threaded to its outer most position (2c). (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 (2d).



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 (3). 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. Tube Connectors (800-140, -142, -143, -144, -145) are for PEX or PE-RT tubing manufactured in compliance with ASTM F 876 (PEX) or ASTM F 2623 (PE-RT). Composite Tube Connectors (800-143C, -144C, -145C) are for PEX-AL-PEX tubing manufactured in compliance with ASTM F 1281.

Note: The Legend, M-8300 Stainless Steel series manifold tube connectors (and all other manufacturers' tube connectors) are not compatible with the M-8000 Modular Brass or M-8200 Precision Brass Manifold

For 5/16", 3/8", 1/2" & 5/8" radiant tubing (Tube & Composite Tube Connectors) connections (4)

- 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 adapter into the tubing until flush with the end of the tubing.
- Place the end adapter 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 adapter square in the port. It should turn on smoothly as the fitting is aligned (4a).
- 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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