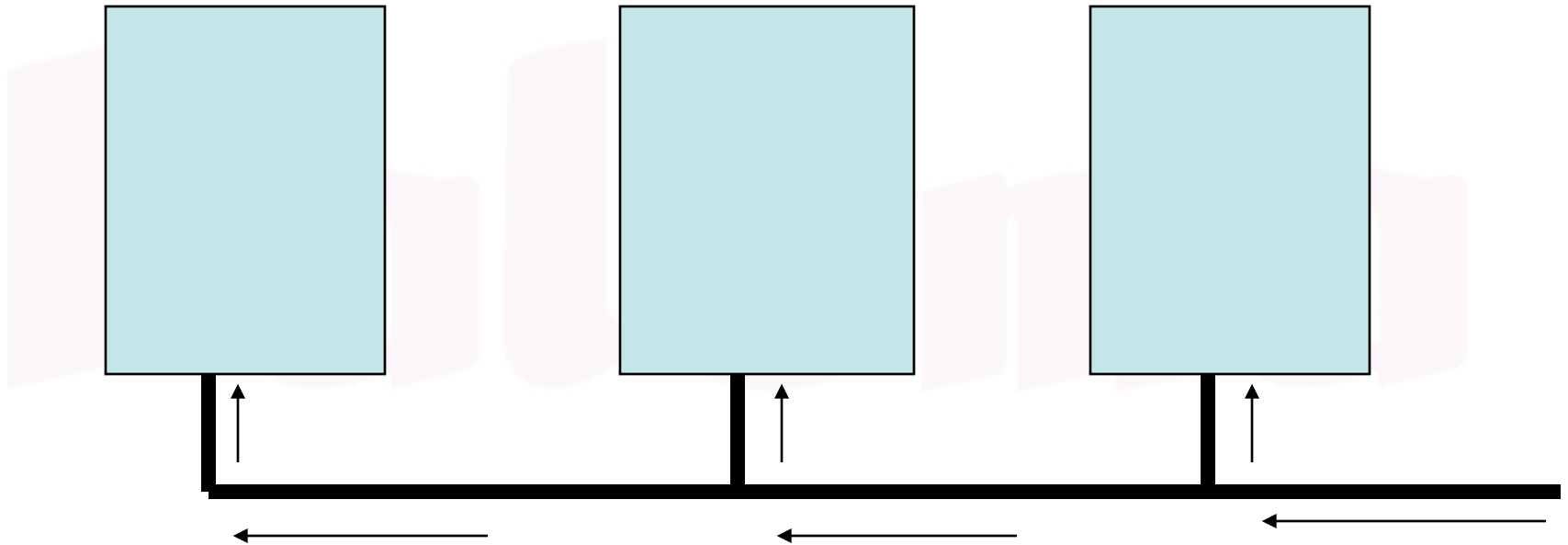


Manifold Plumbing

- Paloma Heaters can be hooked together in groups of up to 20
- Heaters must be plumbed in parallel
- Individual heaters in this configuration may be shut down or even removed for service using isolation valves
- MIC-180 Controller controls the heaters to provide only the amount of water needed

Manifold Plumbing

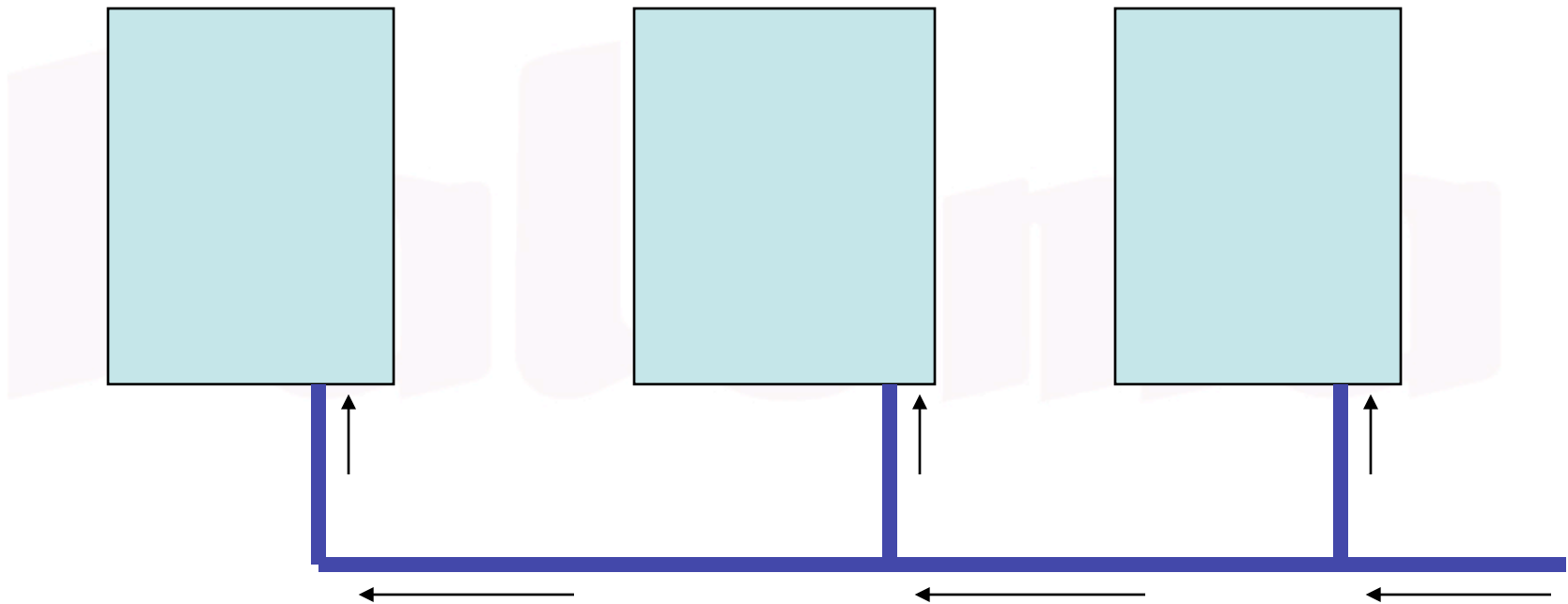
Water line



Plumb incoming water in parallel. **Never** run water from heater to heater. Size incoming line for the amount of water you will need at maximum demand.

Manifold Plumbing

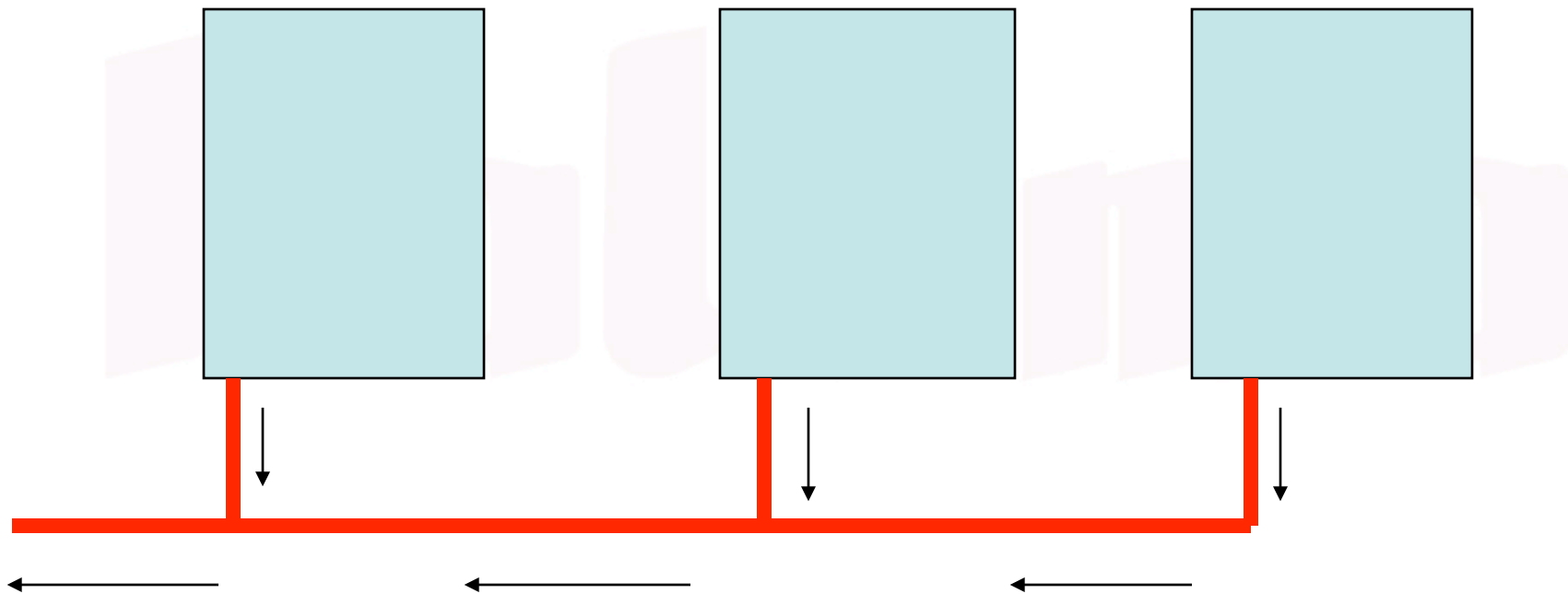
Gas line



Plumb incoming gas in parallel. Size gas line to feed all the heaters. Each heater at max runs at 199,900 BTU so the line must be large enough to serve all units in the manifold at maximum output.

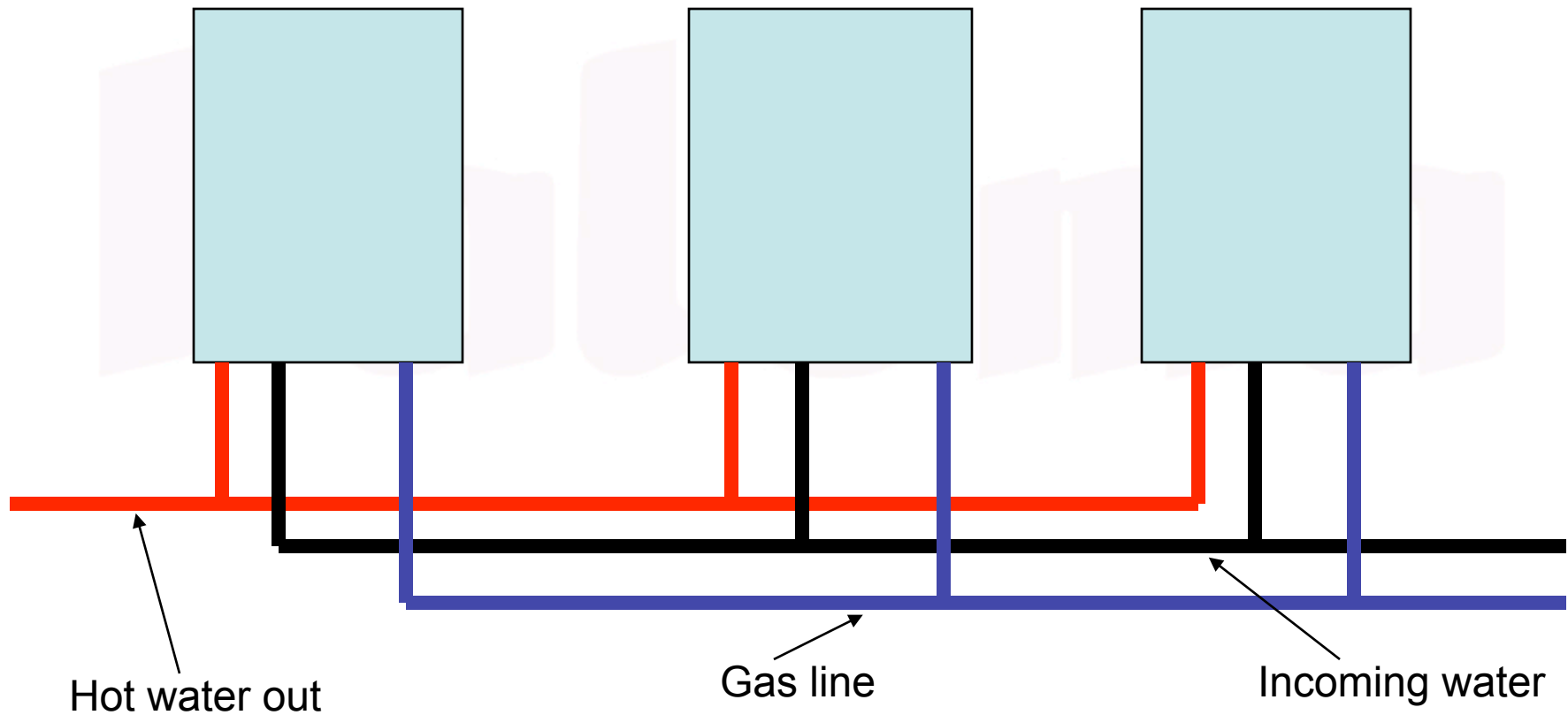
Manifold Plumbing

Hot water line



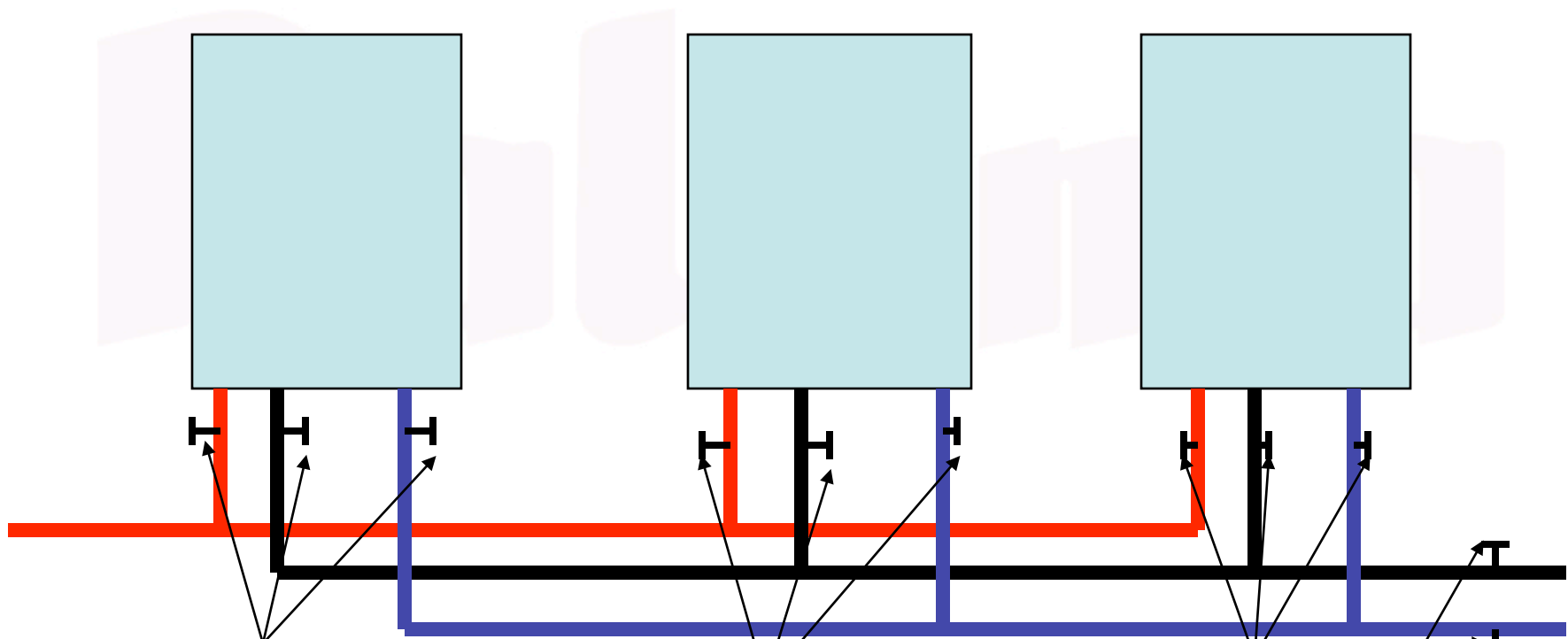
Outgoing hot water is also in parallel. Size the outgoing pipe to carry the maximum amount of water required by the user.

Manifold Plumbing



Manifold Plumbing

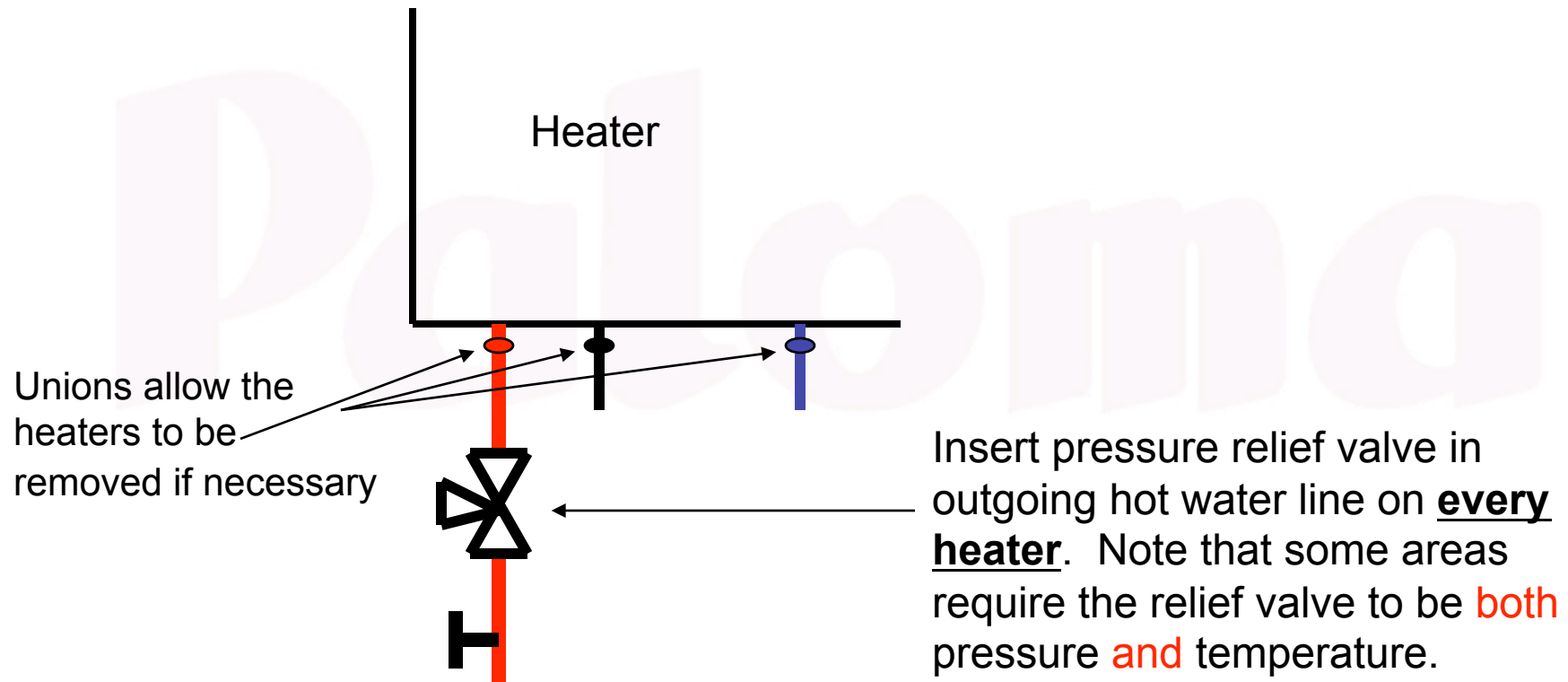
Isolation Valves



Include isolation valves in all lines so heaters can be turned off and isolated from the manifold for servicing, The remaining heaters will still run normally when one is isolated.

Manifold Plumbing

Relief Valve



Do not install a shutoff valve between the heater and the relief valve.

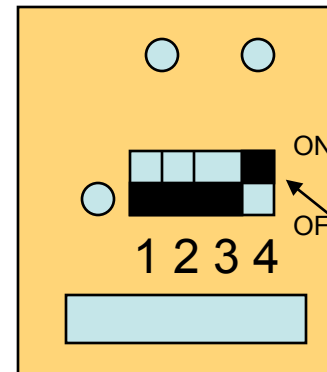
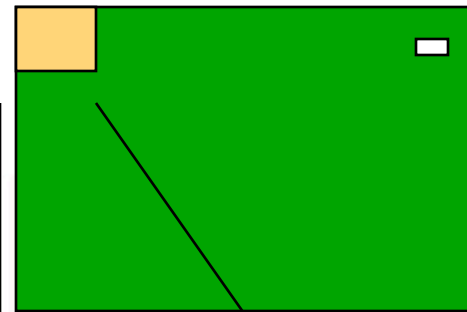
Manifold Plumbing

Dip Switch Setting In the heater

This panel is in the upper left corner of the circuit board.

There are 4 dip switches in the center of the panel and they are usually in the 'OFF' position.

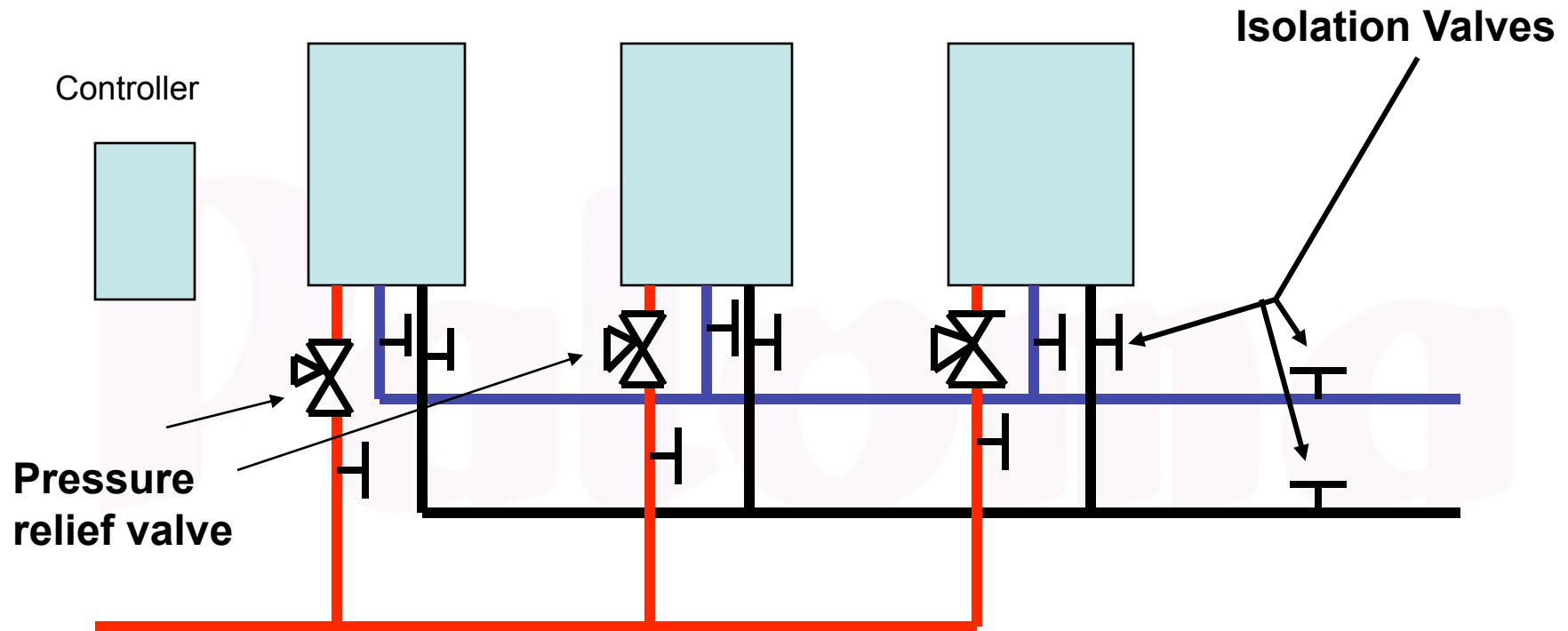
Circuit board of
second heater



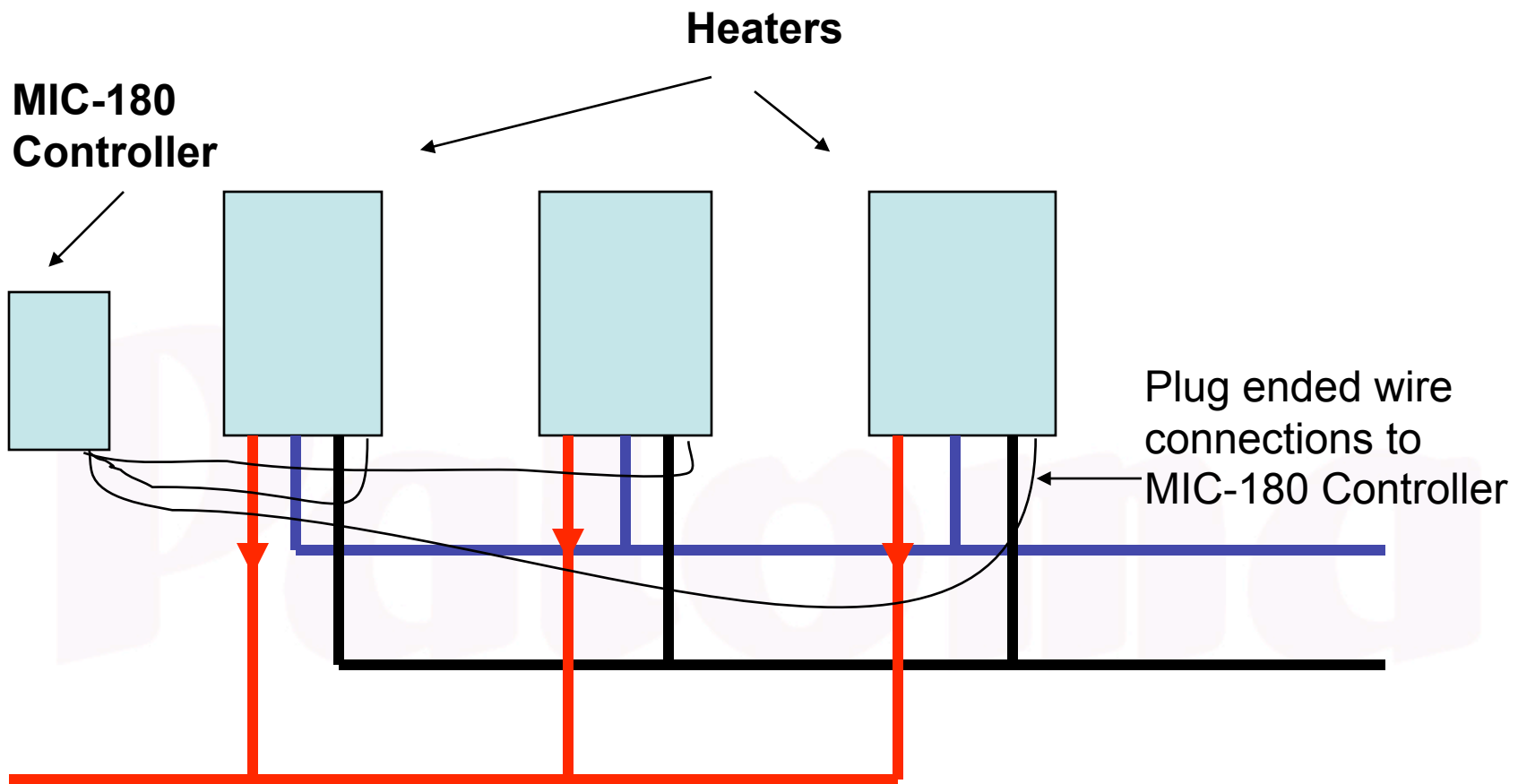
Dip switch panel
from heater circuit
board.

Set #4 switch to ON
and **leave it there.**

Manifold Plumbing Plan

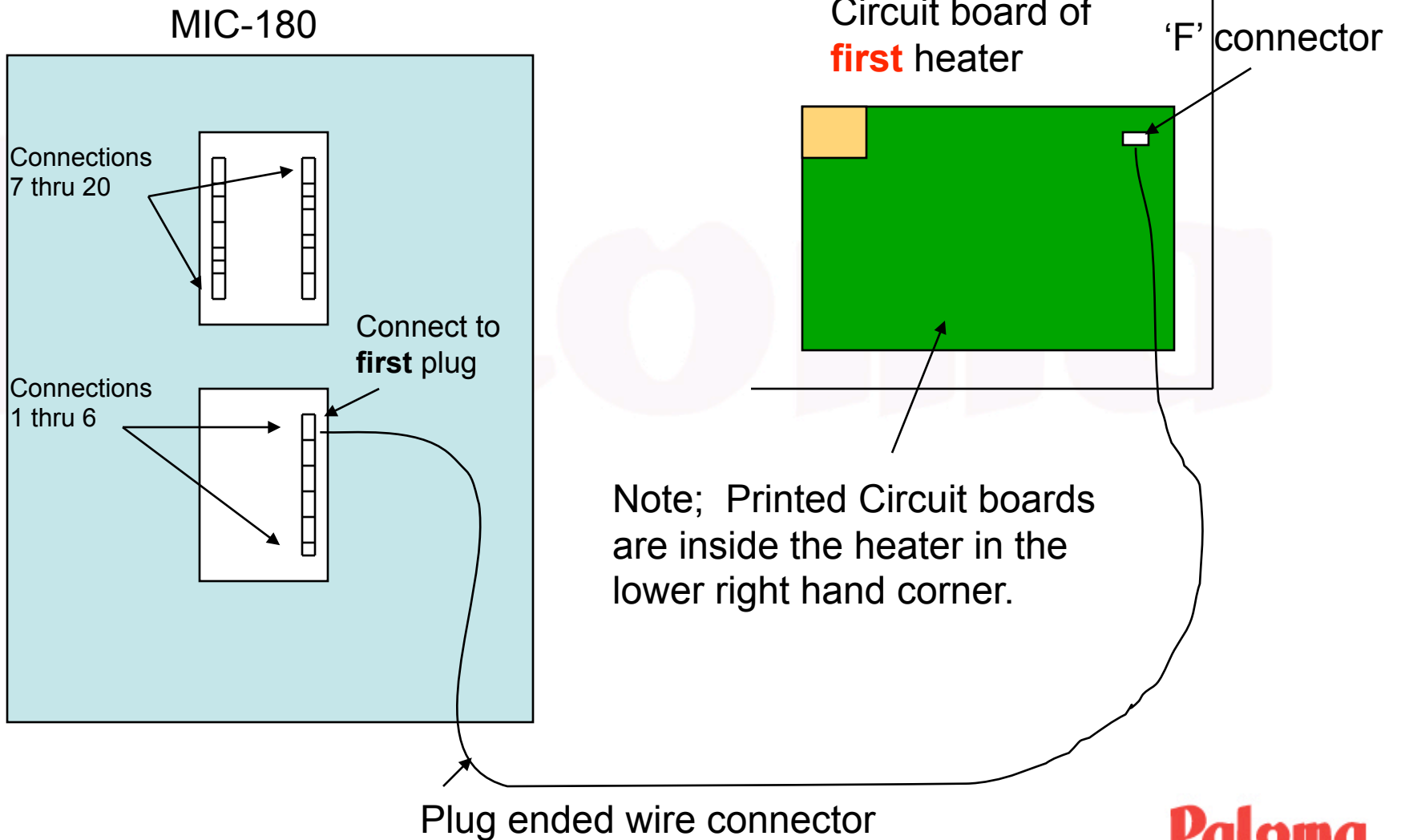


The plumbing will look like this. **Never** cascade lines from heater to heater. This configuration can be as large as 20 units. The Controller acts to manage the output of the manifold.

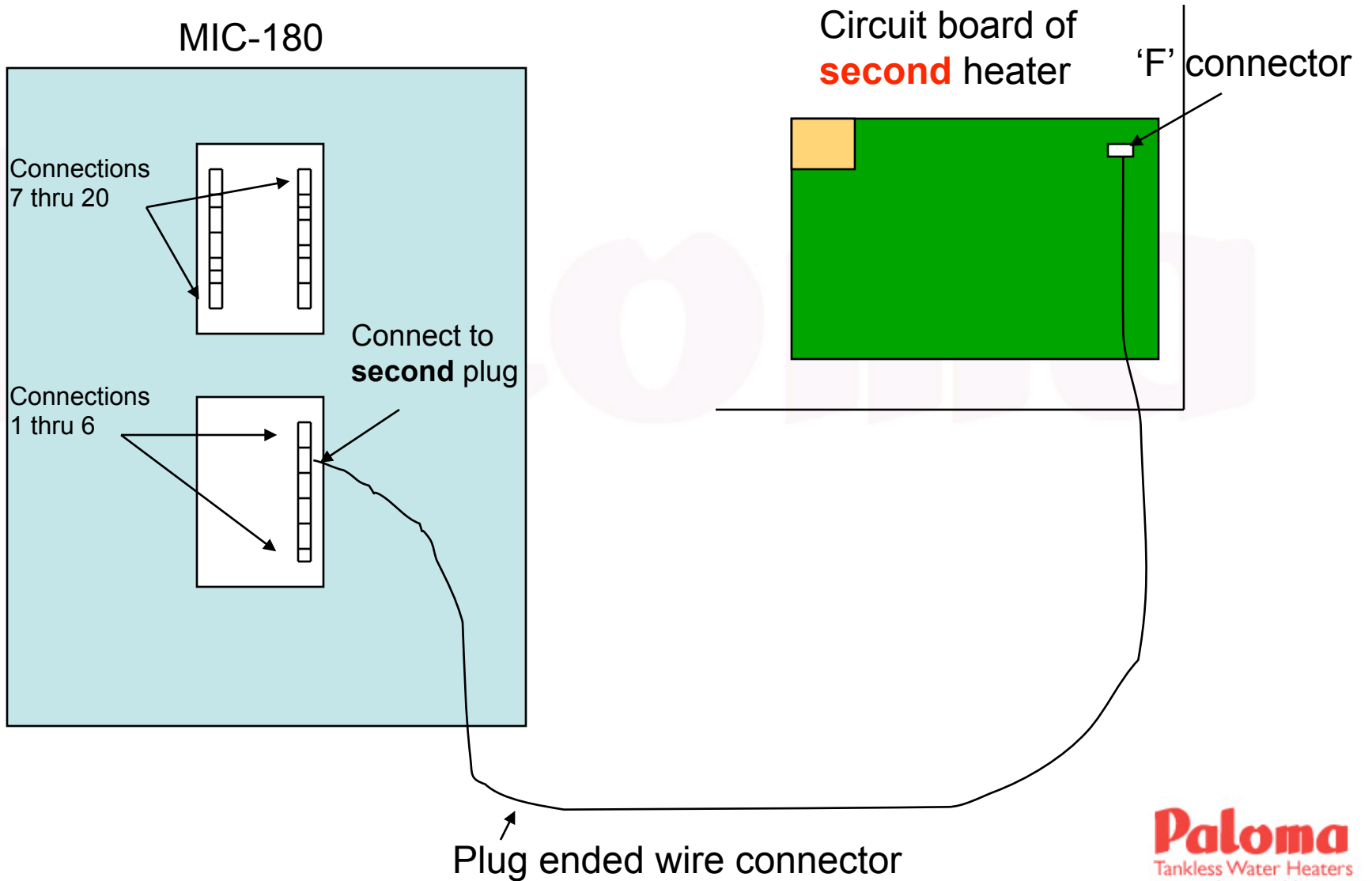


The MIC-180 Controller connects by plug ended wire to each heater. It fires up the heaters in response to hot water demand then turns them off as demand goes down. It randomly lights the heaters so that all units burn an equal amount of time. The MIC-180 Installation and Operation Instruction booklet gives connection details.

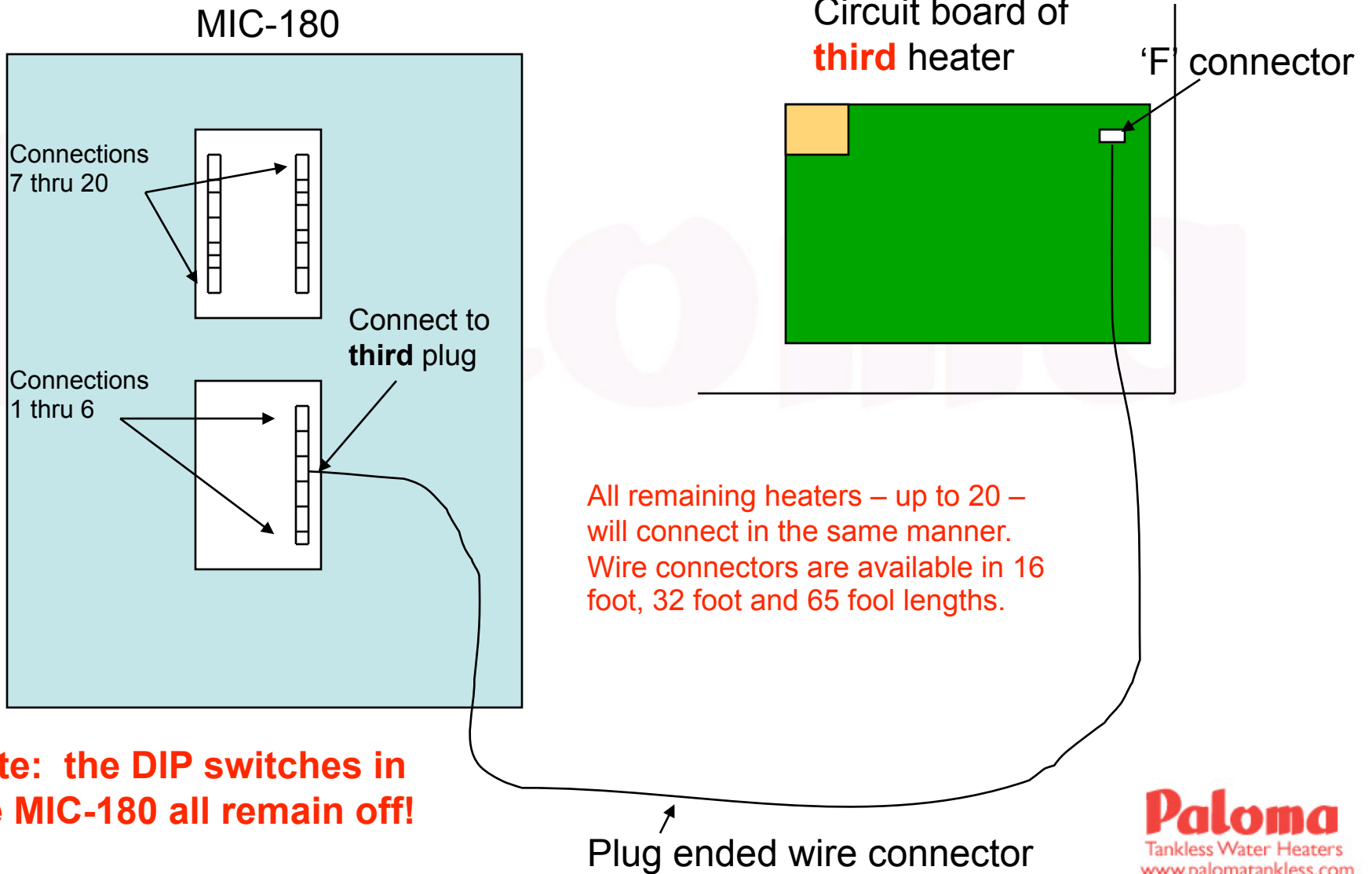
Manifold Plumbing



Manifold Plumbing



Manifold Plumbing



As the manifold heaters come on line the MIC-180 controller lights them off in random order depending on demand for hot water.

As the demand increases more heaters light off until demand is satisfied.

When demand begins to decrease the heaters shut down one at a time until they all return to stand-by mode.

This process ensures that only the exact amount of fuel is burned to produce the hot water needed.