The following will go through a step by step process for commissioning any/all Digital Recirculating Valves (DRVs). Armstrong Hot Water, Inc. recommends that an authorized representative perform the commissioning process and subsequently submits a DRV Commissioning Report to the factory to keep on file.

1. Perform a visual overview and confirmation that the DRV is installed per our installation schematics located in our IOM’s
   a. Ensure all water supply lines are present and in the correct location
      i. Hot water
      ii. Cold water
      iii. Mixed Water
      iv. Recirculation return from the system loop to the DRV
      v. Return to heater from the DRV

2. Power the DRV ensuring the display on the front of the DRV is illuminated

3. Flood the system slowly and in the following sequence:
   a. Cold water supply
   b. Mixed water outlet
   c. Hot water supply

4. Create a demand in the system loop
   a. Open 4-5 fixtures (slop sinks, showers, baths, etc…)

5. Turn on recirculation pump(s)
   a. Ensure there is sufficient minimum flow (DRV40 ≥ 5gpm; DRV80 ≥ 10gpm)

6. Ensure all supply temperatures and pressures are sufficient
   a. Hot water
   b. Cold water
   c. Recirculation return

7. If the DRV is at the desired set point (which was already pre-programmed at the factory with info supplied with the order) you may skip to step 10

8. Connect to the programming software via proper adapter (Gen. 1 = IrDA to USB Adapter, Gen. 2 = RS485 to USB Adapter)

9. Continue DRV set up programming following IOM pages 16-22 & 32

10. Shut off all demand and allow recirculation pump(s) to continue to run

11. Monitor DRV outlet and ensure is maintain set point
    a. It make take some time for the recirculation return temperature to rise to an appropriate level due to it being a new start up and system