

REQUIREMENTS FOR SETUP

1. Proper Conduit connection/installation
2. Supply Air Requirements
 - 5psi over Actuator Operating Range
3. Supply Voltage Requirements
 - Minimum of 10.5Vdc available for 4-20mA Analog operation
 - Minimum of 11.0Vdc available for HART Communications

WORKING CONDITIONS

1. Instrument Air Supply Integrity
 - Supply Filter/Regulator installed; clean, dry air is a must
 - Supply Regulator Vent Hole & Drain Valve orientation
2. Exhaust Vent on DVC Housing clear of obstruction

When receiving a standalone DVC6000 the instrument mode is “In Service”

- 1) This Mode needs to be changed to “Out of Service” during configuration
 - a) **Communicator Path:** *Setup and Diag/Detailed Setup/ Instrument Mode*
 - b) Take out of service
- 2) Next step is to teach positioner the equipment it is working with
 - a) **Communicator Path:** *Setup and Diag/Basic Setup/ Setup Wizard*
 - b) Upon selecting you will be prompted by communicator to input several pieces of information: MFG, Actuator Type & Size, Supply Pressure, etc.
 - c) It will prompt for factory default – choose YES.
- 3) After info is entered communicator will prompt you to enter Travel Calibration
 - a) Will ask Auto- or Manual- control – Auto is suggested
 - b) After choosing Auto it will ask you for Crossover Adjustment Source to define the midpoint – select Manual.
 - c) During Auto Calibration valve will open fully and close multiple times while searching for its end points.
 - d) You will be asked to define a midpoint (crossover) – Adjust input current as needed (near 12 mA) until feedback arm is perpendicular to the adjustment arm.
 - e) Select “Continue” with Auto Travel Calibration.
- 4) Once Auto Travel Calibration is complete
 - a) Communicator will prompt you to put back in service – choose “In Service”.
 - b) Adjust current source from 4-20 mA and note valve position.
 - i) Linear? Verify functionality.
 - ii) Non-linear? Needs further adjustment.
- 5) If DVC fails Auto Travel Calibration:
 - a) Check travel sensor adjustment – see related section of manual.
 - b) Verify I/P functioning properly – is I/P Linear?
 - c) Verify pressures on output pressure and supply gauges.
- 6) If DVC passes Auto Travel Calibration, but is unsteady or oscillates:
 - a) Adjust response control – dampening.
 - b) **Communicator Path:** *Setup and Diag/Detailed Setup/Response Control/Tuning Set*
 - c) A letter was assigned during setup to factory default – choose a lower letter – move a couple steps lower at a time, may need to repeat until control smooths out.

NOTE: Different device descriptions and DVC styles may have slightly different terminology. Path give is based on 375 or 475 communicator structure.

Additional troubleshooting is available through technical support, please make sure to note any symptoms or issues as they occur, including process information, or communicator error readings.

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