

## Remanufactured Rosemount® 3051 – Flow Measurement Setup

- **“Enhanced” electronics**
  - Visually identifiable by the raised faces along the transmitter, and the round base for SST tags (shown in red circles on picture)
  - (This style of unit will prompt you with questions during setup, after step 6 below)
    - **INSTRUCTIONS**
      - 1) Go to the “configuration” menu
      - 2) Go into “manual setup”
      - 3) Select “scaled variable”
      - 4) Select “scaled variable” again (not always an option, if not available go to step 5)
      - 5) Select units and set for flow measurement (ex: GPM)
      - 6) Select “transfer function” and set to “square root” mode
      - 7) Define pressure value at position 1 (lower span value for Process Variable)
      - 8) Define starting point for Scaled Variable (lower span value for Scaled Variable)
      - 9) Define pressure value at position 2 (upper span value for Process Variable)
      - 10) Define final measurement value for Scaled Variable (upper span value for Scaled Variable)
      - 11) Define PV linear offset (usually 0)

### **Alternative “Enhanced” Method:**

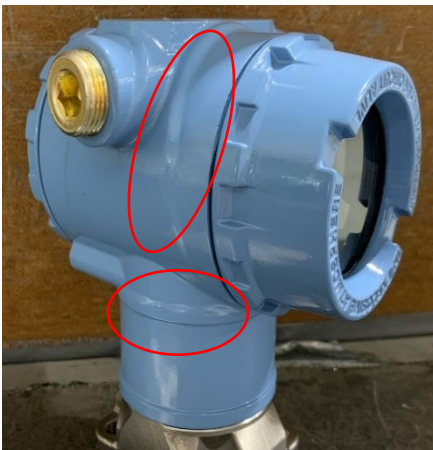
- Leave scaled variable as linear, and change analog output to Square Root mode
- Configuration → manual setup → analog output → Xfer function to Square Root mode

**BOTH “ENHANCED” AND “NEW STYLE” UNITS HAVE CONNECTIONS THAT EXTEND PAST TRANSMITTER BODY, SHOWN BY THE RED LINES ON THE MIDDLE PICTURE BELOW**

- **“New Style” electronics**
  - Visually identifiable by the flush round faces on body, extended connections and flat faces used to screw in SST tags
  - (**MUST SEND CHANGES TO THE UNIT IMMEDIATELY AS THEY ARE MADE DURING SETUP!**)
    - **INSTRUCTIONS**
      - 1) Go to the “configuration” menu
      - 2) Go into “manual setup”
      - 3) Select “display”
      - 4) Set desired decimal place
      - 5) Selects “units” (scaled variable units) and set to flow units (ex: GPM)
      - 6) Go to “display options”
      - 7) Go to custom meter display
      - 8) Adjust transfer function to “Square Root” mode

### **Alternative “New Style” Method:**

- Leave scaled variable as linear, and change analog output to Square Root mode
- Configuration → manual setup → Process Variable → Xfer function to Square Root mode



Enhanced Electronics  
w/ raised surfaces



Extended connection terminals  
for Enhanced & New Style



New Style Electronics

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## **Remanufactured Rosemount® 3051 – Flow Measurement Setup**

- **“Old Style” Electronics**
  - Visually similar to the New Style electronics with smooth rounded surfaces and flat face for attaching SST tag
  - **HOWEVER**, the old-style connections **DO NOT** extend past the unit body allowing for a flush profile of the unit
    - Some legacy units do not employ the opportunity for flow measurement applications
    - **“Old Style” electronics are not suitable for flow measurement applications**



Old Style Electronics  
w/ flush surfaces



Old Style Electronics flush  
terminal profile

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

(800) 325-4808 Visit [www.automation-service.com](http://www.automation-service.com) for additional training videos and downloads.