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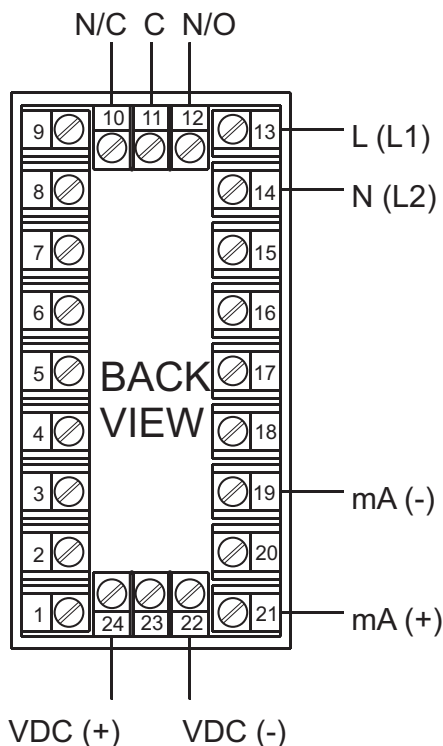ANDERSON

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Technical Bulletin
Model 801 PID Loop Controller
Quick Start Notes

This bulletin is designed as a Quick Reference to be used during instrument start-up. Refer to the supplied Concise Product Manual for additional wiring details, as well as instructions on how to enter the Program/ Setup menus. Upon power-up Goto ConF is displayed as described in section 7 of the Concise Manual. Press scroll to enter Configuration Mode and enter the unlock code (20 is the default) as listed in section 2. Select Mode. In the section 3 Configuration mode the parameters displayed depend on how the instrument has been configured. The input type MUST match the type of input being used. If required, section 3 Configuration Mode explains how to change input type. For Transmitter inputs, the model 801-4010-00 Controller features an on-board DC loop power supply.
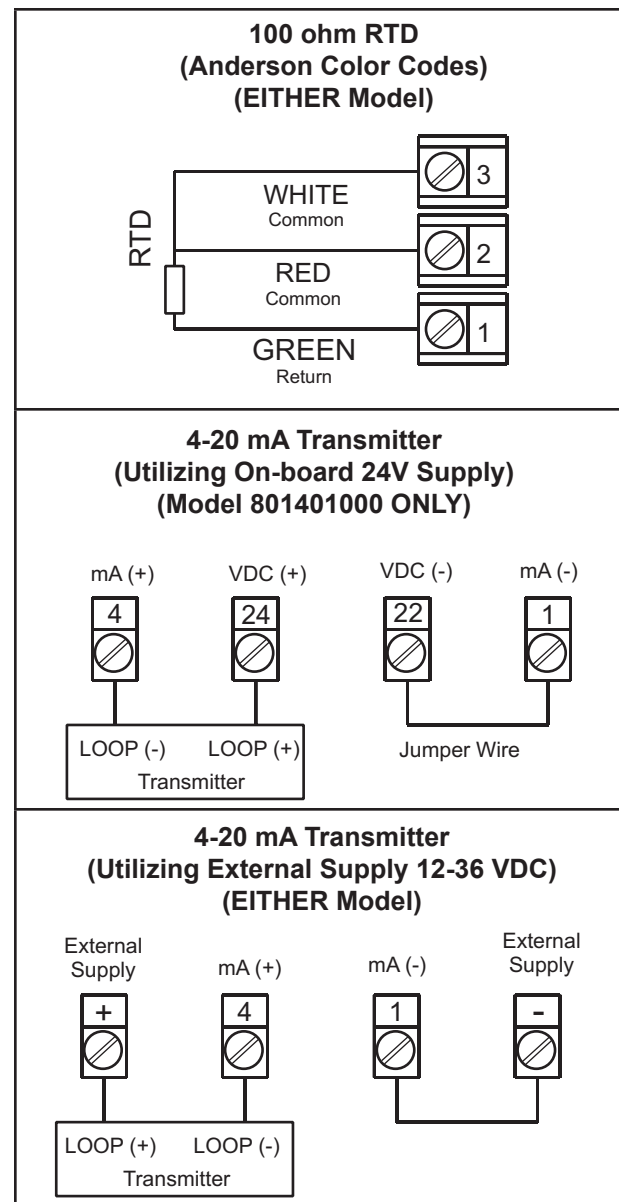
OUTPUT 3
RELAY
2 Amp - Mechanical - Dry Contact

N/C C N/O

BACK VIEW

L (L1)
N (L2)

SUPPLY VOLTAGE
(90-264 VAC)

mA (-)
mA (+)

OUTPUT 1
4-20 mA (PID)
(To I:P or Motor Speed Control)

VDC (+)   VDC (-)

OUTPUT 2
24 VDC TRANSMITTER
POWER SUPPLY
(-- IF SUPPLIED --)

The term "Transmitter" denotes a device which outputs 4-20 mA. Depending on the model, may be for Temperature, Pressure, Liquid Level. The term "RTD" denotes a device which outputs a Resistance signal. Used in Temperature measurement only.

INPUT WIRING

100 ohm RTD
(Anderson Color Codes)
(EITHER Model)

RTD

WHITE — Common — 3
RED — Common — 2
GREEN — Return — 1

4-20 mA Transmitter
(Utilizing On-board 24V Supply)
(Model 801401000 ONLY)

mA (+) 4
VDC (+) 24
VDC (-) 22
mA (-) 1

LOOP (-)   LOOP (+)
Transmitter

Jumper Wire

4-20 mA Transmitter
(Utilizing External Supply 12-36 VDC)
(EITHER Model)

External Supply +
mA (+) 4
mA (-) 1
External Supply -

LOOP (+)   LOOP (-)
Transmitter

Quick Setup Guide

1. Make wiring connection as shown on Concise Product Manual (59300-4) under, *1. INSTALLATION*.
Note: The actual connections required depend on the exact model and options fitted.
At first power-up, or if hardware configuration has been changed the **GoTo ConF** message is displayed. Access to other menus is denied until configuration mode is completed.

2. With **GoTo ConF** displayed press the scroll key, **ULock** will be in lower display and **0** in upper display. Use the up key to enter the unlock code **(20)** then press the scroll key to proceed. An unlock code is required to prevent unauthorized entry to Configuration & Setup modes.
Note: the unlock codes are listed in the, *2. SELECT MODE* section of the Concise Manual. You may enter the Select Mode at any time by holding down scroll key and pressing the up key.

3. Once in the, *3.Configuration Mode* access to all available Parameters is done by pressing the scroll key. With desired Parameter in lower display use the up or down keys to set required values.
Note: When a parameter is changed it will be flashing in the upper display, press the AUTO/ MAN key to accept the change, otherwise parameter will revert to previous value. Any time you wish to exit Configuration Mode, hold down scroll key and press up key.

4. To enter the, *4. Setup Mode* hold down the scroll key and depress the up key, use up or down key to get to setup then press scroll key, now enter unlock code **(10)** as listed in *(2.Select Mode)*.
The MAN LED will light while in Setup mode. Press scroll to move through the parameters and then press the up or down keys to set required value. To **exit** Setup mode, hold down scroll key and press up key.
Now press down arrow, **Optr** will be in top display, then press scroll key to enter normal operation mode.

5. While in normal Operator Mode the process value will appear in the upper display, and the set point value in the lower. *(Display strategy 1)* To modify the set point value, press the scroll key and the set point value will be move to the upper display, and **SP** in the lower. Use the up and down arrow keys to adjust set point as needed, press scroll twice to return to normal operating display. *(Display strategy 2)* The display will appear the same as above, but the set point value can be changed without first pressing the scroll key. This function can be selected in the Configuration Mode.

For those wishing to have a full product manual or needing a new concise manual they are available on the Anderson web site; www.andinst.com , look under Instrumentation for the AIC 801 Micro-Based 1/8 Din Controller.