

## **Technical Note**

Mettler-Toledo Thornton 200CR with 10 VDC Output

The 4-20 mA analog output signal can be converted to 0-10 VDC following steps outline below with reference to the 200CR Instruction Manual. A milliammeter and 500 ohm 0.1% resistor (Thornton part 58106 is satisfactory) are needed. The procedure explains adjustment of analog output 1. The second output could be done similarly.

- 1.) In section 8.4 of the manual, step through the menus to the [1:Adj 4mA=XXXXX] display. (Display would be [2:Adj 4mA=XXXXX] for the second output.)
- 2.) Connect a milliammeter to the terminals of the analog output to be adjusted.
- 3.) Press and hold the down arrow key to lower the output current as low as possible, approaching zero mA until the display read [1:Adj 4mA-00000].
- 4.) Press the ENTER key.
- 5.) With the [1:Adj 20mA=XXXXX] display, press the up arrow keys to obtain exactly 20 mA output on the milliammeter, ignoring the 200CR display.
- 6.) Press the ENTER key twice.
- 7.) Mount a 500 ohm  $\pm 0.1\%$  resistor across the analog output terminals AOUT1 and AGND1, in addition to the leads from the device using the signal.

For the most current product information visit: **WWW.thorntoninc.com** 

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