

4803D(DC) and 4803D(AC) DO 4-20mA Transmitter



Introduction:

Thank you for choosing this DO transmitter. This 1/16 DIN controller offers dual backlight LCD display, high accuracy, and automatic or manual temperature compensation.

Specifications:

	DO	O ₂	Temp.
Range	0~20.00 mg/L	0~200.0 %	0~110 °C
Accuracy	±0.2+1 digit	±2% FS	±0.2+1 digit
Resolution	0.01 mg/L	0.10%	0.1 °C
Compensation	ATC: 0~60 °C MSC: 0~50 ppt MAC: 0-20000 ft	N/A	

Temperature Compensation	30K Thermistor or Pt-1000 or MTC
Output	4-20mA isolated current output
Signal output load	500 Ω
Power supply	9V DC or 100V~240V AC
Panel Cutout	1/16th DIN 1.81 x 1.81" (46 x 46mm)
Meter Dimensions	4.7 x 1.77 x 1.77" (105 x 45 x 45mm)

Accessories:

9V DC adaptor (only for 9V DC version)

Adapter connection wire (only for 9V DC version)

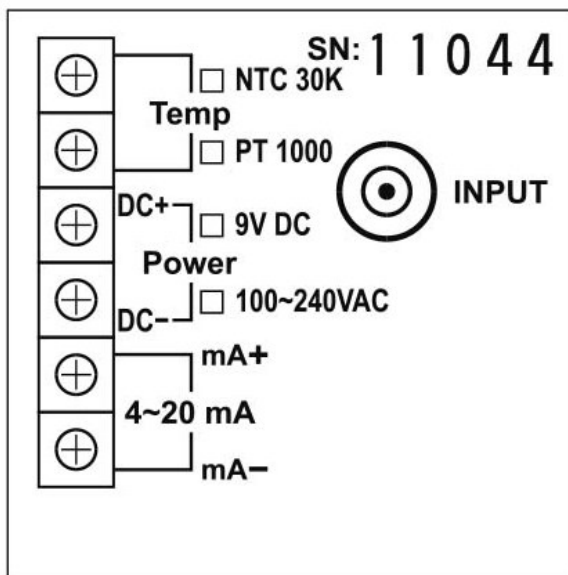


Installation:

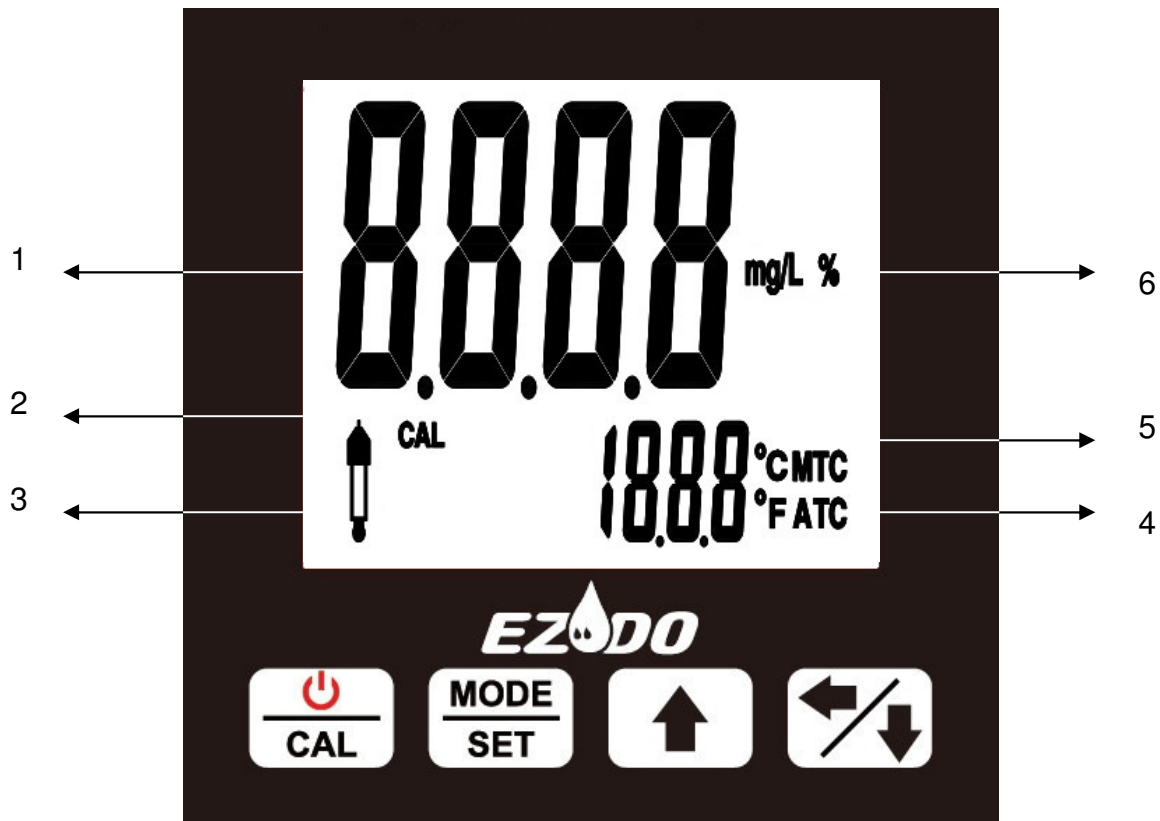
<Mounting the controller>

1. Make a 1.77 x 1.77" (45 x 45 mm) panel cutout (1/8" to 3/8" thickness)
2. Slide the controller into the cutout until the bezel is flush with the panel.
3. Slide the mounting bracket over the rear of the controller and press snugly against the rear of the panel.





<Rear panel connection>



<Display and Buttons>






1. DO or O₂ reading
2. Calibration mode
3. Calibration error indicator
4. Auto temperature compensation(ATC) or Manual temperature compensation(MTC)
5. Temperature reading and unit
6. unit of DO or O₂ reading

 CAL	<ol style="list-style-type: none"> 1. Turn on/off the controller 2. Enter calibration mode
 MODE SET	<ol style="list-style-type: none"> 1. Switch DO and O₂ mode 2. Press and hold to enter setting mode 3. In setting mode, press to store each setting
	<ol style="list-style-type: none"> 1. In measurement mode, adjust temperature value of MTC
	<ol style="list-style-type: none"> 2. In setting mode, adjust each parameter

Calibration:









<DO>

1. Press  to switch mode to O₂ mode (unit will be %). DO probe will be calibrated in the air under O₂ mode.
2. Wait 10 minutes to 30 minutes for the probe to polarize. The reading should be approx. 101.7% (saturation) or stable after the probe has completely polarized.
3. Let the probe in the air vertically. Press and hold  for 3 sec. to enter calibration mode. The display will appear **CAL** and flashing 101.7%. When the display stops flashing and indicates “SA”, then “End” while calibration ends, and will return to measurement mode.
4. Optional 'zero oxygen' calibration: (improves measurement accuracy for very low or very high DO measurements). Place the probe into a zero-oxygen calibration solution, such as 5% sodium sulfite, wait for stability and press and hold  to enter calibration. Stability in a zero solution may take many minutes, depending on probe history.








Note:

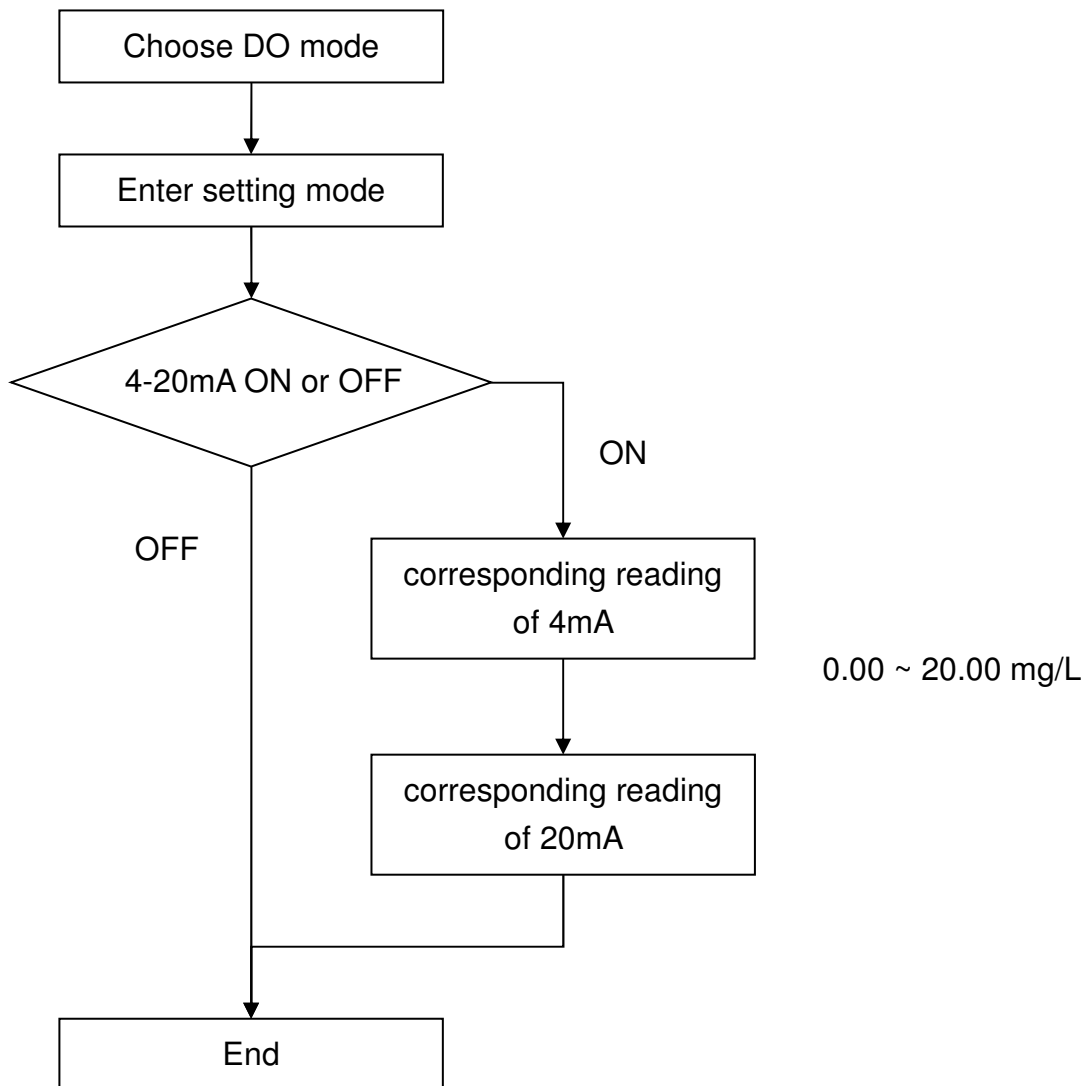
1. For this first-time calibration, the reading is not necessarily to be 101.7% after the probe is completely polarized. If the reading is stable, it is ready for calibration.
2. Calibration error indicator icon will appear, and “Err” instead of “SA”, if calibration fails.
3. If the reading is not 0% while the DO probe is not connected, calibrate the meter in the air without probe to make reading becomes 0%.

<Salt and Altitude compensation and temperature unit setting>

1. Press and hold  until a beep sound, and then press  again.
2. Press  to set salt compensation between 0~50 ppt, and then press  to store the setting.
3. After setting salt compensation, then use  to set altitude compensation between 0-20K feet, and then press  to store the setting.
4. The display will then show the current temperature unit. Press  to change the unit, and then press  to store the setting.






4-20mA output setting:

1. Press  to choose DO mode.
2. Press and hold  button until a beep sound, and then press and hold  button until a beep sound to enter 4-20mA output setting mode.
3. Use  and  to adjust settings, and use  to store each setting.
4. The display will then automatically cycle through 3 settings: 4-20mA output on or off, the corresponding reading of 4mA, corresponding reading of 20mA.
5. When setting the corresponding readings, press and hold  to switch the value to Positive or to Negative.








Other settings

<Back light>

1. Press and hold  until a beep sound, release  and then press and hold  again.
2. Press  to choose On, OFF, and Auto:
On: back light is always on.
OFF: back light is always off.
Auto: back light will be on for 30 seconds while any button is pressed and then off.
3. press  to store the setting.

<Reset the controller to default setting>

1. Press and hold  until a beep sound, release  and then press and hold  again until a beep sound.
2. Press  to switch OFF to On, and then press  to reset the controller to default setting.

