

Changing the Analogue Signal Range (1/2)

When switching from a normal range sensor to a medium or high range sensor, the signal range must be adjusted. The N_2O Wastewater Controller has two analog channels with a default range from 0 to 2.0 mg N_2O -N/L. When using Medium or High range sensor heads, the channels should be rescaled to e.g. 0 to 10.0 mg N_2O -N/L. It is a 2-step process where the output range as well as the logging range need to be changed separately.

IMPORTANT:

- Make sure the same scaling is used in the receiving data handling system.
- If a firmware update is performed, the controller will go back to default settings and this step must be repeated.

Step-by-step guide to output range rescaling:





4. Find the corresponding Analog output channel 1 or 2 for sensor 1 or 2, respectively.

Analog output 1		
Signal output value	Analog output math	
Analog signal	4-20 mA	
Enable manu mode	No	
Safety value 1	+0.0 mA	J

7. Finally, press the OK button and exit the menu.

ГОК 🗙	Cancel	
Scale start 1	+0.00 Nmg/L	-
Scale end 1	+10.00 Nmg/L	
Safety value 2	+0.0 mA	
Scale start 2	+0.00 Nmg/L	
_	140000 NL (1	

2. Locate the submenu called Configuration and enter this.



5. Find the value Scale end 1 and tab the yellow window. An input window will popup.

Analog	cale	end 1			
Scale st			2.0	0 Nmg/L	
Scale ei	7	8	9	Exp	
	4	5	6		
Safety v Scale st	1	2	3	-	
Scale er	0	±			
					-

8. <u>REMEMBER</u> to change the scaling in the SCADA system accordingly.

3. Locate the submenu called Analog outputs and enter this.

Configuration	×
- Limit monitoring	-
Analog outputs	
Analog output 1	
Analog output 2	
Analog output 5	
Analog output 6	
OUTIN Analog output 8	-

6. Enter the new max scale range that 20 mA corresponds to. 10 mg N_2O-N/L is used here.



Continue to page 2 for Step-by-step guide to logging range rescaling ____



Changing the Analogue Signal Range (2/2)

When switching from a normal range sensor to a medium or high range sensor, the signal range must be adjusted. The N_2O Wastewater Controller has two analog channels with a default range from 0 to 2.0 mg N_2O -N/L. When using Medium or High range sensor heads, the channels should be rescaled to e.g. 0 to 10.0 mg N_2O -N/L. It is a 2-step process where the output range as well as the logging range need to be changed separately.

IMPORTANT:

Please make sure, that you have done the Step-by-step guide to output range rescaling, before proceeding with logging range rescaling.

Step-by-step guide to logging range rescaling:

1. Enter the menu system in the lower left corner and login as MASTER with pin code 9200

N2O Sensor Overview	<u>em</u>
N2O Sensor 1	N2O Sensor 2
ID input	
ID input	Master
Гок	Cancel
24/08/07 13:29:31	

4. CHANGE the Display range end from the default 2.0 to e.g. 10.0

►unctior	Jispla	y ranį	ge end 10	3). (-)		
Descrip	7	8	9	E	Exp.	-
Tempera	4	5	6	4		
Unit	1	2	3	Ī	•••	
Display	0	±			×	
Comma ro	rmat			<u>~</u>		-

2. Locate the submenu called Configuration and enter this.



5. Display range start can be set to 0, or -1 if negative values should be visible



3. Find the Formula submenu and go to Formula 1 for sensor 1 or Formula 2 for sensor 2



6. Close the menu to save the rescaling



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