

Changing the Analogue Signal Output Range

The N₂O Wastewater Controller has two build-in analog output channels with 4-20 mA with a default range from 0 to 2.0 mg N₂O-N /L. When using high range sensor heads, the output can be rescaled to e.g. 0 to 10.0 mg N₂O-N /L if needed.

This setting change is needed if high range N₂O Wastewater Sensors are used and an analogue communication with SCADA is used. Furthermore, it is needed if data should be extracted using the PCA3000 Software.

In case of digital communication (Profibus/Modbus), the rescaling is not needed.

IMPORTANT: If a firmware update is performed, the controller will go back to default settings and this step must be repeated.

Below is a step-by-step guide to do this rescaling.

1. Enter the menu system in the lower left corner and login as 'MASTER' with pin code '9200'.
2. Locate the submenu called 'Configuration' and enter this.
3. Locate the submenu called 'Analog outputs' and enter this.
4. Find the corresponding Analog output channel 1 or 2 for sensor 1 or sensor 2, respectively.
5. Find the value called 'Scale end 1' and tab the yellow window. An input window will popup.
6. Enter the new max scale range that 20 mA corresponds to - 10 mg N₂O-N/L is used here
7. Finally, press the 'OK' button and exit the menu.
8. REMEMBER to change the scaling in the SCADA system accordingly.

