

Power Cable Connection

Connect the micro USB power supply and wait approximately 45 seconds for the CODA splash screen to appear. Connect the display to the CODA instrument using the USB to USB Type C cable. If the meter/controller is not connected, the display screen will read “device not found”.

Note: The display is able to power CODA meters, but controllers must also be powered via DB-15 or M12.

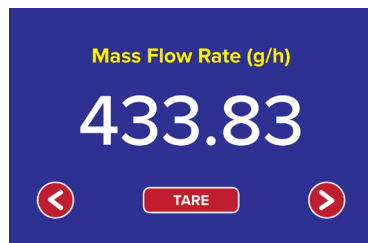
Primary Functions



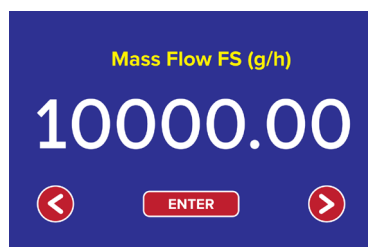
Setpoint

Press enter and input the desired setpoint.

Tare



Press the tare button. The tare process will take approximately 10 seconds to complete.



Full scale setting

The full scale can be changed for re-scaling the inputs and outputs of the device. The analog inputs and outputs will scale linearly from 0–100% of the displayed full scale.

Other Functions

Totalizer

The Totalizer displays the total flow that has passed through the device since the last time the totalizer was reset. When a setpoint is given for a controller, its timer and flow counter will start to count. Press Reset to clear.

Feedback Select

Select the measurement variable that is used for analog I/O and flow control. Use a value of 0 for mass flow (the default), and 1 for volumetric flow.

Filter Alpha

The exponential filter is a value from 0–1, and defines the time constant of the exponential filter being applied to the signal. The time constant is approximately $(20 \text{ ms})/\alpha$, so a default value of 0.1 will have a filtering time constant of 200 ms and a value of 0.01 will have a filtering time constant of 2 seconds.

Density Full Scale

This affects the analog density reading. Density analog output is the density reading divided by the density full scale.

Mass Flow Rate Units

Select the desired mass flow units. The selection will affect setpoint, mass flow FS, and mass flow rate.

Volumetric Flow Rate Units

Select the desired volumetric flow units. The selection will affect setpoint, volumetric flow FS, and volumetric flow rate.

Baudrate

Select the baud rate of the device for RS232/RS485 serial communication.

STP Density

If STP density is set to a value of 0, the device’s volumetric flow rate will represent the actual volumetric flow as calculated by the measured mass flow divided by the measured density (when valid).

Setting the STP density to the fluid’s known density at the desired reference temperature and pressure (units of kg/m^3) will change the volumetric flow output to a standardized volumetric flow rate (units such as SLPM or NLPM)

For example: For N_2 gas, to use an STP of 25°C and 1 atmosphere for the standardized volumetric flow, an STP density of $1.1452 \text{ kg}/\text{m}^3$ would be used.

PID Control Setting

Crack: Set the preload of the valve with a value from 0–1. This value will vary slightly when the pressure changes, and normally needs no adjustment.

Igain: The integral gain, from 0–1.

Pgain: The proportional gain, from 0–1.

Dgain: The derivative gain, from 0–1. Normally needs no adjustment.