

# QUICK SET-UP INSTRUCTIONS

## TIO Totalizer-Input/Output Flow Monitor/Controller

Download the latest version of  
the instructions from the product web page:

[Aalborg.com/TIO\\_o/89](http://Aalborg.com/TIO_o/89)



# TIO MOUNTING AND PARAMATER CONFIGURATION INSTRUCTIONS

## STEP 1: TIO Mounting

1. Using a 3/16" hex nut driver unscrew the 4 original screws (A) from the **TIO** and GFM/GFC D-connectors.
2. Use the 4 screws (C) from the mounting kit to attach the mounting bracket (B) to the **TIO** and GFM/GFC. Make sure the bracket is properly aligned with both D-connectors.

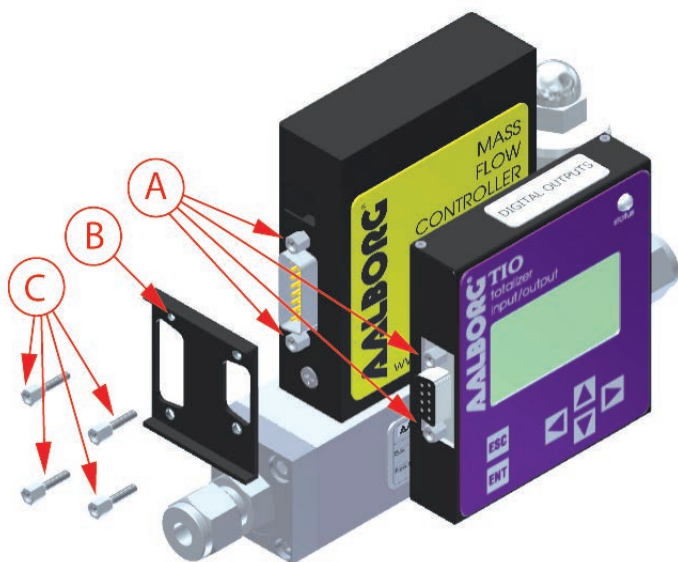
## STEP 2: TIO Parameters Configuration

- 2.1 “**Device Function**” parameter must be set according to mated device function:
  - 2.1.1 From the **TIO** main PI screen press “**ESC**” button.
  - 2.1.2 Highlight “**Program Protection**” menu option and press the “**ENT**” button.
  - 2.1.3 Highlight “**Disable**” menu selection and press “**ENT**” button.
  - 2.1.4 Using “**Dn**” button, scroll down to highlight “**General Settings**” menu selection and press “**ENT**” button.
  - 2.1.5 Select “**Device Function**” menu selection and press “**ENT**” button.
    - a) If the **TIO** is mated to the GFM flow meter select “**Meter**” and press “**ENT**” button.
    - b) If the **TIO** is mated to the GFC flow controller select “**Controller**” and press “**ENT**” button.
    - c) If the **TIO** is mated to third party device set “**Device Function**” parameter according to mated device function.
- 2.2 “**Full Scale Range**” parameter must be set according to mated device Full Scale Range.
  - 2.2.1 From “**General Settings**” menu scroll down to select “**Device Calibration**” menu selection and press “**ENT**” button.
  - 2.2.2 Select “**Full Scale Range**” menu selection and press “**ENT**” button.
  - 2.2.3 Using “**Up**”, “**Dn**”, “**Left**”, “**Right**” buttons, adjust **Full Scale Range** parameter to be equal to the Full Scale Range of the mated device converted to **litr/min** units. When done, press “**ENT**” button to save new settings.
- 2.3 “**Fluid Std. Density**” parameter must be set according to mated device Operating Fluid density. This parameter is required only when mass based engineering units are selected.
  - 2.3.1 From “**Calibration Menu**” scroll down to select “**Fluid Std. Density**” menu selection and press “**ENT**” button.
  - 2.3.2 Using “**Up**”, “**Dn**”, “**Left**”, “**Right**” buttons, adjust the Fluid Std. Density parameter according to mated device **Operating Fluid** density in **gram/litr**. When done, press “**ENT**” button to save new settings.

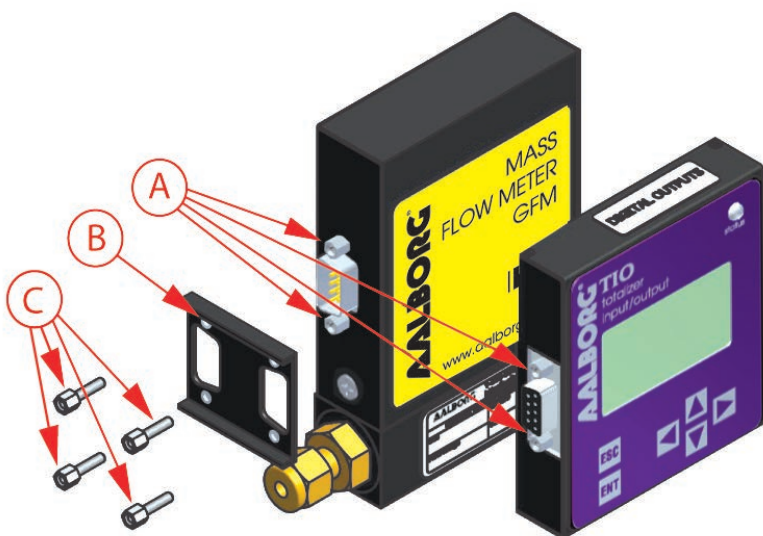


**NOTE:** If “Full Scale Range”, “Device Function” and “Fluid Std. Density” parameters are not set properly the device may have erroneous readings and unpredictable behavior.

## Mounting TIO for GFC



## Mounting TIO for GFM





## **CAUTION:**

This product is not intended to be used in life support applications!

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