

## Bronkhorst software: FlowDDE, FlowView and FlowPlot. Overview and Operation.

### **Overview:**

Bronkhorst High-Tech offers different software for the control and management of your instruments. They are delivered with each order or available on the internet: [click here](#)

The three softwares, FlowDDE, FlowPlot and FlowView allow you to quickly enjoy your instruments with a simple your instruments with a simple PC equipped with Windows.

**FlowDDE** is an interface that generates DDE links.

Data exchange between the RS232 port and applications under Windows environment:

- Visual Basic, Labview, Excel, etc...
- BRONKHORST software: Flow View and Flow Plot.

**Flowview** is a control software for BRONKHORST digital instruments.

Parameters displayed in the application window:

- User-defined name of the instrument: USERTAG.
- Serial number
- Number of the selected digital channel
- The setpoint and the instantaneous flow rate by means of a cursor on a % scale
- Instantaneous flow rate in physical unit and nature of the fluid
- Control mode: RS232/ BUS/ analog etc...
- Selection of setpoint ramp
- Selection of one of the 8 memorizable calibration curves
- Display of the counter.

Alarm management:

- Selection of the alarm mode: Min/max, difference measurement/setpoint...
- Selection of the delay before the alarm is triggered
- Selection of the setpoint change in alarm mode
- Selection of alarm reset mode: automatic, bus, keyboard...

Counter management:

- Selection of counter mode: with or without limit.
- Selection of the unit
- Selection of the setpoint change when the limit is reached.
- Selection of the reset mode: automatic, bus, keyboard...

**FlowPlot** is a control loop tuning software.

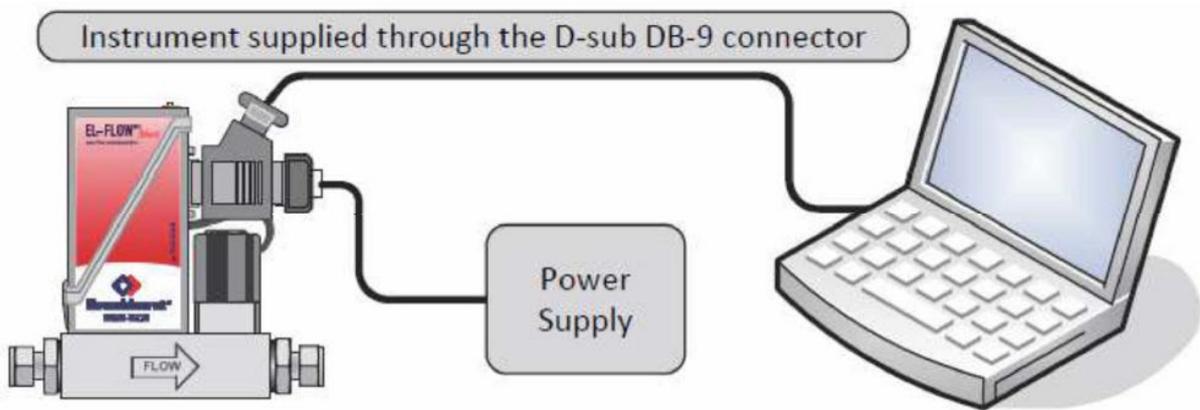
- Visualization of the instrument behavior
- Curve according to the time of the setpoint, the measurement and the valve voltage.
- Adjustment of the PID parameters.
- Automatic adjustment of the opening time.
- Storage of different dynamic profiles.
- Implementation of dynamic operating scenario with fast change of the setpoint.
- Modification of calibration parameters as an option.

**Operation:**

Install the FlowDDE, FlowView and FlowPlot software. You will find them on the CD provided with the instrument or on the internet at the following address  
<https://www.bronkhorst.com/int/products/accessories-and-software/flowware/>

ATTENTION: For a correct use of the software, the decimal symbol must be a point "." and not a comma ",". Make sure to change this setting in your computer's regional settings.  
For the connection of the instrument to your computer you can refer to the brochure 9.17.027 (RS232 interface with FLOW-BUS protocol for digital multibus), which can be downloaded here :  
<https://www.bronkhorst.com/int/downloads-1/manuals-and-quick-installation-guides/>

Below is an example of a classic EL-FLOW/RS232 use. If your PC does not have a sub-D9 a sub-D9 serial port, you can use a USB converter, ref. Bronkhorst: 9.09.122.

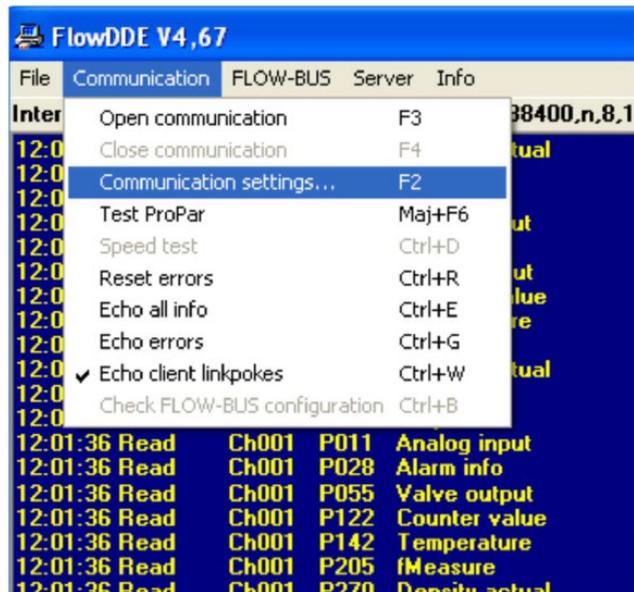


Connect the fluid inlet and outlet and pressurize.

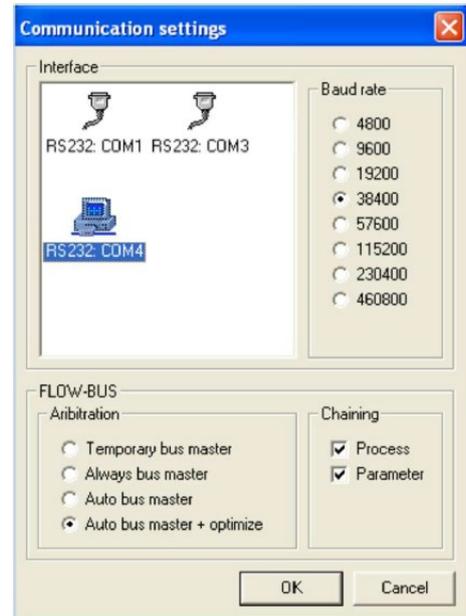
**Start up of flowdde:**

For a detailed use, please refer to the manual 9.17.067.

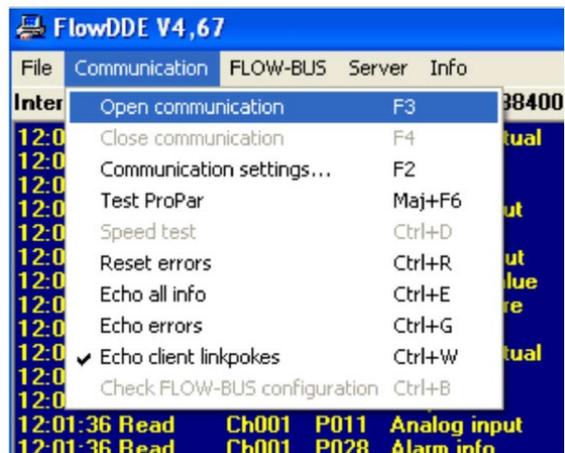
Start FlowDDE,  
select Communication  
and then  
Communication settings...



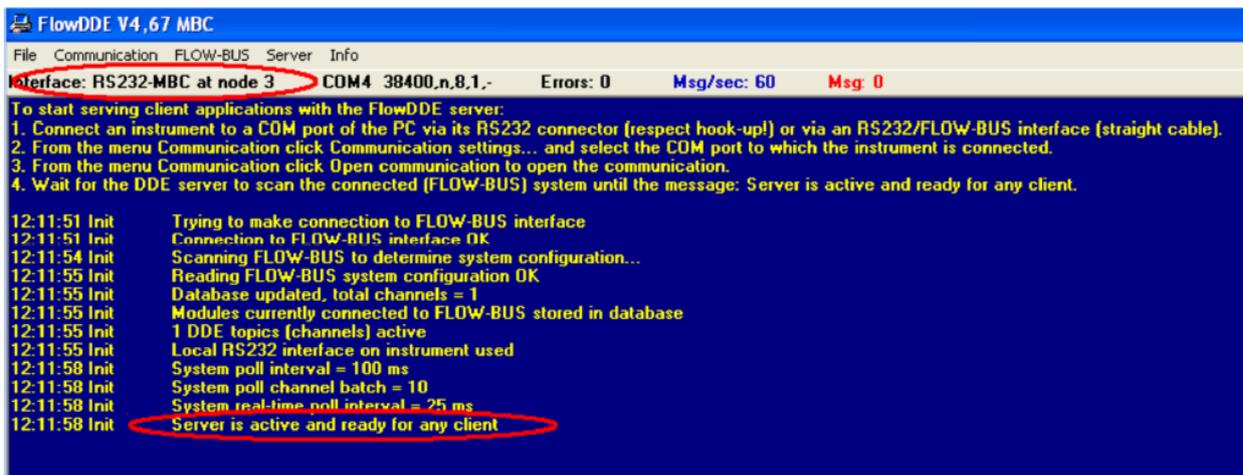
Default display to be maintained.  
 If necessary change the COM-port, then OK.



Open communication



On your screen, FlowDDE should show the following image:



Leave flowdde open while using FlowView and/or FlowPlot.

## Getting started with flowview

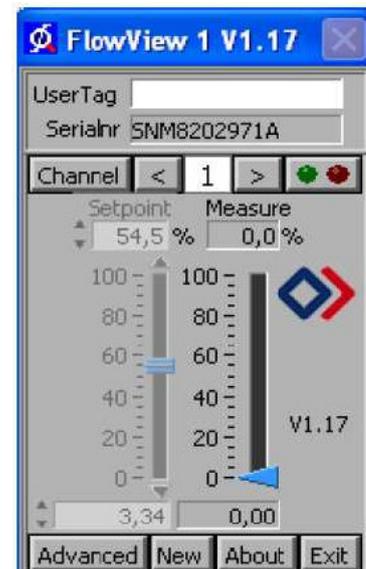
Detailed instructions on the manual : 9.17.030

### Basic function

After opening you will get this window.

You can now :

- read the serial number,
- indicate a tag number,
- select the channel,
- change the setpoint and
- read the measurement.



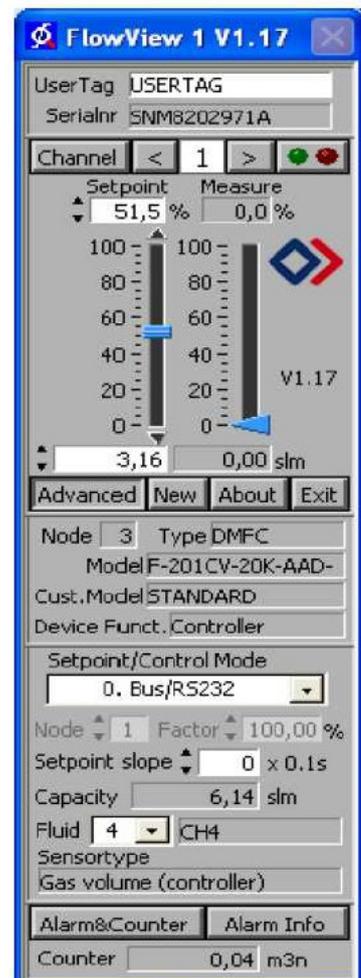
### Advanced function

Click on the "Advanced" button.

In this window you will be able to:

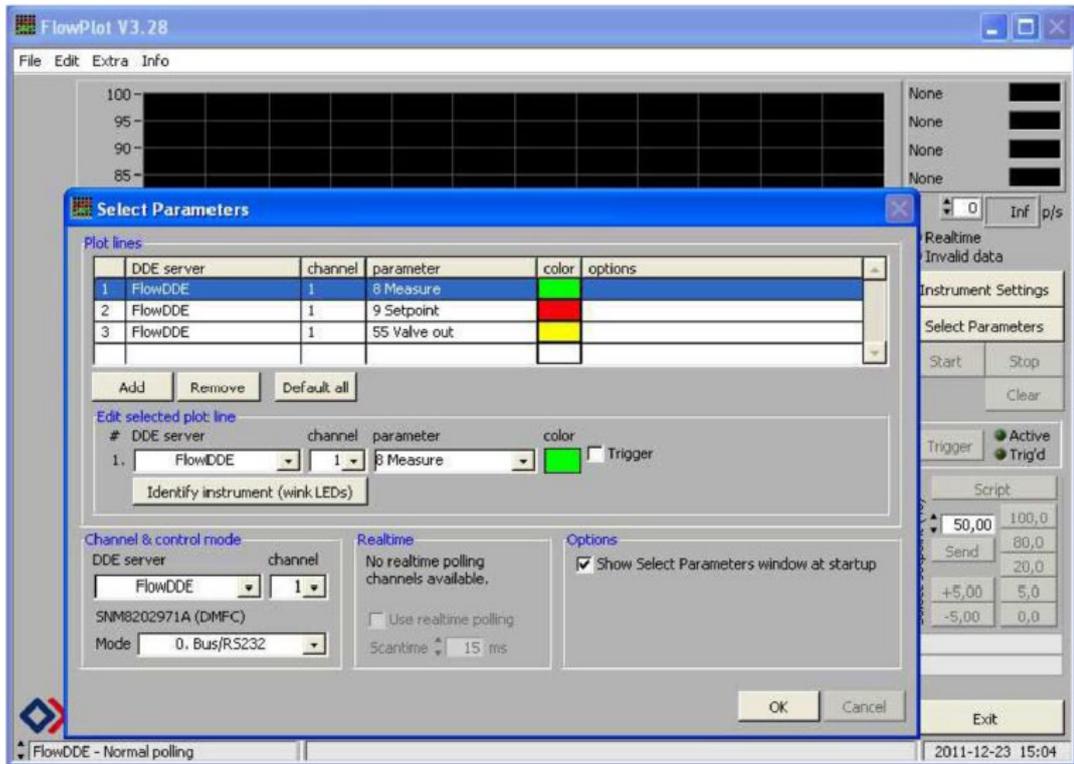
- modify the control mode,
- create slopes,
- change the gas (for multi-fluid instruments),
- configure the counters and alarms.

If you have several instruments in a network, click on new and select your instrument with the arrows under the serial number.

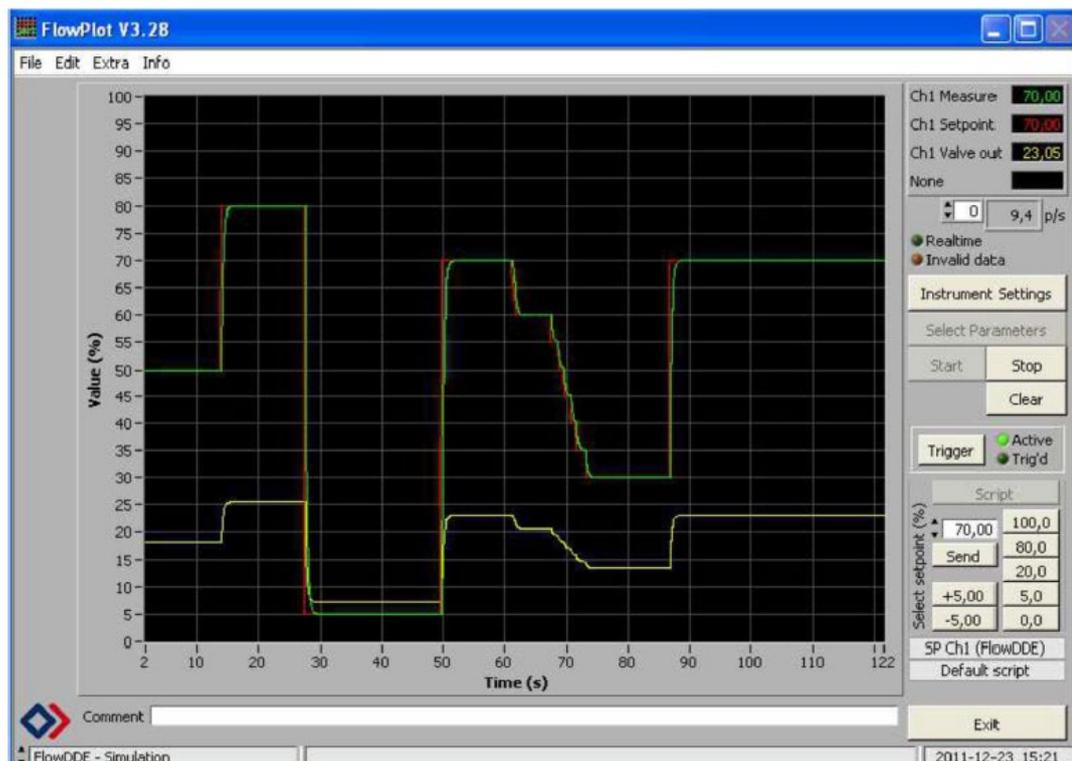


## FlowPlot

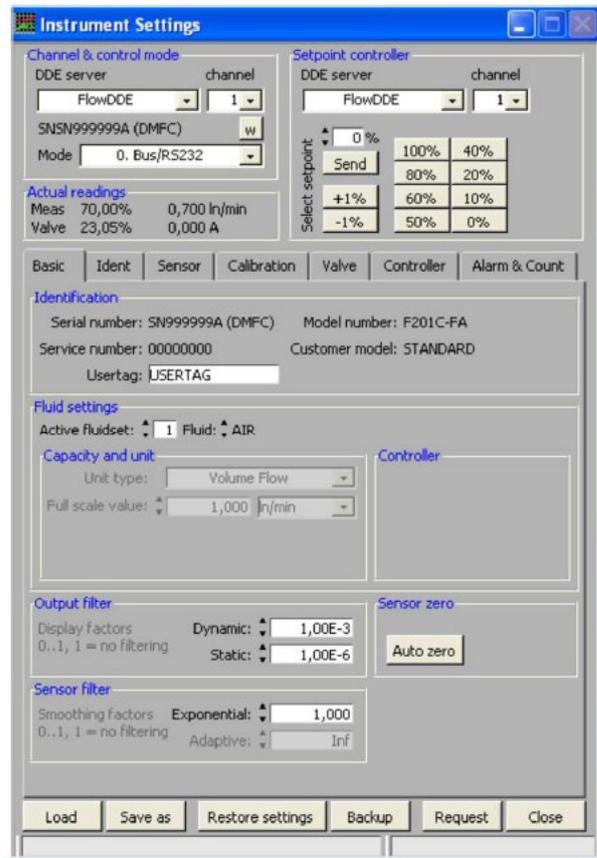
When opening FlowPlot 2 windows are opened. In the “Select Parameters” window, you can modify the curves to be displayed. Display at least “Measure” and “Setpoint”, then OK.



Start the display by clicking on Start. You can change your setpoint, either by writing it down or by using the writing it down or by using the buttons, +5, -5, 80....and Send.



Select Instruments Settings to access the advanced settings.



The controller tab will allow you to set the controller parameters.

