MP SUPERVISOR

User Guide
Version 1.7

www.aep.it
transducers

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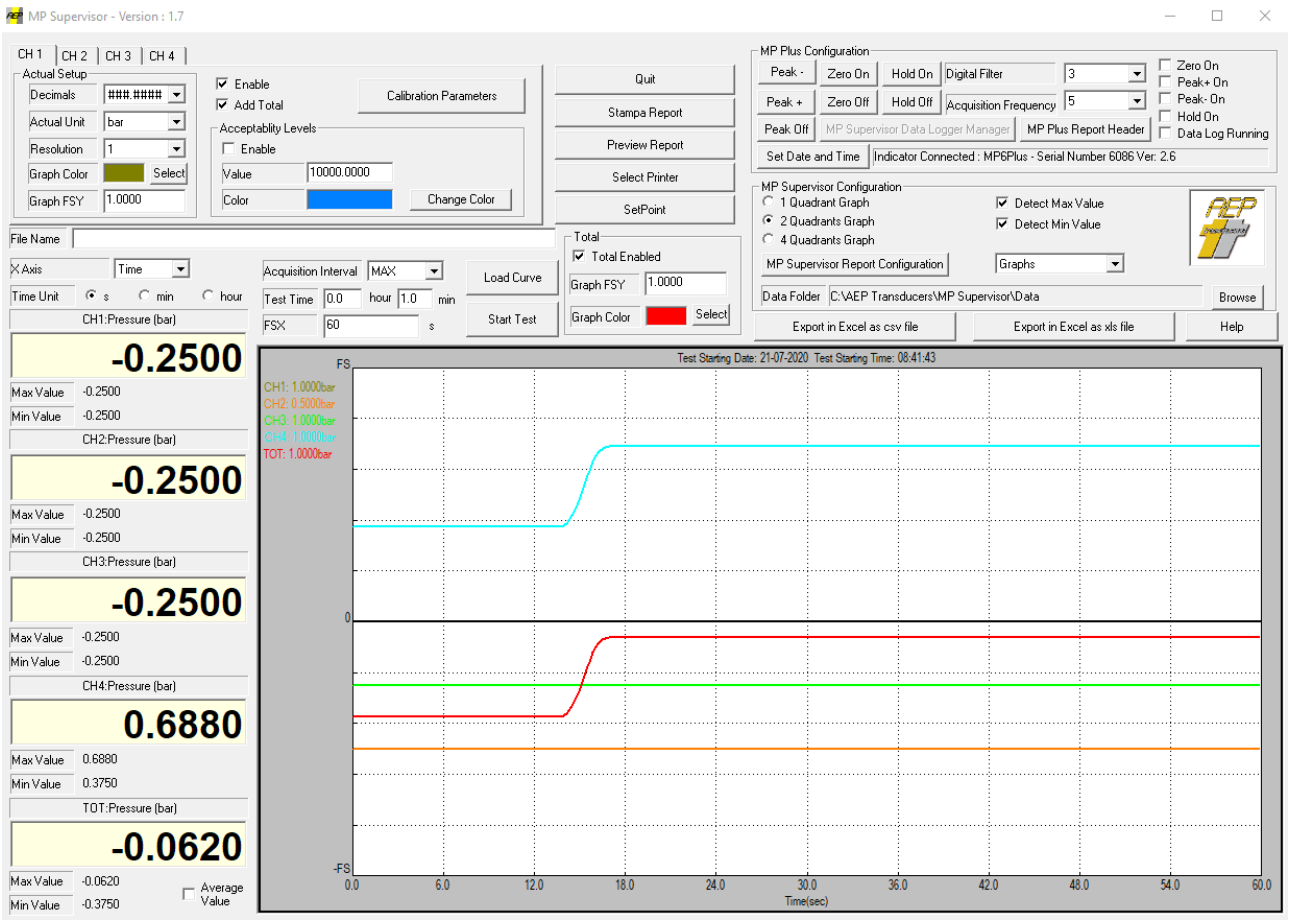
1.0 Generality

Mp Supervisor allows you to communicate with MP2Plus, MP4Plus, MP6Plus, WiMP2Plus instruments(from now on MPX) easily, using the USB port.



It is possible to connect just one instrument a time.

Mp Supervisor main features are:

- Makes graphs test acquiring data at the maximum speed(up to 4800 Hz for each channel). Curve can be saved and reviewed later.
- Allows to Export acquired data to Microsoft Excel (from real time cuve or DataLogger).
- Allows to Print Reports with custom logo as report header.
- Allows to download internal Datalogger and shows it as curve graph.
- Allows to download Datalogger create in the MPx instruments using an external pen drive and shows it as curve graph.
- Allows you to change easily the calibration parameters for all Channels.
- Allows to change most of the MPx parameters (Filter, Unit, decimal point etc, date and time etc).
- Allows to change MPx SetPoints.
- Allows Manual Acquisition Logs.

System requirement

PC: 1GHz 512 MB RAM or upper

Windows 7
Windows 8
Windows 10

Minimum resolution : 1028 x 1024

License Agreement

1. We grant the customer a non-exclusive and non transferable right to use MP Supervisor software on a single computer and at only one place.
2. The licence holder is not permitted:
    a) to pass on or otherwise make the software or associated material accessible to third parties without prior written agreement
    b) to modify the software without prior written consent
    c) to create works derived from software or to duplicate the written material
    d) to translate or modify it to create works derived from the written material
3. The right of use is dependent on the customer observance of these general conditions of supply

Acceptance of this license agreement is formally required during the installation of the software.

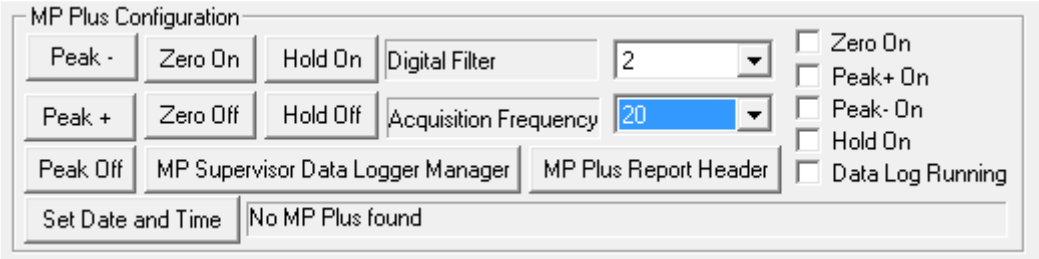
2.0 Main Page

In the main page you have most of the feature you need to use your MPx instrument.

The software automatically connect to the MPx using the USB port, download the MPx actual configuration and at the end display acquired values for each enabled channel.

Some buttons allow you to perform the main commands like ZERO ON/OFF , PEAK mode , HOLD mode.

The **Set Date and Time** button allows to set, just pressing it, the current date and time of your computer directly on the MPx.

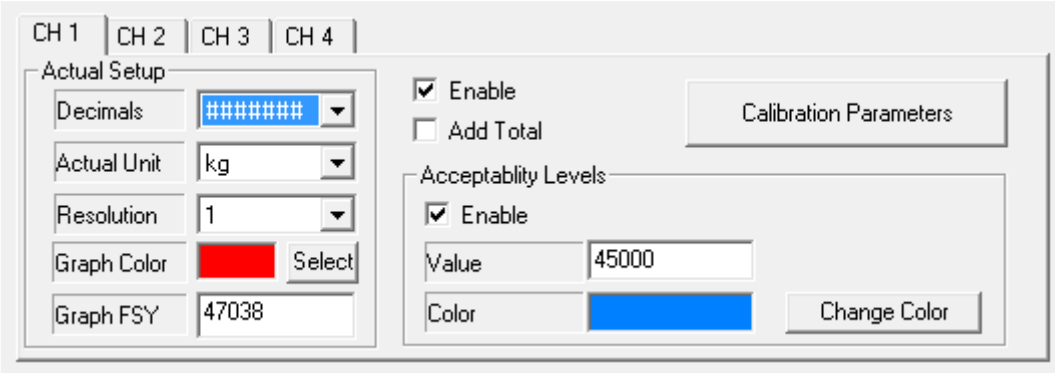


Another window allows to set some important parameters for each channel like:

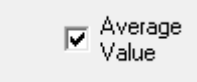
- The enable state.
- The decimal point position.
- The actual unit.
- The resolution.
- The curve color in the graph.
- The FSY value for the channel.
- If the channel is enabled for the Total/Average value (**Add Total**).
- **Calibration Parameters** : gives access to the Calibration Page for the channel.

For each channel it is possible to define a acceptability level with a dedicated color.

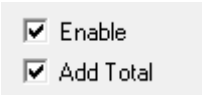
When enabled, on the graph, will appear a line so you can graphically observe if your test has or not superated a define level.



The average value can be performed through the “Average Value” box.



To include a channel in the calculation select “Add Total” of the related channel. It will be automatically included in the calculation of the arithmetic mean.

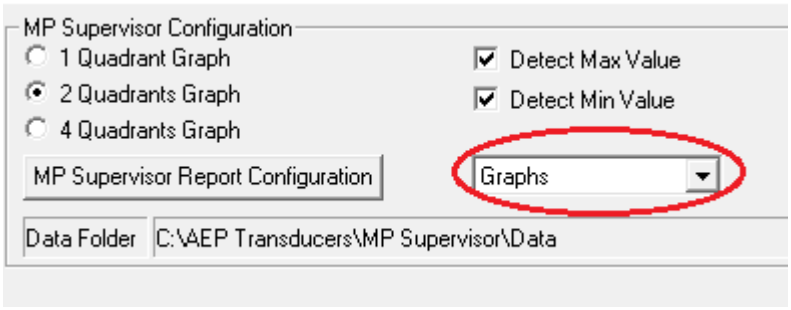


A channel will be included in the calculation of the average value even if the “Enable” box is not checked.

Average value and total value cannot be used at the same time.

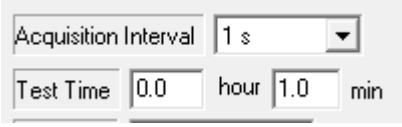
3.0 Start Test

It is possible to create real-time tests. Please verify that you are in the graphs page as shown in the picture that follow.

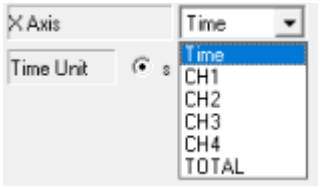


To setup a test you are required to define only two test-parameters.

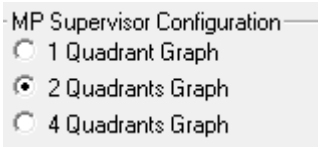
- **Test Time:** defines the time the test will last (in hour and minutes). The test can be stopped any way by pressing the **Stop** Button.
- **Acquisition Interval:** defines the time between two acquisition points.



The X axis can be select among time and one of the other enabled channels. This allows to create charts such as the load/displacement typical of many applications.



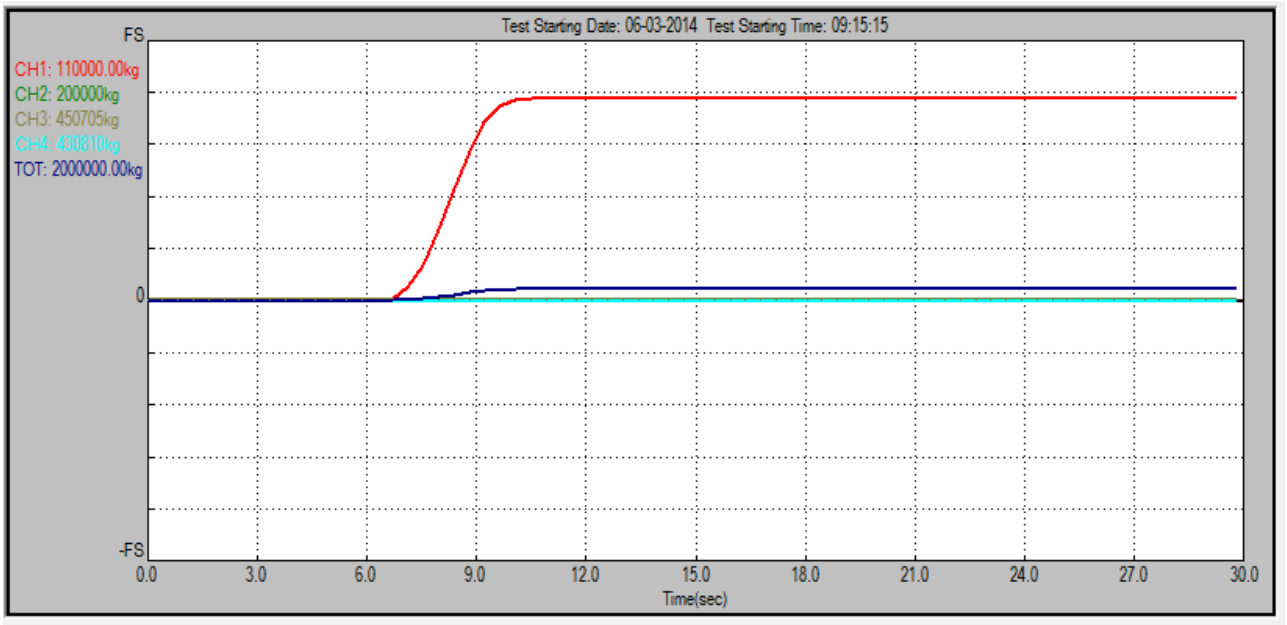
Graphs can be displayed in 1 or 2 quadrants according if you want to see both negative and positive values of your channels or not.



At the end of the test the Max and Min Values can be calculated and printed(if enabled).

By pressing the **Start Test** button, MP Supervisor start to record all the acquisition points creating raw data.
By **Stopping** the data recording, data will be stored in a text file in the folder **Data** present inside the installation folder with the filename assigned inside the field **Filename**.

The graphics window allows the setting of the parameters of real-time graphic. The X-axis can be time (with the unit assigned inside the field **X Axis Unit**) or one of the other enabled channels (with the unit assigned with respect to the chosen channel), while the Y axis is the output value of the instrument for each channel.



FSX : defines the full scale of the axis X .
Graph FSY : defines the full scale of the axis Y for each channel.

Graphs saved can be re-analyzed by using the "**Load Curve**" button. You can choose the folder where data are saved selecting the Data Folder using the **Browse** button.

Channel curves are displayed with different colors.
The scale will automatically adapt itself to the maximum values recorded in the tests.

It is also possible to perform an export of data collected in a Microsoft Excel file with the button **Export to Excel**. This feature is only available when Microsoft Excel is installed on your computer.

NOTE : To Export data in Microsoft Excel you must have this program installed on your PC. If you save to export data in Excel using the csv file format it is not necessary to have Excel installed on your PC.

Using the buttons **Print report** or **Preview Report** it is possible to print a test report.

Using the button **Select printer** you can choose the printer where to address your printout.

Using the **Report Configuration** button it is possible to define the Logo, the report header (up to 3 lines of free text) the operator , notes, and the graph title.

If you have created a datalogger(see “7.0 Data Logger Manager” for Data Logger usage) cycle on MPx instrument using a pen drive you can read the acquired value using MP Supervisor.

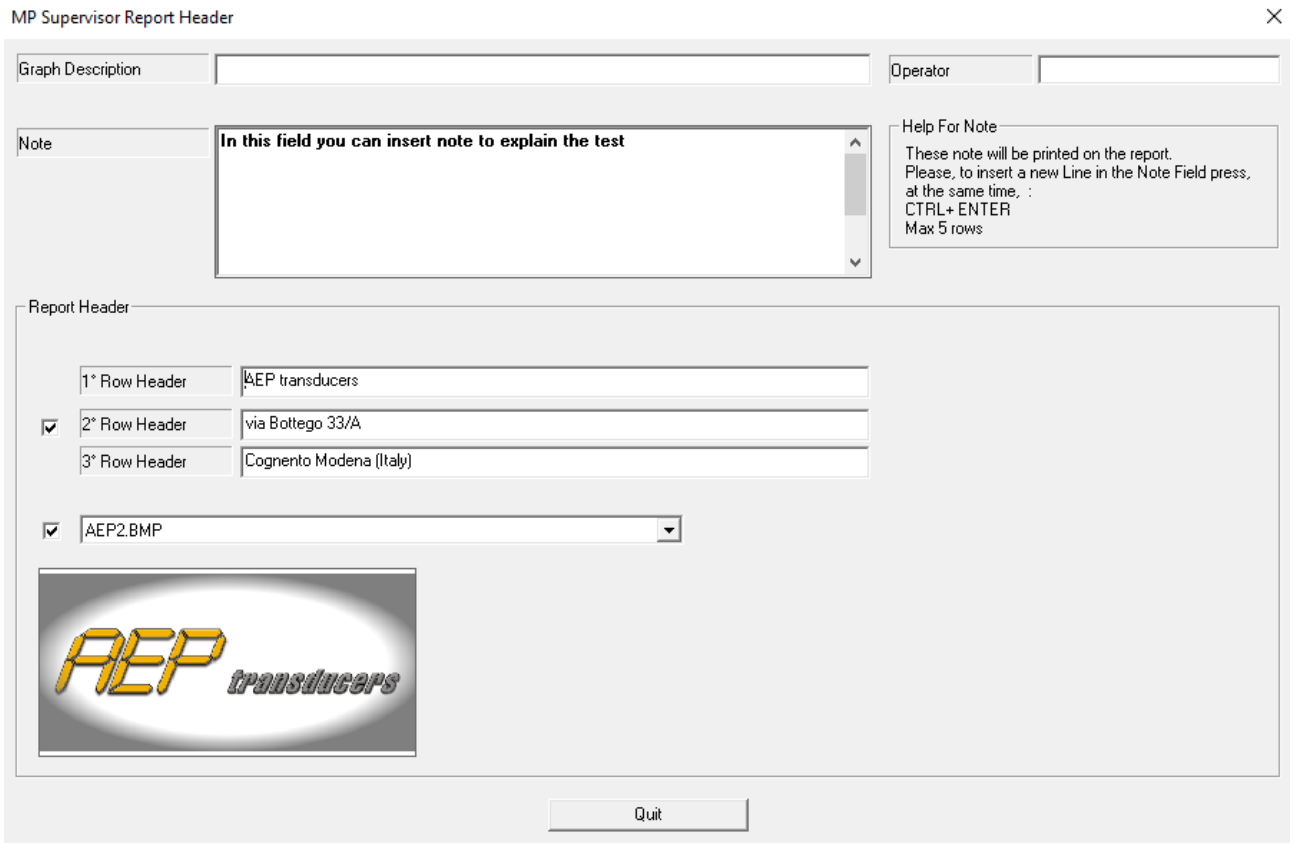
It is not necessary to connect MPx instrument to the PC because it is possible to work off-line, just insert your pen drive to your PC, press **Load Curve** and select the drive assigned to your pen and in the file type window select **MP Plus DataLogger File** *.bin or *.csv according to the file type selected in your MPx instrument.

Confirm the file and the curve of the acquired data will be shown. Now you can print a report or export your data in Microsoft Excel.

Anyway, if you have created the datalogger file in csv format it can be immediately read by Microsoft Excel without using MP Supervisor.

4.0 Report Header

Here is an example of the **Report Header configuration Page.**



It is possible:

- Insert a Graph description.
- The operator name.
- Up to 5 rows for insert note to describe the test.
- Up to 3 text rows dedicated to the custom header address data.
- The logo image can be select.

To add a new brand logo just copy in the “Loghi” folder (inside the installation folder of the program) the relative image file . The file must be in a bitmap format (max dimension 1500x500 point). To select it please choose the image in this page.

The following is a report example.

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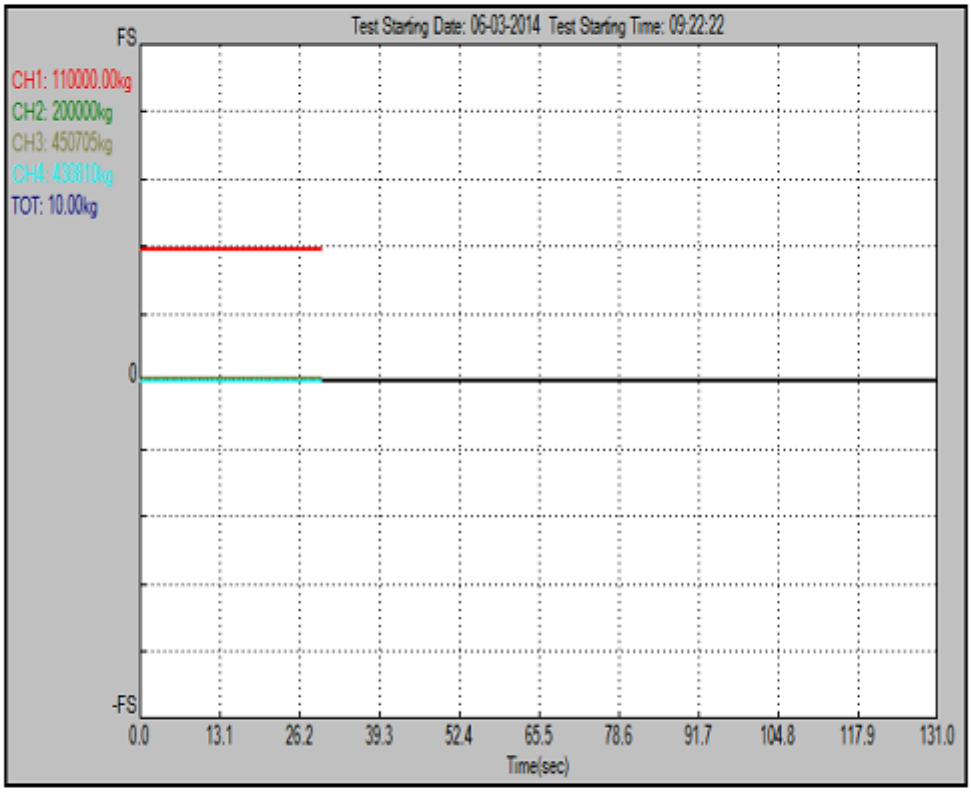


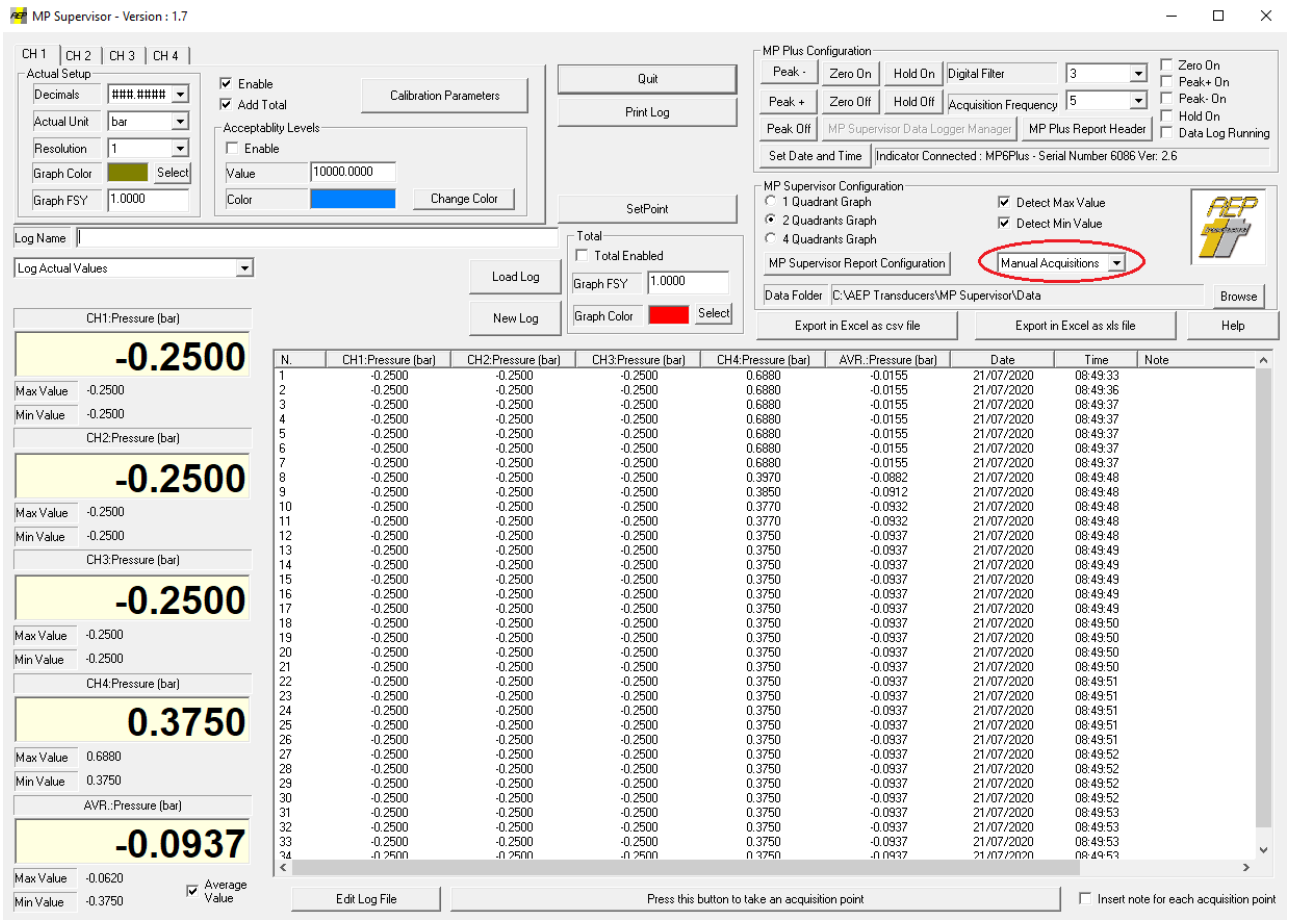
Note:

In this field you can insert note to explain the test

Operator :

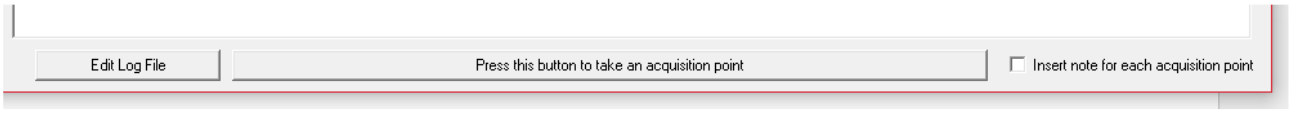
Time : 9:02 Date: martedì, aprile 21, 2015

5.0 Manual Acquisitions Mode



To enter in manual acquisition mode switch the relative switch as shown above.

This page allow to insert in a log file acquisition points by pressing the button **Press this button to take an acquisition point.**



Points are stored in a file called log (inside the folder **Logs**).

For each point it is possible to insert a note when to set the relative switch **Insert note for each acquisition point.** This way every time you acquire a point a window will be open where you can add a note.

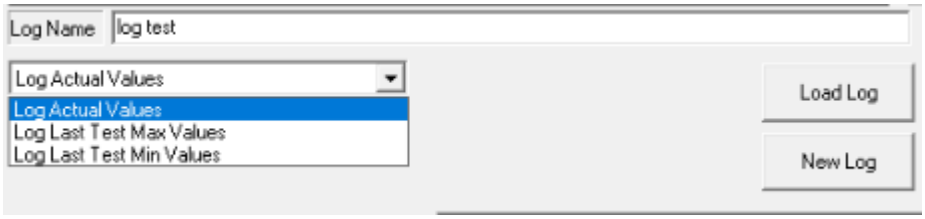
If you want to modify the log (for wrong acquisition point) please you the **Edit Log File** button.

The log file is just a test file so you can modify each field, remove a line etc.

You can decide to store :

- The Actual Values of each enabled channel.
- The Max values registered in the last test.
- The Min Values registered in the la test.

The first choose stores value directly. To store the other values you have to switch between the Graph Mode and the Acquisition Mode.

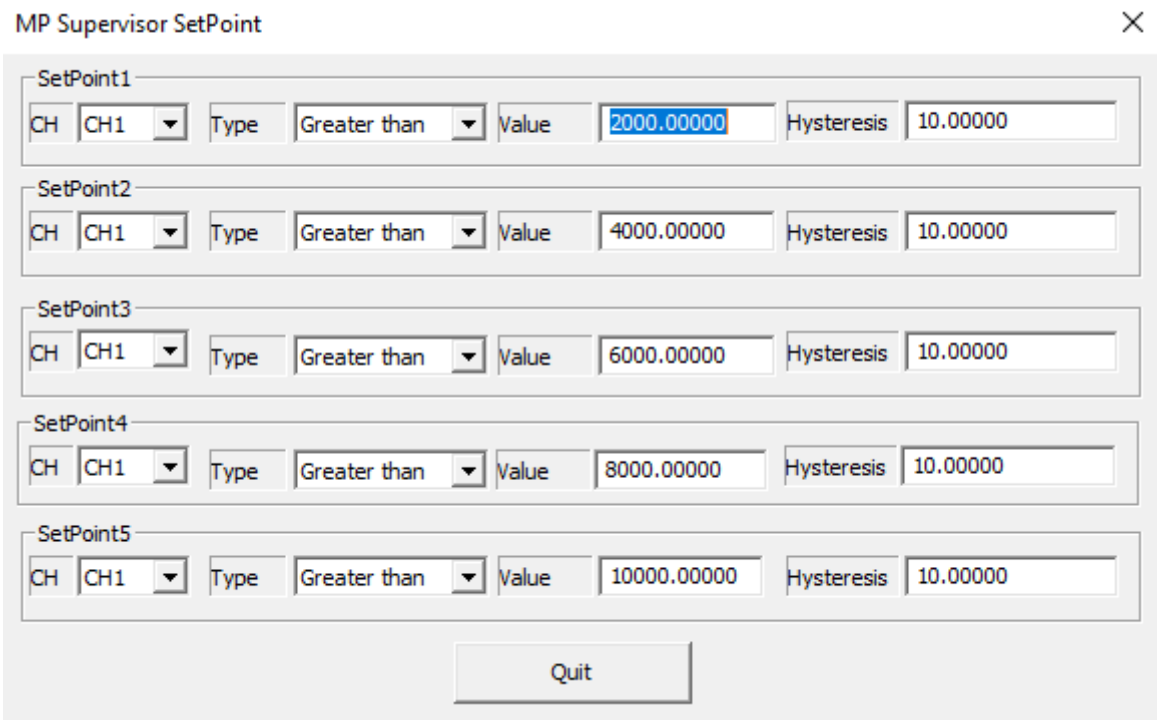


So you have :

- Switch to Graph Mode.
- Perform a test in graph mode so Max/Min values are calculated.
- Switch to Manual acquisition mode.
- Press the **Press this button to take an acquisition point** to store their values.

You can create new log or upload existing log (in order to continue them) using the button New Log.

6.0 Set Point



In the SetPoint Page you can change the MPx parameters relative to the SetPoint.

CH: select the channel associated to the SetPoint.
Type: select how the setpoint should work :

- >
- <
- Abs >
- Abs <

Value: is the SetPoint value.
Hysteresis: is the Hysteresis value for the SetPoint (see the MPx manual for reference).

7.0 Data Logger Manager

MP Supervisor allows to download the internal datalogger cycle and allows to select easily all the parameters to Start/Stop a new cycle.

For the meaning of the parameters please refere to the MPx Manual.

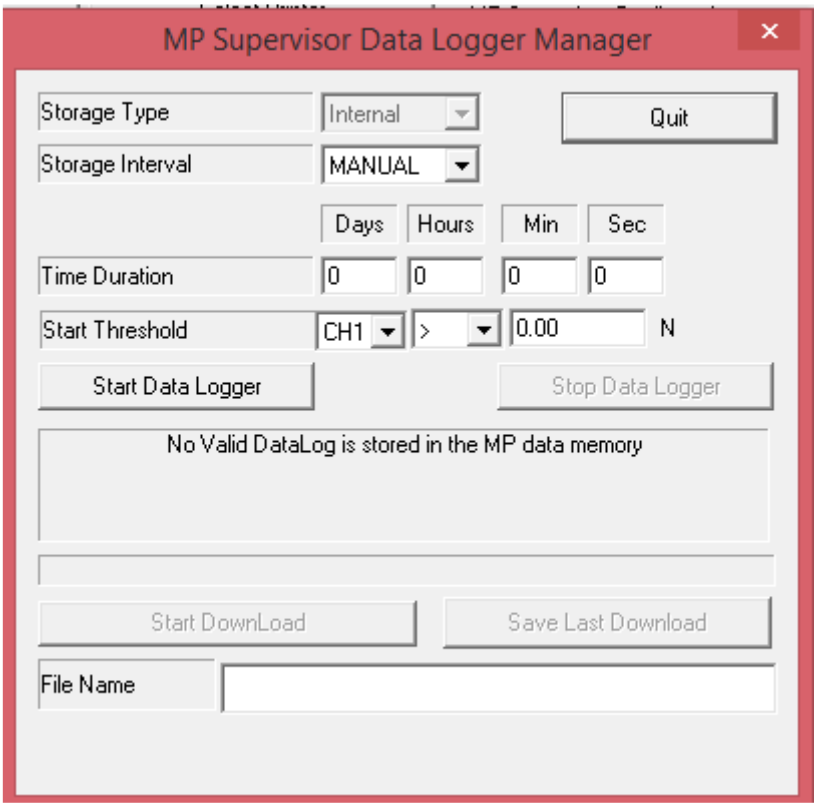
To Start a cycle please select the **Time Duration** using the Day-Hours-Min-Sec fields and the acquisition interval in the **Storage Interval** window. You can also define a trigger for the start of the Datalogger using the **Start Threshold** window. (see the MPx Manual for the meaning of the parameters.

When all parameters are set, press **Start DataLogger** to start the cycle.
If a datalogger cycle is active you can manual stop it by using the **Stop DataLogger** cycle.

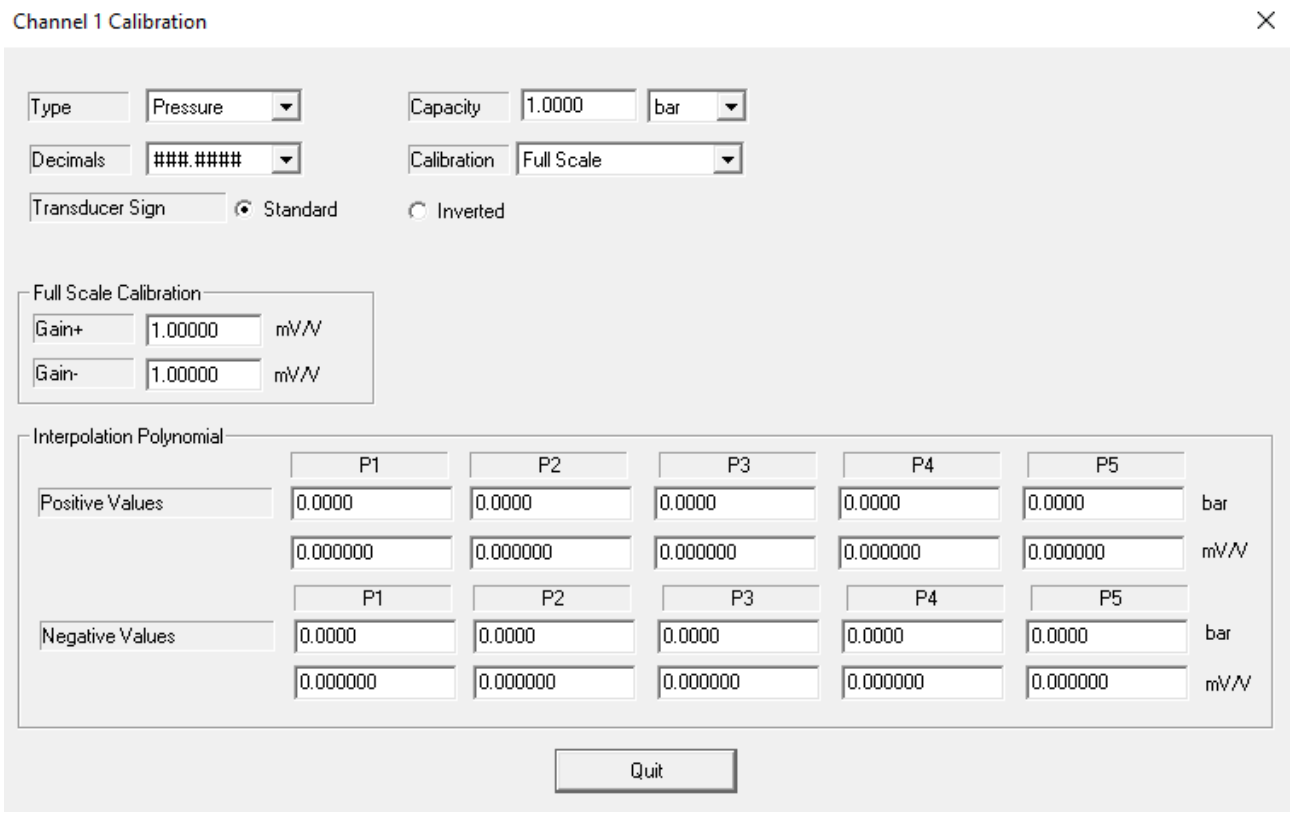
To download a datalogger cycle press the **Start Download** button.

When done the acquisition points can be saved as a file. Insert a valid Windows filename in the **Filename** field and press **Save Last DownLoad**.

In the main page the acquisition points are immediately shown as a curve and can be printed and exported in Microsoft Excel.



8.0 Calibration Parameter



The Calibration page allows you to enter all the parameters you need for the channels calibration.

For the meaning of the parameters please refere to the MPx Manual.

This page is password protect. The password is 7