Description of the program APEK: PrezenterAssistAV wer.4.2.5.7

- Program works with **AV32xxxx** measuring systems:
- Requires operating system: WIN XP, WIN2000, WIN7 (32bity) or later.
- Recommended minimum computer parameters: HDD: 40GB min, Processor with at least 2GHz clock, Graphics SVGA 19", USB port, mouse.

1. Installation of the program and first launch.

To install the program:

– Unzip if file is *.zip.
– Copy folder ex.'Pomiary32P' to c: ie. c:\ Pomiary32P or another which was specified by producer.
– Change the mode of the folder 'read only' to 'normal'.
– Place the shortcut of the program PrezenterAssistAV.exe on the desktop.

To remove the program delete the contents of the folder.
(The program does not change the operating system registry).

1.1. First installation:

Connect computer with the system AV32.., using USB cable.

When you are installing new hardware wizard, insert the installation wizard and select the location of the driver on the CD. ..\Drivers AV32\. Follow the wizard's instructions.

After installing the drivers, the system is ready for operation.

2. Configuration of the system AV32xxx \ tab Settings.

AV32xxx system configuration includes a computer program to assign channel **k** to the number in the system input **W** and the particular sensor (**Figure 1**).
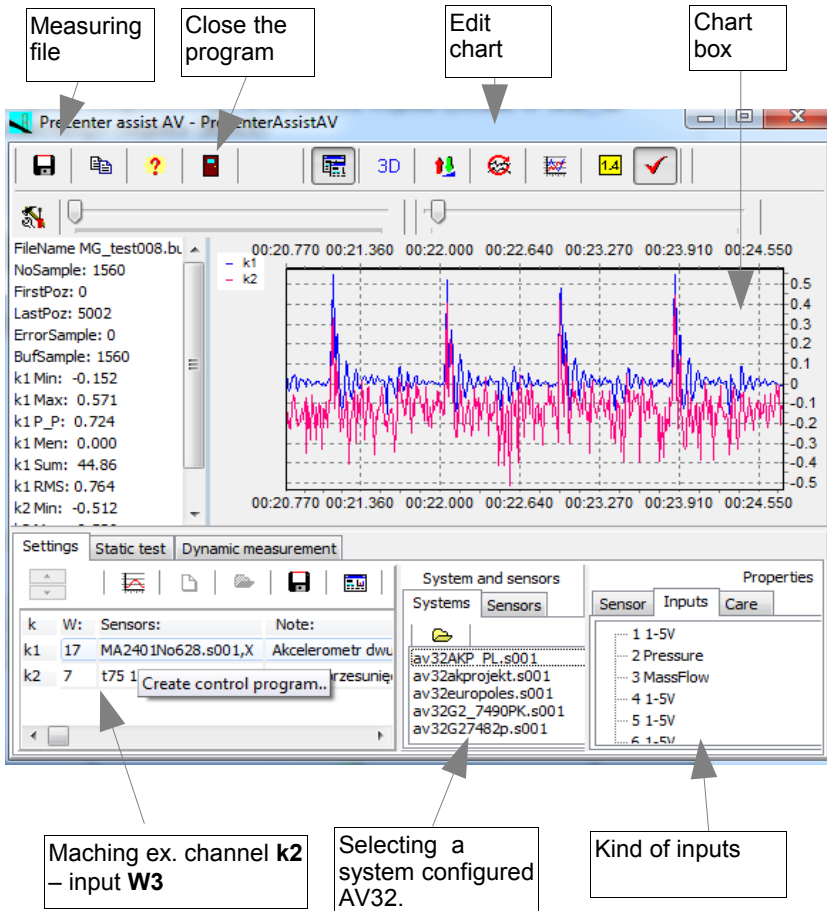

Figure 1 View **Configuration window \ Settings tab \ AV32AKP system.**

   Use the tab **Settings** (**Figure 2**) to determine **system configuration** ie. specify the number of measuring channels, create a new configuration, save it to file or read the existing configuration file. You can also read the parameters of the sensors in **Properties** window, tab **Sensor** or comments about security work with sensors in tab **Care**.
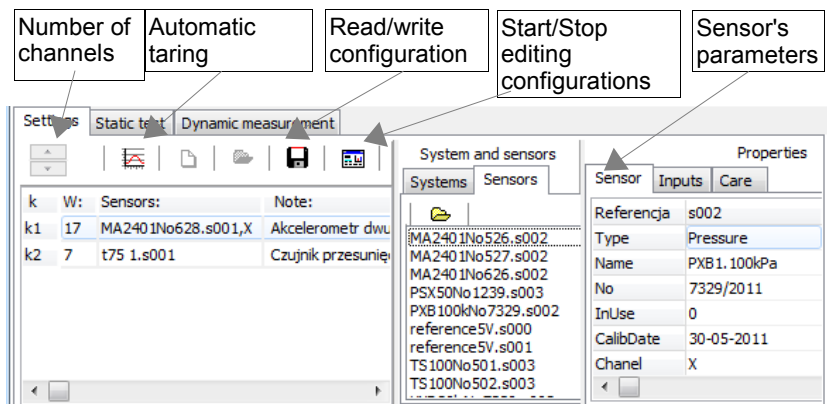

Figure 2. Sensor's parameters tab in **Configuration window.**

Example of creating a new configuration, such as on Figure1:

- **a**. Click **Enable to change settings.**
- **b.** Remove the old configuration by pressing **New settings.**
- **c.** Double click select the name of configured system in **Systems and sensors/System** window**.** Displays the type of inputs of system in **Properties/Inputs** window**.**
- **d.** Use the slider to select the number of channels **(ex.2.)**
- **e.** In **Properties/Inputs** tab select by click input's number of the AV32AKP system, which will be included pressure sensor **(ex.2).**
- **f.** In **System and sensors/Sensors** window select by click sensor **(ex.PBX100kNo7329.s002)**. In **Properties/Sensors** tab you can read its parameters.
- **g.** Click to select the second row (after k2).
- **h.** In **Properties/Inputs** tab select by click input's number of the

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AV32AKP system, which will be included flow sensor **(ex.3).**

i. In **System and sensors** window select by click sensor **(ex.VXD20isNo7330).** In **Properties/Sensors** tab you can read its parameters.

3 . Static measurement by AV32xxx system\ Static test tab.

In the **Settings** window, you can set the frequency of slow static measurements. After transferring to the system configuration **AV32AKP** (**Connected** button), you can press **One measurement** or **Monitoring** ie. begin with registration static measurements on the chart in the form of single points and write to a file with the name entered in the **File name** box.
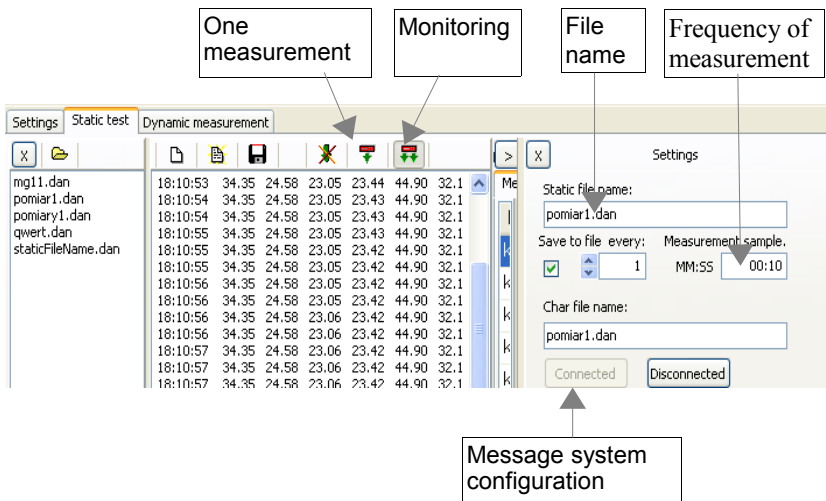

Figure 3 Static Test tab for **AV32AKP** system.

4. Measurements by AV32AKP system \ Dynamic measurement tab.

After transferring to the system configuration **AV32AKP** (**Connected** button), you can press the **START** button to begin recording current measurements on a graph (see **Figure 4** – channel selection see **Figure 5**) and write to a file with the name entered in the **File name** box.
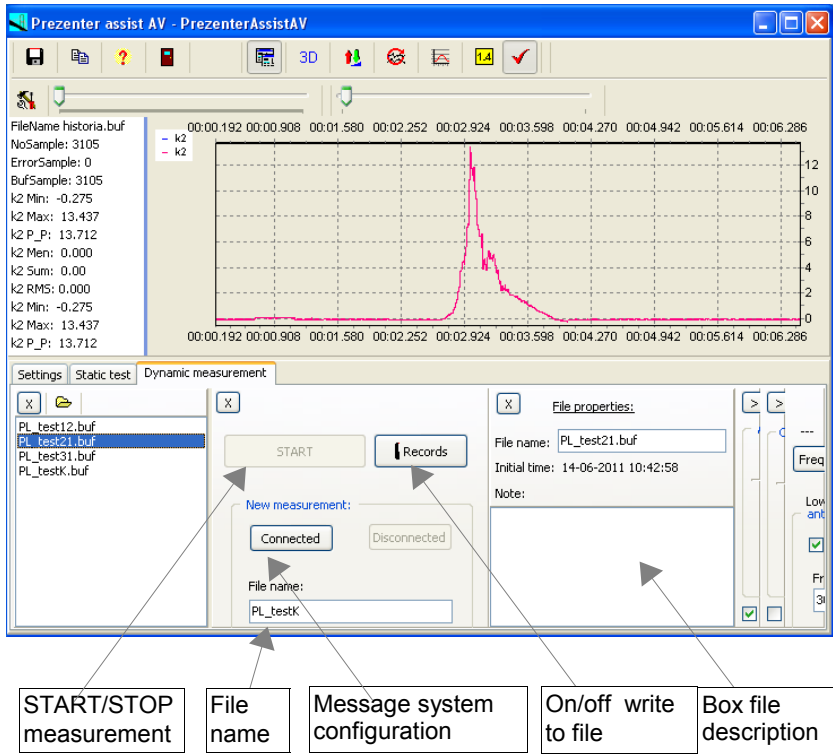
Figure 4 View of the **Measuring window \ Dynamic measurement tab** for **AV32AKP** system.

In order to stop the measurement archive file hit **Records. File properties** window shows the date and time of the start of the recording to a file archiving. The file will be saved from all the measurement channels specified in the system configuration. Additionally, you can leave your comments about measurements on **Note** window.

In **Field graph** (see **Figure 5**) highlighted key switching measurements can be viewed in real time (real time) or measurements data already stored in an archive file. Viewing the file will not affect the current write to archive file.

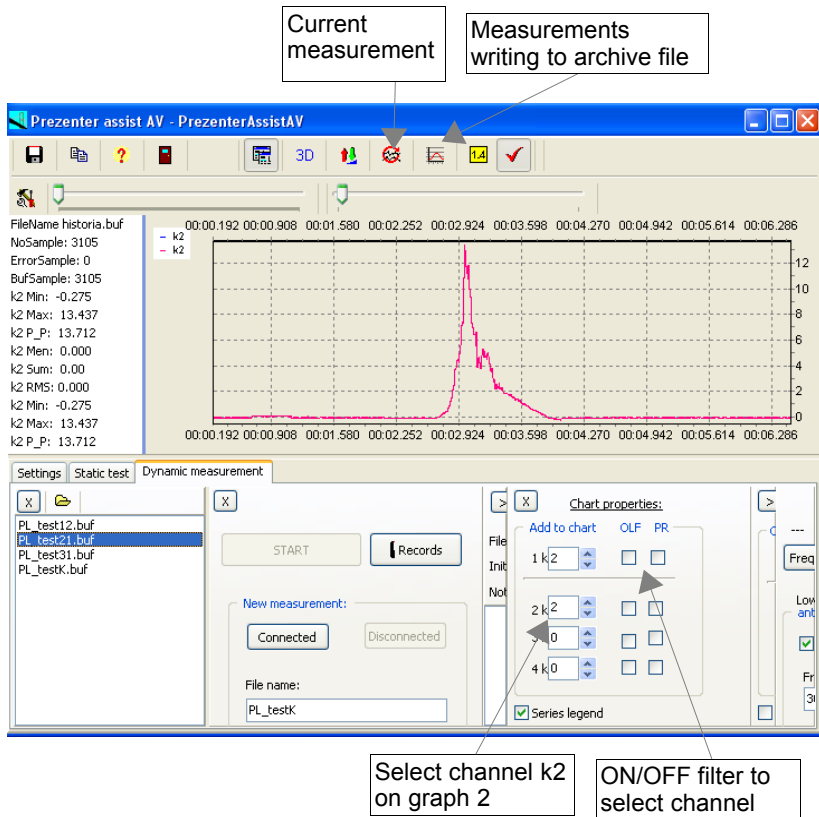--

Figure 5 View of the **Measuring window \ Dynamic measurement tab** and **Chart properties window.**

In **Chart properties** window you can select which channels will be presented in **Box chart**. You can submit up to four different color charts. Graphs should be assigned a channel number (use the arrow keys or type the number dialed). Entering a zero off the chart.

In addition to this column **OLF (Online_Filter)** allows you to enable or disable the software filter (on line) for a chart of the channel, and

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the column **PR (Peak_Reducer)** to enable or disable the elimination of a single measurement noise.

In **Filter properties window** (**Figure 6**), set the upper frequency to help low-pass filters to remove noise and interference on the graph presented in **Box chart**. For standard measurements are recommended values in the range 30 – 100 Hz. In the last window in **Figure 6** after hitting **Frequency 1** displays the parent (energy) for a given measurement frequency.
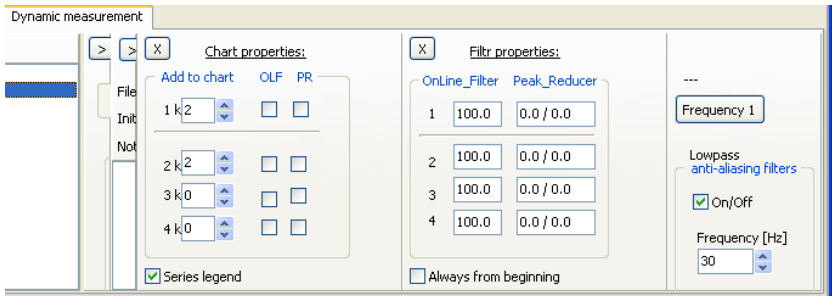

Figure 6. **Filter properties window**.

Filter applies only to the displayed values, the file saves to full information about the measurement. To obtain a filtered signal from disk files, the filters should be included when making measurements from files.

4.1 Algorithm of dynamic measurements with AV32AKP system.

The order of proceedings at the first measurement:
- Connect a power supply to **AV32AKP** system. (Not applicable to systems powered from the USB port).
- Connect a USB cable to the computer and **AV32AKP**.
- Press **RESET** button in **AV32AKP** system (single LED flash).
- Run **PrezenterAsistAV**.
- Check the configuration in the **Settings** tab.
- In **Dynamic measurement** tab submit to the system configuration (**Connected** button).(LED AV32AKP system should only flash twice.)
- Select the channels shown on the chart (**Chart properties** window)
- Press **START** button.

Note: If a blank file, write the names of the measurements in a file named formed with the date and time of measurement.

5. Chart box.

Edit **Chart box** for measurements recorded in the selected file allows keys described in **Figure 7**.

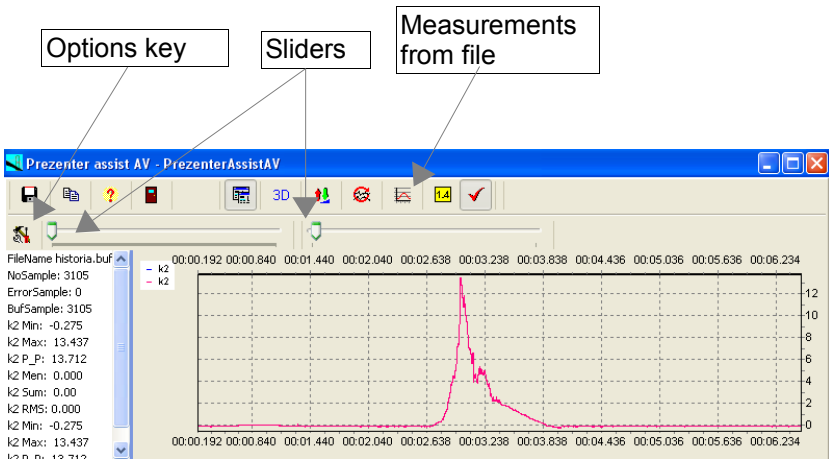Edit Fields chart for measurements recorded in the selected file allows keys described in Figure seventh

Figure 7 Edition **Chart box**.

After hitting Measurements from file, you can view the recorded data using two sliders:
the left slider (**File pointer**) – moving the graph (in the time line);
the right slider (**Buffer length**)– increase/decrease the range of chart (within the declared size of the data buffer – see **Figure 8**).

After hitting **Options** button in the **Chart** tab you can define the size of the buffer and the viewing frame rate on the chart. In **Measure** tab (**Figure 9**) can be defined measured frequency or number of measurements performed and recorded. Entering zero in the **counter** window is equivalent to a continuous record of measurements.
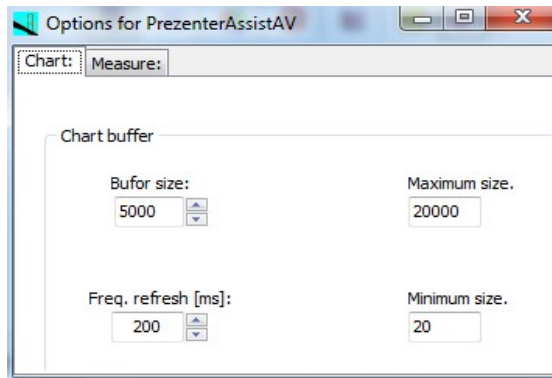

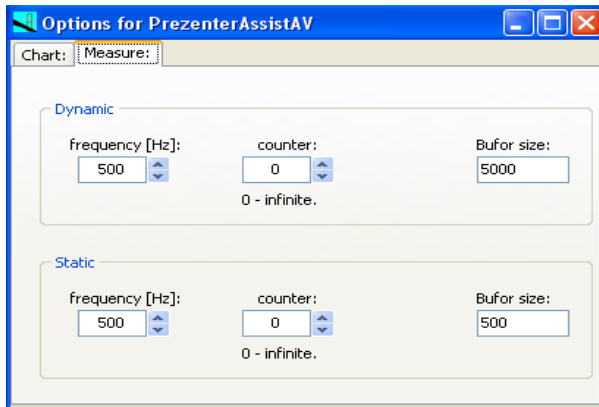**Figure 8. Chart** tab- edition of chart buffer.

Figure 9. Measure tab– definition of measuring parameters.

Note!
When using dynamic and static measurements alternately, set the same length of buffers.

**Changing the scale of the graph** – the left mouse button.
Moving the mouse while holding down the left mouse among the X and Y allows you to change the scale of the graph:

- shifting to the right and down (or up) for the extension of a selected portion of the graph, the entire surface of the drawing, ie to reduce the scale to an extent dependent on the size of the selected part.
- move to the left and down (or up) to return the largest scale chart (ie the minimum size of the graph), independently of the size of the selected part.
-moving outside the box to the right or bottom panel, allows you to increase the scale of the chart- dependent on mouse hanging outside the window of the program.

Moving the chart – right mouse button.
Moving the mouse while holding down the right button allows you to move the plot along both axes (the negative part) without changing the scale.

6.   Taring of sensors.
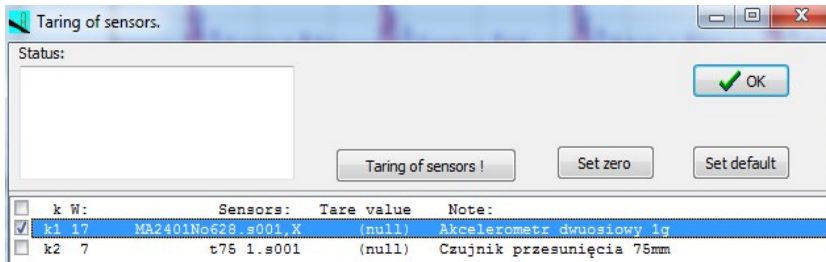
Before taring should set to zero all sensors which will be taring. Press the [Taring of sensors] button in the [settings] tab. Select sensors to taring and press [Taring of sensors] button. Only sensors that have the property of „Tare" can be tared. In addition, the date and time of the last tare can be read in the properties of the sensor, ie. „TareTime".

7. Software update. (The computer connected to the Internet).
We can perform the software update by pressing [Help].
Pressing [->Latest version] displays the latest available version. Compare versions of the program. Latest version when displayed numbers separated by dots are larger than thew specified version of the name of the program.
Pressing [->Download latest version.] starts updating the software.
Completion of the update is indicated by the sign [Download: OK!]. Now just close and restart a new program already.