Step by step guide

Adash 4400 – VA4Pro

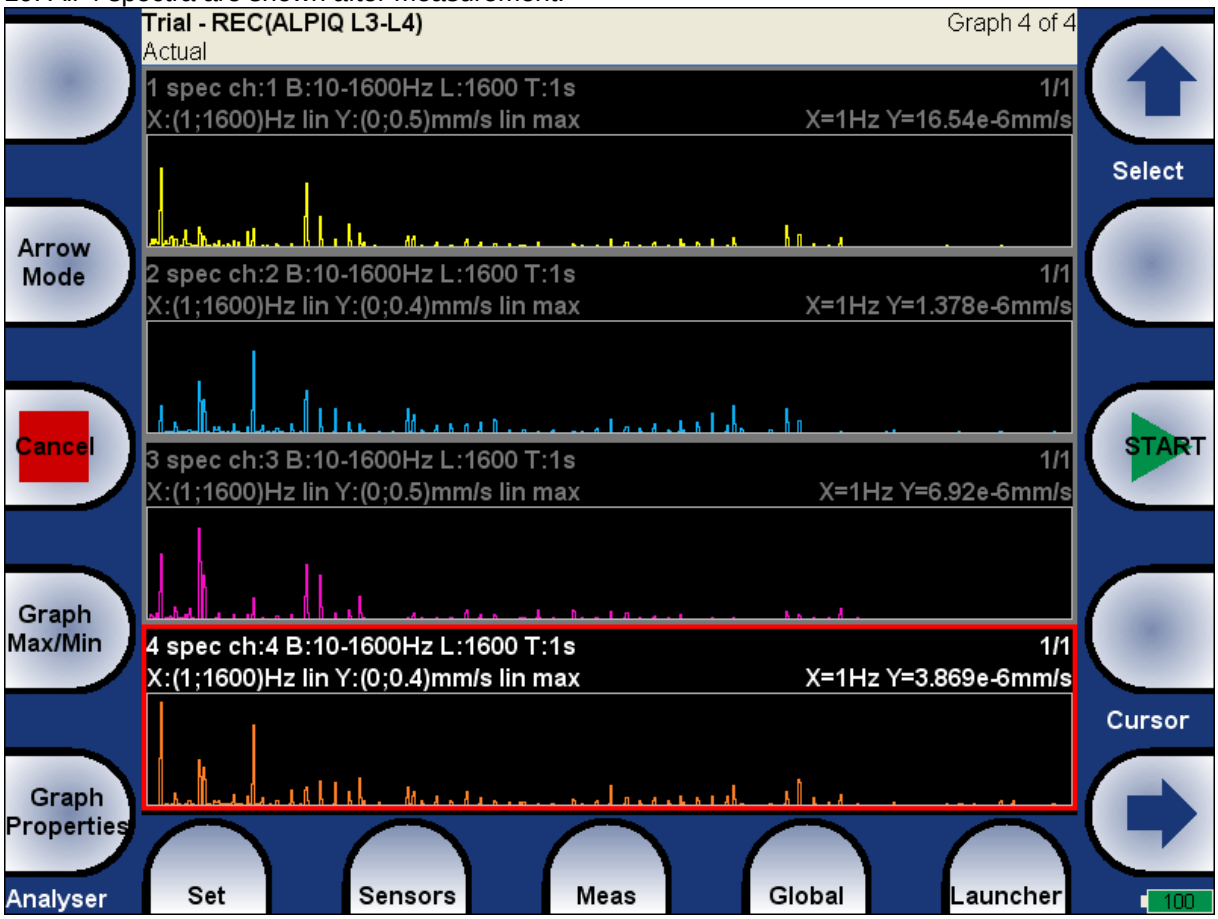
Ver. 210510

Content:

The Analyzer mode.

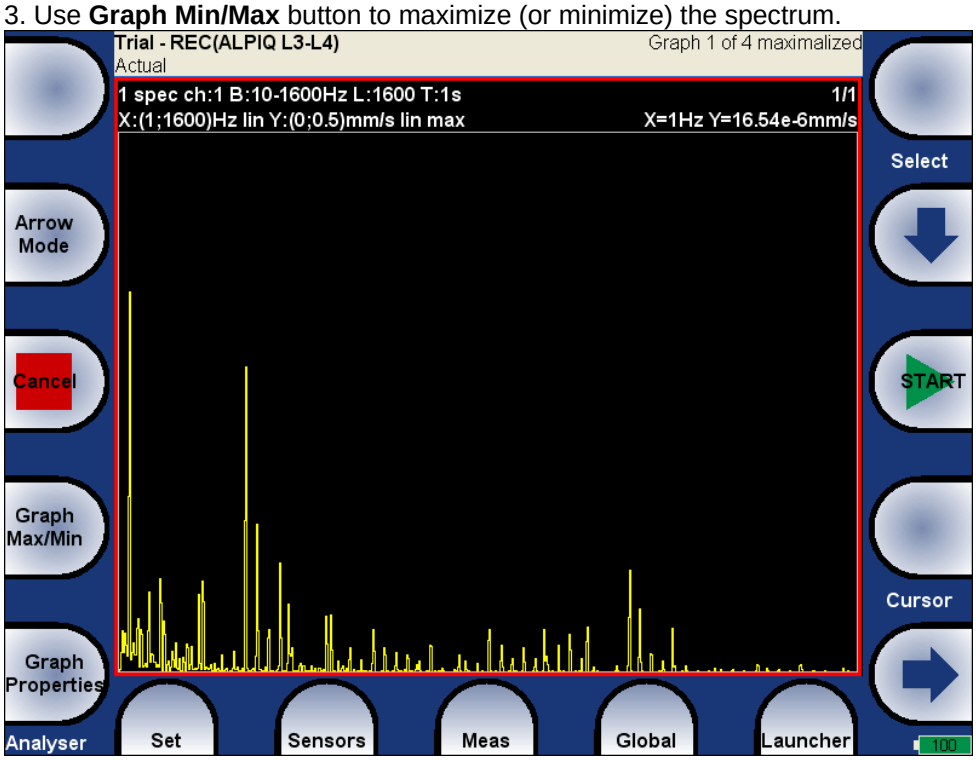
How to measure velocity spectra 1600 Hz, 1600 lines on all 4 channels?

1. Launch the Analyzer mode.
2. Press **Set** button.
3. Select **New** and confirm by OK button.
4. Enter the name and press **OK**.
5. Press **Meas** button select **New Advanced** option and press **OK**.
6. Select **SPEC** in Type mode.
7. Select **Channel 1**.
8. Select Band fmin.
9. Select Range(Hz) 1600.
10. Select number of Lines 1600.
11. Select Averaging.
12. Select the unit and press **OK.**
13. Press **Meas** button again select **New Advanced** option and press **OK**.
14. Select **SPEC** in Type mode.
15. Select **Channel 2**.
16. Enter the same values as for channel 1 and press **OK**.
17. Arrange the same procedure for channel 3 and 4.
18. Press **START** to take the measurement.
19. All 4 spectra are shown after measurement.

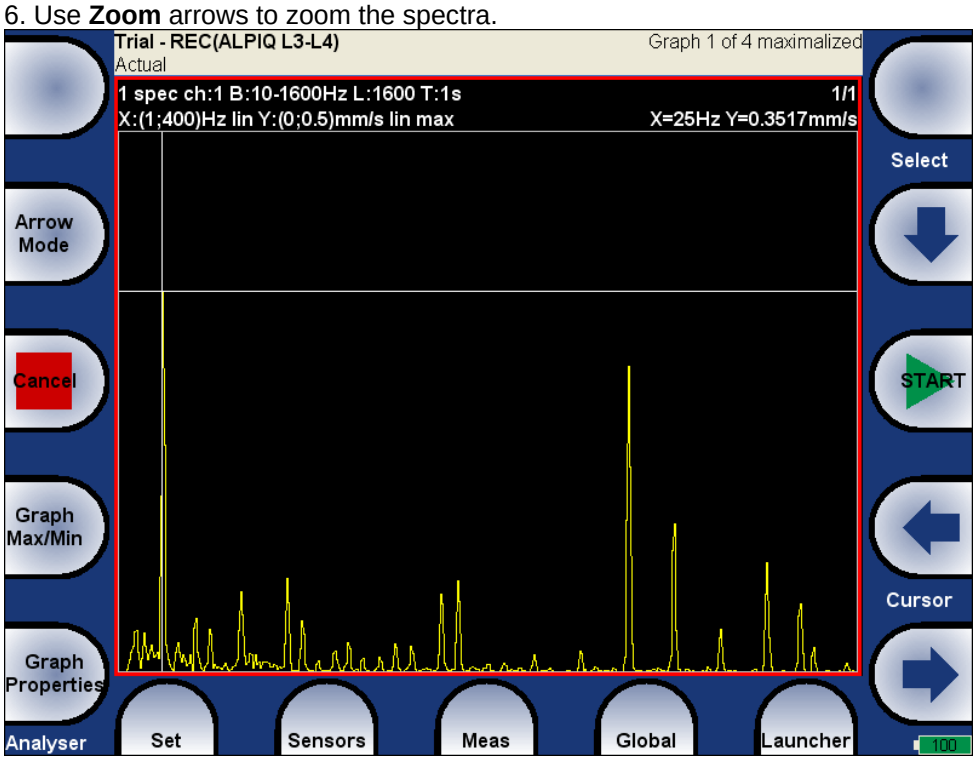


How to work with measured spectra?

1. Spectrum in red square is active (as shown on previous picture).
2. Use Select arrow buttons (top right corner) to select required spectrum.
3. Use **Graph Min/Max** button to maximize (or minimize) the spectrum.



4. Use **Arrow Mode** button to change the meaning of the arrows.
5. Use **Cursor** arrow buttons (bottom right corner) to move the cursor.
6. Use **Zoom** arrows to zoom the spectra.



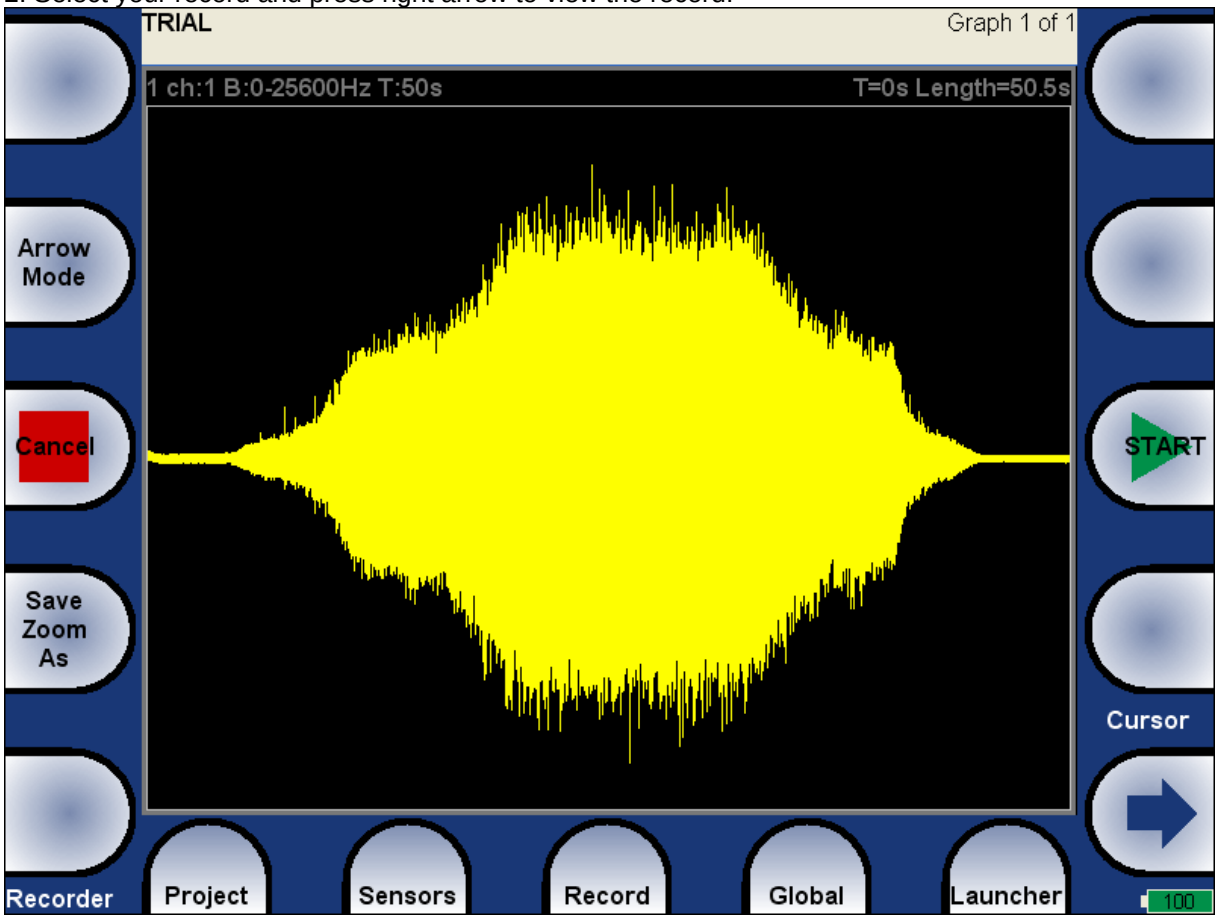
The Recorder

How to make the record?

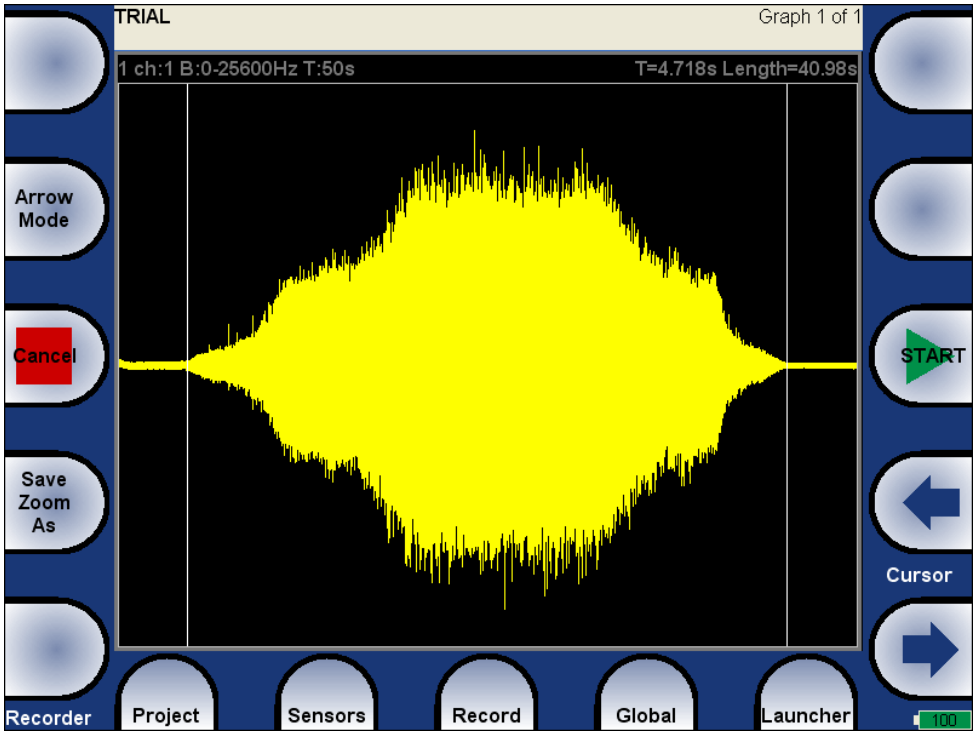
1. Launch the Recorder mode.
2. Press **Project** button.
3. Select **New** and press **OK**.
4. Enter the name and press **OK**.
5. Press **Record** button to edit record settings.
6. Switch on or off required channels. You can take the record for all 4 channels at the same time.
7. If you wish to have a information about trigger select on for Trigger Channel.
8. Define how you want to stop the record. Manual stop is default.
9. Define how you want to start the record. Freerun is default (manual start). See the Record parameters in manual for explanation of other options.
10. Press **OK** to confirm Record settings.
11. Press **START** to begin the recording.
12. Press **Stop** to stop the recording.
13. Press **Back** to go back to the project list.

How to work with the record?

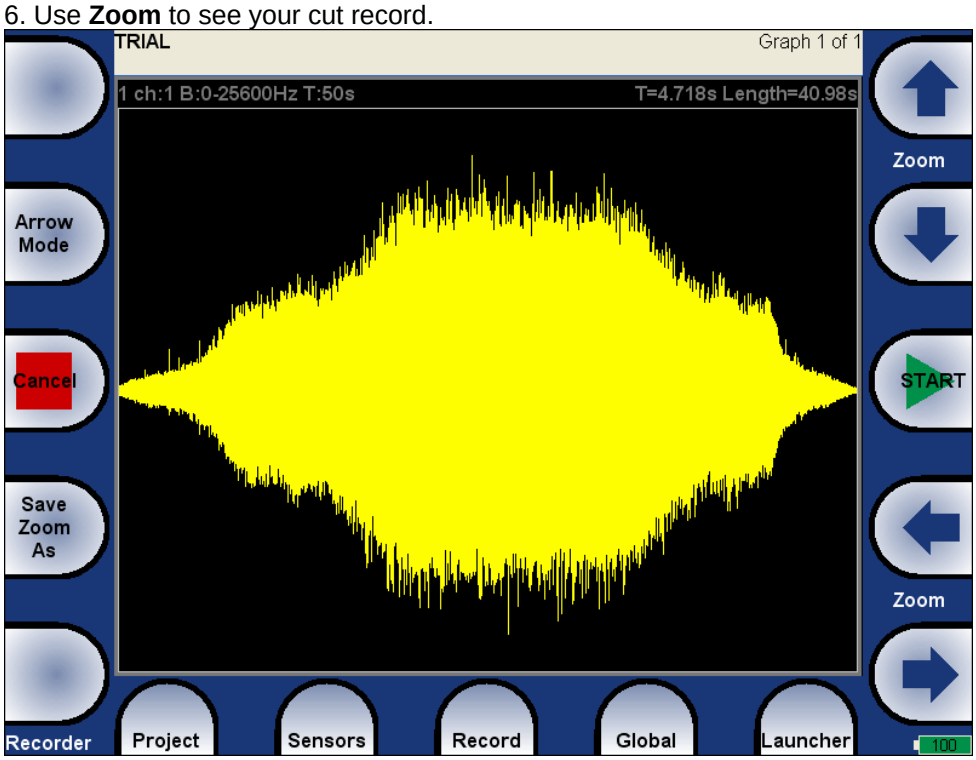
1. Launch the Recorder mode.
2. Select your record and press right arrow to view the record.



3. Some parts of the recorded data are not useful, you can cut required data and save it.
4. Use Cursor arrows to define the begin of the cut.
5. Press **Arrow Mode** button to change the meaning of arrows into **Length** and define the end of the cut.



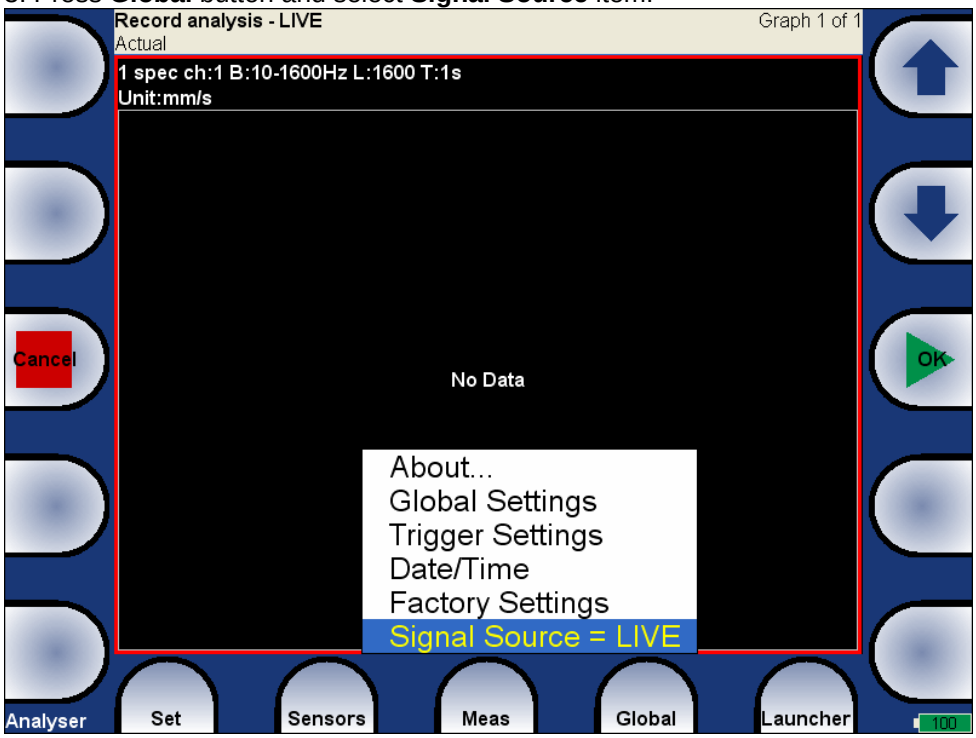
6. Use **Zoom** to see your cut record.



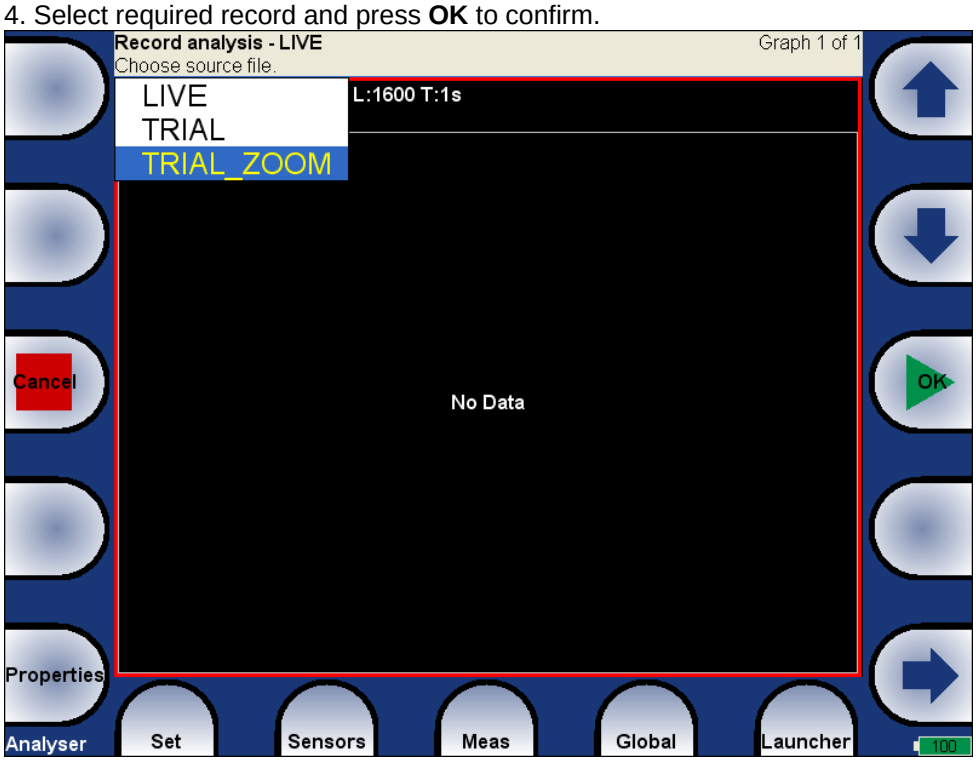
7. Press **Save Zoom As** button to save your zoomed record. Enter the name and press **OK** to confirm.

How to analyse the record?

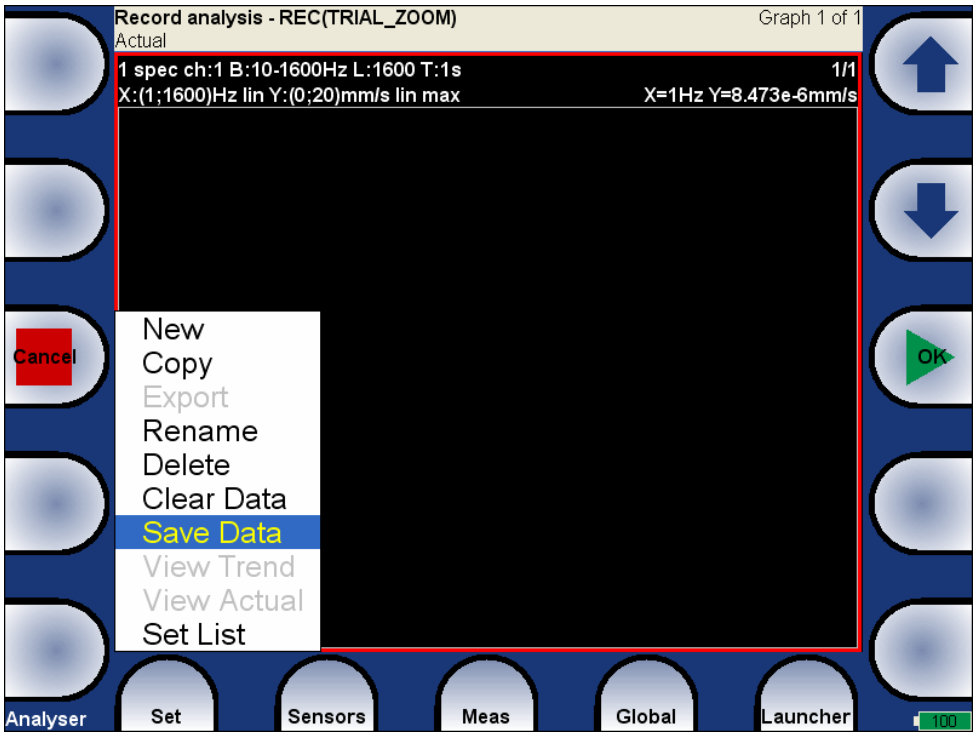
1. Launch the Analyzer mode.
2. Create the New Set of measurements as described for the Analyzer Mode.
3. Press **Global** button and select **Signal Source** item.



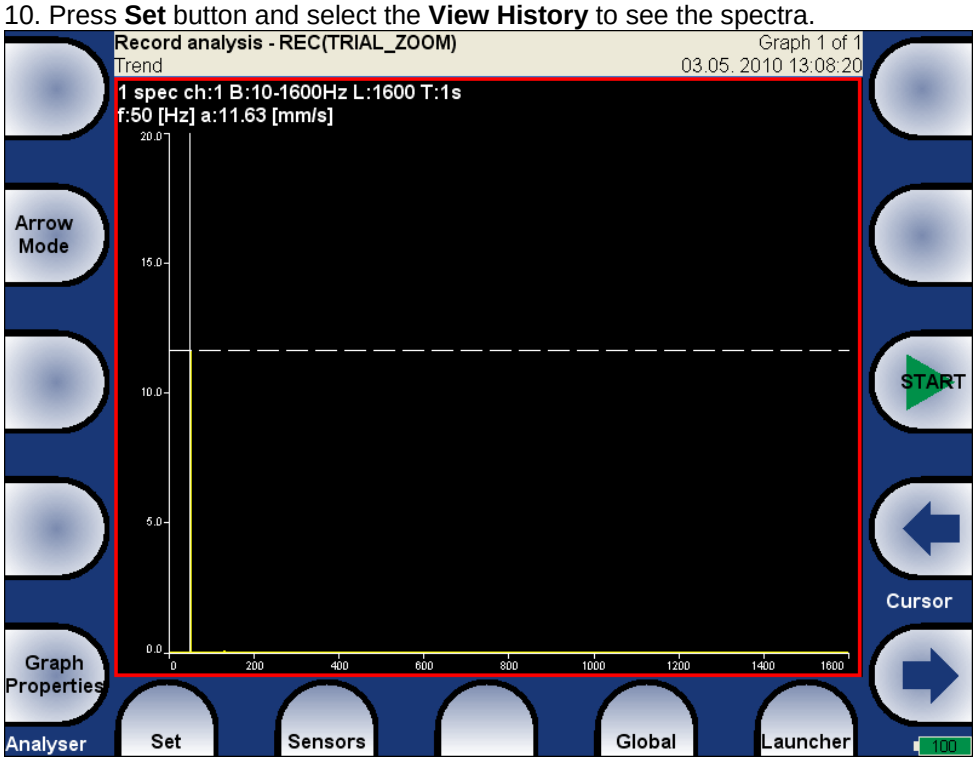
4. Select required record and press **OK** to confirm.



5. Press **START** to take the measurement.
6. If you want to save the data press **STOP** in any required time.
7. Press **Set** button and select **Save Data** to save it.



8. Press **Back** to go back to the Set list.
9. Select your Set and press **START**.
10. Press **Set** button and select the **View History** to see the spectra.

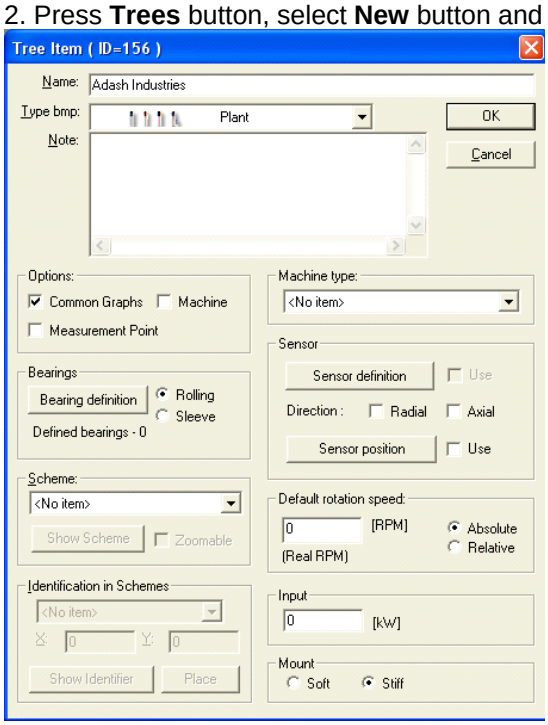


11. You can work with the spectra as described in the Analyzer mode. Unbalance can be clearly seen on our example.

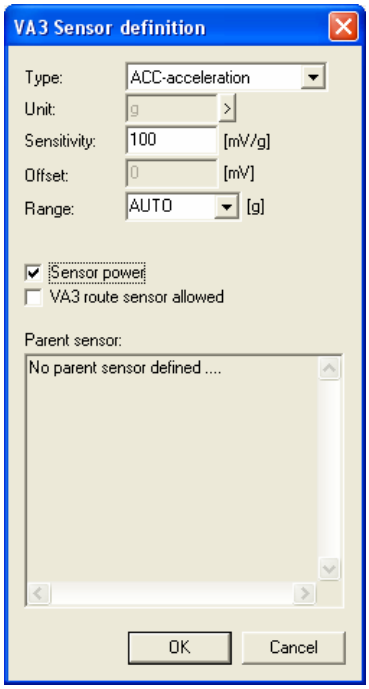
The Route mode.

How to create a tree in DDS2010?

1. Launch the DDS2010.
2. Press **Trees** button, select **New** button and enter the name of the new tree (e.g.Adash Industries).

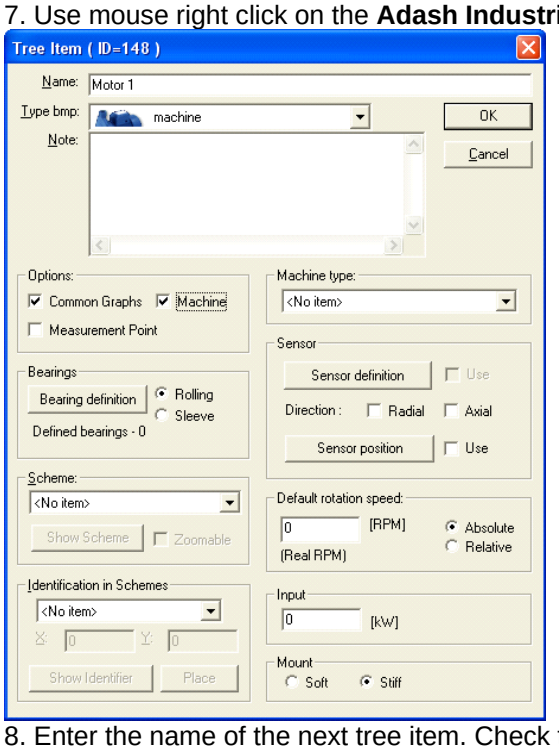


3. Many items can be defined in this window. Define the sensor, which is required for route definition in VA4Pro..
4. Press **Sensor definition** button and define a sensor as shown on the picture below.



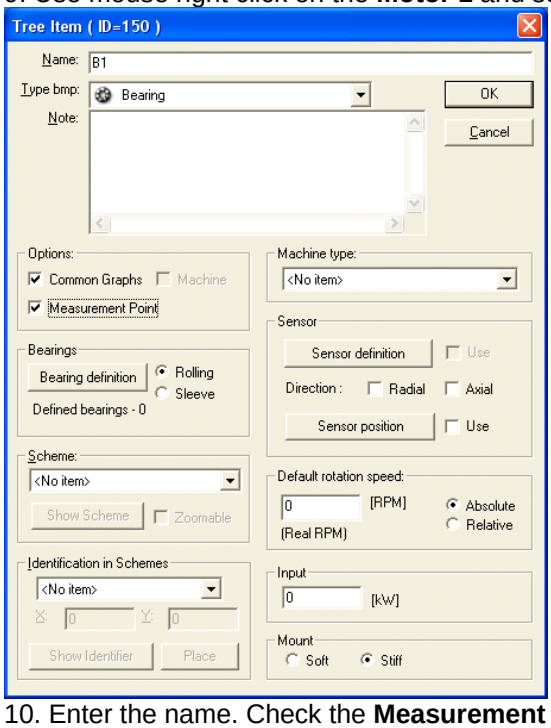
5. Confirm the sensor definition by **OK**
6. Check the **Use** item next to the **Sensor definition** button and press **OK.** Next window appears (displayed only a cut).

7. Use mouse right click on the **Adash Industries** item and select **Add item** button.



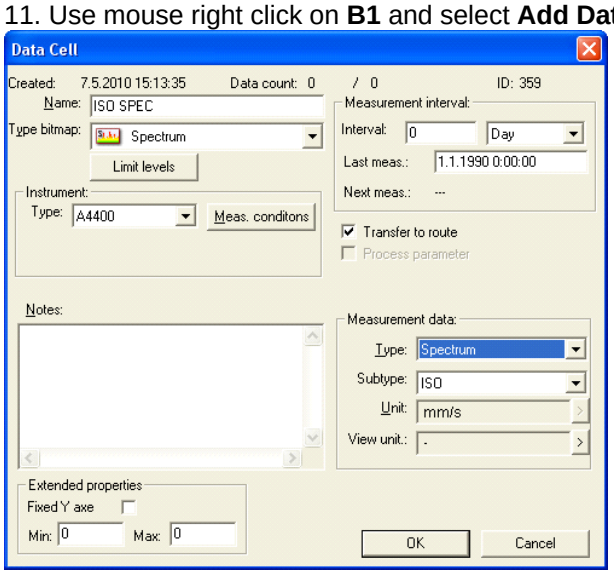
8. Enter the name of the next tree item. Check the **Machine** box. This label defines the machine level. The route is the set of machines. Press **OK.**

9. Use mouse right click on the **Motor 1** and select **Add item** button.



10. Enter the name. Check the **Measurement Point** box. Press **OK.**

11. Use mouse right click on **B1** and select **Add Data Cell** button. The data cells contain data.

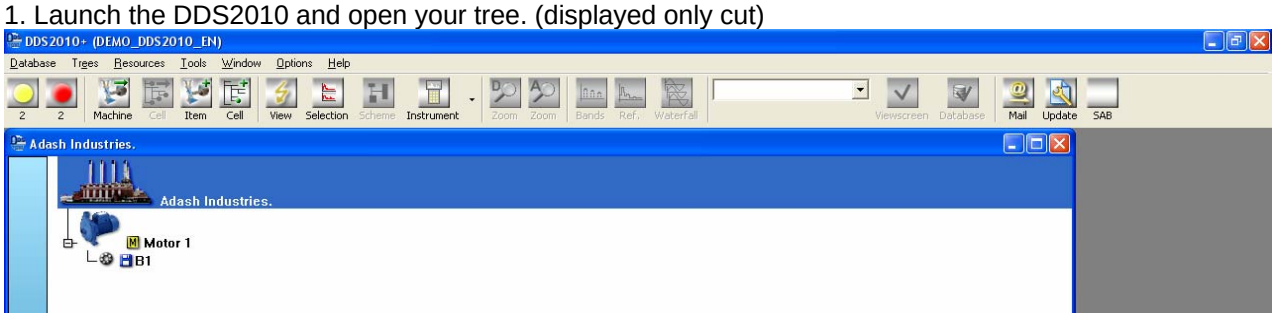


12. Enter the name of the Data cell, select a type of measurement data and press **OK.**

13. Simple tree is created. You can use Drag and Drop to copy Measurement points, Machines even the whole branch. Use mouse left click and drag required item.

How to transfer the tree from PC to VA4 and other way around.

1. Launch the DDS2010 and open your tree. (displayed only cut)



2. Connect the VA4Pro to PC via USB
3. Close the VA4_DISC (F:) window.
4. Press **Connect instrument** button and select **VA4Pro.**
5. Press **Connect** button in the VA4Pro window.
6. Select required part of the tree which you want to transfer to the VA4Pro. Drag and Drop it from the tree window to the VA4Pro window.
7. Two dialog windows appears:

Items out of measurement interval only? If you have defined a measurement intervals and you missed some items press **YES** and only missed items will be transferred to VA4Pro. Press **NO** and the whole tree will transfer.

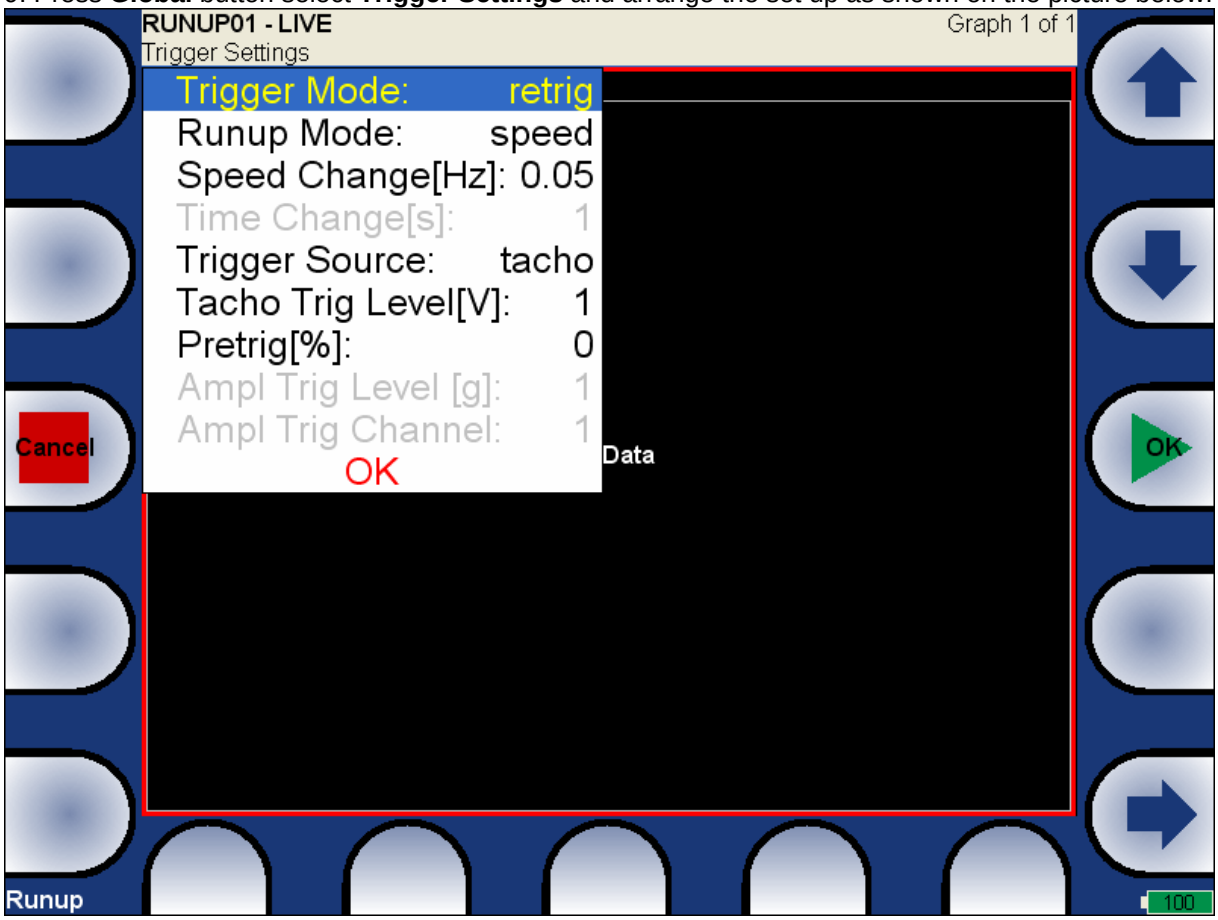
Load last measurement as a reference data? If you wish to have the last measurement as a reference data press **YES.**

8. Press **Save to VA4Pro** button. Press **New route** on the next window, enter the name and press **OK**.
9. Make the route measurement.
10. When the measurement is done go back to the route list. Press **Back** button until the VA4Pro asks **Save "Route" to DDS Memory?** Press **YES** and data will be saved.
11. Launch the DDS2010 and open your tree.
12. Connect the VA4Pro to PC via USB.
13. Close the VA4_DISC (F:) window.
14. Press **Connect instrument** button and select **VA4Pro**.
15. Press **Connect** button in the VA4Pro window.
16. Press **Read from VA4Pro** button, select required route and press **OK**.
17. Press **Store to Database** button.
18. Now you can analyse the data.

The Run Up mode

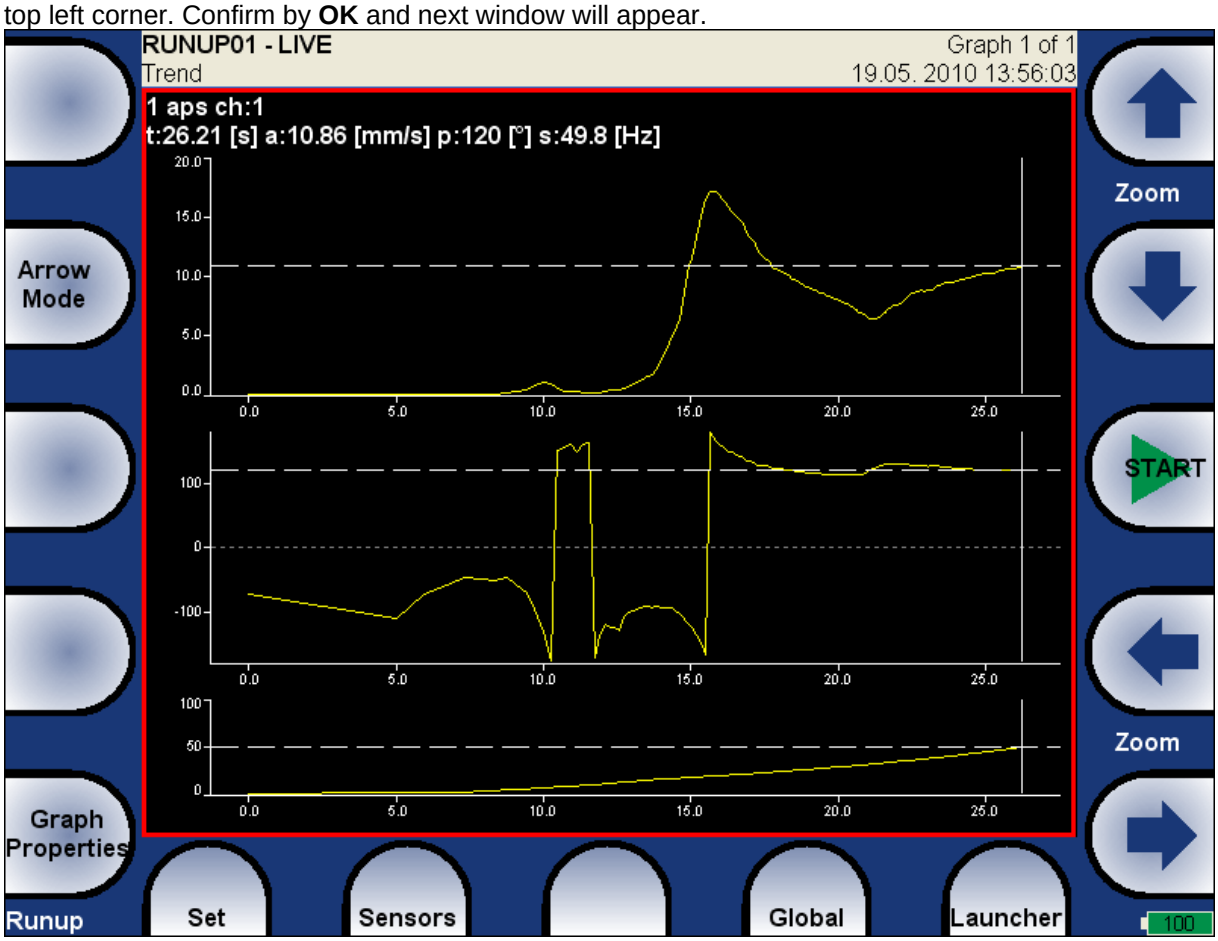
How to measure machine amplitude phase and speed during run up?

1. Launch the **RunUp** mode.
2. Press **Set** button.
3. Select **New** and confirm by OK button.
4. Enter the name and press **OK**.
5. Press **Meas** button select **New Advanced** option and press **OK**.
6. Select **aps** in Type mode.
7. Select **Channel 1**.
8. Select unit (mm/s) and press **OK.**
9. Press **Global** button select **Trigger Settings** and arrange the set up as shown on the picture below.



10. Make the run up measurement. Make sure that you have a signal from tacho probe.
11. Press **Stop** to stop the measurement.

12. Press **Set** button, select **View Trend** option and select required measurement from the list on the top left corner. Confirm by **OK** and next window will appear.



13. Use **Arrow mode** button to change the meaning of arrows. You can zoom the graph and move with the cursor.
14. Press **Set** button and select **View actual.**
15. Press **Beck** button and the instrument will ask " Save RUNUP01 to DDS Memory?" Press **Yes** if you want to save the data for further transfer to DDS2010 software. Press **No** if you don't want to save the data.