



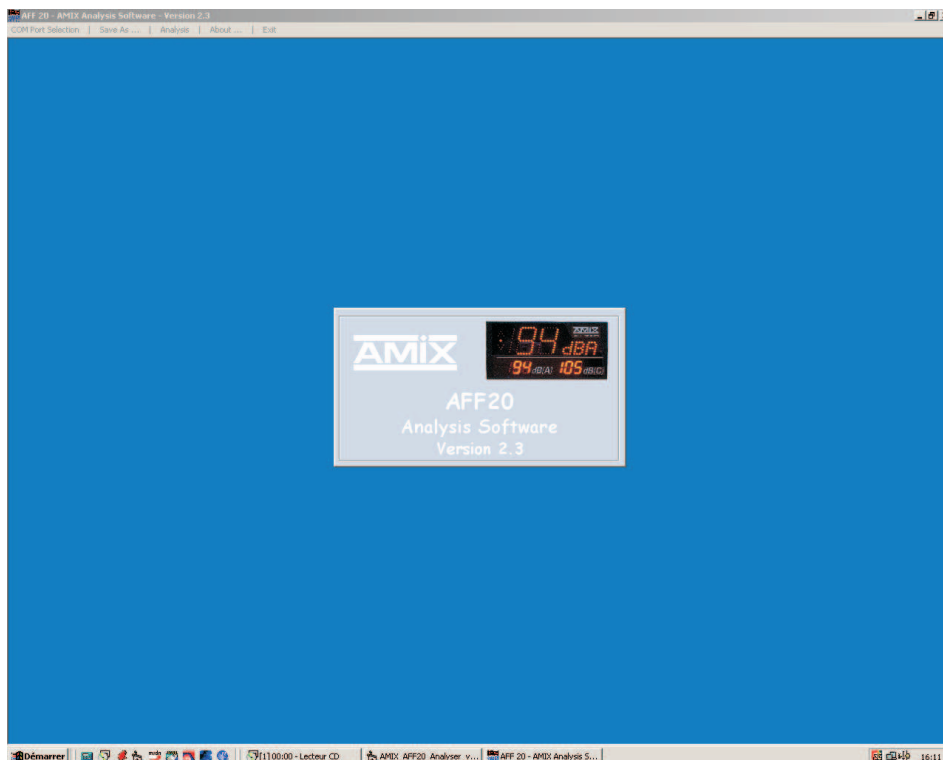
An USB serial link permits you to connect AFF20 to a computer. Then all the saved data in AFF 20 can be analysed, using this software. With this analysis software, you can transfert analysis and save display acoustic presure level historic.

Analysis can be made by different ways :

- ▶ Acoustic pressure level diagram (60 minute Leq, 5 minute Leq, and peak level).
- ▶ Levels chart.
- ▶ Events chart.
- ▶ Parameters Chart

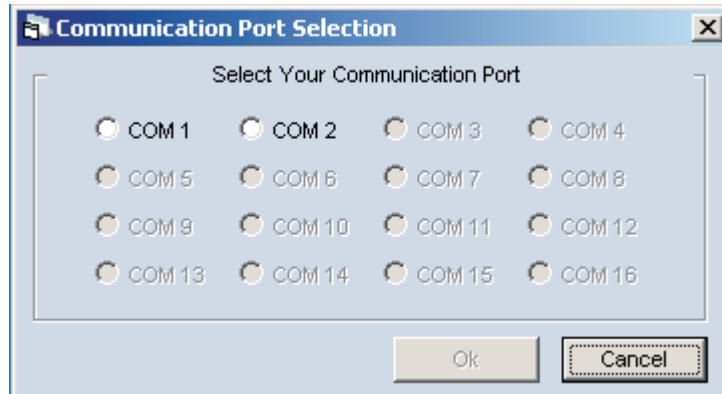
Note : - Use a type A / type B USB cable.

**Attention : you must have load USB drivers before downloading the display data.**



# COMMUNICATION PORT SELECTION

At software start, after the introduction page, the communication port selection window opens.



This window permits you to choose the communication port which AFF 20 is connected to. If no communication port is selected, downloading data from AFF 20 is impossible.

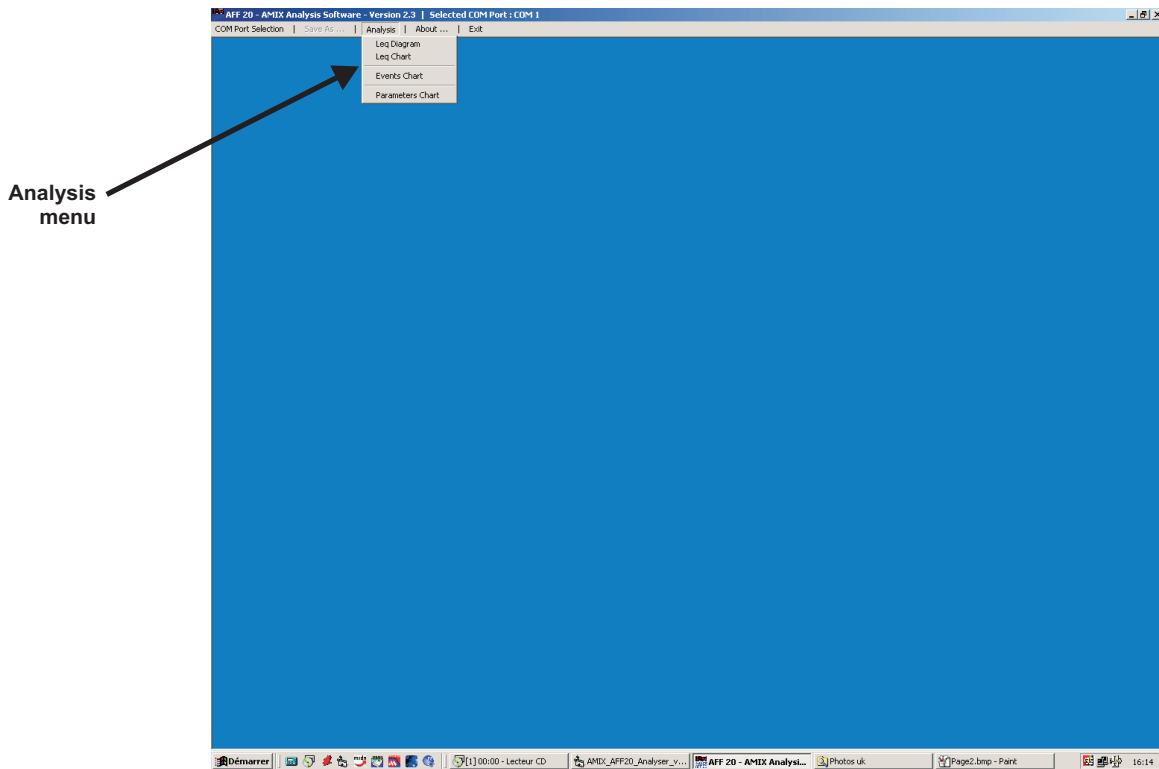
**Attention :** Selecting an wrong communication port, will generate errors during download (see on page 11 : Software errors).

**Note :**

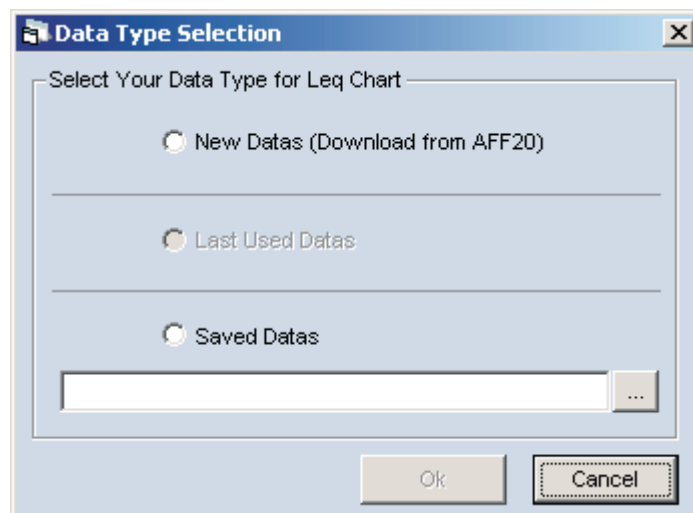
- ▶ In use software configuration (communication port, data opening mode) is displayed in the title bar.
- ▶ If only one communication port is available on the computer, it will be automatically selected. When the computer has several ports, none is selected by default.

# SOFTWARE GENERAL USE

It is possible to use the software for different kind of analysis.



Whatever the analysis mode chosen, the following window opens :



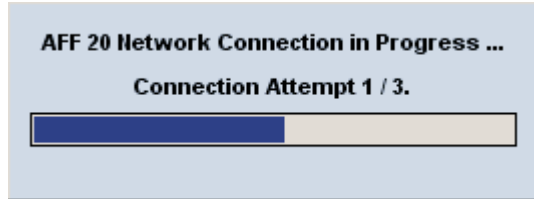
This window allows selecting one of three kinds of data to be analysed.

# SOFTWARE GENERAL USE (next)

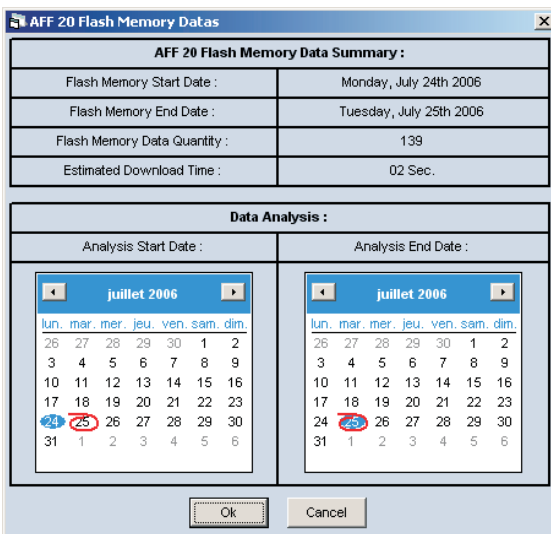
## 1°) Data download :

This function allows the AFF 20 data download.

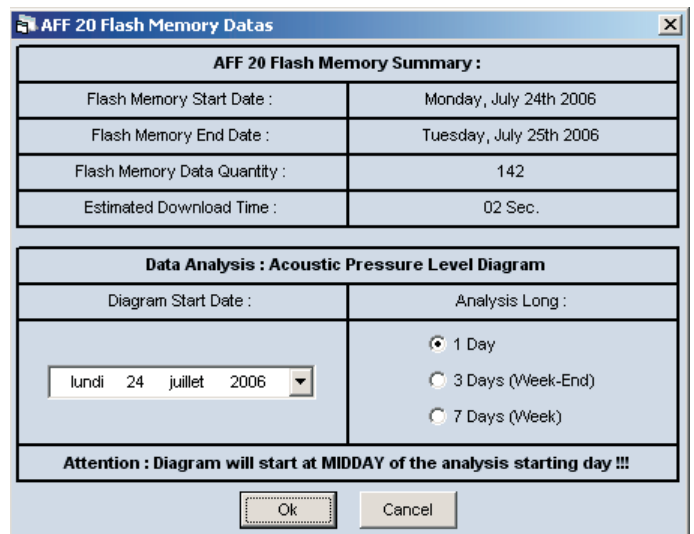
First of all the software connects to AFF20.



Then the software opens one of the following windows :



Picture 1: Window to display a chart



Picture 2: Window to display a diagram

This window displays (on its top) dates of start / end of AFF20 saved data, the number of data it represents and the estimated download time.

The chart on bottom part corresponds to the desired analysis period.

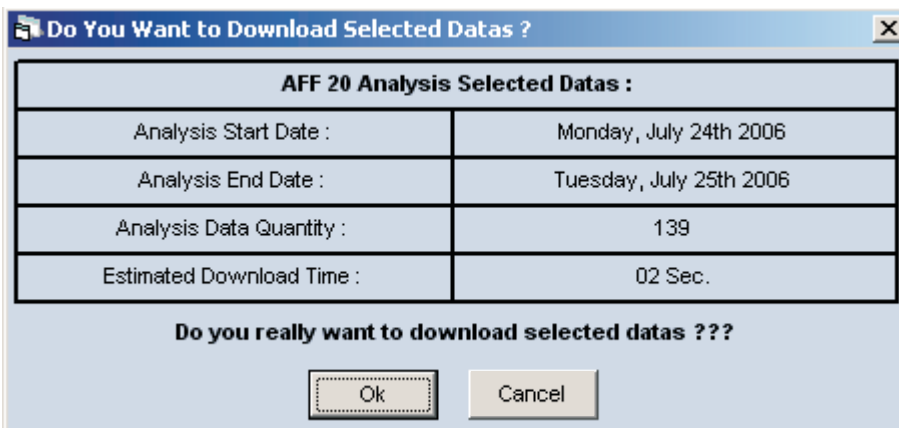
⇒ For a chart, analysis start and end dates are required

**Note : it is recommended not to download more than one month of data in order to avoid any download problem or any software slowing down.**

⇒ For a diagram, the analysis start date and duration are required.

Press OK when the dates are selected

The software asks AFF20 and the following window opens :

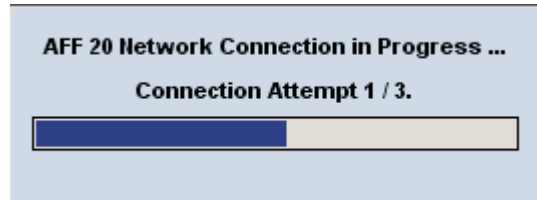


This window sums up analysis parameters: start and end dates, number of data, and download time

Pressing "Cancel" returns to the previous screen, "OK" starts the download.

# SOFTWARE GENERAL USE (next)

The transfer starts :



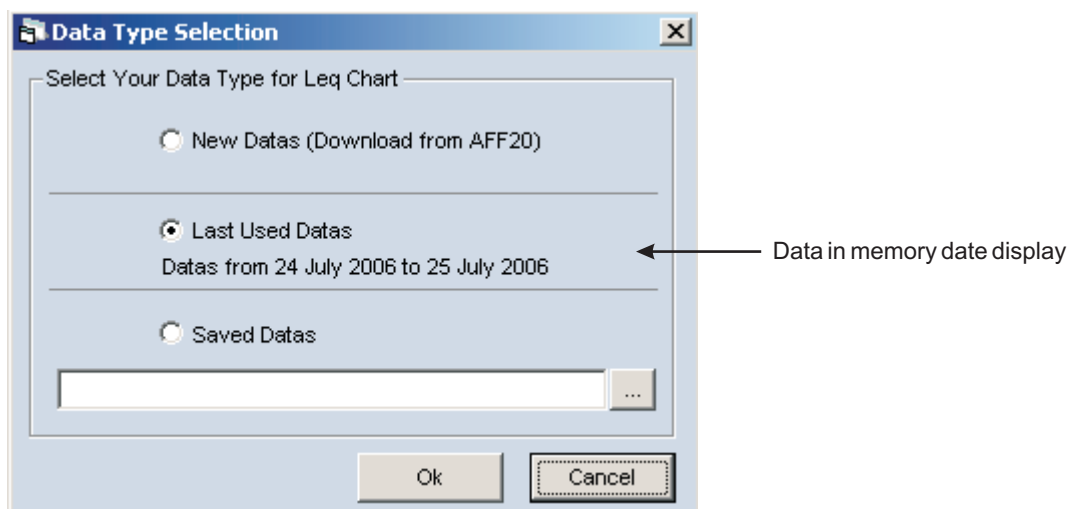
After transfer, the analysis window opens :

- ⇒ for a Leq chart, see page 6.
- ⇒ for an event chart, see page 7.
- ⇒ for a parameter chart, see page 8.
- ⇒ for diagram, see page 9.

## 2°) Last used data :

The last used data in memory option correspond to last data used in the software, either by download, or opening a record. This option avoids reloading data when changing analysis mode.

**Note** : This function can only be selected after a download or after opening a save file. Once data load efficient, this option is default selected when changing analysis mode.



## 3°) Saved data :

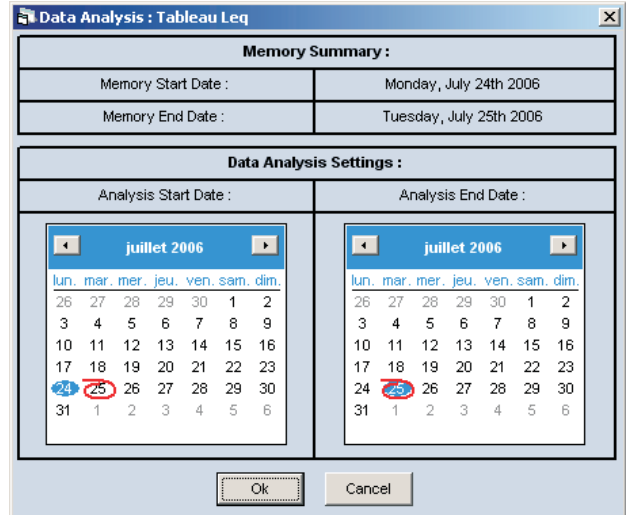
This function allows loading data from the computer. The software can only open data with **.aff20** extension.

# DIFFERENT ANALYSIS MODES : THE CHARTS

## 1°) Acoustic pressure level chart : Leq chart .

In this mode, you can analyse acoustic pressure levels (60 minute Leq, 5 minute Leq and peak level) between two dates. The analysis starts from midnight of the starting date to 11:59 PM of the end date.  
For a one day analysis, the start and end dates must be the same.

The dates choice is done using the window Picture 1 page 4 (downloading new data) or with this window (last used datas).



**Attention :** When selecting analysis dates, the analysis start date must be previous (or the same) than the end one.

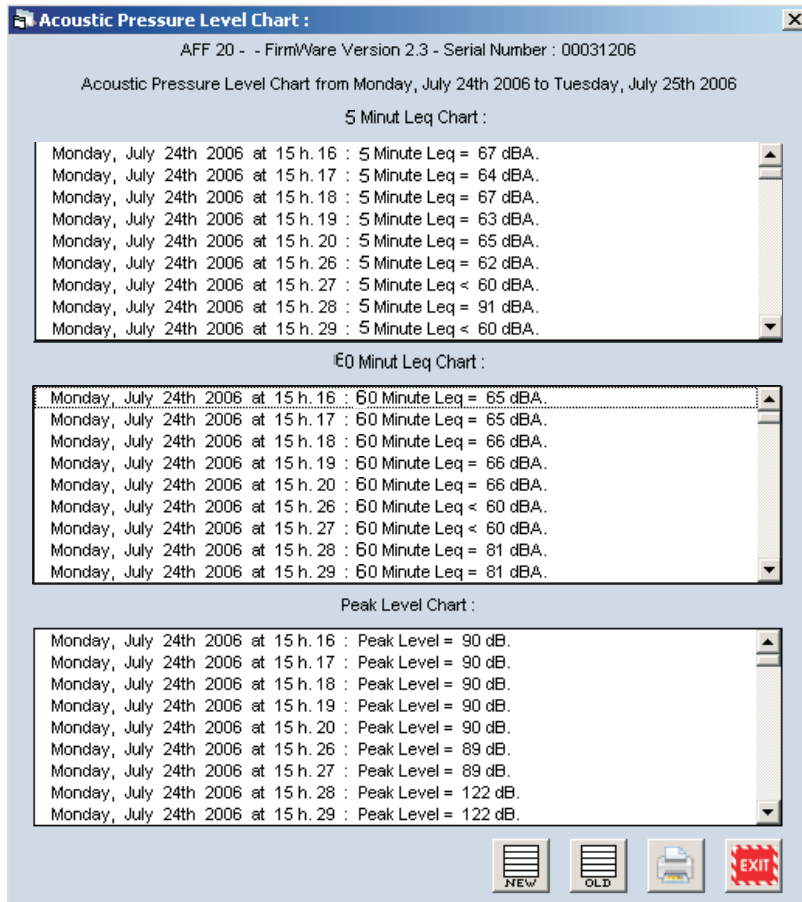


Chart 1 : 5 minutes Leq

Chart 2 : 60 minute Leq

Chart 3 : Peak level

Key to exit

Key to print charts

Key to make another Leq chart by downloading new data from AFF 20 (return to window "picture 1" page 4)

Key to make another Leq chart using the last downloaded data (return to the window on top of the page)

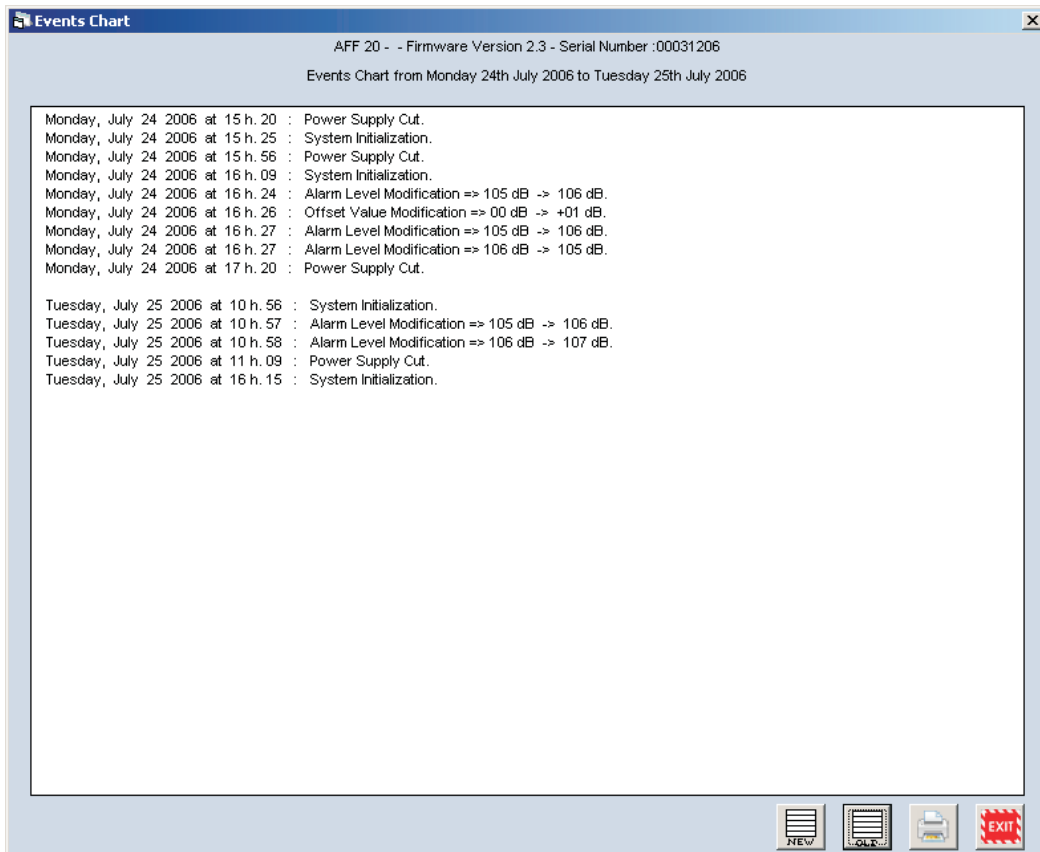
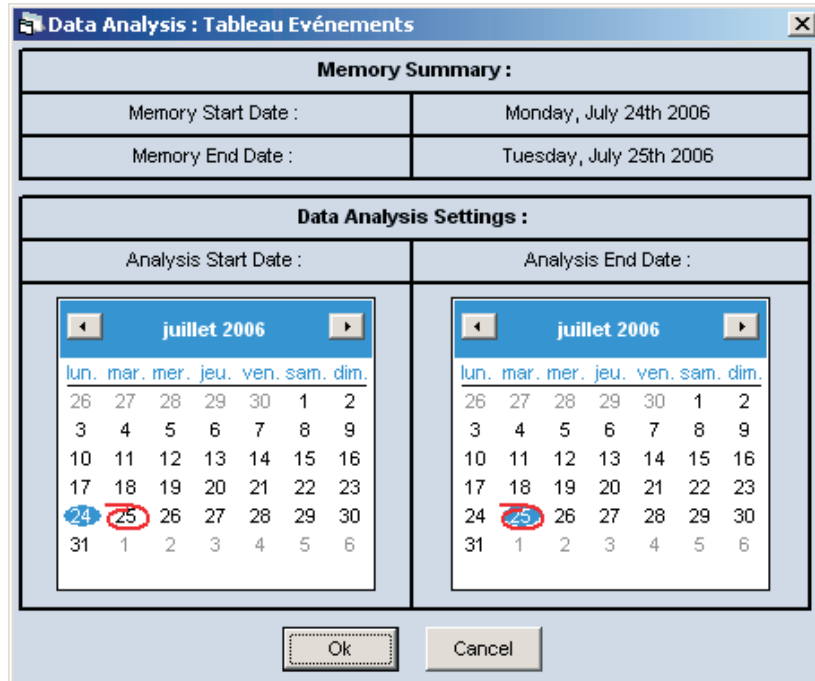
**Note:** clicking one data line in chart select corresponding data on the other charts.

# DIFFERENT ANALYSIS MODES :

## THE CHARTS (next)

### 2°) Event chart :

The functioning is the same than Leq chart.

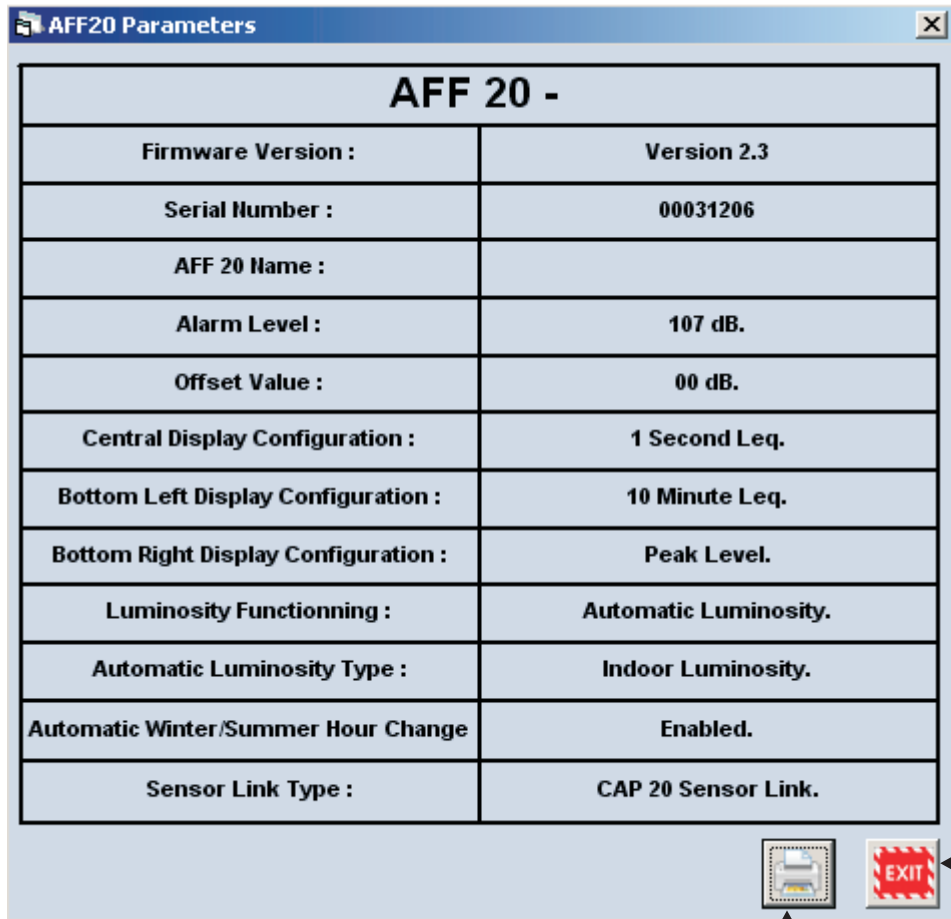


# DIFFERENT ANALYSIS MODES :

## THE CHARTS (next)

### 3°) Parameters chart :

This function displays all AFF 20 parameters.



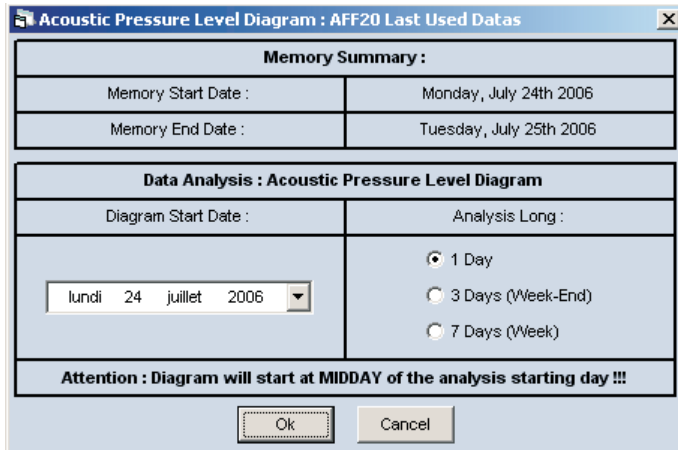
AFF 20 -	
Firmware Version :	Version 2.3
Serial Number :	00031206
AFF 20 Name :	
Alarm Level :	107 dB.
Offset Value :	00 dB.
Central Display Configuration :	1 Second Leq.
Bottom Left Display Configuration :	10 Minute Leq.
Bottom Right Display Configuration :	Peak Level.
Luminosity Functionning :	Automatic Luminosity.
Automatic Luminosity Type :	Indoor Luminosity.
Automatic Winter/Summer Hour Change	Enabled.
Sensor Link Type :	CAP 20 Sensor Link.

At the bottom right of the window, there are two icons: a printer icon and a red 'EXIT' button. Arrows point from these icons to the text labels 'Key to print paramater chart.' and 'Key to exit' respectively.



# DIFFERENT ANALYSIS MODES : THE DIAGRAMS

This analysis mode gives us 5 minute Leq, 60 minute Leq and peak level in the form of diagrams.  
The following window permits you to set diagram analysis parameters. They are selected using the window "picture 2" page 4 (download new data), or using the following window (last used datas).



The analysis starting day corresponds to the first day on the diagram.  
There are 3 analysis lengths :



- ▶ 1 day : the analysis starts at midday the selected day to midday the next day
- ▶ 3 days : the analysis starts at midday the selected day to midday three days later. This allows covering a week end from Friday midday to Monday midday.
- ▶ 7 days : the analysis starts at midday the selected day to midday seven days later. This allows covering a full week.

The screenshot shows the main software window with the following components and labels:


- Leq 60 level diagram:** Points to the top-left graph showing 60-minute Leq data.
- Leq 60 zoom key:** Points to the 'Leq' zoom button on the 60-minute graph.
- New diagram 1 key:** Points to the 'NEW' button in the top right.
- New diagram 2 key:** Points to the 'OLD' button in the top right.
- Events chart:** Points to the 'Events Chart for the Selected Period' table on the right.
- Maximum and alarm levels chart:** Points to the table below the events chart showing Alarm Level, Minut Leq Maxi, 5 Minut Leq Maxi, and Peak Level Maxi.
- Leq 5 Diagram:** Points to the bottom-left graph showing 5-minute Leq data.
- Combo box A:** Points to the '60 Minute Leq Diagram' dropdown menu.
- Combo box B:** Points to the '5 Minute Leq Diagram' dropdown menu.
- Leq 5 zoom key:** Points to the 'Leq' zoom button on the 5-minute graph.
- Peak level chart:** Points to the bottom-right graph showing peak level data.
- Combo box C:** Points to the 'Peak Level Diagram' dropdown menu.

# DIFFERENT ANALYSIS MODES :

## THE DIAGRAMS (suite)

- ▶ Leq 60 levels diagram : The acoustic pressure 60 minute Leq is displayed as the red line. The green line is the alarm threshold
- ▶ Leq 5 levels diagram : The acoustic pressure level 5 minute Leq is displayed as the red line. The green line is the alarm threshold
- ▶ Peak level diagram : The acoustic pressure level peak level is displayed as the red line.
- ▶ Zoom key for Leq 60 diagram : This key permits you to zoom the 60 minute leq diagram. When pressed the diagram is maximized to the full window. Once zooming, new options are available.
  - ▶▶ Allows printing using the printer key 
  - ▶▶ Return to normal size, pressing zoom .
  - ▶▶ You can zoom one user define part of the diagram. To define part to be zoomed, push on mouse left click on the diagram and drag the pointer to open a rectangle on the diagram. Releasing the click, the selected part is zoomed.

**Attention :**

    - There is a final limit to the “click and drag” zooming. This limit is obtained when the selected part is too small or after several zooming.
    - After “click and drag” zooming, print is disabled
    - Pressing the zoom key  returns to the previous zooming.
- ▶ Zoom key for Leq 5 diagram : As for 60 minute Leq but on 5 minute Leq diagram.
- ▶ Zoom key for peak diagram : As for 60 minute Leq, but on peak level diagram.
- ▶ Combo box A, B, C : Permit you to choose for each diagram zone, the kind of analysis between 60 minute Leq, 5 minute Leq and peak level diagram, 60 minute Leq, 5 minute Leq and peak level charts.
- ▶ Leq 60 chart : This chart is a recap of the 60 minute Leq displayed on the diagram. It is possible to locate a value on the diagram. Clicking one value in the chart, displays a blue arrow on the corresponding value on the diagram.
- ▶ Leq 5 chart : Same as 60 minute Leq chart.
- ▶ Peak level chart : Same as 60 minute Leq chart.
- ▶ Events chart : This chart sums up all the events during the selected period. The names of the events are simplified. For more details see the events chart page 7.
- ▶ New graphic 1 Key : This key returns to the new diagram windows by downloading a new set of data.
- ▶ New graphic 2 Key : Same as previous but using the last data.

**Attention : Printing the different charts in the diagram window is impossible. It is necessary to return to the chart analysis mode.**

# ERRORS MESSAGE GUIDE

❑ **Error 01** : AFF does not answer.

⇒ Check the USB cable (the AFF 20 USB red led switches on when connected).

⇒ Check for correct connection port selection.

⇒ If the trouble persist, shut down and power up AFF20 leaving the USB cable connected.