



AUDIO PROFESSIONAL

7 RUE RAOUL FOLLEREAU
77600 BUSSY ST GEORGES - FRANCE
Tél. : (33)1 64 66 20 20
Fax : (33)1 64 66 20 30



SNA 60 analysis software

SNA60 can be connected to a PC using the RS232 or USB link. So all the data recorded in SNA can be examined using the supplied software. This software is used to transfer, analyse data and save historic.

Analysis is carried in different ways :

- ⇒ Acoustic pressure plotted every 10 mn (Leq 10) and every 1mn (Leq1 available in SNA50-2 FIRMWARE 5.x only))
- ⇒ Level and events array.
- ⇒ Events array.
- ⇒ Parameters with historic changes array.

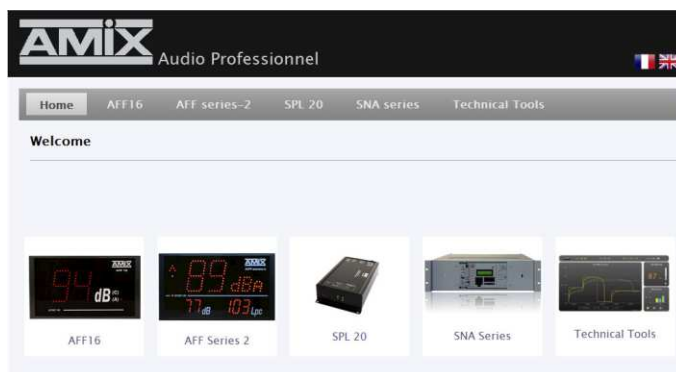
A/ Software installation :

The first time, please install the software Amix- SNA60 on your computer. This software is available on the CD supplied with SNA60.

Attention: The software is not compatible with "windows Vista".

⇒ How to install the software?

- Insert Amix CD into your computer and wait a few seconds, and the screen appears.



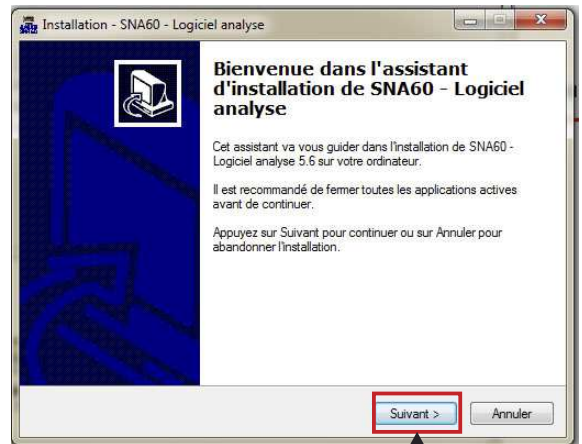
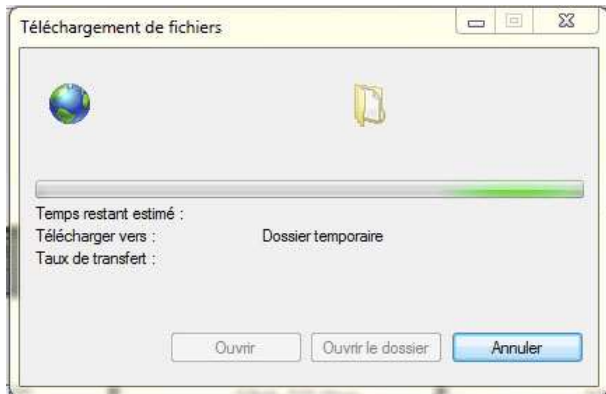
- Select SNAseries / software menu



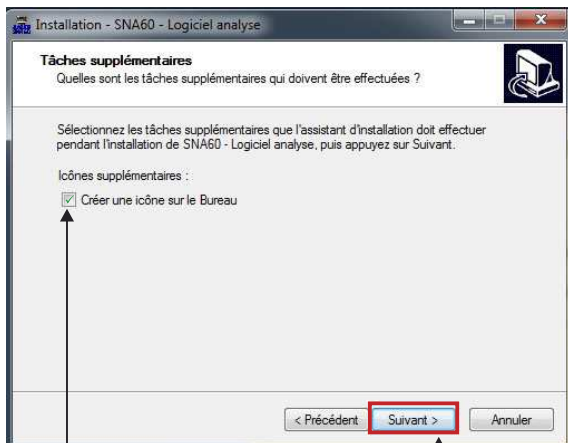
Click this icon to load SNA60 software



Click "executer" to load files

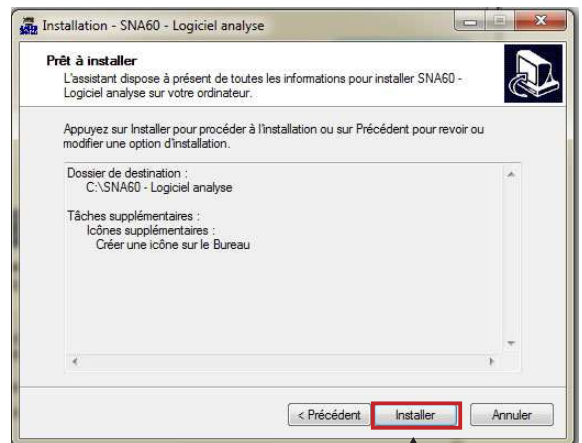


click suivant



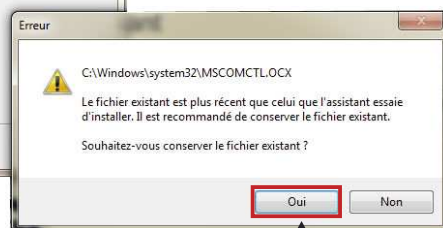
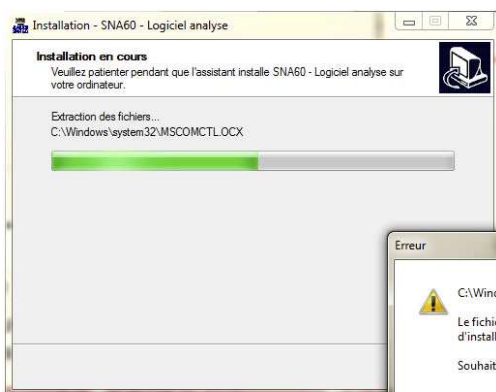
click "suivant"

Valid "checkbox" if you want create a desktop icon.

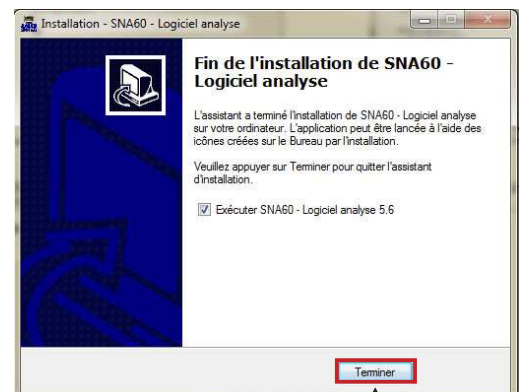


click "installer"

If your computer exploitation system is "windows 7", or "windows 8", then this screen will appear (if your exploitation system is windows XP, then please go to page 4)

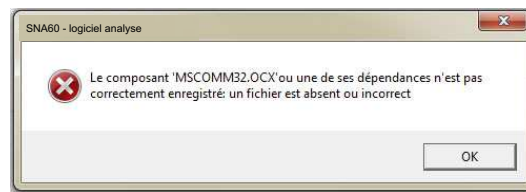


click "oui"



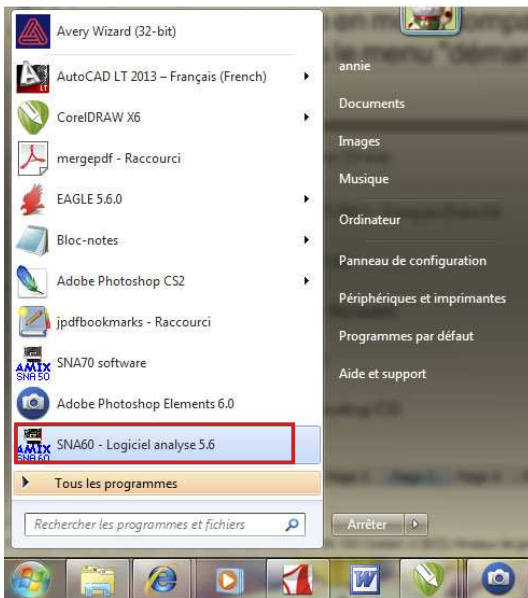
click "Finish"

This screen displays:

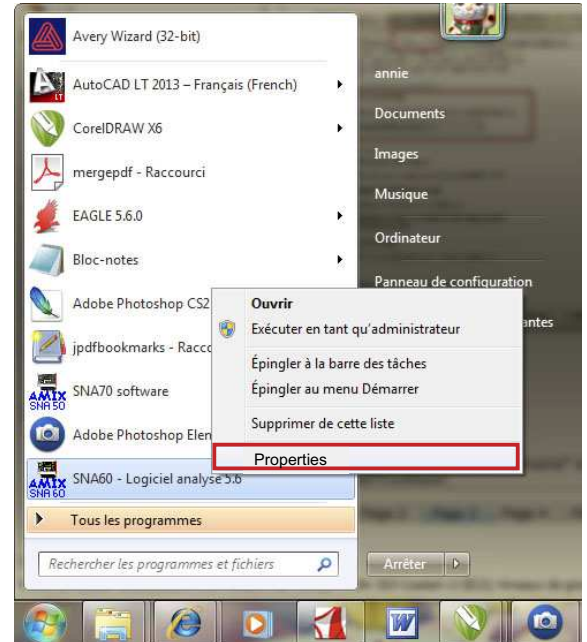


Windows 7 allows you to run a program in compatibility mode with Windows XP for example. This function is very useful with some older programs that might be difficult to work under Windows 7. Here's how to run a program in compatibility mode.

- Go to the "Start" menu on your computer, select the "SNA60 - logiciel analyse 5.6" program

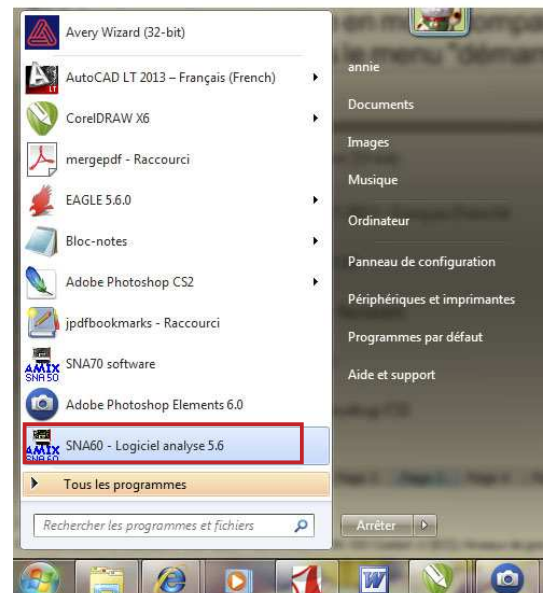


Right click on the icon and select "Properties"

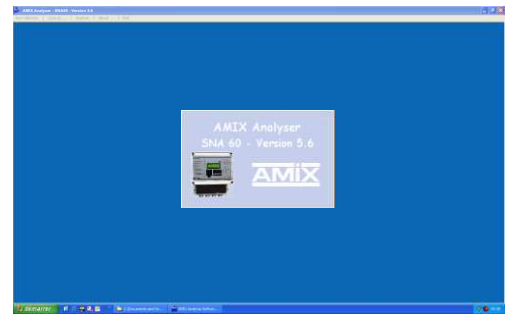


Go to "compatibility" menu, check "Run this program in compatibility mode for", and select an appropriate option "Windows XP (Service Pack 3)". Press OK to finish.

Return to the "Start" menu and run the "SNA60 - logiciel analyse 5.6" program.



This screen appears, the software is installed on your computer.



B/ Wiring :

It is good practice to connect all equipments before to switch on.
The first time, connect SNA60 to your computer using USB port. Use a USB A → USB B wire.

Note : - It is possible to use a male / female RS232 wire (extension cable) to connect SNA60 to your computer (serial port), or with USB Amix USB 50 device
- Software is compatible with USB Amix USB 50 device.



The first time, do not forget to install USB drivers before using USB (drivers are available in the supplied CD rom).

Attention:

- In order to get data, the plexi hood and the connector mask, must be in place.
- SNA60 hood must be closed during transfer.



COM PORT SELECTION

At starting up after the introduction page, a window opens to choose the serial port.



This is the port used to link the SNA60. If no port is selected, obviously transfer to PC is impossible. This window allows to choose the SNA50-2 FIRMWARE version.

Attention : a wrong FIRMWARE version will give problems during data transfer.

Remark :

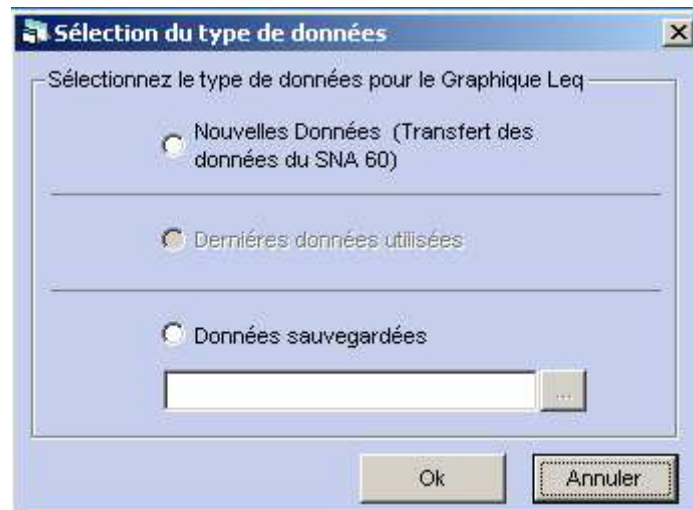
- ⇒ The configuration in use (com port, file opening mode) is displayed in software title bar.
- ⇒ If the PC provides only one com port, it is selected as default. If several ports are available, the user must define the one to use.
- ⇒ FIRMWARE 5.X is selected as default.

SOFTWARE USE

Using the software it is possible to carry several analysis.



Whatever analysis is used the following window opens :



This window allows to choose between the 3 types of data for analysis.

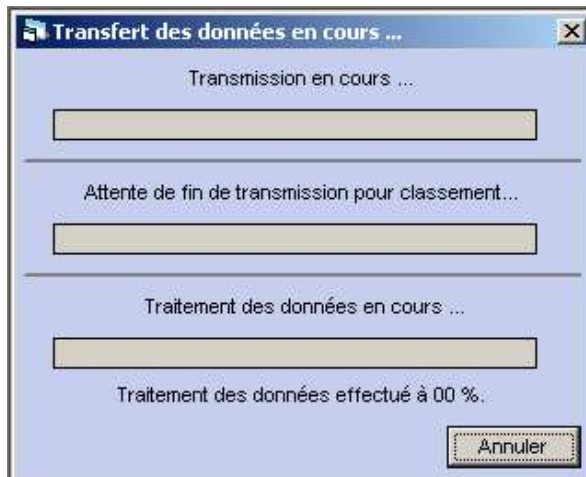
SOFTWARE USE (next)

1°) Data download :

This function downloads data in two steps :

- ⇒ First from regulator to PC.
- ⇒ Then data sorting for further treatment.

Once the transfer starts, a windows shows transfer progression.



During transfer SNA60 (V5.x) displays "PC transmission in progress", but older version wont.

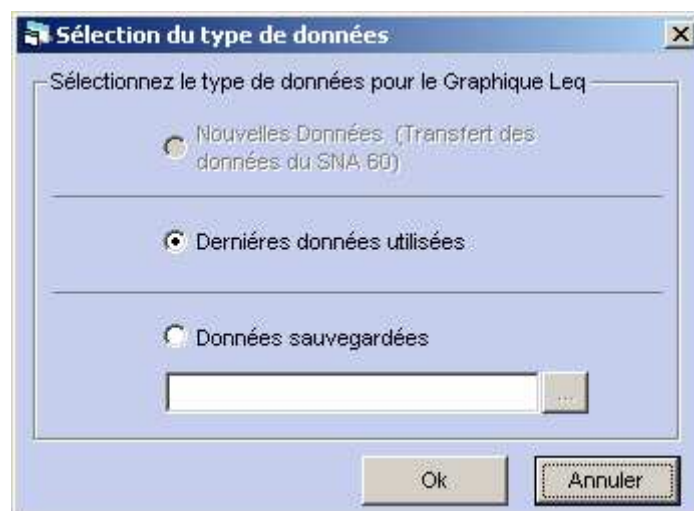
Should an error occur during transfer, an error message is displayed. See error message on page 13.
At the end of transfer, the required analysis window opens. (see different analysis functions page 8).

Attention: Do not forget to save your transferred data before shutting down your computer, or they will missing.
Click "Save as ..." and select the desired location to save your file.

2°) Last used data :

The " last used data in memory" correspond to the last downloaded data, either downloaded, or from a recorded file. This option does not require to download when changing analysis mode.

Remark : To use this function, it is necessary to download first or open a saved file. Once this mode is enabled it stays as default when going to other analysis mode.



3°) Saved data :

Allows to open a file previously saved on the PC. The file to be open, is .sna type. Other file without .sna extension wont be open (such as saved from SNA70).

DIFFERENT ANALYSIS MODES : ARRAYS

1°) ACOUSTIC PRESSURE ARRAY : LEQ ARRAY

This is the way to analyse acoustic pressures on 1 or 10mn between two dates, from 00h00 the first day to 23h59 the last day. Using the same date as start and end provides analysis for one day only.



Attention ! analysis start date < analysis end date.

SNA 60 - FirmWare Version : 5.X - Numéro de Série : 00000012

Tableau des valeurs Leq 10 minutes du Lundi 06 Décembre 2004 au Vendredi 16 Septembre 2005 :

Le Vendredi 25 Mars 2005 de 19 h. 45 à 19 h. 55 : Niveau Leq 10 = 86 dB.				
Le	Mardi	29	Mars	2005 de 09 h. 12 à 09 h. 22 : Niveau Leq 10 = 94 dB.
Le	Mardi	29	Mars	2005 de 09 h. 22 à 09 h. 32 : Niveau Leq 10 = 94 dB.
Le	Mardi	29	Mars	2005 de 09 h. 53 à 10 h. 03 : Niveau Leq 10 = 93 dB.
Le	Mardi	29	Mars	2005 de 10 h. 12 à 10 h. 22 : Niveau Leq 10 = 88 dB.
Le	Mardi	29	Mars	2005 de 10 h. 28 à 10 h. 38 : Niveau Leq 10 = 93 dB.
Le	Mardi	29	Mars	2005 de 10 h. 38 à 10 h. 48 : Niveau Leq 10 = 94 dB.
Le	Mardi	29	Mars	2005 de 11 h. 02 à 11 h. 12 : Niveau Leq 10 = 88 dB.
Le	Mardi	29	Mars	2005 de 11 h. 32 à 11 h. 42 : Niveau Leq 10 = 72 dB.
Le	Mardi	29	Mars	2005 de 13 h. 02 à 13 h. 12 : Niveau Leq 10 = 83 dB.
Le	Mardi	29	Mars	2005 de 13 h. 35 à 13 h. 45 : Niveau Leq 10 = 93 dB.
Le	Mardi	29	Mars	2005 de 14 h. 00 à 14 h. 10 : Niveau Leq 10 = 93 dB.
Le	Mardi	29	Mars	2005 de 14 h. 11 à 14 h. 21 : Niveau Leq 10 = 84 dB.
Le	Mardi	29	Mars	2005 de 18 h. 57 à 19 h. 07 : Niveau Leq 10 = 94 dB.

Tableau des valeurs Leq 1 minute du Lundi 06 Décembre 2004 au Vendredi 16 Septembre 2005 :

Le	Mardi	29	Mars	2005 de 10 h. 36 à 10 h. 37 : Niveau Leq 1 = 94 dB.
Le	Mardi	29	Mars	2005 de 10 h. 37 à 10 h. 38 : Niveau Leq 1 = 94 dB.
Le	Mardi	29	Mars	2005 de 10 h. 38 à 10 h. 39 : Niveau Leq 1 = 94 dB.
Le	Mardi	29	Mars	2005 de 10 h. 39 à 10 h. 40 : Niveau Leq 1 = 94 dB.
Le	Mardi	29	Mars	2005 de 10 h. 40 à 10 h. 41 : Niveau Leq 1 = 94 dB.
Le	Mardi	29	Mars	2005 de 10 h. 41 à 10 h. 42 : Niveau Leq 1 = 94 dB.
Le	Mardi	29	Mars	2005 de 10 h. 42 à 10 h. 43 : Niveau Leq 1 = 94 dB.
Le	Mardi	29	Mars	2005 de 10 h. 43 à 10 h. 44 : Niveau Leq 1 = 94 dB.
Le	Mardi	29	Mars	2005 de 10 h. 44 à 10 h. 45 : Niveau Leq 1 = 94 dB.
Le	Mardi	29	Mars	2005 de 10 h. 45 à 10 h. 46 : Niveau Leq 1 = 94 dB.
Le	Mardi	29	Mars	2005 de 10 h. 46 à 10 h. 47 : Niveau Leq 1 = 94 dB.
Le	Mardi	29	Mars	2005 de 10 h. 47 à 10 h. 48 : Niveau Leq 1 = 94 dB.
Le	Mardi	29	Mars	2005 de 10 h. 48 à 10 h. 49 : Niveau Leq 1 = 94 dB.
Le	Mardi	29	Mars	2005 de 10 h. 49 à 10 h. 50 : Niveau Leq 1 = 94 dB.
Le	Mardi	29	Mars	2005 de 10 h. 50 à 10 h. 51 : Niveau Leq 1 = 94 dB.

Key to leave array

Key to print arrays

Key to define a new Leq arrays

Remarque : the selected picture shows a V5.x array. As the older versions do not provide 1mn analysis, the bottom array does not exist.

DIFFERENT ANALYSIS MODES : ARRAYS (next)

2°) EVENTS ANALYSIS ARRAY :

Same as for Leq analysis array.

The dialog box is titled 'Paramètres du tableau d'événements'. It contains a label 'Sélectionnez les paramètres du tableau' and a section 'Dates de début & de fin de l'analyse :'. Inside this section, there are two date pickers: 'Date de début :' set to 'mardi 30 novembre 2004' and 'Date de fin :' set to 'vendredi 16 septembre 2005'. At the bottom, there are 'Ok' and 'Annuler' buttons.

The window is titled 'Tableau des événements'. It displays 'SNA 60 - FirmWare Version : 5.X - Numéro de Série : 00000012' and 'Tableau des événements du 30 Novembre 2004 au 16 Septembre 2005 :'. The table lists 32 events, all occurring on 'Le Vendredi 25 Mars 2005' at various times. The events are: Ouverture Capot., Fermeture Capot., Modification Paramètres., Ouverture Fenêtre., Ouverture Capot., Fermeture Capot., Modification Paramètres., Ouverture Fenêtre., Initialisation Système., Ouverture Fenêtre., Ouverture Capot., Fermeture Capot., Modification Paramètres., Ouverture Fenêtre., Initialisation Système., Ouverture Fenêtre., Ouverture Capot., Fermeture Capot., Modification Paramètres., Ouverture Fenêtre., Initialisation Système., Ouverture Fenêtre., Ouverture Capot., Fermeture Capot., Modification Paramètres., Ouverture Fenêtre., Ouverture Capot., Fermeture Capot., Modification Paramètres., Ouverture Fenêtre.

Date	Heure	Événement
Le Vendredi 25 Mars 2005	à 19 h. 41	Ouverture Capot.
Le Vendredi 25 Mars 2005	à 19 h. 41	Fermeture Capot.
Le Vendredi 25 Mars 2005	à 19 h. 41	Modification Paramètres.
Le Vendredi 25 Mars 2005	à 19 h. 41	Ouverture Fenêtre.
Le Vendredi 25 Mars 2005	à 19 h. 44	Ouverture Capot.
Le Vendredi 25 Mars 2005	à 19 h. 44	Fermeture Capot.
Le Vendredi 25 Mars 2005	à 19 h. 44	Modification Paramètres.
Le Vendredi 25 Mars 2005	à 19 h. 45	Ouverture Fenêtre.
Le Vendredi 25 Mars 2005	à 20 h. 02	Initialisation Système.
Le Vendredi 25 Mars 2005	à 20 h. 02	Ouverture Fenêtre.
Le Vendredi 25 Mars 2005	à 20 h. 04	Ouverture Capot.
Le Vendredi 25 Mars 2005	à 20 h. 05	Fermeture Capot.
Le Vendredi 25 Mars 2005	à 20 h. 05	Modification Paramètres.
Le Vendredi 25 Mars 2005	à 20 h. 05	Ouverture Fenêtre.
Le Vendredi 25 Mars 2005	à 20 h. 05	Initialisation Système.
Le Vendredi 25 Mars 2005	à 20 h. 05	Ouverture Fenêtre.
Le Vendredi 25 Mars 2005	à 20 h. 11	Ouverture Capot.
Le Vendredi 25 Mars 2005	à 20 h. 12	Fermeture Capot.
Le Vendredi 25 Mars 2005	à 20 h. 12	Modification Paramètres.
Le Vendredi 25 Mars 2005	à 20 h. 12	Ouverture Fenêtre.
Le Vendredi 25 Mars 2005	à 20 h. 12	Ouverture Capot.
Le Vendredi 25 Mars 2005	à 20 h. 13	Initialisation Système.
Le Vendredi 25 Mars 2005	à 20 h. 13	Ouverture Fenêtre.
Le Vendredi 25 Mars 2005	à 20 h. 13	Ouverture Capot.
Le Vendredi 25 Mars 2005	à 20 h. 14	Fermeture Capot.
Le Vendredi 25 Mars 2005	à 20 h. 14	Modification Paramètres.
Le Vendredi 25 Mars 2005	à 20 h. 14	Ouverture Fenêtre.
Le Vendredi 25 Mars 2005	à 20 h. 16	Ouverture Capot.
Le Vendredi 25 Mars 2005	à 20 h. 16	Fermeture Capot.
Le Vendredi 25 Mars 2005	à 20 h. 16	Modification Paramètres.
Le Vendredi 25 Mars 2005	à 20 h. 16	Ouverture Fenêtre.

DIFFERENT ANALYSIS MODES : ARRAYS (next)

3°) PARAMETERARRAY :

This function displays the equipment parameters and their modifications.

The screenshot shows the 'Paramètres du SNA 60' window. At the top, it displays the title bar and a subtitle 'Tableaux des Paramètres du SNA 60 :'. Below this, a date range is shown: 'Paramètres du Lundi 13 Octobre 2008 à 14 : 34 au Mercredi 30 Juin 2010 à 19 : 54'. The main area is divided into several sections:

- Paramètres Généraux:**

Version Firmware :	Version 5.5
Numéro de Série :	00038891
- Paramètres d'Heures:**

Heure Jour vers Nuit :	22 Hrs.
Heure Nuit vers Jour :	06 Hrs.
- Paramètres de Niveaux:**

Niveau Leq Jour :	93 dB
Niveau Leq Nuit :	96 dB
Niveau Leq Jour Fenêtre :	93 dB
Niveau Leq Nuit Fenêtre :	96 dB
Niveau Public :	100 dB
Niveau Capteur :	100 dB
- Paramètres de Courbe:**

Analyse :	Pondérée Type A.
-----------	------------------
- Utilitaires de Gestion:**

Fonctionnement du Relais :	Norm. Fermé.
Coupure si Défaut Capteur :	Activée.
Etat de la Coupure Finale :	Activée

At the bottom, there is a date selection dropdown menu showing 'Lundi 13 Octobre 2008 à 14 : 34'. To the right of this menu are two buttons: a printer icon and a red 'EXIT' button. Arrows point from these elements to descriptive text:

- An arrow points from the date range at the top to the text: 'displays validity date of parameters to display'.
- An arrow points from the printer icon to the text: 'Key to print parameters'.
- An arrow points from the 'EXIT' button to the text: 'Key to leave'.
- An arrow points from the date dropdown menu to the text: 'Combo box for date selection (only on V5.x)'.

A "Combo box" (only V5.X) allows the user to choose in a list, the data of parameter to be studied. By default the date is the one of the latest modifications made to the equipment.

DIFFERENT ANALYSIS MODES : GRAPHS

Allows to draw level Leq1 and Leq10 graphs.

The following windows is used to choose the parameters for this analysis



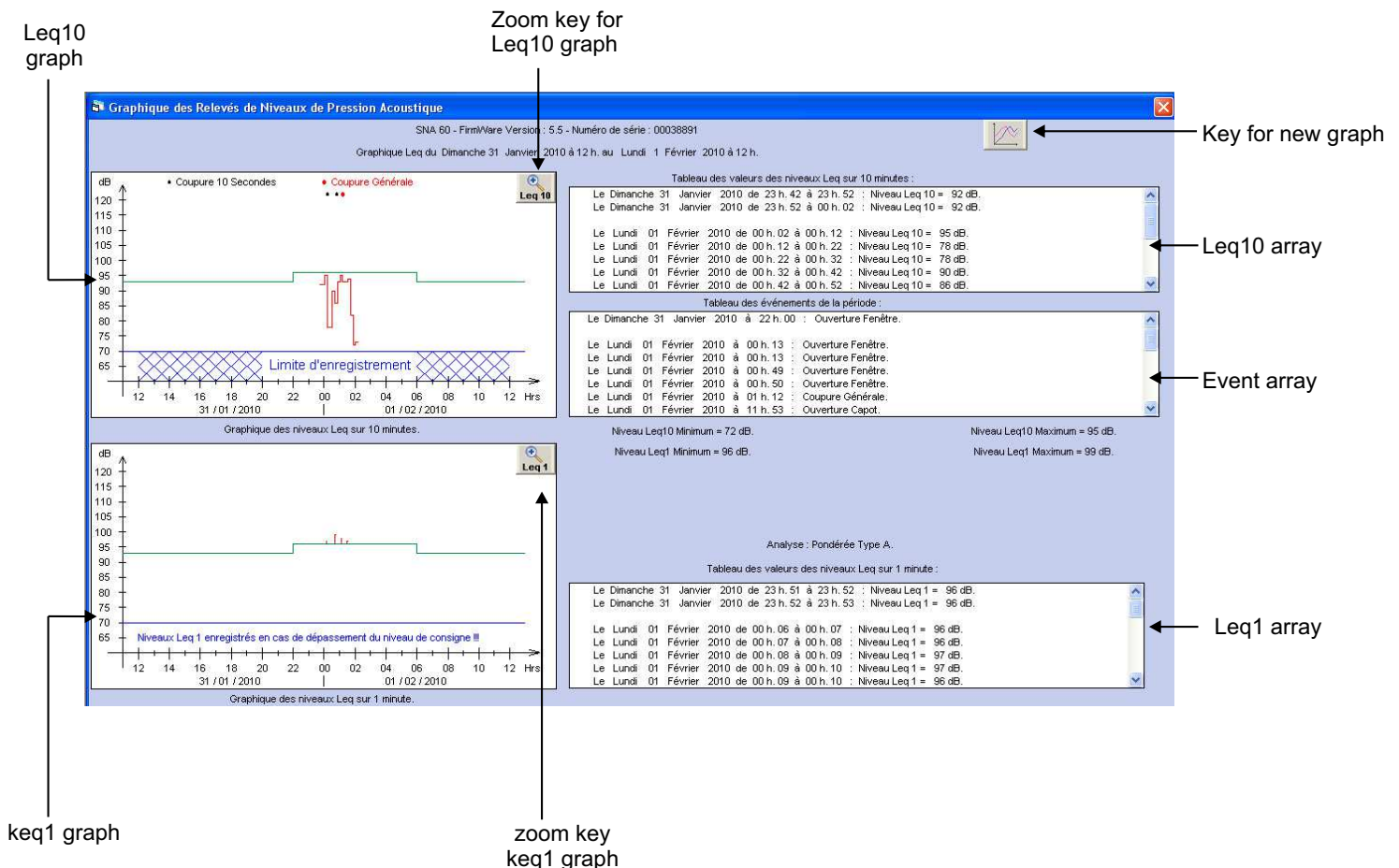
Start of analysis is the first day on the graph.

Attention : ⇒ this analysis starts the selected day at 12.00.


⇒ It is impossible to visualize the gauge from the day the equipment was installed for the first time.

There are 3 analysis duration :

- ▶ 1 day : analysis from first day 12.00 to next day 12.00
- ▶ 3 days : analysis from first day 12.00 to third day 12.00. This allow to cover a week end i.e. From Friday 12.00 to Monday 12.00
- ▶ 7 days : as before during seven days, covering a full week.



DIFFERENT ANALYSIS MODES : GRAPHS (next)

- ▶ Leq10 graph : Acoustic pressures on 10 mn is displayed in red, where the gauge is green (not to be exceeded). Even when SNA is running, this curve may not be displayed, because only Leq10 levels over 70dB are recorded.
- ▶ Leq1 graph : Acoustic pressures on 1 mn is displayed in red, where the gauge is green (not to be exceeded). Leq1 levels are continuously computed, but saved only, if they equal or exceed the threshold level. This is why there are only few values, or even no values (as in our case). This means that the audio level was not in excess, because, even the measure on 1 mn, did not exceed the instruction.
- ▶ Leq 10 zoom key : The leq10 graph fills the window. Then further actions are possible.
 - ⇒ Print the graph by pressing 
 - ⇒ Come back to normal graph by pressing zoom (⊖)
 - ⇒ It is possible to zoom a part of the graph. Click on the graph and using the mouse and keeping left key pressed, draw a square on the part to be magnified.

Attention :

 - there is a limit to the zoom. A square too small, or several zooms will drive to the limit
 - It is not possible to print the “square” magnified graph.
 - pressing zoom key (⊖) restore the graph from first zoom.
- ▶ Leq1 zoom key : Same as for Leq10 but on 1 mn graph.
- ▶ Leq10 array : This array is a summary of Leq levels. It is possible to visualize on the graph a particular value from the array. Just click the desire line in the array. A blue arrow will point the value on the graph.
- ▶ Leq1 array : Same as for Leq10.
- ▶ Event array : This array displays all the events during the selected run.
- ▶ New graph key : Comes back to the window, to define a new graph

Attention : It is impossible to print the arrays in the graph window. To do this, come back to mode array analysis.

❑ **Error 01:** Problem when starting data download.

- ⇒ Check RS232 wire.
- ⇒ Check the 2 hoods are closed.
- ⇒ Check com port choice.
- ⇒ Check for FIRMWARE selection (displayed at SNA60 power on).

❑ **Error 02:** Problem at end of data download.

- ⇒ Check for RS232 wire disconnection.
- ⇒ Close all running applications and re start download.

❑ **Error 03:** Problem when starting parameter download (Version 3.2)

- ⇒ Check as for error 01.

❑ **Error 04:** Problem at the end of parameters download (Version 3.2)

- ⇒ Check as for error 02.

■ System initialization	» event occurring during power on
■ Equipment power supply cut	» event occurring during power cut
■ Hood opening	» event occurring when opening one of the two hoods.
■ Hood Closing	» event occurring when closing one of the two hoods
■ Sensor link problem	» event occurring when a default is detected on the sensor link (broken wire, disconnected plug...)
■ End of sensor link problem	» event when the sensor is coming back to normal
■ Sensor level problem	» event occurring when the sensor test level is different of the calibration one (sensor masked ...)
■ 10s power cut	» occurs after the first overflow
■ definitive power cut	» occurs after the third overflow in the same hour
■ End of definitive power cut	» occurs after an equipment reset (reset is only possible by the installer)
■ CAP60 standardization	» occurs when the standardisation is run (To be done at least once a year).
■ Windows opening	» occurs when a door or window is open.
■ Window closing	» occurs when a door or window is closed.
■ Settings Modification	» occurs when an internal parameter is modified.
■ Configuration Modification	» occurs when an historic or analysis filter is modified.
■ Automatic time change	» occurs after an automatic time change of the equipment.



7 Rue Raoul Follereau
77600 BUSSY SAINT GEORGES - FRANCE
Tél. : 33 (0)1 64 66 20 20- Fax : 33 (0)1 64 66 20 30
E-mail : amix@amixaudio.com
www.amixaudio.com