

PHOXLOG

LOGGER & RS 422 Option for BAMOPHOX monitors



INSTRUCTION MANUAL

BAMO MESURES

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PHOXLOG
LOGGER & RS 422

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V 00 00 000

MES
LOG/BUS

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1. First installation

The MMC cards supplied with the BAMOPHOX logger monitors are ready to use.

CAUTION: MMC cards supplied are for use exclusively on BAMOPHOX Loggers

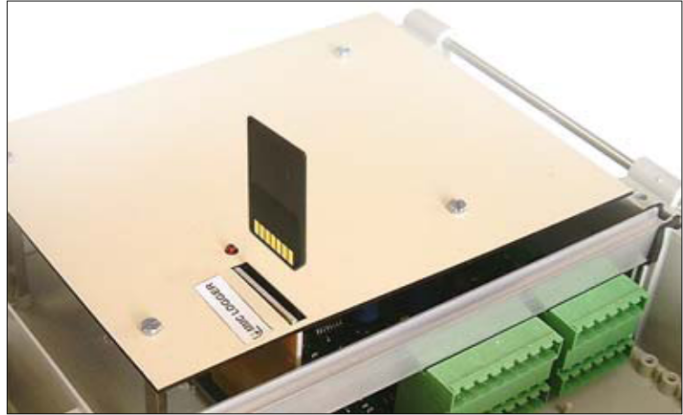
In case of use for other purpose (such as memory card on camera, files saving on PC, etc.) the data from PHOXLOG wont be loaded anymore until the format is done once more (data ill be loosen).

Erasing the file Bamophox.log on MMC card can be done only from the menu on PHOXLOG software.

- Never use Windows explorer to erase or rename the file Bamophox.log on MMC;
- Never format the MMC card from Windows tools.

Please follow the operation order as here under, do not insert the MMC before:

1. Connect the BAMOPHOX Logger model to the main supply.
2. Check the clock through the main menu.
3. Choose the recording period.
4. Locate the MMC card on the upper cabinet (wall mounting) or on the rear of the panel mounting model only when the red LED is off. Moving the MMC card when the red LED is lighting (recording sequence data) could damage all data.

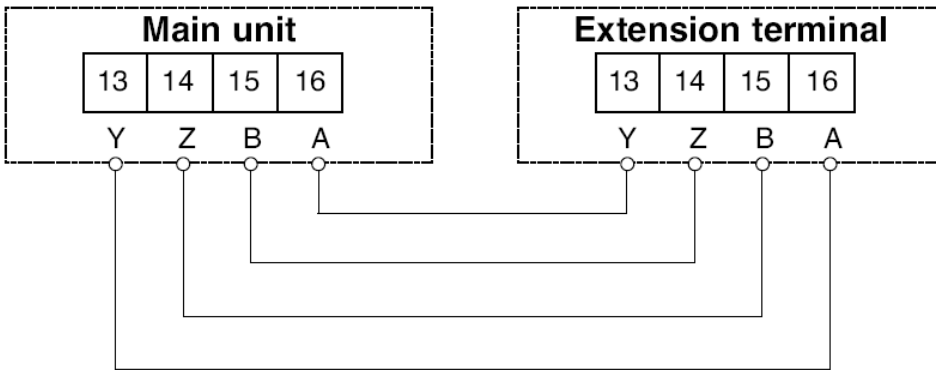


5. Data recording is done every x minutes: the red LED lights on when in record mode during 5 seconds. When red LED is lighting do nor insert or extract the MMC card.

Note: without a MMC the logger will not record any data.

2. EXTENSION WIRING

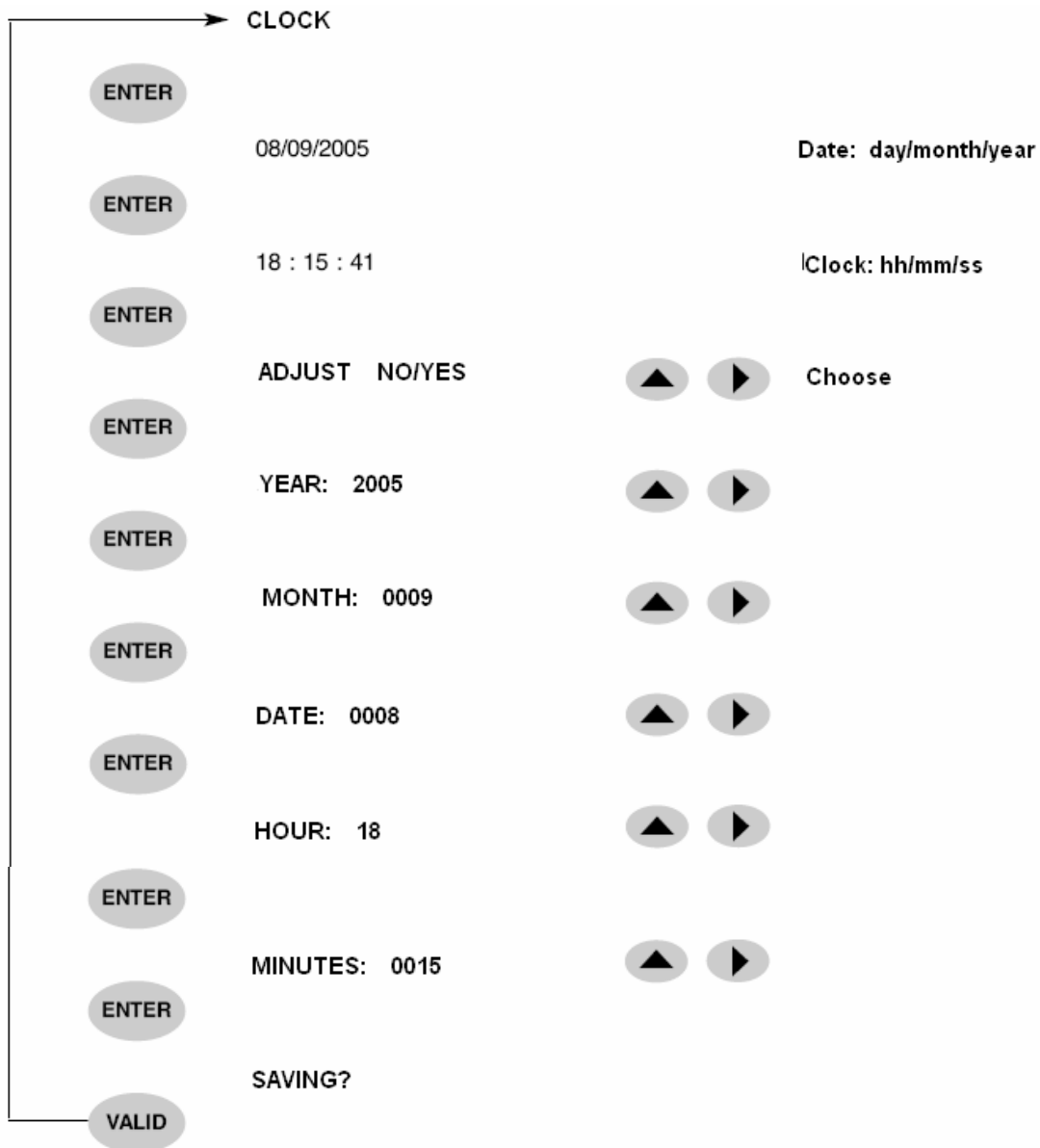
Wiring from wall or panel mounting BAMOPHOX to an Extension terminal BAMOPHOX



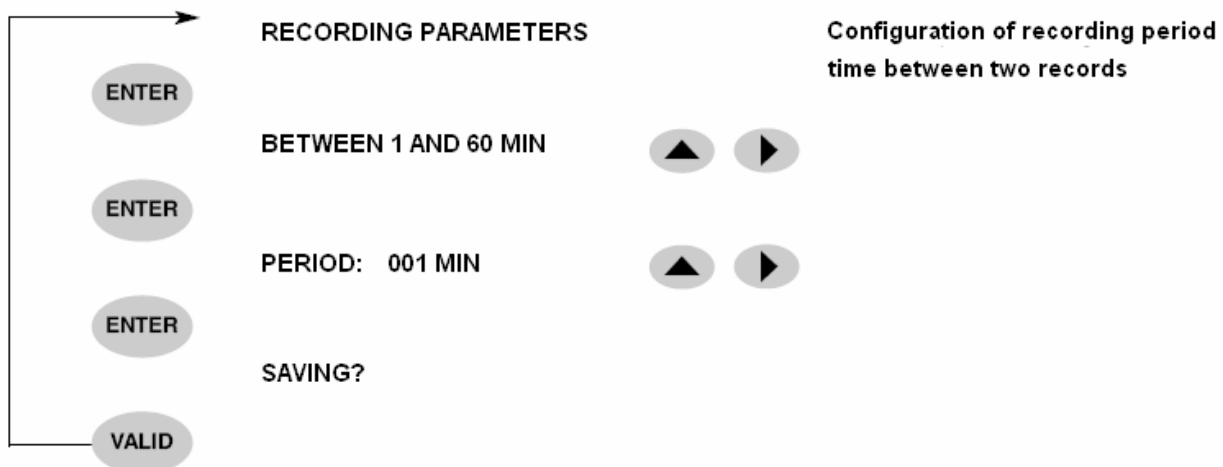
- Maximum length cable 500 m
- Wire specifications: Mains cable or 4 wires shielded cable = 0.25 mm² cross section

3. CONFIGURATION WITH BAMOPHOX MENU

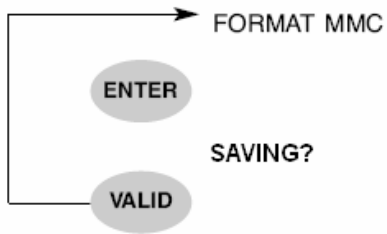
3.1 Clock



3.2 LOGGER



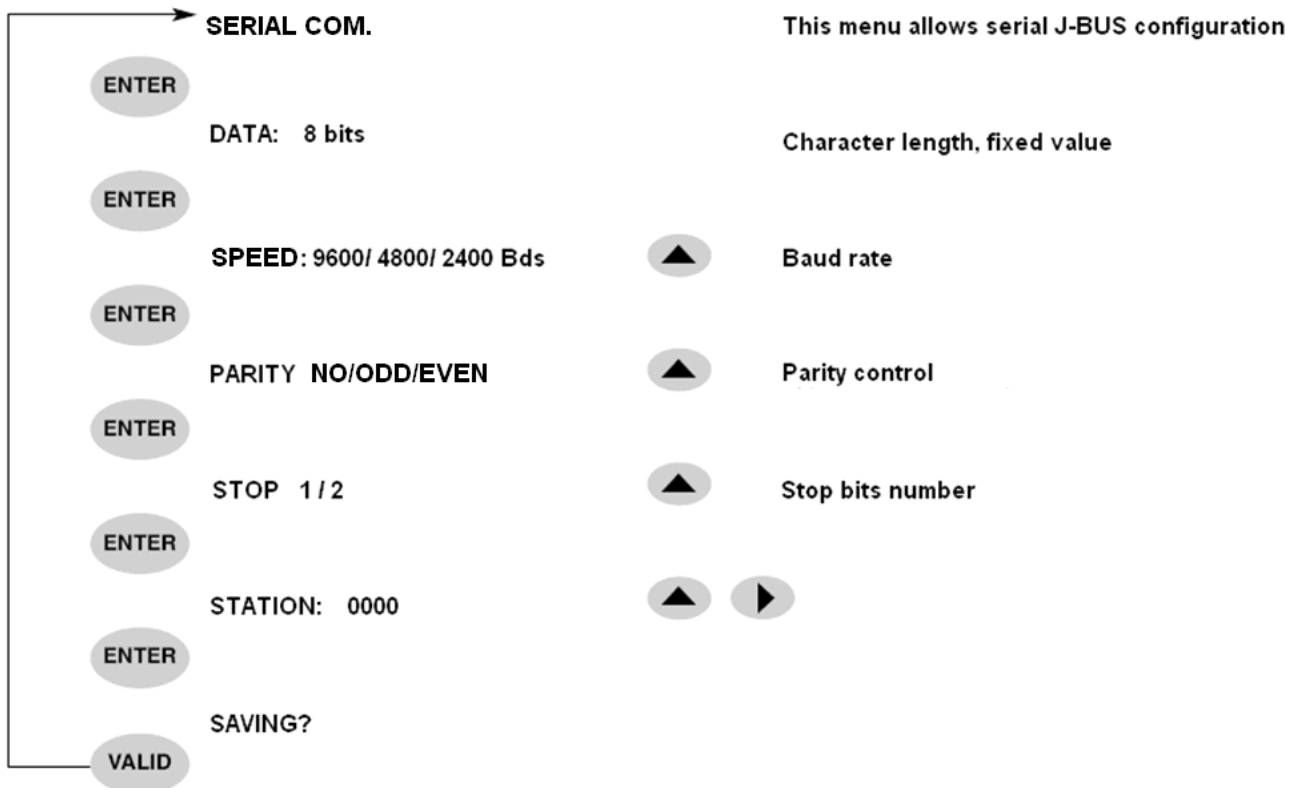
3.3. MMC card format



This menu sequence allows the format of MMC for BAMOPHOX Logger as a FAT 16 (File Allocation Table / 16 bits). This is necessary to assure recording and storage of data on the MMC.

Without MMC in the card reader of BAMOPHOX logger, an error message appears when saving is pressed.

3.4. Serial interface



4. Software PHOXLOG

To install PHOXLOG software, you may use:

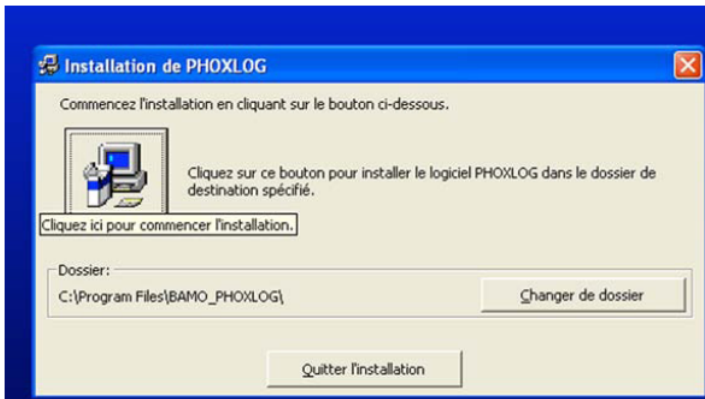
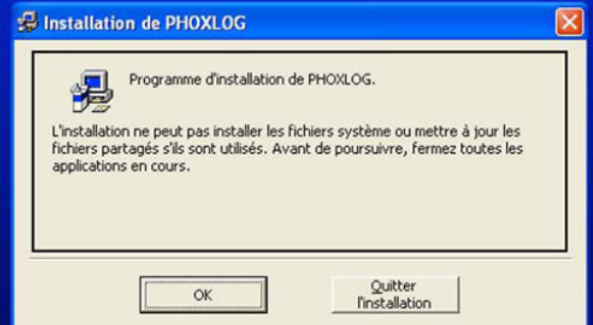
- CD supplied with the BAMOPHOX or,
- downloaded version from <http://www.bamo.fr>

Necessary files:

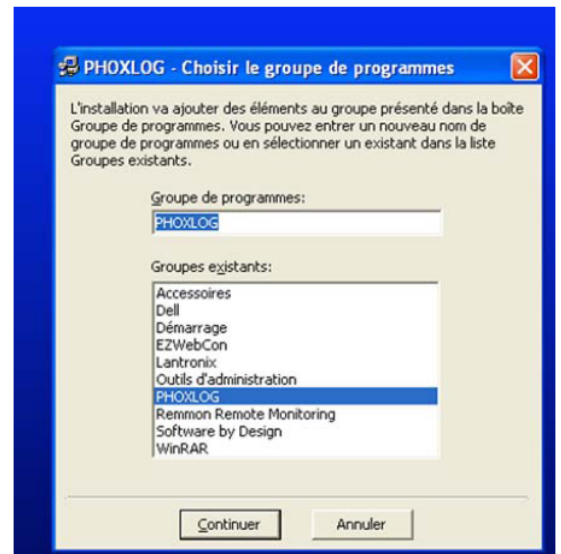
- PHOXLOG.CAB
- SETUP.EXE
- SETUP.LST

From setup.exe you begin the installation.

Installation de PHOXLOG



Quitter l'installation: to quit the install program
Cliquez ici pour commencer l'installation: click on icon to begin install sequence
Changer de dossier: to change file for PHOXLOG software localisation



To change file for PHOXLOG software localisation:
Groupe de programme: name of new software PHOXLOG
Groupes existants: existing software
Continuer: continue
Annuler: cancel

Installation de PHOXLOG



L'installation de PHOXLOG a réussi: Install is successful

Now you can use the software from the starting menu.

If you keep the default installation parameters, the software is located in C:\Program Files\BAMO_PHOXLOG

In this file will be saved your data files.

4.1. Files

Existing files in BAMO_PHOXLOG

- CONFIG.TXT
- INSTRUM1.BMP
- PHOXLOG.EXE
- PORTCOM.DAT
- SAVEDATA.DAT
- STGUNST.LOG

It is necessary you create your own files to keep safely the data without a risk to delete an original record. These original record files cannot be corrupted, they will allow you to prove the historical of measurements.



- **Original records**
- **pH measurement**
- **Flow rate measurement**
- **etc...**

5. Data loading

The BAMOPHOX Logger records measurements on a Multi Media Card (MMC).

Records are saved in a file named: BAMOPHOX.LOG.

Through a MMC reader, this file is saved on a PC and access to data is done with the software PHOXLOG.

The software creates 1 or 2 files (the second would be for the extension -blind BAMOPHOX- when existing) with a name corresponding to the main parameter (pH, flow,...) plus the serial number of the BAMOPHOX (example: ph-metre_20691-01.xls).

This file is a text type file, it could be read by any word processor or data sheet processor. Its extension is .xls for a quick opening in Excel.

How to proceed:

- Insert the MMC in the card reader
- Card reading

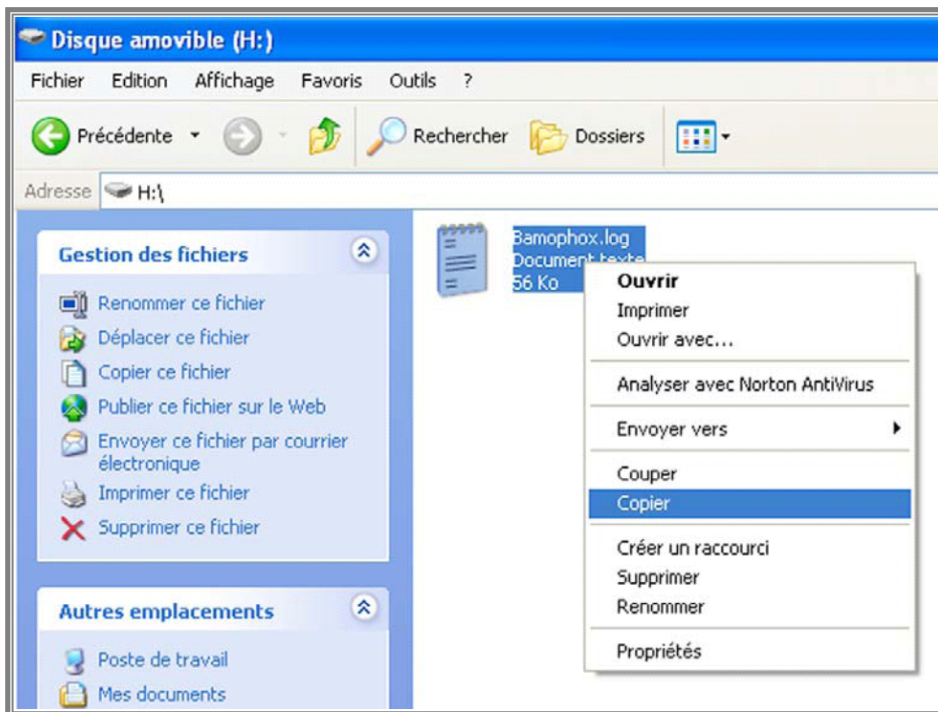
- a) - Copy the file BAMOPHOX.LOG from the MMC
- Save this file to your "Original records"
- rename it (date, station,...) still with the extension .LOG

Close the window

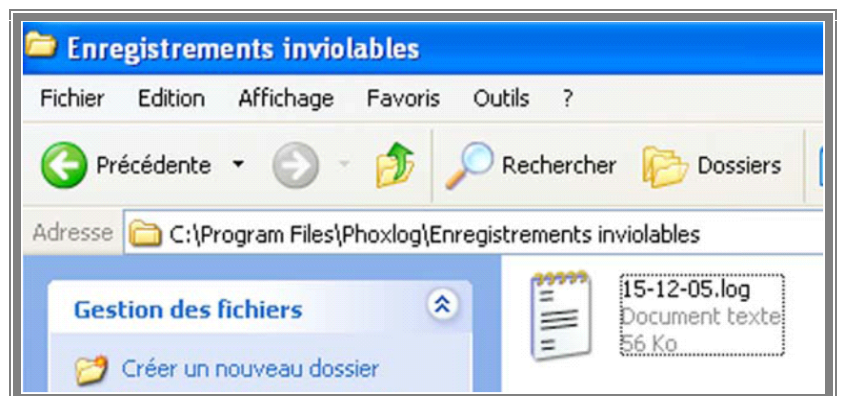
- b) - open PHOXLOG
- in LOGGER choose the application "Extraction données" = Data Extraction
- Then choose your file in "Enregistrements inviolables" = Original files
- Then confirm "Extraction" .

Close the window

First PHOXLOG Window



Copy of original file



6. Data presentation

How to proceed:

When data are loaded (please refer to § 5):

- a)
 - open the file BAMO_PHOXLOG
 - select the file(s) with extension .xls
 - rename the file(s) if necessary
 - Or double click to open it

From Original files (cannot be corrupted)

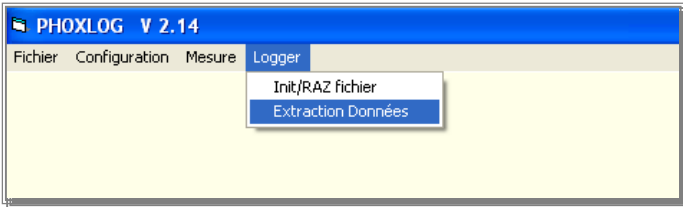
- b)
 - open the application PHOXLOG
 - in LOGGER choose the application "Extraction données" = Data Extraction
 - Then choose "Enregistrements inviolables" = Original files

 - select the file *.LOG on the left side window
 - then "EXTRACTION"

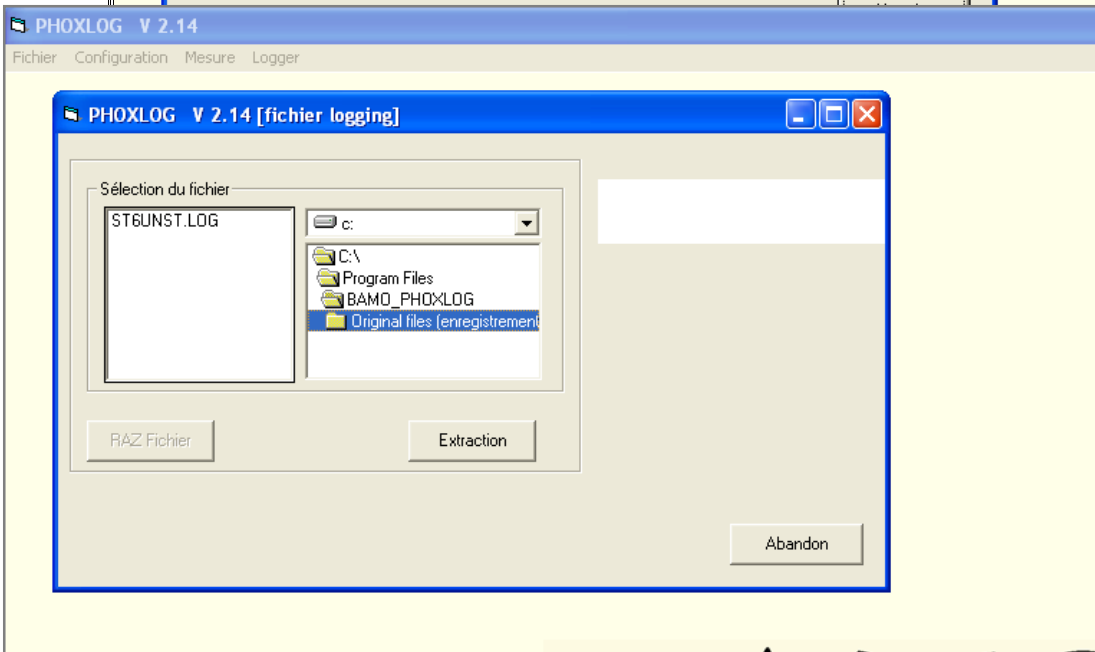
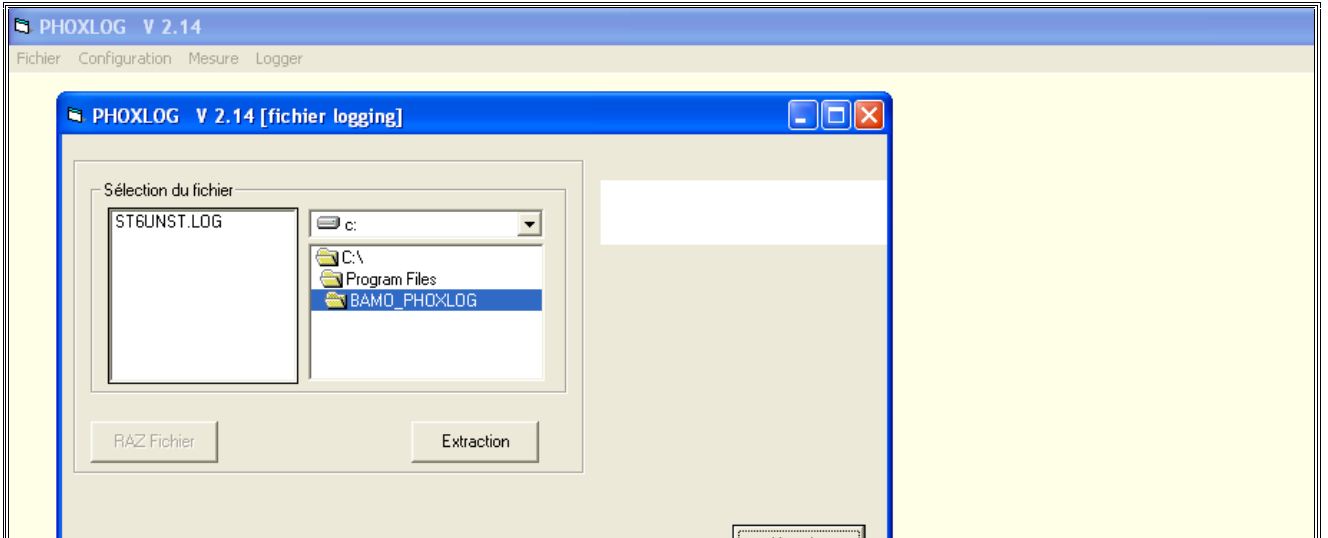
 - When ready, valid "OK"

 - Quit the application PHOXLOG

To work with your data: same as a) sequence in the file BAMO_PHOXLOG



Data extraction

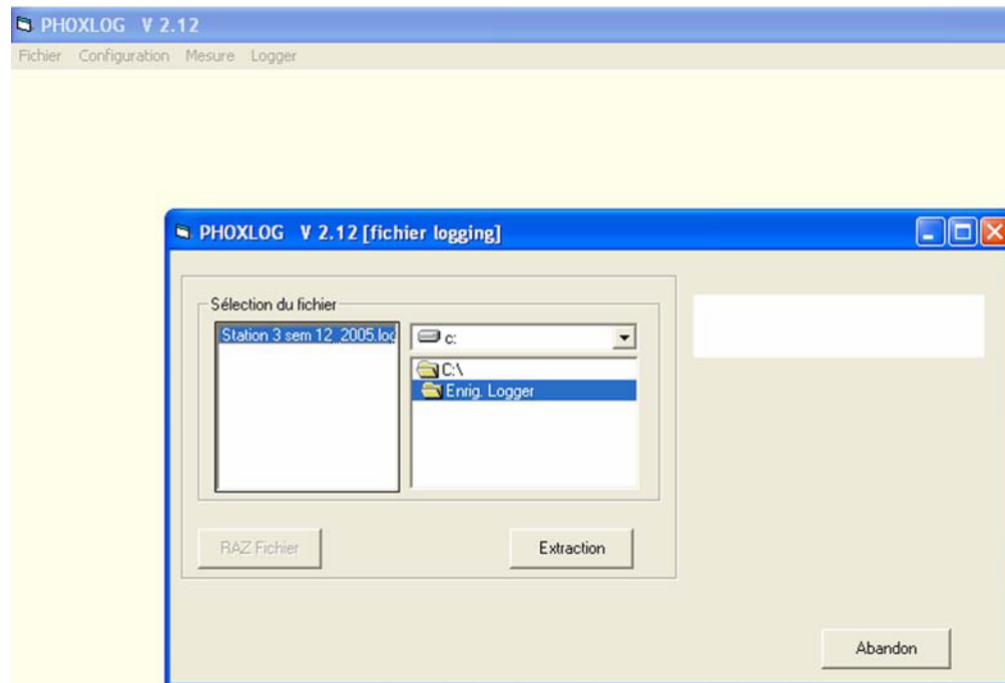


Microsoft Excel - pH-mètre_20882-01.xls

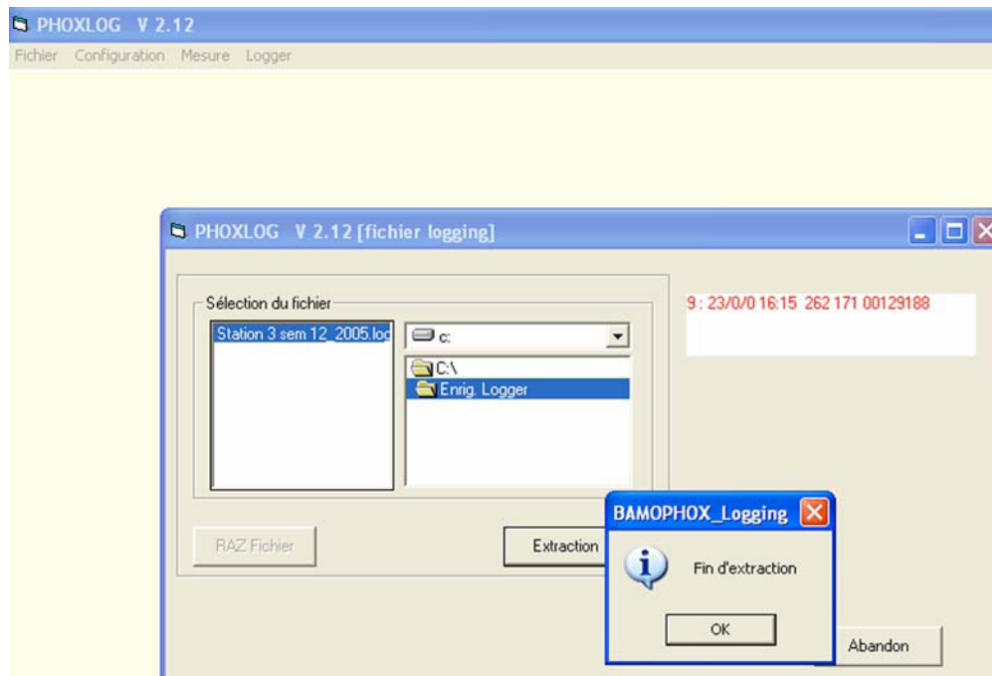
	A	B	C	D	E
1	Logger :	20882-01			
2					
3	pH-mètre				
4					
5	Date	Heure	pH	°C	
6	21/08/2005	11:49	6,22	20	
7	21/08/2005	11:50	6,16	20	
8	21/08/2005	11:51	7,15	20	
9	21/08/2005	11:52	7,92	20	
10	21/08/2005	11:53	8,04	20	

7. MMC card

To procure more space on the MMC it is necessary to delete old recorded data.
This can be done only from the PHOXLOG:



Choose: **"Extraction"**



Choose OK, files are now on C:\Program Files\BAMO_PHOXLOG
Close the window through "ABANDON" = Cancel

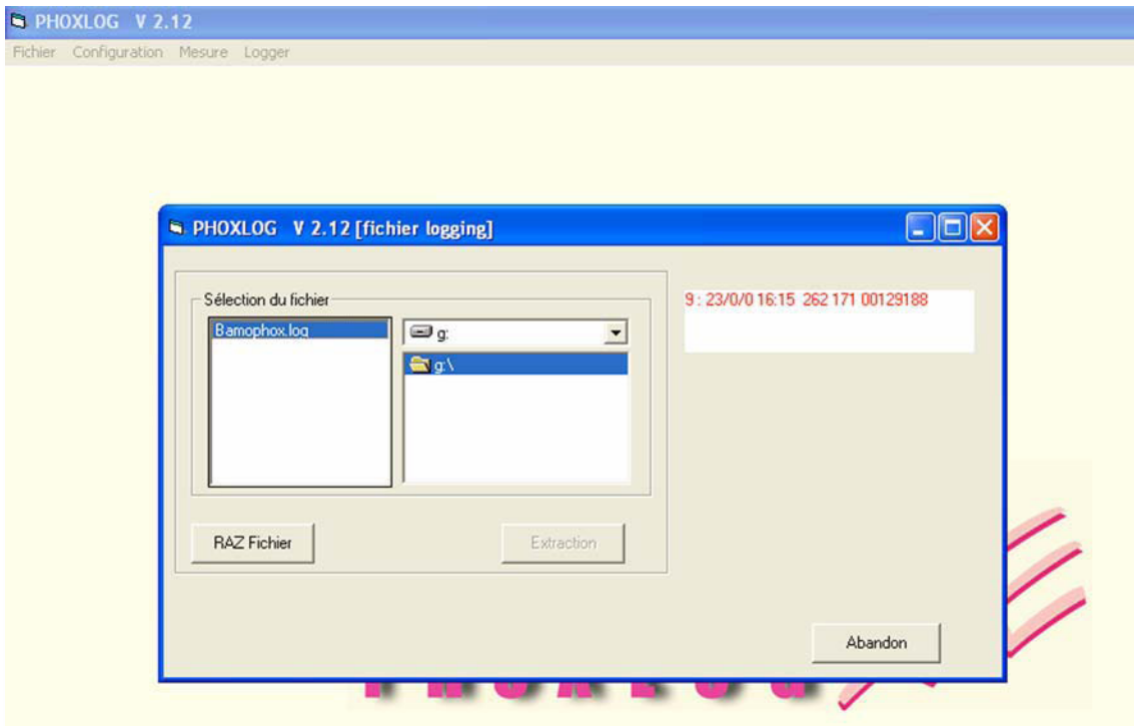
- the original files are on MMC
- they are saved on your PC: file 3 sem 12_2005.log in C:\Enreg. Logger
- the files with extension .xls are in C:\Program Files\BAMO_PHOXLOG

To erase the MMC, please follow the next sequences.

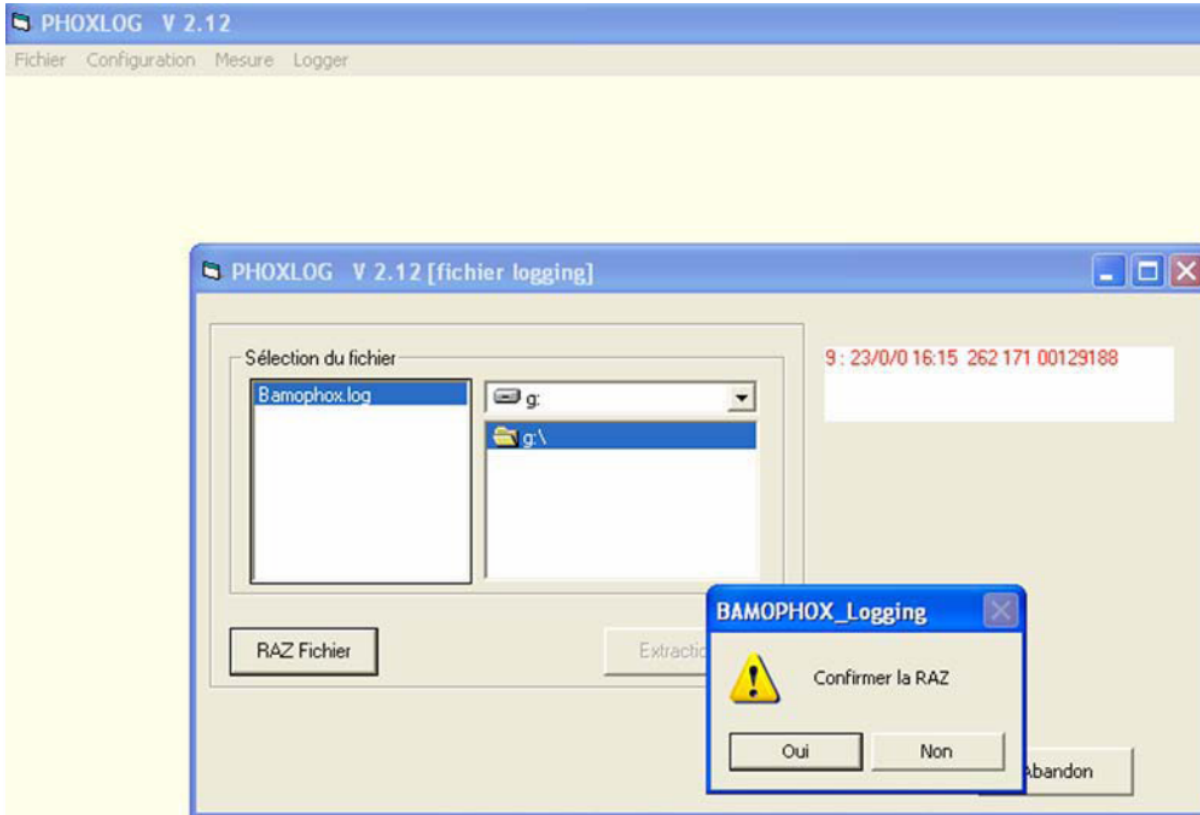
In PHOXLOG, choose Logger then "Init/RAZ fichier"= init/erase file



Look for **BAMOPHOX.LOG** in MMC



Then choose "RAZ Fichier" = delete file



Choose "Oui" = Yes, then "ABANDON" = Cancel. Close the software PHOXLOG.

The MMC is ready for the next recording period.

The file C:/Enreg.logger will be useful to save original files (every week for instance) and let you re-create the Excel files at any time.

APPENDIX

Parameters available for

pH, ORP, Resistivity, Conductivity, Concentration, Chlorine, Dissolved Oxygen, Turbidity:

1 record is: DATE / TIME / MEASUREMENT /TEMPERATURE

Parameters available for

Flow rate:

1 record is: DATE / TIME / MEASUREMENT /TEMPERATURE / TOTALIZATION

Number of records:

MMC is 32 Mo capacity used on PHOXLOG format, identical to 31 948 800 octets.

1 record use (main instrument or main instrument + extension unit) 21 octets

Records available: 1 521 371

For a 128 Mo MMC there are 6 085 484 records available.

CAUTION: be careful not to overpass the spreadsheet capacity for data presentation if it is not an Excel data processor. .

- Excel is 178 000 lines, if you record once every minute during 123 days the total number of records is
1 x 60 x 24 x 123 --> 177 120 records

Paramétrage des voies de mesure

ABANDON

Sélection	Type de mesure	Station	Repère
Voie 0 <input checked="" type="checkbox"/>	pH	3 <input type="radio"/> Base <input type="radio"/> Ext.	pH Final
Voie 1 <input checked="" type="checkbox"/>	Débit	3 <input type="radio"/> Base <input type="radio"/> Ext.	Débit de Sortie
Voie 2 <input type="checkbox"/>			
Voie 3 <input type="checkbox"/>			

OK

to switch on a terminal

Base: Main unit
Ext.: Extension unit

Measurement parameter

Terminal number

The selected value should be identical to the value in the BAMOPHOX unit

Your TAG or description for terminal

This will appear on the window "monitoring" (Suivi des mesures: page 15)

Configuration (Liaison série)

Port <input checked="" type="radio"/> Com1 <input type="radio"/> Com2 <input type="radio"/> Com3 <input type="radio"/> Com4	Vitesse <input checked="" type="radio"/> 9600 <input type="radio"/> 4800 <input type="radio"/> 2400	Parité <input checked="" type="radio"/> SANS <input type="radio"/> PAIRE <input type="radio"/> IMPAIRE	Stop <input type="radio"/> 1 <input checked="" type="radio"/> 2
--	---	--	--

Suivi des mesures

Monitoring

pH Final	5,82 pH 20,0 °C
Débit de Sortie	1,44 m3/h 20,0 °C
Volume Journalier	11 m3
Volume Cumulé	188 m3

NB : Without any Pt 100 connected, the display will be permanently **-20 °C**