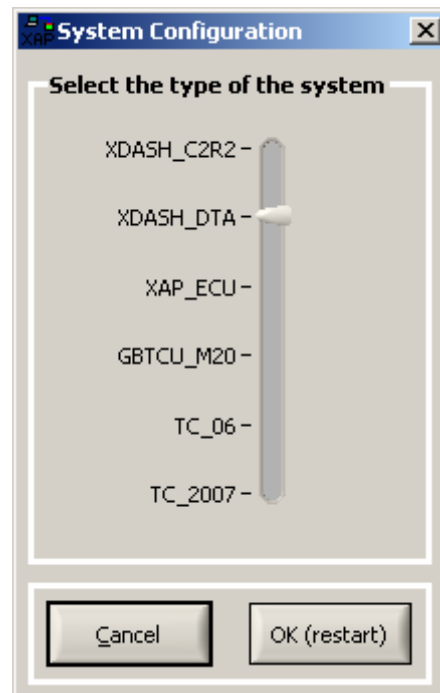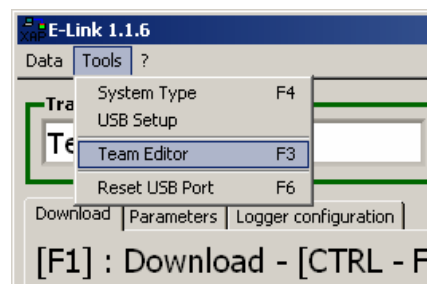## 1. Configure the type of the logger

At the first startup, the software will ask for the type of logger you own.

You can change it at every moment by clicking on the menu **Tools\System Type**.

2. Configure your team

Every device is identified by its own serial number, and the download is enabled by entering a pincode associated to it. The team editor allows to associate a serial number to a driver name and a pincode.

Click on the menu **Tools\Team Editor**.

Now you have to enter the serial number of each of your dashboards, the name of their drivers, and the pincode associated with the serial number. If for a dashboard you got the "**Driver kit**" option, you have to click the corresponding checkbox.
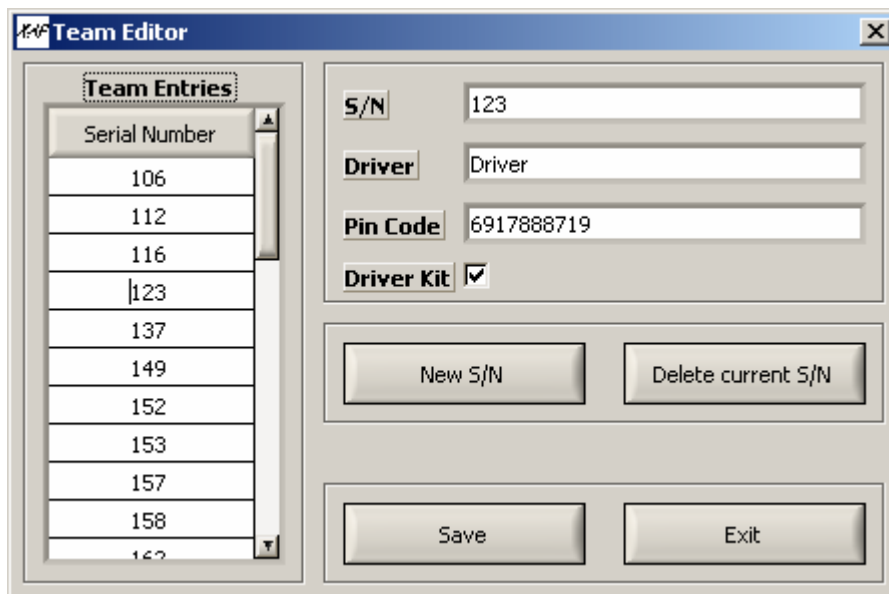

To enter more Serial Number, click on **New S/N**.

If you want to modify an entry, double-click in the table **Team Entries** on the left on the number you want to set, then click on **Save**.

If you can't see the serial number at the back of the dashboard, you can click on the **Connect** button (or press **F2**) when on the **Download** Tab. The serial number will appear (surrounded by #), or

3. Set the path for your data

Click now on **Data\Data Manager** to raise up the window that will let you choose where you want to save the data you plan to download.
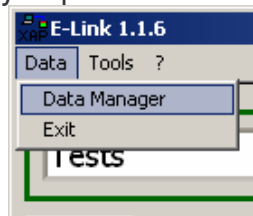
Tracks and Sessions are actually directories in the parent directory **C:\XAP DATA\TRACKS**.
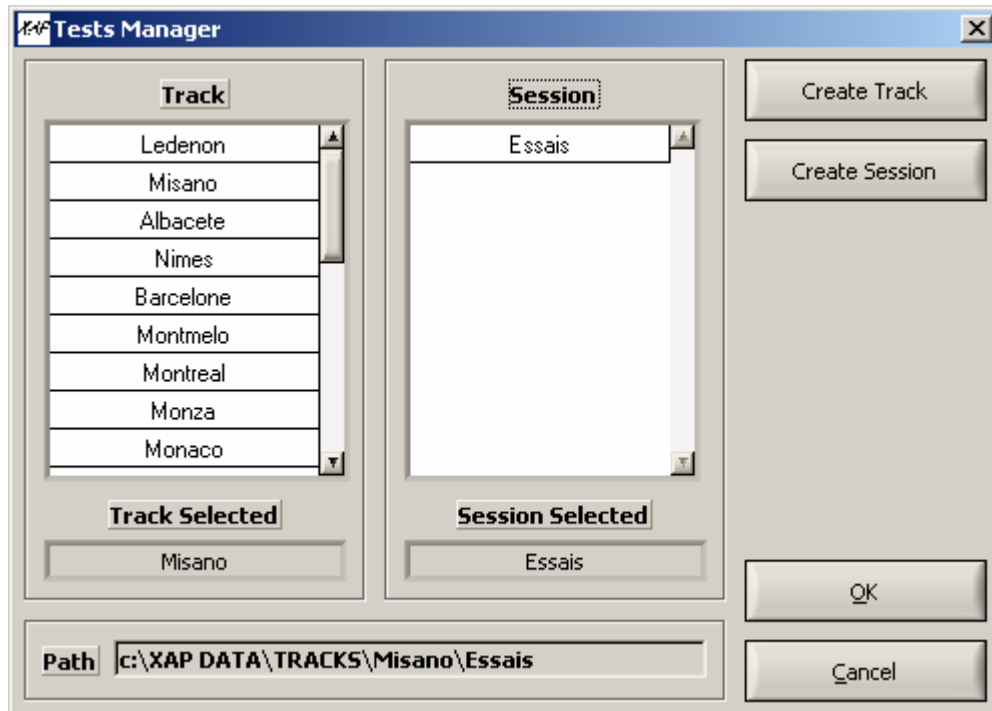
The first time you use the software there will be no tracks nor sessions created.

First you have to create a track using the Create Track button :

Enter the name of the current track and press Enter, or click OK.

Now create a **session** using the **Create Session** button. This **session** will become a directory under the track you just created.

You can create as many **sessions** as you want for a given track. To select a **session** for download, double-click on it in the table on the right.

The current download **path** should now appear in the bottom of this window. If it's right, click on the **OK** button. If not, double-click on the corresponding table to choose a track and its associated session.

4. Choose your download options
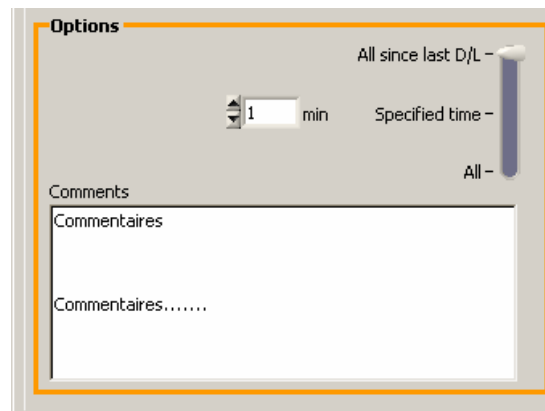
The **Comments** box allows to add some information to the downloaded data.

You can also specify whether you want to download **All** the memory, only the last **Specified time**, or **All data since last download**.

In case of circle-memory loggers, like X-Dash, the first option won't be accurate if the total capacity of memory (determined by the data logging table) has been overlapped.

5. Download

Click the **Download** button or press **F1**.
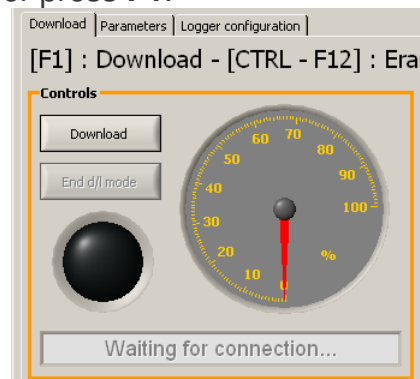
The color of the round led indicates :
Blue : waiting for the connection
Green : everything OK during download
Orange : Communication problem on the serial port.
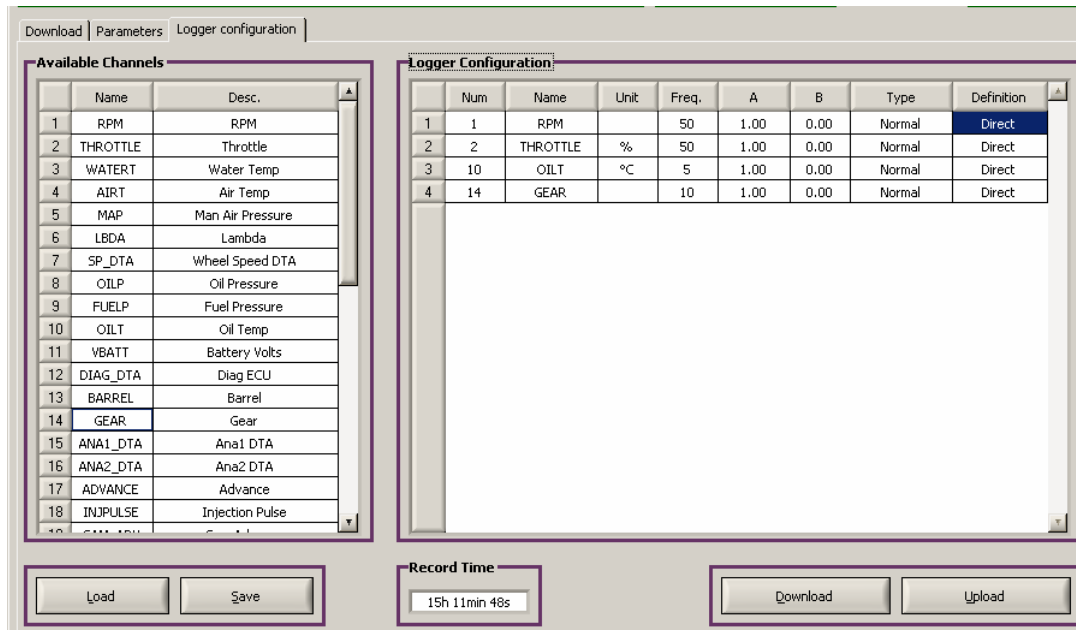**Red** : Transfer Error.
White : Erasing data.

The needle will go up to 100% when the data is transferred from the logger to the PC.
Then it goes down from 100% to 0% while data is processed.
At the end of download, the informations are displayed.

6. Logger Configuration

This tab is divided in two tables.

All available channels are on the left. To add a channel to the current configuration, just drag an drop it on the table on the right.

Using the **Save** button, you can store different logger configurations on you computer. These configurations are saved a **.ccf** file. Use the Load button to recall a configuration.

You can define default properties for all the available channels. To access channels properties, you have to double-click on the corresponding line of the table, or click with the right button and choose the corresponding options in the menu.
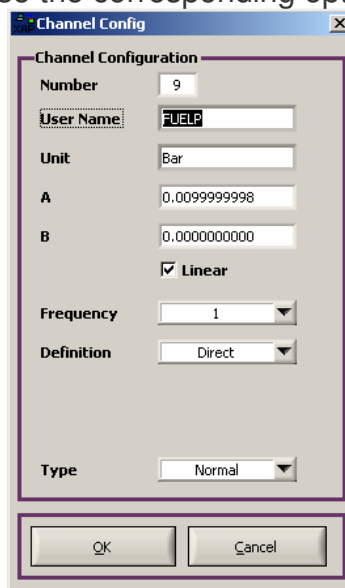

You can change the name of a channel and its unit.

If the sensor is linear, enter A et B as the final value = A*(recorded value) + B.
If not, uncheck the box to access the Linear parts definition interface (see below).

The Definition ring can have 3 values :
- Direct : the A and B values are used for computing the final data
- Zero : The A value is used, and the B value is automatically computed with the "Zero" defined with the E-Logger setup
- Min/Max : the A and B values are computed with the values given with the E-Logger setup and the Range value. You can also "center" these values with checking the "Centered" box.

The Type ring allows to index the channels as "Normal" or "Susps" (Suspensions) channels in E-Race. The "Dist" type is reserved to numerical distance sensors (and should not be used with the Seat E-logger).
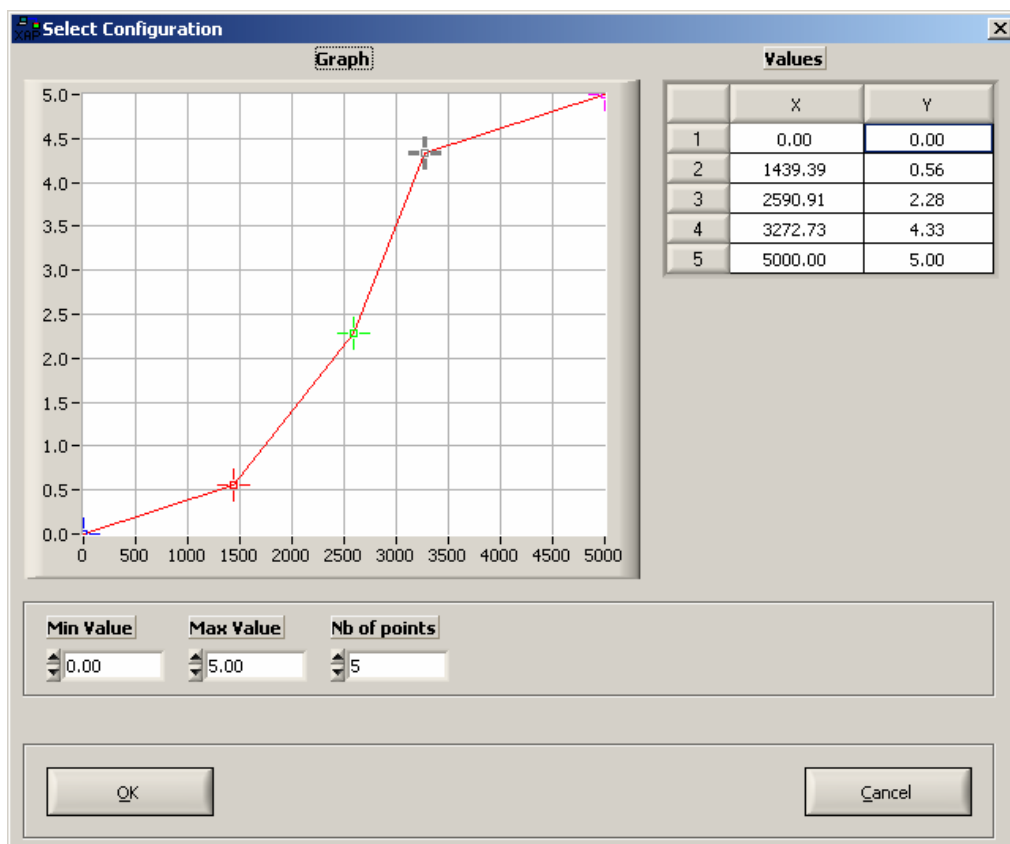
First choose a Minimum and Maximum value. Then choose the number of points of the curve. You have now to set the points on the graph, to suit the response of the sensor.

The **Type** of a channel can be :
- Normal
- Dist : distance channel (pulses, computed with the parameters Nb Teeth and Perimeter), if available.
- Susp : Suspension channel, it will appear in a specific tab of Erace.
- GPS : GPS channel, used to compute the car position, does not appear in Erace.
- DistC : Distance channel, cumuled, for use with GBTCU.

Click OK when you've finished.

To upload the configuration in the logger, switch it on and click on the Upload button. This will take a certain time.

7. Parameters

This tab sets all parameters available in the logger, including the display (for dashes).

Click on the **Connect** button (or **F2**) to recover the logger parameters.

When modified, click on **File\Send** (or **F5**) to send the parameters to the logger.

You can also store parameters in a file using the **Save** and **Load** options in the **File** menu.

8. Errors

Incorrect Pincode for serial #XXX

Check if the XXX is the serial number of your device. If not, it can indicate a transmission error. Check the cable and try connecting again. If the serial number is always the same but a wrong one, contact us.

If the serial number is correct, check if the pincode has been right entered, and if the driver kit checkbox has been checked (if needed).

Transfer initialization failed

The first phase of the communication between the PC and the logger has failed. It happens sometimes with the USB connection. Try again. Also, try to raise the USB timeouts.

No Data in logger

No data found on data logging system. It happens when there was no data recorded after the last download. If you still want to download the data, use the **Specified Time** or **All** download option.

Channel transfer Error

The transfer of data has failed. This happens when the logger is disconnected during download.

No entry found for serial #XXX

You have to create an entry in the *team.ini* file for your logger. Use the **Tools\Team Editor** item.

Device Not Connected (1 or 2)

The software cannot access the USB device : it may indicate that the USB cable is disconnected (2) or that the device is not ready yet (1). In case of repeated errors, use Tools\Reset USB port, or disconnect/reconnect the cable.

9. USB Setup

Use **Tools\USB Setup** to set the parameters :

The default values should work correctly, but it could be necessary to raise the latency (to 3 or 4) and the timeouts (to 250-300ms) on some computer. This will affect the download speed.

10.   XDASH-DTA

Channels

DTA CAN values (50Hz)

RPM
Throttle
Water Temp
Air Temp
Man Air Pressure
Lambda
Wheel Speed DTA
Oil Pressure
Fuel Pressure
Oil Temp
Battery Volts
Diag ECU
Barrel
Gear
Ana1 DTA
Ana2 DTA
Advance
Injection Pulse
Cam Advance
Cam Pulse
Fuel Cons (Hr)
Fuel Cons (100km)
Crank Errors
Cam Errors

Dash values

Board Temp : dashboard temperature
Front BP : Front Brake Pressure (bars)
Fuel gauge : Fuel level (computed with the gauge parameters set in X-Conf)
Rear BP : Rear Brake Pressure (bars)
Ana 4 : Analog input 4 (10 bits conversion, 0-1024)
Meas 12V : 12V measured by the dashboard
Ana 0 : Analog input 0 (10 bits conversion, 0-1024)
Wheel speed A : Dashboard wheel speed (if set in the parameters).
LatGPS1 : GPS Latitude (part 1).
LatGPS2 : GPS Latitude (part 2).
LongGPS1 : GPS Longitude (part 1).
LongGPS2 : GPS Longitude (part 2). Every part must be recorded with GPS Type
GPS Speed : GPS Speed over ground (if set in the parameters)
UTC Hr : GPS UTC Hour.
UTC Min : GPS UTC Minutes.
UTC Sec : GPS UTC Seconds
Reset counter : Numbers of resets of the dashboard.

Parameters

Speed : Toggle to determine which speed to display on the dashboard.
ECU : Speed is received from the DTA ECU
Dash : Speed is computed by the dashboard using the Wheel Perimeter and the wheel target Number of Teeth.
GPS : Speed is received from the GPS module.

Log Trigger : The minimum values to reach before logging data.