Instructions for Installing and using the BIRAL Sensor Interface Software

Upgrading the software

If the software already exists on the PC make sure it is removed prior to upgrading.

Removing Existing Versions of the software

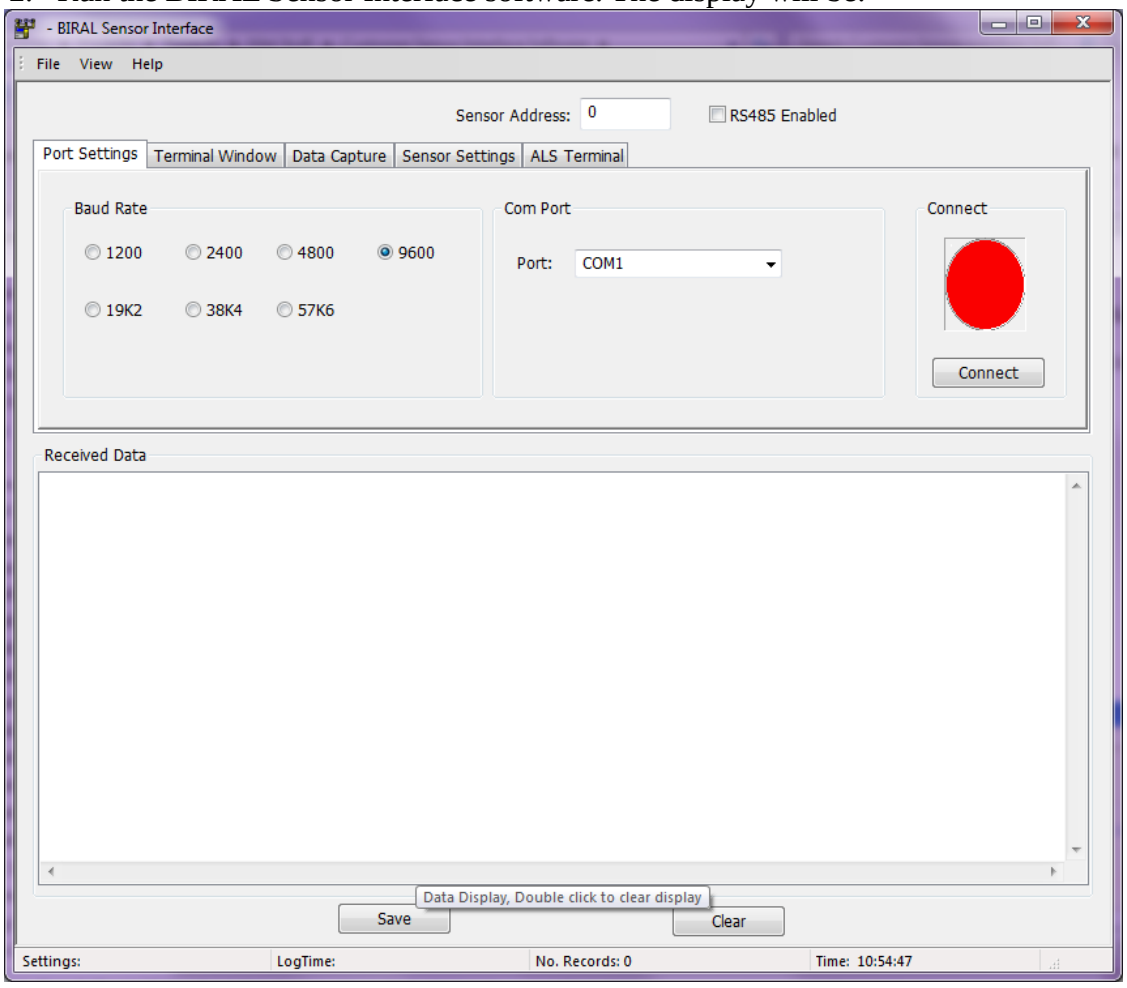
1. Go to Control Panel and choose Add or Remove Programs
2. Wait for list of programs to update and then select BIRAL Sensor Interface Software from the list.
3. Choose to uninstall the program – follow the instructions and wait until the program has uninstalled.

Installing the software

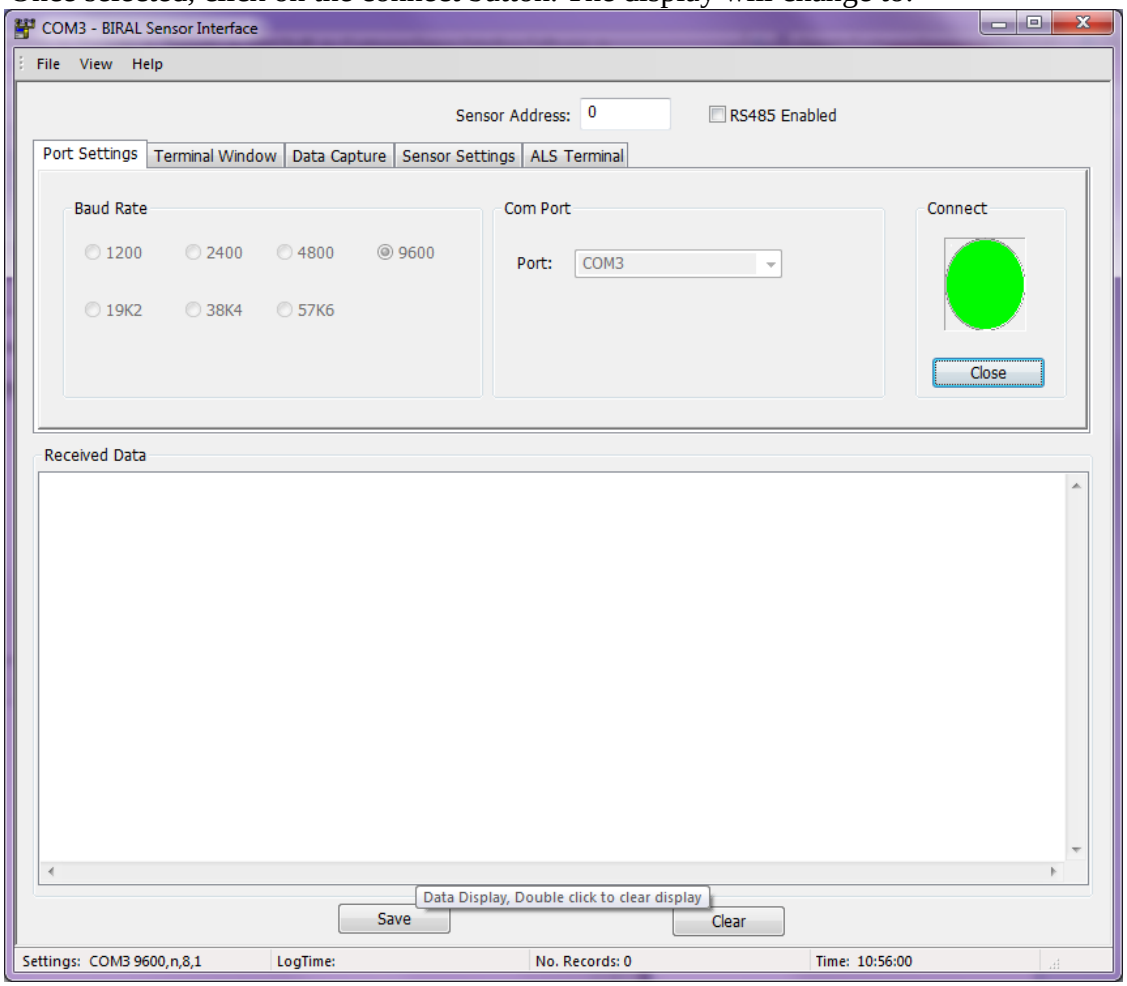
1. Extract the contents of the file Interface Software.zip.
2. Run the program setup.exe, this will install the software onto the PC.
3. After installation, the icon shortcut will be on the desktop.

Running the Software

1. Connect the sensor to the PC and switch on.
2. Run the BIRAL Sensor Interface software. The display will be:



3. The COM Port box will show the first available port. Select the port you require using the drop down arrow and select the baud rate.
4. Once selected, click on the connect button. The display will change to:

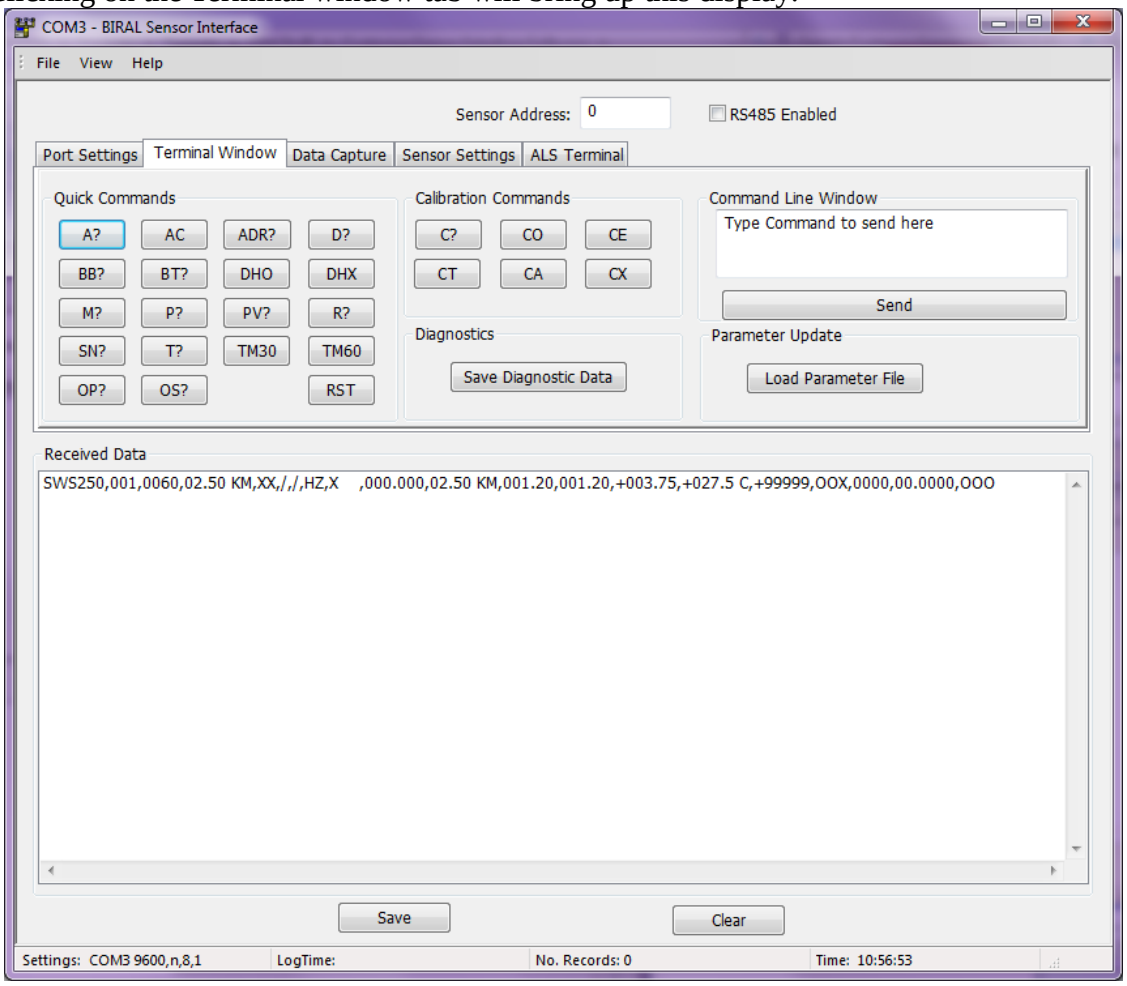


5. The software initially assumes that the RS485 has not been enabled and the sensor address default to zero.

6. There are three tabs that enable the user to interact with the sensor, Terminal Window, Data Capture, Sensor Settings. These are described below

Terminal Window

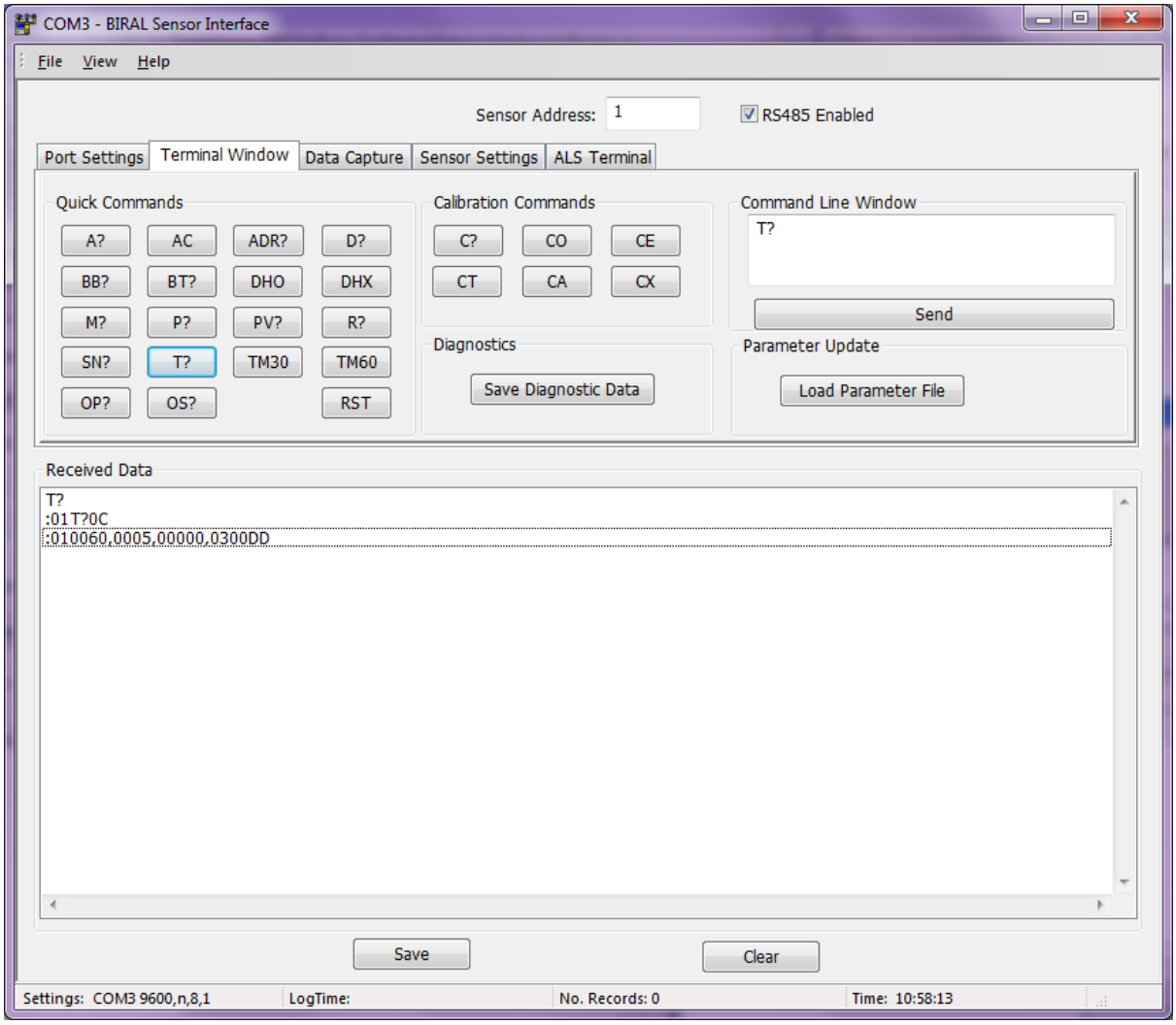
Clicking on the Terminal window tab will bring up this display:



The user can send commands to the sensor using either the quick commands buttons or by typing the command into the command line window and pressing the send button.
The commands sent to and received from the sensor will be displayed in the Received data window.

If the sensor has had the RS485 enabled then the quick commands will elicit no response from the sensor.
To tell the interface software that the sensor has RS485 enabled, click on the RS845 Enabled check box and resend the command.

e.g.
In the example below, the first T? command was ignored by the sensor, after selecting RS485 Enabled, this is shown by a tick in the check box and resending the command, the sensor address and checksum is appended to the message and the response sent by the sensor.

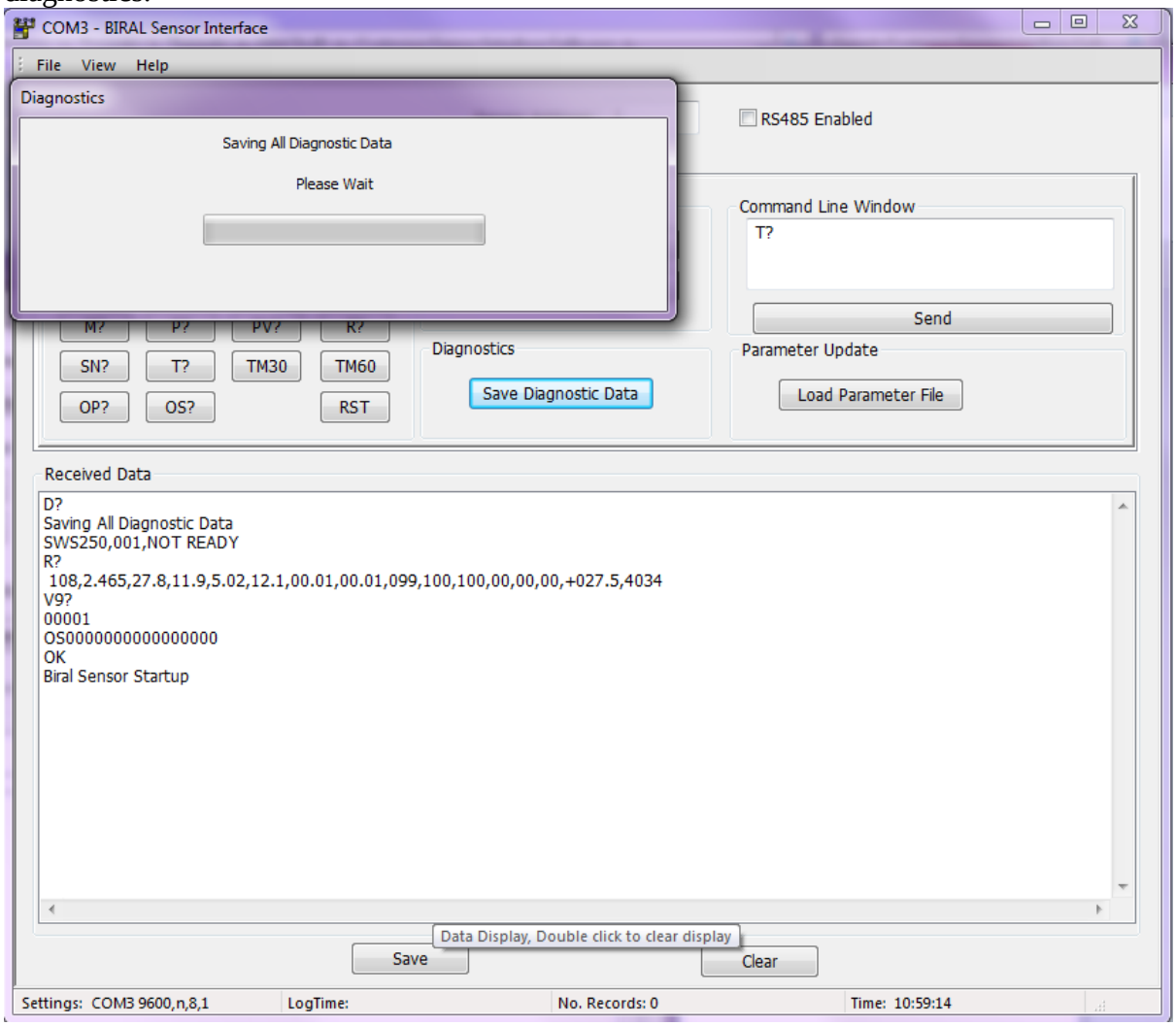

COM3 - BIRAL Sensor Interface
File View Help
Sensor Address: 1
RS485 Enabled
Port Settings
Terminal Window
Data Capture
Sensor Settings
ALS Terminal
Quick Commands
A?
AC
ADR?
D?
BB?
BT?
DHO
DHX
M?
P?
PV?
R?
SN?
T?
TM30
TM60
OP?
OS?
RST
Calibration Commands
C?
CO
CE
CT
CA
CX
Diagnostics
Save Diagnostic Data
Command Line Window
T?
Send
Parameter Update
Load Parameter File
Received Data
T?
:01T?0C
:010060,0005,00000,0300DD
Save
Clear
Settings: COM3 9600,n,8,1
LogTime:
No. Records: 0
Time: 10:58:13

Save Diagnostic Data button

Pressing this button will send a series of commands to the sensor and save the responses in a text file to help with diagnostics.

NOTE: The diagnostic save procedure takes approximately 10 minutes.

During the saving process a message box will be displayed showing the progress of the diagnostics.

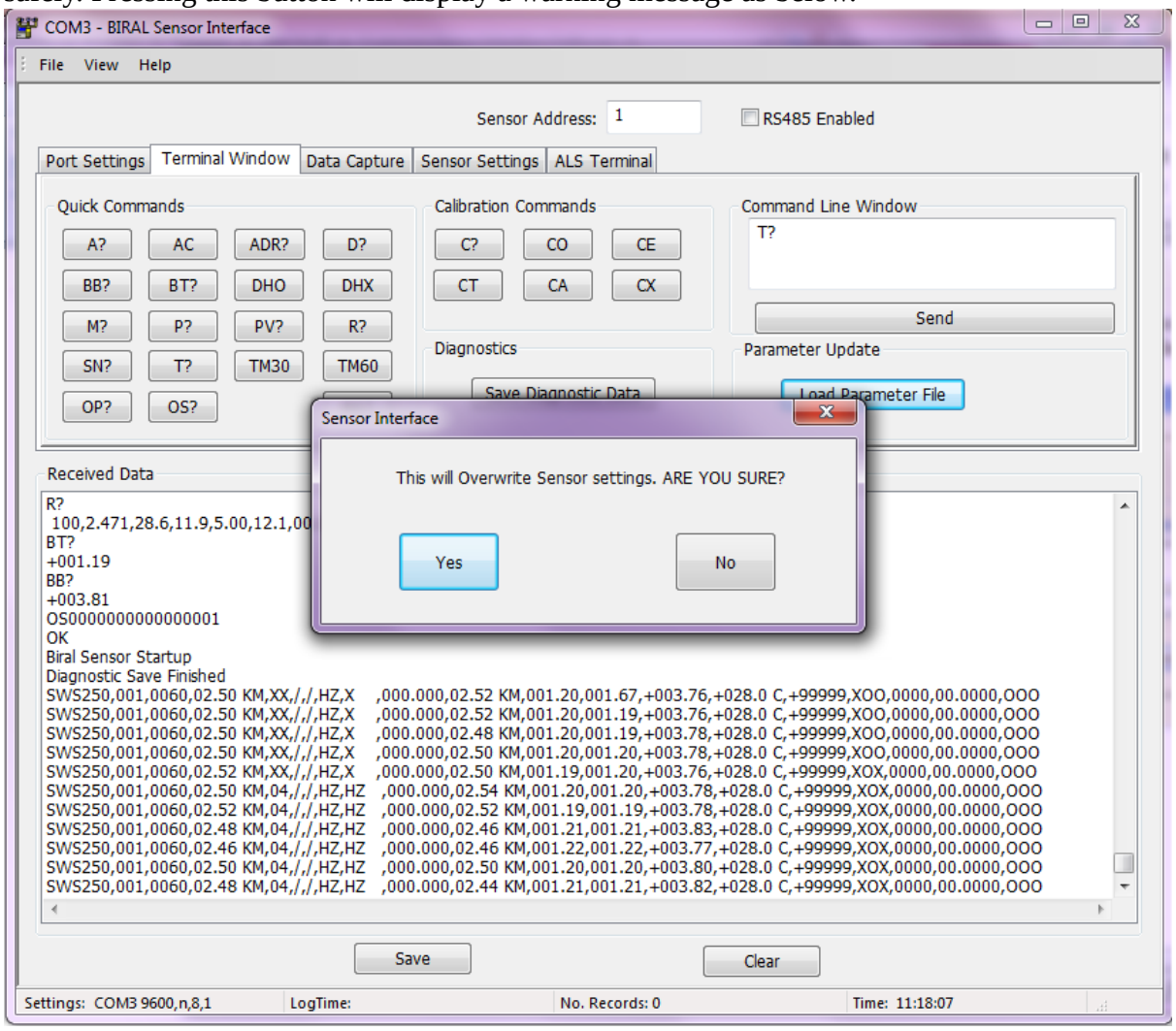


On completion the message box will close and the text “Diagnostic Save Finished” will be displayed on the received data screen.

In the case of a sensor fault or unusual symptoms we would recommend saving the diagnostic data and sending the file to BIRAL to assist the service team.

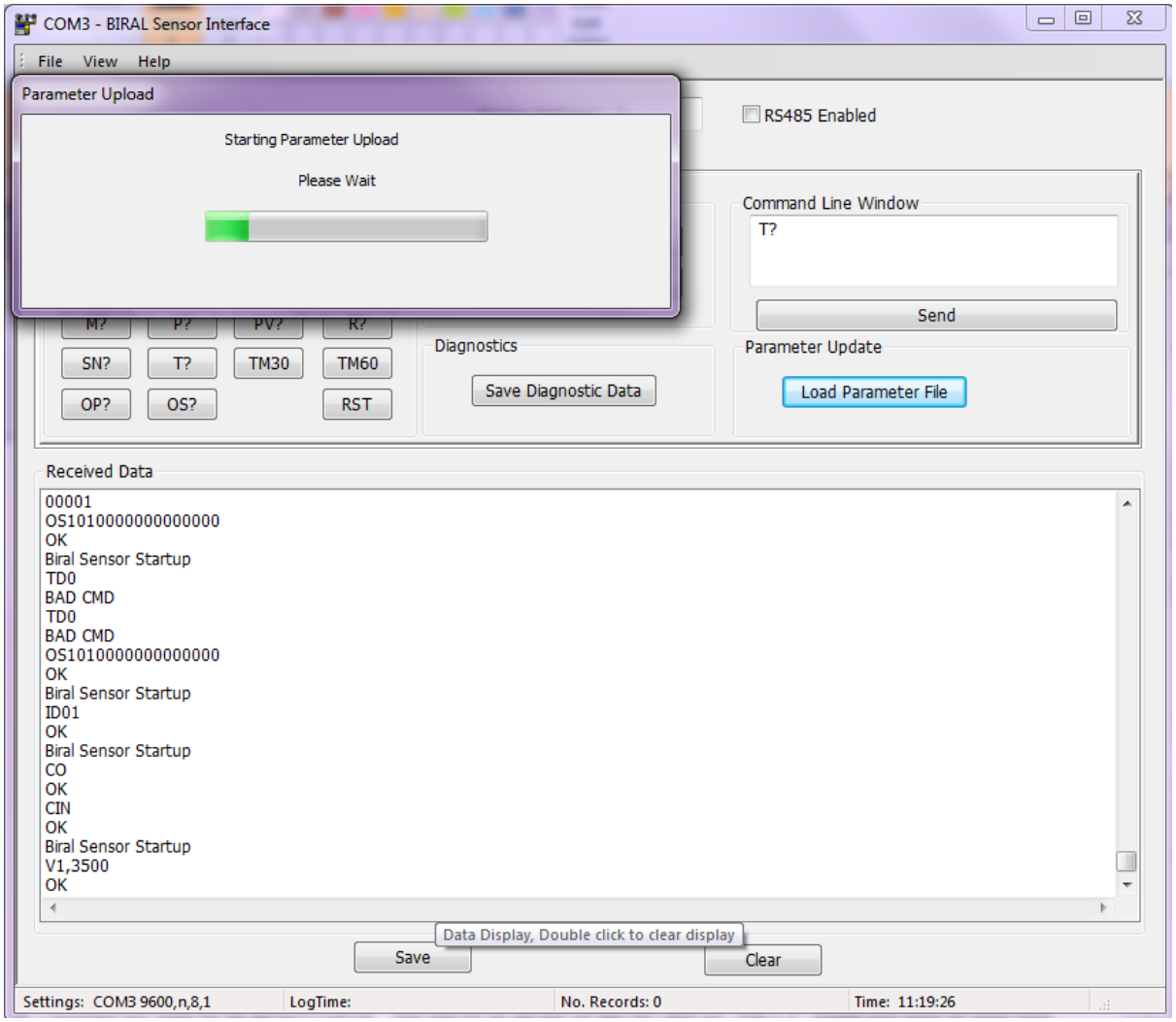
Load Parameter File button

Occasionally BIRAL may send files to update the sensor settings, e.g. to set new country definition parameters. This button will allow the user to upload these files to the sensor safely. Pressing this button will display a warning message as below.



Pressing No will stop the process, pressing Yes will bring up the windows Open File dialog to allow the user to select the parameter file.

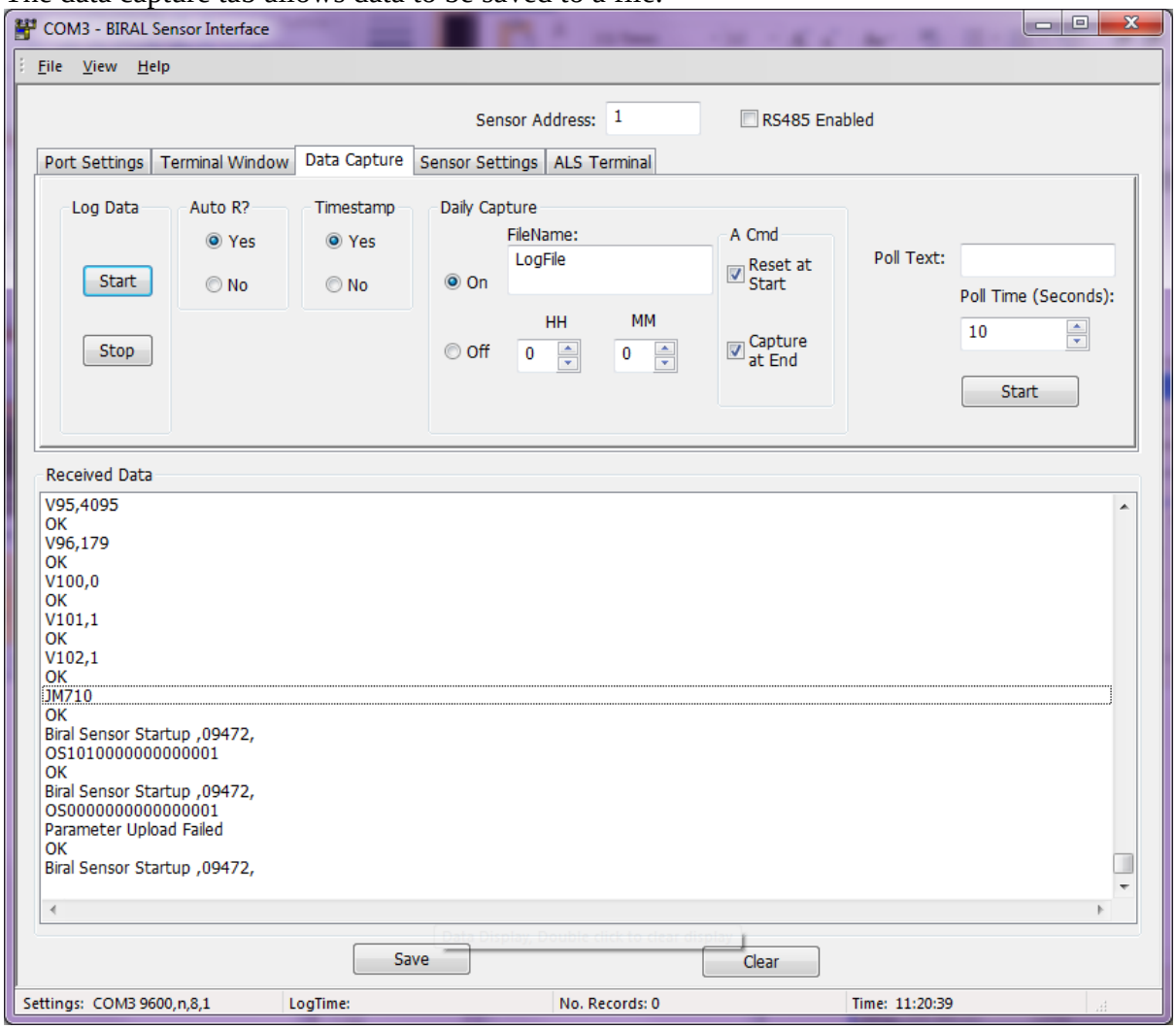
When the file is opened the new parameters will be transmitted to the sensor as a series of commands and a message box will be displayed showing the progress of the update.



On completion of the upload, the message box will close and the text “NVRAM Load Finished” will be displayed on the received data screen

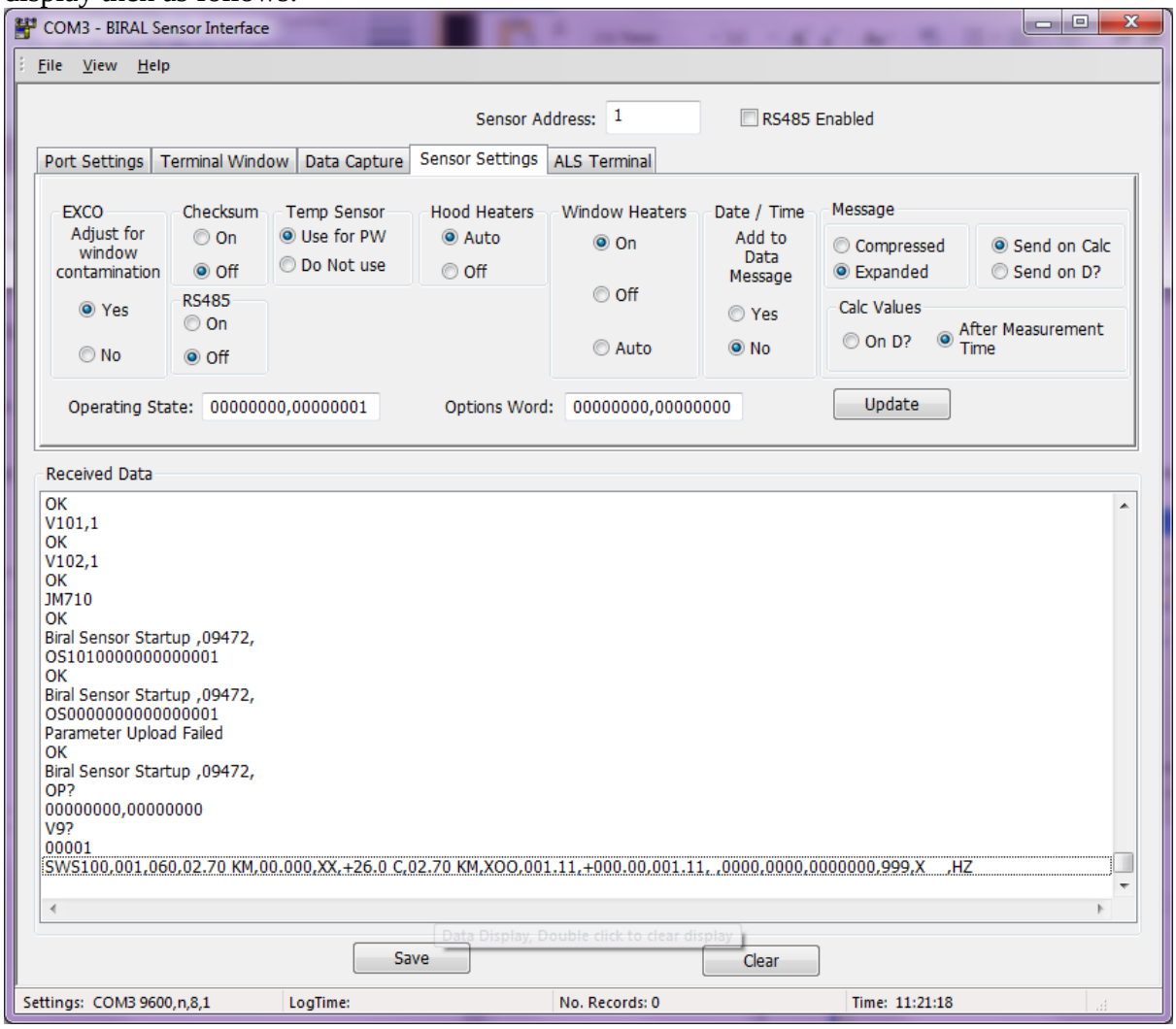
Data Capture

The data capture tab allows data to be saved to a file.



Sensor Settings

Selecting the sensor settings tab will request the current settings from the sensor and display then as follows:



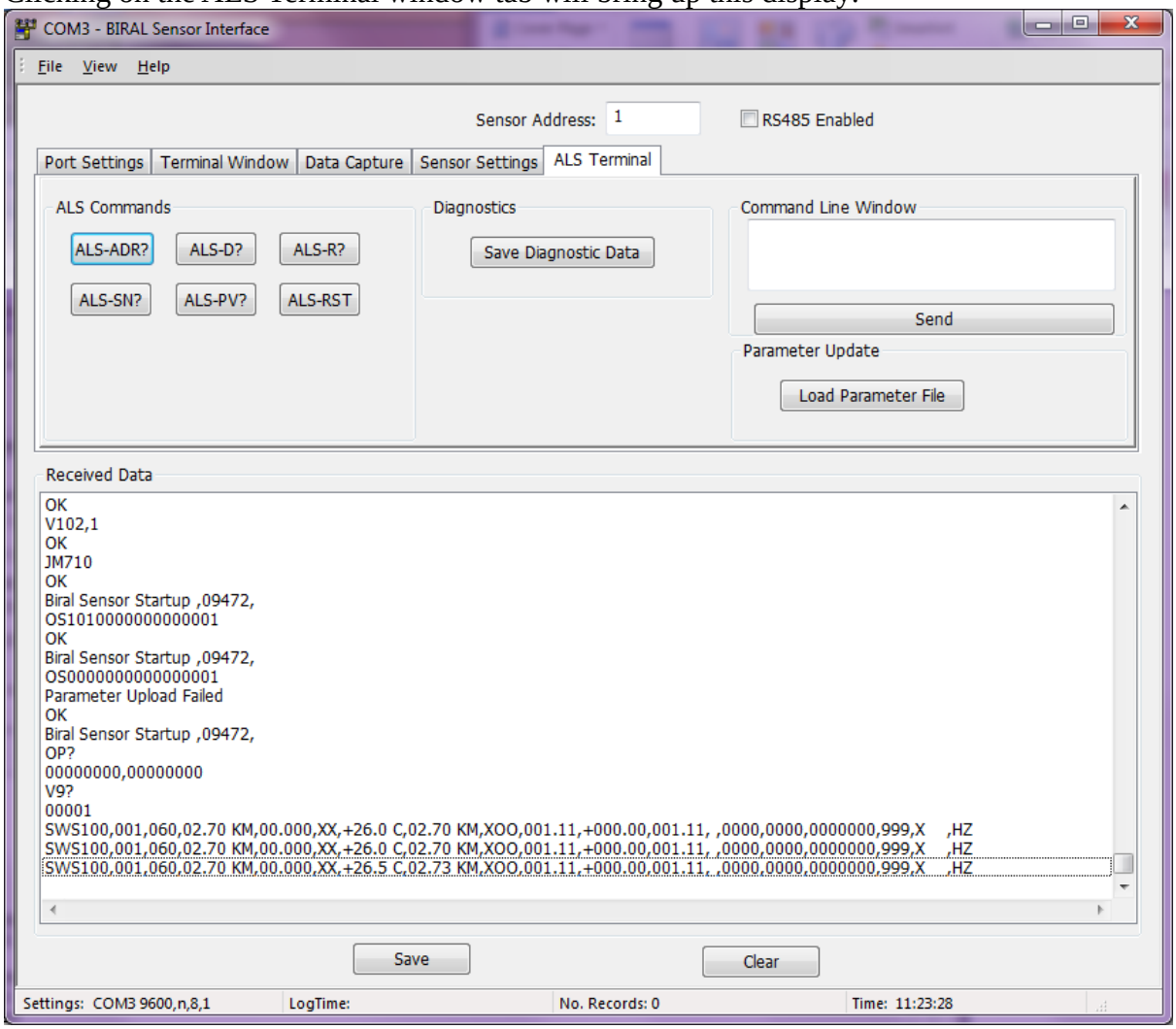
This page allows the user to see how the sensor is set up and is an easy interface to changing those settings.

Pressing the update button will send the new settings to the sensor and cause the sensor to reset.

WARNING: Changing the sensor settings will affect how the sensor operates. Please use with care.

ALS Terminal

Clicking on the ALS Terminal window tab will bring up this display:



This tab is only for use with a BIRAL ALS-2 sensors - either attached to the Present weather sensor or standalone.

The user can send commands to the ALS-2 using either the quick commands buttons or by typing the command into the command line window and pressing the send button.

The commands sent to and received from the sensor will be displayed in the Received data window.

The Save Diagnostic Data and Load Parameter File buttons work in the same way as those in the Terminal Window.