Ryme worldwide

RYME_MultiNet

User manual

Version 04

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Eng

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Index

Note: *Técnicas Reunidas de Automoción, S.A., is not responsible for the modifications and differences in the software shown in the manual due to modifications by regulations or clients. The software may be modified without prior warning due to constant innovation and development.*

1 Introduction

The company Técnicas Reunidas de Automoción has developed a series of programs to control different machines aimed at guaranteeing the safety of vehicles, as well as caring for the environment.

This document describes the use and operation of the MultiNet platform. This software serves as a link for the different software of the Ryme® machines. The aim of the RYME_MultiNet program is to operate two or more machines from the same software.

This application allows the configuration of the applications that are launched through it. Within this configuration are included communication ports configuration, database access configuration to save the test results, users configuration and management and general configuration.

1 RYME Multinet Application icon

To access this platform, double-click on the RYME_MultiNet icon.

Then, in order to have access to changes in it, you must have certain permissions established by the user from the beginning to avoid possible modifications, be they intentional or not.

2 Password display

Depending on the type of user established, you will have permissions to enter or not to enter the different windows.

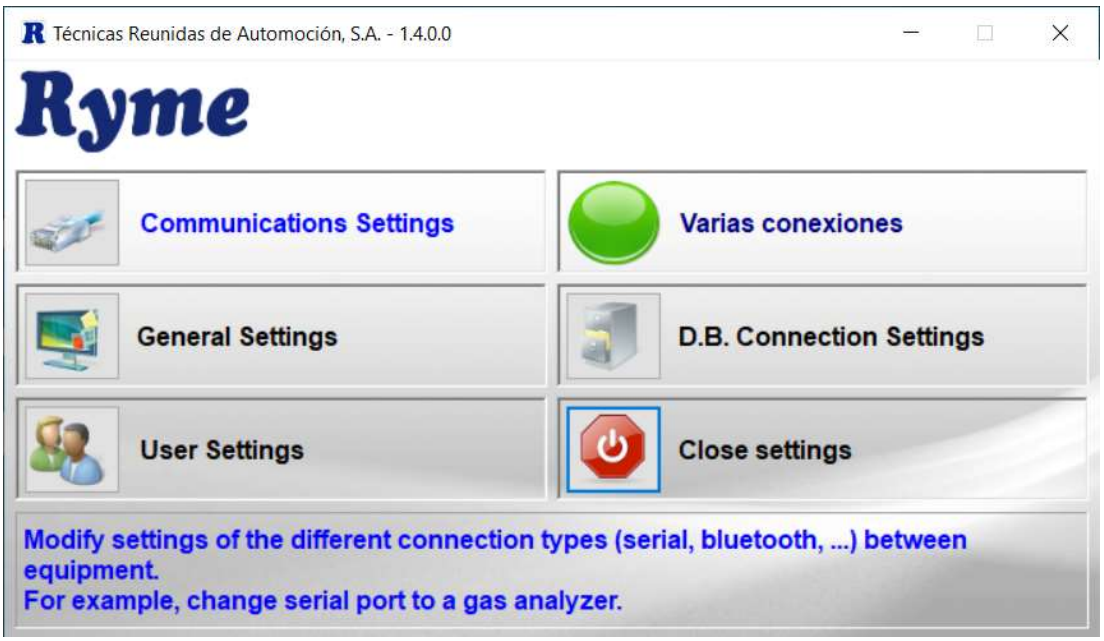
By default the password to be used will be: GJ94 (not case sensitive)

Once the password has been entered, you will be able to move freely around the application without having to enter it again.

Important: If the original password is changed, new passwords entered in the application must be written down in a safe place.

2 Configuration

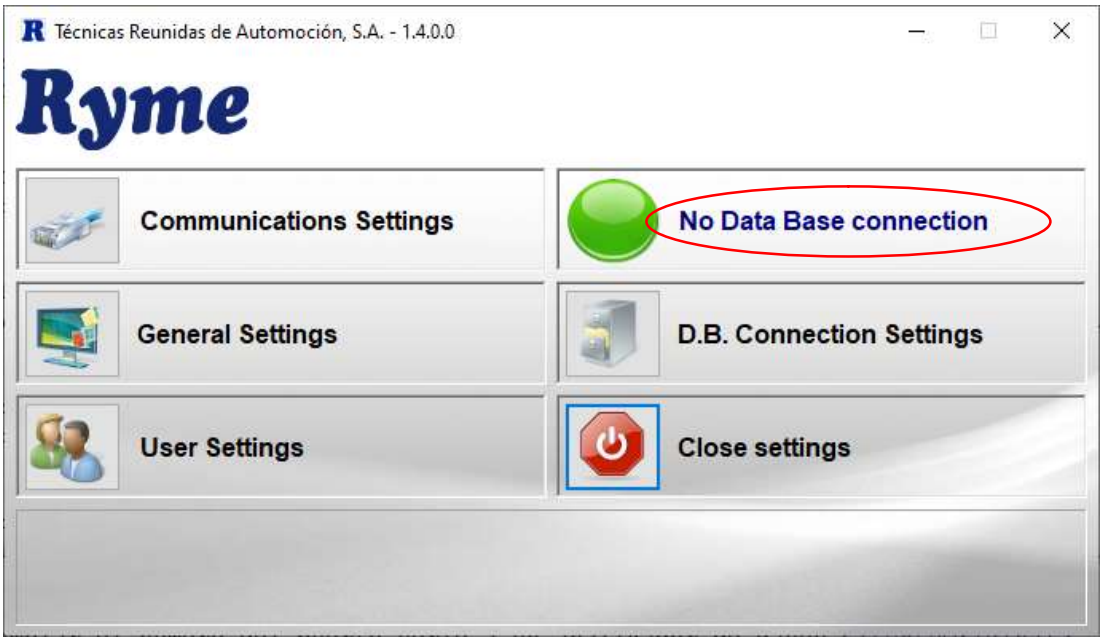
The main menu of the application will appear, from which you can access the different menus:



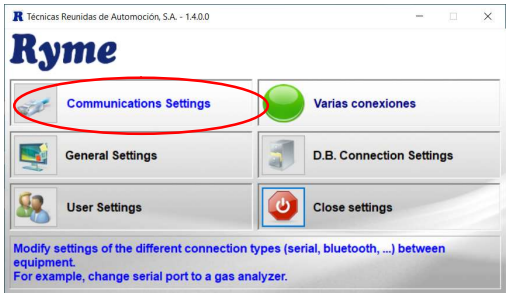
3 RYME_Multinet main menu

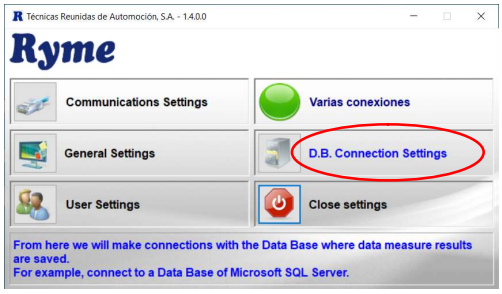
You can also check if the connection selected in the database configuration is active, indicating in green its correct communication.

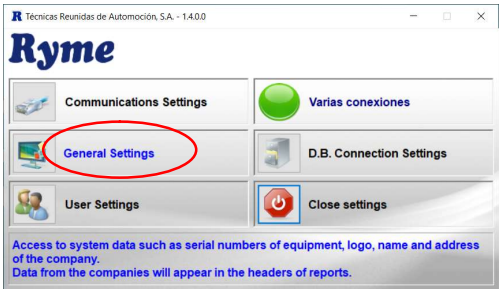
If the connection has not been made, a message will appear with the text: 'No connection with database'.

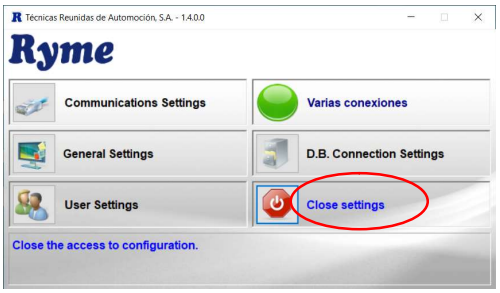


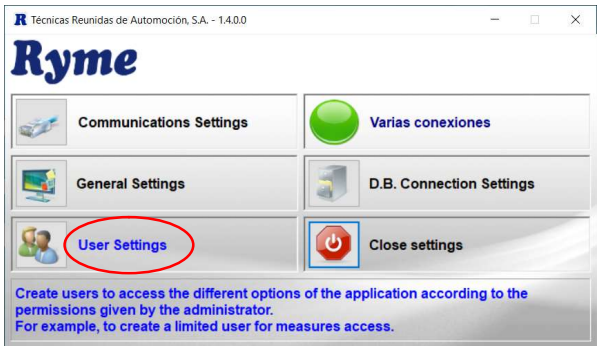
Also, at the bottom there is an information box where each of the configurations is briefly explained when the mouse cursor is moved over each configuration.











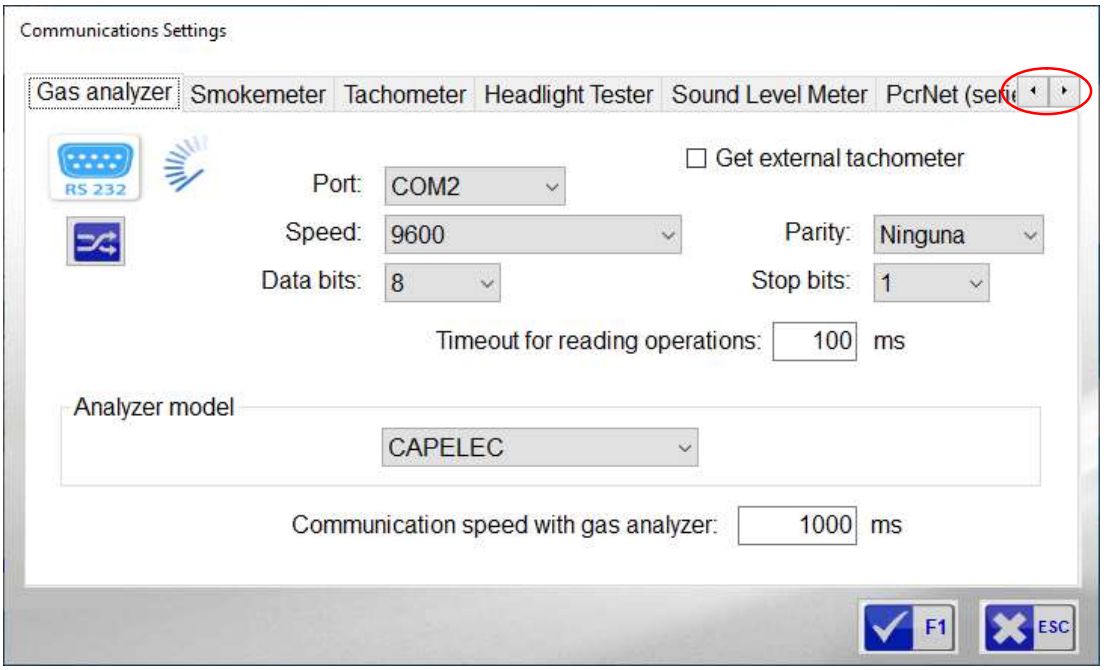
4 RYME_Multinet menu

Finally, to change the language of the settings, it is necessary to click with the right button of the mouse in the configuration window, where the respective flag to each language will appear for their selection.

5 RYME_Multinet menu: change language

2.1 Configuration of the communication ports

This option is used to modify the different types of connections between the software and the various devices. Using the different tabs at the top of the screen, you will be able to configure the devices that communicate with the software. To visualize the tabs that do not appear due to the size of the window, move through them with  .



6 'Communications' Configuration

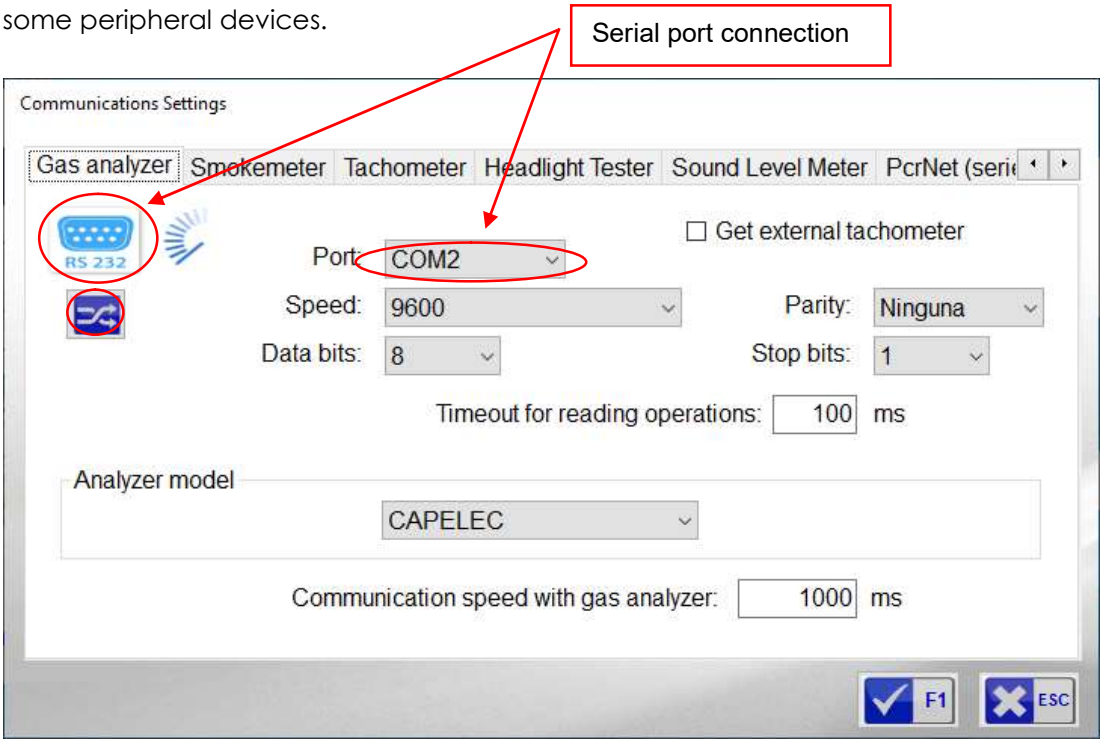
They are listed below and a picture of each tab is shown.

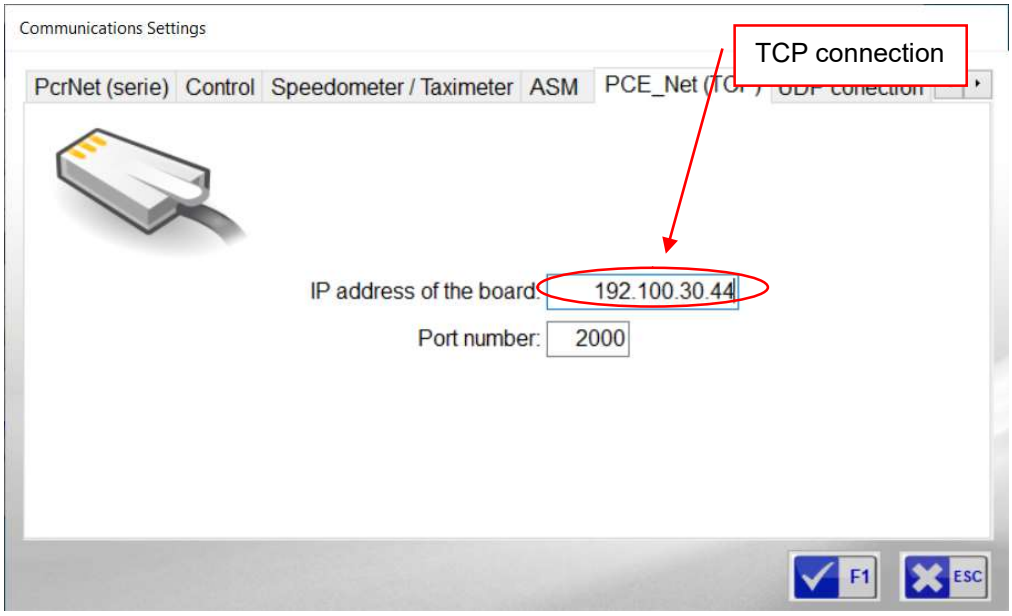
In general, each device has the possibility to

- Configure the communication port number.
- Modify the transmission speed.
- Select data bits, stop bits and whether parity exists.

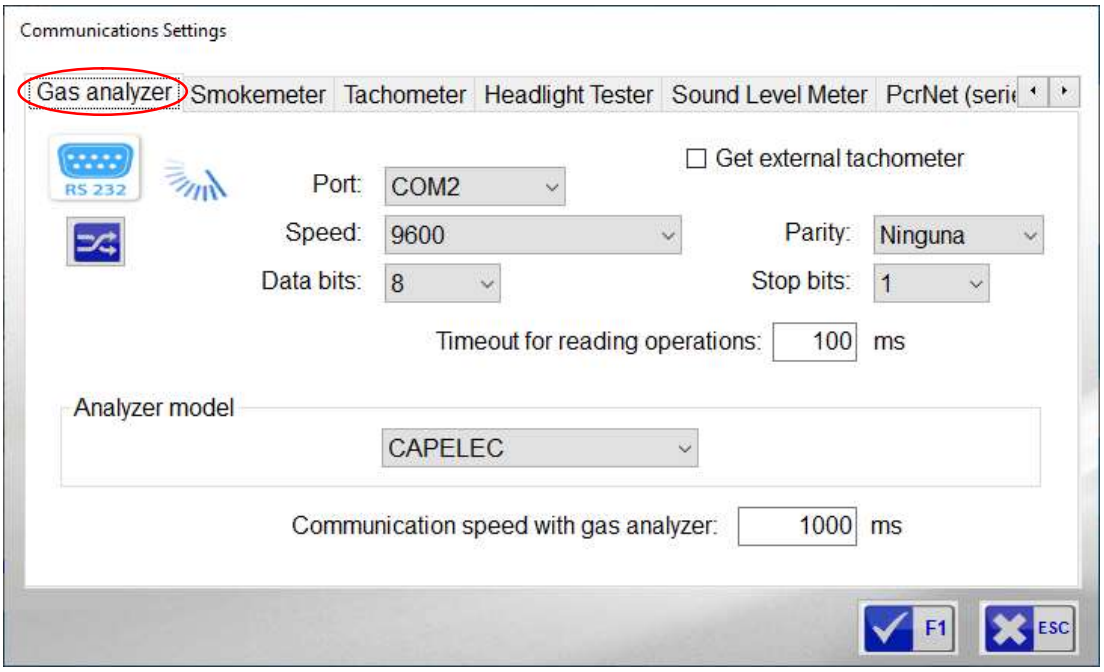
There are other specific configurations for each piece of equipment.

Each tab also shows the type of communication between the machines (Serial, TCP...), and the possibility of detecting the communication port automatically in some peripheral devices.



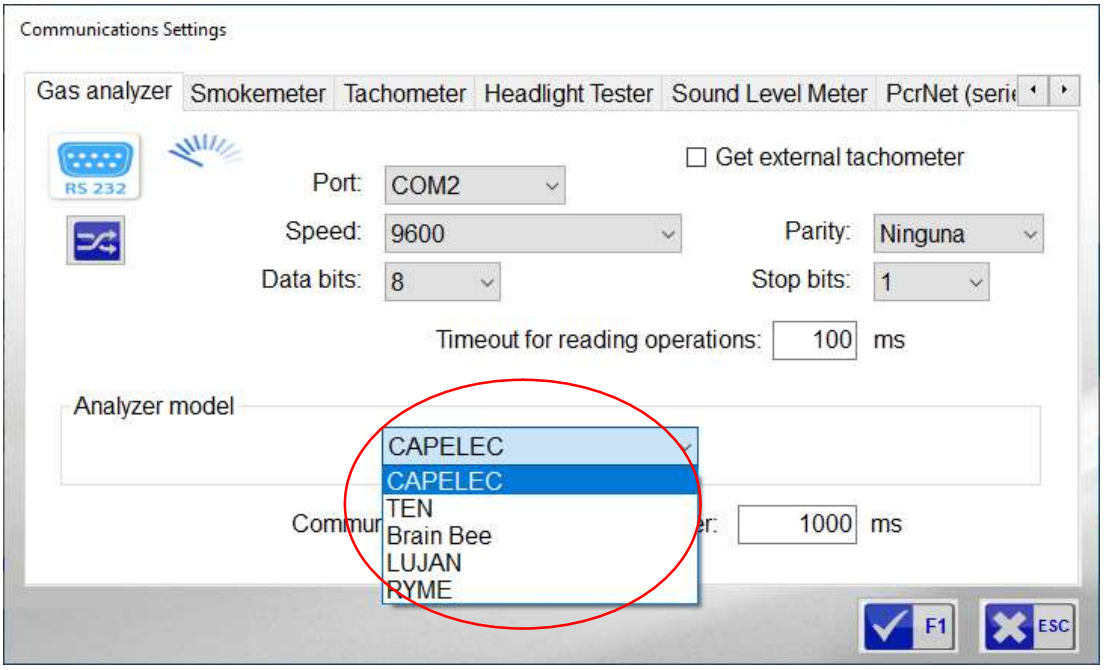


2.1.1 Gas analyzer



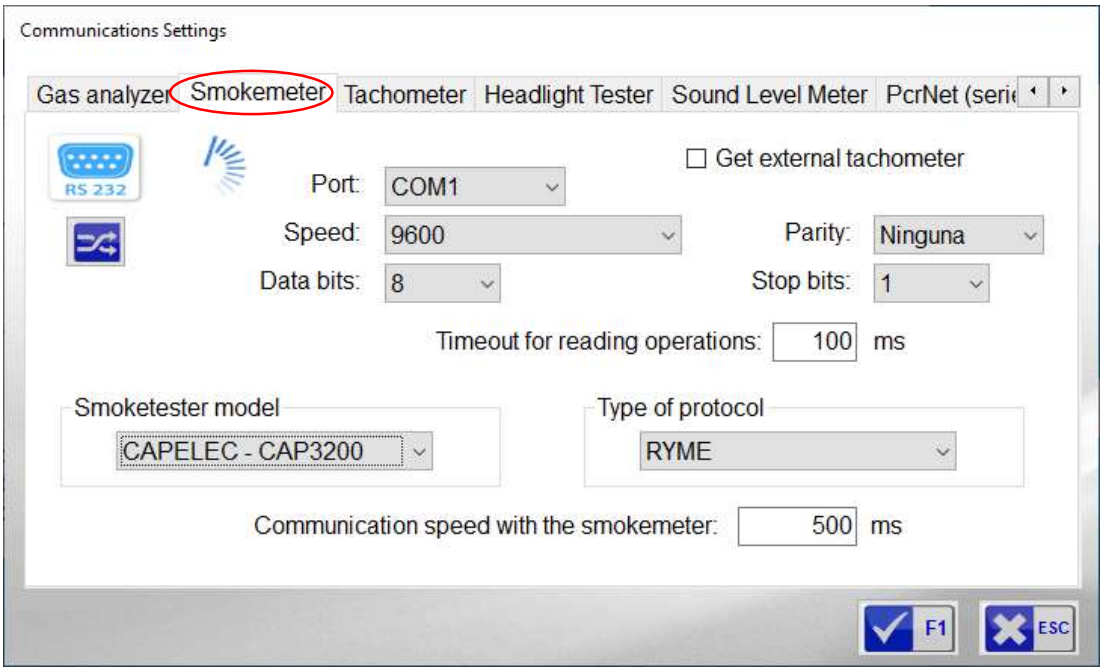
To configure the Gas Analyzer, in addition to what was mentioned at the beginning, you need to know:

- **Auto search button**: by clicking on the icon  , an automatic search of the communications port will be performed. In case of locating and establishing a correct communication, the 'RS 232' icon located in the upper left part of the screen will change from blue to green. If a connection cannot be established, the latter icon will change from blue to red. Important: not all peripheral devices have this option.
- **Port**: Select the port assigned to the connected device from the drop-down list. This port number can be modified in the Windows 'Device Manager'.
- **Speed**: Select from the drop-down list the speed of communication with the device, which is given by the manufacturer.
- **Timeout for reading operations**: Delay time for reading the data issued by the device. By default it is 100ms.
- **Analyzer model**: select the brand and model of equipment purchased from the drop-down list.



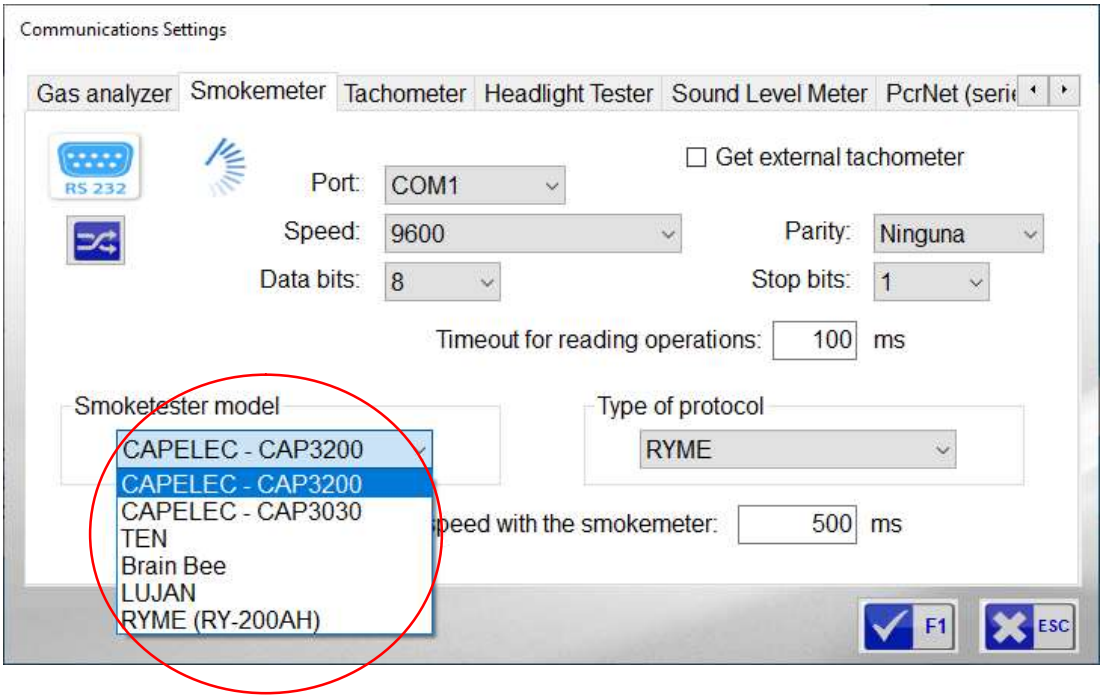
- **Communication speed**: This is the transmission speed between the PC and the device (its minimum value is 250ms).
- **Use external tachometer**: if you use an external tachometer, select this box and then configure it on its corresponding tab.

2.1.2 Smokemeter



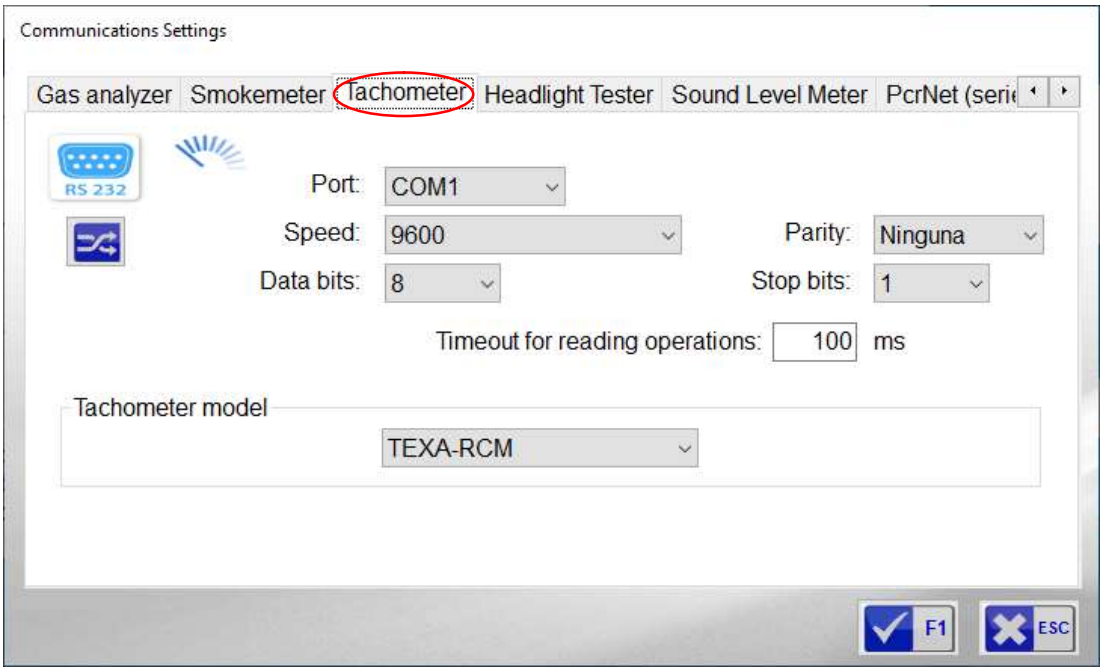
To configure the Smokemeter, in addition to what was mentioned at the beginning, you need to know

- **Auto search button**: by clicking on the icon  , an automatic search of the communications port will be performed. In case of locating and establishing a correct communication, the 'RS 232' icon located in the upper left part of the screen will change from blue to green. If a connection cannot be established, the latter icon will change from blue to red. Important: not all peripheral devices have this option.
- **Port**: Select the port assigned to the connected device from the drop-down list. This port number can be modified in the Windows 'Device Manager'.
- **Speed**: Select from the drop-down list the speed of communication with the device, which is given by the manufacturer.
- **Timeout for reading operations**: Delay time for reading the data issued by the device. By default it is 100ms.
- **Smokemeter model**: the brand and model of the equipment purchased from the drop-down list.



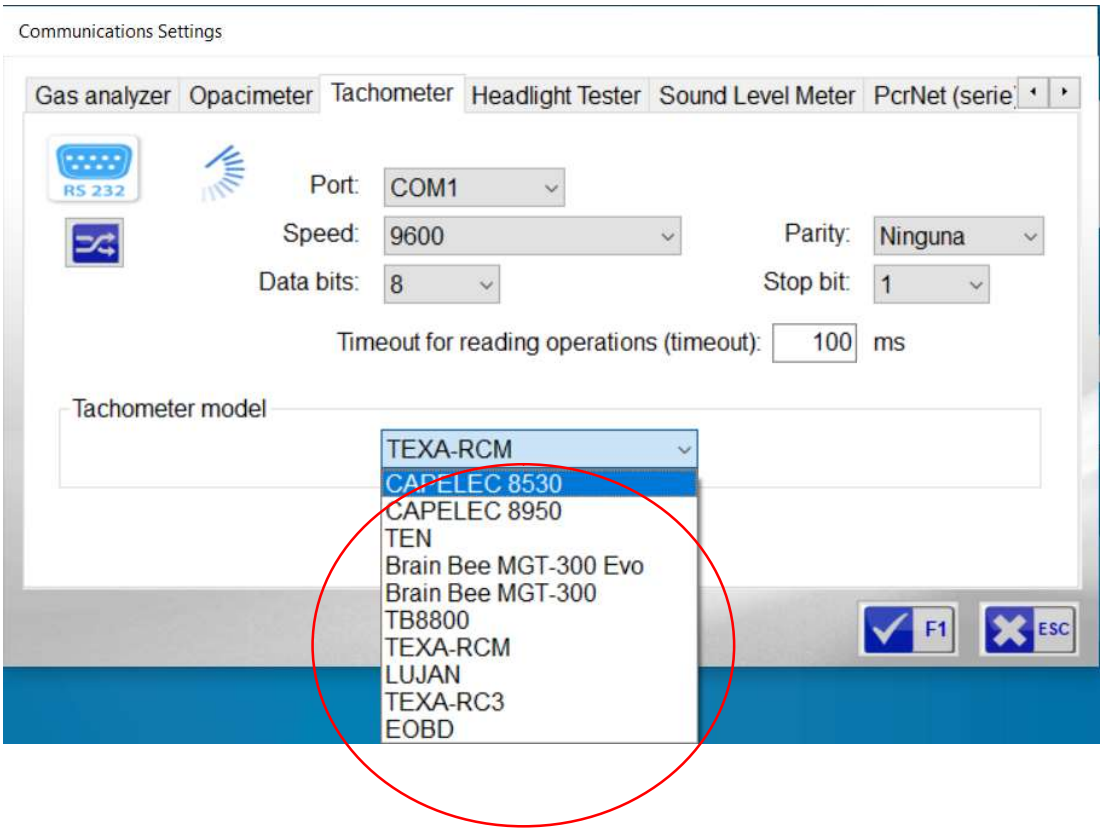
- **Type of protocol**: special protocol for large vehicle inspection groups which will be selected depending on the established quality system.
- **Communication speed**: transmission speed between the PC and the device (its minimum value is 250ms).
- **Use external tachometer**: if you use an external tachometer, select this box and then configure it on its corresponding tab.

2.1.3 Tachometer



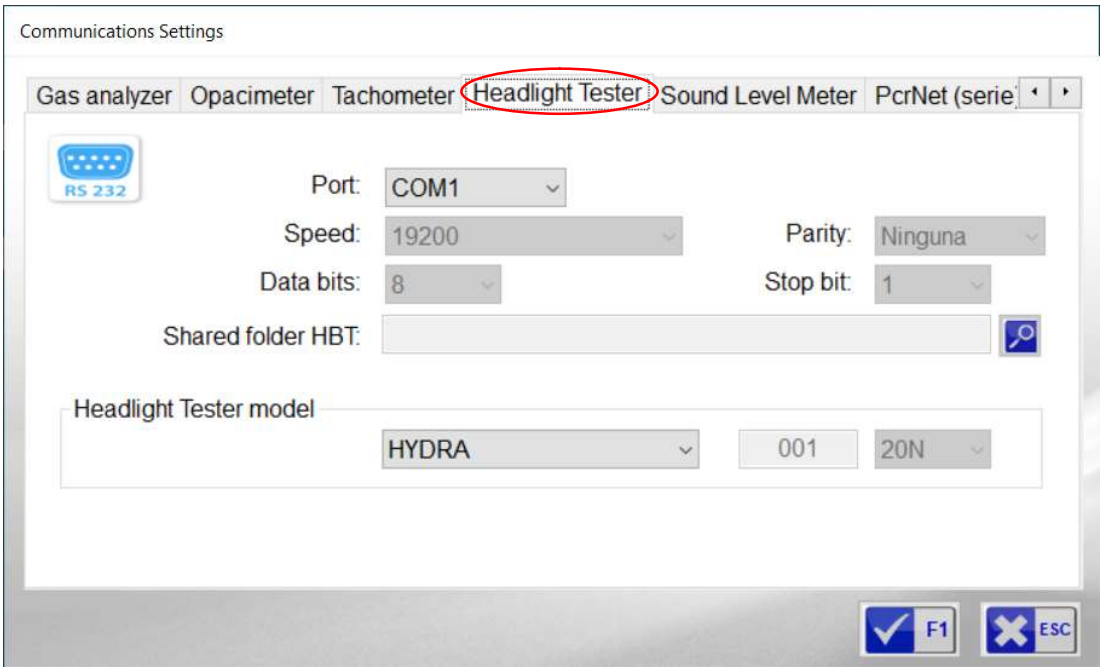
To configure the Tachometer, in addition to what was mentioned at the beginning, you need to know:

- **Auto search button**: by clicking on the icon  , an automatic search of the communications port will be performed. In case of locating and establishing a correct communication, the 'RS 232' icon located in the upper left part of the screen will change from blue to green. If a connection cannot be established, the latter icon will change from blue to red. Important: not all peripheral devices have this option.
- **Port**: Select the port assigned to the connected device from the drop-down list. This port number can be modified in the Windows 'Device Manager'.
- **Speed**: Select from the drop-down list the speed of communication with the device, which is given by the manufacturer.
- **Timeout for reading operations**: Delay time for reading the data issued by the device. By default it is 100ms.
- **Tachometer model**: select the brand and model of equipment purchased from the drop-down list.



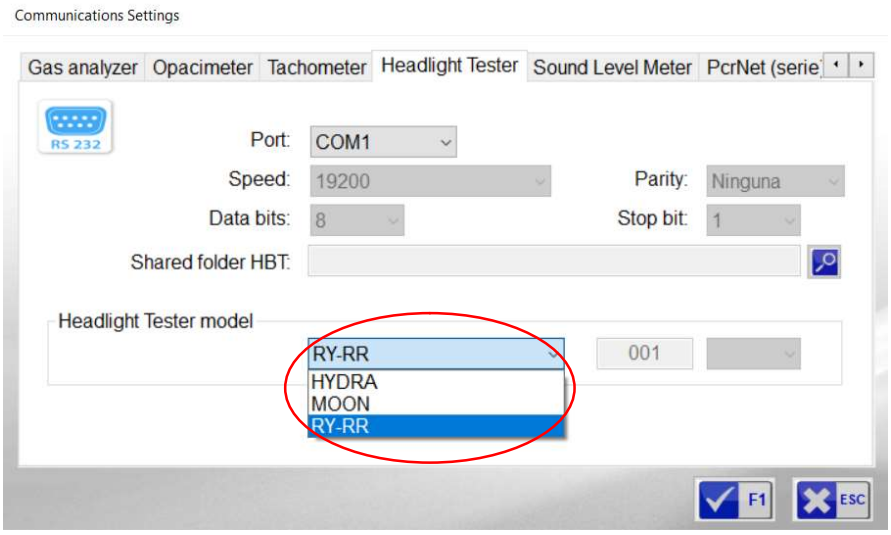
- **Communication speed**: transmission speed between the PC and the device (its minimum value is 250ms).

2.1.4 Head Light tester

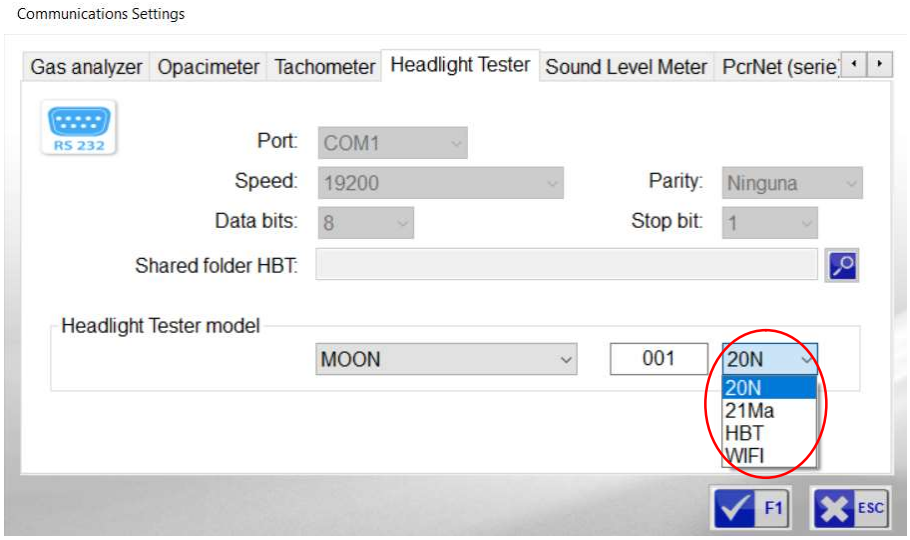


To set up the Head Light Tester, in addition to what was mentioned at the beginning, you need to know:

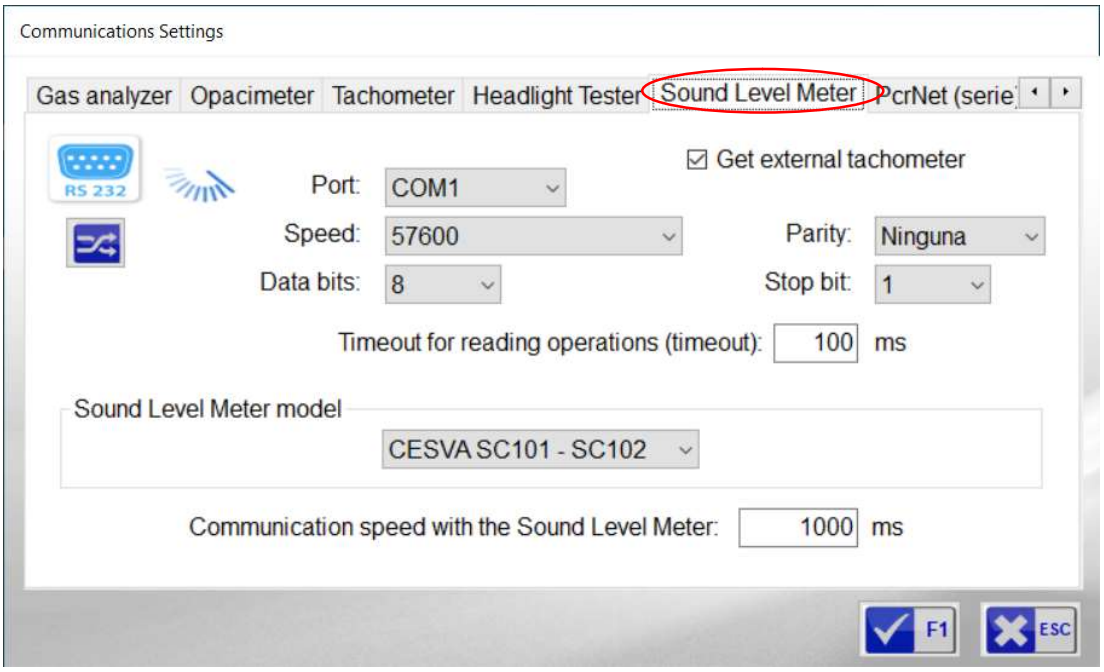
- **Port**: Select the port assigned to the connected device from the drop-down list. This port number can be modified in the Windows 'Device Manager'.
- **Speed**: Select from the drop-down list the speed of communication with the device, which is given by the manufacturer.
- **HBT shared folder**: In case the equipment purchased is a 'Moon' model, it will be associated to an external application, which you have to route in the box provided.
- **Head Light Tester model**: select the brand and model of equipment purchased from the drop-down list.



- Select the type of connection of the PC with the device.

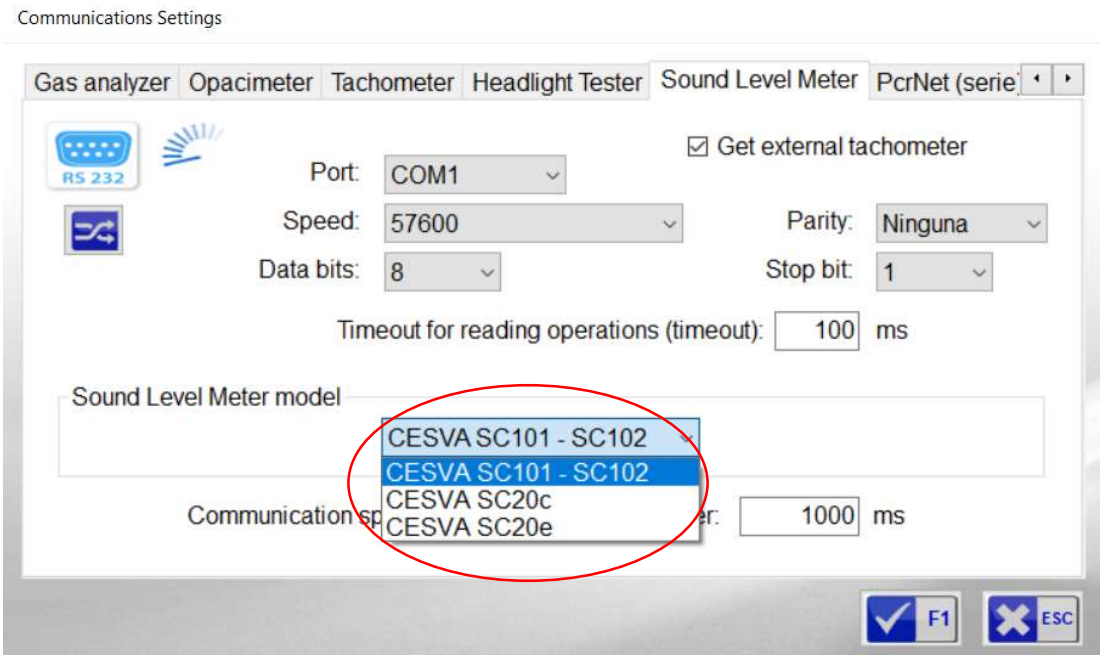


2.1.5 Sound Level Meter



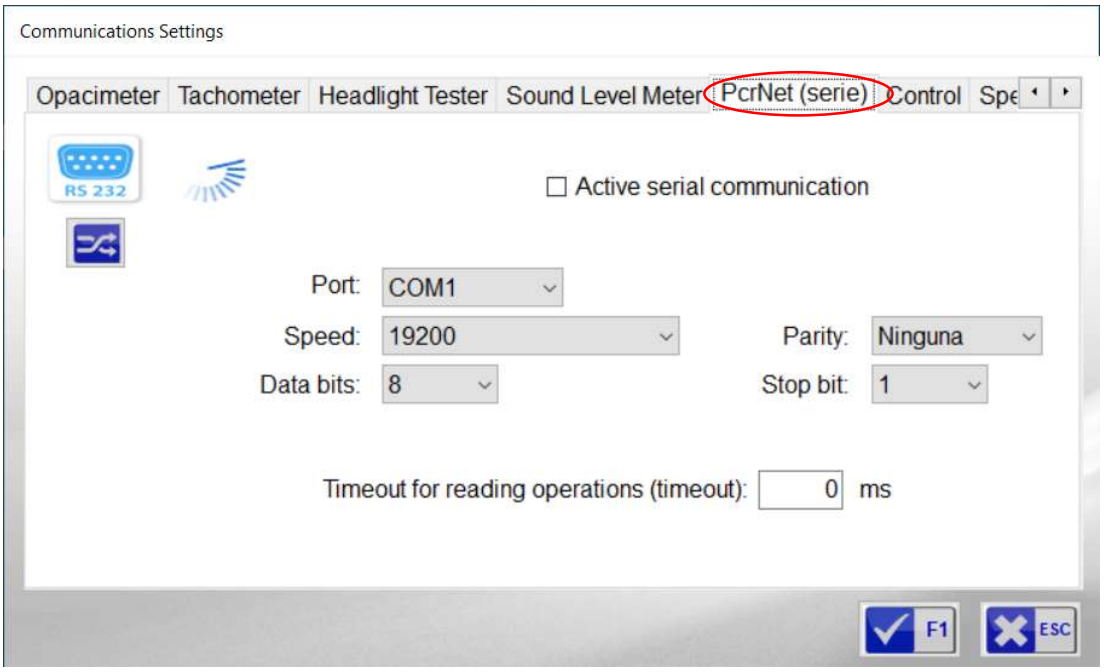
To configure the Sound Level Meter, in addition to what was mentioned at the beginning, you need to know

- **Auto search button**: by clicking on the icon , an automatic search of the communications port will be performed. In case of locating and establishing a correct communication, the 'RS 232' icon located in the upper left part of the screen will change from blue to green. If a connection cannot be established, the latter icon will change from blue to red. Important: not all peripheral devices have this option.
- **Port**: Select the port assigned to the connected device from the drop-down list. This port number can be modified in the Windows 'Device Manager'.
- **Speed**: Select from the drop-down list the speed of communication with the device, which is given by the manufacturer.
- **Timeout for reading operations**: Delay time for reading the data issued by the device. By default it is 100ms.
- **Sound level meter model**: select the brand and model purchased from the drop-down list.
- **Communication speed with the Sound Level Meter**: speed of data transfer between the periphery and the cpu.



- **Use external tachometer**: if you use an external tachometer, select this box and then configure it on its corresponding tab.

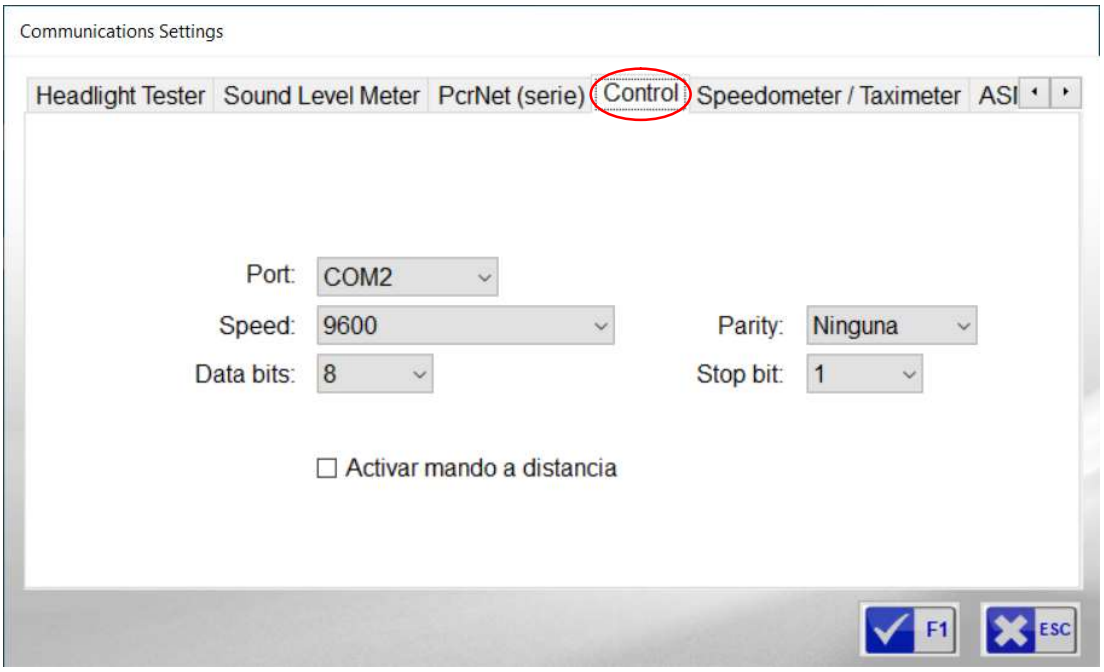
2.1.6 PcrNet (serial)



To configure the PcrNet (serial), used by the equipment with serial cable communication, for brake measurement, suspension bench and aligner, in addition to what was initially described you have to know:

- **Auto search button**: by clicking on the icon , an automatic search of the communications port will be performed. In case of locating and establishing a correct communication, the 'RS 232' icon located in the upper left part of the screen will change from blue to green. If a connection cannot be established, the latter icon will change from blue to red. Important: not all peripheral devices have this option.
- **Port**: Select the port assigned to the connected device from the drop-down list. This port number can be modified in the Windows 'Device Manager'.
- **Speed**: Select from the drop-down list the speed of communication with the device, which is given by the manufacturer.
- **Activate serial communication**: Select this box in case you purchase a PCR electronic board, which communicates through a serial connection.
- **Timeout for reading operations**: Delay time for reading the data issued by the device. By default it is 100ms.

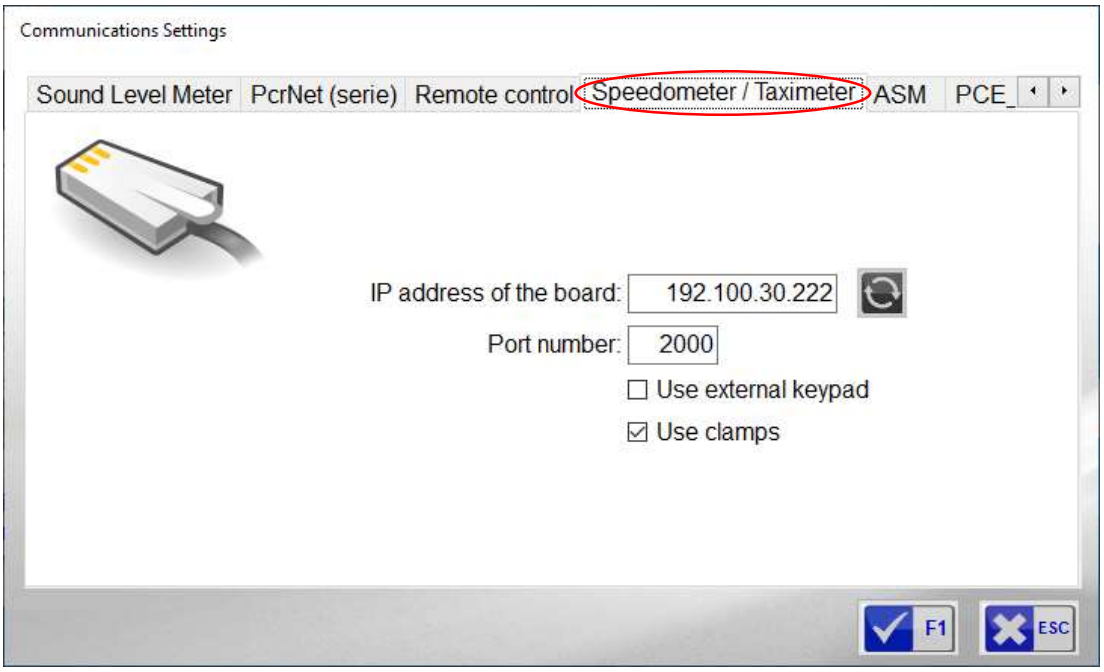
2.1.7 Remote Control



To configure the remote control, if the equipment uses a PCR electronic board by serial port, in addition to what was mentioned at the beginning, activate the box with the text: **'Activate remote control'** and indicate:

- **Port**: Select the port assigned to the connected device from the drop-down list. This port number can be modified in the Windows 'Device Manager'.
- **Speed**: Select from the drop-down list the speed of communication with the device, which is given by the manufacturer.

2.1.8 Speedometer/taximeter

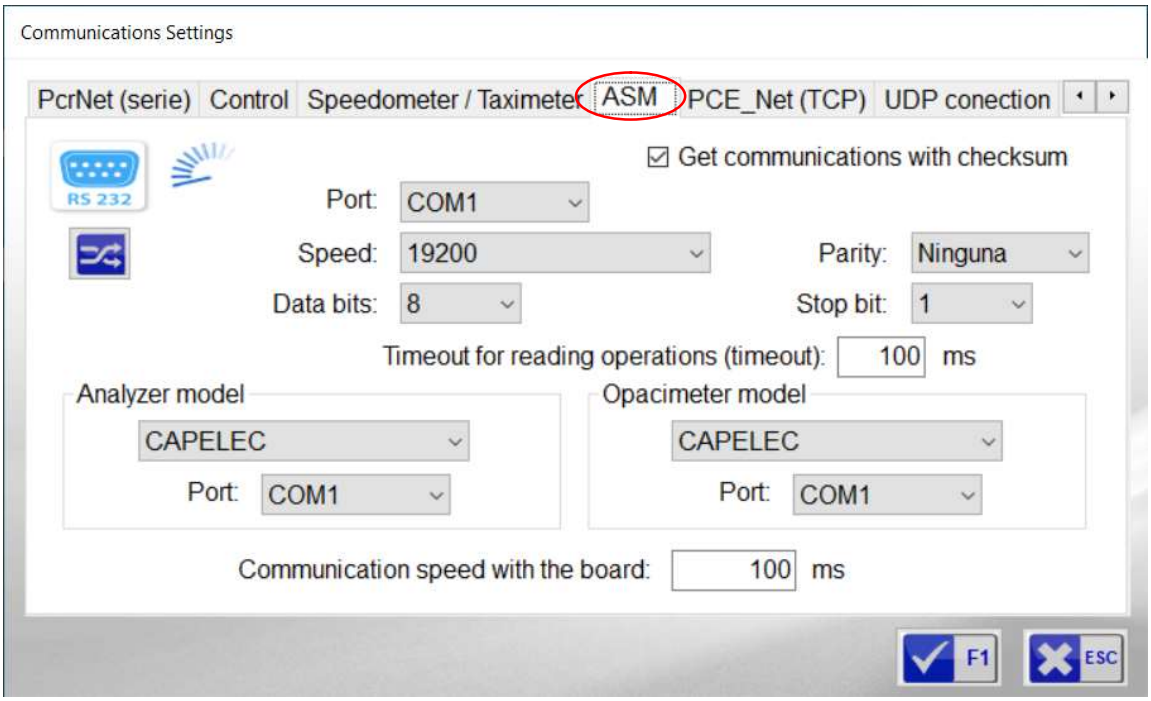


The image shows the RJ45 connection symbol, which means that this equipment connects through a TCP-IP network.

To configure the board of the speedometer correctly, you need to know:

- **IP address of the board**: by default this will be 192.100.30.222, but in exceptional cases it can be modified by the client depending on their network.
- **Port number**: This is the port number with which the PC and the electronic board communicate, which is in accordance with the internal configuration of the electronic board. This must never be changed except for a justified reason. By default it is 2000.
- **When to select 'Use external keypad'**: if you have purchased keypad pedestal for controlling the equipment, select this option and the changes will be reflected in the RYME_PCE software.
- **'Use clamps'**: if you have purchased clamps with the equipment, select this option and the changes will be reflected in the RYME_PCE software.

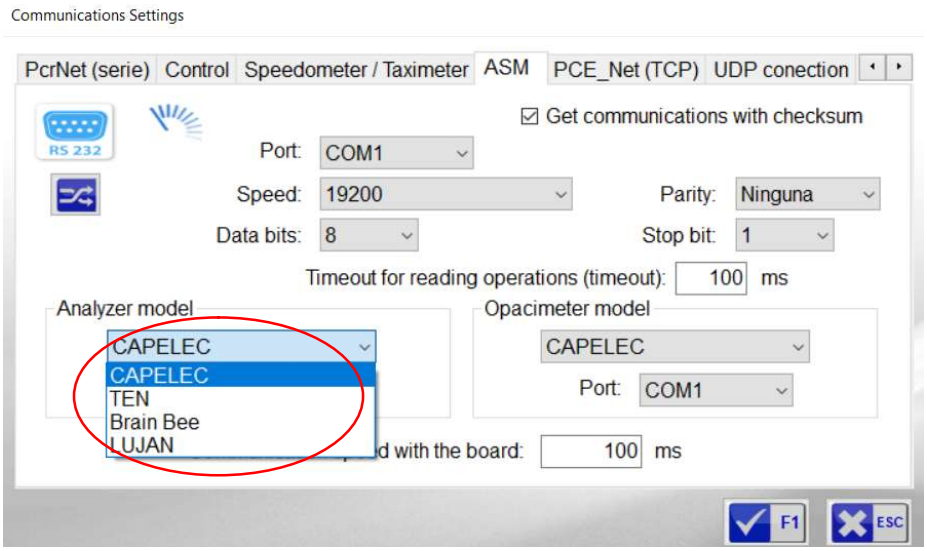
2.1.9 ASM



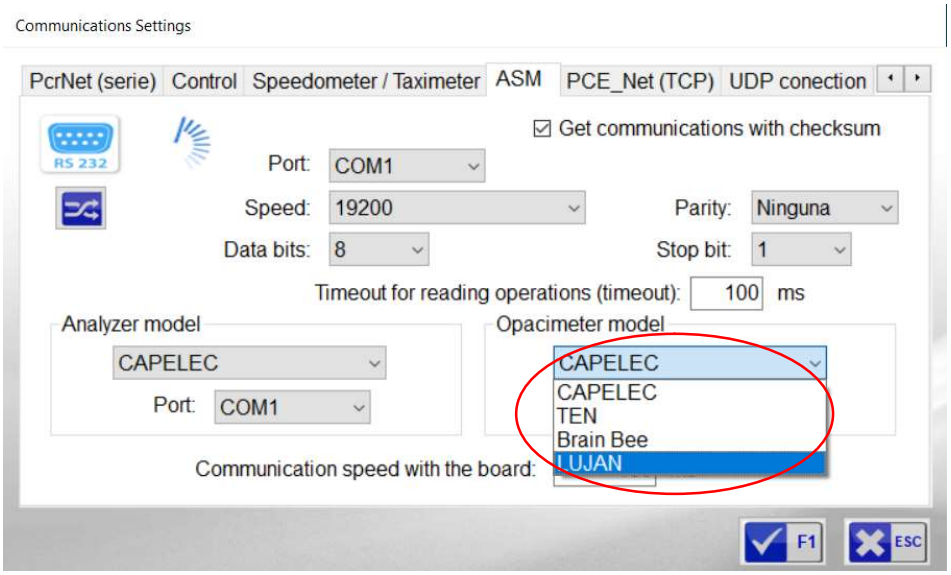
To configure the ASM machine, in addition to what was mentioned at the beginning, you need to know:

- **Auto search button**: by clicking on the icon , an automatic search of the communications port will be performed. In case of locating and establishing a correct communication, the 'RS 232' icon located in the upper left part of the screen will change from blue to green. If a connection cannot be established, the latter icon will change from blue to red. Important: not all peripheral devices have this option.
- **Port**: Select the port assigned to the connected device from the drop-down list. This port number can be modified in the Windows 'Device Manager'.
- **Speed**: Select from the drop-down list the speed of communication with the device, which is given by the manufacturer.
- **Use communications with checksum**: depending on the type of installation, you can activate this box so that the transmission of data contains a checksum. With it you will be able to verify the emission and reception of data.
- **Timeout for reading operations**: Delay time for reading the data issued by the device. By default it is 100ms.

- **Analyzer model**: select the brand and model purchased from the drop-down list. This will be for the ASM models: 2WD and 4WD (petrol engines):

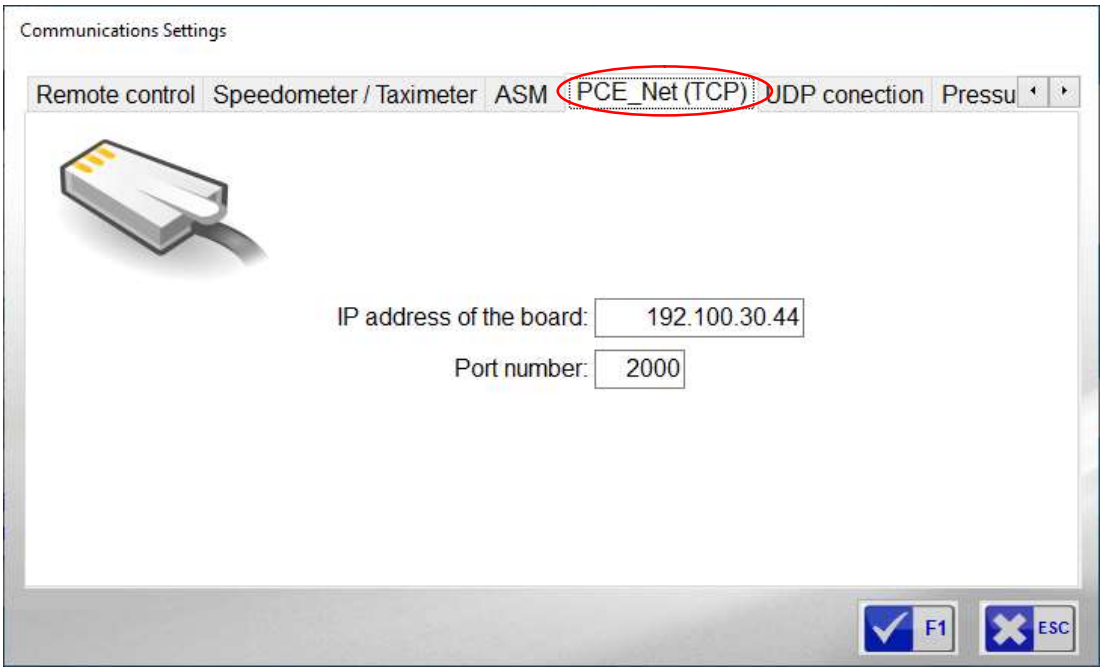


- **Configure the smokemeter model**: select the brand and model purchased from the drop-down list. This will be for ASM models: BDU 2WD (diesel engines):



- Additionally, select the Port both in Analyzer and Smokemeter sections in this display for its correct communication.

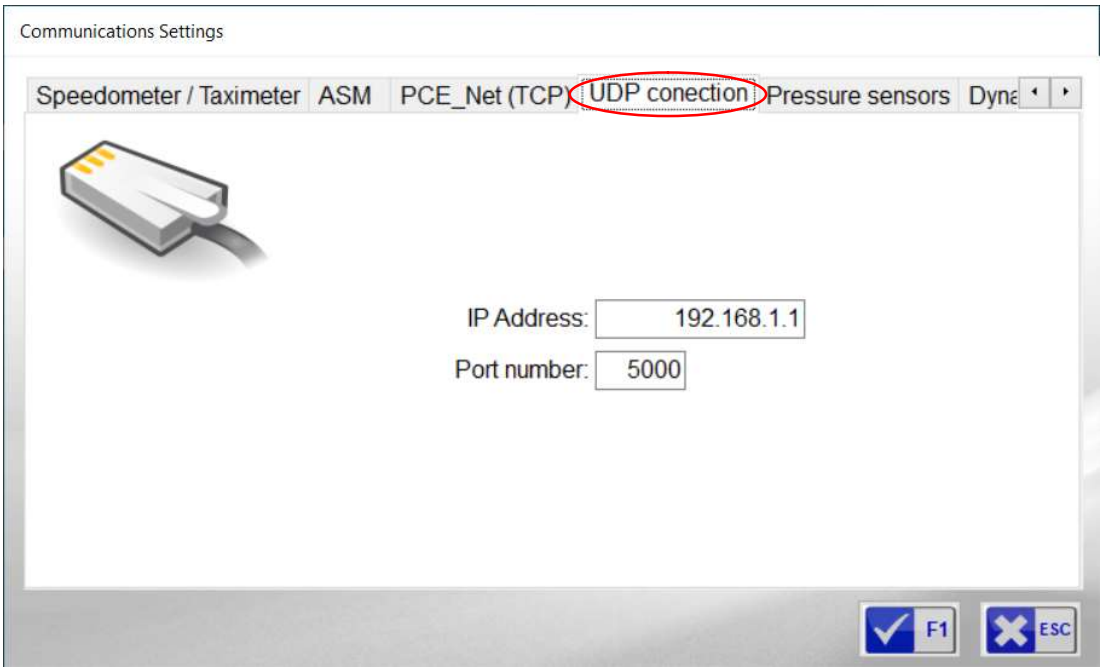
2.1.10 Pce_Net (TCP)



For the configuration of a device: brake tester, suspension bench and slip tester, with PCE electronic board, which connects through a TCP connection, enter the data you will see below. To connect to this you have to know:

- **IP address of the board**: by default this will have the following IP: 192.100.30.44.
- **Port number**: This is the port number with which the PC and the electronic board communicate, which is in accordance with the internal configuration of the electronic board. This must never be changed except for a justified reason. The default is 2000.

2.1.11 UDP connection

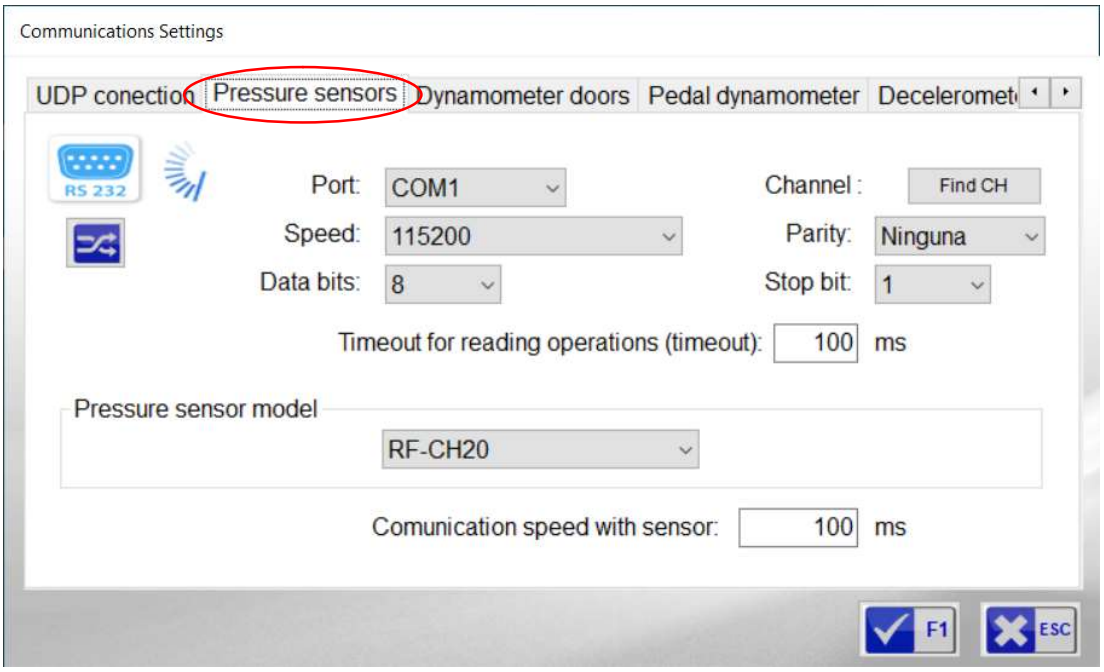


For the configuration of a device: brake tester, suspension bench and slip tester, with PCE electronic board, which connects through a TCP-UDP connection, enter the data you will see below.

It is important to emphasize that the main difference of this type of connection with others is the security established by the own protocol between PC and electronic board, since this type of connection is less secure than a TCP connection used in other applications. To connect to this, you have to know:

- **IP address of the board**: by default this will have the following IP: 192.168.1.1.
- **Port number**: This is the port number with which the PC and the electronic board communicate, which is in accordance with the internal configuration of the electronic board. This must never be changed except for a justified reason. By default it is 5000.

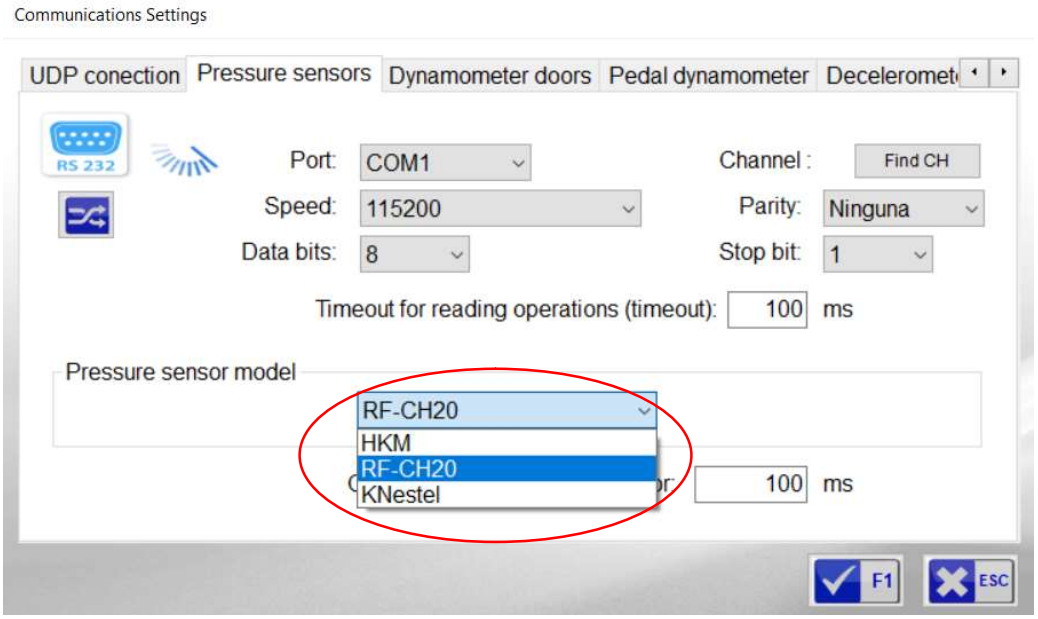
2.1.12 Pressure sensors



To configure the pressure sensors, in addition to what was mentioned at the beginning, you need to know

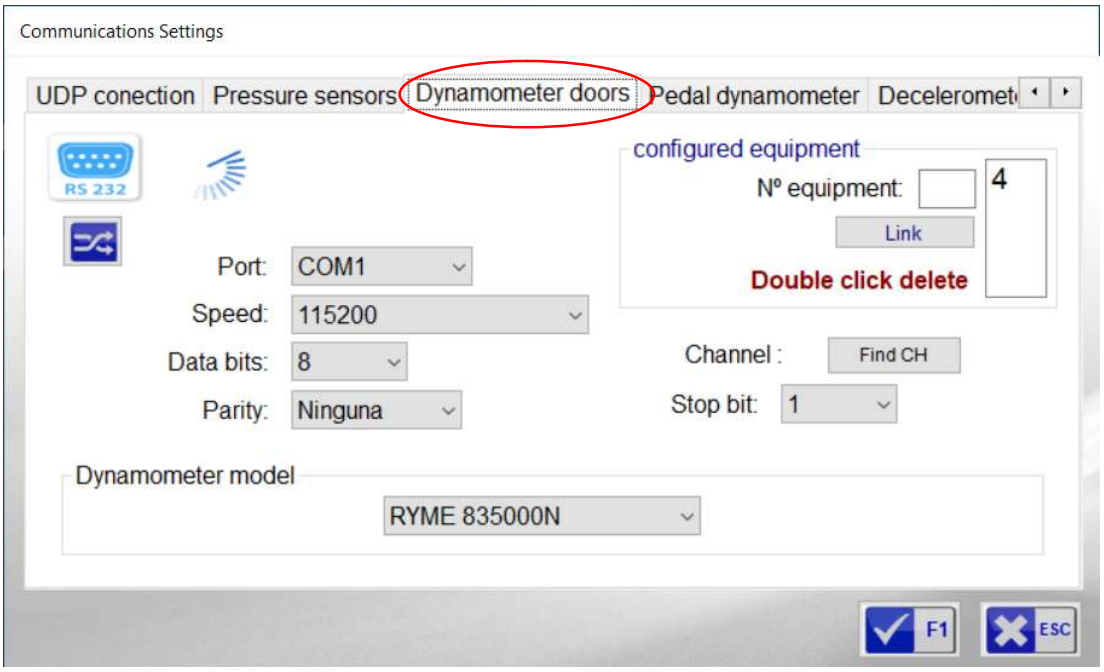
- **Auto search button**: by clicking on the icon , an automatic search of the communications port will be performed. In case of locating and establishing a correct communication, the 'RS 232' icon located in the upper left part of the screen will change from blue to green. If a connection cannot be established, the latter icon will change from blue to red. Important: not all peripheral devices have this option.
- **Port**: Select the port assigned to the connected device from the drop-down list. This port number can be modified in the Windows 'Device Manager'.
- **Speed**: Select from the drop-down list the speed of communication with the device, which is given by the manufacturer.
- **Channel**: by clicking on this icon, it will automatically show the channel number assigned for the communication between the receiver and the sensor.
- **Timeout for reading operations**: Delay time for reading the data issued by the device. By default it is 100ms.

- **Pressure sensor model**: select the brand and model purchased from the drop-down list.



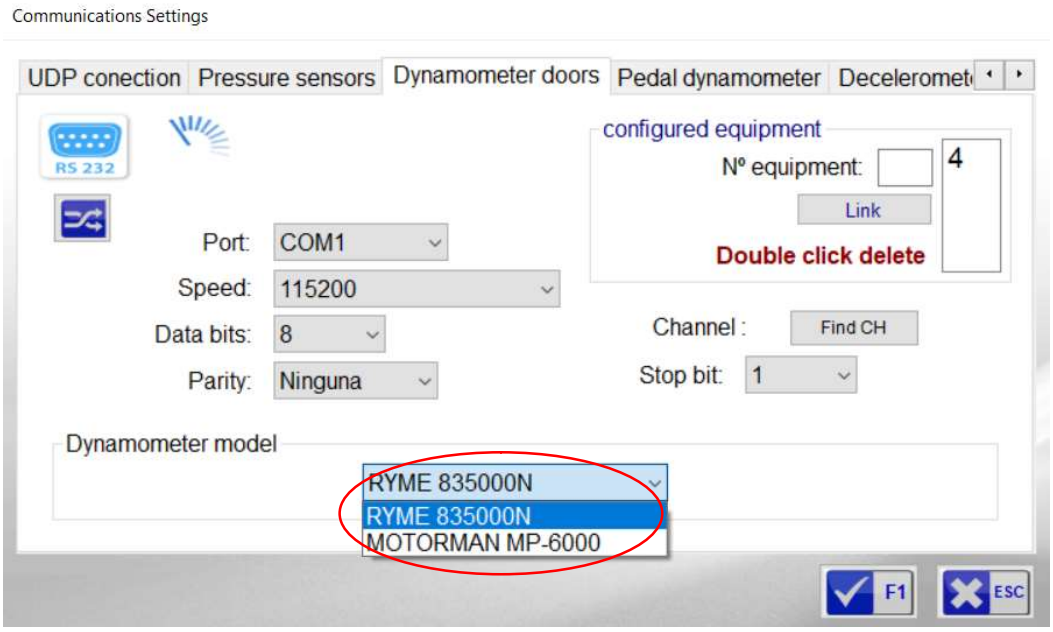
- **Communication speed**: transmission speed between the PC and the device (its minimum value being 100ms)

2.1.13 Door Dynamometer

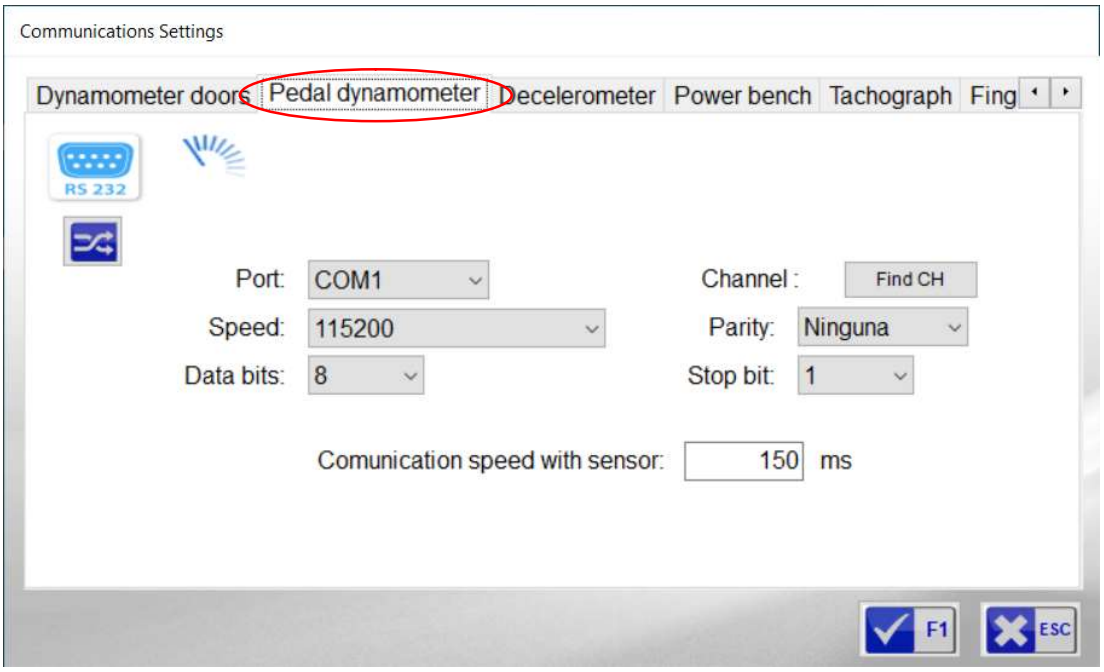


In order to configure Door Dynamometer, in addition to what was mentioned at the beginning, you need to know

- **Auto search button**: by clicking on the icon , an automatic search of the communications port will be performed. In case of locating and establishing a correct communication, the 'RS 232' icon located in the upper left part of the screen will change from blue to green. If a connection cannot be established, the latter icon will change from blue to red. Important: not all peripheral devices have this option.
- **Port**: Select the port assigned to the connected device from the drop-down list. This port number can be modified in the Windows 'Device Manager'.
- **Speed**: Select from the drop-down list the speed of communication with the device, which is given by the manufacturer.
- **Configured equipment**: In this section write the address number of the device in the 'Device number' box and click with the mouse on the 'Link' icon.
- **Channel**: by clicking on this icon, it will automatically show the channel number assigned for the communication between the receiver and the sensor.
- **Dynamometer model**: select the brand and model purchased from the drop-down list.


Communications Settings
UDP conection
Pressure sensors
Dynamometer doors
Pedal dynamometer
RS 232
configured equipment
Nº equipment:
4
Link
Double click delete
Port:
COM1
Speed:
115200
Data bits:
8
Parity:
Ninguna
Channel :
Find CH
Stop bit:
1
Dynamometer model
RYME 835000N
RYME 835000N
MOTORMAN MP-6000
F1
ESC

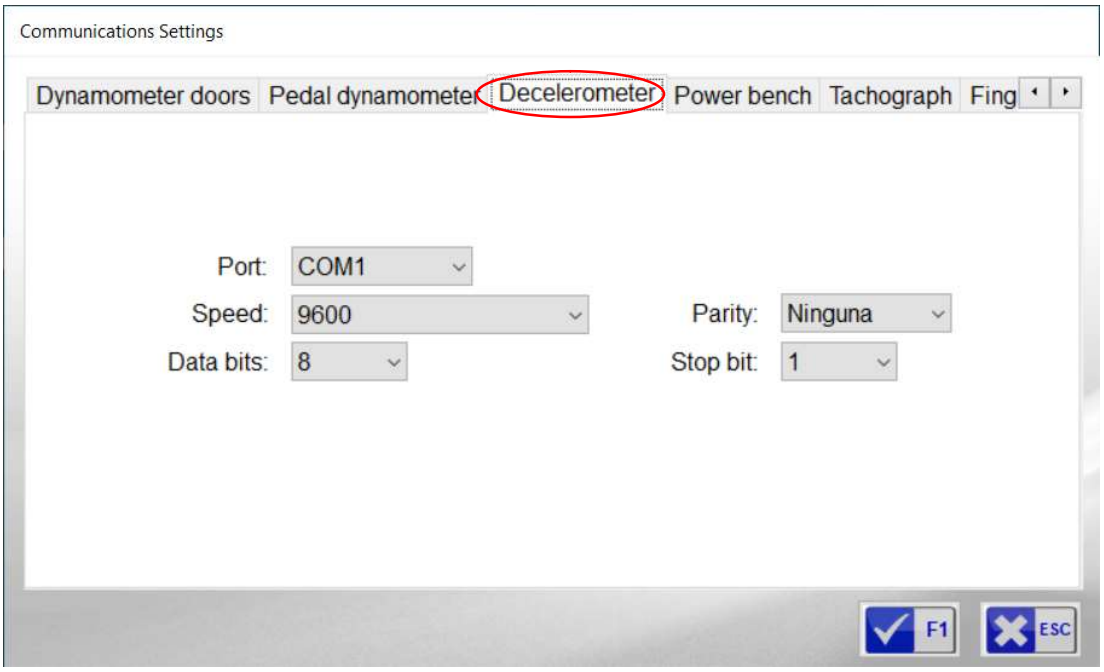
2.1.14 Pedal Dynamometer



To configure the Pedal Dynamometer, in addition to what was mentioned at the beginning, you need to know:

- **Auto search button**: by clicking on the icon  , an automatic search of the communications port will be performed. In case of locating and establishing a correct communication, the 'RS 232' icon located in the upper left part of the screen will change from blue to green. If a connection cannot be established, the latter icon will change from blue to red. Important: not all peripheral devices have this option.
- **Port**: Select the port assigned to the connected device from the drop-down list. This port number can be modified in the Windows 'Device Manager'.
- **Speed**: Select from the drop-down list the speed of communication with the device, which is given by the manufacturer.
- **Channel**: by clicking on this icon, it will automatically show the channel number assigned for the communication between the receiver and the sensor.
- **Communication speed**: transmission speed between the PC and the device (its minimum value is 150ms).

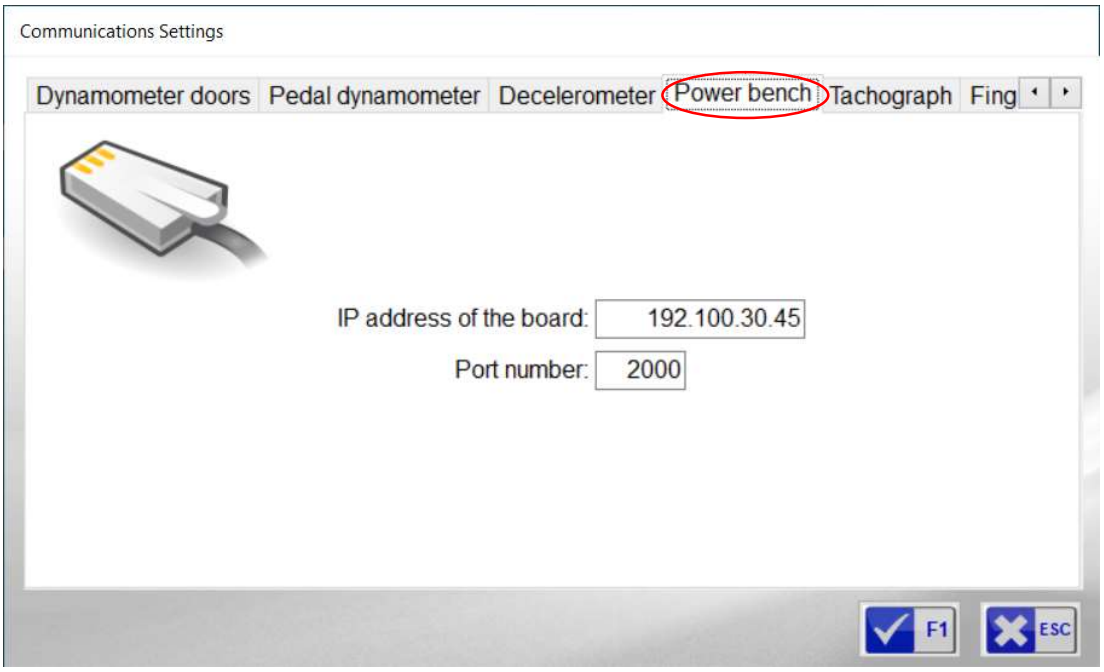
2.1.15 Decelerometer brakecheck



To configure the decelerometer, indicate:

- **Port**: Select the port assigned to the connected device from the drop-down list. This port number can be modified in the Windows 'Device Manager'.
- **Speed**: Select from the drop-down list the speed of communication with the device, which is given by the manufacturer.

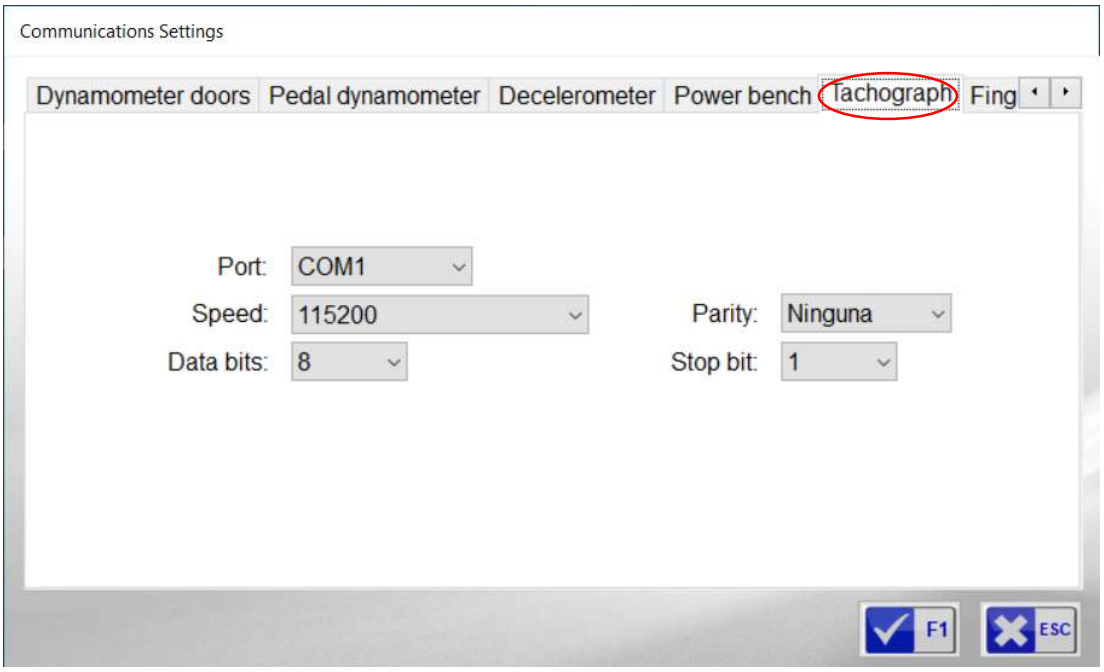
2.1.16 Power bench



To configure a power bench with an ASM-BP 4200 electronic board, which is connected via a TCP connection, the following data must be entered

- **IP address of the board**: by default this will have the following IP: 192.100.30.45.
- **Port number**: This is the port number with which the PC and the electronic board communicate, which is in accordance with the internal configuration of the electronic board. This must never be changed except for a justified reason. The default is 2000.

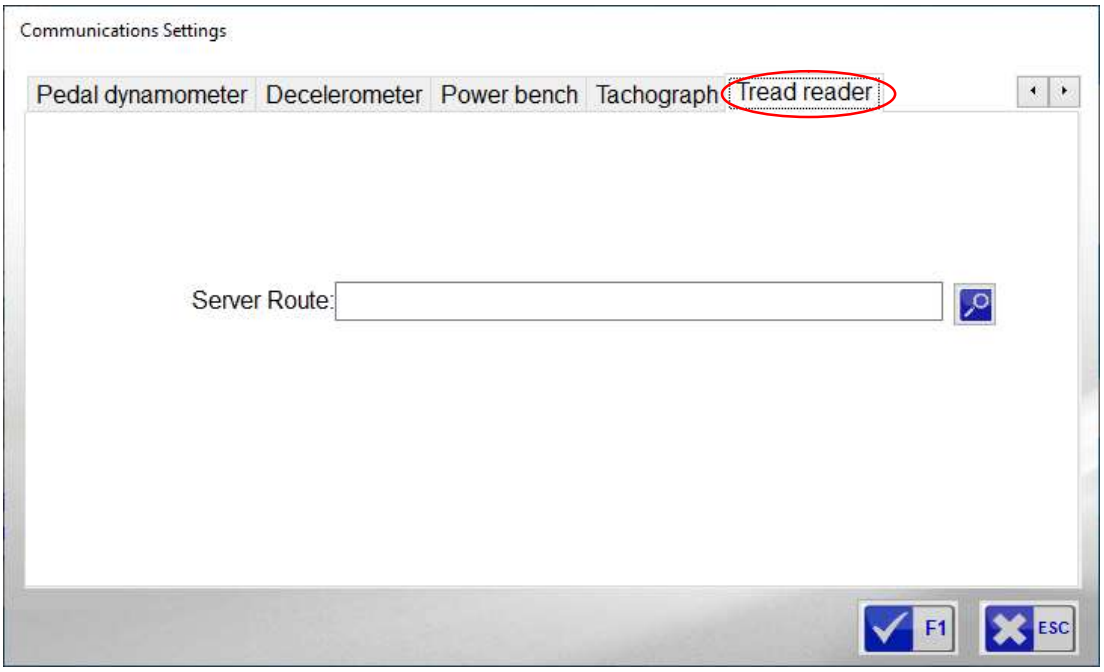
2.1.17 Tachograph



To set up the tachograph, indicate:

- **Port**: Select the port assigned to the connected device from the drop-down list. This port number can be modified in the Windows 'Device Manager'.
- **Speed**: Select from the drop-down list the speed of communication with the device, which is given by the manufacturer.

2.1.18 Tread reader



Under development (tread reader)

2.2 Configuration of the connection to the database access

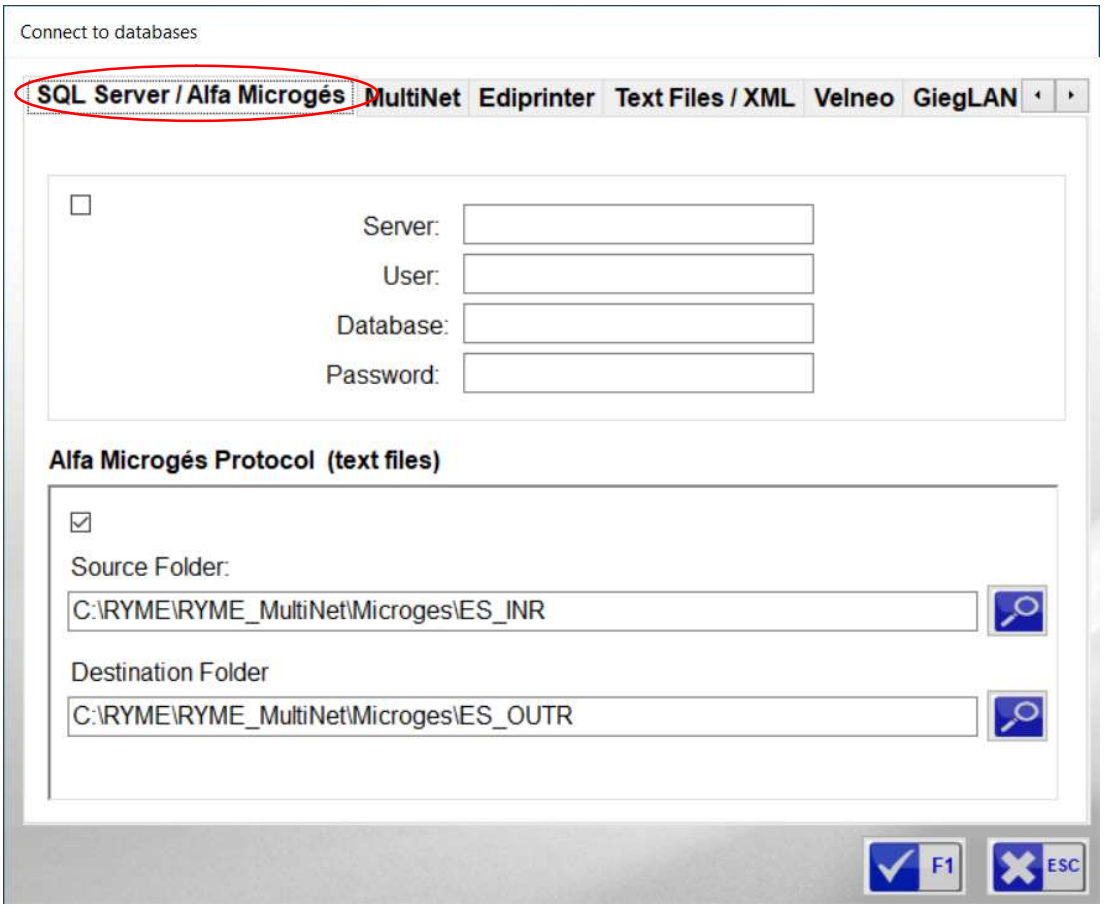
There are different possibilities regarding the recording of test data. In case the client needs to record the data in a different system, RYME will carry out a study and then provide a budget to integrate the new data recording mode into its system.

The following recording systems are available to date:

- SQL Server
- Alfa Microges
- Multinet
- Ediprinter
- XML files
- Text files
- Velneo
- GiegLAN

You can see individually how to configure the management system to be linked:

2.2.1 SQL Server/Alfa Micrógés

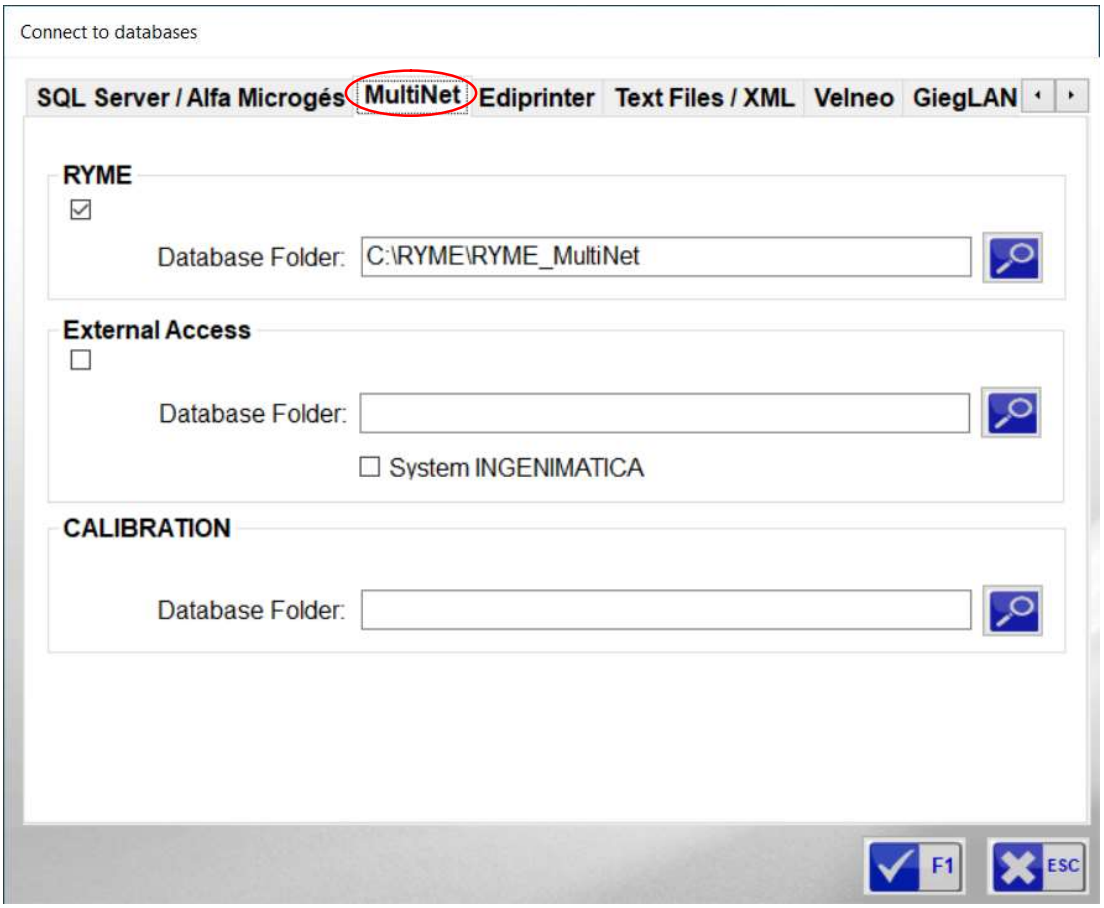


The data of the tests carried out are stored in a system external to the Ryme applications, based on a communications protocol:

- **SQL Server©**
  - Select the box at the top left to activate this type of protocol.
  - **Server**: IP address where the database is hosted.
  - **User**: established by the company, each with a certain degree of permission to access the server.
  - **Database**: name of the file to which the data recorded in the test will be sent.
  - **Password**: set of letters and numbers that restrict the entry to unauthorized users.

- **Alfa Microgés**
  - Select the box in the middle left to activate this type of protocol.
  - **Source folder**: enter in this box the address where this data-entry folder is located.
  - **Destination folder**: enter in this box the address where this data-output folder is located.

2.2.2 MultiNet



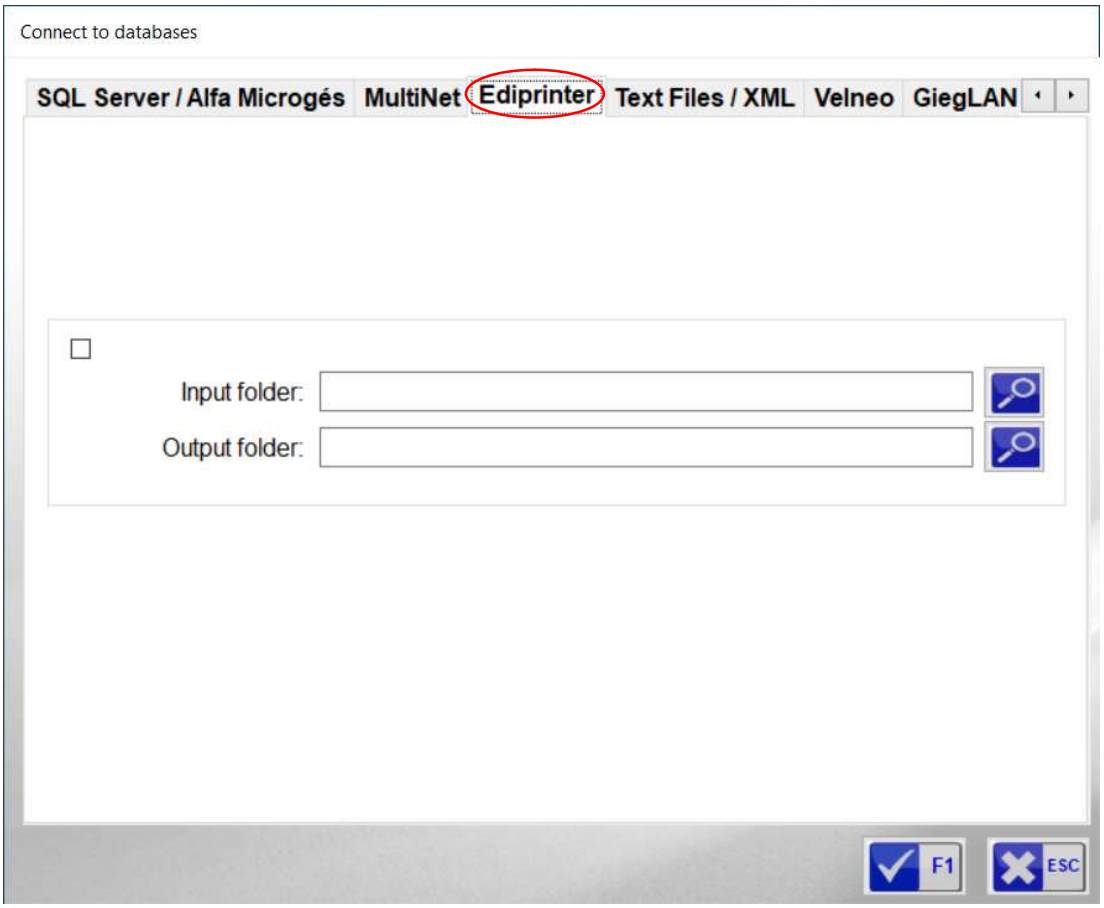
Another possibility to manage the data is through a Microsoft Access© Database Management System. For this, configure:

- **RYME**
  - Select the box at the top left to activate this type of protocol.
  - **Database folder**: enter in this box the local address of the PC where this folder with the data input/output file (MultiNet.s3db) is located.
- **External Access**
  - Select the box in the middle left to activate this type of protocol.
  - **Database folder**: enter in this box the address in the network where this folder is located with the data input/output file (Multinet.mdb).
  - **System INGENIMATICA**: for specific clients

- **CALIBRATIONS**

- **Database folder**: enter in this box the local address of the PC where this folder containing the file designated for the registration of calibration data of certain machines is located.

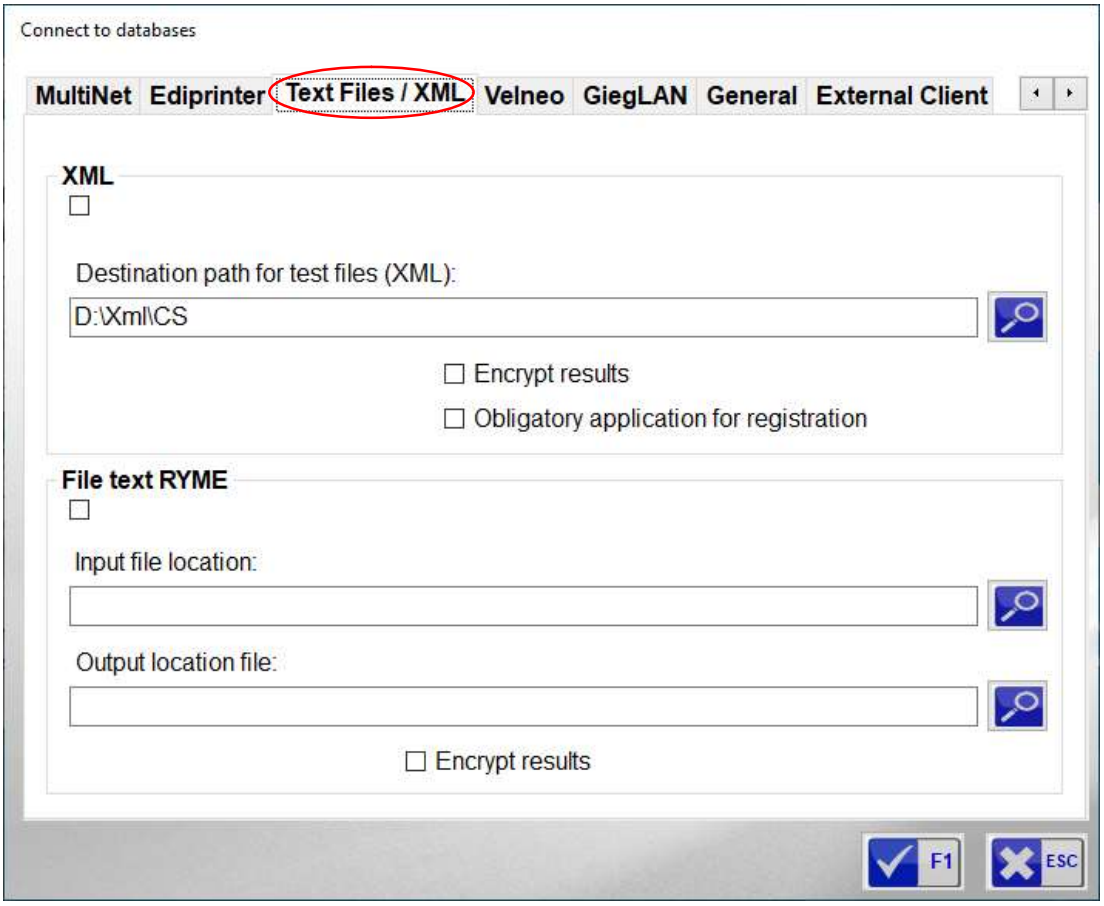
2.2.3 Ediprinter



The results of the tests carried out are stored in a system external to the Ryme applications, based on a communications protocol with text files (INI). To configure this type of management system you will need to:

- Select the box in the middle left to activate this type of protocol.
- **Input folder**: Enter the address of where this data input folder is to be located in this box.
- **Output folder**: Enter the address of where this data output folder is to be located in this box.

2.2.4 Text Files/XML

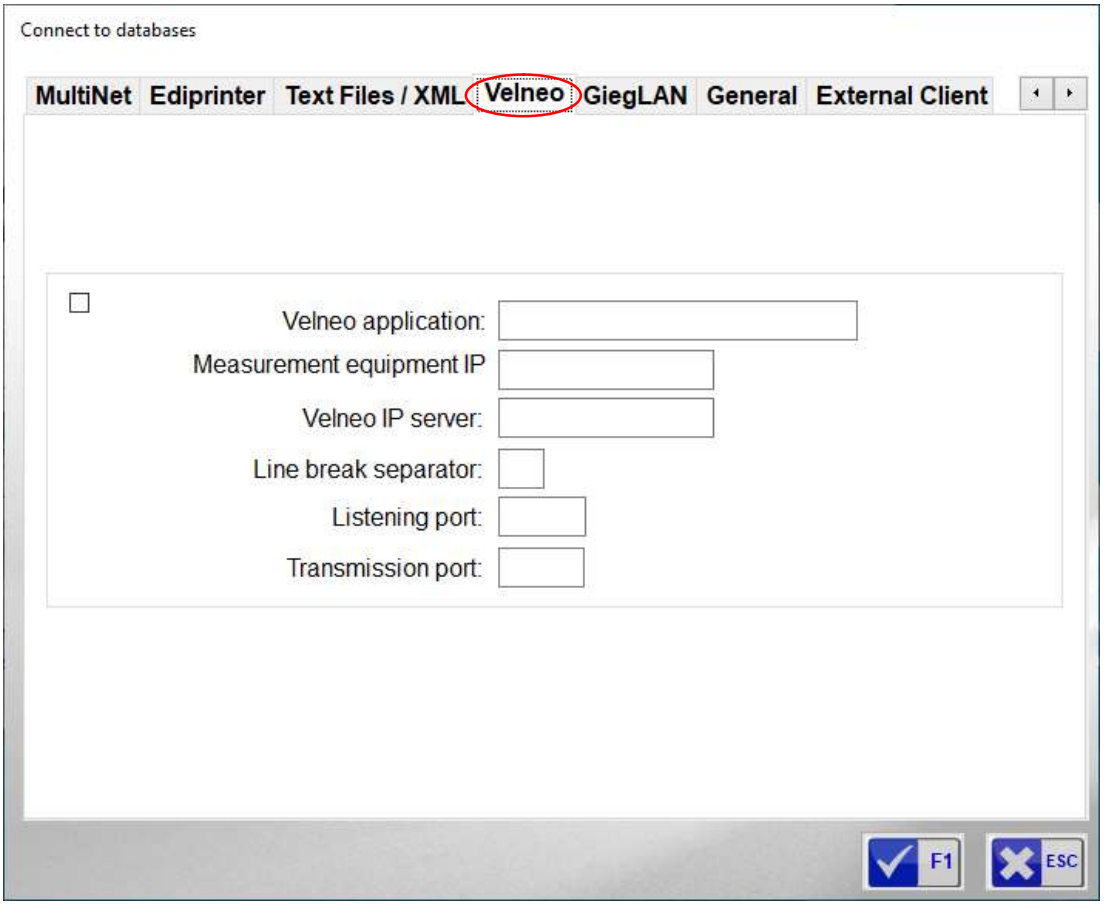


The data of the tests carried out are stored in a system external to the Ryme applications, based on a communications protocol:

- **XML**
  - Select the box at the top left to activate this type of protocol.
  - **Destination path for test storage files (XML)**: enter the address of this data input/output folder in this box.
  - **Encrypt results**: check this box if you want to encrypt the results of the test, thus providing total security to the system since data will not be able to be modified.
  - **Mandatory vehicle registration request**: If this box is checked, at the end of the test the storage system will force you to enter the license plate so that the data can be sent to the management system.
  - **Password**: set of letters and numbers that restrict the entry to unauthorized users in case the system is encrypted.

- **RYME text files**
  - Select the box in the middle left to activate this type of protocol.
  - **Input file location**: enter in this box the address where this data entry folder is located.
  - **Output file location**: enter in this box the address where this output data folder is located.
  - **Encrypt results**: check this box if you want to encrypt the results of the test, thus providing total security to the system since data will not be able to be modified.

2.2.5 Velneo



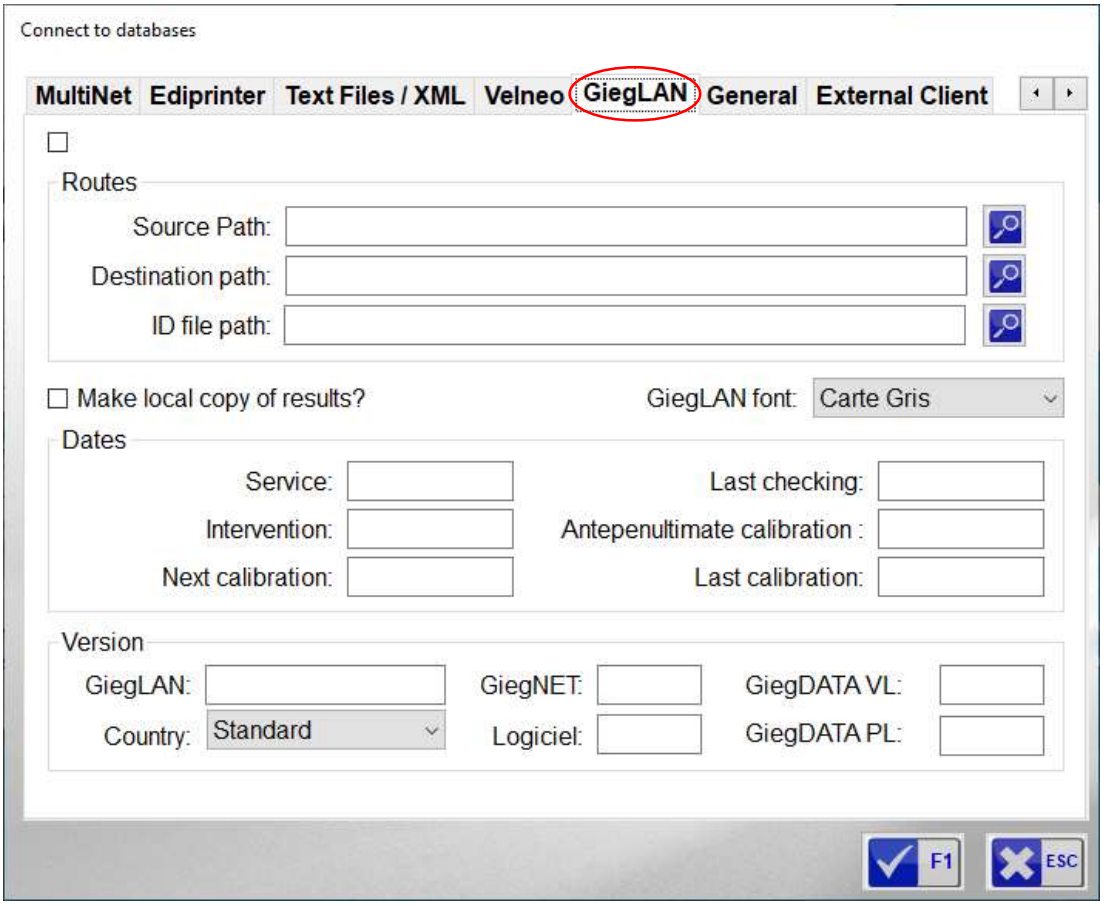
This system uses an application development platform called Velneo. It integrates its own database and programming language, and the RYME system sends the data in a format that Velneo is able to interpret and incorporate into its database

To configure this system, fill in the following fields:

- Select the box at the top left to activate this type of protocol.
- **Velneo application**: name of the user's Velneo application
- **Measurement equipment IP address**: IP address of the computer where is located the software of the machinery with which the tests are carried out.
- **Velneo IP server**: IP in which the User Management System is located.
- **Line break separator**: symbol used for the organization of data sending, separating the sent data frames.
- **Listening port**: port associated to the IP of the Velneo server.

- **Transmission port**: Not available. Reserved for future versions.

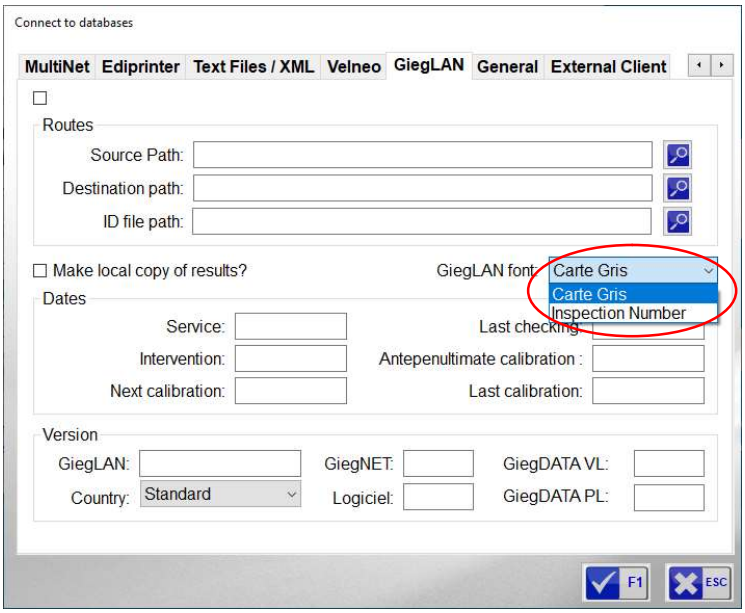
2.2.6 GiegLan



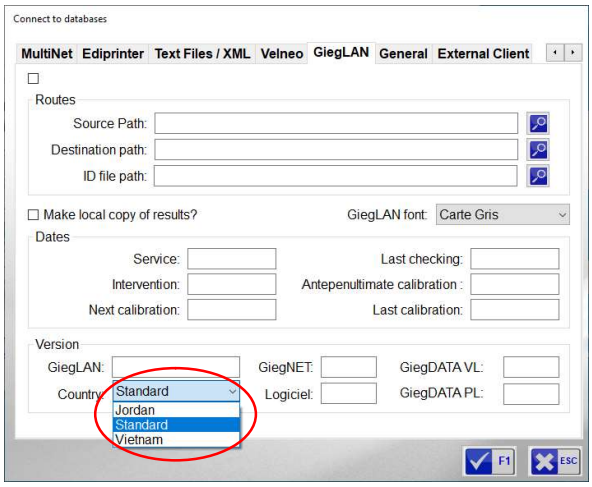
GiegLAN is the name of the management system used mainly in France and derived from other countries such as Morocco.

From this tab you can configure the various parameters of this management system:

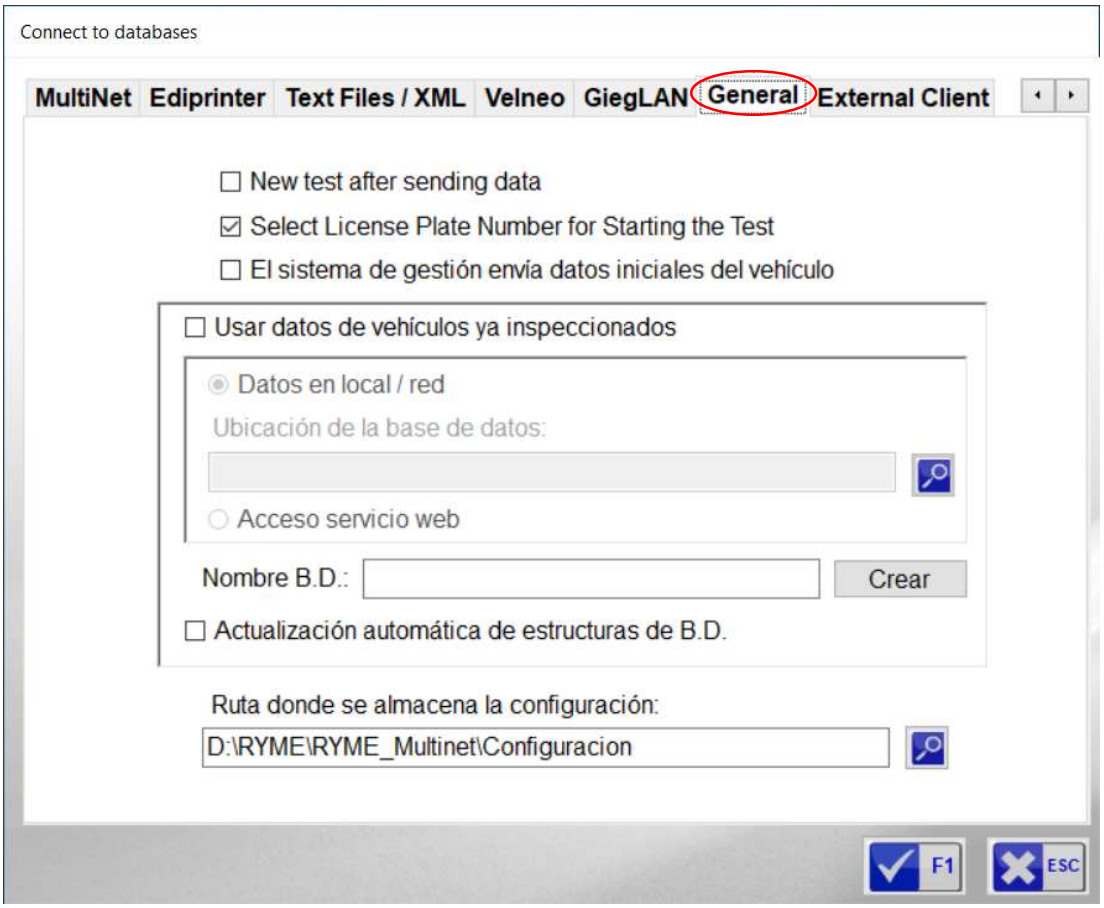
- Select the box at the top left to activate this type of protocol.
- **Routes:** enter in these boxes the address where these data route folders are located:
  - **Source path**: location of the input file.
  - **Destination path**: location of the output file.
  - **ID file path**: file containing the vehicle identification.
- **Make local copy of results**?: Check this box to create a copy of the test results in a local PC record.
- **GiegLAN font**: select the type of preferred font.



- **Dates**: introduce in these boxes the control dates of your equipment.
  - Service
  - Intervention
  - Next calibration
  - Last checking
  - Antepenultimate calibration
  - Last calibration
- **Version**: introduce in these boxes the versions of GiegXXX.
  - GiegLAN
  - GiegNET
  - Logiciel
  - GiegDATA VL
  - GiegDATA PL
- **Country**: select the country of installation.



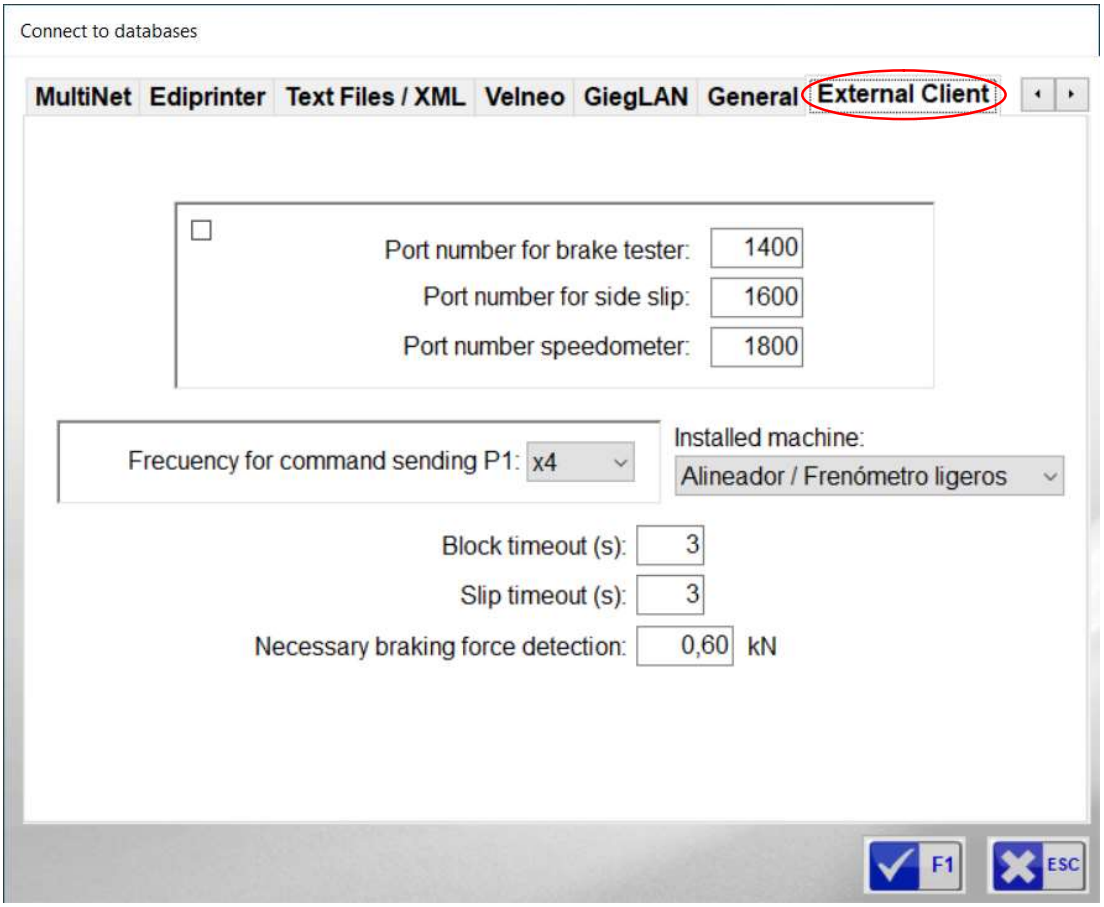
2.2.7 General



In this section, you will be able to select various functions that will be general when using the different applications:

- **New test after sending data**: select this option in case you want a new test to be automatically created after sending the data to the Management System.
- **Select vehicle registration plate at the beginning of the test**: select this option if you want to choose the registration with which you are going to work before the test.

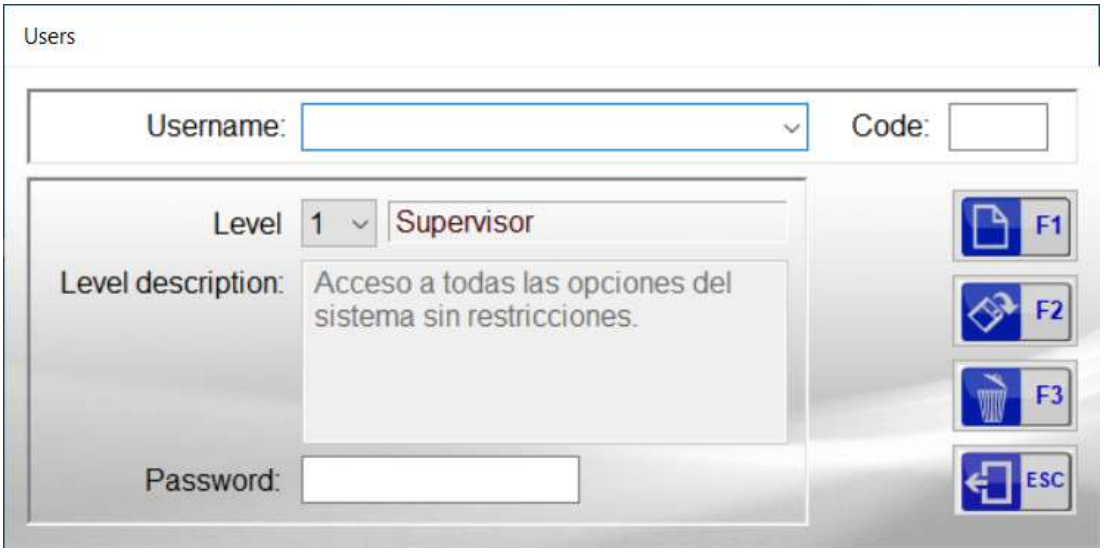
2.2.8 External client



In this section you will be able to create a configuration to establish a connection between the client and the server. This way, you will connect the different machines associated to the port number to be able to send the information externally. You can also vary the frequency of the P1 sending orders.

2.3 User configuration

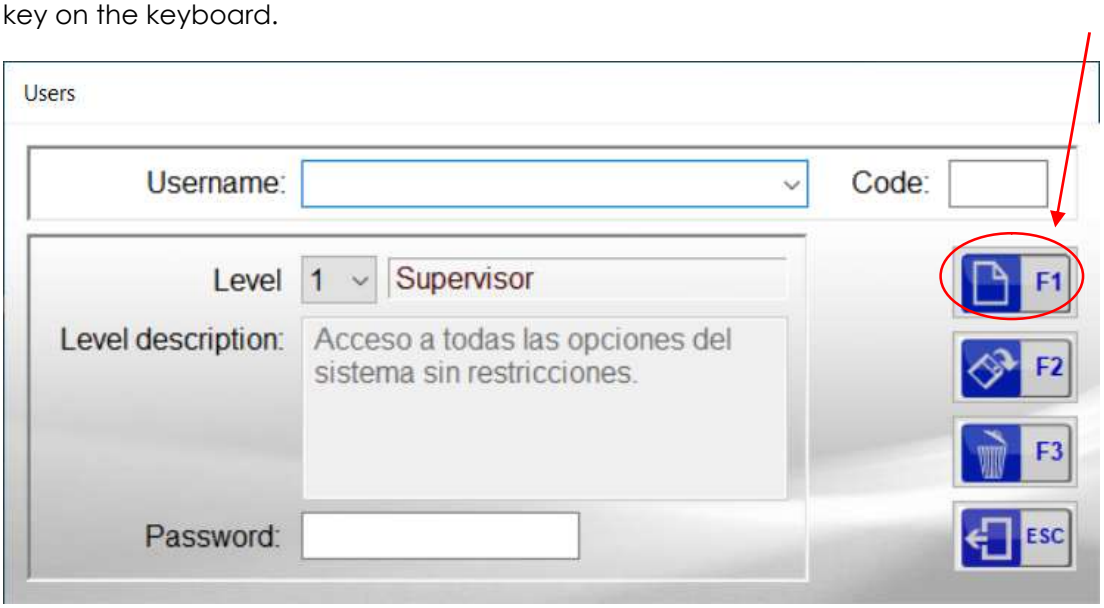
In this configuration screen (User Settings), you can either define a new user or delete a previously saved user.



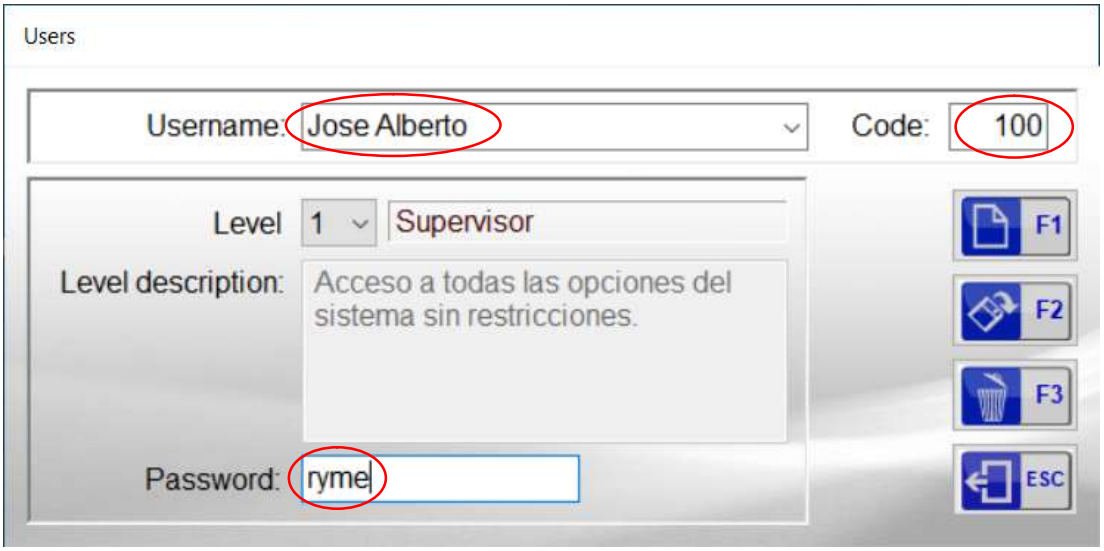
7 User registration display

2.3.1 Creating a new user

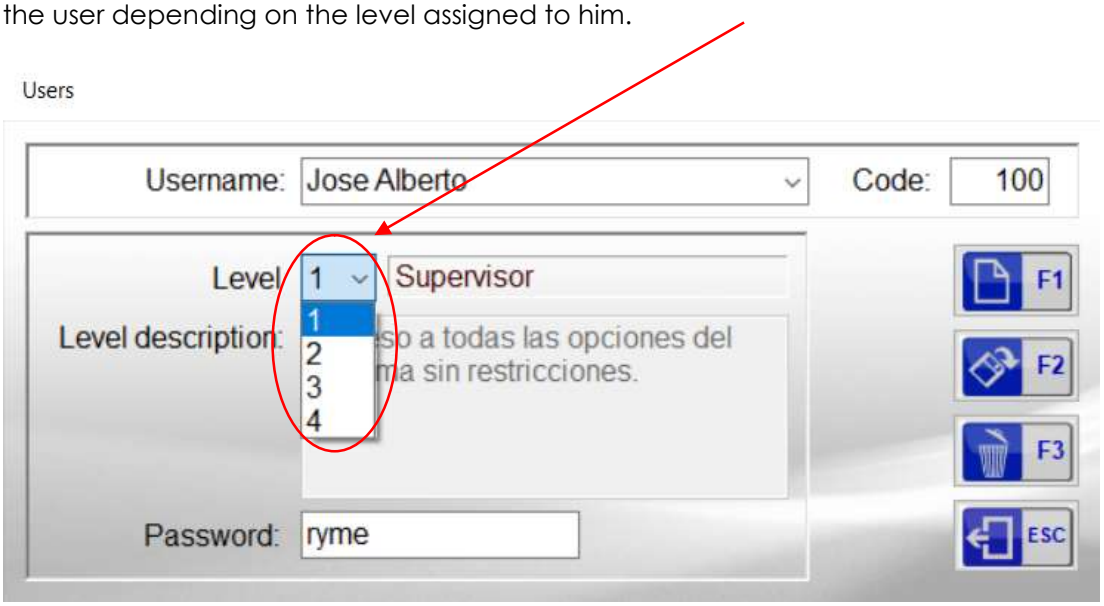
To create a new user, click on the 'New User' button with the mouse or press the 'F1' key on the keyboard.



And fill in the fields of the form.



In the 'Level' field, the user level is defined, i.e. a series of permissions are granted to the user depending on the level assigned to him.

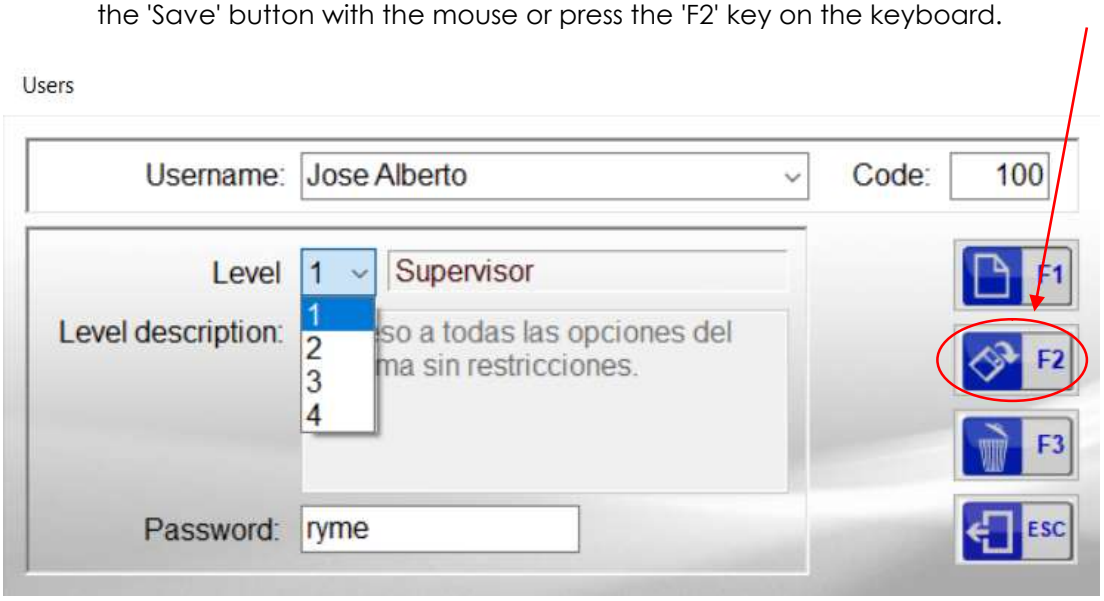


The different types of levels are:

- Supervisor: Supervisors have unrestricted access to all system options.
- Technician: Technicians have access to all system options except user control.
- Inspector: Inspectors can save, print and perform all available measurements. This type of level does not allow calibration/adjustment or configuration.
- User: Users can only take measurements of the different machines installed.

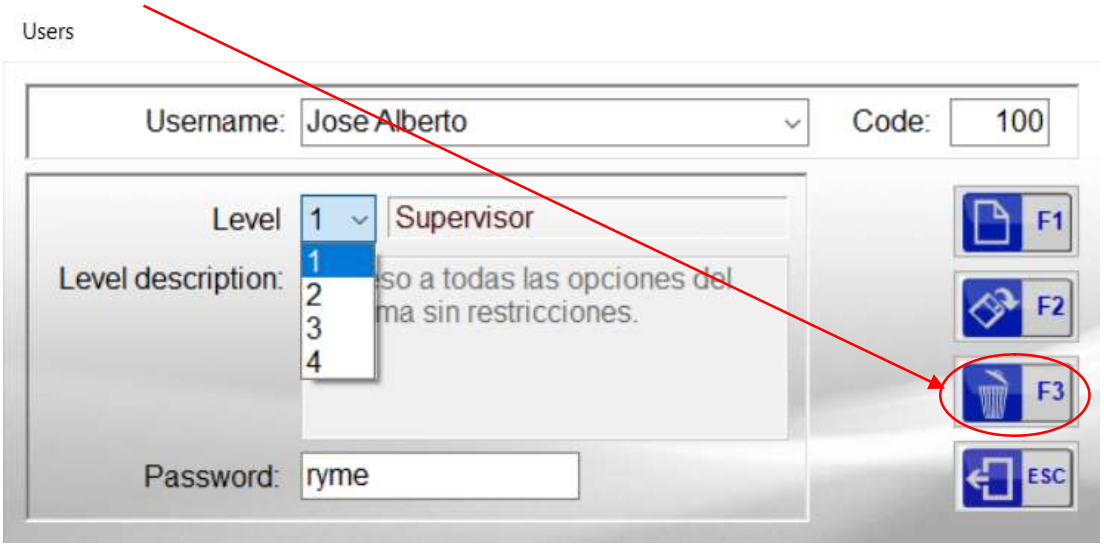
2.3.2 Save user

Once the fields have been completed, to save the user in the database, click on the 'Save' button with the mouse or press the 'F2' key on the keyboard.



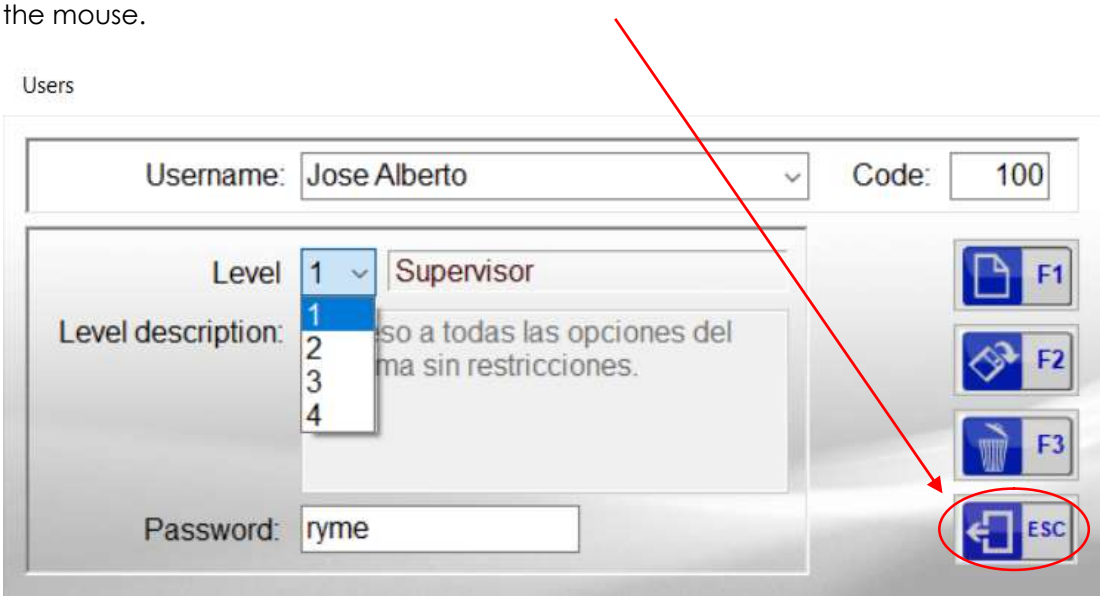
2.3.3 Delete user

To delete a user created and saved in the database, select that user from the drop-down menu in the 'User name' field and then click on the 'Delete' icon with the mouse or press the 'F3' key on the keyboard.



2.3.4 Exit

To exit the user screen, press the 'Esc' key on the keyboard or click on the icon with the mouse.

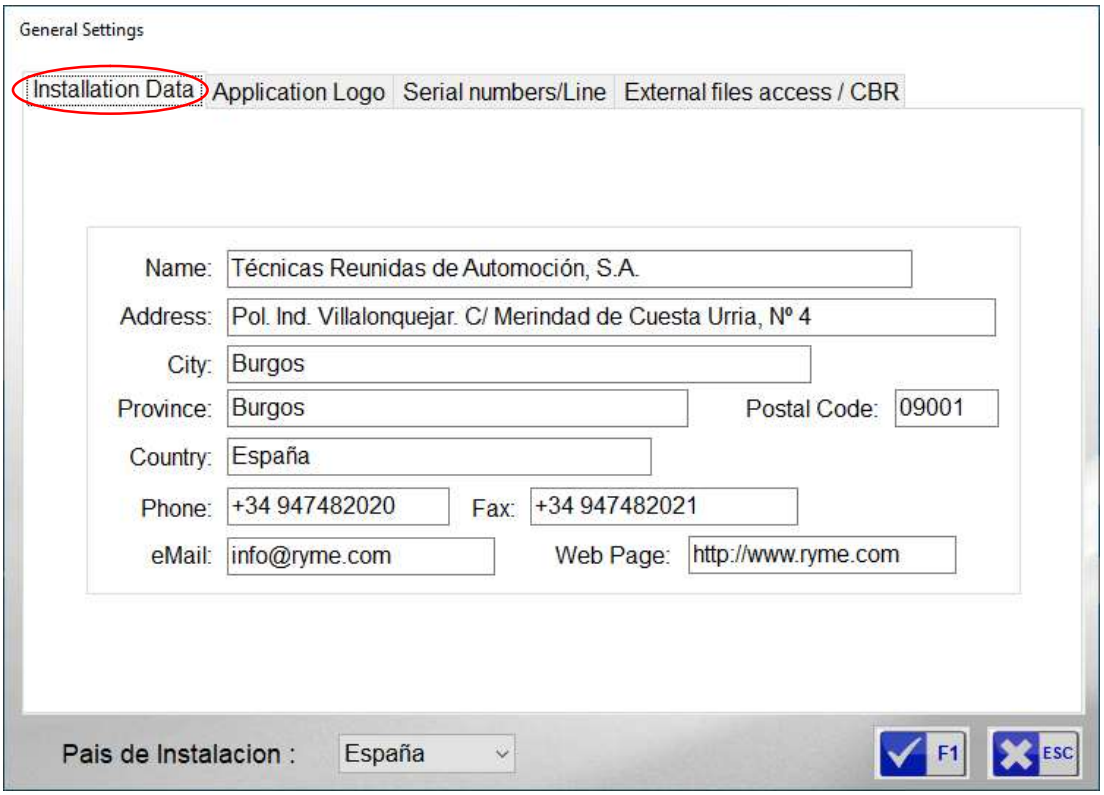


2.4 General configuration

In this general configuration screen (General Settings), you will be able to define or modify the general parameters of the software, such as company data and machine serial numbers.

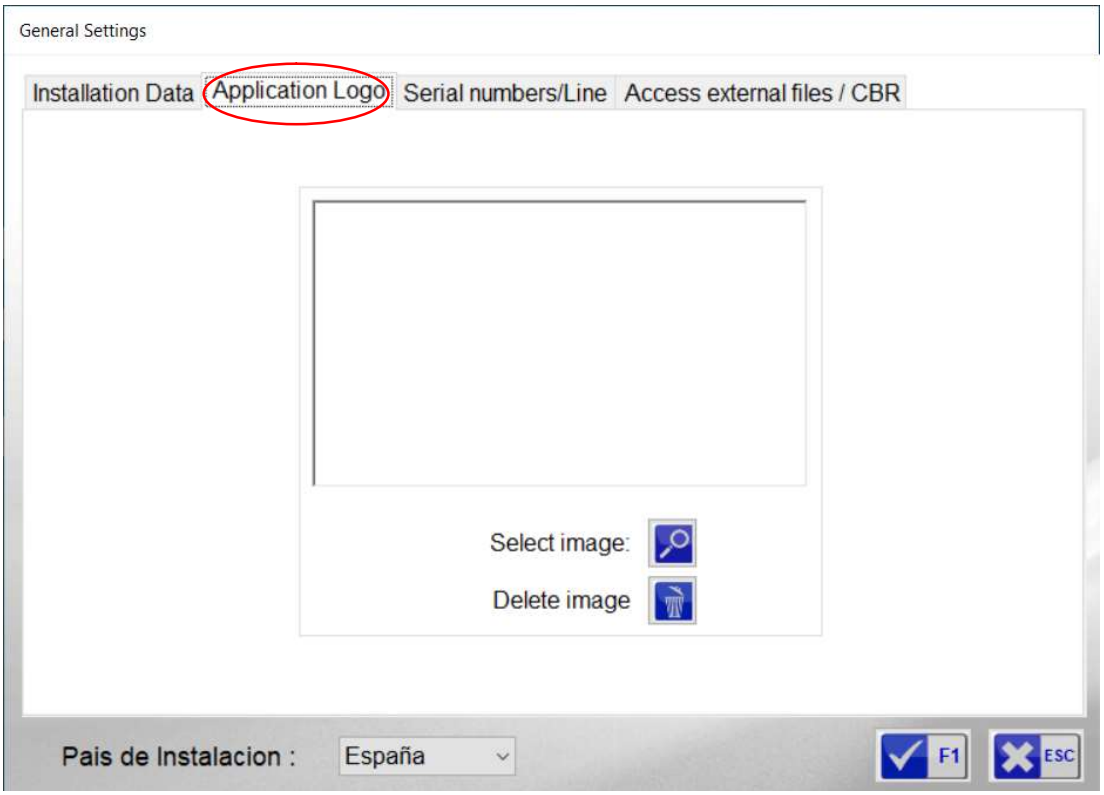
2.4.1 Installation Data

The 'Installation Data' screen refers to the data of the installation for technical inspection of vehicles. The entry of this data is used to display it later on the software screens and in reports.



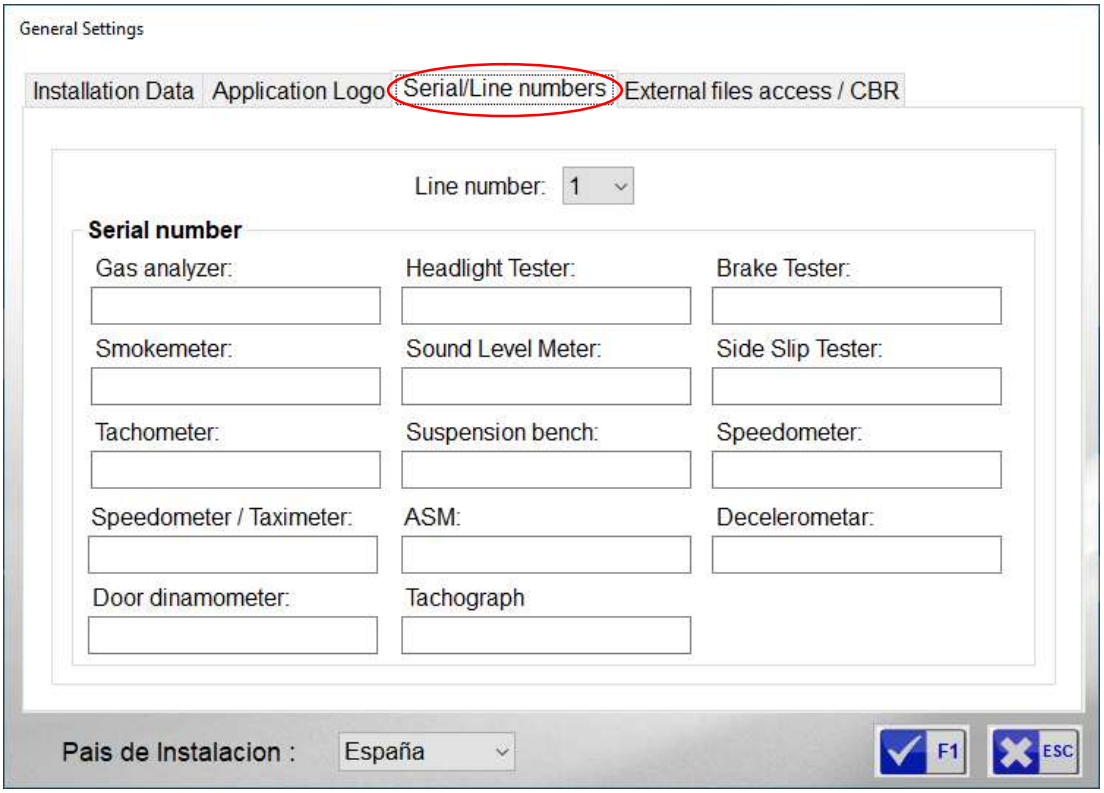
2.4.2 Application Logo

In the 'Application Logo' tab, you will be able to select an image to appear on the different screens of the software.



2.4.3 Serial/Line Numbers

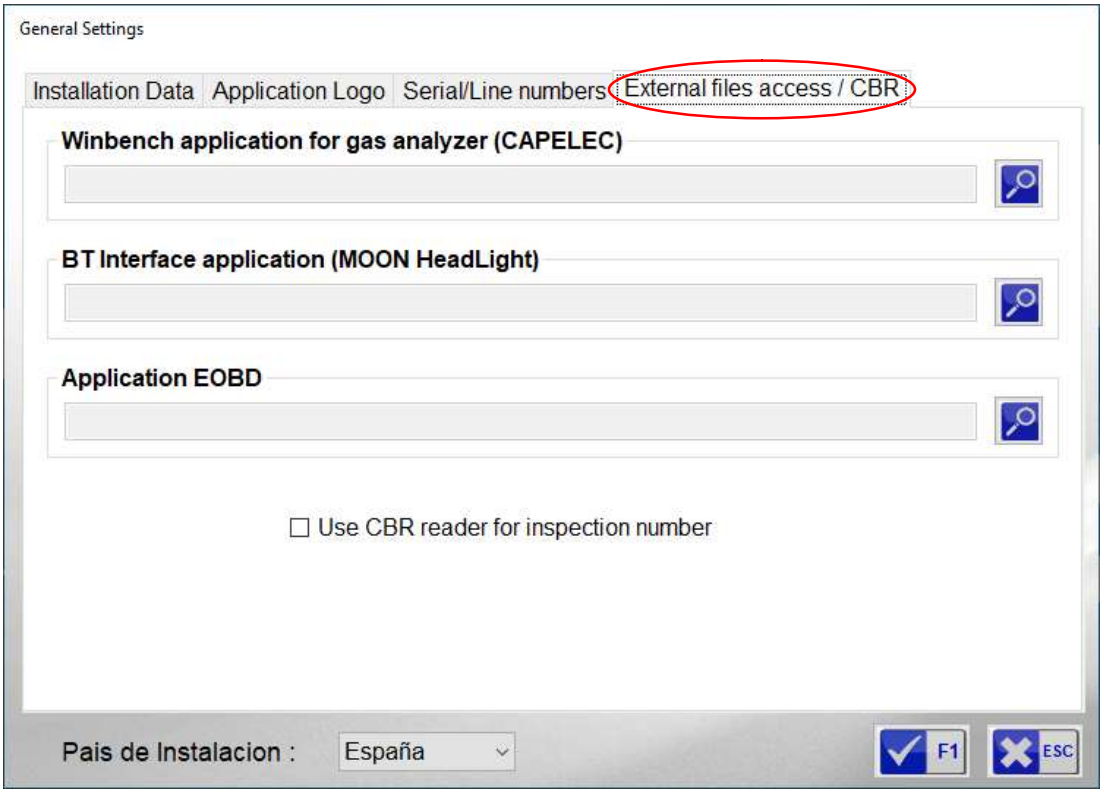
On the 'Serial / Line Numbers' tab, you must enter the serial numbers of the machines and peripheral devices installed and indicate on which line number they are installed if there is more than one line in the installation.



2.4.4 External File Access

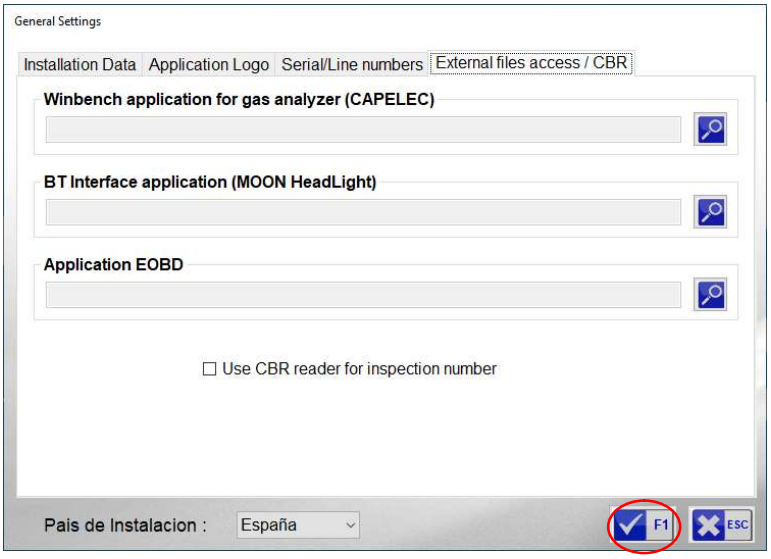
In the 'External File Access' screen, you can enter the paths to open external software or applications.

You can also enable the possibility of using a barcode reader for recording test data.



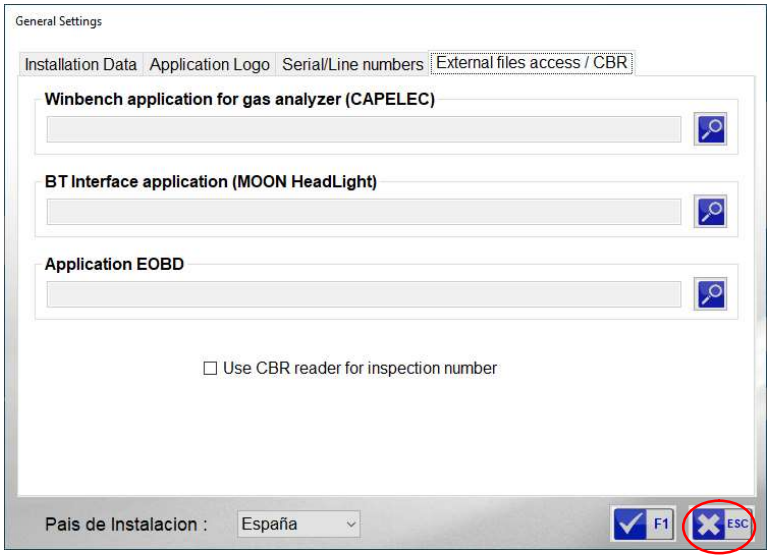
2.5 Save and Exit

When a change is made to the communications or general configuration of your equipment or peripheral devices and you want to save it, click on the icon with the mouse or press the 'F1' key on the keyboard.



This will automatically save and exit the window.

If you want to exit without saving the data click on the icon with the mouse or press the 'Esc' key on the keyboard.



3 Applications

Many applications are available for integration into the RYME_MultiNet. Each of these applications has its own manual and uses the corresponding sections of RYME_MultiNet automatically once saved. The possible applications are listed below:

- RYME_AnalizadorGases
- RYME_Opacímetro
- RYME_ASM Gases
- RYME_ASM Humos
- RYME_Regloscopio
- RYME_Sonómetro
- RYME_VelTax
- RYME_VTC
- RYME_PCE
- RYME_TreadReader
- RYME_DinamometroPuertas
- RYME_Tacografo
- RYME_Decelerometro
- RYME_GestionBD