



RFID CARD ENCODING SOFTWARE HELP



DATE: 2021/04/30
BY: ENKOA SYSTEM

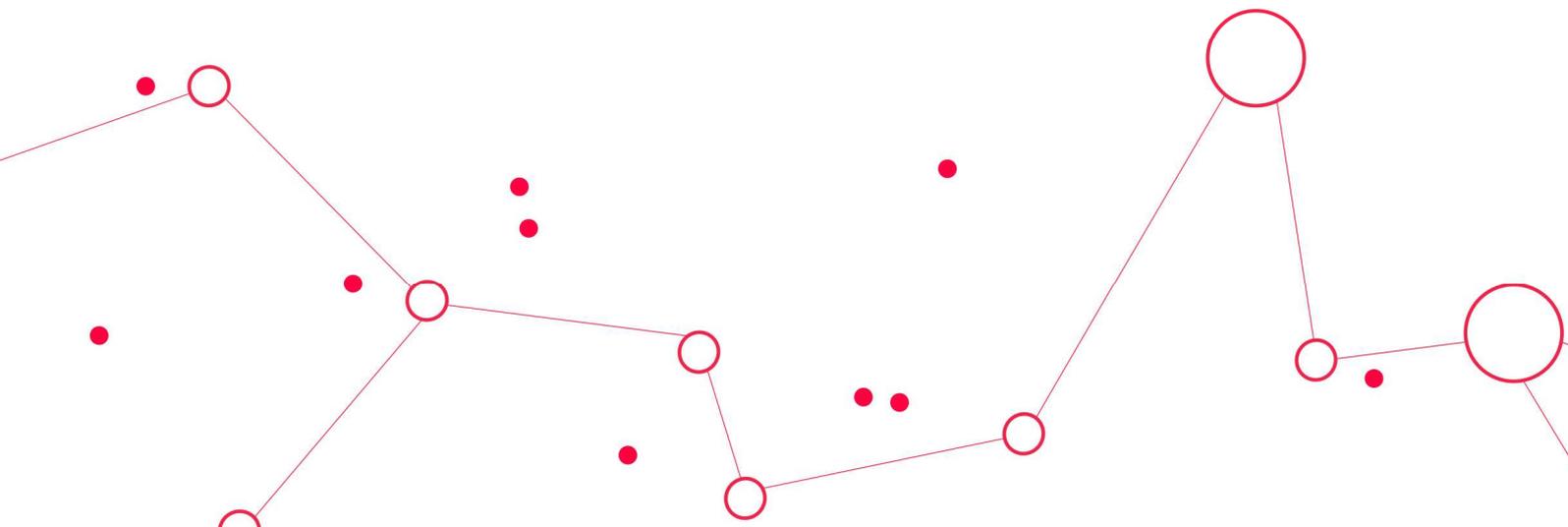


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IMPORTANT NOTE: your software may not include some of the software functions described here, depending on the package you have purchased.

1. System requirements

The rfid card encoding software must run on an IBM personal computer or compatible system under Windows 95, Windows 98, Windows NT, Windows 2000, Windows XP or Windows Vista. The software must meet the minimum requirements set out in the table below:

Minimum Requirements	Processor	Speed (Hz)	RAM (MB)	Hard drive (MB)	Display area (Pixels)	9600 baud dedicated serial ports
	Pentium™	200	32	20	1024x768	1

The software is single-user and is not intended to run on a local network, although it could work this way. This software can communicate with the rfid card reader/encoder whenever it is connected to the computer via the serial port. The software can only be installed on a single PC, otherwise the database it works with could bring about operational conflicts.

2. Introduction

The rfid card encoding software, as the name suggests, is used to encode rfid cards. These cards can be used in the different solutions offered, depending on the system purchased. Each card is different, meaning its effect is also different.

The rfid card encoder provided with this software is required in order to programme these cards. The encoder is connected via USB to the PC where the software is installed, and can only be used to programme cards for the system if connected correctly.

3. Installation

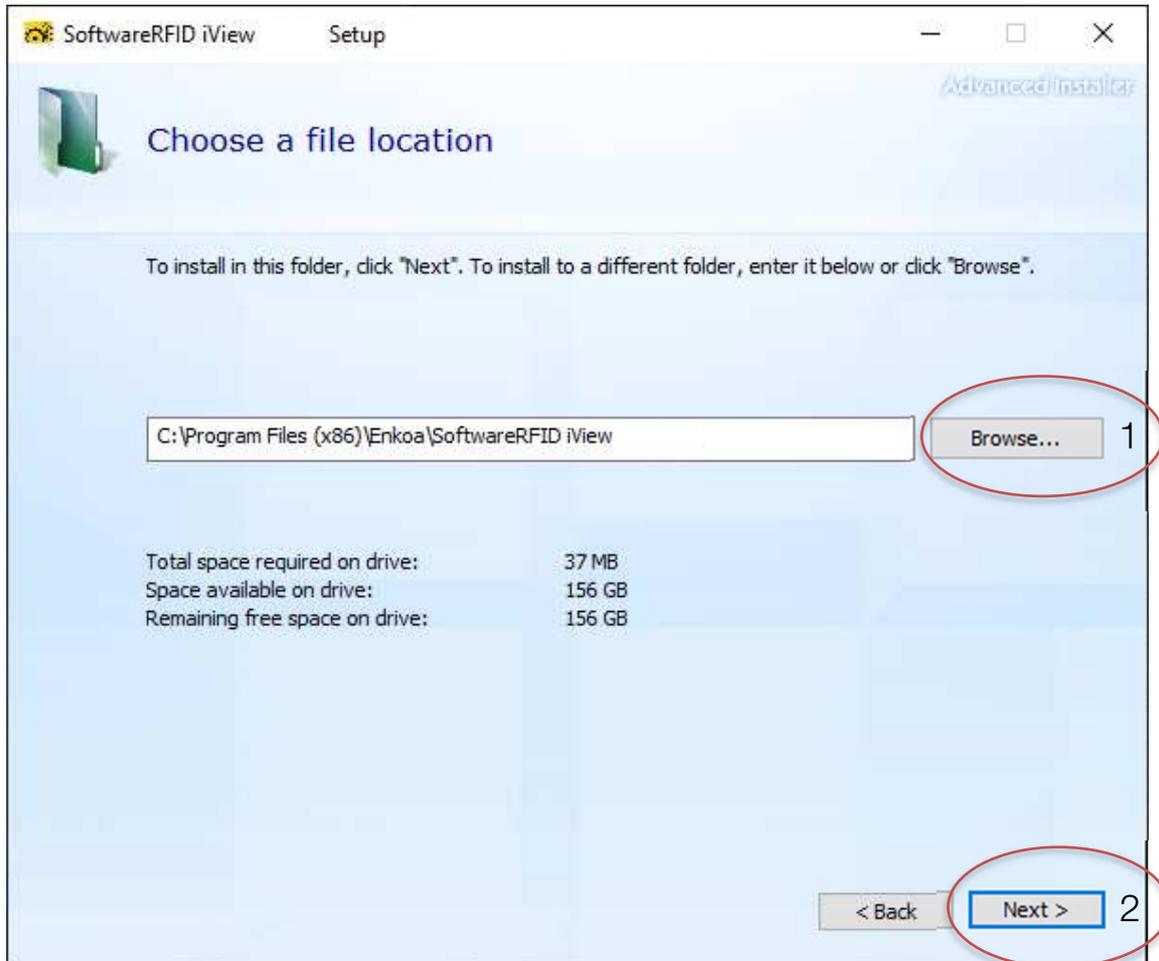
IMPORTANT NOTE: connect the reader/encoder to your PC after installing the software and logging in, NEVER BEFORE. Make sure the reader/encoder has established communication with the PC. This can be done in the communication option in the configuration menu.

1. The welcome screen is then shown. Click on *Next*.

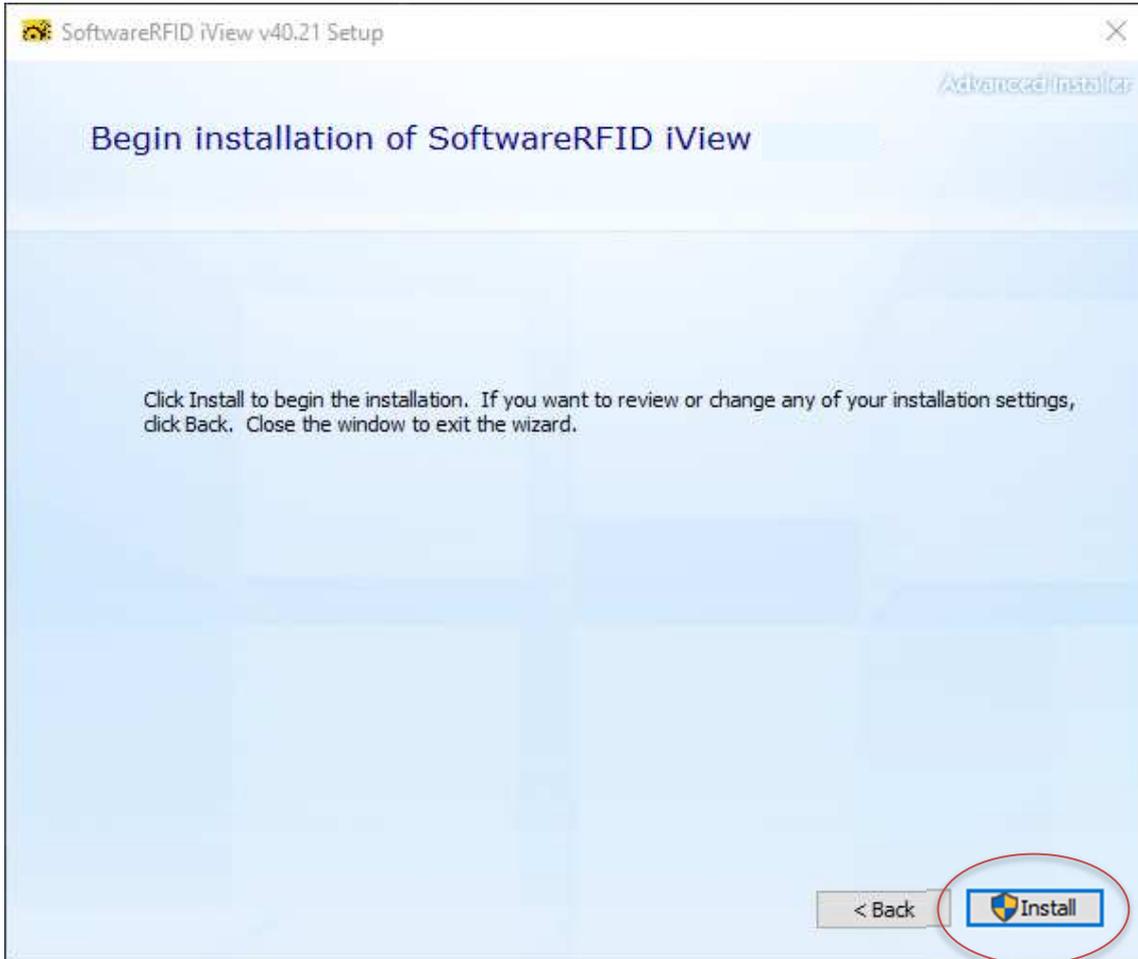


2. You must indicate where you want the software to be installed. To install it in the folder shown by default, click on

Next; otherwise select *Browse* (1) and click on *Next* (2) after specifying the folder.



3. Click on *Install* to start setup.



4. Stand by while setup completes.
5. Then click on the *Close* button to exit the setup programme.



6. An icon called rfid encoding software will have been added to your PC's Desktop; click on this to start using the programme that has just been installed.

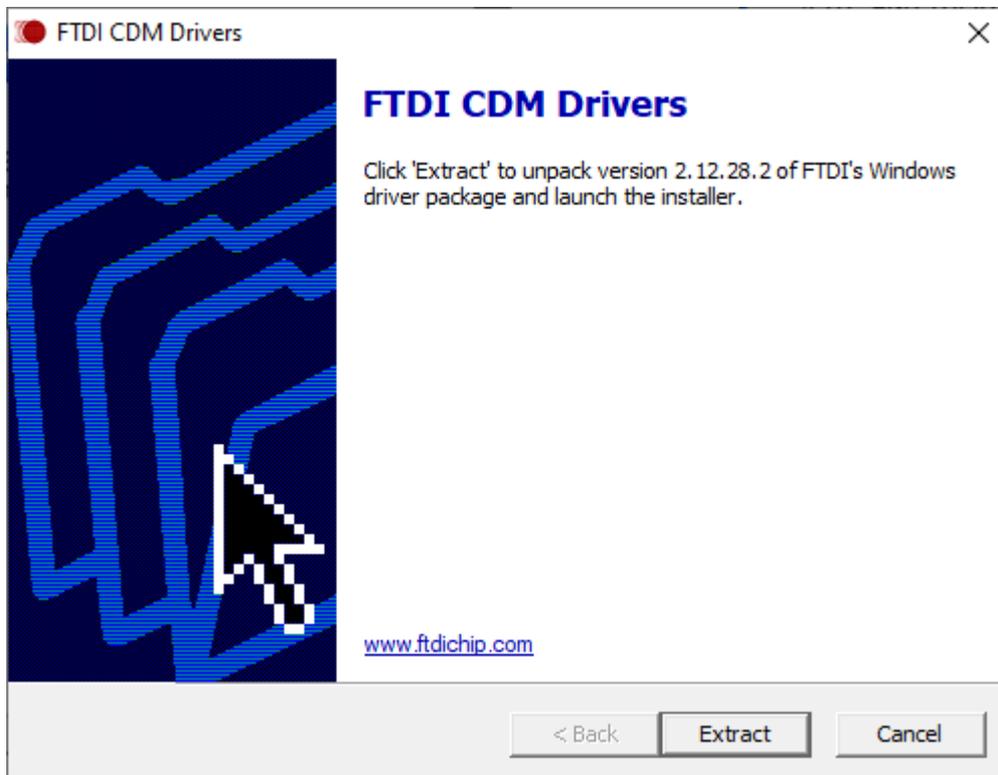
4. Programme

4.1 Starting the programme for the first time

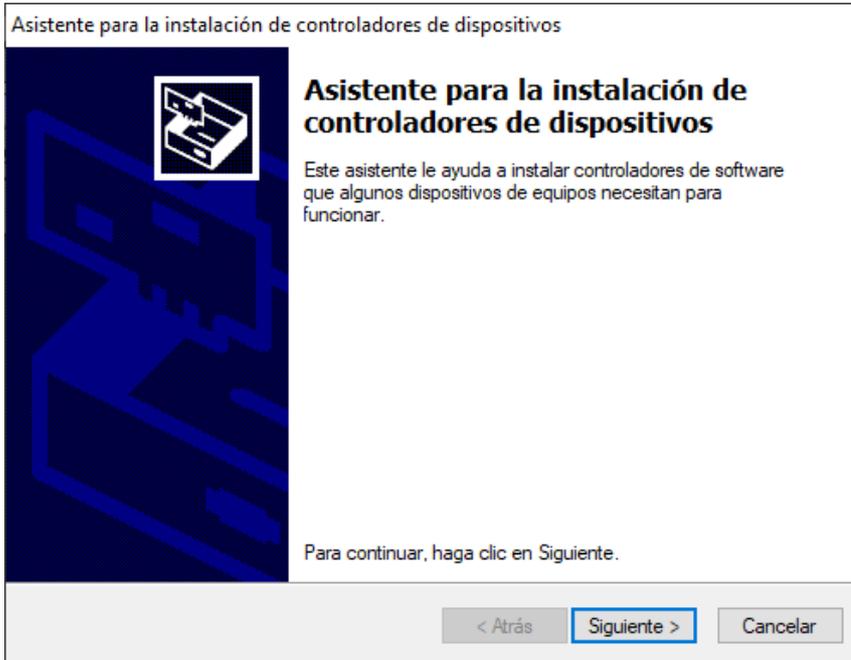
Two screens that do not usually appear are displayed when starting up for the first time after installing the software correctly.

The first one will allow us to install the encoder reader software. This should be done as follows:

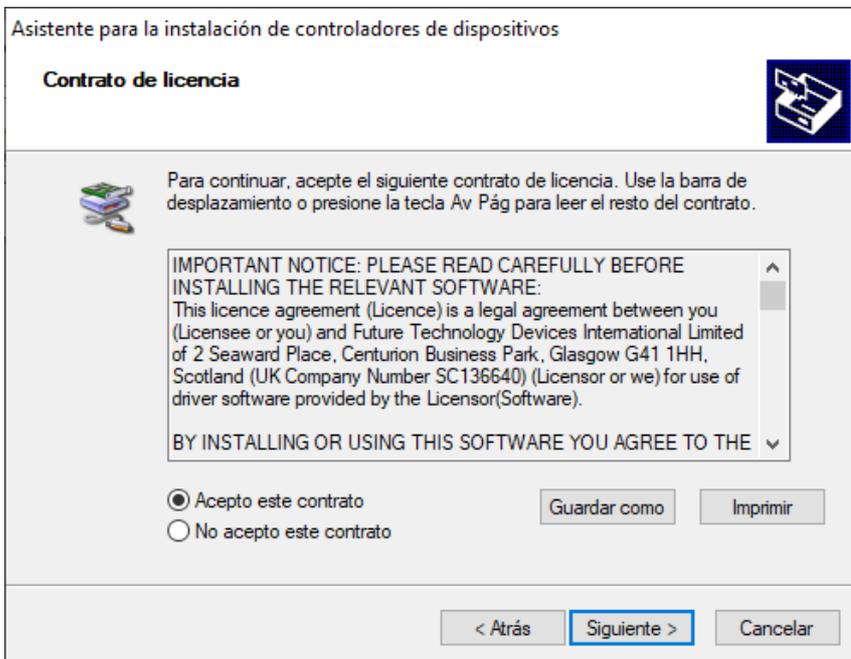
1. Select "Extract" on the next screen



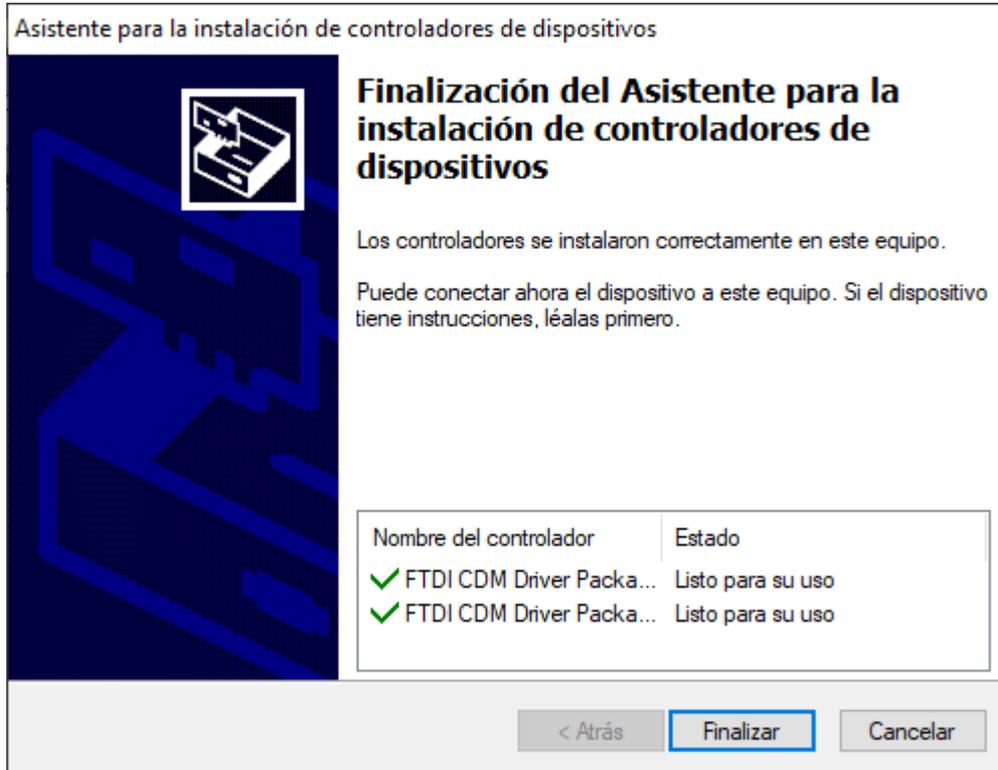
2. Select "Next" on the next screen



3. Accept the contract and click on "Next".



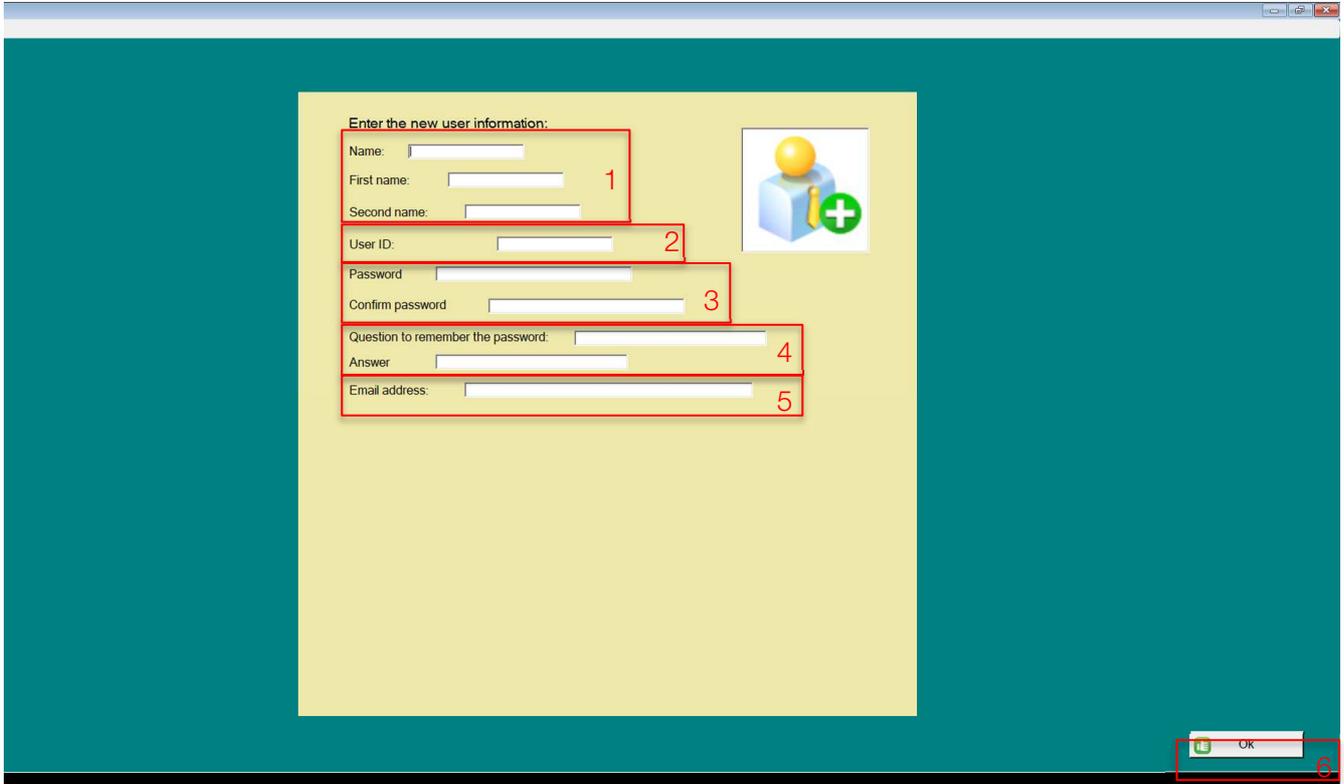
4. Select "Finish" on the next screen.



The second screen is displayed because there is no user in the application, meaning at least one user must be configured in order to access all the software options.

Restart the computer if the aforementioned setup screens do not appear when starting the programme.

The following screen will appear when the programme starts for the first time:



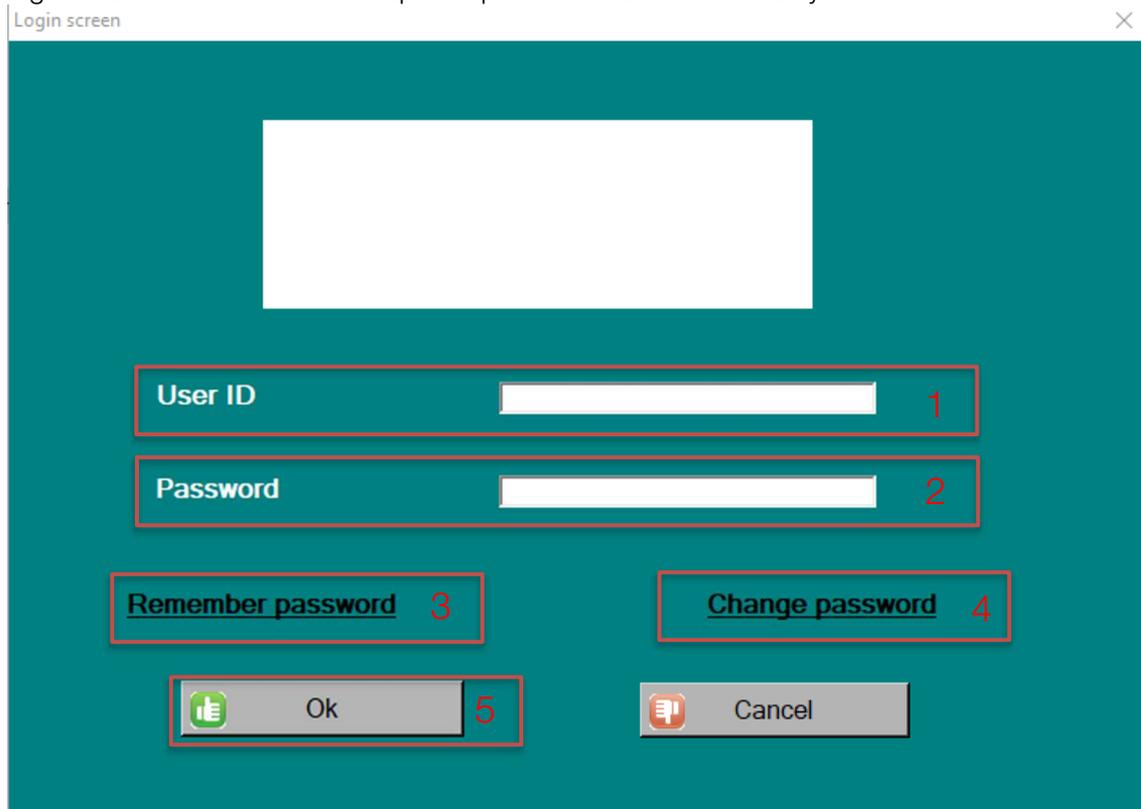
All fields must be filled in:

1. Enter the user's name and surname.
2. Enter the user's ID.
3. Enter the username and password in the respective boxes.
4. If the password is lost, the system will ask a security question in order to recover it. This question should be entered in this box along with its answer.
5. Enter the user's email address.

Once all the fields have been filled in, click on the *OK* (6) button to access the application.

4.2 Starting the programme normally

Except when running the software for the first time, the programme will normally ask us to log in in order to work with the options pre-selected for our security level.



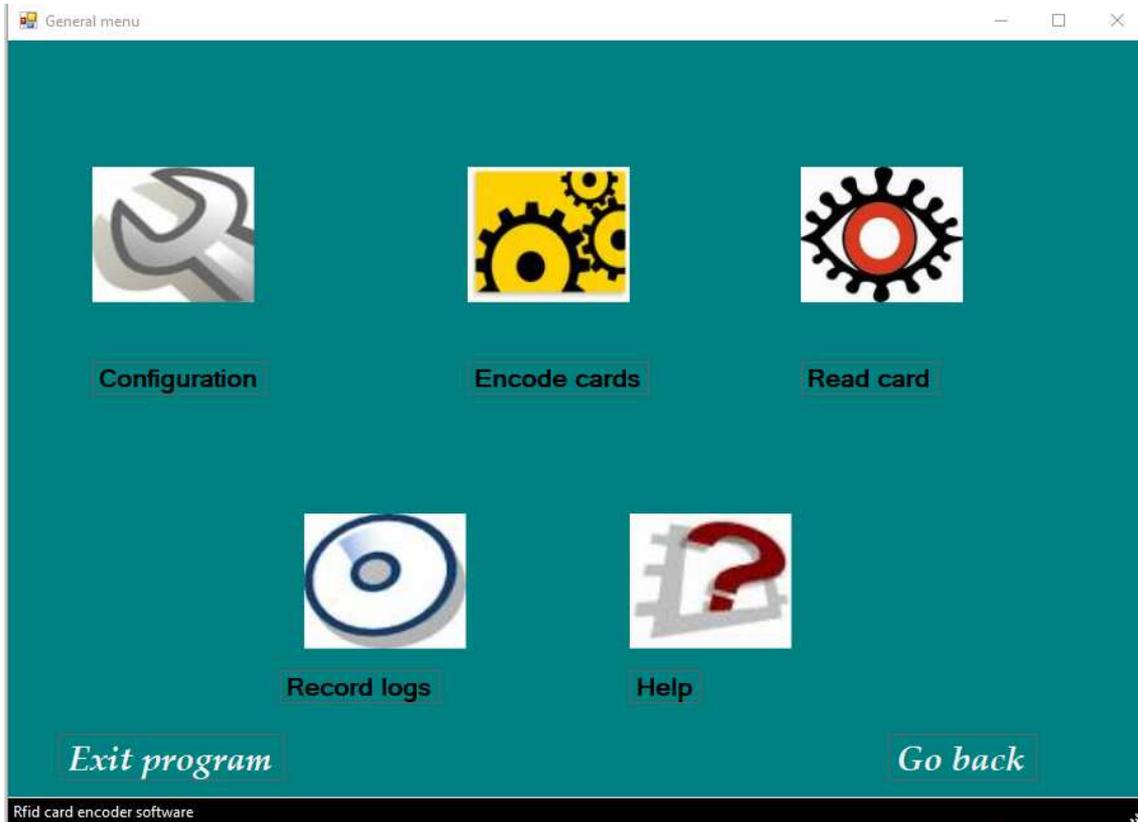
After logging in with your *username* (1) and *password* (2), select *OK* and enter the programme. You can also *change* (4) your password or receive a *reminder* (3) using the appropriate links.

4.3 Leaving the programme

You can leave the programme by clicking on the *Close* button in the screens displayed. The session you have logged out of cannot be recovered after leaving.

4.4 Main menu

After logging in, the first screen to appear will be the Main menu (the options available will depend on the system purchased).



Select one of the options shown on the screen, as explained in the chapters below.

4.4.1 Configuration menu

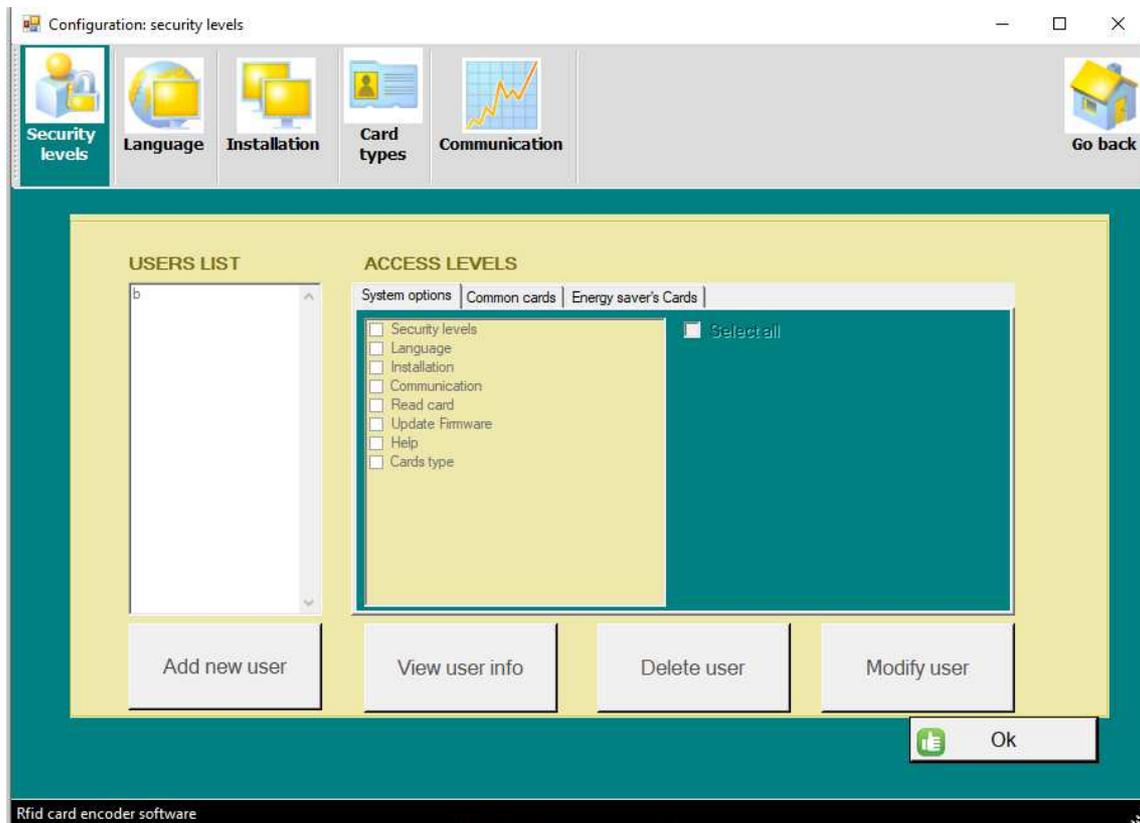


Here you will find all the options for configuring the application grouped together. These are:

1. Security levels (this option is not yet available)
2. Language
3. Installation
4. Card types
5. Communication

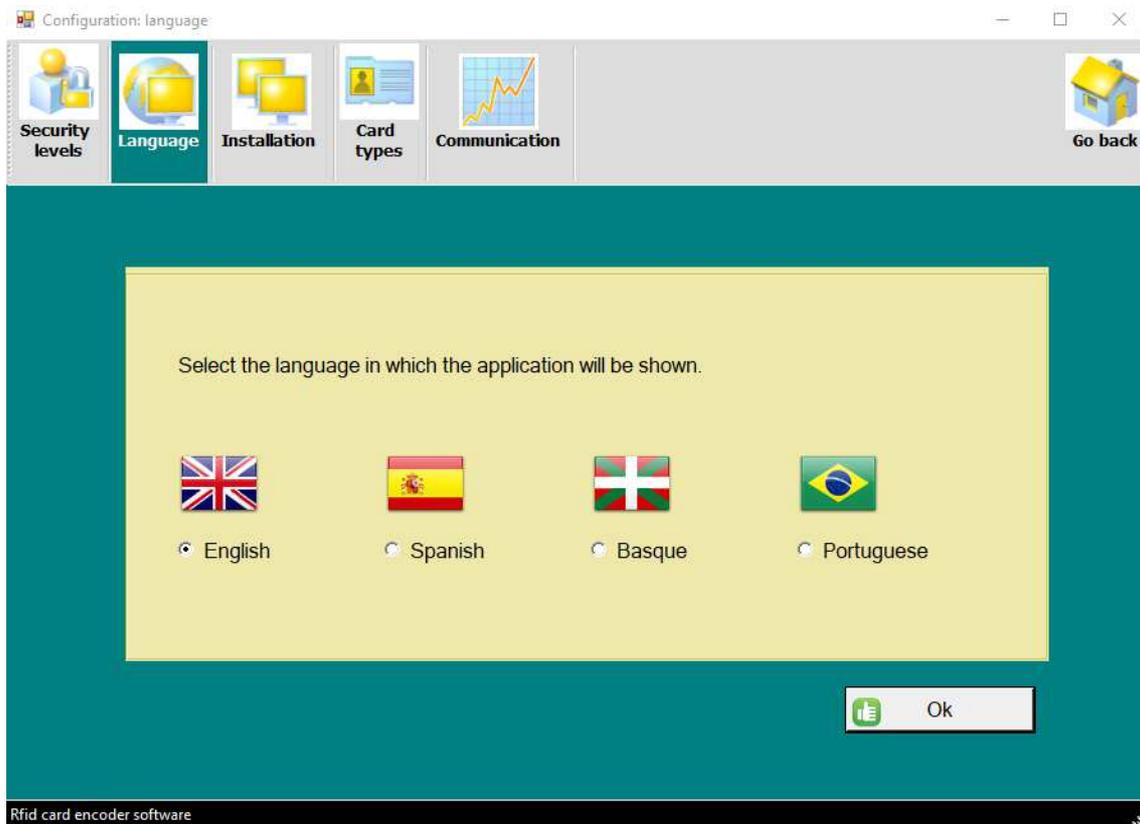
4.4.1.1 Security levels (not available)

This option can be used to configure the different access levels to the application by different users, as well as registering/deregistering new users. Users must be logged in in order to configure their application access levels.



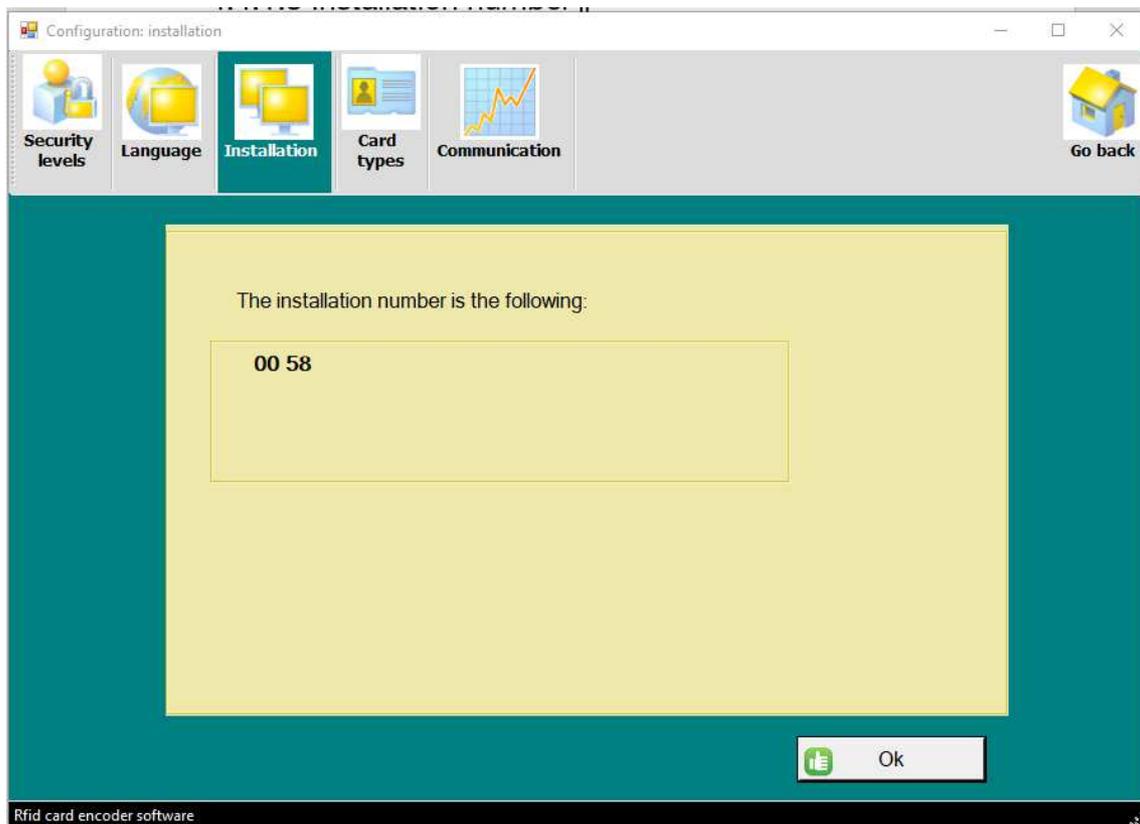
4.4.1.2. Language

Simply choose one of the following options in order to change the application's language, and then click on the *OK* button in the bottom right of the screen. By default, the application will start up in Spanish.



4.4.1.3 Installation number

When accessing this tab, you will first be asked to enter a software installation number. Each software installation has a unique identification number, which is displayed in this configuration menu option after reading or writing from a card. This number cannot be modified or deleted.

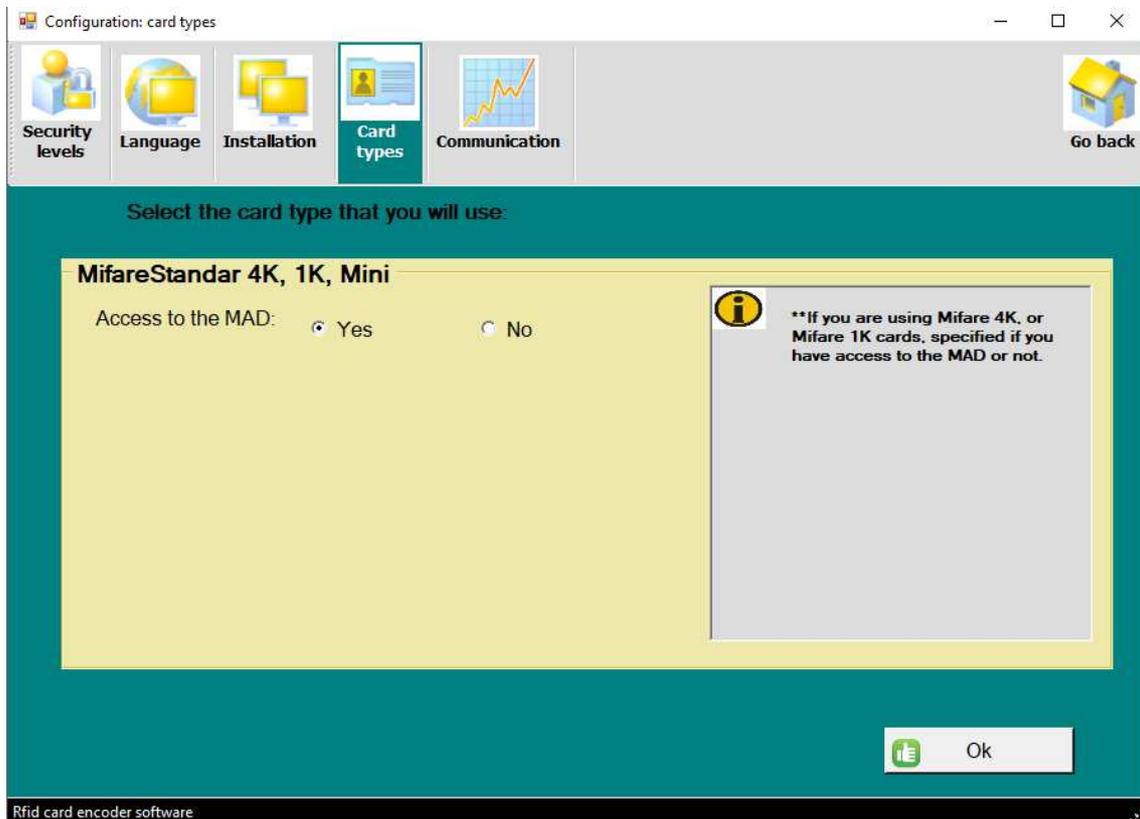


Modify installation number: enter the number to be configured in decimal format (this may vary from hexadecimal, depending on the customer).
Obtain card installation number: this will read the card in the encoder and display its programmed installation number.

4.4.1.4 Type of cards

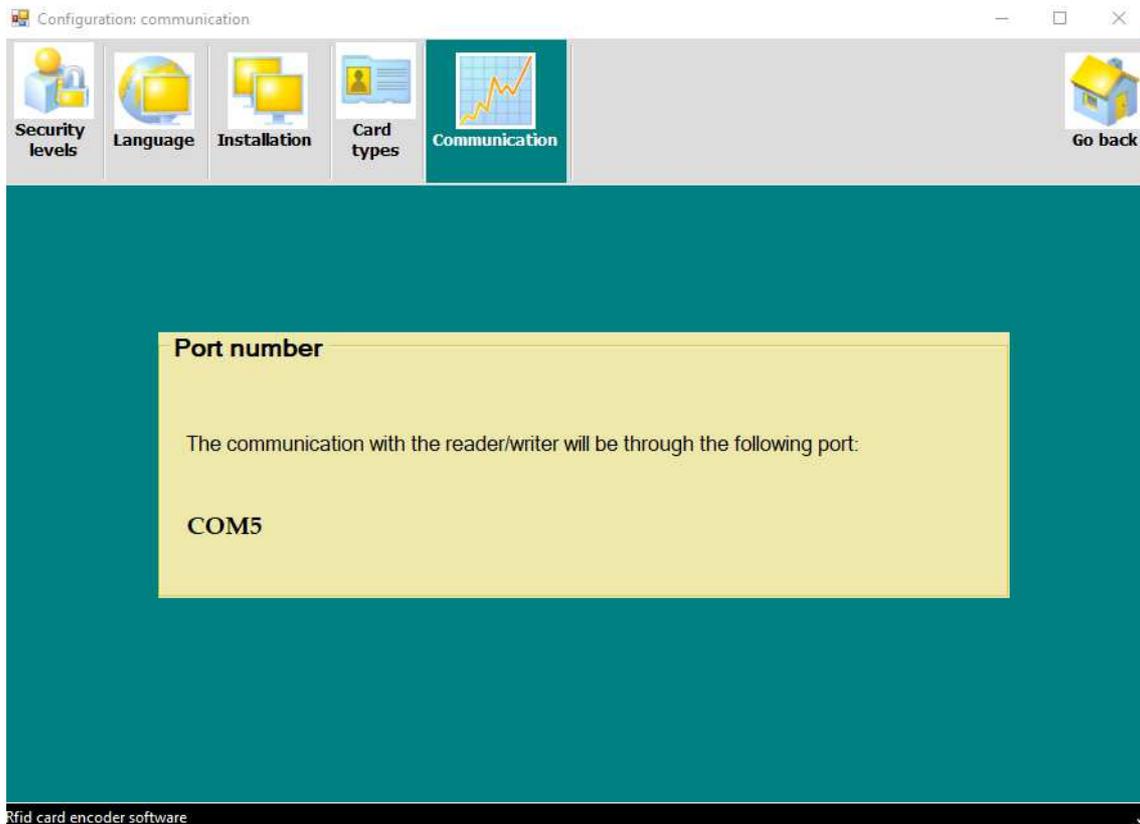
In this section the software lets us choose the type of card to be programmed. Only MiFare Standard mini and 1 Kb cards and MiFare Ultralight cards can be programmed. For the former, we will have the option to specify whether we have access to the card's MAD or not. If you do not have access to the MAD, you will have to specify which sector the cards will be programmed in.

We can also specify whether we want the card to be programmed starting from a fixed sector or not.



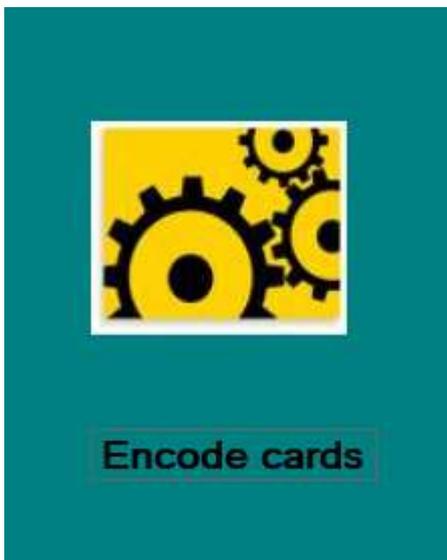
4.4.1.5. Communication

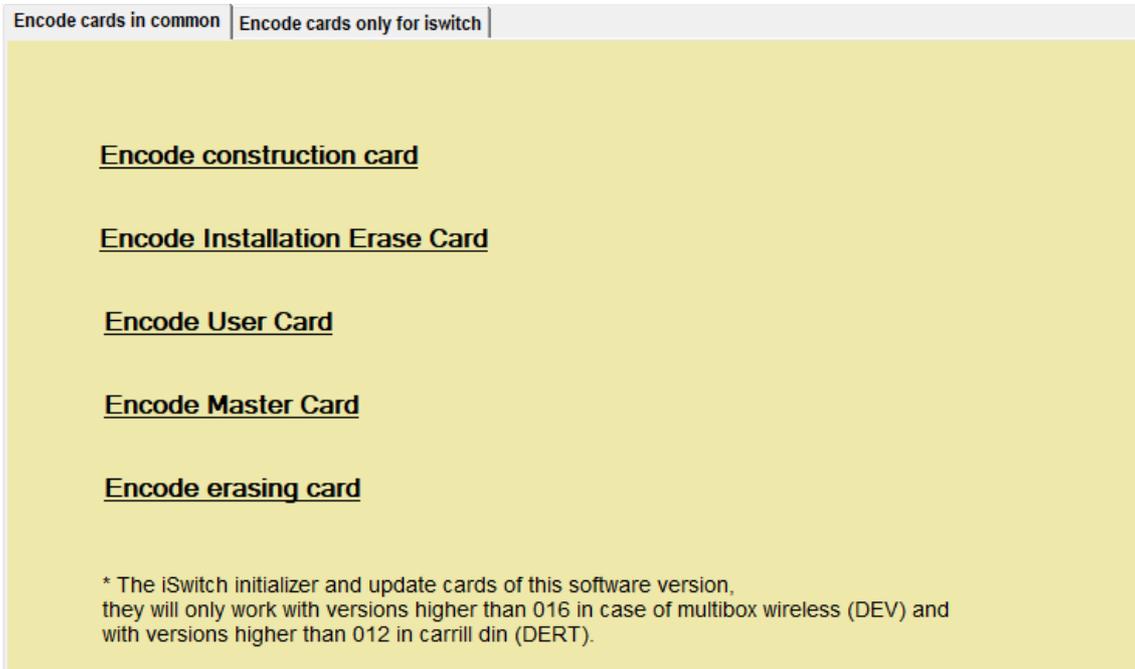
The port the reader/encoder is communicating through is shown, and cannot be modified from the software since the PC itself assigns the first unused port. The encoder/reader is connected to the PC.



4.4.2 Card encoder menu

The software has the option to programme different types of cards. To programme a card, simply click on the name of the type of card to be programmed, provided the reader is connected to the PC and the card to be programmed is on top of the programming device; cards cannot be programmed if either condition is not met.





Whenever the encoder is connected, the card can be programmed by bringing it close to the reader and clicking on one of the options on screen. A guest card or an employee/master card cannot be programmed on MIFARE ULTRALIGHT cards.

A message such as the following will appear on screen if the card has been programmed correctly:



If the card has not been programmed correctly, the reader/encoder will beep and its LED will blink with a red light. A message will also be displayed on screen to indicate that the card has not been programmed correctly.



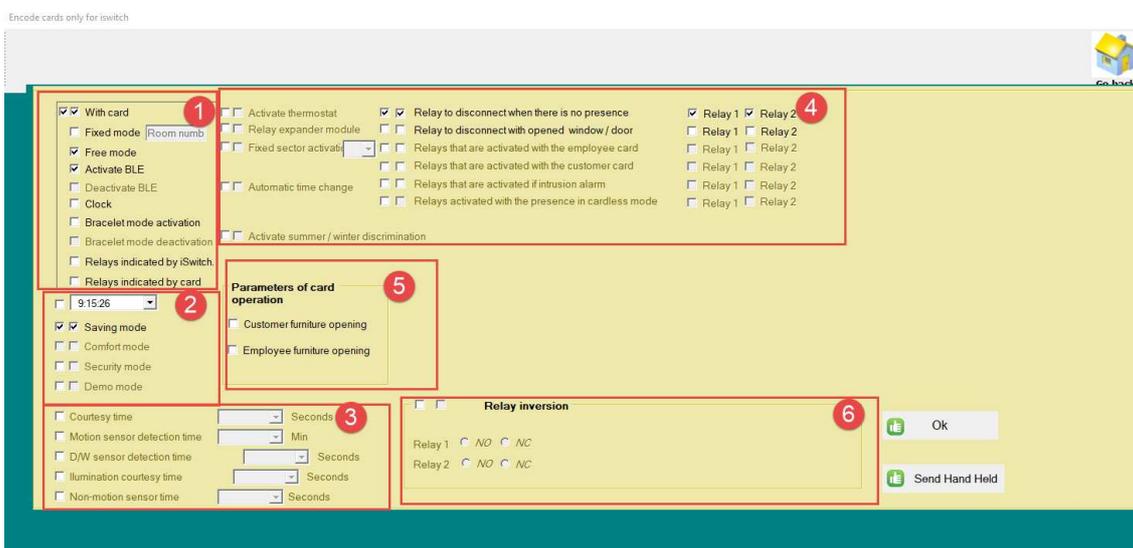
Below is an explanation of what each card consists of:

CARDS FOR DISCONNECTORS

- **Initialiser Card:** This card will be used to configure the installation number and room number, along with the operating mode of the unit in question. The data are specified in the menu that we will see later. All parameters in the menu must be filled in in order to create this type of card.
- **Sensor list deleting card:** This card will delete the information of the sensors synced with the disconnecter. The sync section in the guide for the sensor to be synced must be followed in order to sync again.
- **Sync card:** This card enables the disconnecter's sync mode in order to sync it with the different sensors; follow the specific guide for each sensor in order to sync correctly.

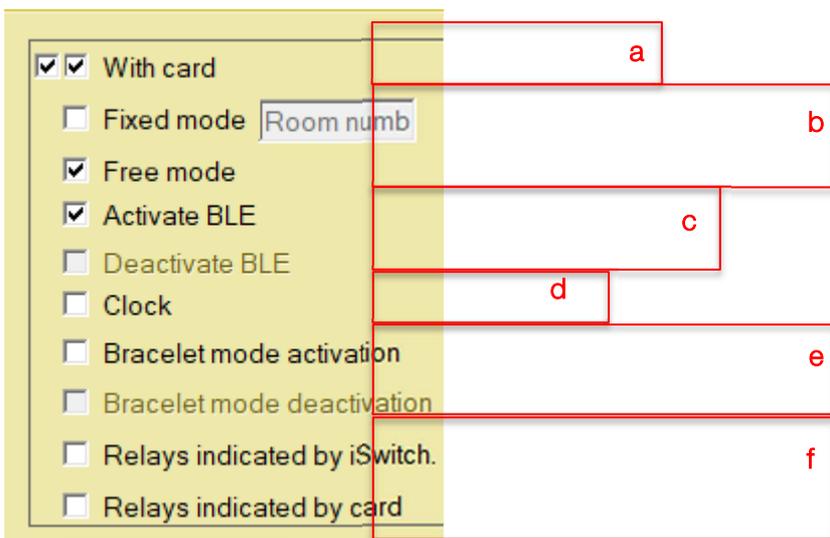
- Updater card:** This card can be used to change the disconnecter's configuration parameters, except for the installation number and room number. The menu to create the updater card is identical to the one for the initialiser card. The only difference is that in this case we only need to fill in the data per block rather than all the parameters before creating the card, i.e. when creating a card that only changes the energy-saver's operating mode from cardless to card mode, we must also fill in the fields that are activated when selecting the required option.
- Installation deleting card:** This card can be used to delete the installation and room number for our disconnecter and initialise it again.
- Guest card:** This card is programmed with the associated room number, for access to this disconnecter only.
- Employee/master card:** This card is programmed with a master key capable of activating any disconnecter in the installation.

PARAMETERS TO BE CONFIGURED ON THE INITIALISER CARD



The card can be encoded or sent to the HandHeld device. The process is the same, we will have to select the desired parameters and then select one option or another depending on what we want to do. To send the card to the HandHeld, it will ask us to give it a name. For more information see the HandHeld manual.

1. Section:

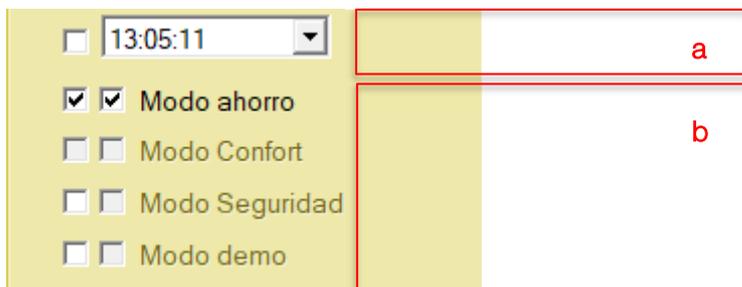


- a. This option is used to specify whether we want the disconnecter to initialise in card or no-card mode.
 - i. **Card mode:** The guest must insert the card in the energy-saver in order to power the room; courtesy time will be activated if it is removed from the device, cutting power to the room once this courtesy time has elapsed.
 - ii. **No-card mode:** The energy-saver is sensor-based and does not require the use of any type of card.

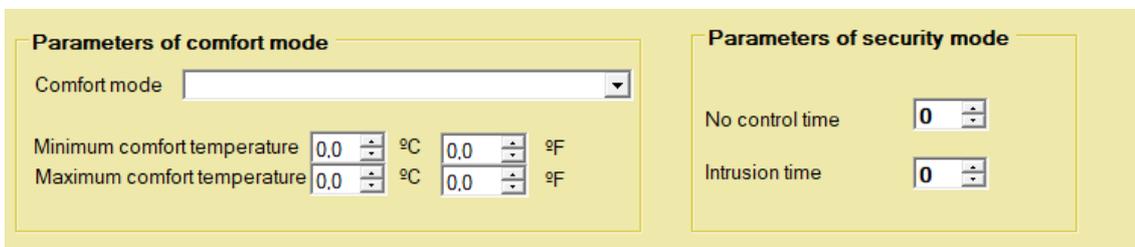
- b. Select whether our disconnecter will operate in free or fixed mode, specifying the room number whenever fixed mode is selected.
 - i. **Free mode:** All guest cards are accepted by the energy-saver when selecting this option.
 - ii. **Fixed mode:** Each guest card only works in its room when selecting this option.

- c. Select whether our disconnecter's BLE will be enabled or disabled once the unit is initialised. The user's smartphone credentials can be used to activate the energy-saver whenever this option is enabled. This option is only available for devices with the BLE function.
- d. If the device has a clock, remember to check this mode.
- e. **Bracelet mode:** Also known as pulse mode, the energy-saver is activated by the presence of a card or bracelet, and remains on even if the card is removed. The energy-saver remains on thanks to sensors. The energy-saver will enter courtesy time whenever the presence of the card or bracelet is detected again, just as if the card were removed from the cardholder in card mode.
- f. These options indicate which relay start-up configuration we want the disconnecter to read. If energy-saver is selected, the disconnecter will enable or disable the relays as indicated on the initialiser card; if card is selected, the disconnecter will enable or disable the relays as indicated on the guest or master card.

2. Section:



- a. This option is used to indicate the date and time to initialise our disconnecter's clock, where appropriate.
- b. Select the modes we want our disconnecter to work in. One or several modes can be selected, but they must be compatible with each other (comfort mode cannot be selected if energy-saving mode is selected, and vice versa). The following options will appear if comfort and safety modes are selected.

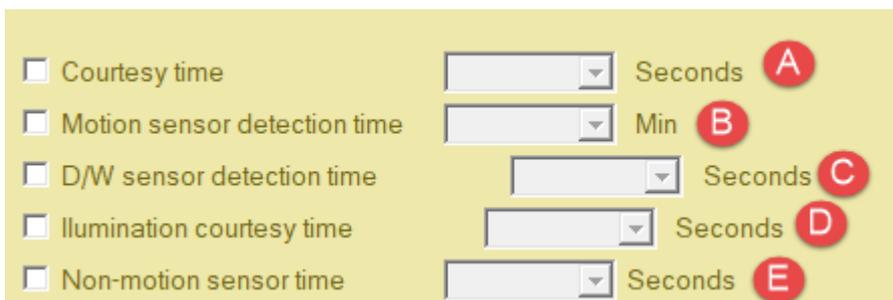


- i. **Energy-Saving Mode:** when there is no presence in the room, either because the guest has removed the card or because the sensor-based system has so decided, one or more relays are disconnected in order to save energy. One or several relays disconnect in order to save energy if an energy-saving condition is detected (no motion, window opened, etc.) while there is presence in the room or a card inserted.
- ii. **Comfort mode:** when there is no presence in the room, either because the guest has removed the card or because the sensor-based system has so decided, it enters Comfort mode, controlling one or more relays to maintain the preset comfort temperature.
Comfort mode is entered if an energy-saving condition is detected (no motion) while there is presence in the room or a card inserted, controlling one or more relays in order to maintain the preset comfort temperature. The relay or relays will always disconnect if the door or window opens, in order to ensure energy savings.
- iii. **Safety Mode:** when working in energy-saver WITH a card and the guest leaves the room, it is interpreted that there is an intrusion in the room (no card inserted in the energy-saver) whenever motion is detected after a preset time. When intrusion is detected, the energy-saver connects one or several relays, which give the alarm signal. Safety mode is not allowed in NON-card mode. In CARD mode, safety mode is enabled when the guest removes the card from the energy-saver. There would be two times to configure:

 - NoControlTime:* configurable time from the card being taken out of the energy-saver and starting to control safety.
 - Intrusion Time:* configurable time there must be motion in the room in order to interpret it as an intrusion.
- iv. **DEMO:** special operating mode intended for commercial product demonstrations. Both the sensors and the energy-savers have accelerated operation for

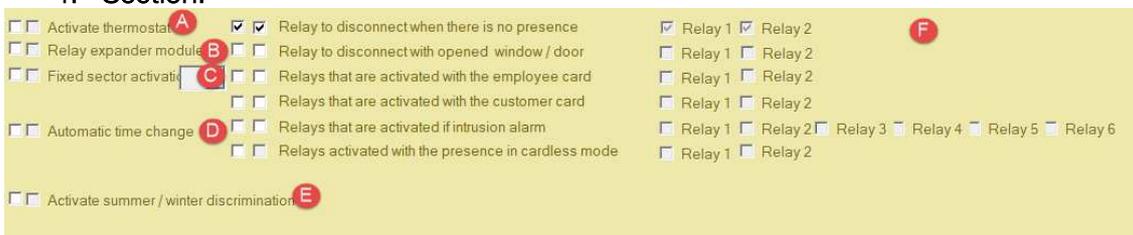
demonstrations. Courtesy times and volumetric detection are interpreted differently in this mode. The sensors must also be configured by hardware in demo mode.

3. Section:



- a. This represents room courtesy time, i.e. the time the room light remains on from the moment the guest removes the card from the iSwitch energy-saver.
- b. NO motion detection time for the volumetric sensors or motion sensors. The iSwitch energy-saver uses this time to determine that there is nobody in the room. Possible values would be from 5 to 1270 minutes.
- c. This represents open door or window detection time before disconnecting the iSwitch energy-saving relay(s).
- d. It is the time the relays will remain on once the disconnecter receives the shut-down signal from one of the sensor elements.
- e. Motion sensor No Detection Time in door mode after door closing

4. Section:



- a. This option allows the disconnecter's internal thermostat to be activated to monitor room temperature; this option must be enabled in order to use Comfort Mode.
- b. This option will be selected if a relay extender module is available, and up to 6 relays can be selected instead of 2.
- c. Select the fixed sector we want our disconnecter to start reading the card from.
- d. Selecting this option will allow us to activate the change of time by connecting to the associated gateway.
- e. The available options are:

Summer mode

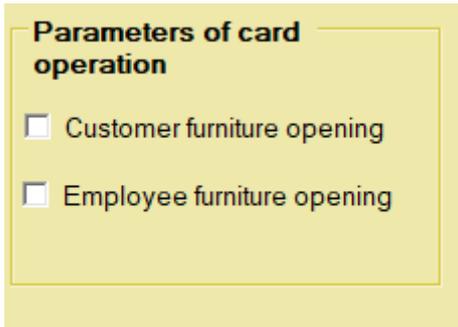
The iSwitch energy-saver will enable the X relay if room temperature is higher than the pre-set maximum comfort temperature in summer mode. This will turn on the air conditioning and lower the room temperature. As soon as the configured minimum comfort temperature is reached, the energy-saver will disable the X relay and turn off the air conditioning, which will not come on again until the configured maximum comfort temperature is reached.

Winter mode

If winter mode is configured, the X relay (heating) will come on when the temperature drops below the minimum temperature and go off when it rises above the configured maximum temperature. No Summer/Winter discrimination: if the iSwitch energy-saver is configured without seasonal discrimination, the X relay will be enabled whenever room temperature is outside of the preset comfort temperature range.

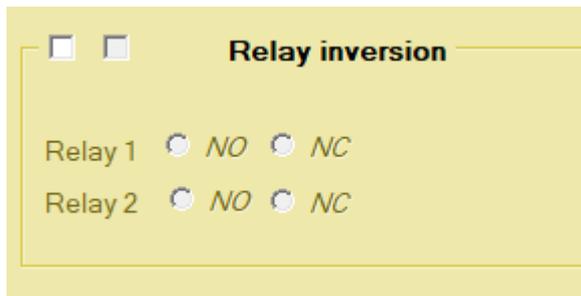
- f. Select the configuration for the relays in this section by choosing which option we want for each one.

5. Section



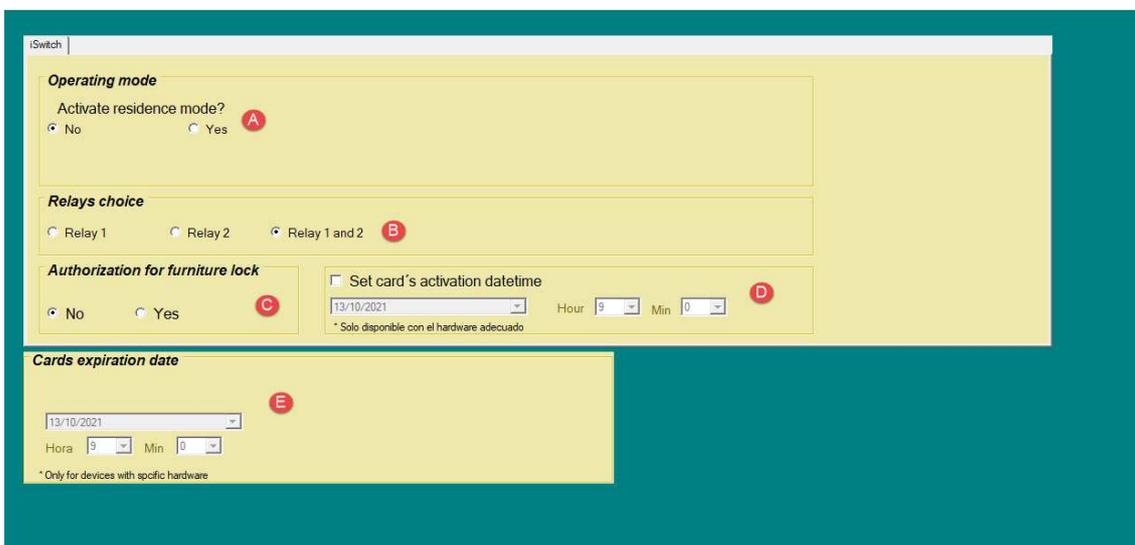
In this section, which is only available when initialising in card mode, we will indicate whether we want the furniture lock installed in the room to open automatically when the card is inserted in the disconnecter. We can select whether to open it using a guest card or an employee card.

6. Section



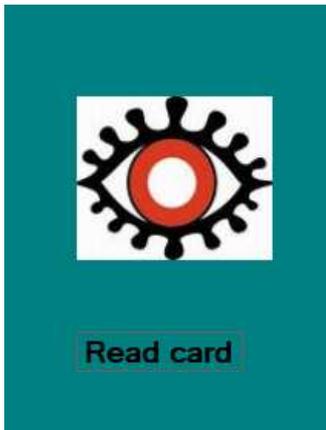
Here we can choose whether to initialise the disconnecter so the relays are normally open or normally closed.

PARAMETERS TO CONFIGURE IN USER OR EMPLOYEE CARD

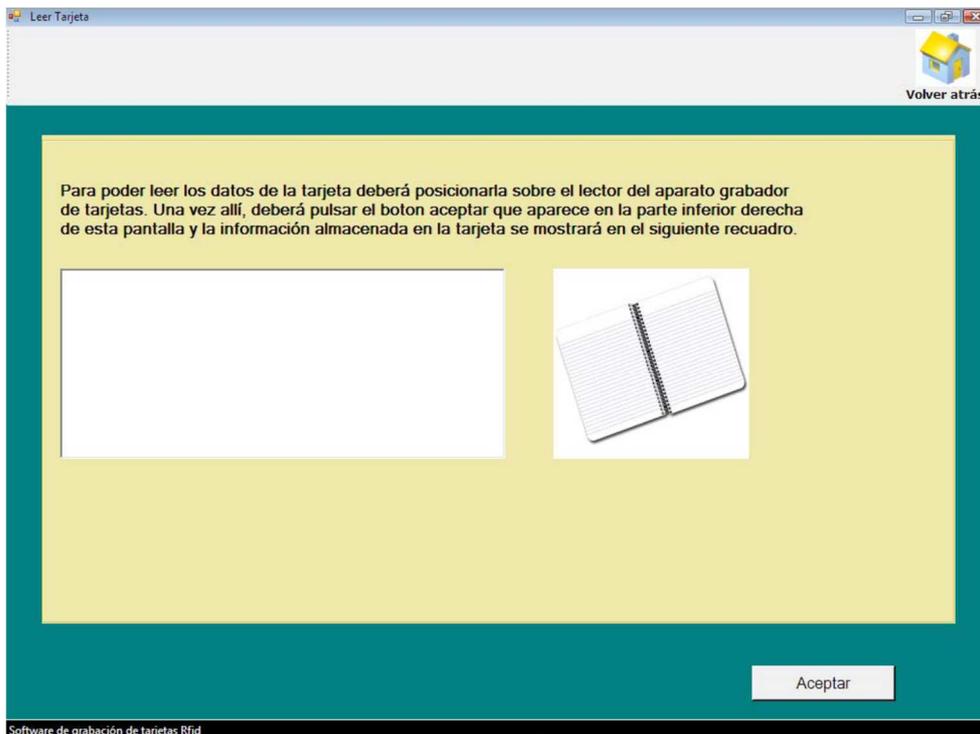


- a. **Residence mode (yes):** the card will only work in the energy-saver that has the same number as the one configured on the card (guest card only).
- b. **Relay selection:** number of relays that will activate the card.
- c. **Furniture lock authorisation:** authorisation for the furniture lock to open automatically when the user card is inserted in the energy-saver.
- d. **Card activation date:** date and time the card will start to work on. This requires the energy-saver to have a clock and have been initialised with date and time.
- e. **Expiry date:** date and time the card will stop working on. This requires the energy-saver to have a clock and have been initialised with date and time.

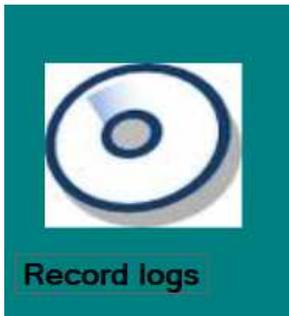
4.4.3 Read cards menu



Place the card on the reader and use this menu to read the information stored on it. The card information will be displayed on screen by simply clicking on *OK*. The information will vary depending on the card, but the type and unique identifier number will be displayed for all cards.



4.4.4 Programme log menu



This menu shows the programmed cards log. We can see the name and surname of the user who has programmed them, the type of card programmed, the date it was programmed, and the number of hours the card is available whenever programmed with an expiry date.

	NOMBRE	APELLIDO	TIPO DE TARJETA	FECHA DE GRABACION	NUMERO DE HORAS
**					

4.4.5 Help menu



Click on this button whenever you need to reach this guide from the programme.

5. Troubleshooting

PROBLEM	SOLUTION
It is not possible to programme a card. A message is displayed on screen indicating that <i>there is no card</i> or there is an <i>error when programming card</i> .	Exit the application, re-enter and re-programme the card.
The code to update the firmware is not valid.	Please contact the software supplier.
When new application users are identified, they do not have access to any of the software's options.	Make sure the person in charge of creating new application users has given them sufficient permissions to access the different software options. A new user will not have access to anything by default, as it has to be the administrator who allows access.
The reader does not programme or read cards. The software indicates that the reader's drivers have not been installed correctly.	Find the CDM2.04.16.exe file in the folder where the rfid card encoding software is located, and run it to install the encoder drivers and make it work correctly. If the problem persists, disconnect the encoder from the PC, then reconnect it to and wait 15 seconds. Try accessing the read or write card menu again.