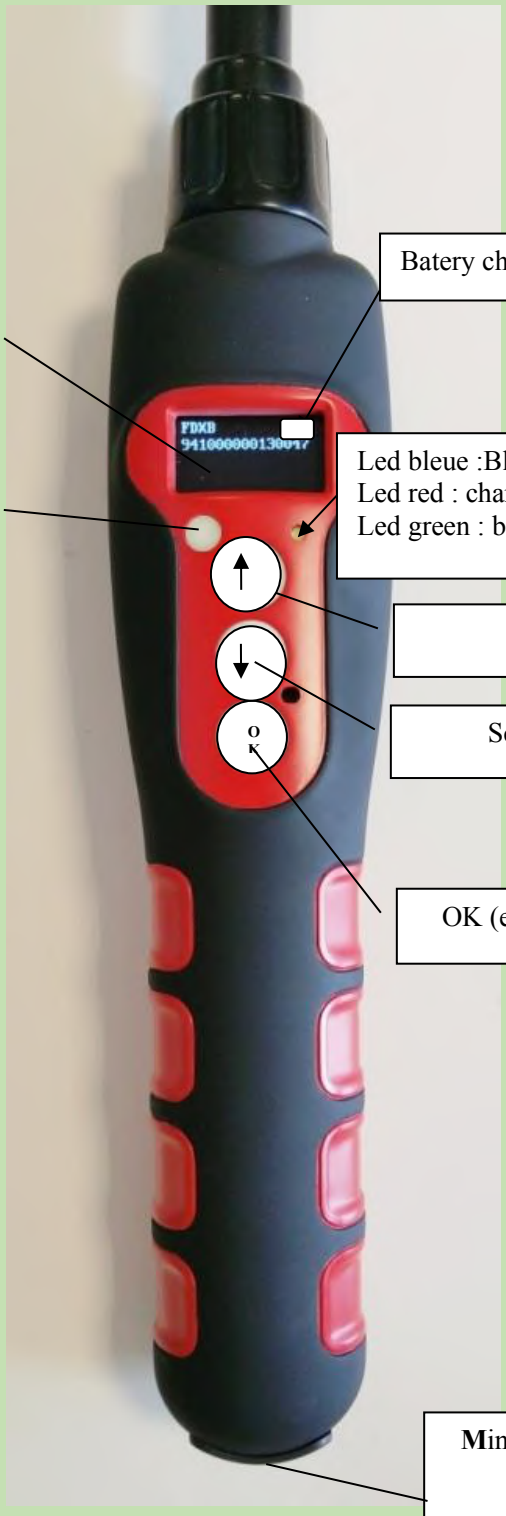
RealTrace
Groupe Atria

Petscan RT 250



Batery charge level

Display OLED
128×64 pixels

Led bleue :Bluetooth activated
Led red : charging battery
Led green : batery charged

In/out button (1)

Scroll up

Scroll down

OK (enter or validate)

Mini USB and reset button
Battery and communication

Table of contents

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Reader Characteristics

Frequency	134.2kHz read and write
Protocol	ISO11784/5 FDX-A, FDX-B, EM4102, HDX
Reading range	12cm（12mm×2mm, glasstag FDXB) 10cm (12mm x 2mm glasstag FDXA) 28/30cm ear tag FDXB (depends of the provider) 25/28cm ear tag HDX (depends of the provider)
Display	128×64，noir et blanc，OLED
Button	4 buttons
Indication	Battery charge level, Bluetooth , Buzzer
USB port	USB virtual comport，bluetooth virtual com.port
Power supply	Lithium battery，5000mAh，3.7V
Dimensions	650mm (L)×63(W)×45(H)
Weight	460g
Charging mode	Mini USB
Accessories	Mini USB cable, User manual, Battery 5000mA: 3,7Volts.
Compliances certifications	FCC - CE
Memory	Up to 800 numbers of chips

The RT250 BT is delivered with English language configured. To change the language see chapter hereunder « Menu Language »

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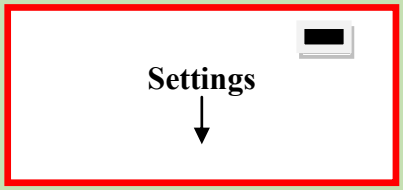
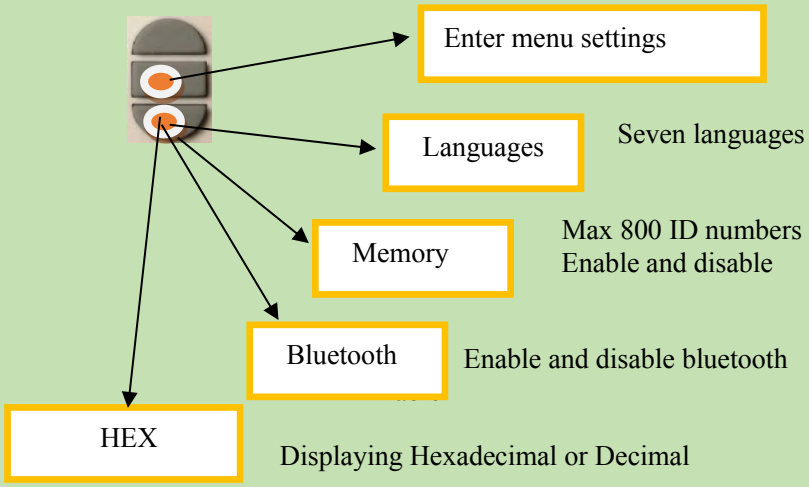
Menu “Settings”





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Bluetooth RT 250BT reader

All readers are delivered with integrated Bluetooth technology. The Bluetooth function consumes energy. It is therefore recommended to activate this function only for the time necessary for its use. To stop Bluetooth communication, simply select the “Bluetooth” menu and disable the function. Communication via Bluetooth is limited to around ten metres and depends on the environment of your PC. To enable Bluetooth on your PC, please consult your computer user manual. Don’t forget to disable the security of Bluetooth on your PC because the V8BTBT don’t ask a security code. If your PC need a code, enter 1234.

Data transmission by Bluetooth or via the USB cable

To be able to transmit the tag numbers read or the numbers recorded in the memory (maximum 800), via Bluetooth or using the USB cable, the user needs to have installed the appropriate driver* on his PC. This driver can be downloaded free of charge from :

http://download.realtrace.com/RTDriver.zip

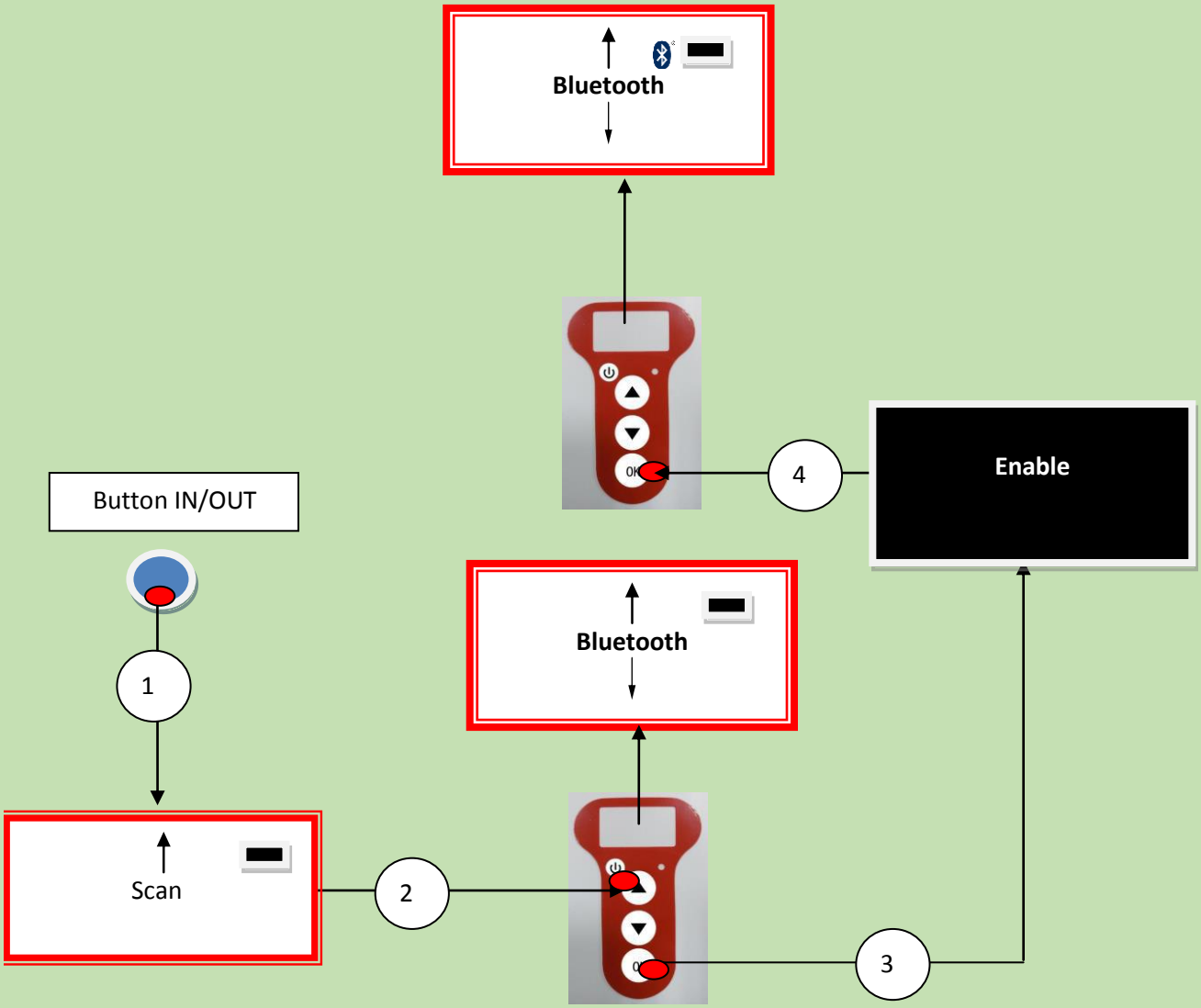
Once the driver is installed on your PC you will need to have application software to view and potentially record the data sent by the reader.

You can use Hyperterminal if your operating system is XP or Realtrace Terminal with XP or Windows 7/8/10.

* A driver is a program enabling an operating system, in this case Windows XP or Windows 7 on a PC, to recognise a hardware peripheral and use it.

Synoptics menu « Bluetooth »

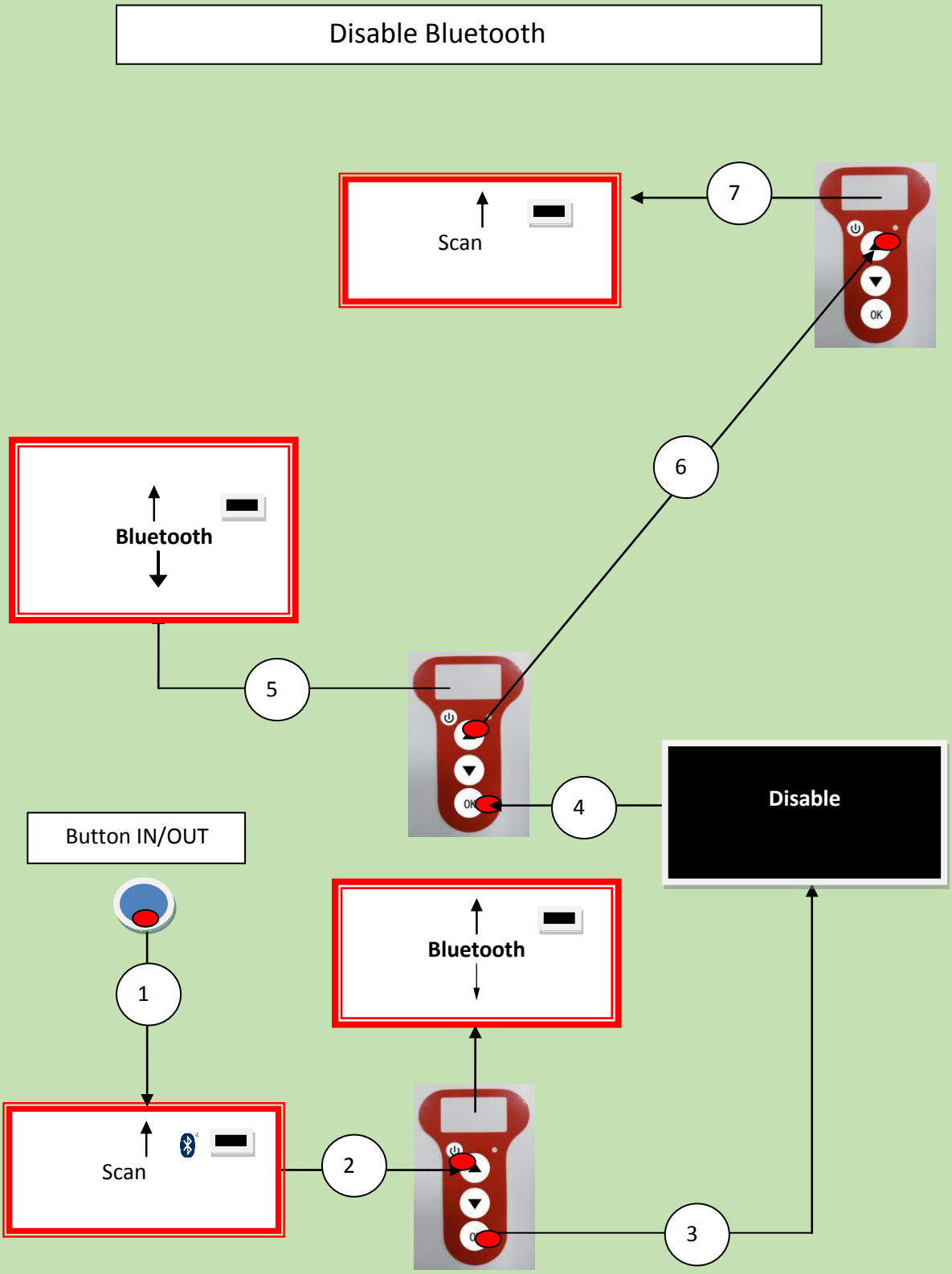
Enable Bluetooth



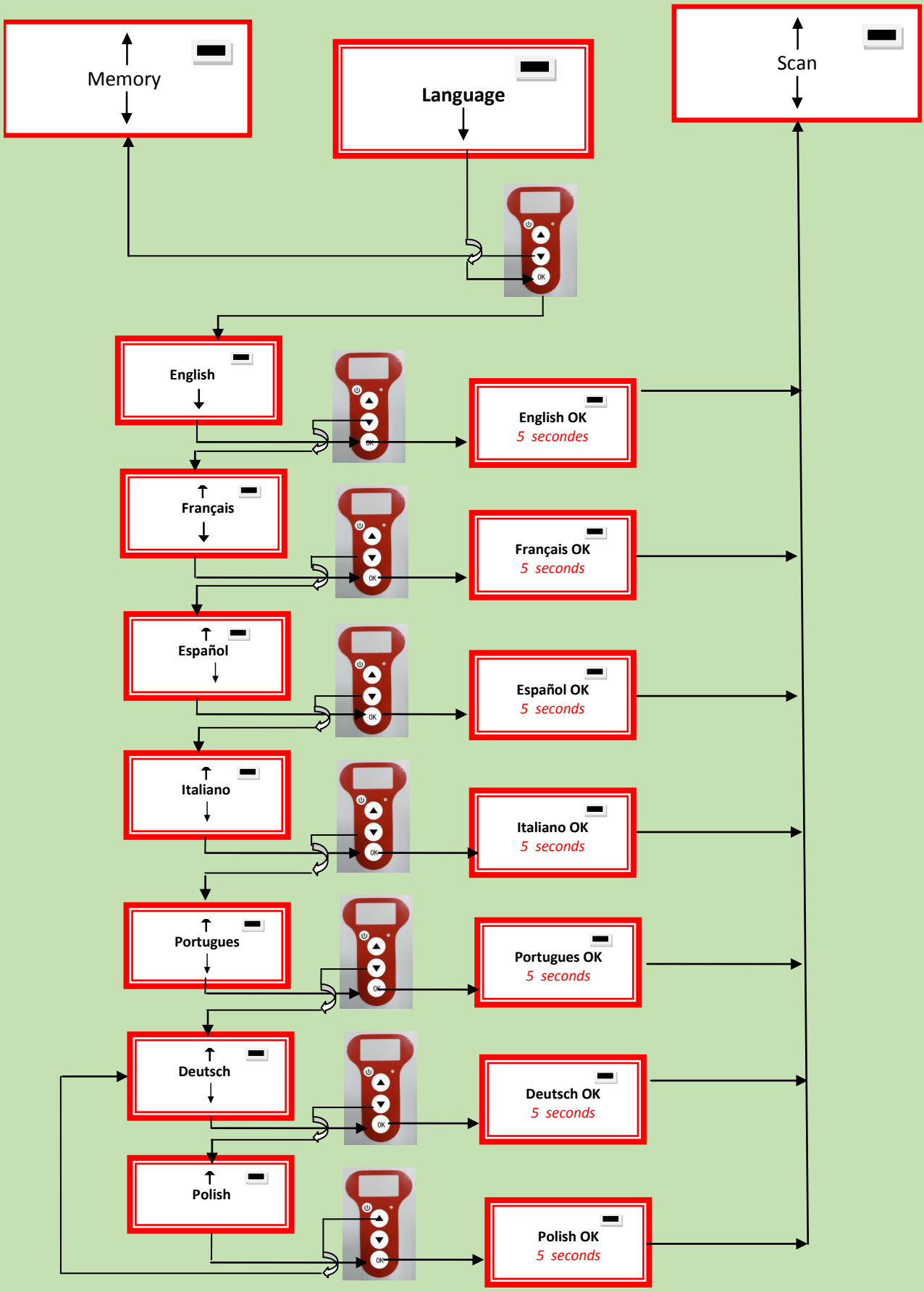
Charging indicator light

Bluetooth indicator light

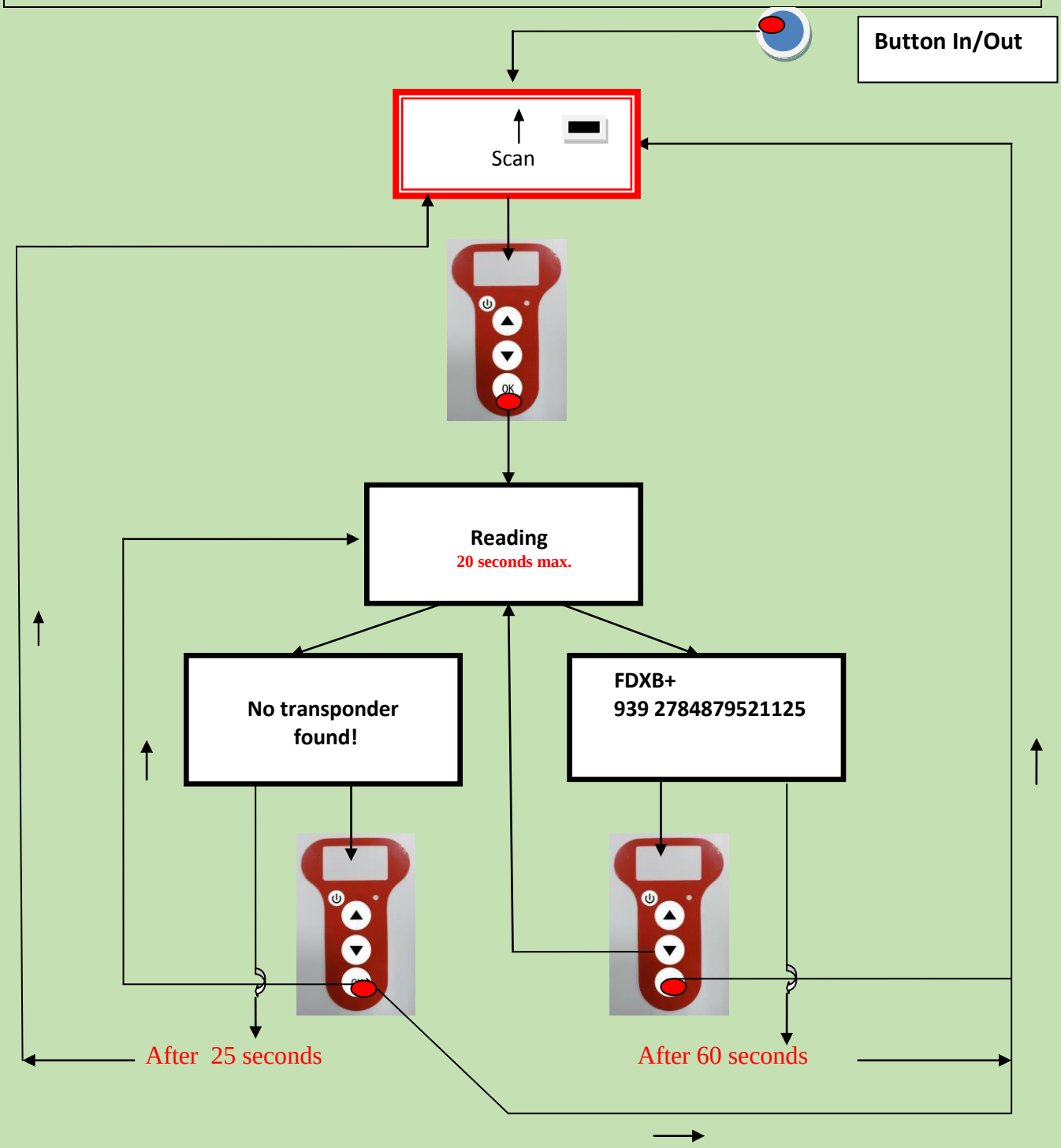
Synoptics menu “Bluetooth”



Synoptics of menu “Language”



Synoptic menu « Scan »



Charging indicator light

Using the RT 250BT Memory

The RT 250BTBT reader has a memory enabling it to store 800 identifiers (tag numbers).
This function must be activated by the user if he wishes to use it.

Storage of numbers read by the RT 250BTBT reader

The RT 250BTBT allows the user to store the numbers of the tags read in order to transfer them subsequently to a PC using the USB cable included with the reader or with Bluetooth.
To use this function, you must first activate the "Memory" function (see block diagram: "Memory 1").
When the Memory is activated each time a new tag is read, the reader displays the number but if the same tag is read twice by mistake the reader indicates this by emitting a characteristic beep and displaying "DUP" on the right of the screen.
This number will not be stored a second time.
If the reader is switched off, the memory function will still be activated when it is switched on again.

Deactivating the memory

The memory can be deactivated via the "Memory" menu.
Two cases may arise:

First case:
Numbers are recorded in the reader's memory (Block diagram: Memory 3)
In this case you must transmit the list of recorded numbers actually or virtually (without plugging in the USB cable) and then erase them .

Second case:
The memory has been previously activated but no number has been recorded.
In this case simply "deactivate" the memory (block diagram: "Memory 2"

Erasing the memory

To erase the contents of the memory to avoid errors, you must select the "Memory" menu and transmit the list of recorded numbers actually or virtually (without plugging in the USB cable) and then erase them (see Block Diagram: Memory 3).

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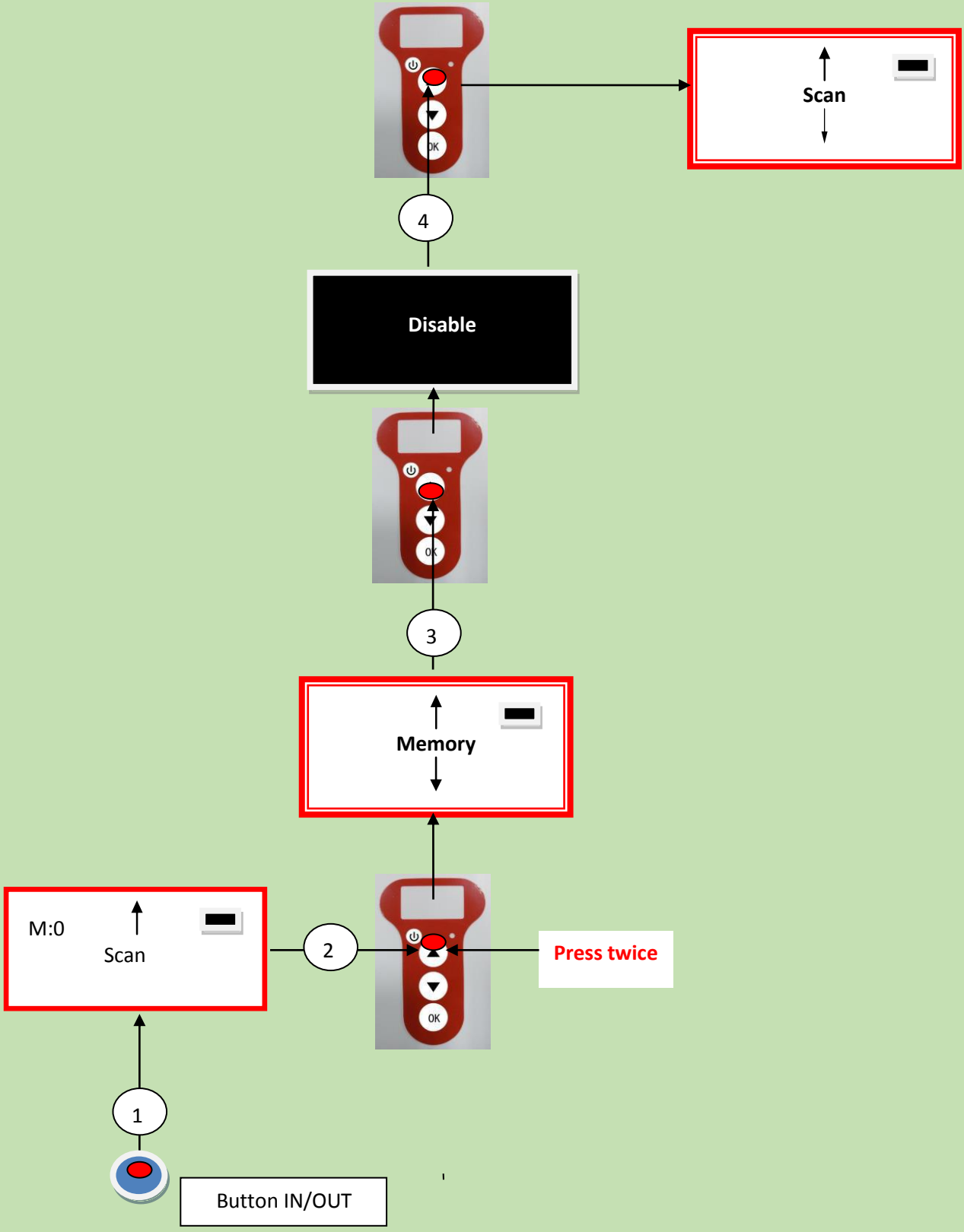
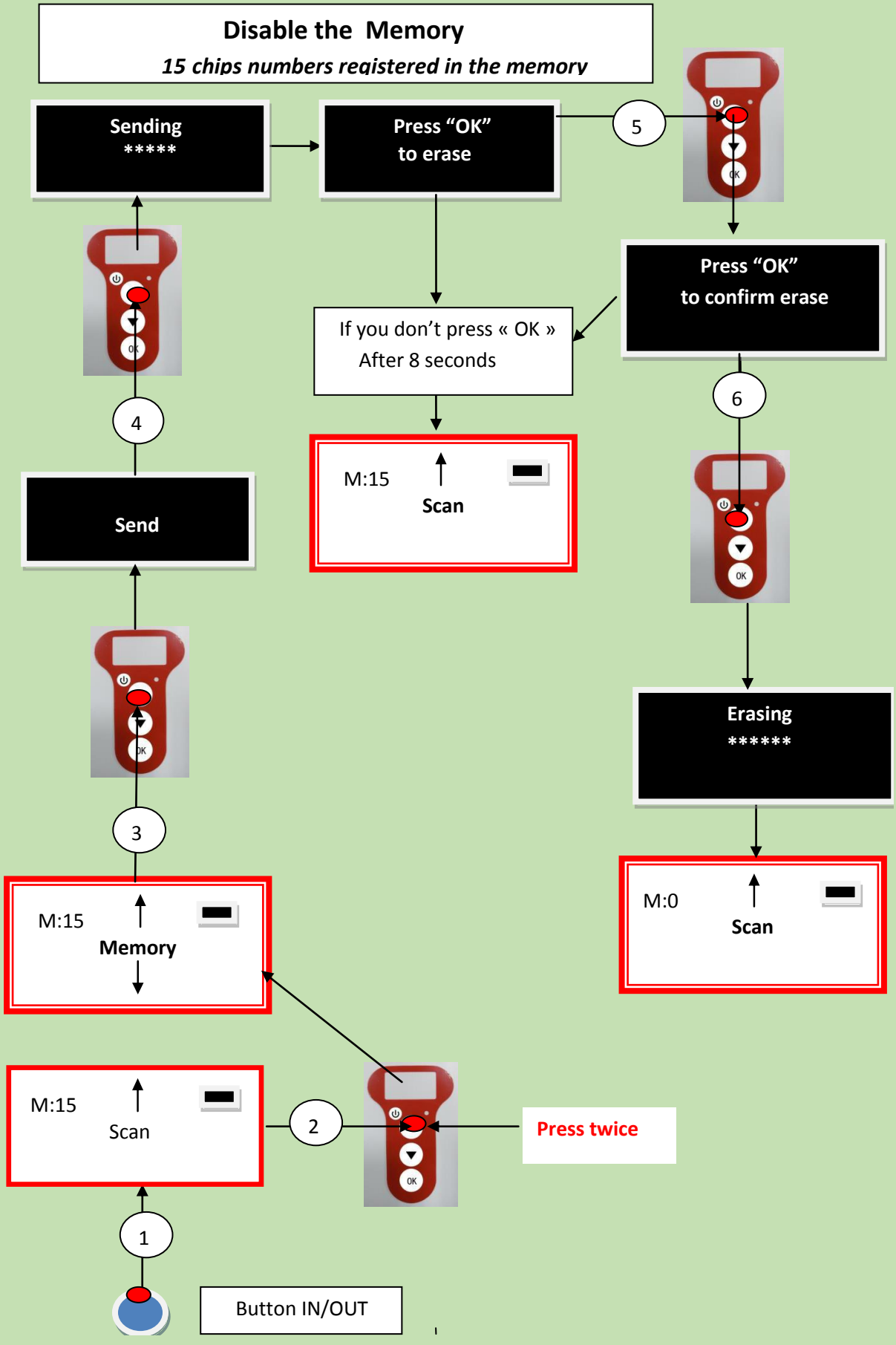
Synoptics menu « Memory 2 »

Disable the Memory

No chip registered



Synoptics menu « Memory 3 »



Communication between RT 250BT and PC

To transfer the contents of the memory you must connect the reader to a PC via the USB cable. You must then select the “Memory” menu and follow the instructions given on the display (see Block Diagram: “Memory3”).
If the reader is connected to a PC it will transfer the number of the tag read on each reading. It is not necessary for the “Memory” function to be activated to carry out this transfer.
Caution: for the reader to communicate with a PC, you must first install the reader and have software such as Hyperterminal (Windows XP, Windows 7), Realtrace Terminal, etc. which enables the data to be displayed on the computer screen and processed if necessary.

Serial link: use of the Windows « Hyperterminal »

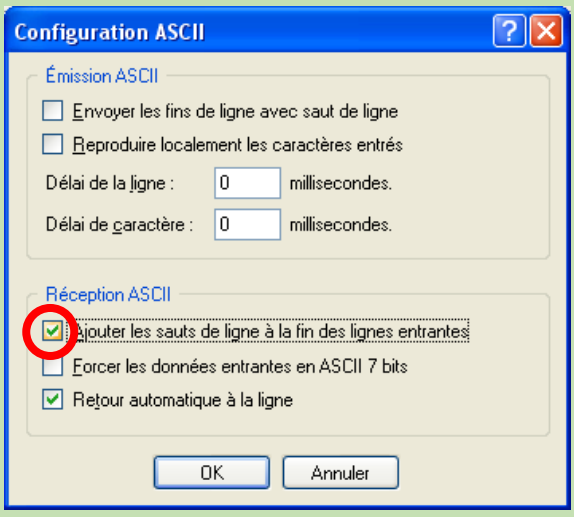
The current version of the RT 250BT, transmits the read identifiers to the PC it is connected to, either via the USB cable or its wireless link (Bluetooth). The reader does not wait for any order or acknowledgement from the PC.

Hardware configuration

The serial port for reading the data is configured as follows:

- 9600 bauds, 8 bits, 1 start bit, 1 stop bit, non-parity, and no flow control.

You must authorize line feeds to visualize the frames using the ***hyperterminal***: click on « properties » in the « file » menu. Go to the « parameters » and then click on « ASCII Configuration… » :



The circled box above must be ticked…

Description of the frame transmitted each time a transponder is read

The PetScan transmits the following frame to the PC after each valid reading :

Octet at the start of the frame : ″U″ ″/x55″	Type of 8 character (or octet) chip	The 16 character (or octet) chip identifier	Separation of octet: ″*″:	CRC-CCITT-control word, 16 ASCII format bits on 4 characters	Carriage Return octet: ″/x0D″

← Data used to calculate the CRC →

Tips: the developers of software associated with PetScan must use the head and separation characters to separate the information transmitted by PetScan, calculate a control word with the data received and compare it to the word transmitted by the PetScan to validate the information (see appendix for the CRC-CCITT-16 bit calculation algorithm)

Description of the frames emitted when reading the databases (PetSCAN memory option)

If a PetScan reader has a memory option, when « Press SCAN to send » is displayed, the reader is ready to transmit the identifiers stored in the memory. The PetScan displays « Sending ! » during transmission and the reader offers the user the option of deleting the content of its database at the end of the transmission.

Format of the frames transmitted to the PC : the frame which is transmitted on each reading of a transponder is preceded by a header octet ″/xAA″, its 4 character registration number in the memory and a separation character ″*″.

Start of frame octet : ″/xAA″	4 character registration number	Separation octet: ″*″	Start of information object : ″U″ ″/x55″	The type of 8 character (or octet) chip)	The 16 character (or octet) chip identifier)	Separation of octet: ″*″:	CRC-CCITT-control word, 16 ASCII format bits on 4 characters	Carriage return octet: ″/x0D″

Data used to calculate the CRC

Algorithm for calculating aCRC-CCITT-16bit control word

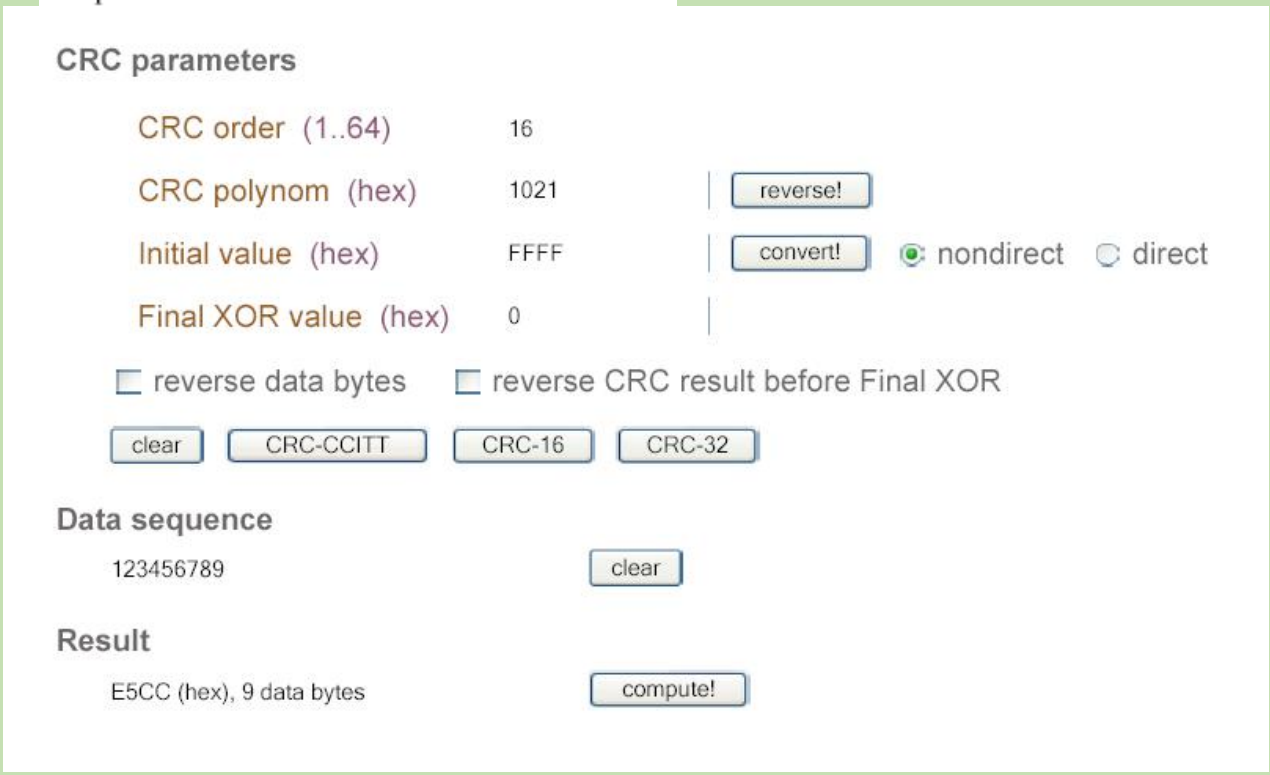
The C ANSI function's source code enabling a control word to be calculated from a string of characters terminating with the character ″/x00″ is described below. The JAVA applet on the « http://www.zorc.breitbandkatze.de/crc.html », website enables you to also calculate the control word. Previously the fields had to be correctly completed before making the CRC calculation and a check made that the control word is equal to 0xE5CC or the ″123456789″ character string.

```
/*=========================================================================*/
/* Function that calculates CRC-CCITT 16 bits
/* INPUT:
/*          unsigned char *inbuffer : 8 bits input vector over which CRC checksum is calculated
/*                                    must termined by 0x00
/* OUTPUT:
/*          unsigned int: 16 bits return of crc_ccitt checksum
/*=========================================================================*/
/* OVERVIEW:
/*          Width = 16 bits
/*          Truncated polynomial = 0x1021
/*          Initial value = 0xFFFF
/*          No XOR is performed on the output CRC
/* DESCRIPTION:
/*    Computing a POLY number from the crc equation.
/*    Crc s are usually expressed as an polynomial expression such as:
/*
/*          x^16 + x^12 + x^5 + 1
/*   CHECK
/*              0xE5CC This is the checksum for the ascii string "123456789"
/*   EXAMPLE
/*   http://www.zorc.breitbandkatze.de/crc.html
*=========================================================================*/
#define crc_poly 0x1021       // Polynome du CRC-CCITT-16Bits
unsigned int crc_ccitt16 (unsigned char *inbuffer) {
unsigned int crc_checksum = 0xffff;
unsigned char ch;
char i,xor_flag;
```

```
while ( *inbuffer!=0)
{
ch = *inbuffer++;
for(i=0; i<8; i++)
{
xor_flag=(crc_checksum & 0x8000)? 1:0;
crc_checksum = crc_checksum << 1;
if (ch & 0x80) crc_checksum++;
if (xor_flag) crc_checksum = crc_checksum ^ crc_poly;
ch = ch << 1;
}
}
for(i=0; i<16; i++)
{
xor_flag=(crc_checksum & 0x8000)? 1:0;
crc_checksum = crc_checksum << 1;


if (xor_flag) crc_checksum = crc_checksum ^ crc_poly;
}
return (crc_checksum);
}
```

http://www.zorc.breitbandkatze.de/crc.html



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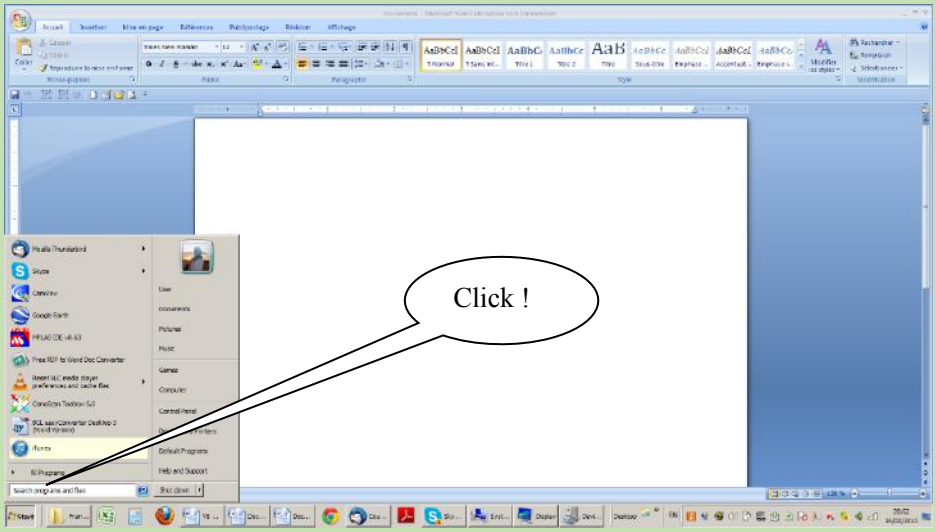
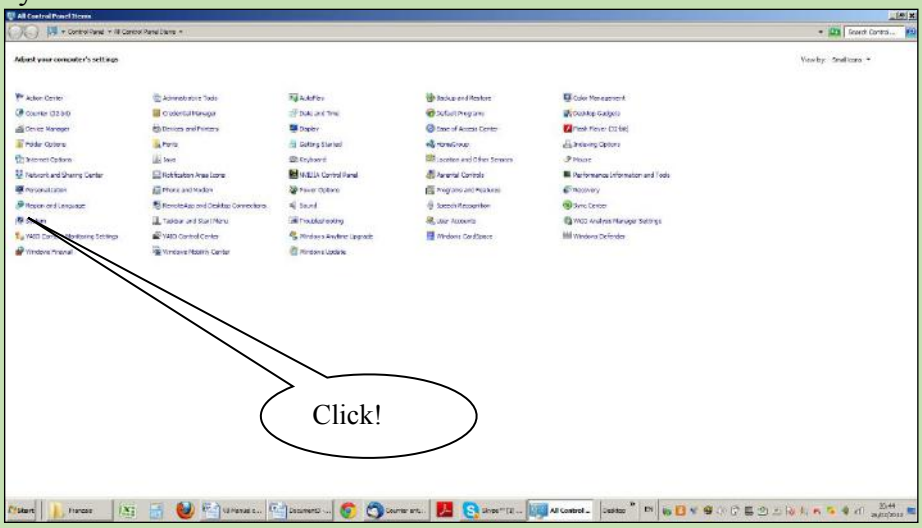
How to know what USB port the RT 250BT is connected to. (Windows 7/8)

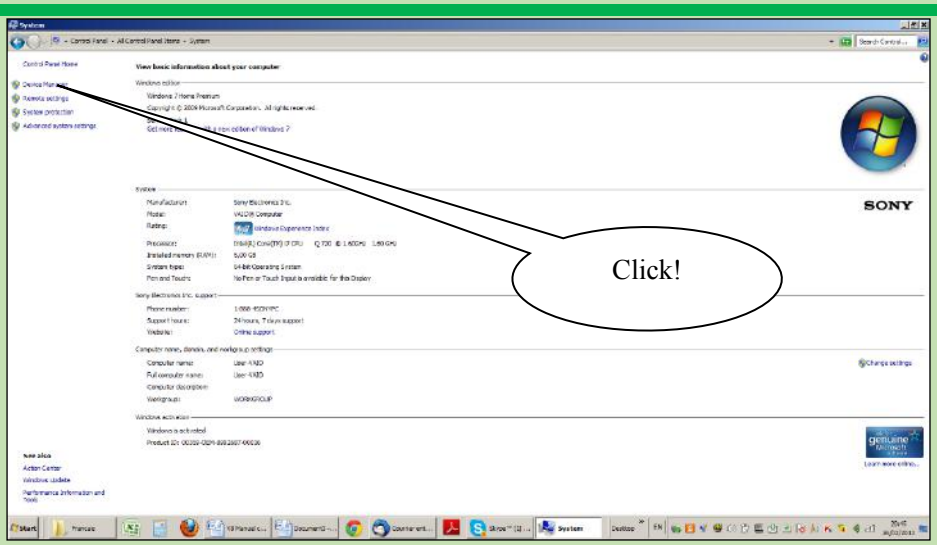
Select as shown below.



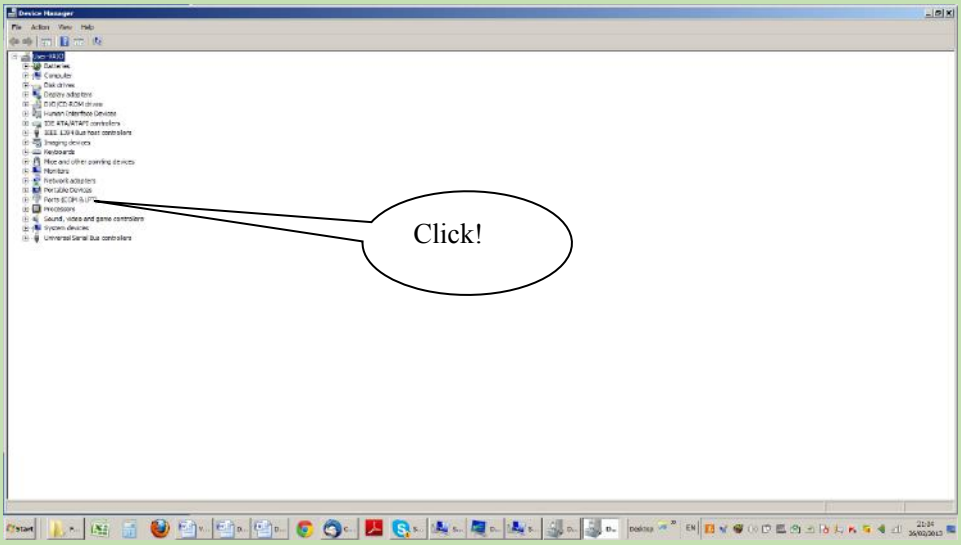
Then select « System »



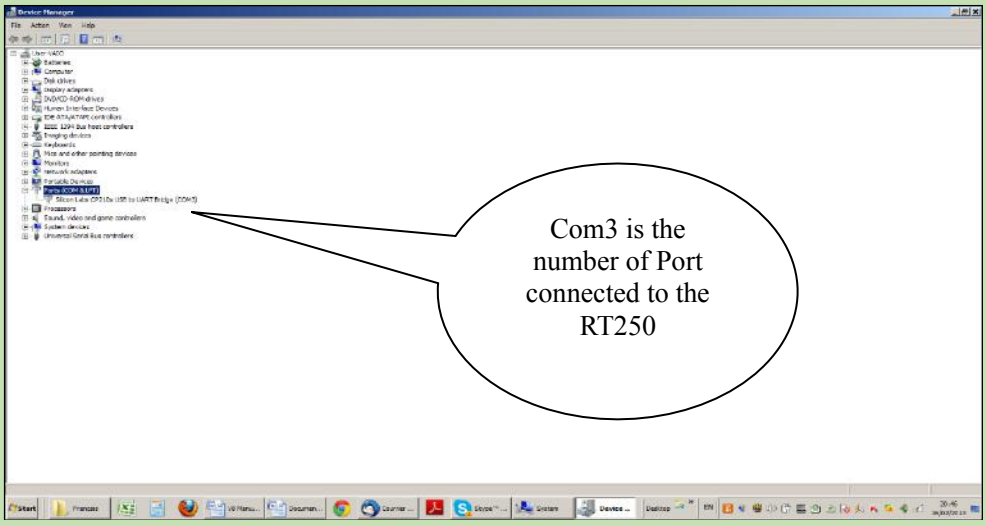
Then select « Device Manager »



Then select « Port COM et LPT»



The number of the Com port is shown.



The screens may be a little bit different. It depends of the Windows version.

RealTrace Terminal

This software is a tool supplied free of charge to all users of the RFID Realtrace standard (with USB cable) or Bluetooth reader.
You can download this software following this link :

http://download.realtrace.com/RealtraceTerminal.exe

You will find that once the communication has been established between a PC and the RealTrace reader both appliances which were previously paired up remain connected providing that they are separated by no more than 10 meters. The communication is cut if the distance is over 10 meters, and a search and pairing up must be performed to restore transmissions.

The communication is also cut when the RealTrace reader switches off after several minutes on standby to save energy in the battery.
The lost communication in both these cases is connected to the way Bluetooth technology operates as well as the Windows operating system.

The use of a lithium/ion battery has provided a significant increase in the autonomy of the reader (several thousand uses). Therefore, you can adjust the auto-power-off period as required: 2, 5, 10, or 30 minutes or if you prefer, you can switch off the timeout altogether (not recommended). This setting can be implemented the same way if Bluetooth is enabled. For your information, the reader without auto-power-off, and with **Bluetooth enabled** works for over 48 hours.

http://download.realtrace.com/RT-Timeout.exe

Initial parameterization of the « RealTrace Terminal » software

Sometimes, after installing Realtrace Terminal on your PC, you will have to parameterize the communication. Sometimes it is not necessary but as safety precaution you can verify if all is correct. Click on « *File* » *then* « *Properties* » then enter the USB port or Bluetooth's communication port number as well as the following data :

- *bits per second : 9600*
- *data bits : 8*
- *stop bits :1*
- *parity : none*
- *flow control : none*

Using the software "Realtrace Terminal"

Menu Options

Choose your language. You can choose between French, English, Spanish, and Chinese.
Select the data you want to appear:

- if you select "All data" it will show the type of chip (FDXB, HDX, FDXA) followed by the ISO "smart" number and the CRC.

Example: **UFDXB 939 000004095425*AC02**

- If you do not select "All Data" only the ISO number of the "chip", or 15 numeric characters (FDXB and HDX), or 10 Hexadecimal characters (FDX A) will be displayed.

Example: **939 000004095425**

Do not forget to declare the type of keyboard you use - AZERTY or QWERTY - if not you risk having inconsistent signs being displayed on the PC screen.

File'menu

The "Save", "Delete" and "Exit" functions are classic.

The "Linking an application" function when selected allows you to link the data sent by the reader to the PC to a Windows application (Word, Excel, etc.) and simultaneously display in the "RealTrace Terminal" window.

If you want to save an Excel file, a number or a list of numbers stored in the memory of the reader you must select "Linked to an application." You then have five seconds to open your application, Word, Excel, etc. After this period if no application is opened data will be sent to the Realtrace Terminal and appear on the initial screen.

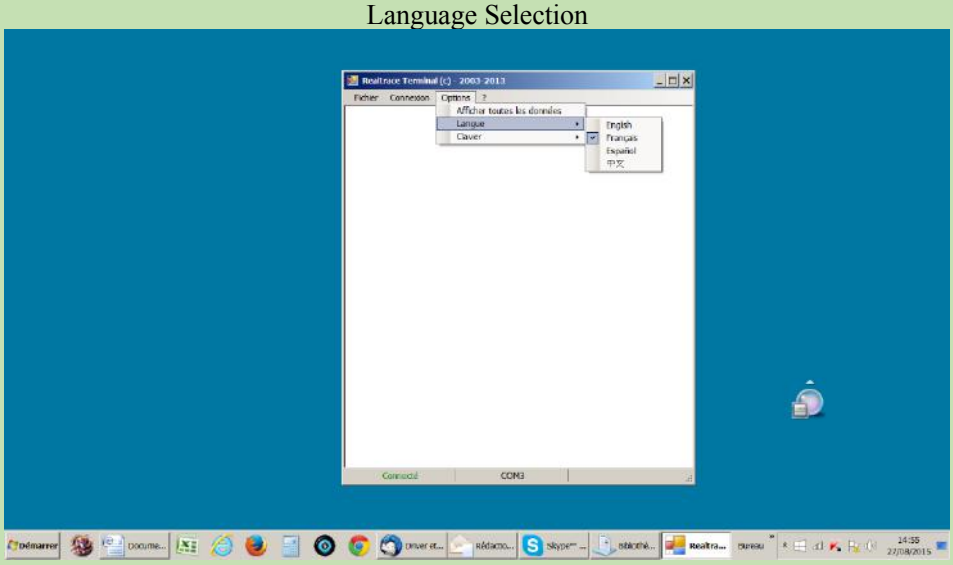
Connection'Menu

In case of breakdown in communication between the PC and the reader simply select "Connect" to automatically reconnect.

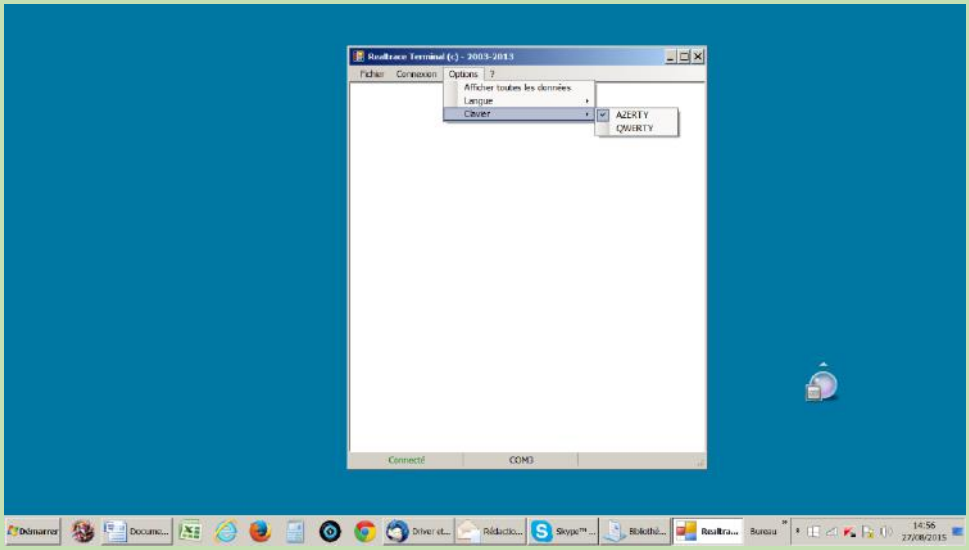
Obviously for reconnection to be possible, the reader must be turned on and be within ten meters around the PC, which must also be turned on.

Menu Realtrace Terminal

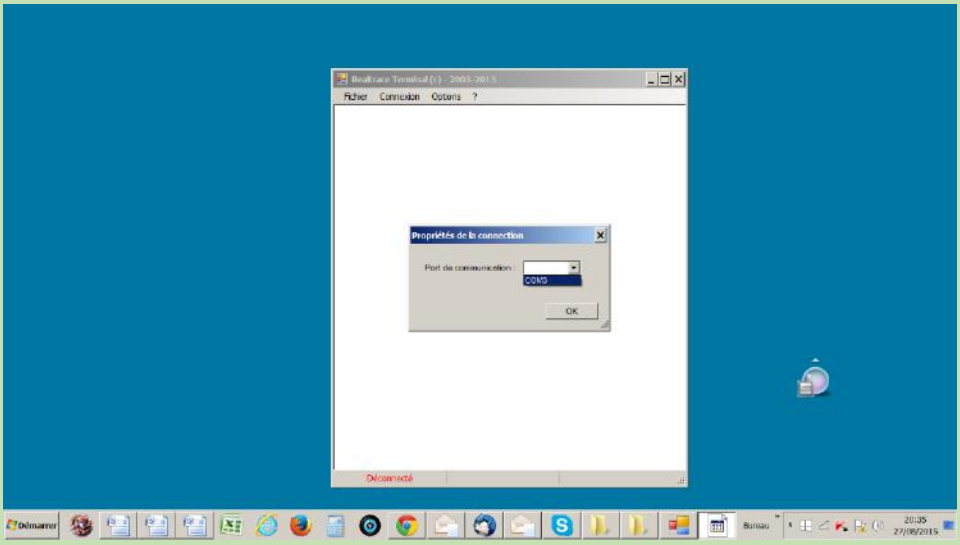
Language Selection



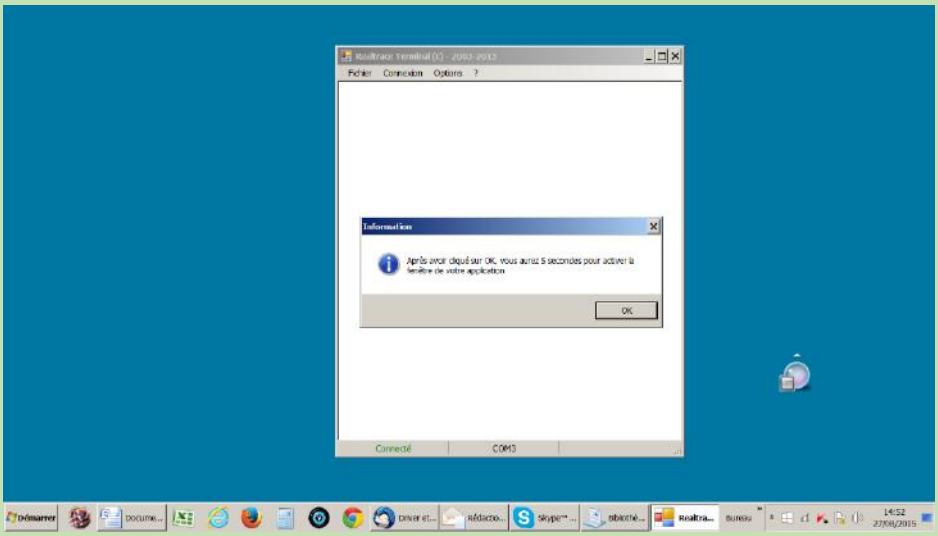
Keyboard Type



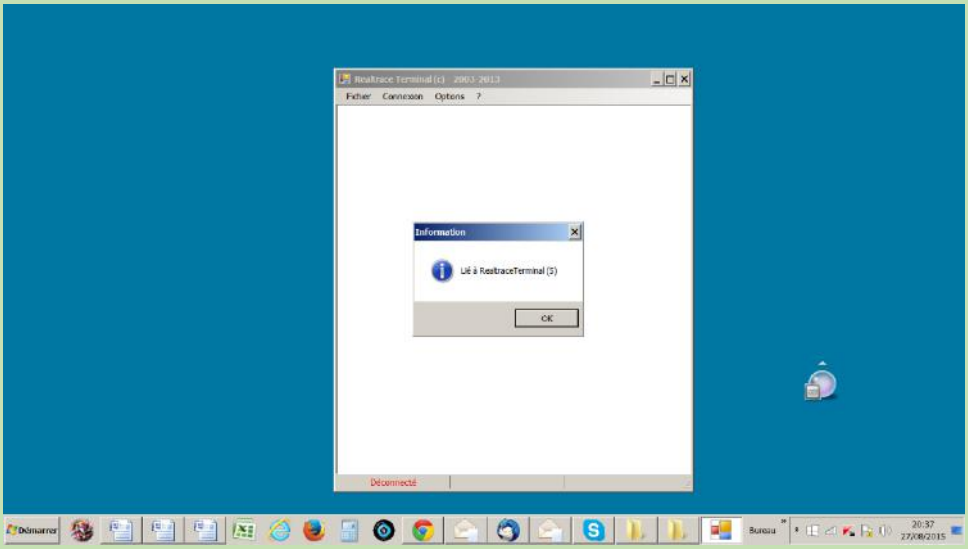
Communication Port Selection



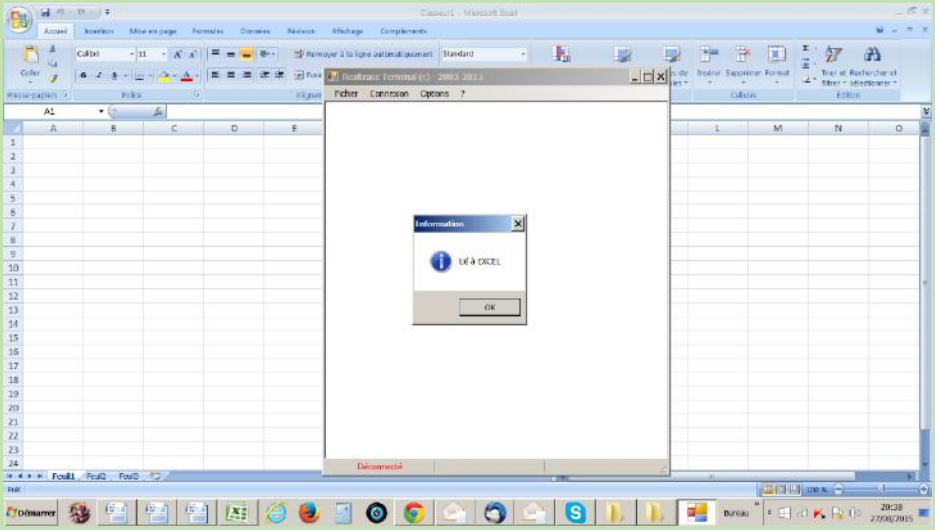
Linking an application



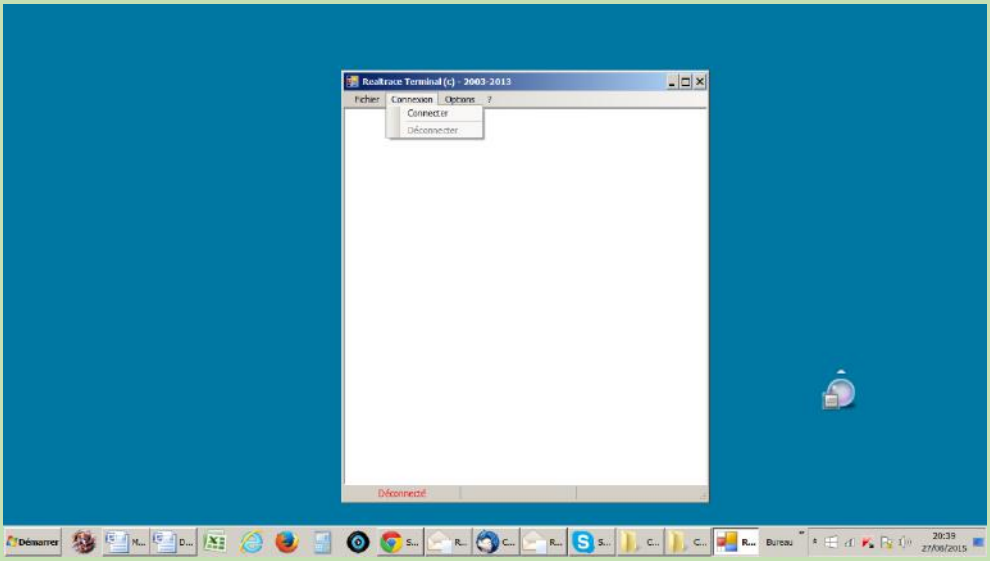
Selecting application after the 5-second delay



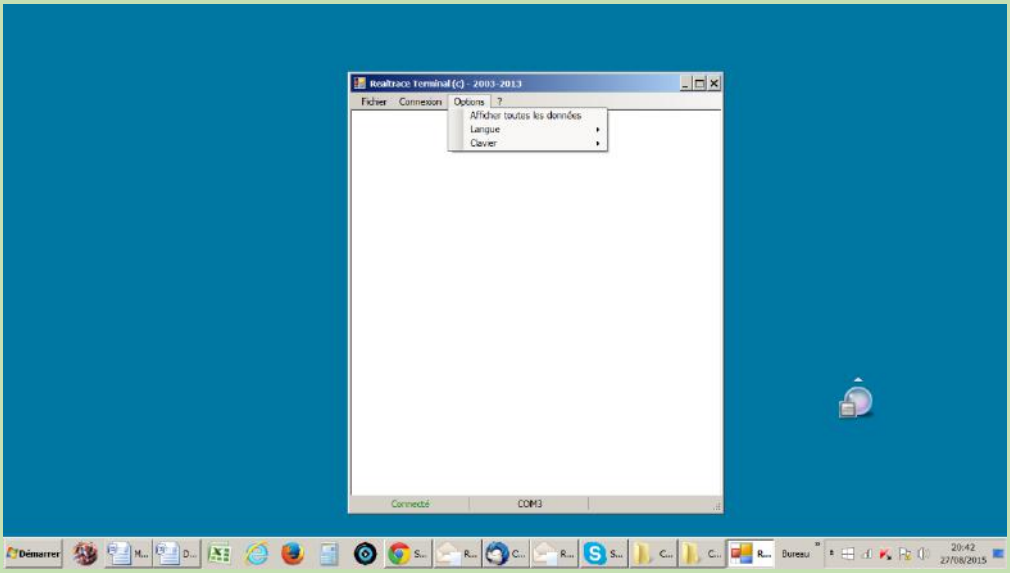
Application open within 5 seconds: Excel

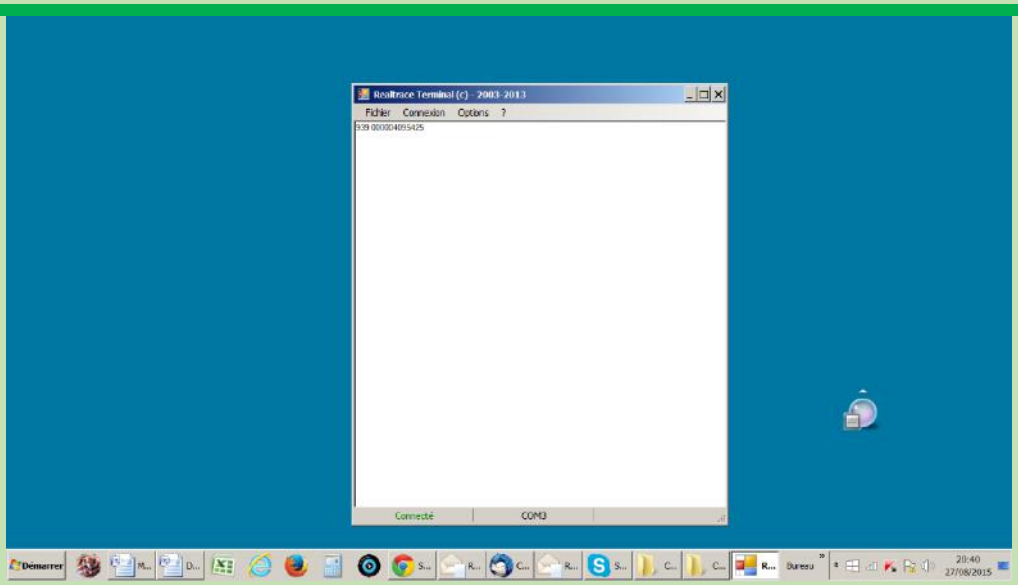


Connect!

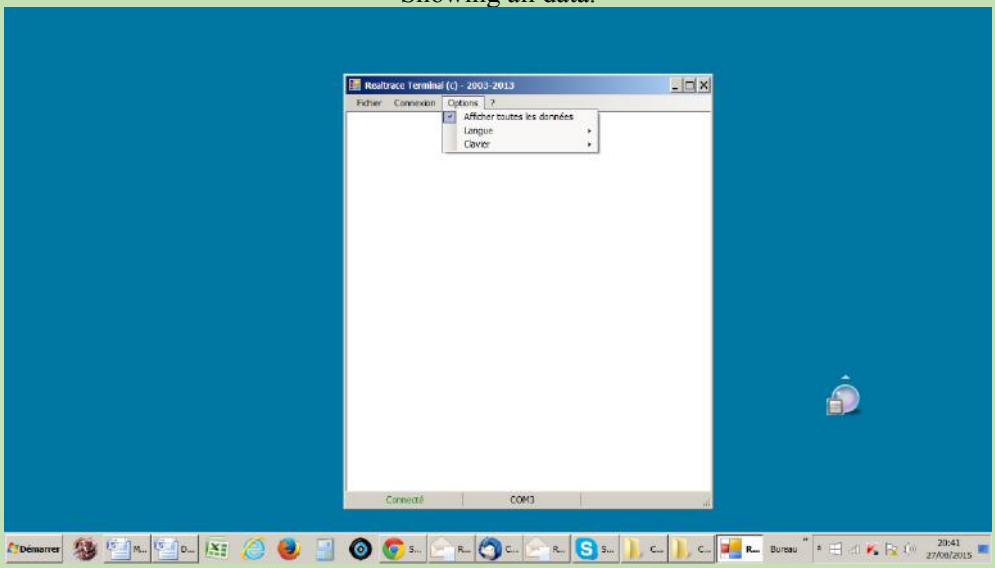


Simple view: only ISO number





Showing all data.



Display message on reader startup!
Setting the reader power timeout!

Through its hardware design, the RT 250BTBT reader was intended to be easier to update, allowing distributors and users to benefit immediately from upgrades that could better respond to market demands.

Now you can customise your readerthrough your PC by connecting to the http:// links that are listed below, but be careful:

The RT 250BT customizer that provides for customising the welcome message upon starting the reader only works from version VM14_v05

RT 250BTTimeout, which can set the time before automatic shutdown, only works from version VM14_v6

Please note that you may find the version of the program installed in your RT 250BT by reading the "Master Card Version RT 250BT" card that came with it.

1 / Display message on reader startup (RT 250BT Customizer)

This message could be your company name, customer name, date of sale or other text of your choice given that you have two 16-character lines.
Upon starting the reader, the RT 250BTBT displays the recorded message for 4 seconds.

2 / Setting the reader power timeout. (RT 250BT timeout)

The use of a lithium/ion battery has provided a significant increase in the autonomy of the reader (several thousand uses). Therefore, you can adjust the auto-power-off period as required: 2, 5, 10, or 30 minutes or if you prefer, you can switch off the timeout altogether (not recommended). This setting can be implemented the same way if Bluetooth is enabled. For your information, the reader without auto-power-off, and with **Bluetooth enabled** works for over 48 hours.

How to benefit from these options.

1/Just load the program option you are interested in on your PC, using the following links:

For the greeting:

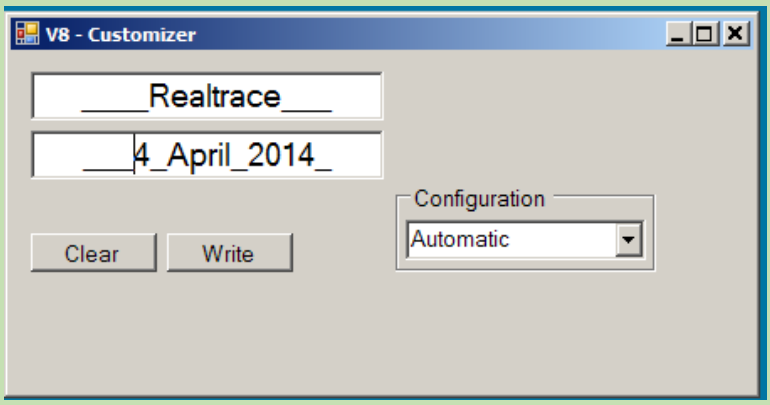
http://download.realtrace.com/V8-Customizer.exe

To set the power timeout

http://download.realtrace.com/RT-Timeout.exe

2 / Connect the reader to the PC via USB cable

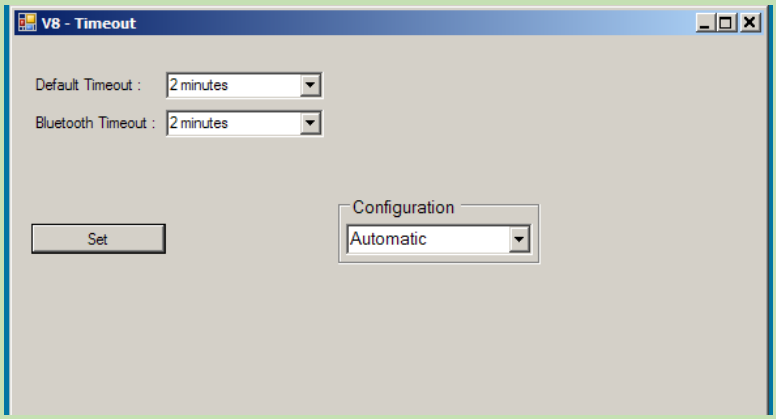
3/ Start the reader and open the program on the PC



For example, you can use this date as the validity of the start of the guarantee period

4 / Enter the fields on the screen and confirm (Write). The communication port is configured automatically.

The new settings will be implemented upon the next launch of the RT 250BT reader.



PS: Customizing each reader takes a few seconds.

"PetScan" program instructions for Android mobile phones

Models RT250BT - V8BT - V8M

This program is compatible with V8BT, V8M, RT250BT readers.

The main function of these readers is to read the number of ISO chips implanted in animals. They each have their own specific elements to meet different user needs.

These readers inaugurate the generation of connected readers. Their operation is linked to the use of an Android or iOS mobile phone.

With the power of the phone, these readers become a connected tool without limits.

Information about the "chip" is stored on the phone's memory. Each reading of the "chip" can be linked to the ISO number, the date and time of reading, location, a photo of the animal as well as variable data such as name, address, phone number, etc.

This data is saved on the phone's memory but can be transferred to an external PC, Cloud or via e-mail.

Even after being implanted in the animal, these readers also allow the user to write additional data on the chip such as the animal owner's name and his phone number*.

The **RT250BT stick reader** — due to its length — allows an increase in the distance at which an animal's "chip" can be read. There are both, short (65 cm) and long (95 cm) versions of the reader. This version allows you to read either aggressive dogs or animals in cages through bars, or livestock, cattle, &goats, pigs, etc., all at a safe distance.

The long version is also used in fish farms, the front part being perfectly watertight.

The V8BT and V8M also allow the user to write additional data on the "Chip" at 7/8 cm, such as the name of the owner and his phone number, etc.

Furthermore, after reading a "Chip" and recording the data in a database, it is possible to recover this additional information via connection to a server.

The following information relates to the functions offered by the standard software provided free of charge via Play Store or Apple Store*.

This full, free version can be used as a management tool. It can be adapted to your needs upon special request.

Which phones are supported?

Normally, all iOS phones (Apple) and "Android". If you wish to buy a phone intended for your needs, we recommend choosing a phone with a minimum of 12 GB of built-in memory. If you wish to incorporate your database into your phone, we advise you to choose a model that supports additional memory (SD card).

To benefit from all the services offered by these readers, it is necessary for the phone to have Bluetooth, WiFi and integrated GPS localisation.

How do I get the free PetScan's software?

You have to log into "Play Store" or "Apple Store" and download the "PetScan" program onto your phone before installation. A "PetScan" icon will appear on your phone's screen after installation is complete.

How much does it cost?

Using the program is free since you only use Bluetooth communication between the reader and your phone, and possibly WiFi between your phone and your Box.

Discovering the "PetScan" program!

The distance between the reader and the phone must not exceed ten metres in order to guarantee a good Bluetooth transmission.

Preparing the phone and the reader:

1/ Enable the Bluetooth function (on the reader and the phone). The blue LED of the reader flashes.

2/ In the "Settings" of your iPhone → Brightness and Illumination →Auto Locking, select 5 min.

3/ In display and wall paper of your Android→ Screen time out select 5 min.

Be aware that each time your phone goes into sleep mode, communication with the reader will be cut off!

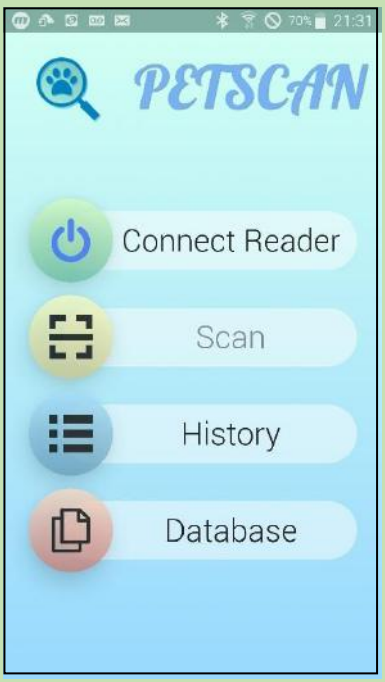
3/ If you have a WiFi connection, it is advisable to activate it. This will allow you to have faster access to Google Maps and avoid communication costs, especially if you are abroad.

4/ Switch on the reader and activate Bluetooth (see the user manual).

5/ Open the "PetScan" program.

Android version : connection to the reader

After opening the "PetScan" program, the following screen will appear:



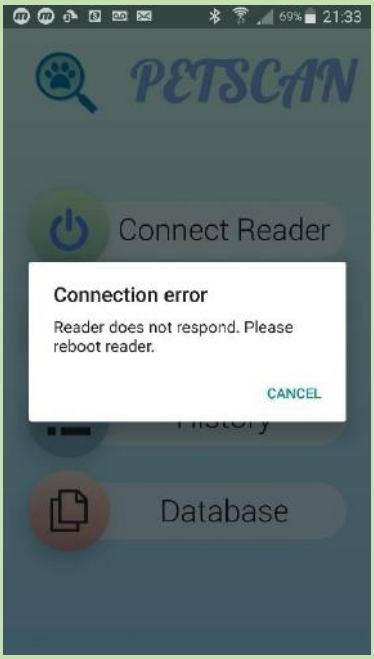
Select "Connect the reader".

The phone will try to connect to a nearby reader for about 10 seconds. Two things can happens.

1/ The phone finds a reader and connects. In this case, the blue "LED" of the reader changes from flashing to constant. The phone screen shows "Disconnect".

2/ The blue led of the reader is flashing. After ten seconds of searching, the phone has not found a reader. In this case, two possibilities:

a) the following message will appear:

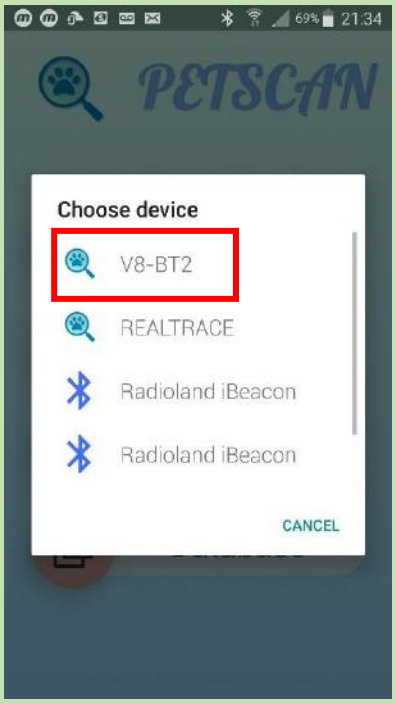


Try again!

If a connection has not been established, a reason may be:

- **<u>Failure when turning on the reader</u>**,
- Failure to charge the reader's battery,
- Wrong setting of your phone's Bluetooth (see the manual of your phone),

b) After 20/30s the following message will appear:



Are displayed all the peripheral Bluetooth detected.

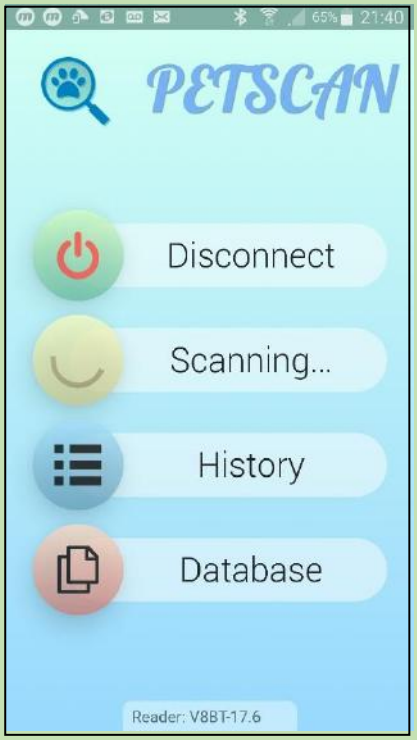
The reader found is a Bluetooth 2 model : select V8-BT2

The phone is connected to the reader. The blue led of the reader become fixed.

Searching for, reading and writing on a transponder (chip) with the reader: Scan'function

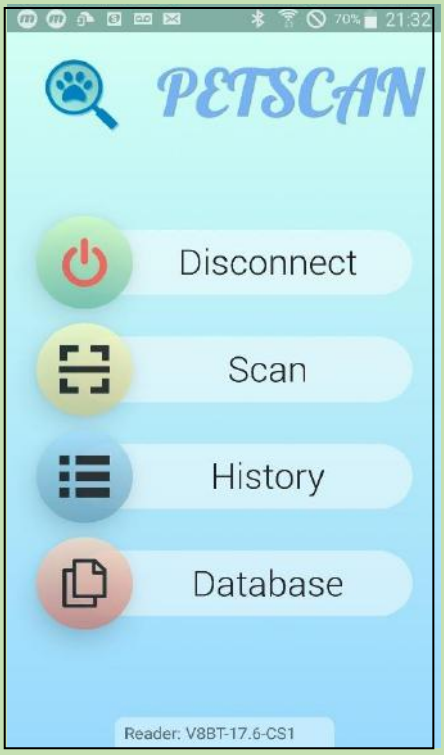
To search for and read a "Chip", select "Scanner":

The reader then searches for a "Chip" near it, 10 to 12 cm for about 25 seconds, and "Scanning" is displayed:

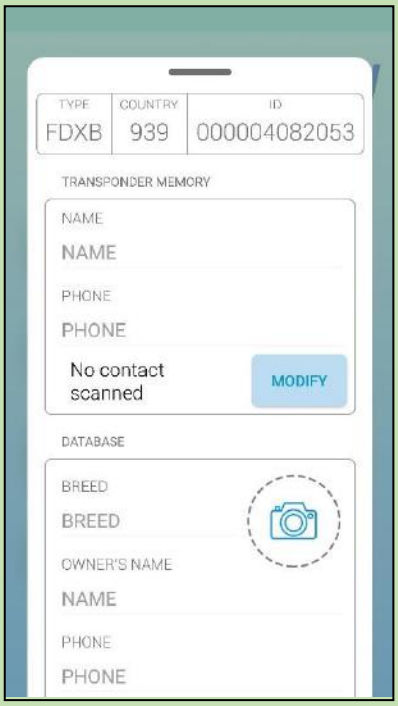


Two things can happen:

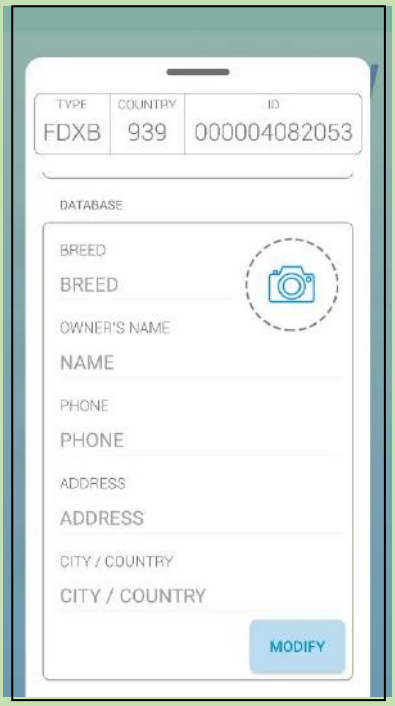
1/ The reader has not found a "Chip," a beep is emitted and it is displayed again:



2/ The reader has found and read a blank chip, that is to say without additional data stored in the chip or in the database of the phone or the server*:

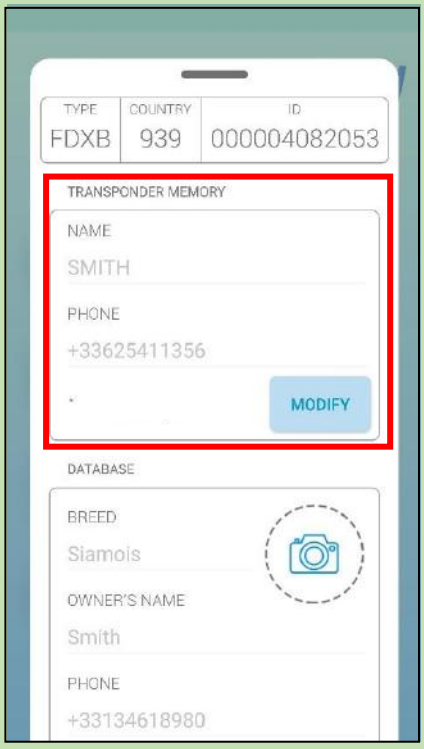


Memory of the chip: nothing

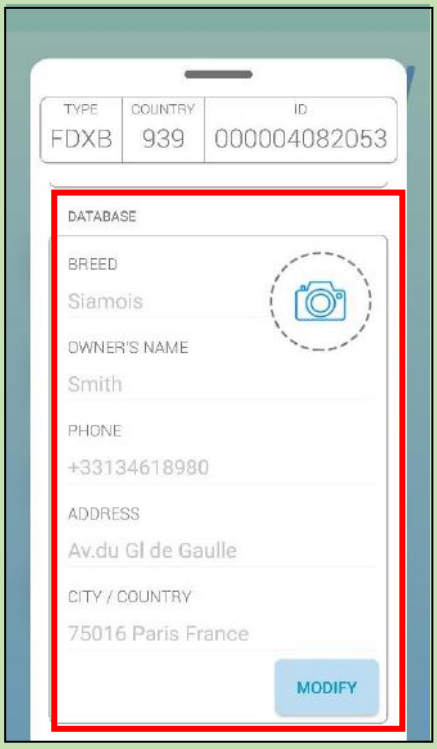


Phone database: nothing

3/ The reader has found and read a chip with data written in the memory of the chip and/or in the database of the phone or the server:

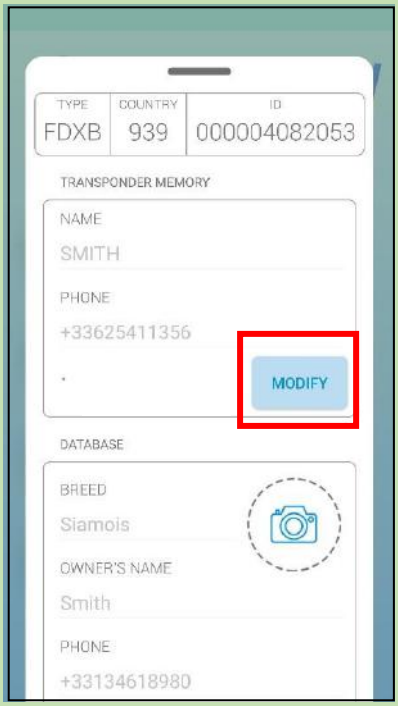


Memory of the chip

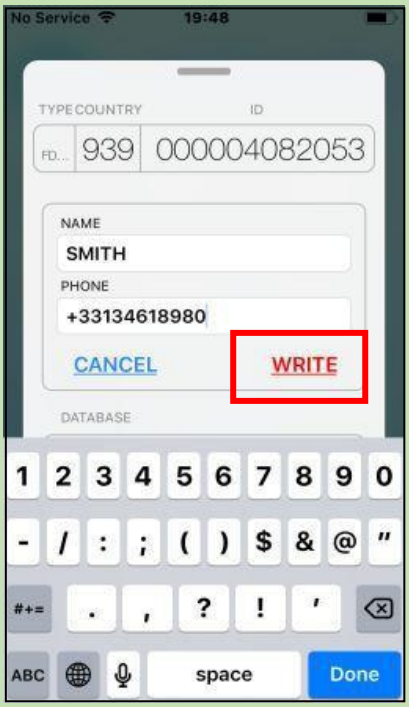


Phone database

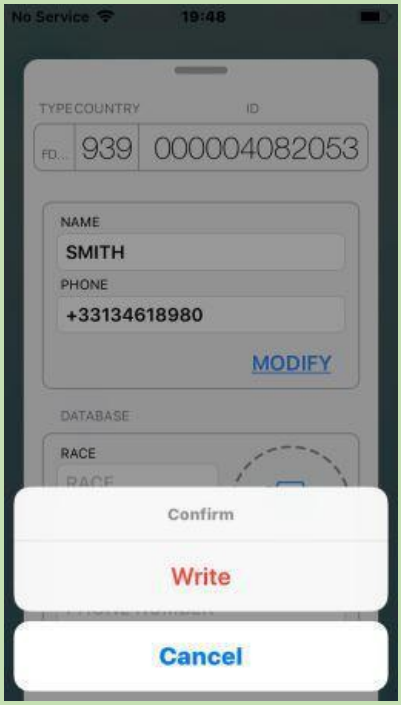
Writing on the memory of the Chip'with the reader



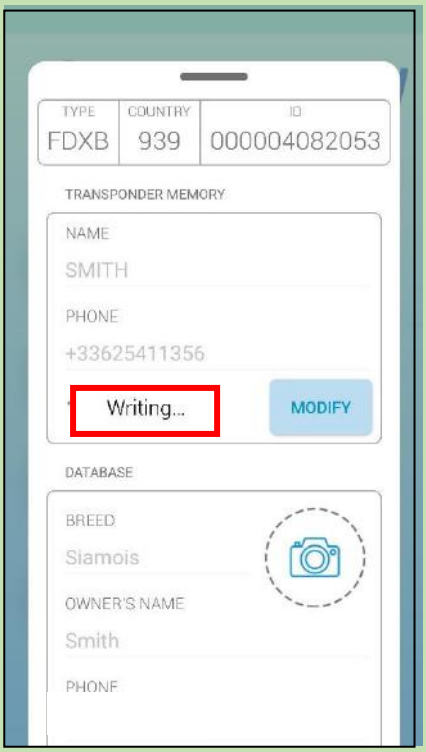
Select MODIFY



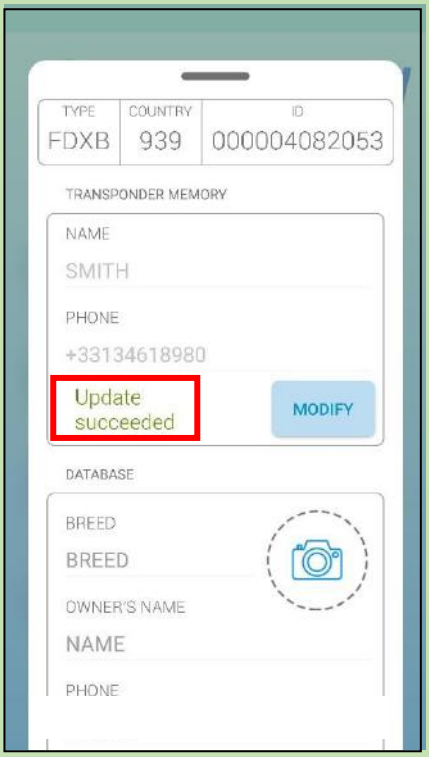
Enter the text and select **WRITE**



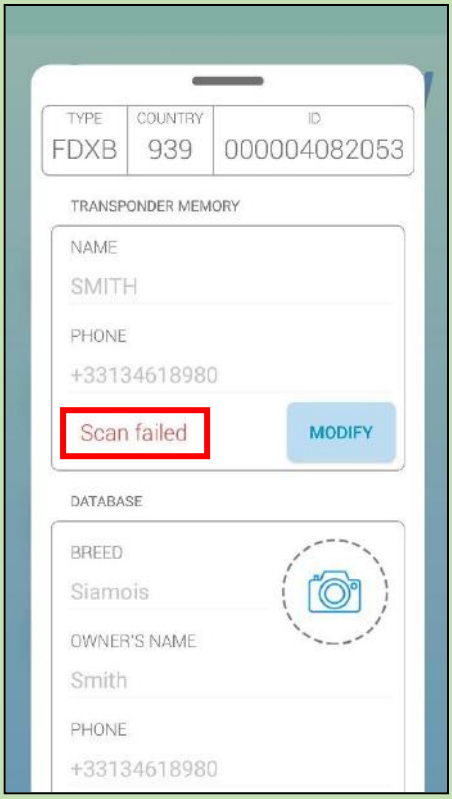
Confirm writing



Writing is in progress

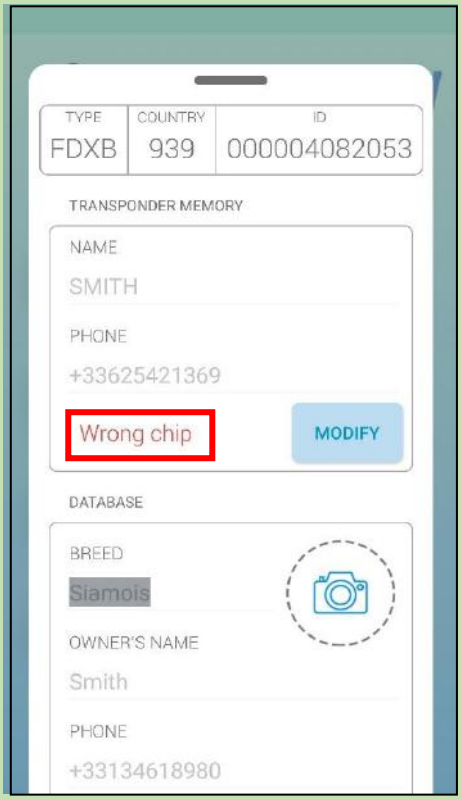


Writing is correct: a beep is emitted



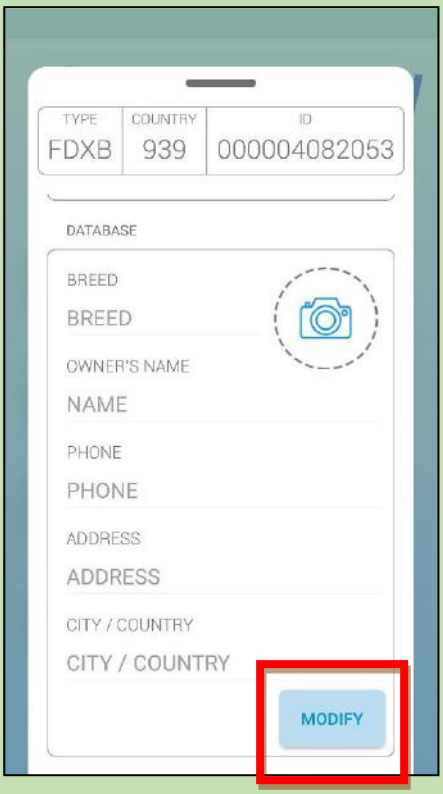
Writing failed:

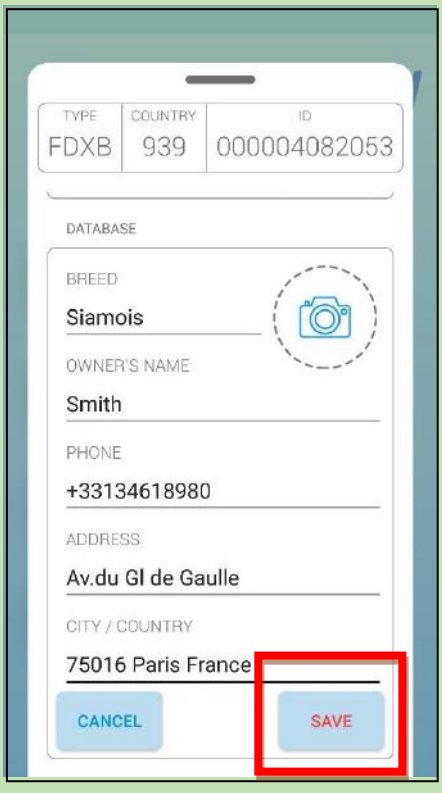
- chip too far from the reader.
- memory blocks not open.



Attempt to write a chip different from the one initially read: a sound signal is emitted .

Writing information to be saved on the phone or server database*

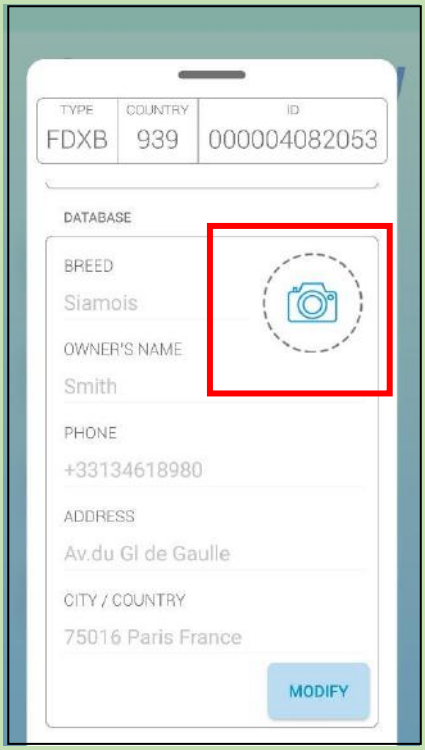




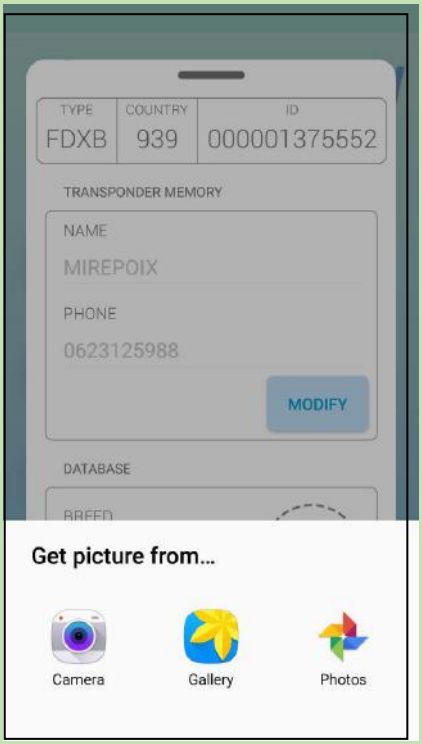
Enter one or more fields after selecting MODIFY and SAVE

The datas will be saved into the Database of the phone or on the SERVER*

Saving a photo of the animal

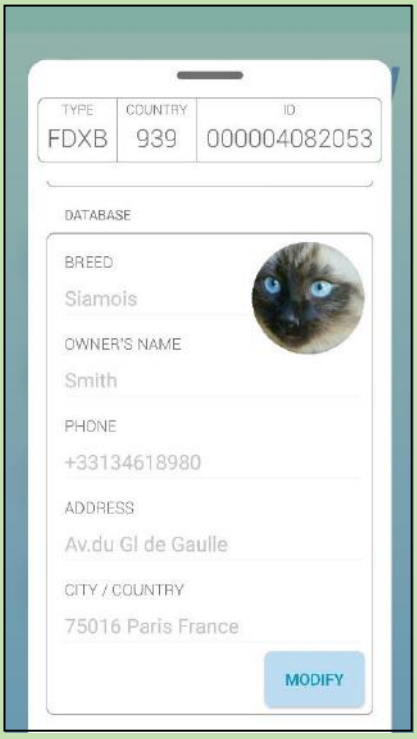


Click on the "photo" icon



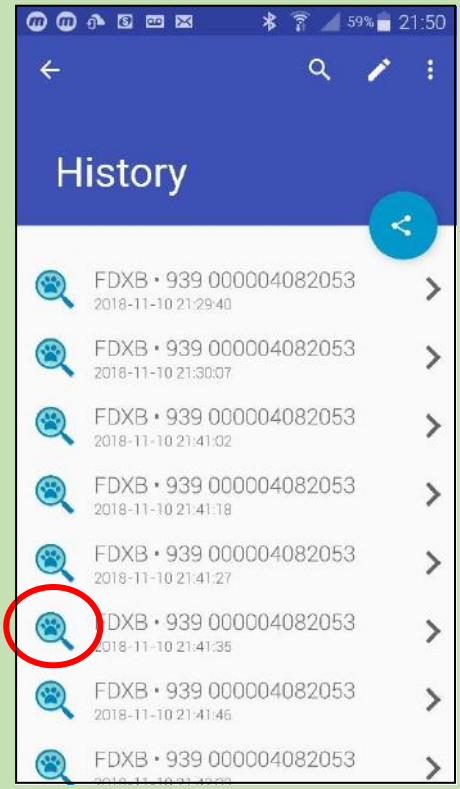
Two possibilities are available:

- take a photo
- choose a photo already saved on the phone.

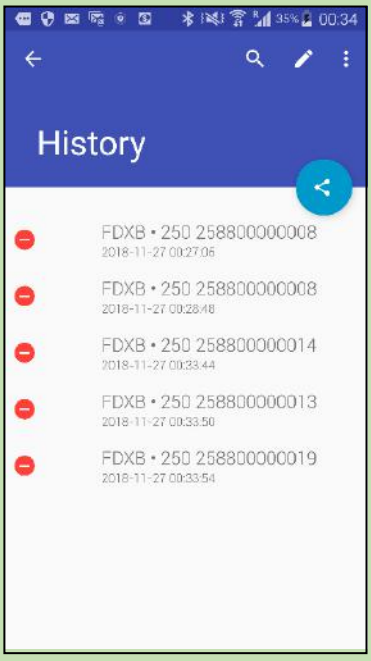


The History function

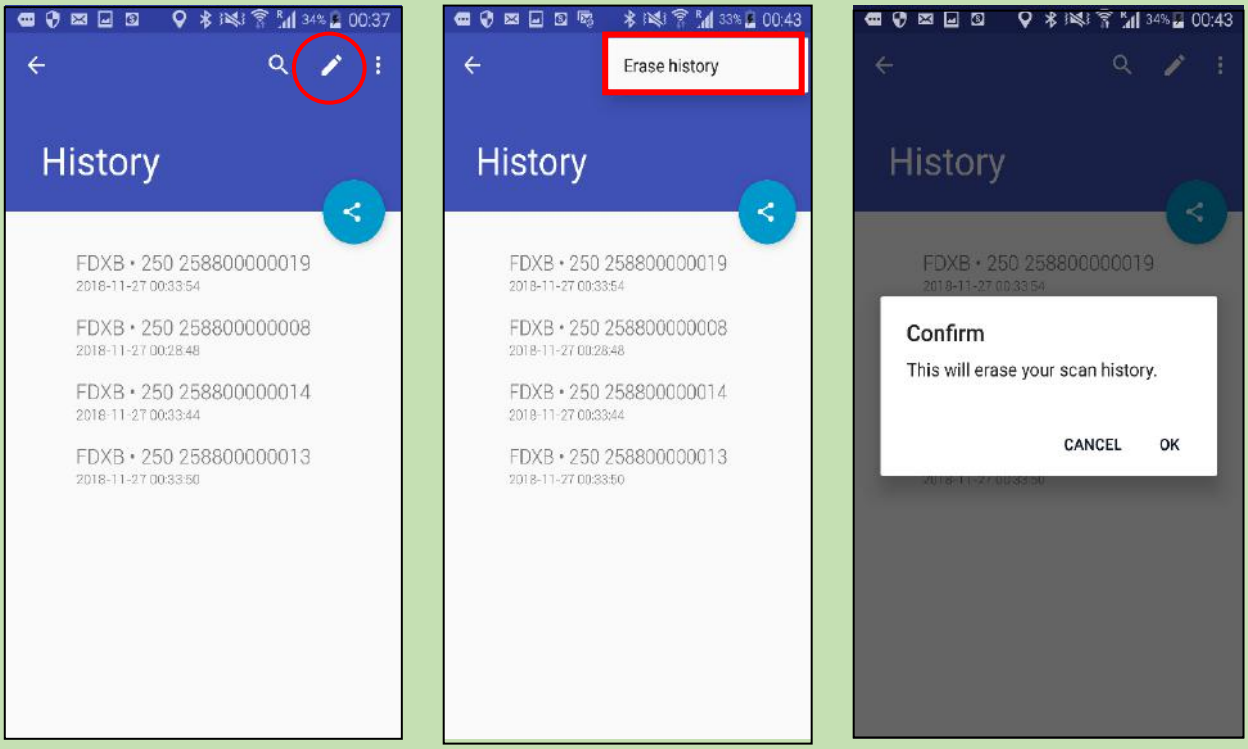
The "PetScan" software keeps the history of all "Chip" readings that have been made.



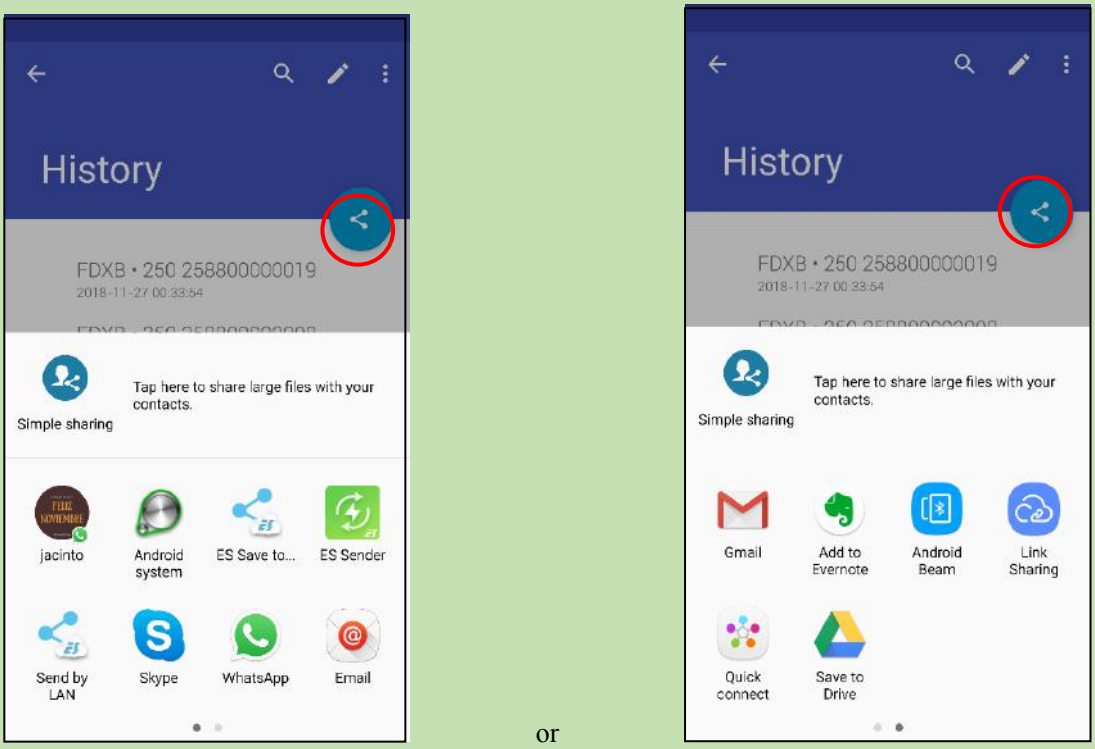
The number of the "Chip" tells you the date and time of the recording. Clicking the "PetScan" icon displays the place where the recording was made, if this information was provided by the phone when reading the chip.



Selective deletion

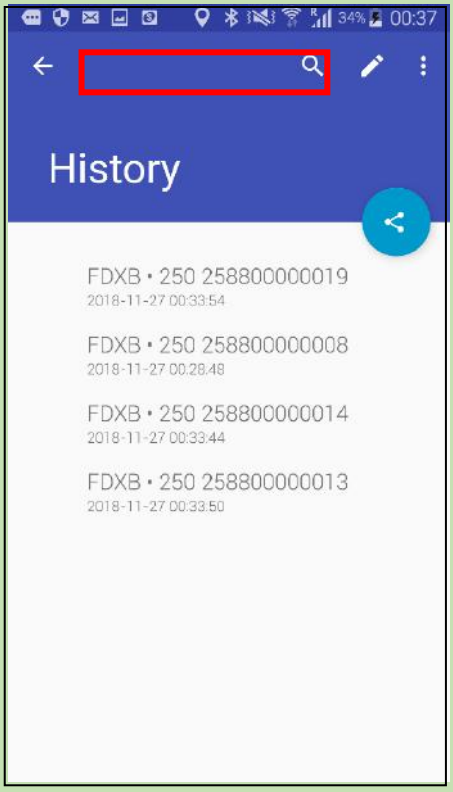


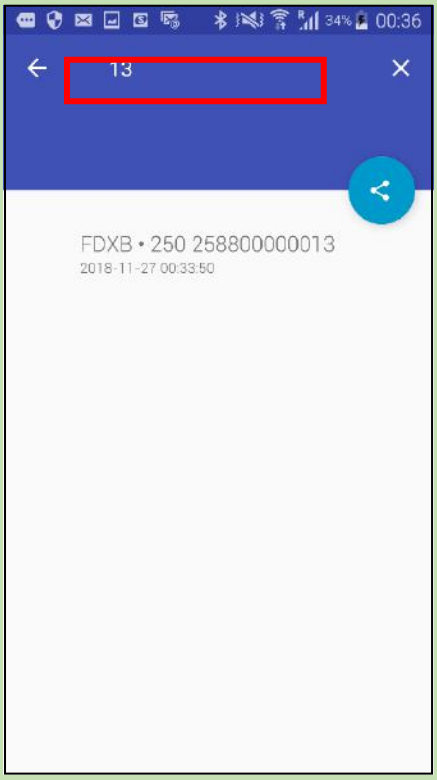
Erase complete history



or

Files containing this information can be transferred  .

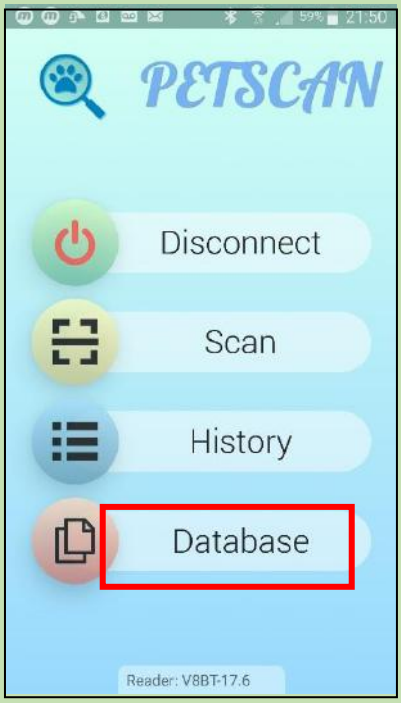


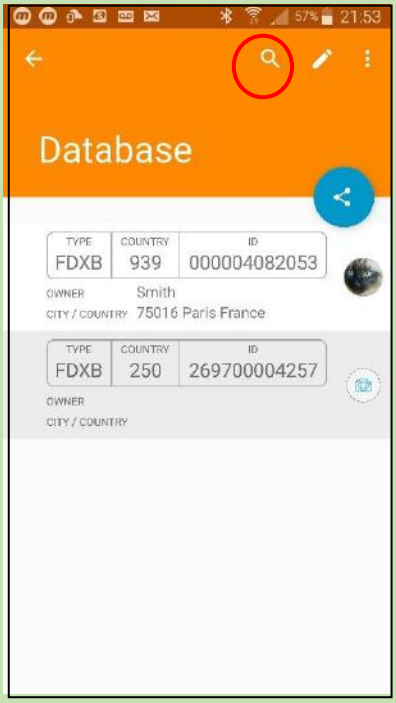


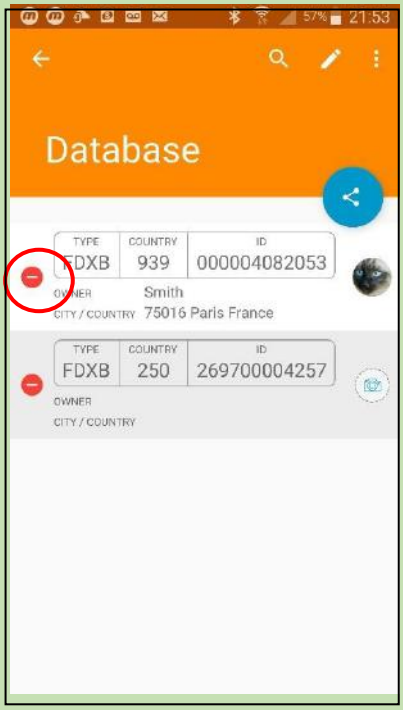
It is possible to search for a file by "Chip" number or by date by clicking on the "Search" field.

The Database function

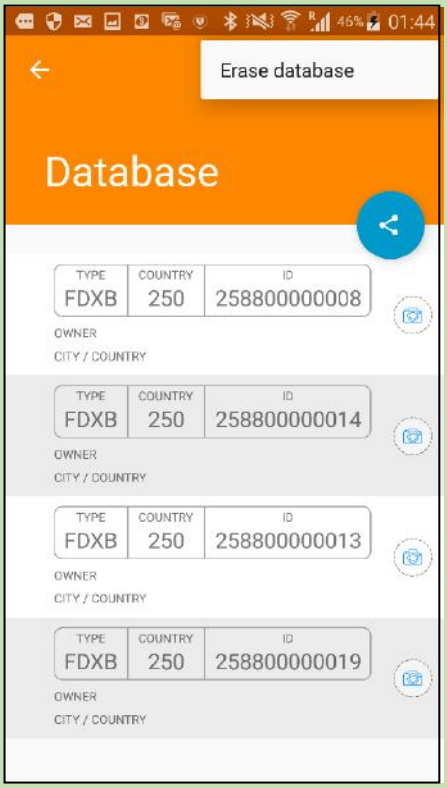
This is the database that is stored on the phone's memory. **The connection to an external database stored on a server is not included in the "PetScan" software.** It needs specific expansion that depends on many parameters but that we can encrypt and carry out in the form of a requirements specification.

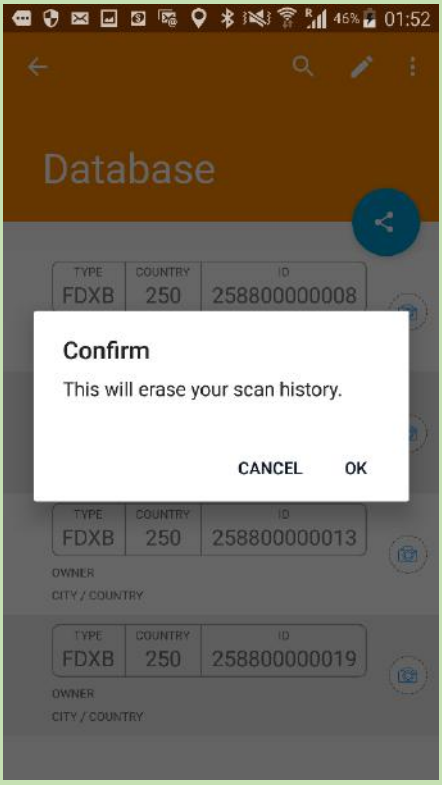




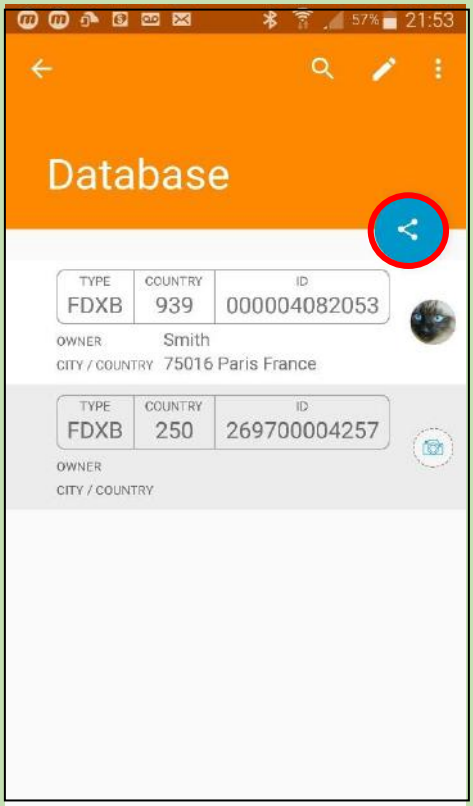


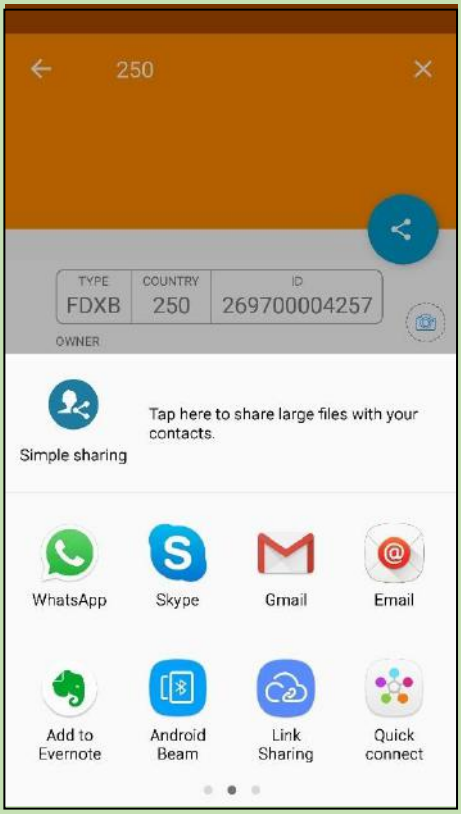
Selective deletion



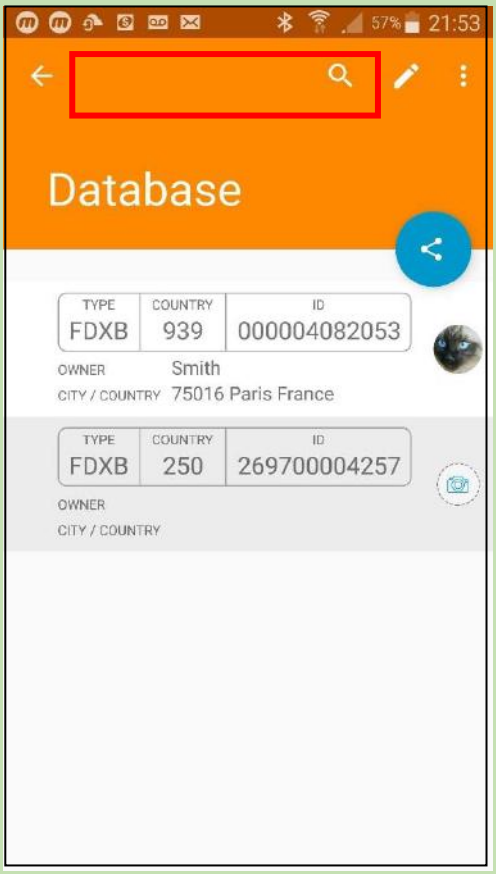


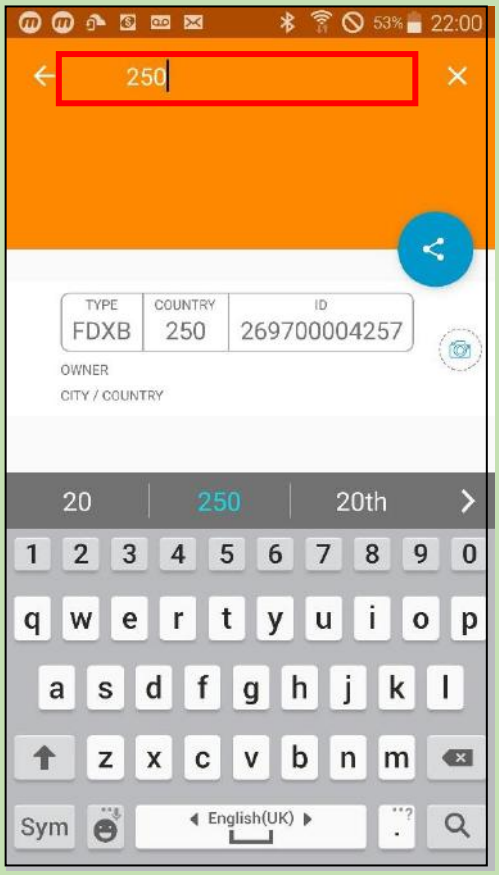
Deleting the database completely





Files containing this information can be transfered.

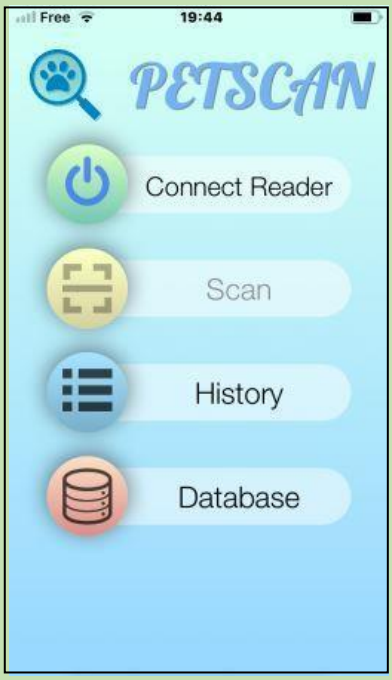




It is possible to search for a file by "Chip" number or by date by clicking on the "Search" field.

Apple mobile version (iOS): connection with reader

After opening the "PetScan" program, the following screen will appear:

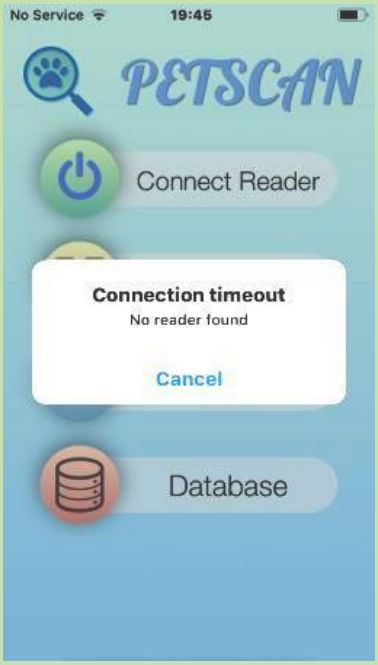


Select "Connect the reader".

The phone will try to connect to a nearby reader for about 10 seconds. Two things can happen:

1/ The phone finds a reader and connects. In this case, the blue "LED" of the reader changes from flashing to constant. The phone screen shows "Disconnect".

2/ After ten seconds of searching, the phone has not found a reader. In this case, the following message will appear:



Try again!

If a connection has not been established, a reason may be:

- **Failure when turning on the reader**,
- Failure to charge the reader's battery,
- Wrong setting of your phone's Bluetooth (see the manual of your phone),
- Incompatibility of the Bluetooth version in the reader. The iPhone only recognises the version Bluetooth 4, also called Bluetooth BLE. Readers put into service before 2017 have Bluetooth 2, which is incompatible with the iPhone.

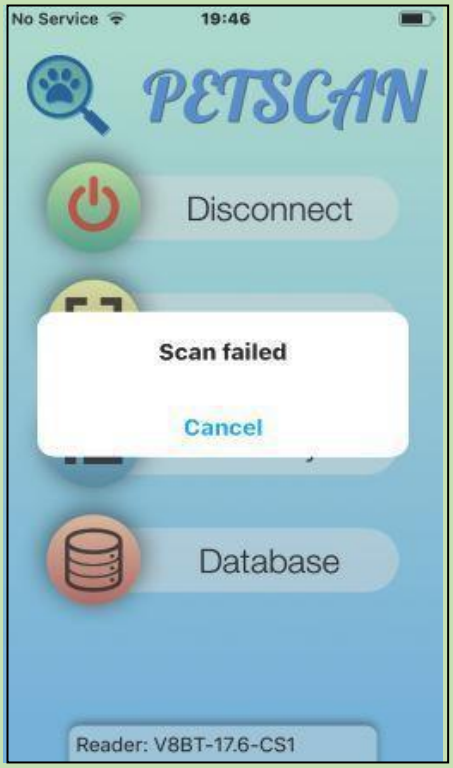
Searching for, reading and writing on a transponder (chip) with the reader: Scan'function

To search for and read a "Chip", select "Scanner":

The reader then searches for a "Chip" near it, 10 to 12 cm for about 25 seconds, and "Scanning" is displayed:

Two things can happen:

1/ The reader has not found a "Chip", and displays:

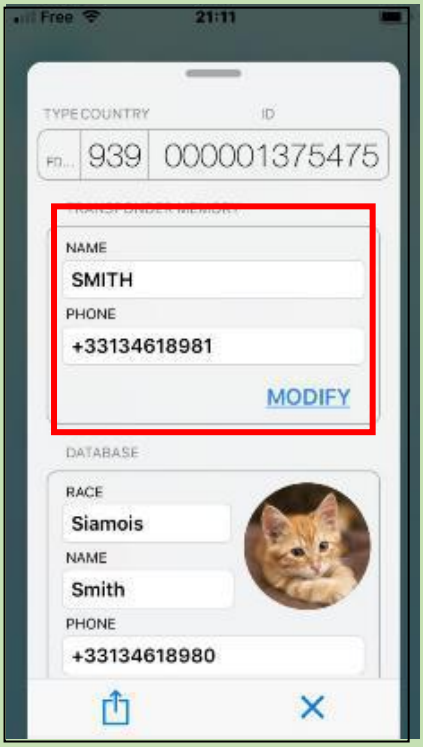


2/ The reader has found and read a blank chip, that is to say without additional data stored in the chip or in the database of the phone or the server*:

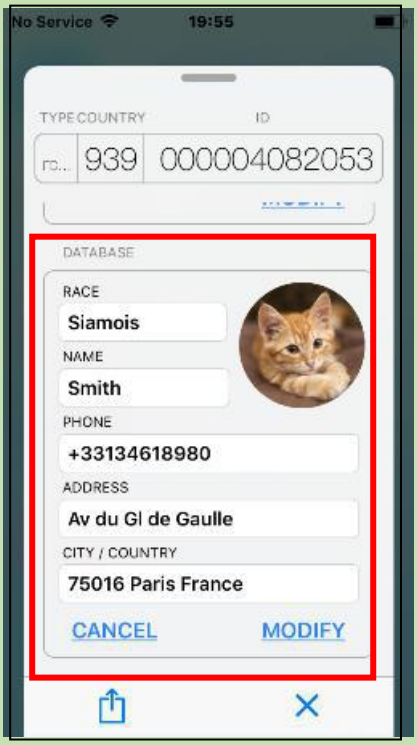
Memory of the chip: nothing

Phone database: nothing

3/ The reader has found and read a chip with data written in the memory of the chip and/or in the database of the phone or the server:



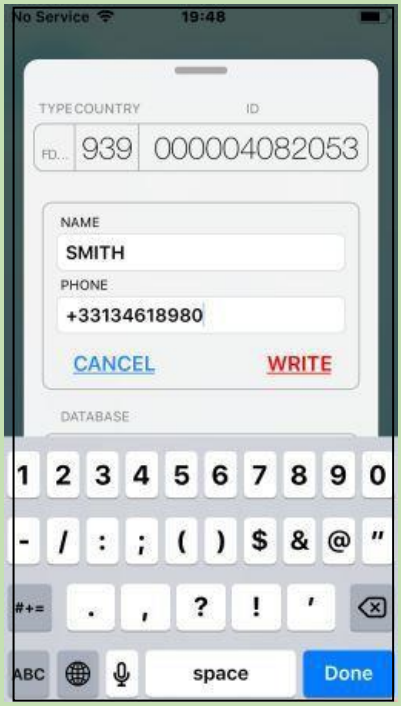
Memory of the chip



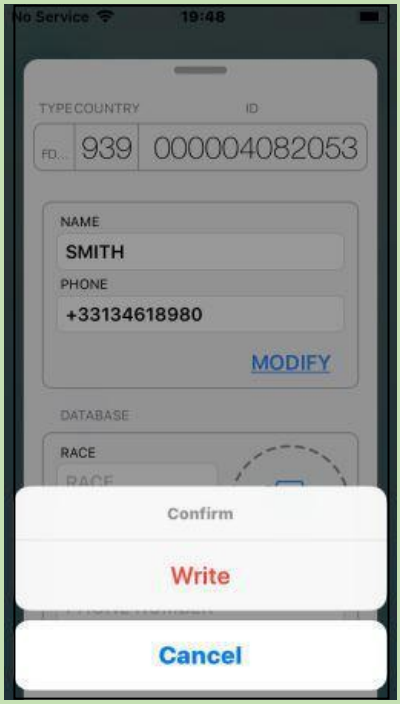
Phone database

Writing on the memory of the Chip with the reader

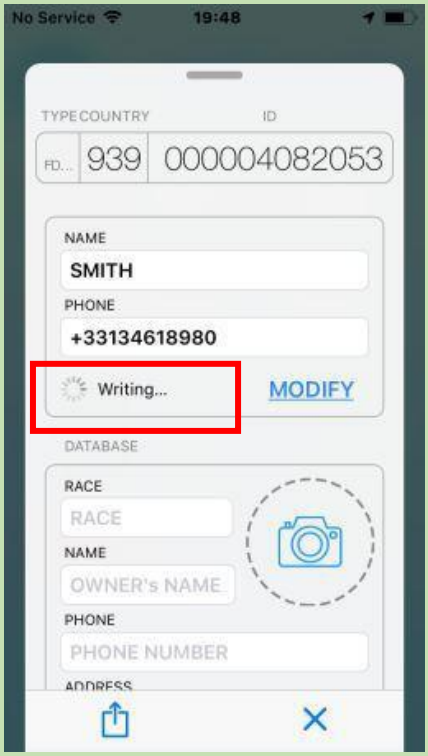
Select MODIFY



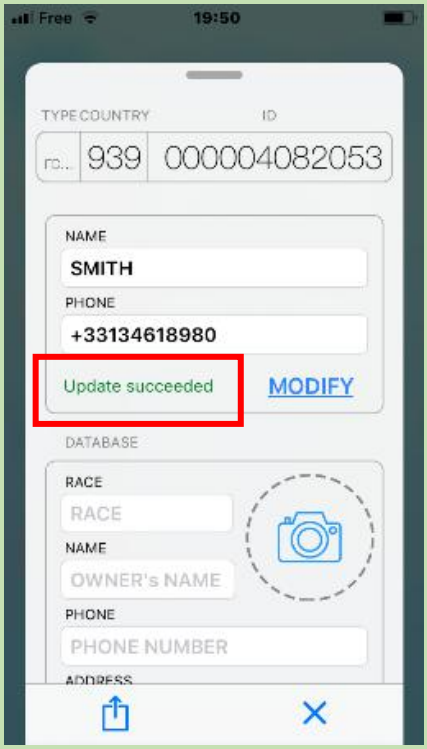
Enter the text and select **WRITE**



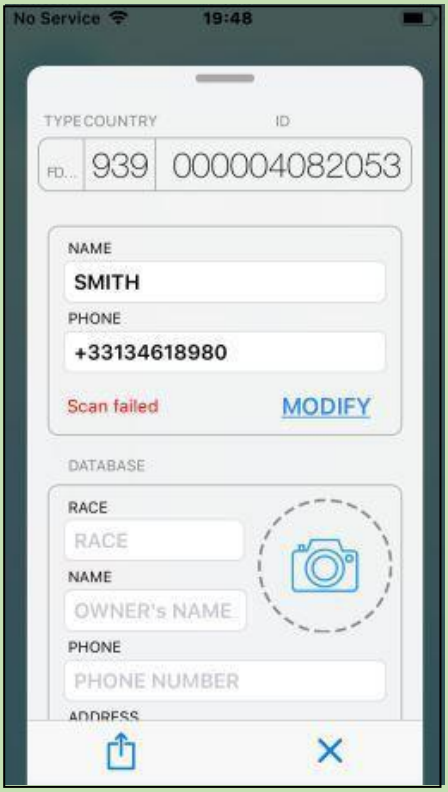
Confirm writing

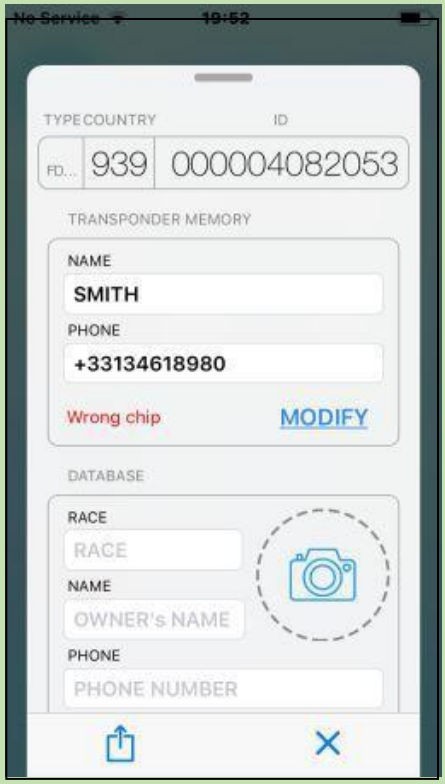


Writing is in progress



Writing is correct: a beep is emitted





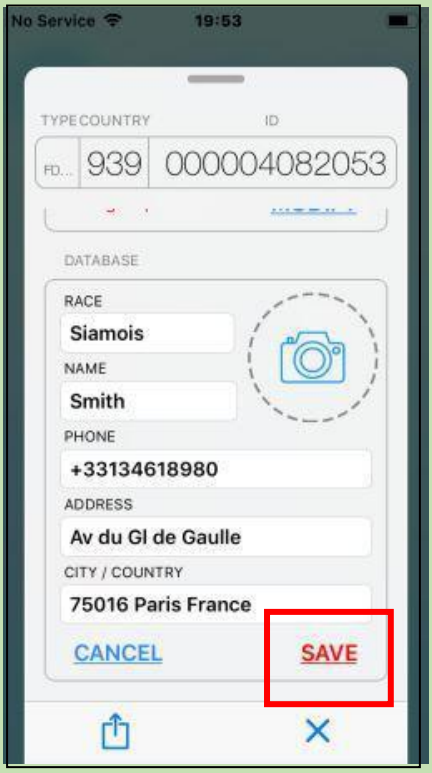
Writing failed:

- chip too far from the reader.
- memory blocks not open.

Attempt to write a chip different from the one initially read: a sound signal is emitted.

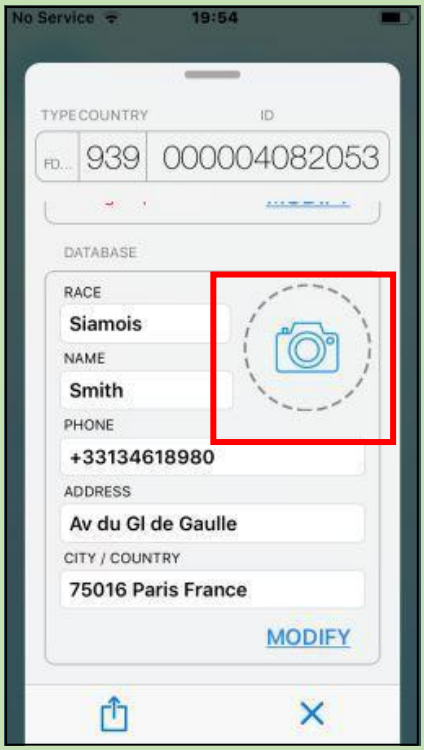
Writing information to be saved on the phone or server database*

Enter one or more fields after selecting MODIFY

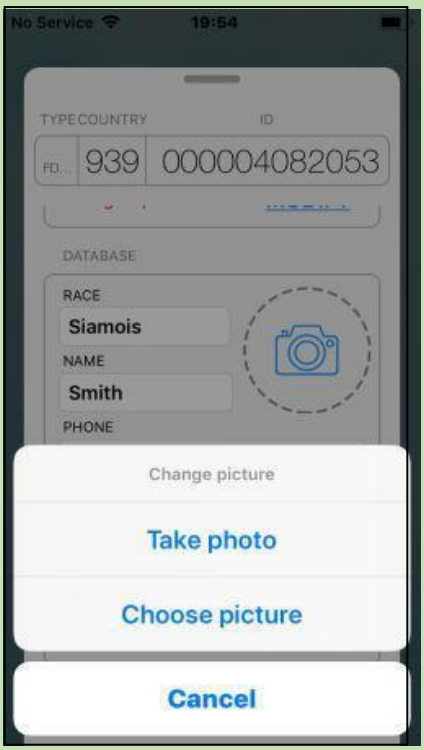


After entering one or more fields, select SAVE, and the data will be saved on the phone database or on the server*

Saving a photo of the animal



Click on the "photo" icon



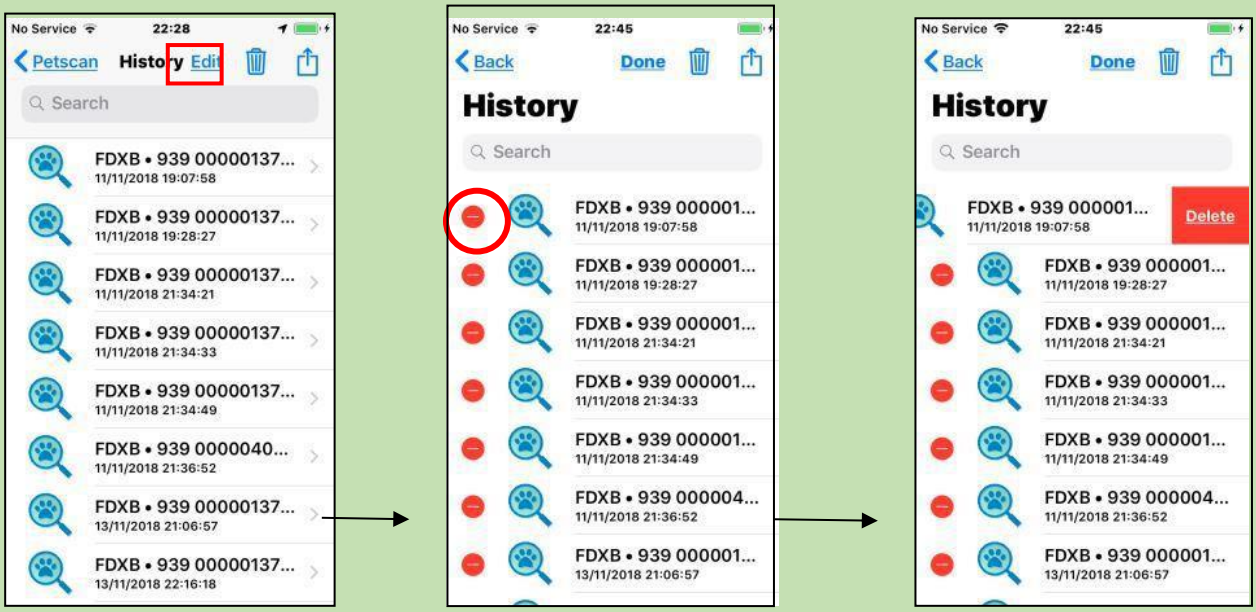
Two possibilities are available:

- take a photo
- choose a photo already saved on the phone.

The History function

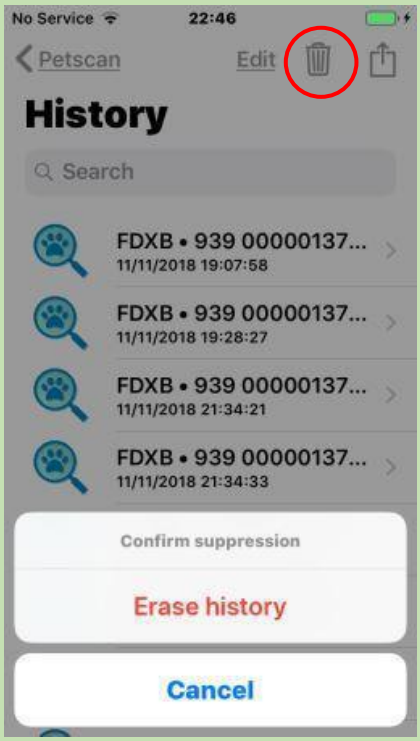
The "PetScan" software keeps the history of all "Chip" readings that have been made.

The number of the "Chip" tells you the date and time of the recording. Clicking the "PetScan" icon displays the place where the recording was made, provided that this information was provided by the phone when reading the chip.



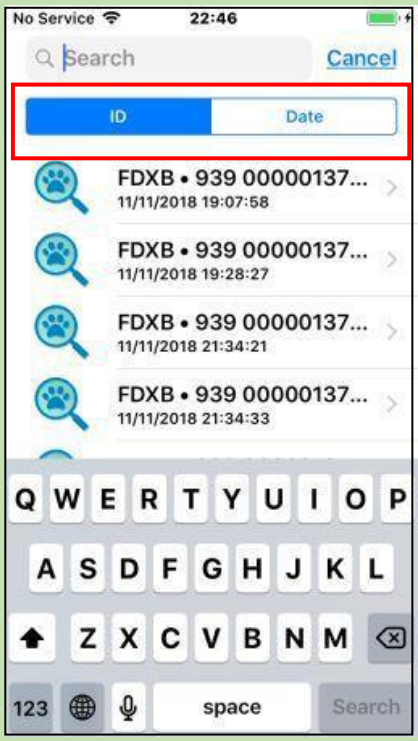
Selective deletion

Files containing this information can be selectively deleted by selecting Edit or universally by clicking on the trash icon or transferred  .



Erase complete history

Transfer file

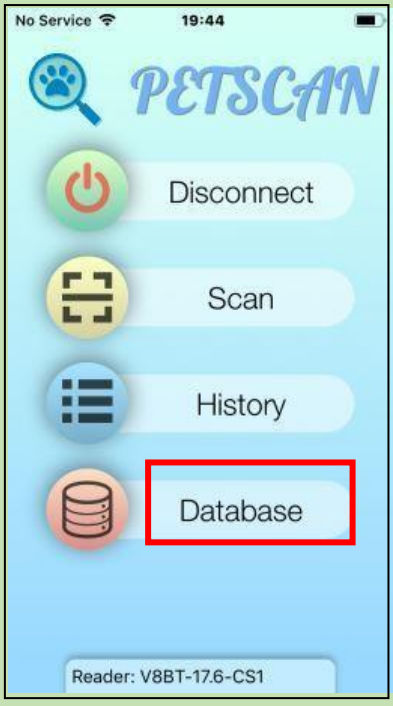


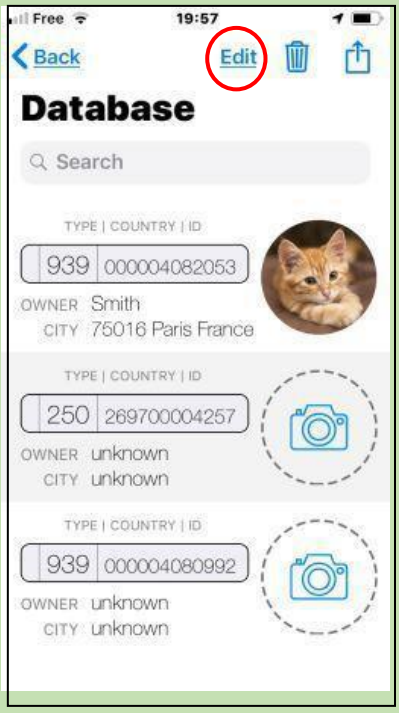
Search

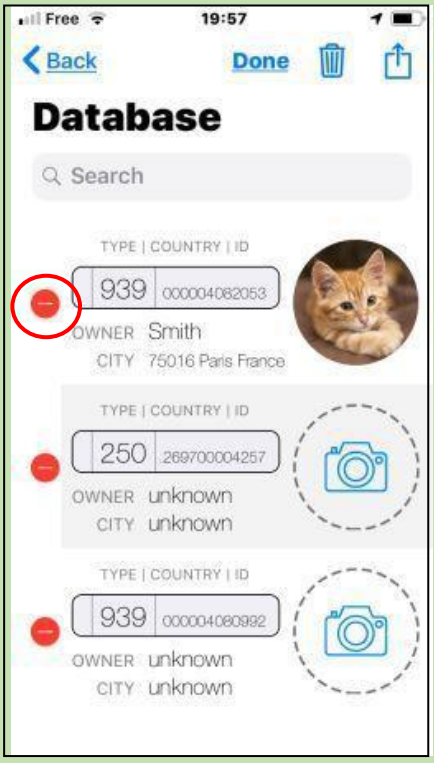
It is possible to search for a file by "Chip" number or by date by clicking on the "Search" field.

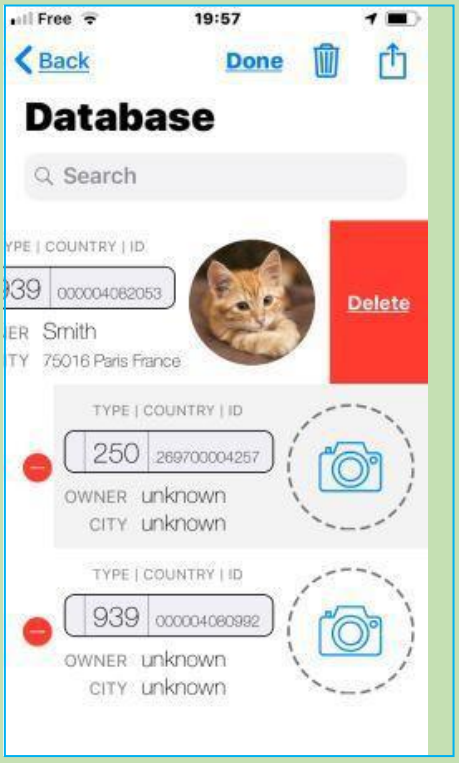
The Database'function

This is the database that is stored on the phone's memory. **The connection to an external database stored on a server is not included in the "PetScan" software.** It needs specific expansion that depends on many parameters but that we can encrypt and carry out in the form of a requirements specification.

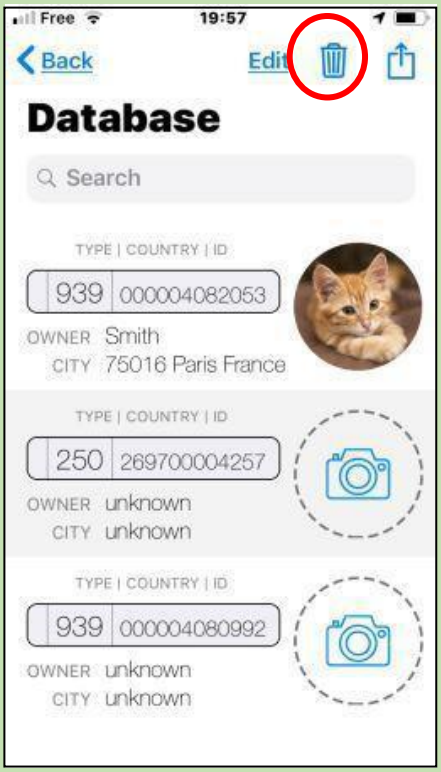


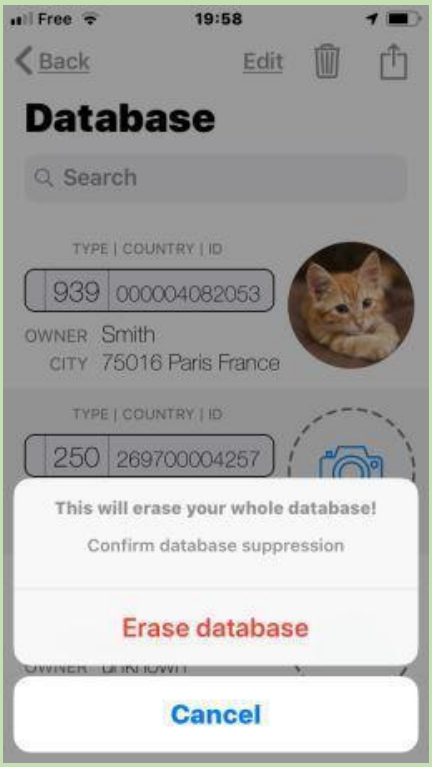






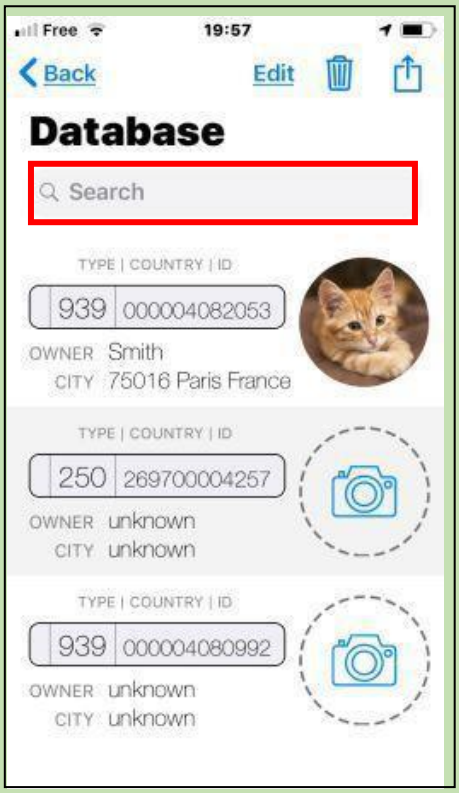
Selective deletion





Deleting the database completely

Send



Carrying out a search in the database can be done by "Chip" ID or by name or by address.

Using the "PetScan" software with the RT250BT

The "PetScan" application can be used with the RT250BT* after activating the reader's Bluetooth function.

The RT250BT is delivered with the function "time out" (2 min), which is activated to save energy. It is advisable to adjust the automatic time out setting and to set it to 30 min or more. If you do not do this, you risk having the reader turn off before a connecting has been made to the phone. Once connected, the player will not turn off even if the "Time out" has not been changed, except when exiting the program **or turning off the phone**.

To change the duration of the "Time out", you must load the utility program onto your PC which you will find at the following link: **http://download.realtrace.com/V8-Timeout.exe**

The features described in the previous chapter are all compatible with the RT250BT, but the writing distance for additional data on the chips is much shorter, i.e. around 3/4 cm instead of 7/8 cm with the V8BT or V8M.

In order to leave one hand free, a phone attachment accessory for the RT250BT has been provided.

Finally, be aware that in all cases, reading a chip can be performed by selecting the "Scan" key on the main menu, or more conventionally, by pressing the play button on the reader in use.

* Only the RT250 BT4 or BT2/4 versions work with the iOS "PetScan" program. Earlier RT250BT2 versions can not work with iOS.

The RT250BT2, RT250BT4 and RT250BT2/4 versions work with Android.
With Bluetooth 2, the blue LED of the reader flashes quickly.
With Bluetooth 4 or BT2/4, the blue LED flashes slowly.

****
****
*

Using the "PetScan" Android" or iOS software with V8BT

The "PetScan" application can be used with the V8BT* after activating the reader's Bluetooth function. The V8BT is delivered with a "Time out" function (2 mins) activated for power-saving reasons. It is advisable to modify the time out setting and increase it to 30 minutes or more. If you do not do this, you risk having the reader turn off before a connecting has been made to the phone. Once connected, the reader will not turn off even if the "Time out" has not been changed, except when exiting the program **or turning off the phone**.

To change the duration of the "Time out", it is necessary to connect the reader to your PC after having loaded the utility program which you will find by following the following link http://download.realtrace.com/V8-Timeout.exe

The features described in the previous chapters are all compatible with the V8BT. The writing distance for additional data on the chips is in the range of 7/8 cm.

* Only the V8 BT4 or BT2/4 versions works with the iOS "PetScan" program.
Earlier V8BT2 versions can not work with iOS.

* Versions V8BT2, V8BT4 and V8BT2/4 work with Android. With Bluetooth 2, the blue LED of the reader flashes quickly.

The "Realtrace Android" application can be used with the VBT after activating the reader's Bluetooth function **but only with the model produced after September 2016**.

However the V8BT is delivered with the "Time Out" function (2min) activated for power saving reasons it is advisable to change the "Time Out" setting and increase it to 30 minutes or more. If you do not, you risk having to re-pair the player with the phone every time it turns off ...

To change the duration of the "Time Out", you must load the utility program on your PC which you will find at the following link: http://download.realtrace.com/V8-Timeout.exe and connect your PC to the reader.

The features described concerning V8BT are all compatible with the V8M.

Programming a V8BT reader via the USB port

This programming of the V8BT reader by connecting the USB port of a PC is only possible from version V8.v 18.8
This and superior versions include a bootloader to update V8BT programs.

Material required:

- PC with Windows 7, 8, 10
- Drive with software V8 V18.8 or higher.
- Cable for drive connection to PC.

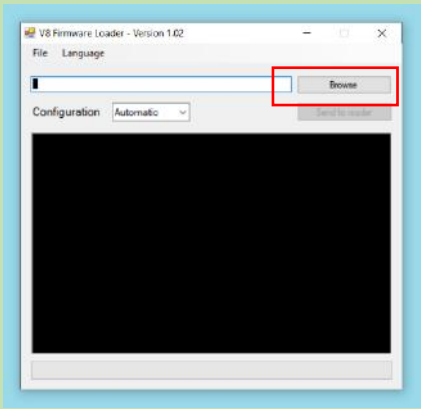
Software required

- Firmwareloader version 1.02.exe
- Firmware to be loaded in the V8BT.

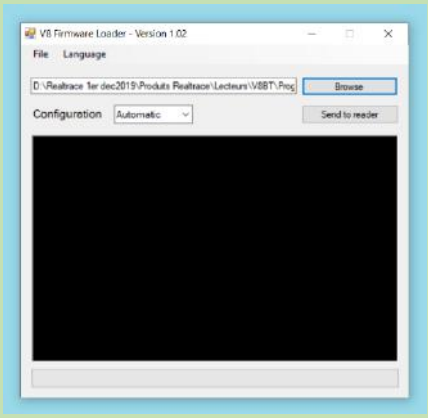
Procedure for the programming

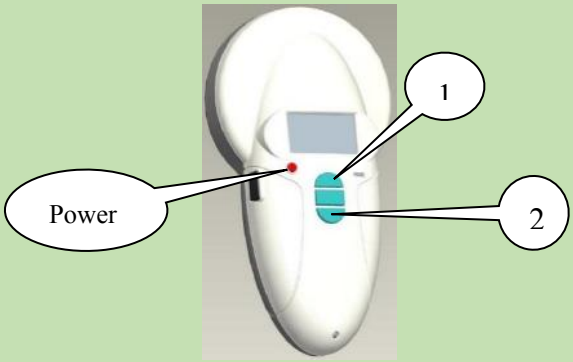
- Install Firmwareloader version 1.02.exe on PC
- Connect the V8BT to the PC using the USB cable

When the program opens, the following screen appears:



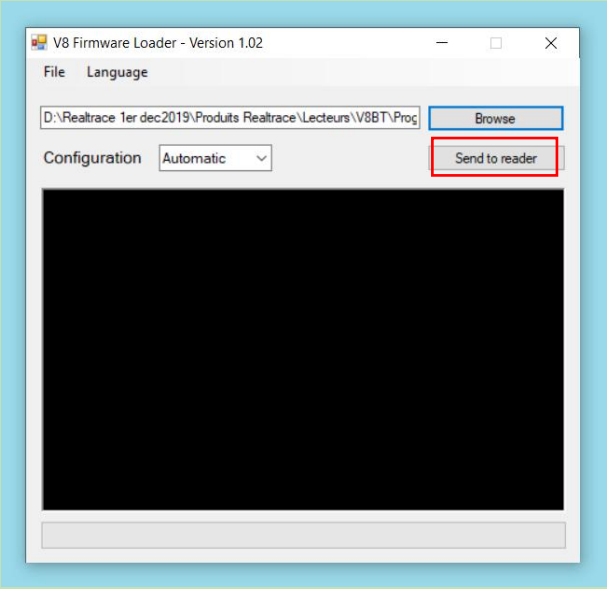
After loading the selected program in this case V8 I.D. ology-2.1



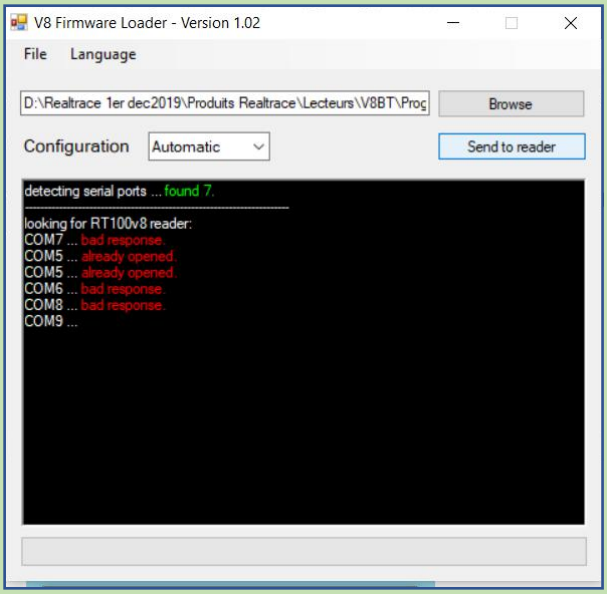


Start the V8 by holding down the Up (1) and Down(2) keys for a few seconds while pressing Power.
Release the keys.
The V8 screen should remain black and the Bluetooth led should flash, informing that the drive has entered Bootloader mode ready to load a program.

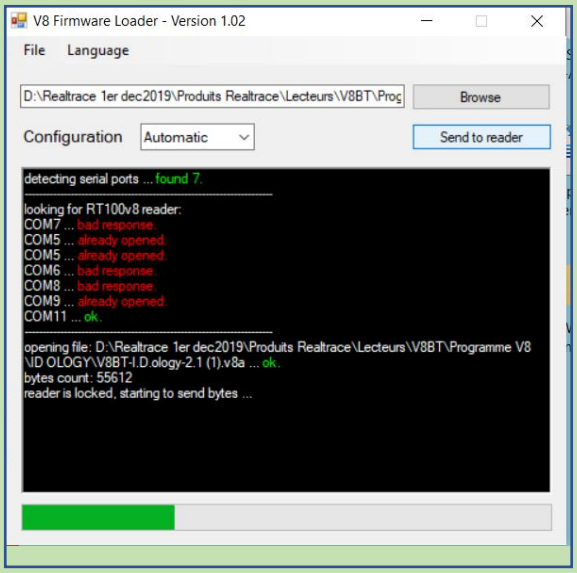
Start the download procedure by selecting “Send to Reader”



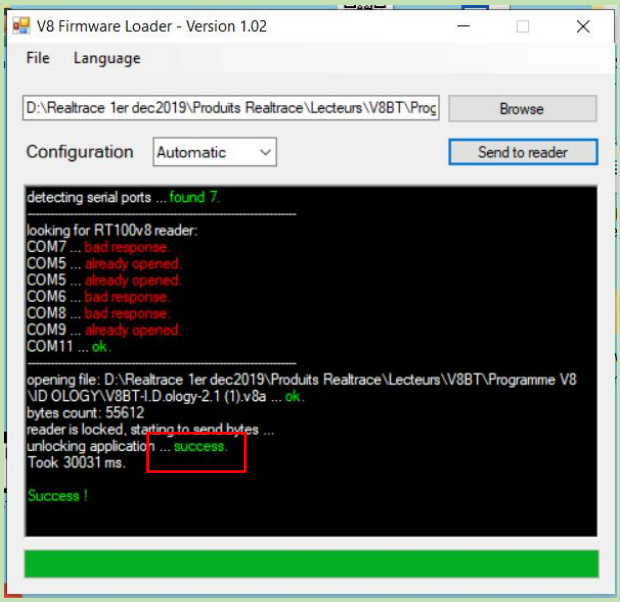
Automatic port searching…



Start of V8 reader programming



Programming is complete. Success !



The V8 reader displays the name of the new program

Tools for development

Two starter kits are available for free:

SDK for application development using the Bluetooth function of the V8BT.

https://www.hypertide.com/v8m/V8MSDK-Rev-1.0.zip

SDK for application development using the V8BT with Windows 10.

https://www.hypertide.com/v8m/W10V8BTSDK.zip

Free application on mobile Phone

On Play Store “PetScan”

On AppStore “PetScan”