



# DataTracer User Guide

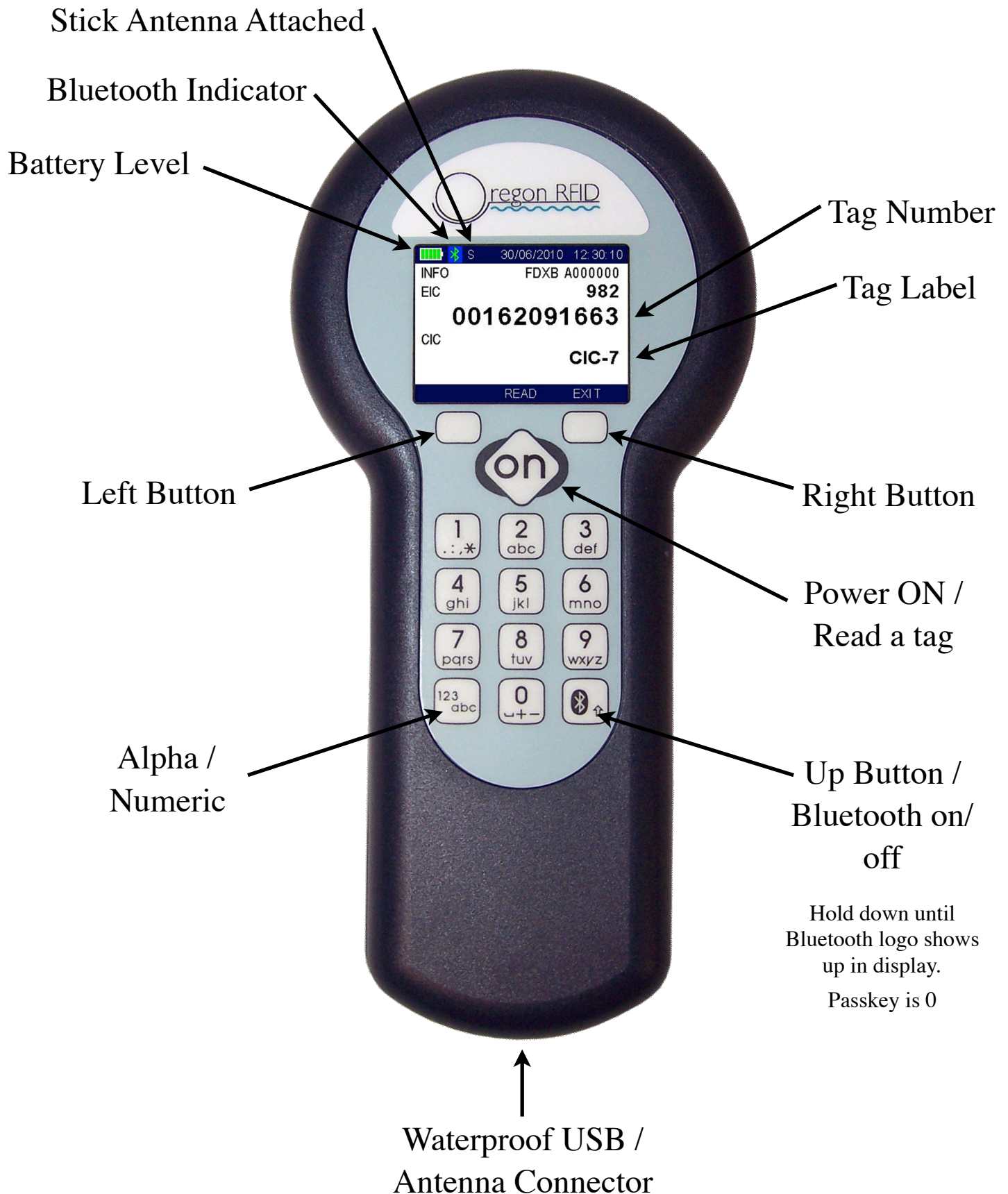


February, 2016  
Firmware 1.4.2





# Reader Controls



| Main Menu     |      |
|---------------|------|
| Language      | †    |
| Configuration | >>>> |
| Setup         | >>>> |
| Date & Time   | >>>> |
| Shutdown      | >>>> |

† English/D Deutsch/Russian/Romanian  
Portuguese/Espanol/Italiano

## Configuration

|                         |                    |
|-------------------------|--------------------|
| Reading timeout [6 sec] | 1-100 seconds      |
| ISO 24631-2             | on/off             |
| EIC/CIC Format          | >>>>               |
| Procedure               | (select .rdf file) |
| Session                 | >>>>               |
| Equivalence             | >>>>               |
| Reading sound           | on/off             |
| Send version (BT)       | on/off             |
| Send reading (BT)       | EIC/CIC/None       |
| Continuous Reading      | on/off             |

## Setup

|                    |                |
|--------------------|----------------|
| Timer backlight    | 1-40 seconds   |
| Auto Shutdown      | 1-5 minutes    |
| Audio Level        | high/low/off   |
| Display Brightness | high/mid/low   |
| Keyboard sound     | on/off         |
| Start-up sound     | on/off         |
| Shut-down sound    | on/off         |
| Start-up image     | on/off         |
| Decimal separator  | (comma/period) |
| Test unit          | >>>>           |

## Date & Time

|          |                  |
|----------|------------------|
| Format   | EU/USA/Timestamp |
| Set date | (date dialog)    |
| Set time | (time dialog)    |

## EIC/CIC FORMAT

|                       |                 |
|-----------------------|-----------------|
| EIC format            | †               |
| Use retagging counter | on/off          |
| CIC                   | long/short/none |
| Duplicate CIC allowed | on/off          |
| Buzzer duplicate CIC  | on/off          |

† Short/Long/Bi-HEX/HEX/ShortSA/  
BDN\_Ira/F210/Tiris

## SESSION

|                       |        |
|-----------------------|--------|
| Continue              |        |
| New                   |        |
| Open                  |        |
| Delete                |        |
| Send/Print            |        |
| Modify/Erase          |        |
| Auto start new        | on/off |
| Blank EIC allowed     | on/off |
| Duplicate EIC allowed | on/off |
| Blank repetition      | on/off |
| Send session (BT)     | on/off |
| Send field name (BT)  | on/off |

## Equivalence

|              |                  |
|--------------|------------------|
| Show EIC/CIC | EIC/CIC          |
| Browse       | select from list |
| Search CIC   | (dialog)         |

## Test unit

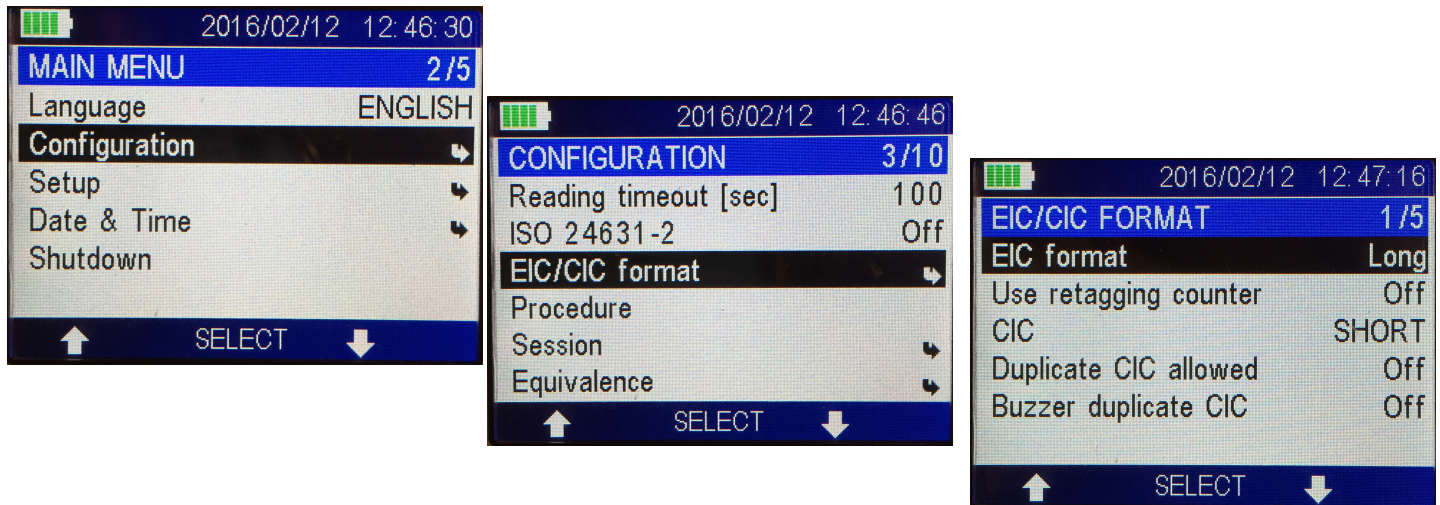
|                    |
|--------------------|
| Autotuning RFID    |
| Cyclic Delay [min] |
| Cyclic reading     |
| Cnt Reading        |
| Save RF            |
| Save HDX           |
| Save FDX-B         |
| Keyboard test      |

Navigate through the menus with the Left and Right buttons. Press the OK button to select an item. Pressing the Up button will go to the preceding menu. Items in red are the factory settings.



# Tag Display Format

There are 5 different formats for displaying the tag numbers. They are selected using the Configuration menu.



## ISO Long (default)

Animal: "A0000000964000000123456" (23 characters)

Industrial = "R000600000000000123456" (21 characters)

## ISO Short

Animal: "964 000000123456" (16 characters)

Industrial: "0006 0000000000123456" (21 characters)

## ISO TIRIS (Texas Instruments)

Animal: "A 00000 0 964 000000123456" (26 characters)

Industrial: "R 0006 0000000000123456" (23 characters)

## F-210

Animal: "A 00000 0 0999 000000123456" (27 characters)

Industrial: "R 0006 0000000000123456" (23 characters)

## BDN-Ita

Animal: "10000000964000000123456" (23 characters)

Industrial: "R000600000000000123456" (21 characters)

## ISO Short South America (SA)

Animal: "964000000123456" (15 characters)

Industrial: "0006 0000000000123456" (21 characters)

## Reader Lock

After a period of inactivity the screen will dim and the keys will be locked. Press the ON button to continue.



## Turn Reader OFF

Press the left button twice (Main Menu/Shutdown) followed by the ON button.

If a menu is being displayed, press the Up button until the topmost screen is reached.



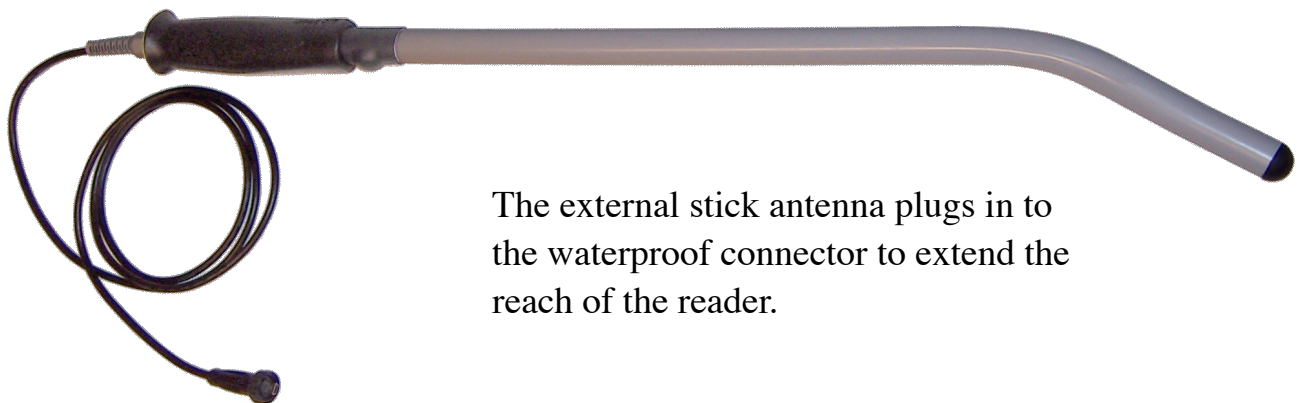
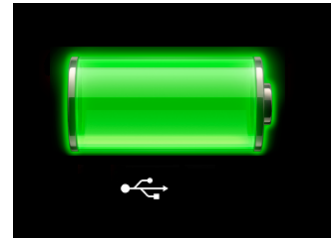
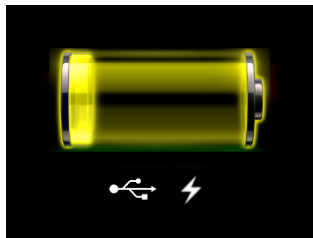


# Waterproof Connector

The waterproof connector on the bottom of the reader is used for many different purposes listed below.

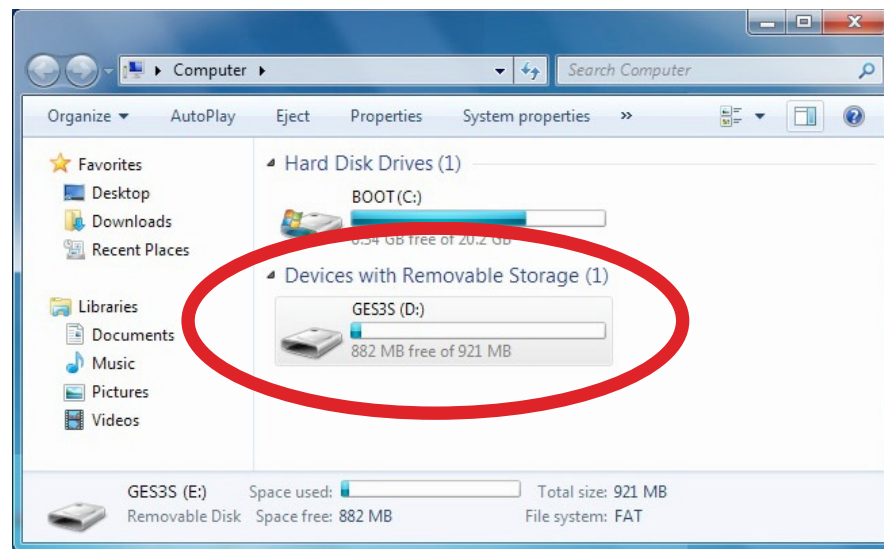


Charge the reader battery from 12 VDC, 110/220 VAC or computer USB port.

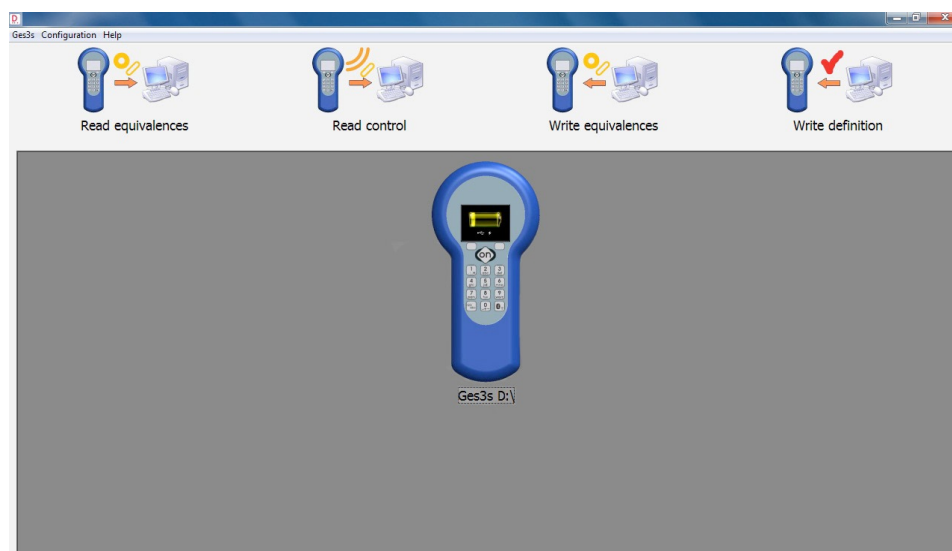


The external stick antenna plugs in to the waterproof connector to extend the reach of the reader.

When the reader is plugged into the USB connector of a PC the internal memory mounts as a disk drive to copy files to and from it.



The PC configuration software uses the USB port to communicate with the reader.

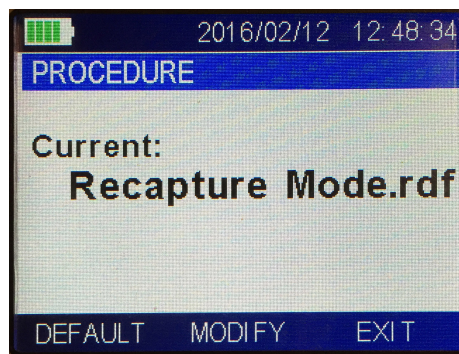
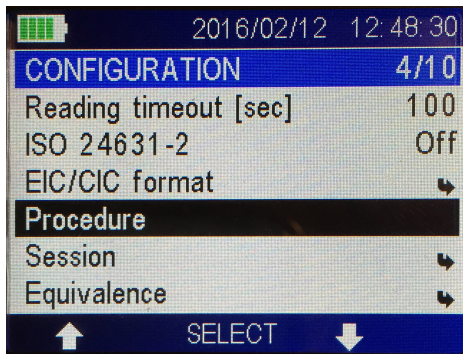




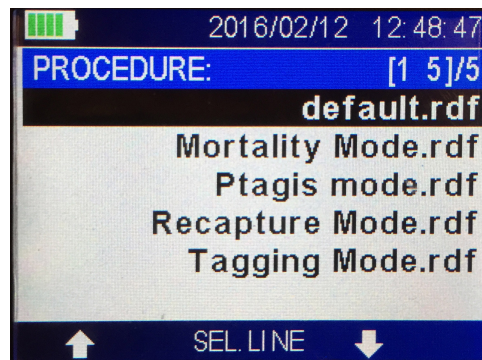
# Applications

The Oregon RFID DataTracer Reader has an advanced scripting capability that allows choosing and running applications stored in memory. Two applications are preloaded for tagging and tag recapture operations.

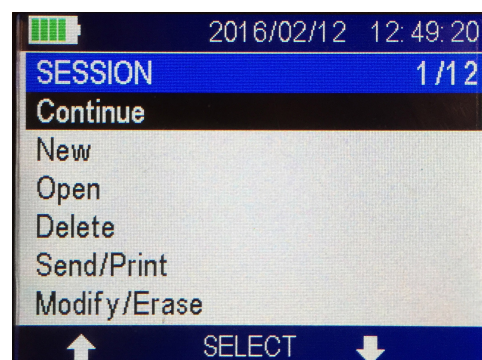
The currently running application is shown with the Configuration >> Applications menu.



The Modify menu will display a list of applications to select one.

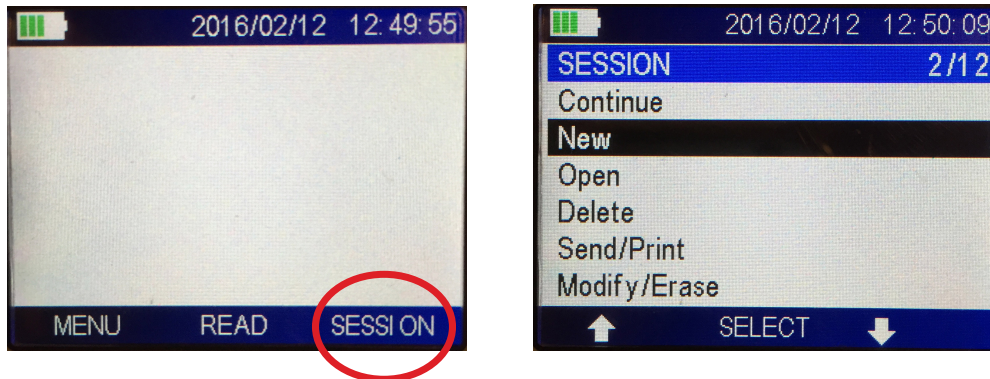


The Continue item is selected to start or resume the currently running application.

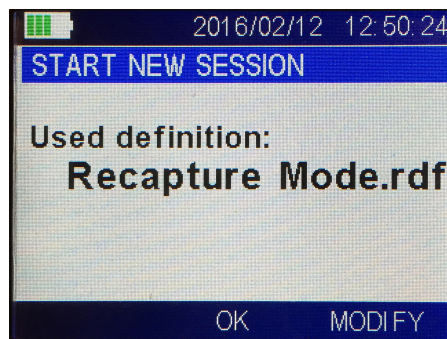


# Opening a New Log File

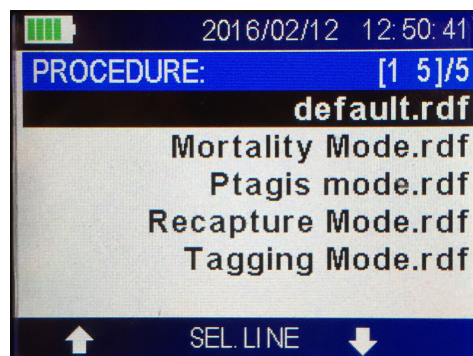
Data is collected using applications which are started by selecting Log File with the right button, then selecting New to start a new session.



The name of the current script will be shown.

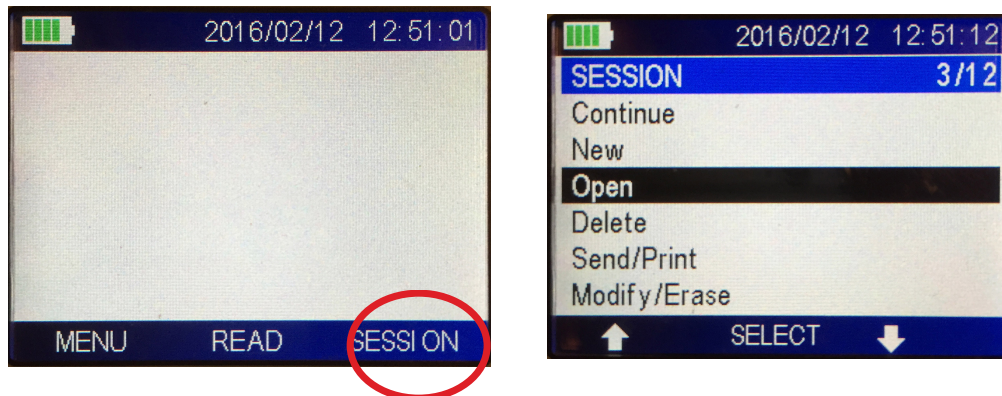


Select Modify to change the application that is used.

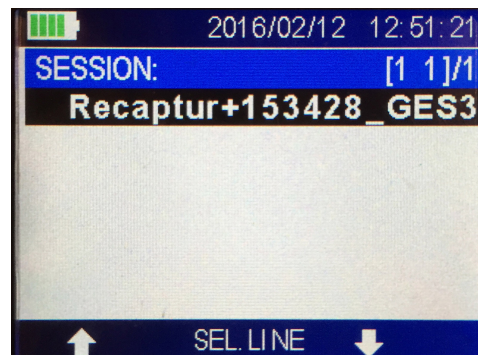


# Adding Data to an Existing File

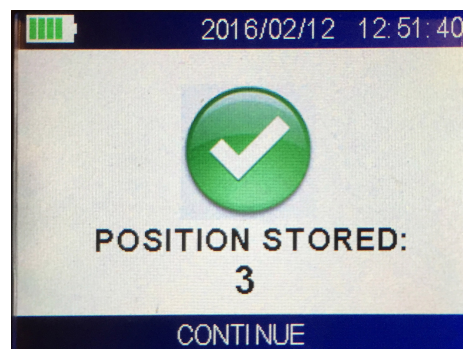
Data can be added to an existing file by selecting Log File and the Open item:



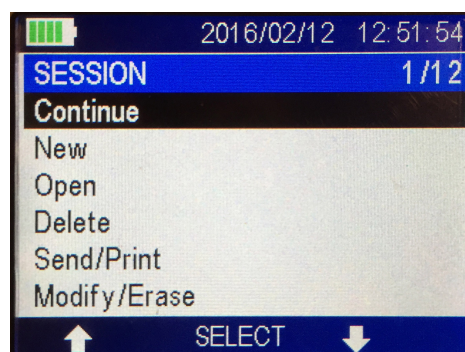
A list of current files will be shown to make a selection.



Once the selection is made the next free position number is displayed.



Finally, start the application by selecting Continue.





# Scripted Applications

A sequence number is requested at the start of every new record.

2011/03/06 21:03:20

RECORD INDEX 1

Field **Sequence Number**

**0001**

LEFT OK RIGHT

The reader waits to read a tag, then displays the EIC number and optional CIC label.

2011/03/06 21:03:36

RECORD INDEX 1

Field **Tag Code**

**000**

**00000000000000**

READ

2011/03/06 21:04:19

INFO FDXB A000000

EIC **972**

**273000038153**

CIC

CONTINUE READ

After the tag has been detected the reader asks for the fork length, weight, species and notes.

2011/03/06 21:04:39

RECORD INDEX 1

Field **Fork Length mm**

**127**

LEFT OK RIGHT

2011/03/06 21:04:56

RECORD INDEX 1

Field **Weight gr**

**0206**

LEFT OK RIGHT

2011/03/06 21:05:05

RECORD INDEX 1

Field **Species**

**Brook Trout**

SAVE

2011/03/06 21:05:51

RECORD INDEX 1

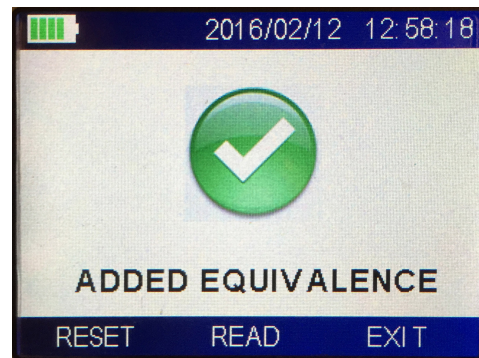
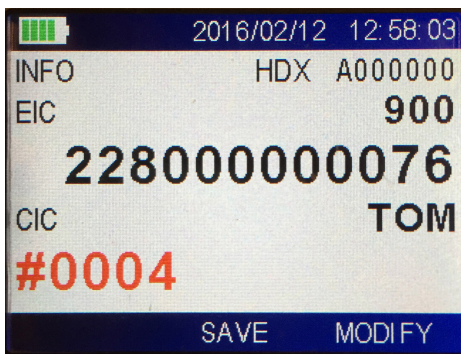
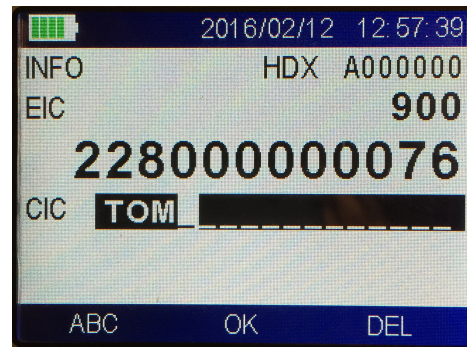
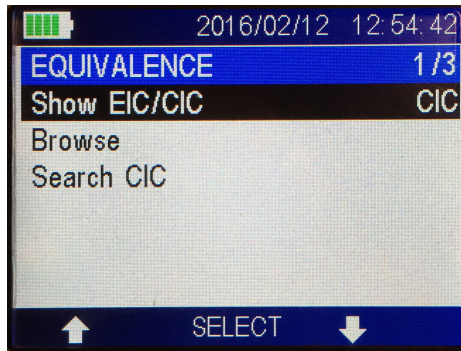
Field **Remark**

**Group 4** -----

123 OK DEL

# Tag Labels

Besides the Electronic ID Code (EIC) that is read from the tag, each can also be assigned a label (CIC - Customer Identification Code) that will be stored in the reader and displayed when the tag is detected.

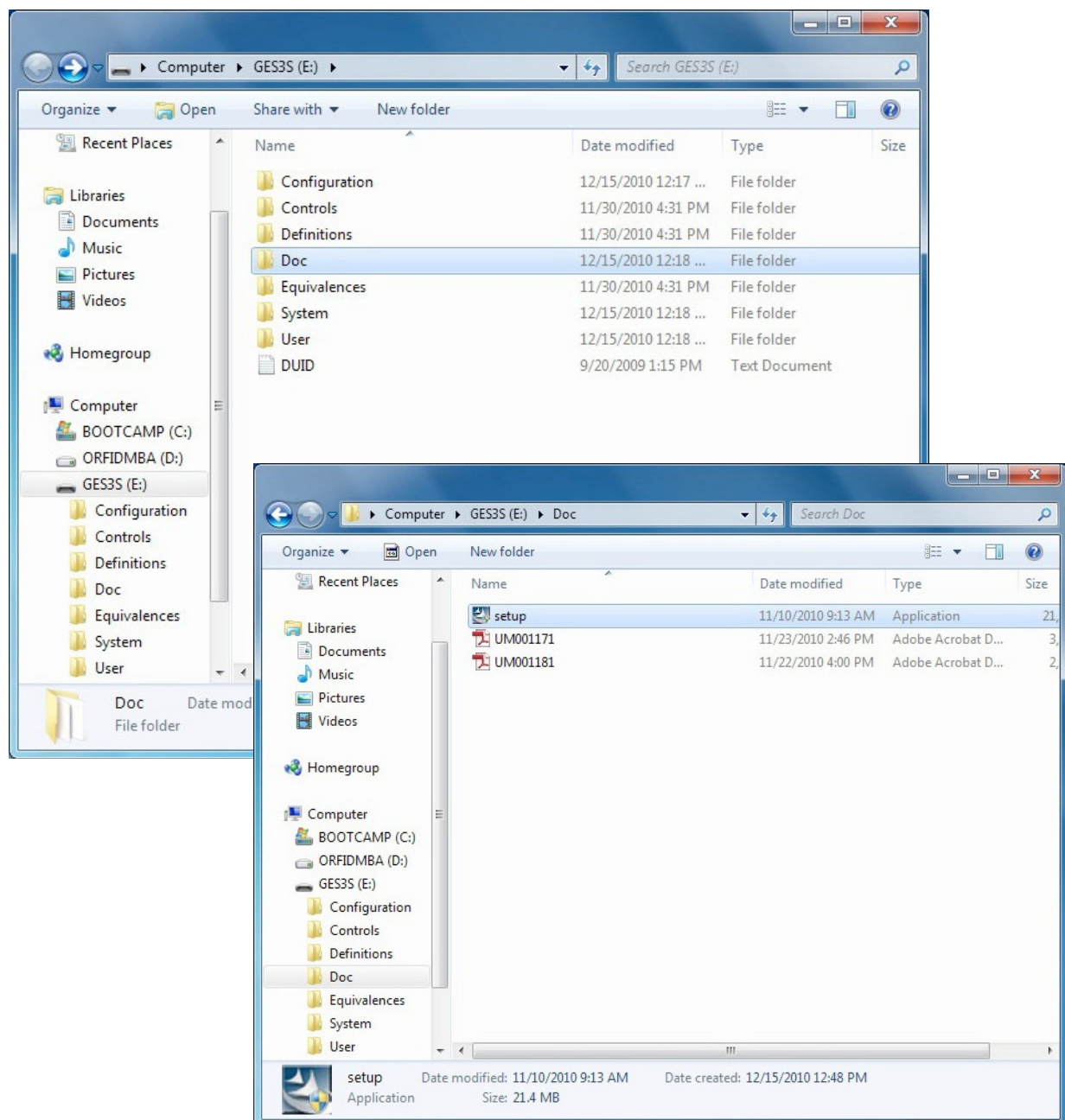


# PC Software

Software is included to connect to the reader using the USB cable to be able to configure it and retrieve stored data.

## Installation

The installer for the PC software is located on the USB drive when the reader is mounted. Start the program *setup.exe* in the *doc* folder to install Rumisoft.



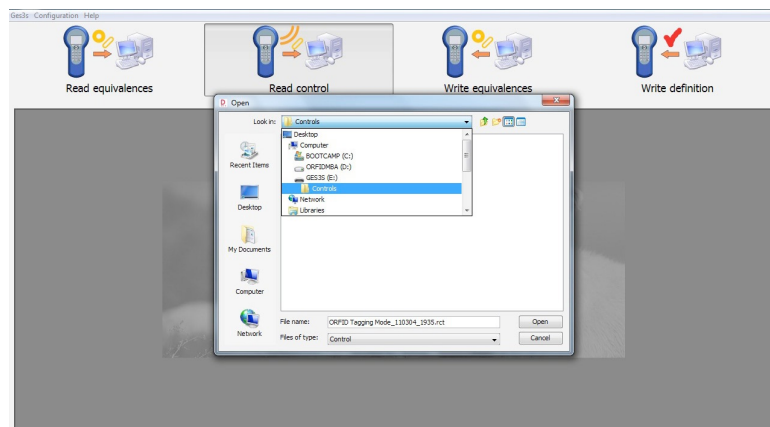


# Exporting Data to a PC

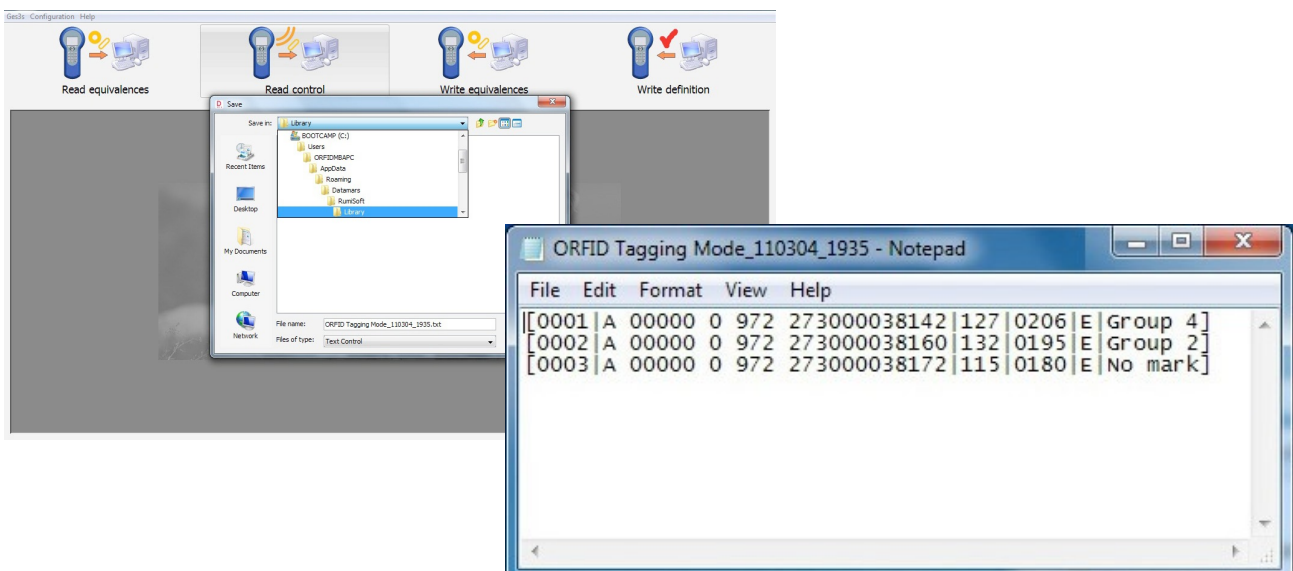
Logged data files are read using the Rumisoft program. Plug the reader in and start the program and wait for the picture of the reader to appear.



Select “Read Control” (Log file) and select the .rct file you want from the reader.



Save the text file where you will find it.

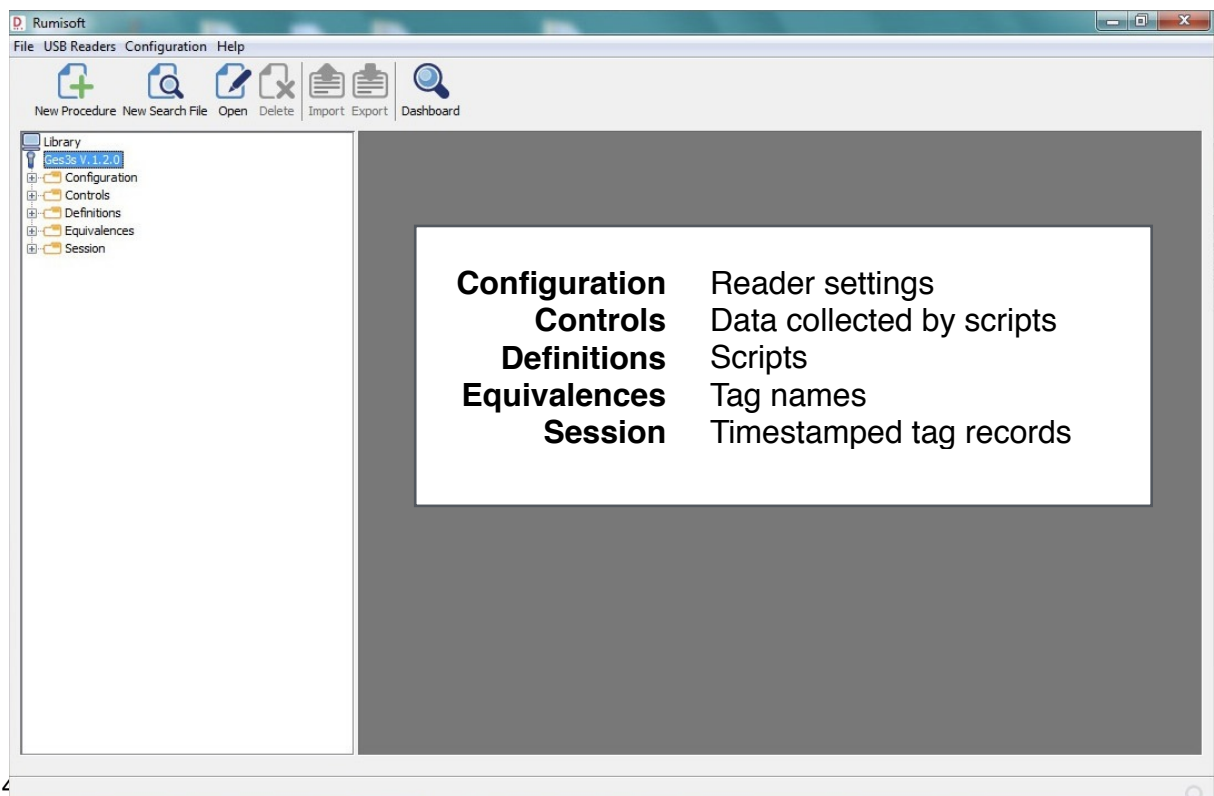


# Advanced Mode

Touch on the picture of the reader until the drawing of the battery is visible. Select “Advanced” from the Configuration menu

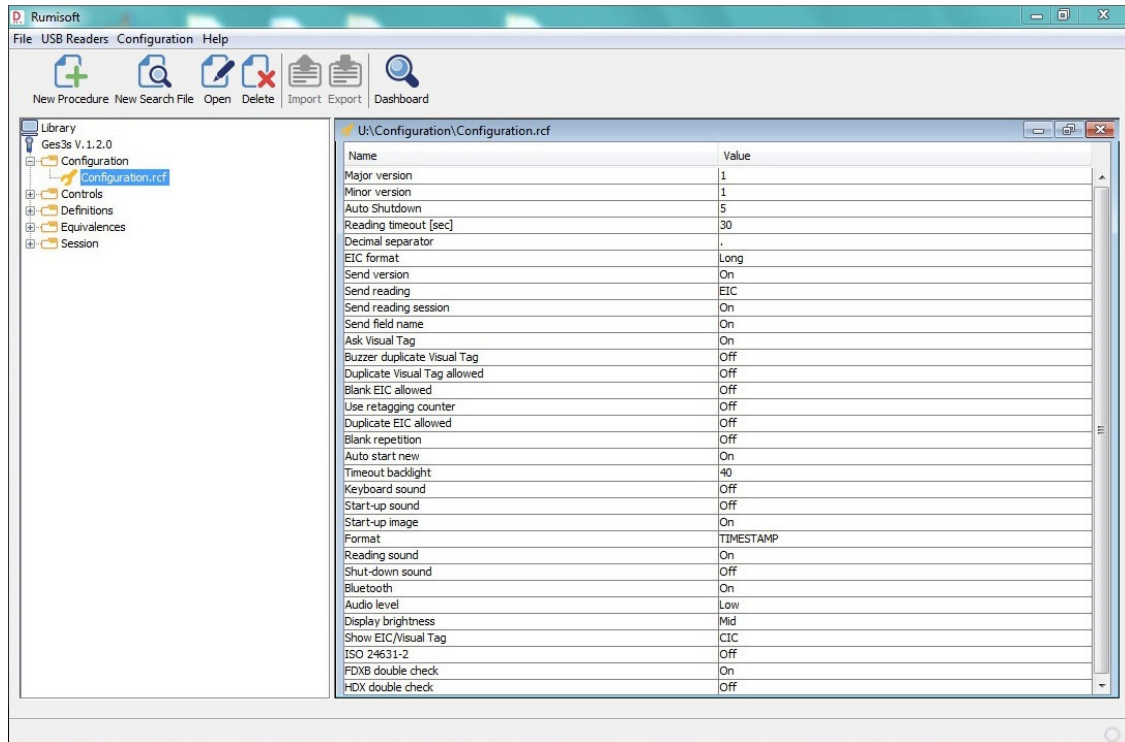


Advanced mode shows the contents of the reader.



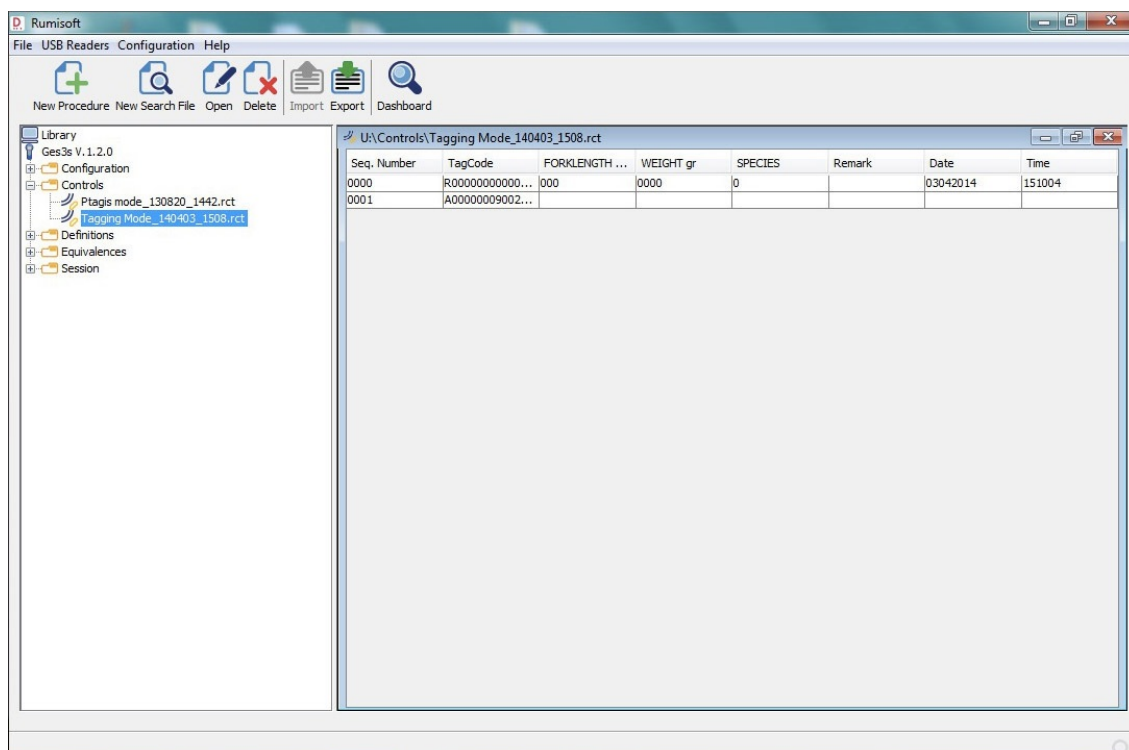
# Configuration

The complete reader settings are shown by selecting the Configuration.rcf file in the Configuration section.



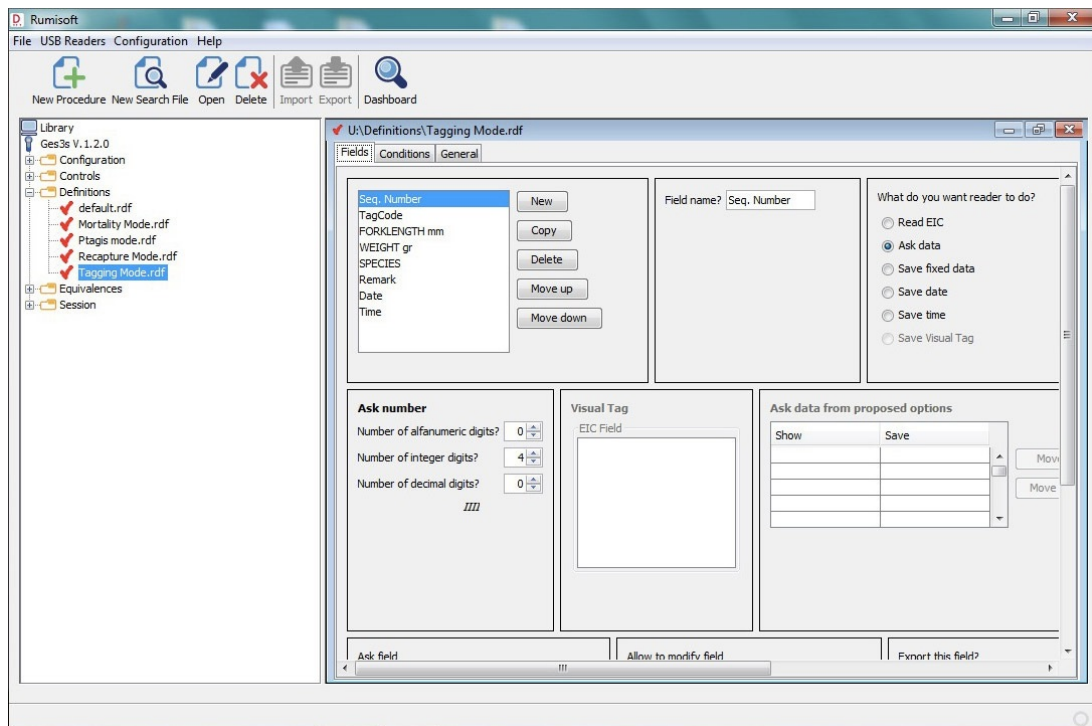
# Controls

Controls show the output from scripts with the data requested in each column.



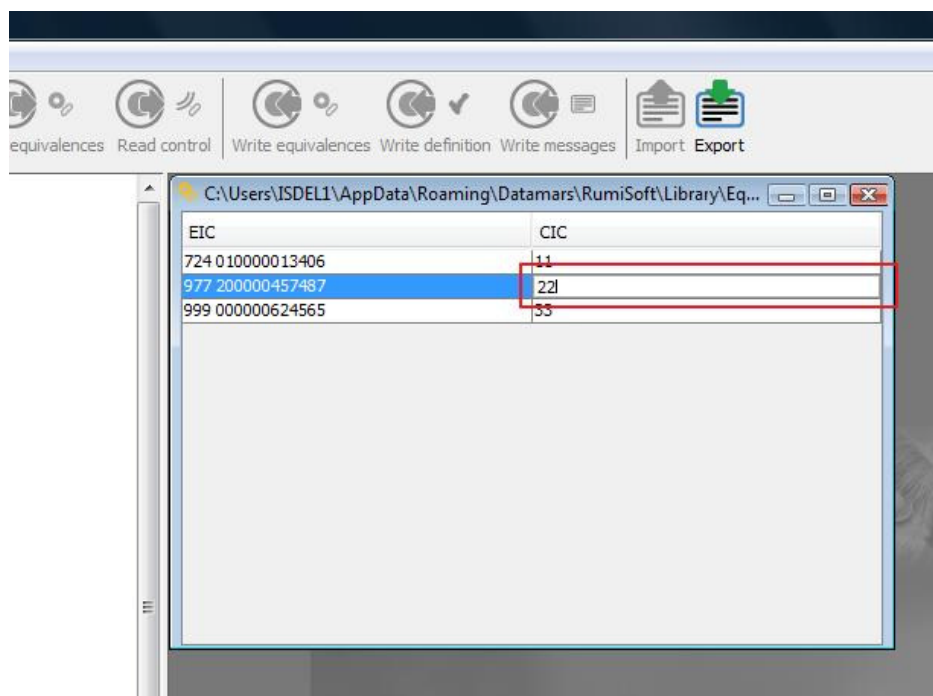
# Definitions

Definitions are scripts that run on the reader. Sample scripts are included that can be modified as needed.



# Equivalences

Equivalences are text strings that are associated with tag numbers. When a tag appears the CIC string will be displayed on the same screen.



# Sessions

Sessions are timestamped tag records.

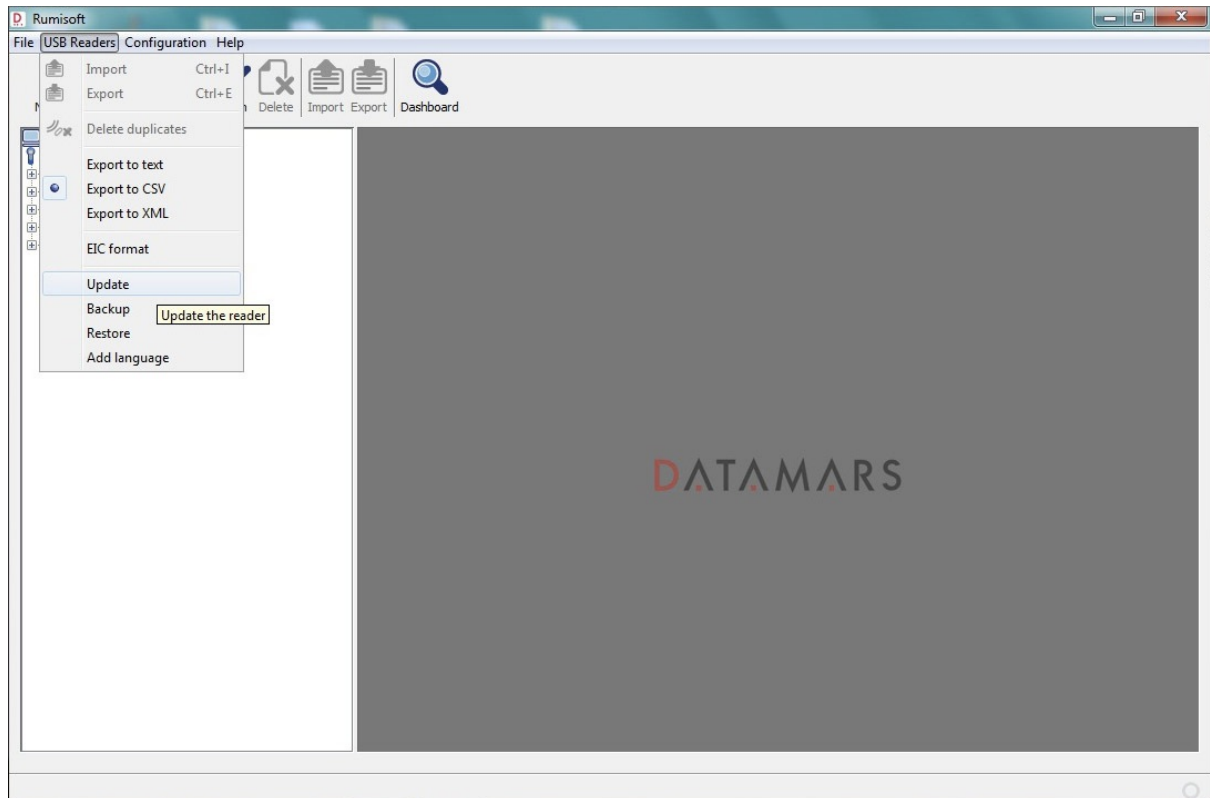
The screenshot displays the Ges3s V. 1.2.0 application window. The interface includes a menu bar (File, USB Readers, Configuration, Help), a toolbar with icons for New Procedure, New Search File, Open, Delete, Import, Export, and Dashboard, and a Library pane on the left. The Library pane shows a tree structure with folders for Configuration, Controls, Definitions, Equivalences, and Session. Under the Session folder, there are subfolders for years 2013 and 2014, and further subfolders for months 01, 02, 03, 04, and 05. The 04 folder is expanded, showing session files: session\_3042014.rsg, session\_8042014.rsg (selected), session\_9042014.rsg, session\_10042014.rsg, and session\_28042014.rsg.

The main window displays the contents of the selected file, U:\Session\2014\04\session\_8042014.rsg, in a table format. The table has three columns: EIC, Date, and Time. The data is as follows:

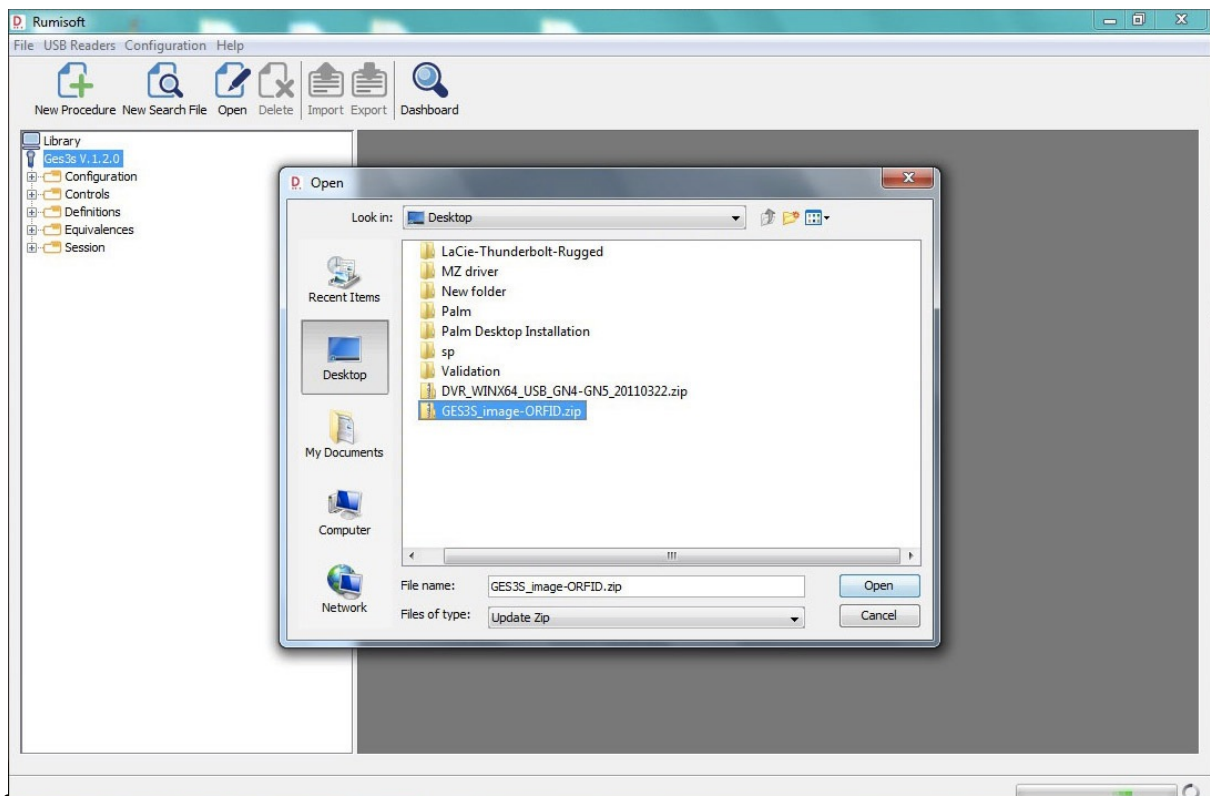
| EIC                     | Date     | Time   |
|-------------------------|----------|--------|
| A0000000900226000074271 | 08042014 | 140250 |
| A0000000900226000074271 | 08042014 | 140254 |
| A0000000900226000074271 | 08042014 | 140257 |
| A0000000900226000074251 | 08042014 | 140716 |
| A0000000900226000074251 | 08042014 | 140743 |
| R00000000000176803016   | 08042014 | 140844 |
| A0000000900043000101796 | 08042014 | 161141 |
| A0000000900254001836386 | 08042014 | 161157 |
| A0000000900254001836386 | 08042014 | 161222 |
| A0000000900254001836386 | 08042014 | 161228 |
| A0000000900254001836386 | 08042014 | 170739 |
| A0000000900226000074251 | 08042014 | 182745 |
| A0000000900226000074251 | 08042014 | 182751 |
| A0000000900226000074251 | 08042014 | 182834 |
| A0000000900226000074251 | 08042014 | 182837 |
| A0000000900226000074251 | 08042014 | 183145 |
| R00000000000183320612   | 08042014 | 191225 |
| R00000000000183320612   | 08042014 | 191246 |
| R00000000000183320612   | 08042014 | 191307 |

# Updating Firmware

Firmware images are distributed as ZIP files. Enter Advanced mode, then select “Update” to select the update image in the browser.



The update will take a few minutes.

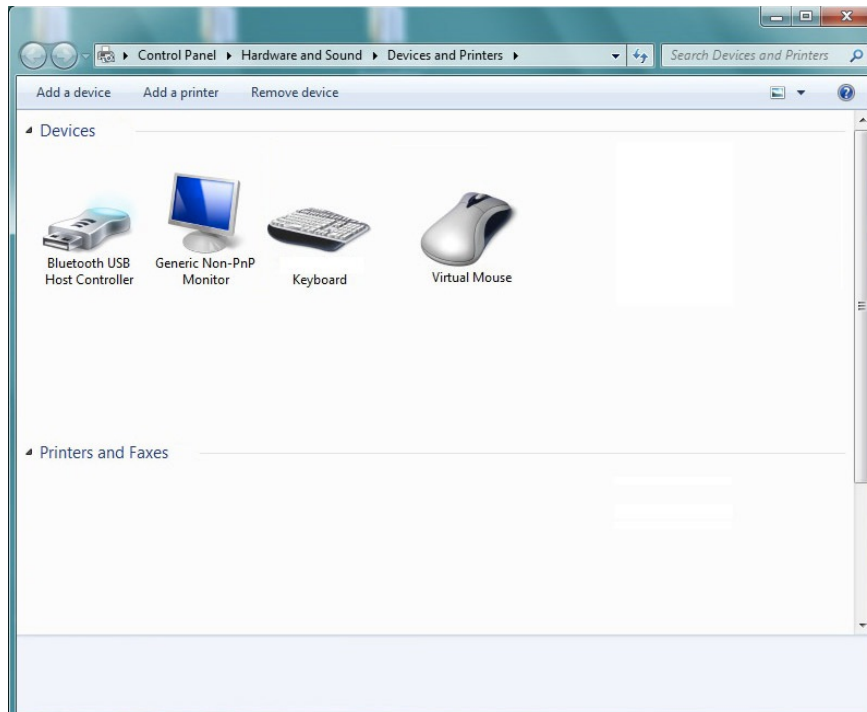




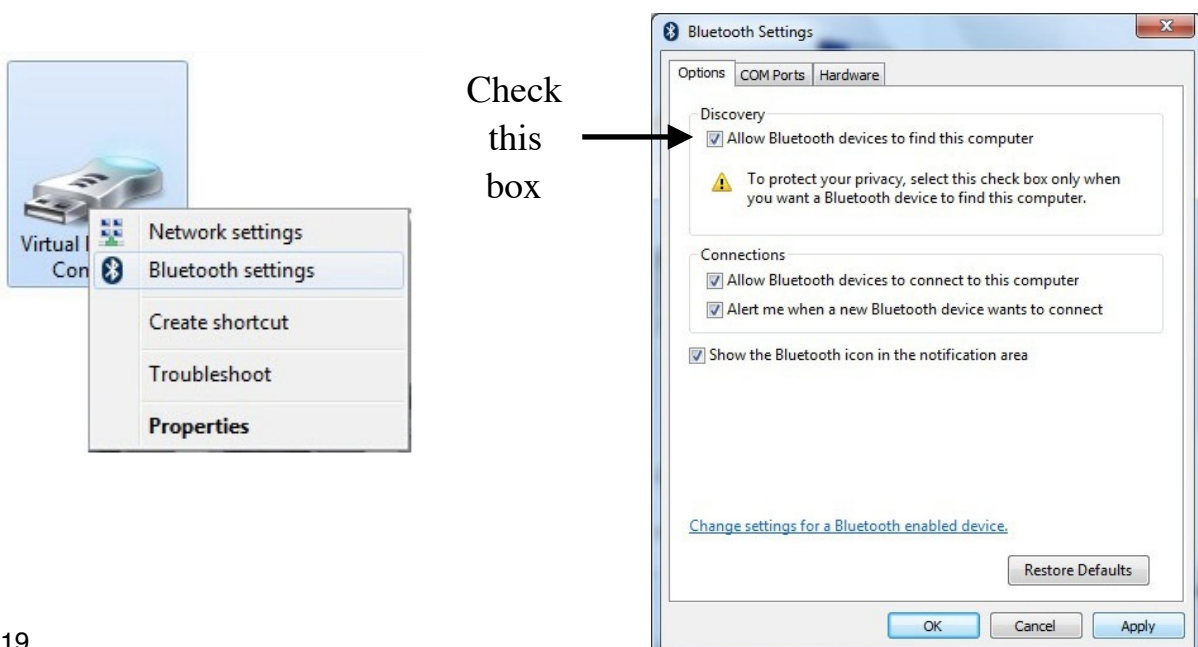
# Using Bluetooth

All readers include a Bluetooth link that will transmit tag numbers when they are detected over a wireless serial connection.

Select “Devices and Printers” in the Start Menu.




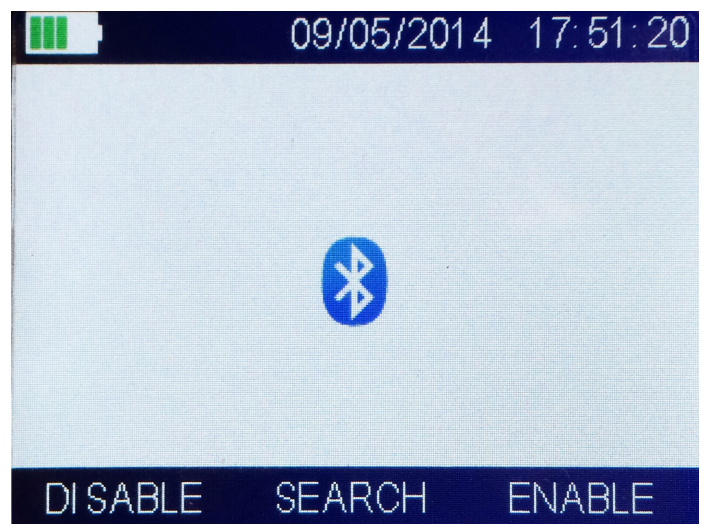
Right click on the Bluetooth controller (icon may be different) and select “Bluetooth Settings”. Check the box “Allow Bluetooth devices to find this computer”.



Press “Add a device” at the top of the window.



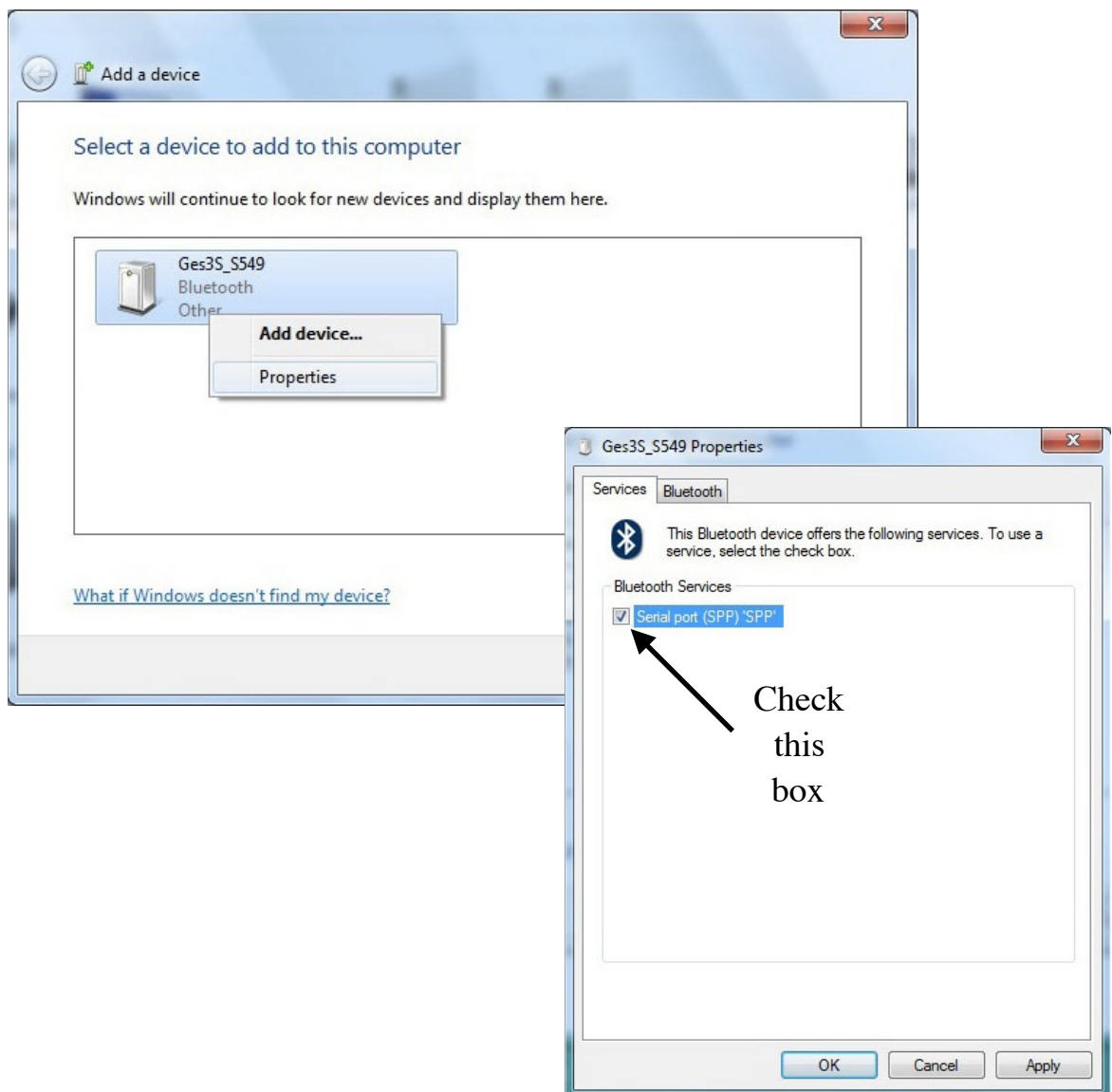
Turn on the reader and when the menu appears, press and hold the  key until the logo appears in the center of the screen.



Press the Search button (ON) and the name of reader (GES3S) will appear on the PC.



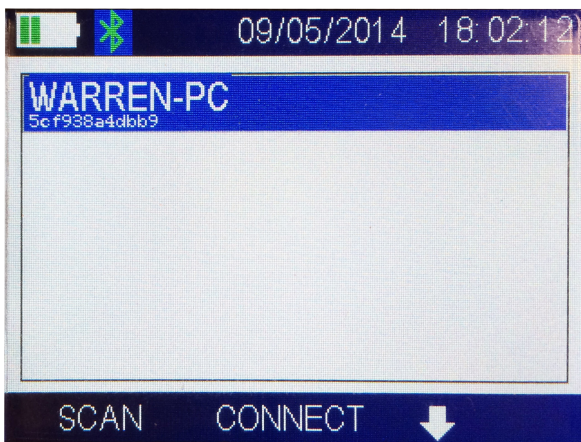
Right click on the icon to open the Properties and check “Serial Port (SPP)”.



When that completes, press “Next”. With luck, the drivers will install and the message will be displayed with the COM port number. Remember this.



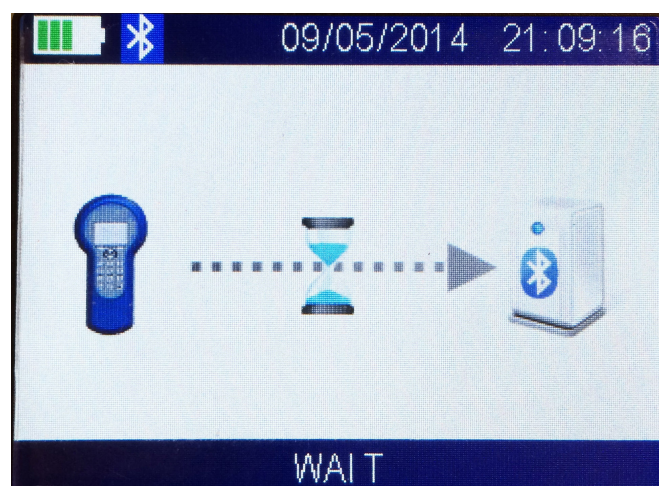
Press CONNECT on the Reader and a dialog will appear on the PC.



Click on the PC balloon to finish the connection.



The reader will show an hourglass while making the connection.

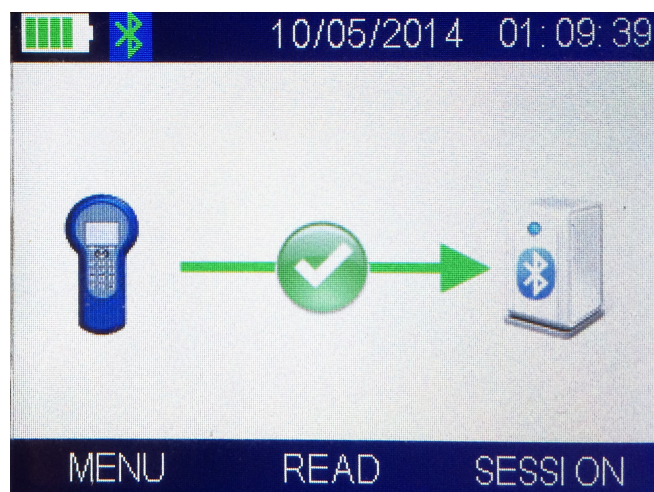




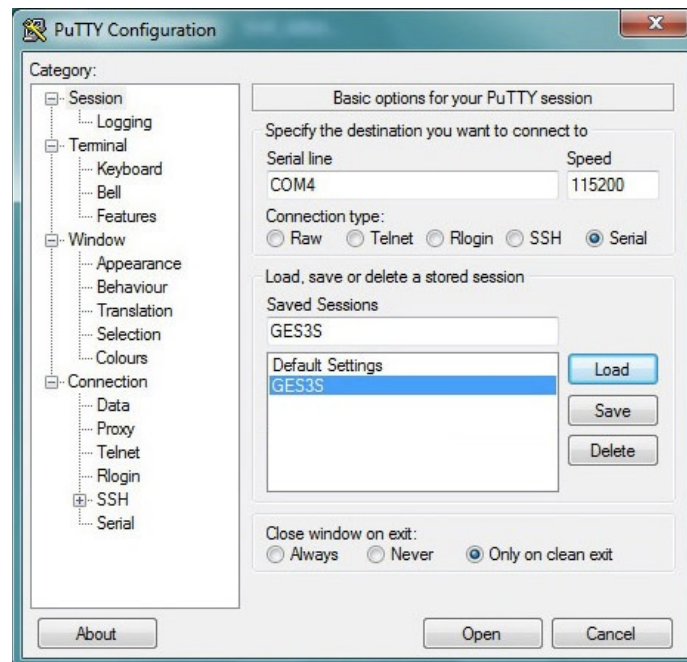
When complete, the following dialog is displayed.



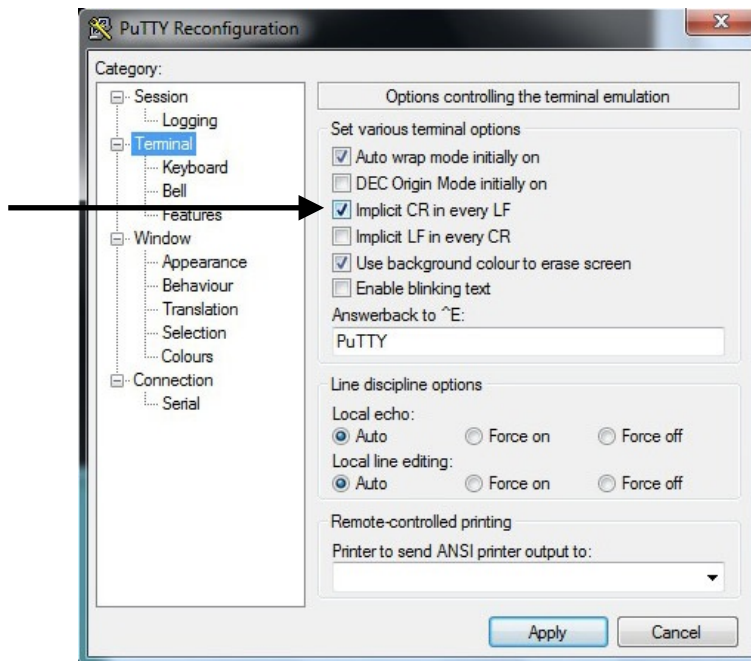
After connecting, the reader will indicate the link is ready.



Open Putty.exe or another terminal emulator program and select the COM port 115200 baud.



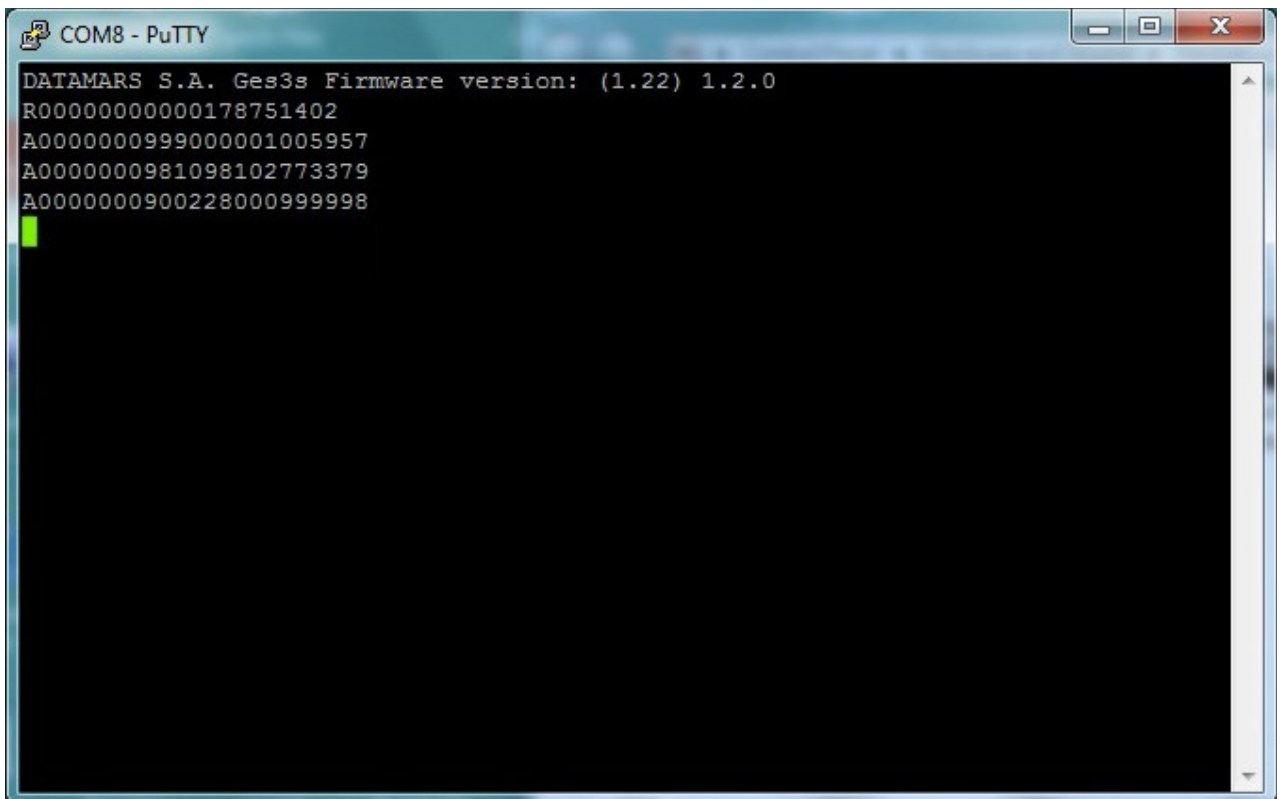
Check  
this  
box






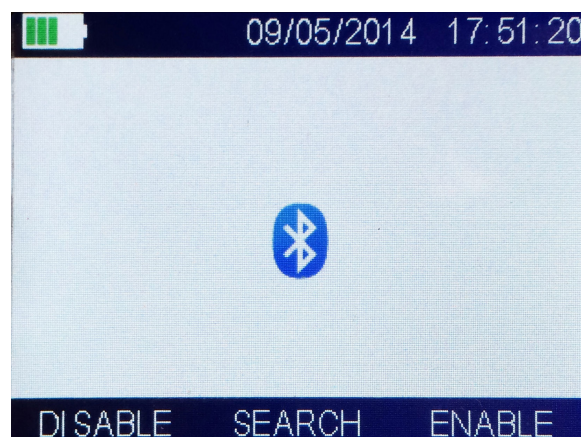
It takes a few seconds for the link to be established. When the connection opens the reader sends a hello message.

Read a tag and detections will appear on the screen.



To close the Bluetooth link, close the Putty window.

To turn the Reader's Bluetooth off, press and hold the  key until the logo appears in the center of the screen. Select Disable.



To see which COM port the device is using, open Devices and Printers and right click on the GES3S icon to open the Properties.

