

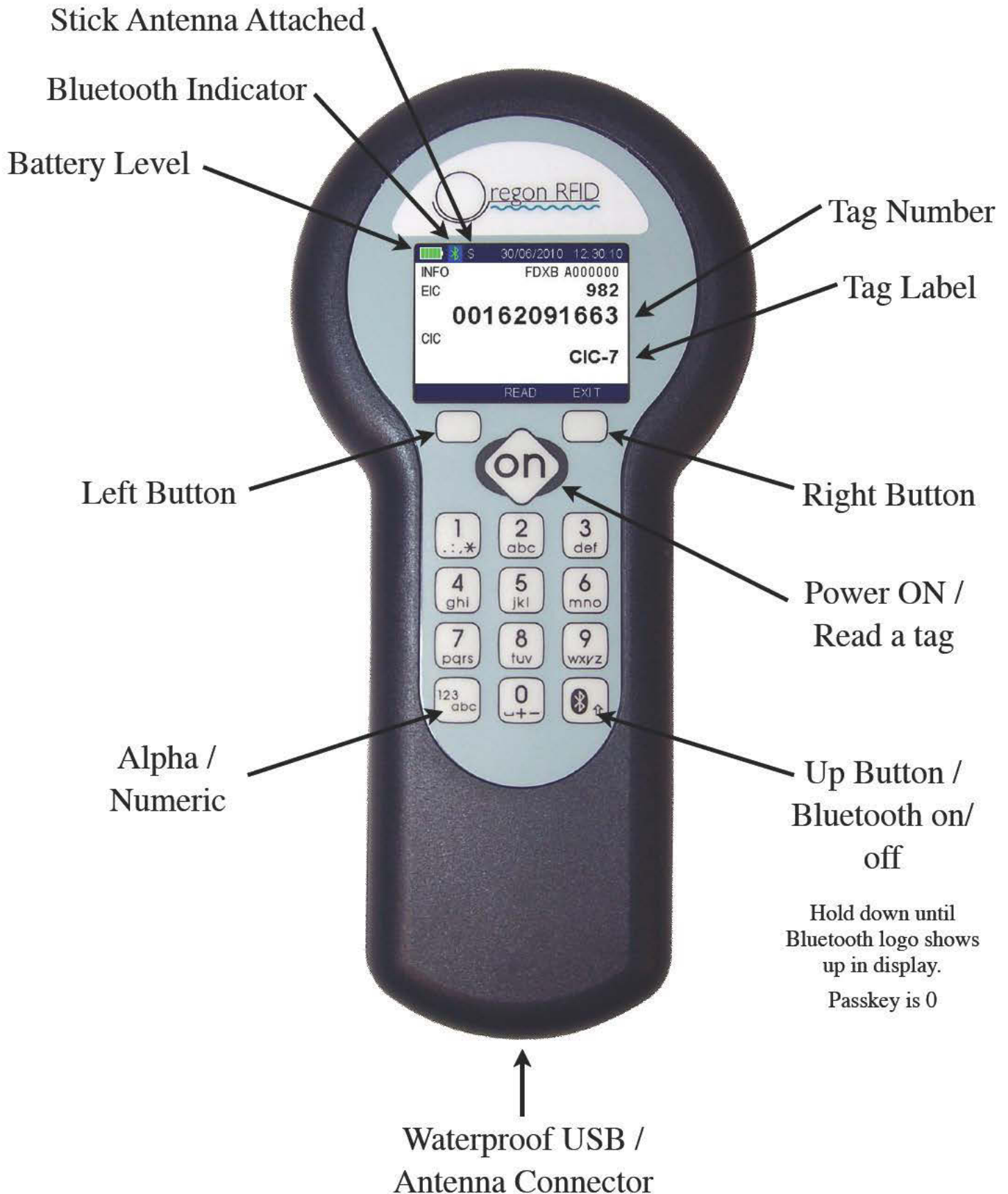


DataTracer User Guide



February, 2016
Firmware 1.4.2

Reader Controls



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

† English/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

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

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	>>>>

Equivalence

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

Date & Time

Format	EU/USA/TimeStamp
Set date	(date dialog)
Set time	(time dialog)

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

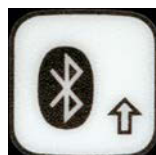
After a period of inactivity the screen will dim and the keys will be locked. Press the ON button to continue.



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.

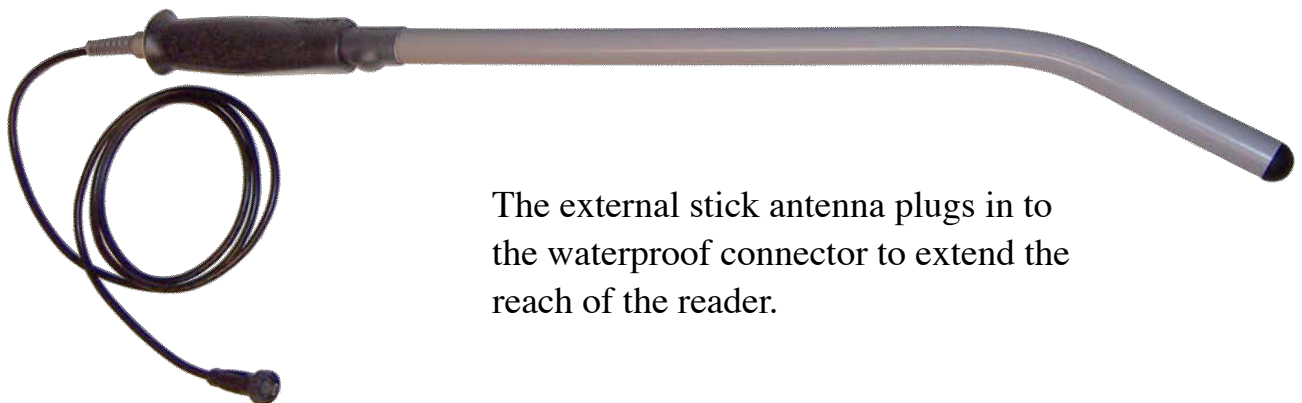
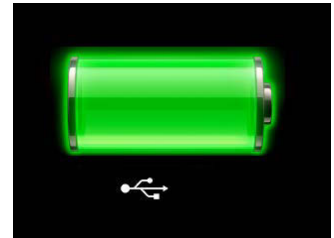
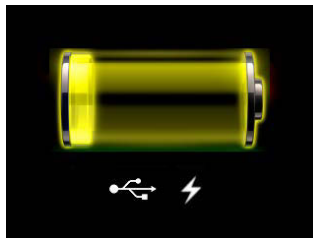


Waterproof Connector

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

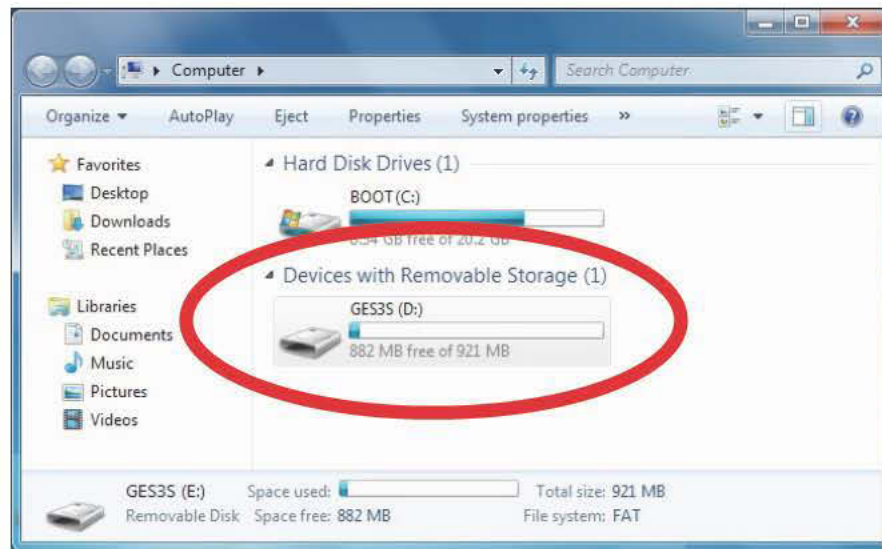


Charge the reader battery from 12 VDC, 110/220 VAC or computer USB port.



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.



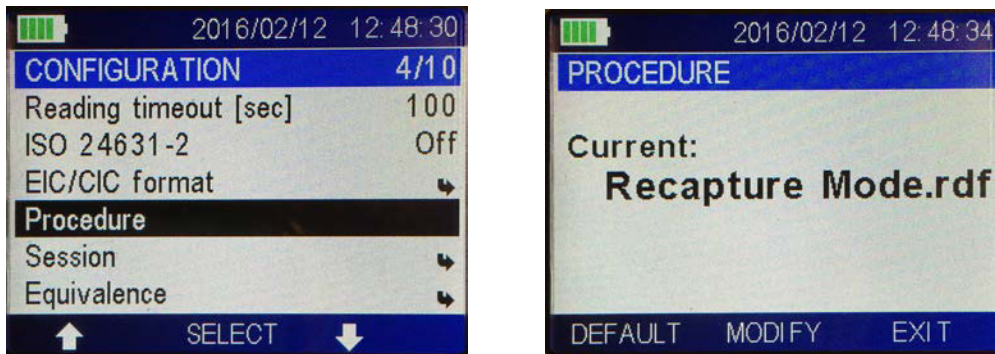
The PC configuration software uses the USB port to communicate with the reader.



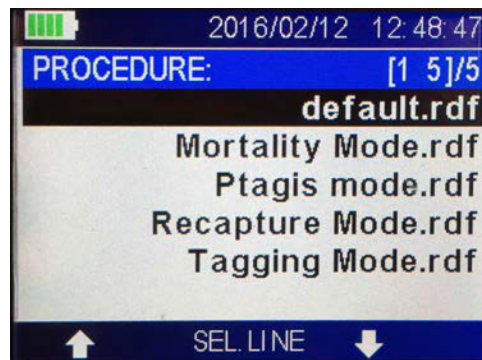
Applications

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.

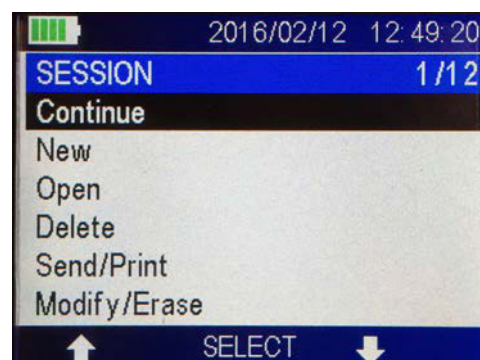
The currently running application is shown with the Configuration >> Applications menu.



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

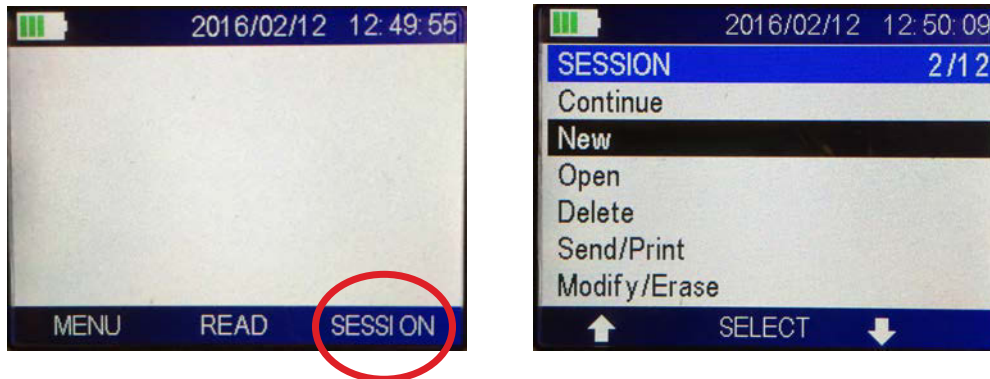


The Continue item is selected to start or resume the currently running application.

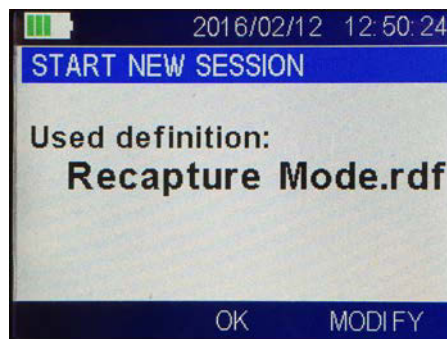


Opening a New Log File

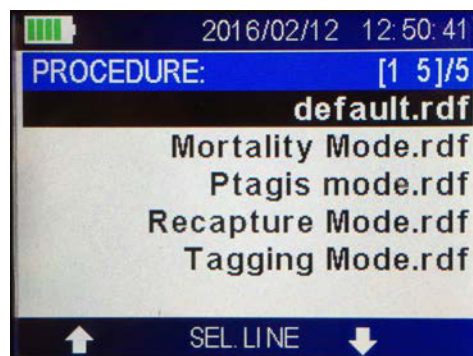
Data is collected using applications which are started by selecting Log File with the right button, then selecting New to start a new session.



The name of the current script will be shown.

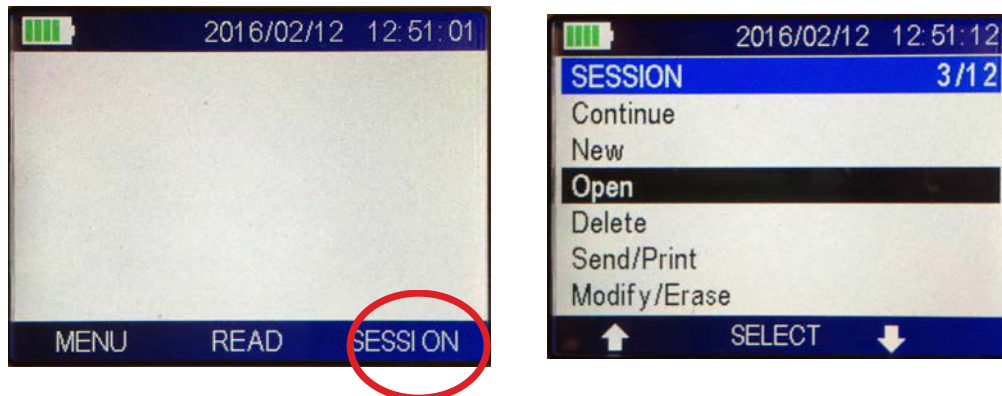


Select Modify to change the application that is used.



Adding Data to an Existing File

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



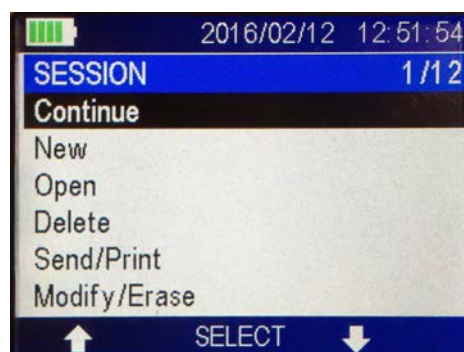
A list of current files will be shown to make a selection.



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

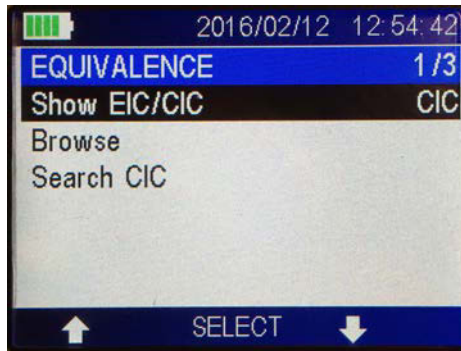
2011/03/06 21:04:56
RECORD INDEX 1
Field **Weight gr**
0206
LEFT OK RIGHT

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.

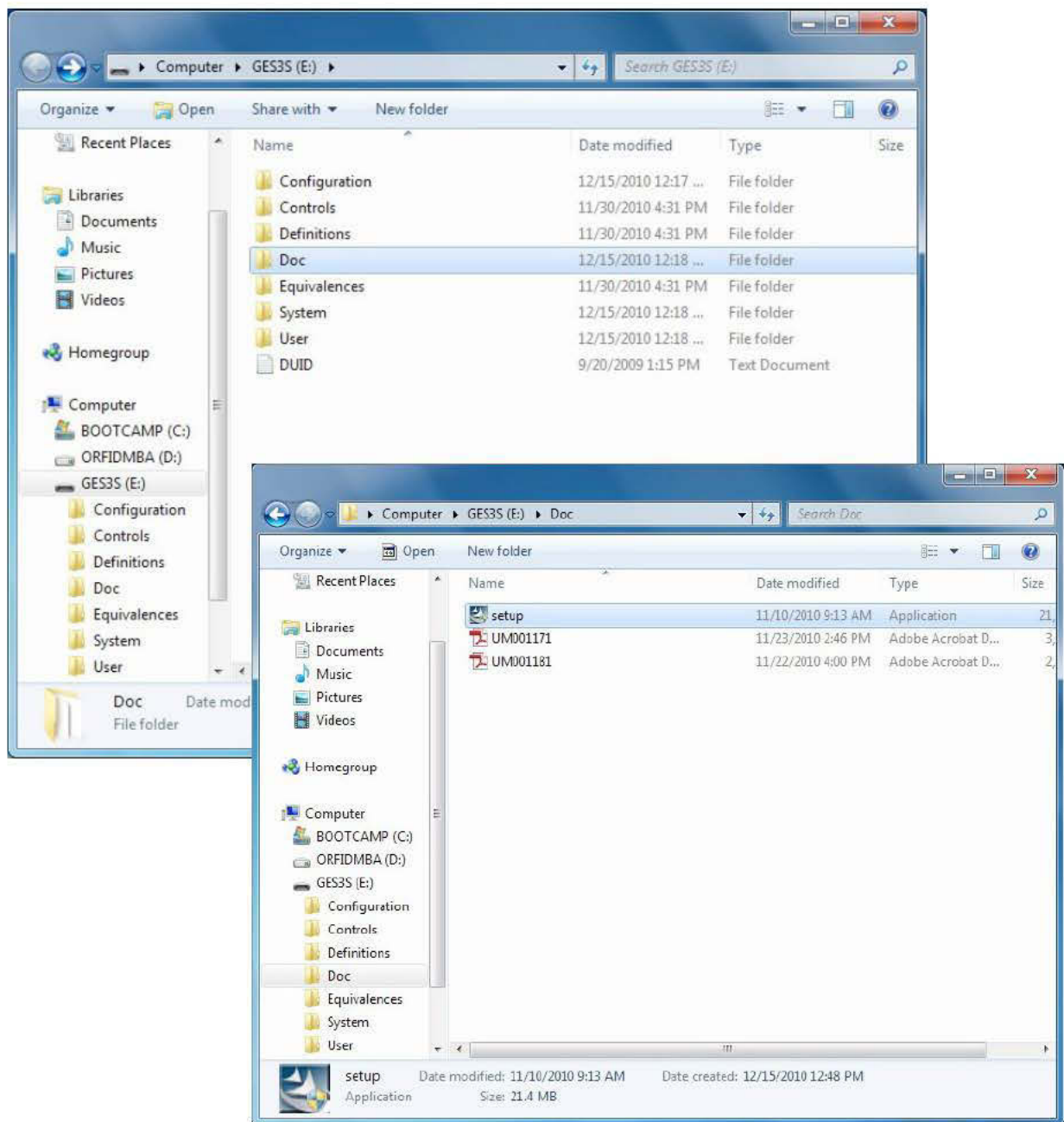


PC Software

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.

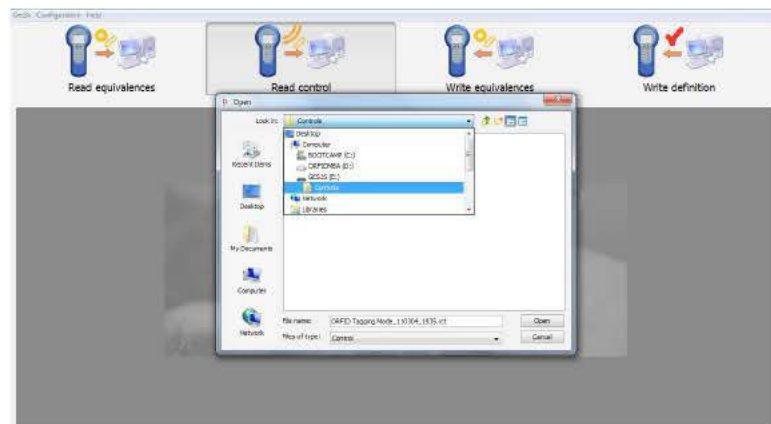


Exporting Data to a PC

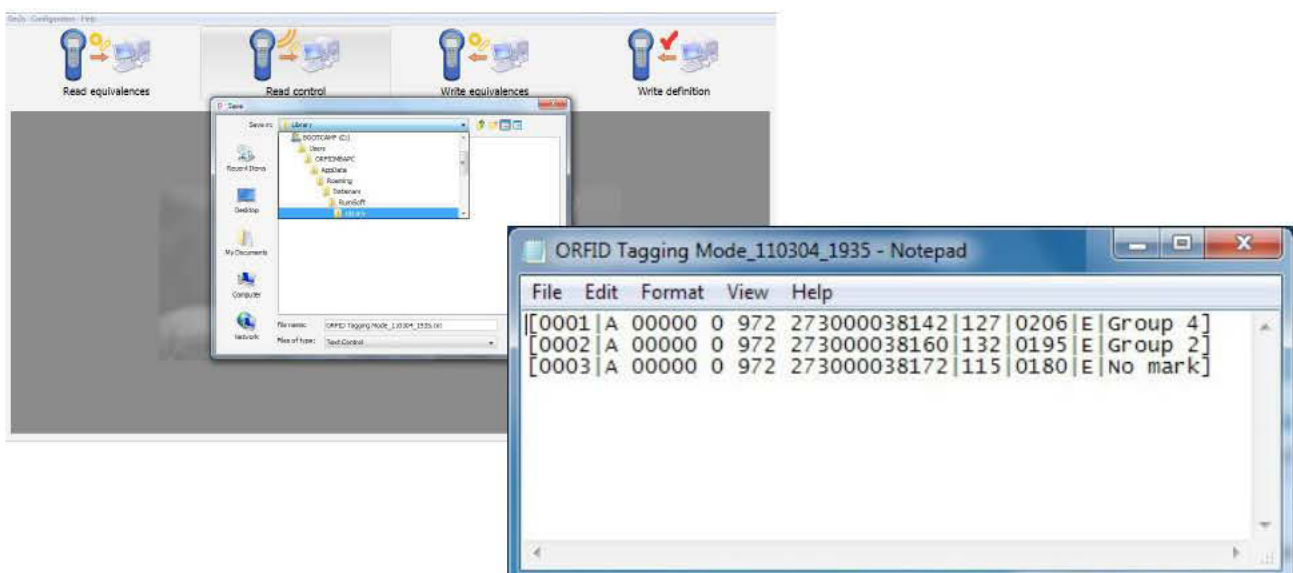
Logged data files are read using the Rumisoft program. Plug the reader in and start the program and wait for the picture of the reader to appear.



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



Save the text file where you will find it.

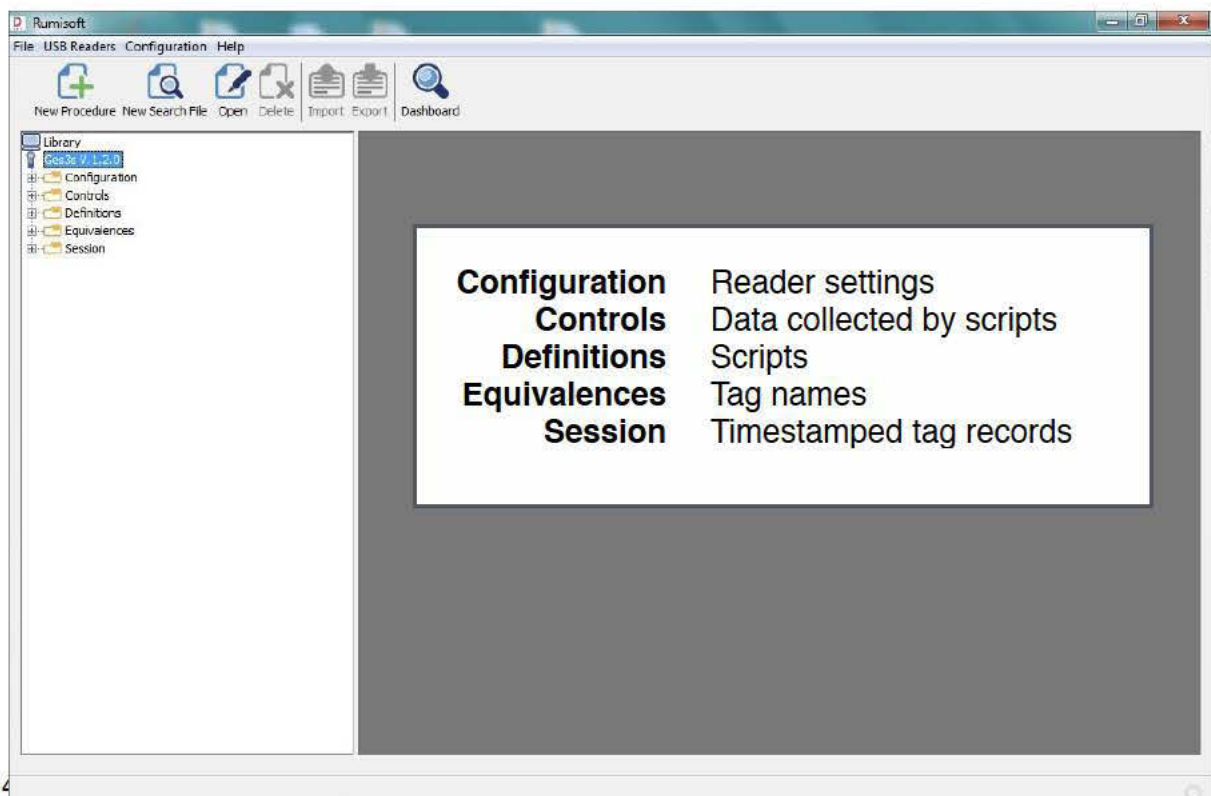


Advanced Mode

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

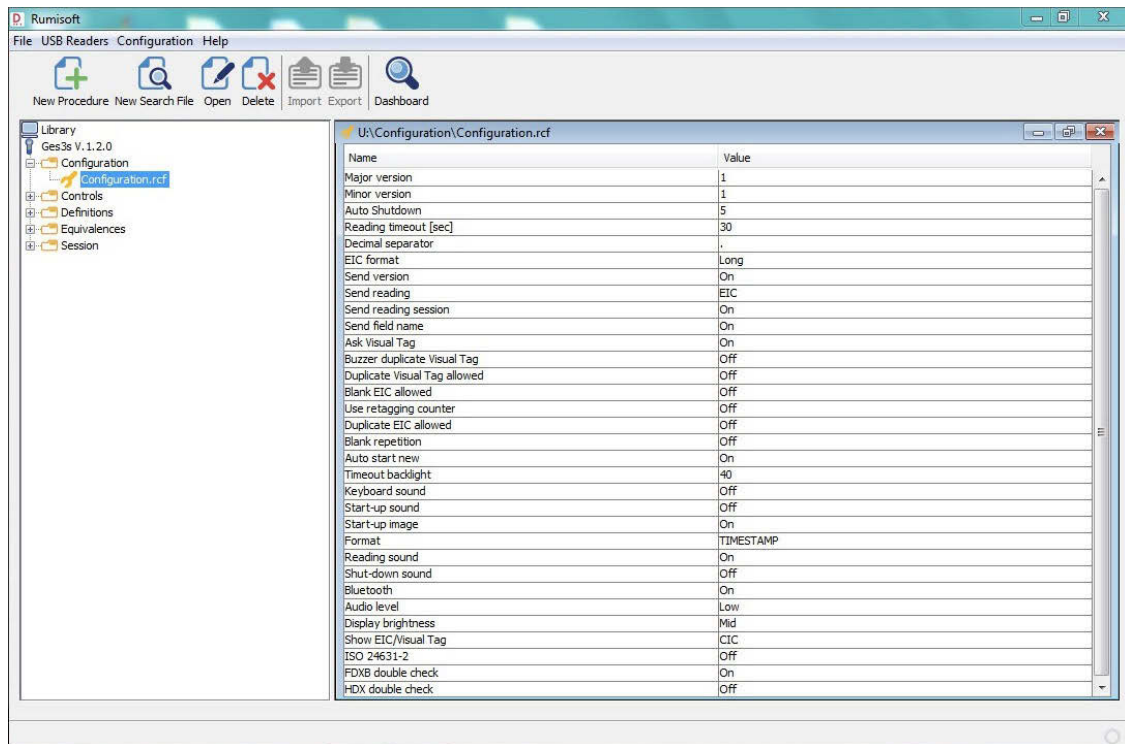


Advanced mode shows the contents of the reader.



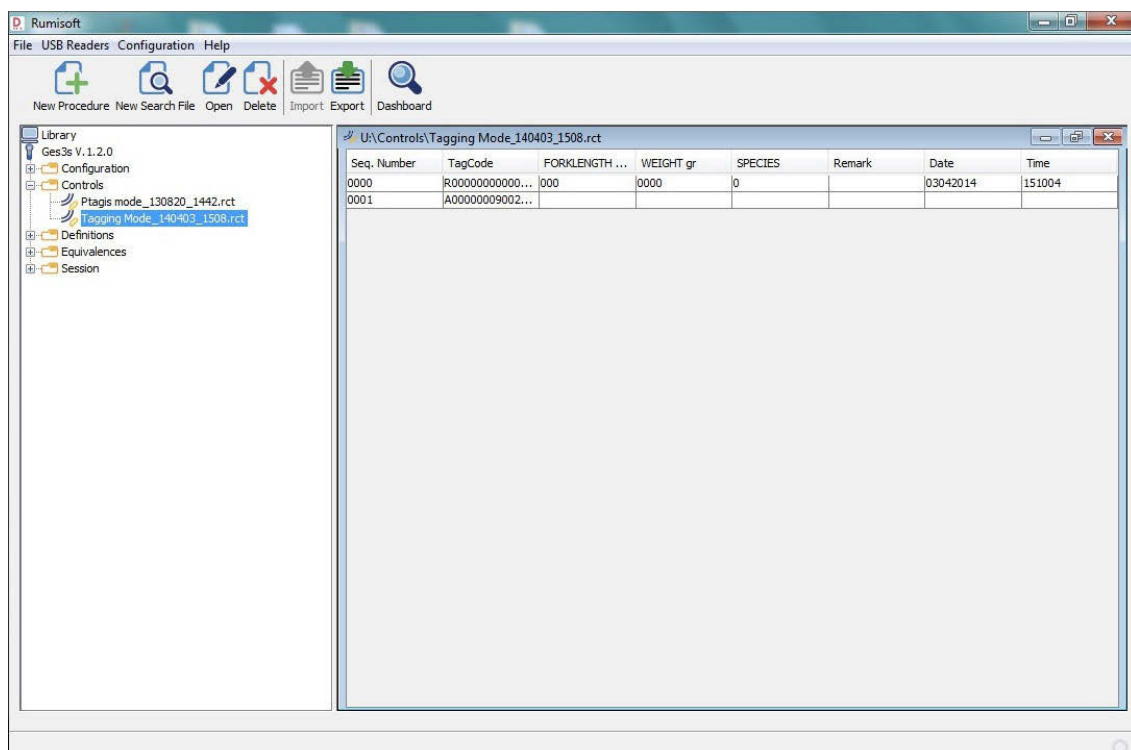
Configuration

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



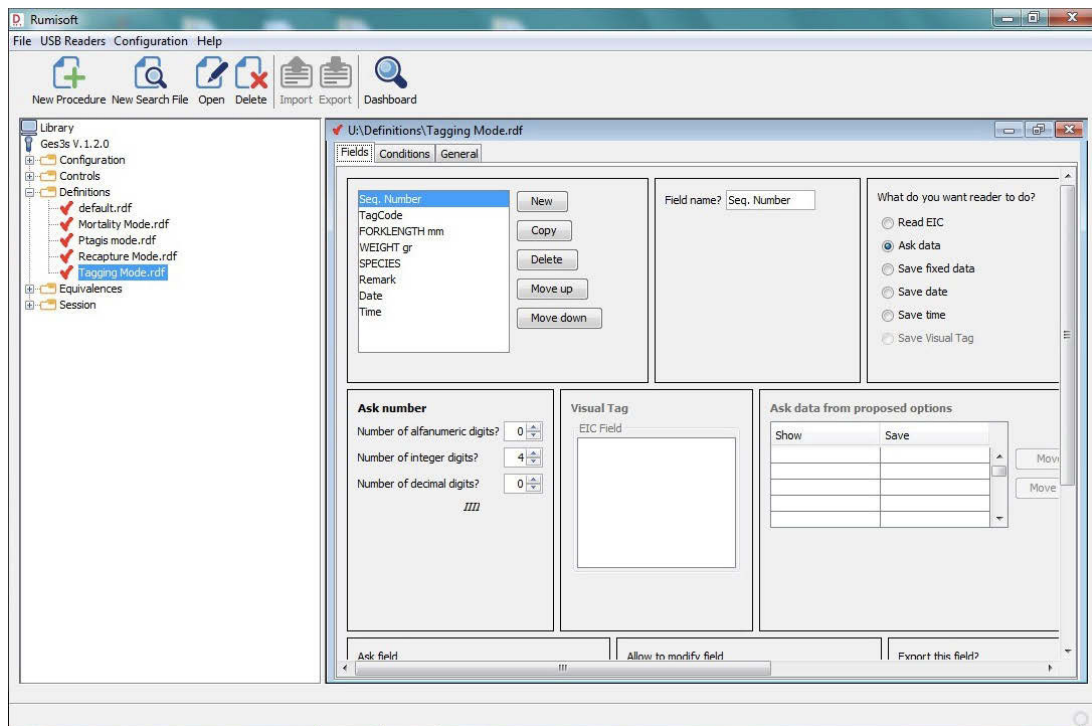
Controls

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



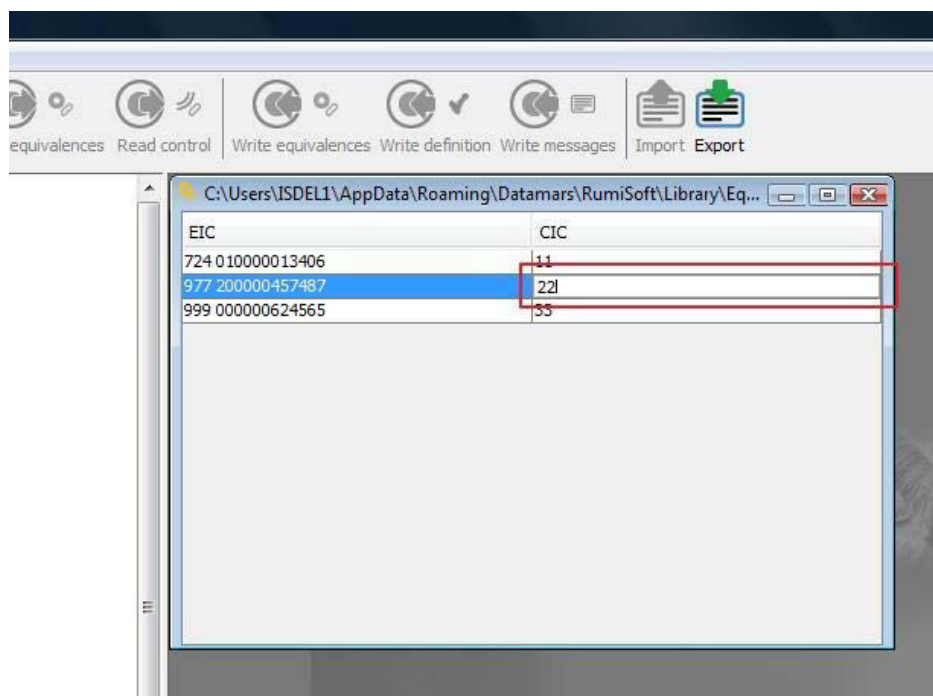
Definitions

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

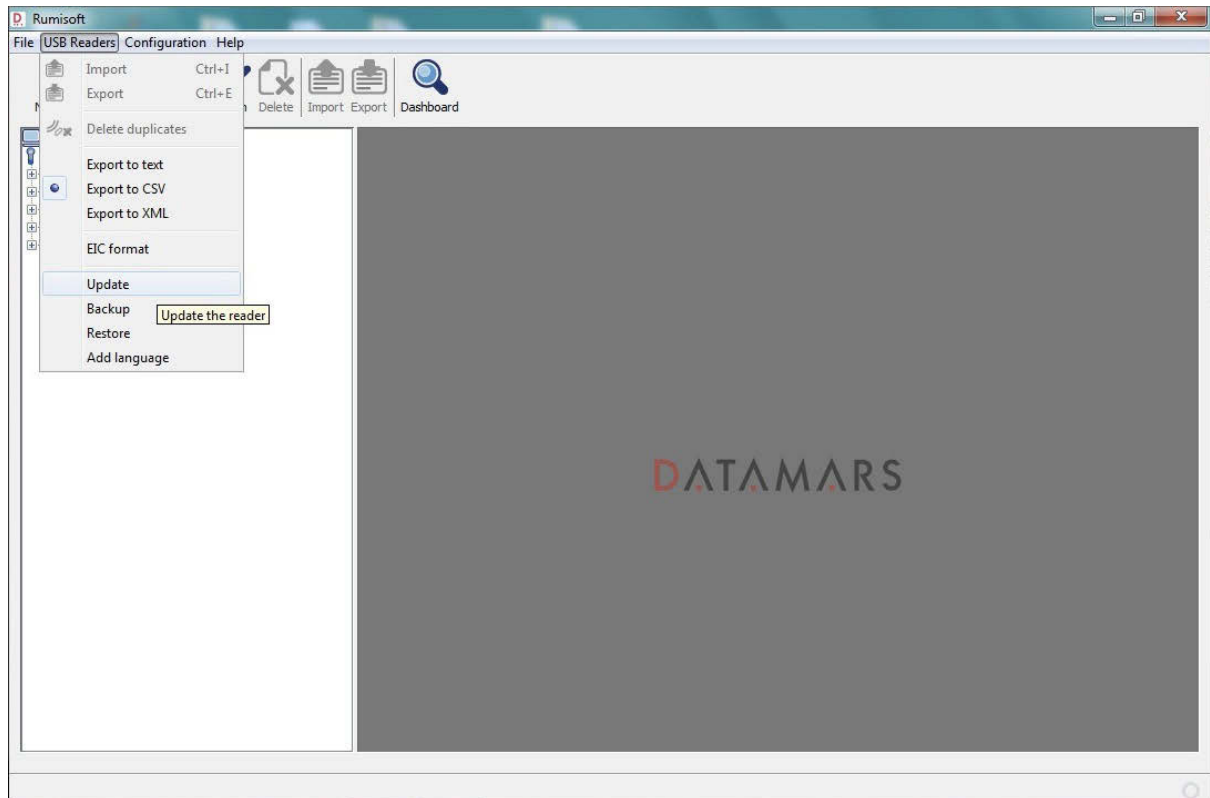
Sessions are timestamped tag records.

The screenshot displays the Ges3e V.1.2.0 software interface. The top menu bar includes 'File', 'USB Readers', 'Configuration', and 'Help'. Below the menu is a toolbar with icons for 'New Procedure', 'New Search File', 'Open', 'Delete', 'Import', 'Export', and 'Dashboard'. The left sidebar shows a 'Library' tree with folders for 'Configuration', 'Controls', 'Definitions', 'Equivalences', 'Session', '2013', '2014', '01', '02', '03', '04', and '05'. The 'Session' folder is expanded, showing several session files, with 'session_8042014.rsg' selected. The main window displays the contents of this file as a table with three columns: 'EIC', 'Date', and 'Time'. The table contains 20 rows of data, all dated '08042014'. The EIC values are a mix of 'A' and 'R' prefixes followed by numerical identifiers. The time values range from 140250 to 191307.

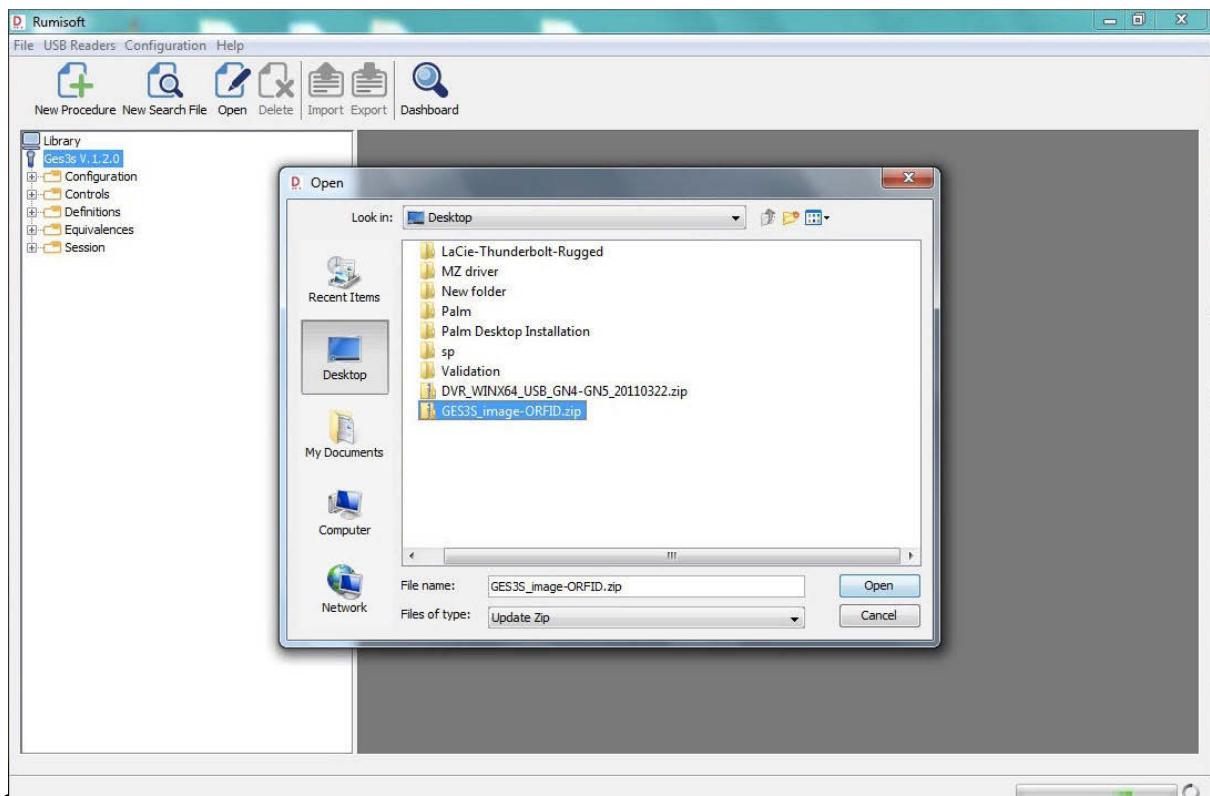
EIC	Date	Time
A0000000900226000074271	08042014	140250
A0000000900226000074271	08042014	140254
A0000000900226000074271	08042014	140257
A0000000900226000074251	08042014	140716
A0000000900226000074251	08042014	140743
R00000000000176803016	08042014	140844
A0000000900043000101796	08042014	161141
A0000000900254001836386	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.



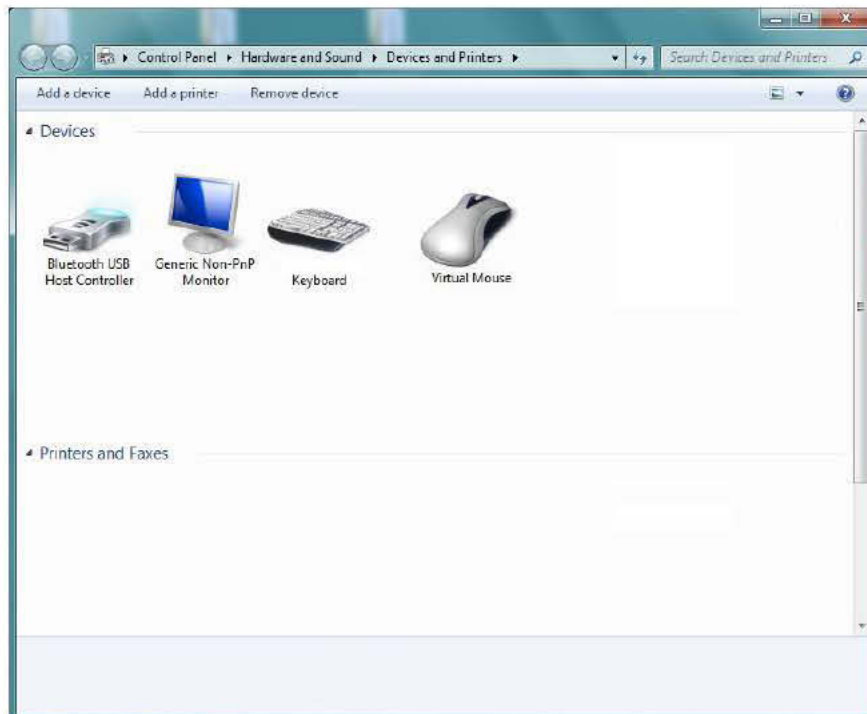
The update will take a few minutes.



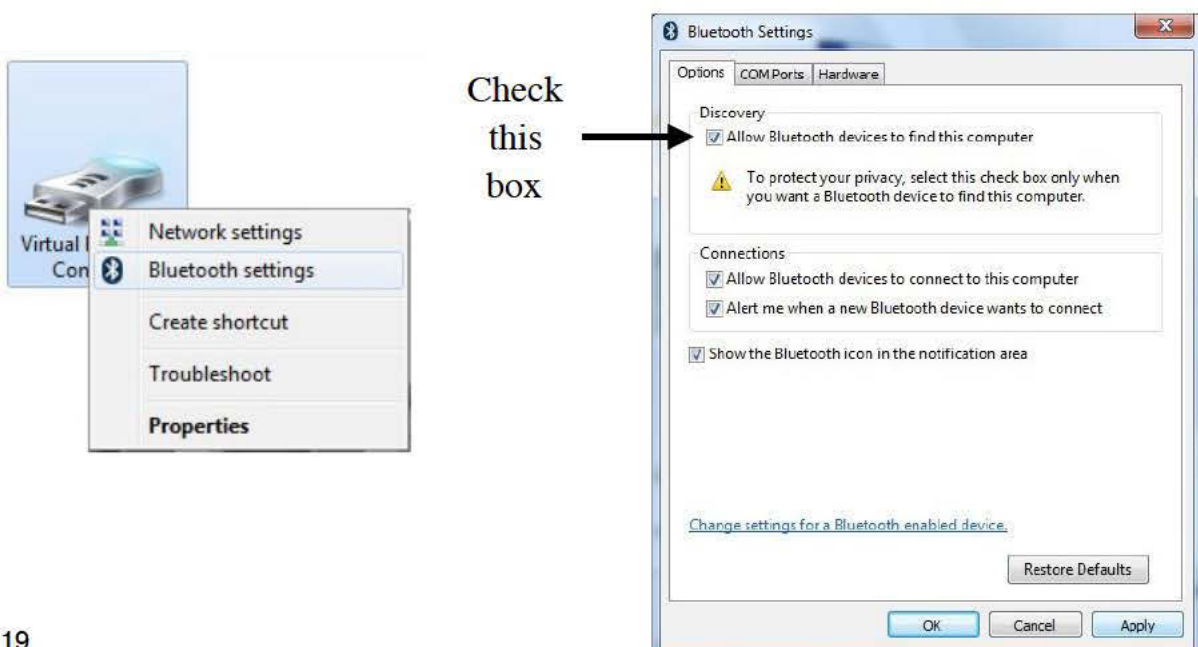
Using Bluetooth

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.




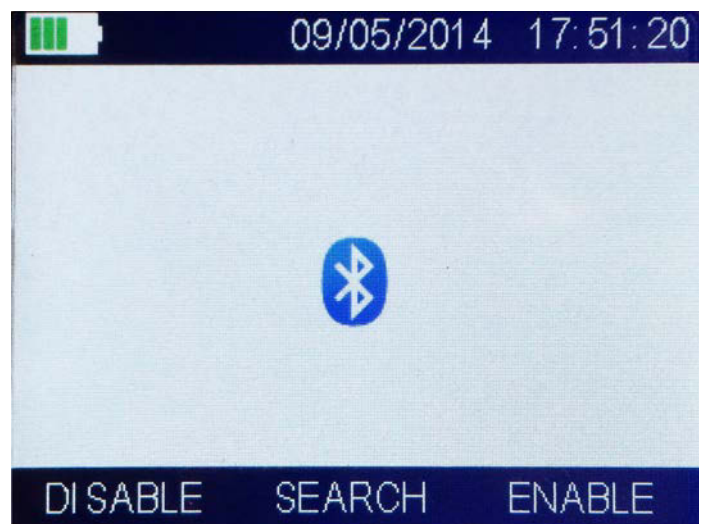
Right click on the Bluetooth controller (icon may be different) and select “Bluetooth Settings”. Check the box “Allow Bluetooth devices to find this computer”.



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



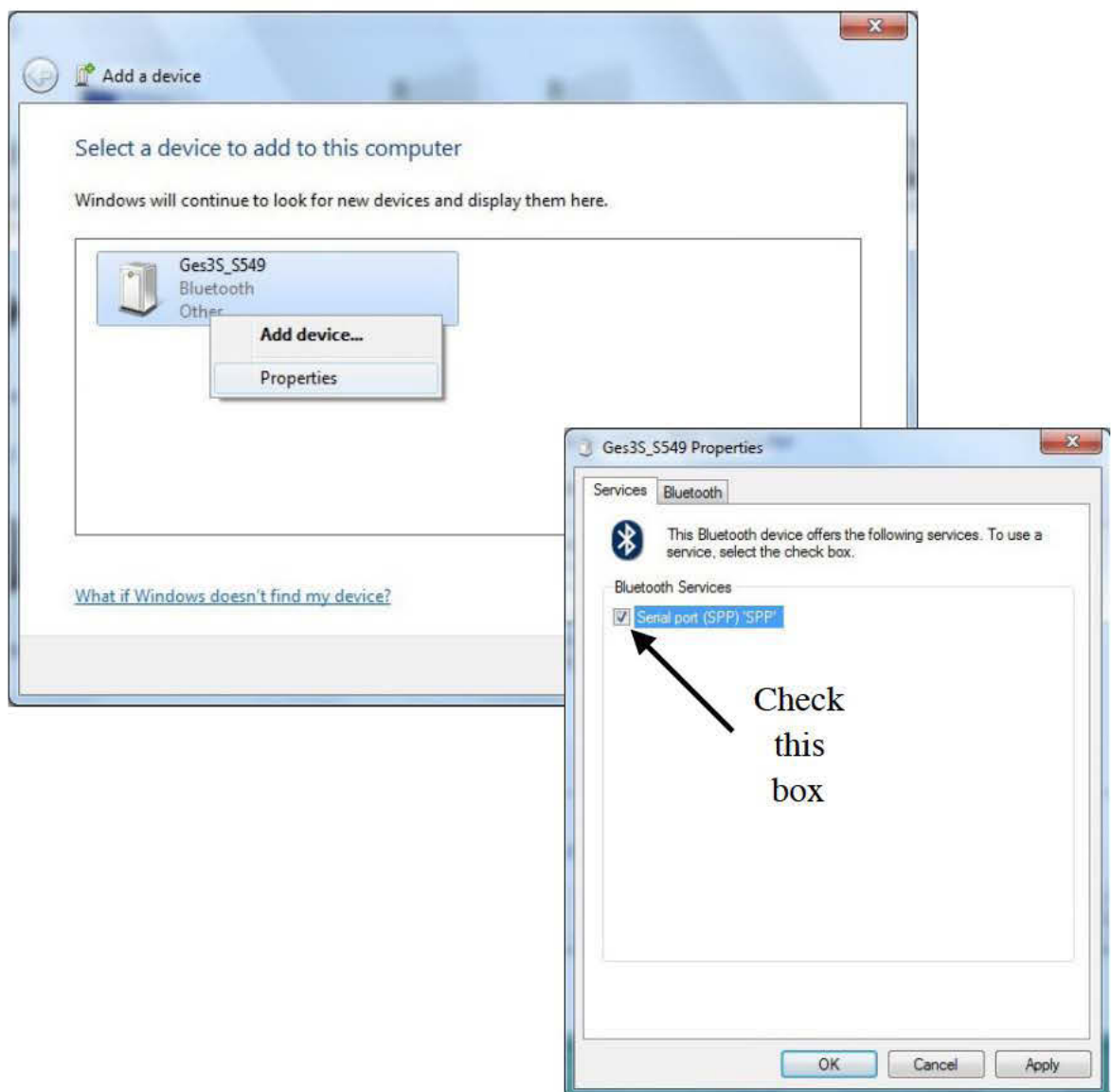
Turn on the reader and when the menu appears, press and hold the  key until the logo appears in the center of the screen.



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



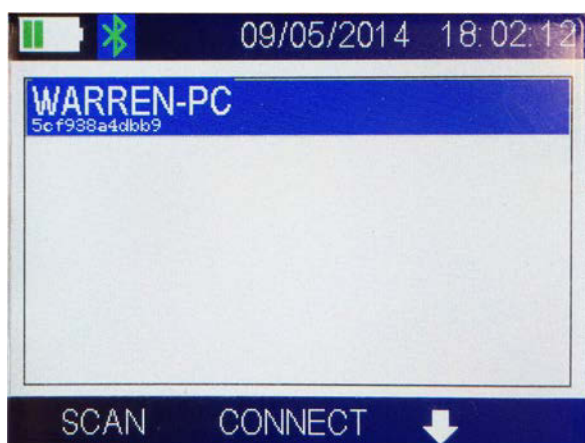
Right click on the icon to open the Properties and check “Serial Port (SPP)”.



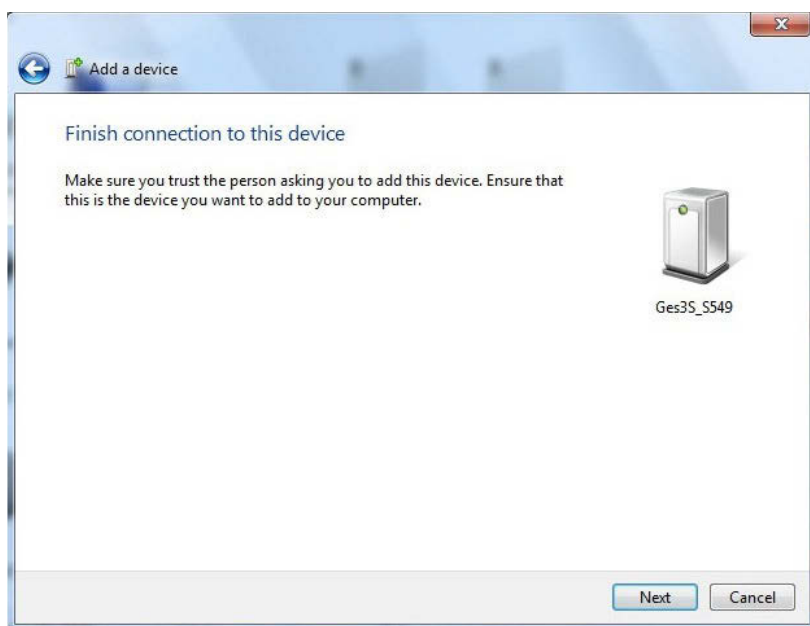
When that completes, press “Next”. With luck, the drivers will install and the message will be displayed with the COM port number. Remember this.



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



Click on the PC balloon to finish the connection.



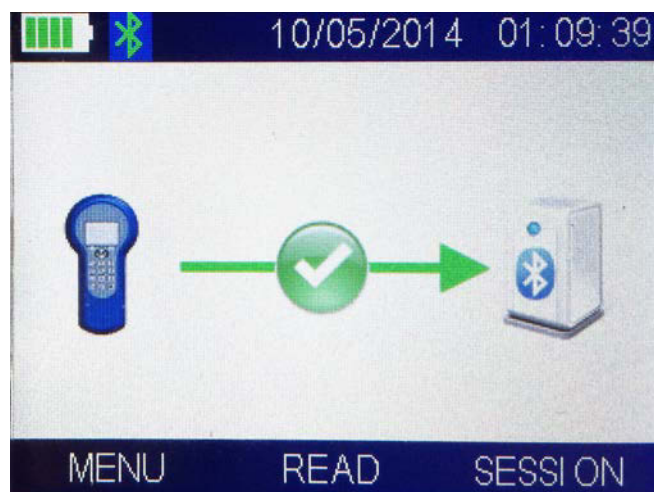
The reader will show an hourglass while making the connection.



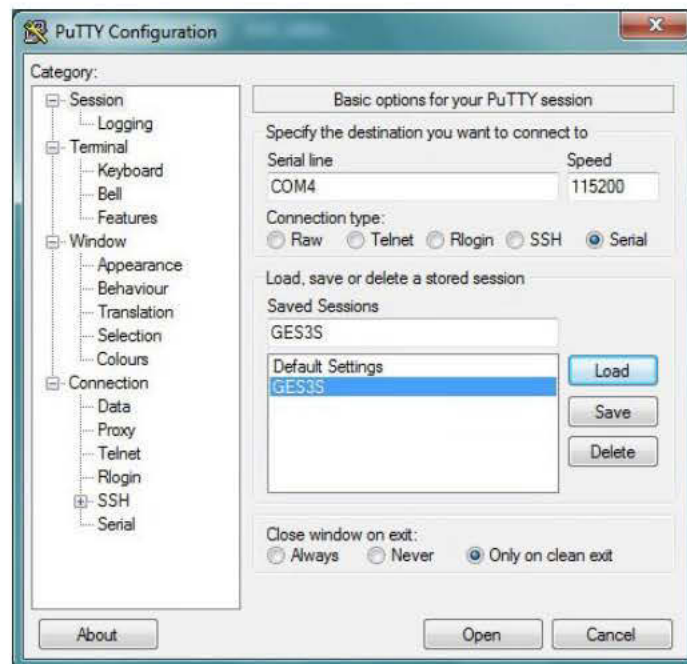
When complete, the following dialog is displayed.



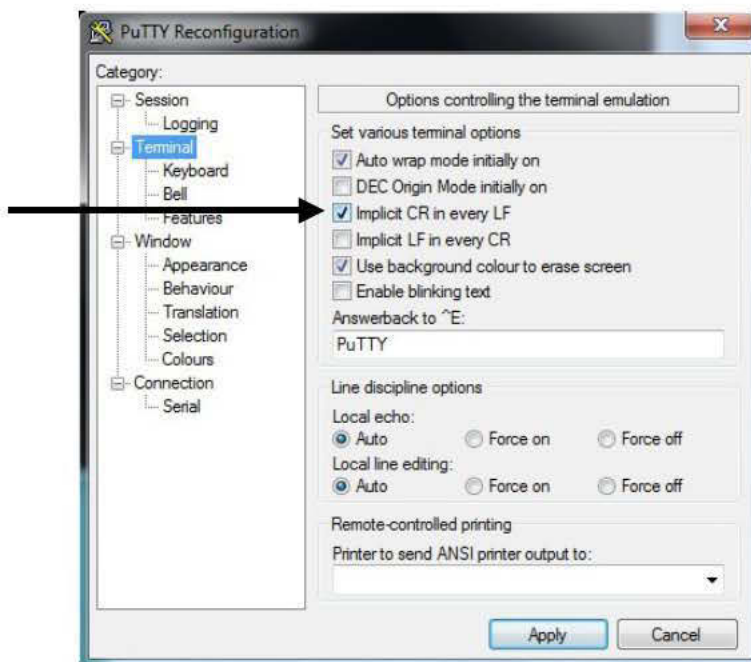
After connecting, the reader will indicate the link is ready.



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

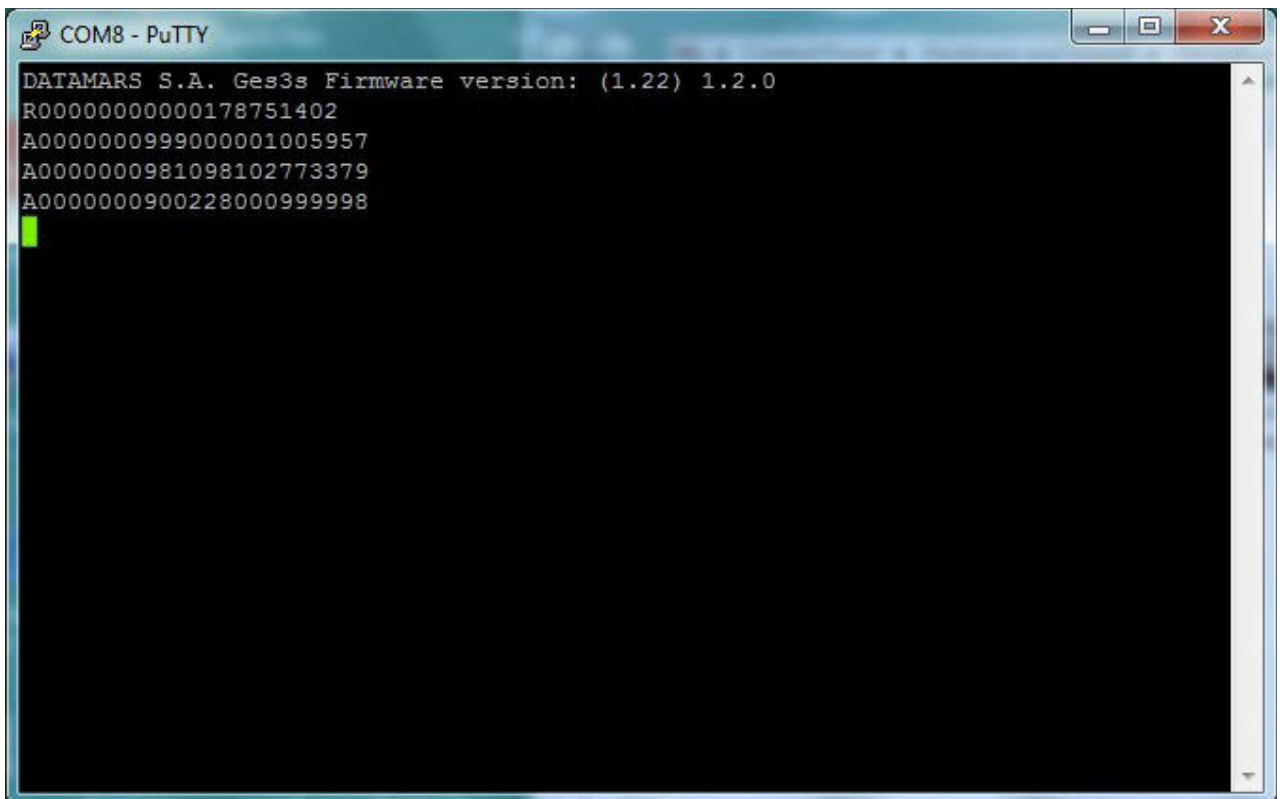


Check
this
box




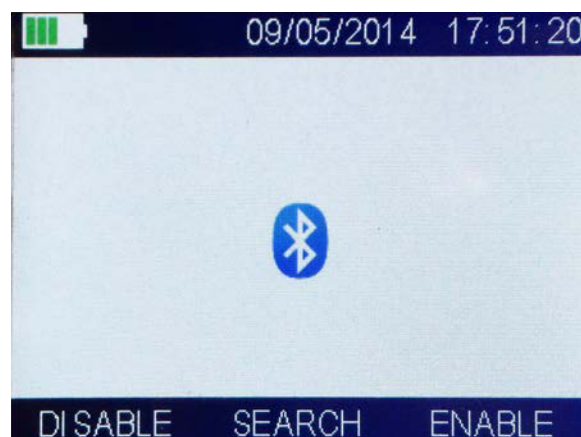
It takes a few seconds for the link to be established. When the connection opens the reader sends a hello message.

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.

