

Enterprise XR+ Extended Range RFID Scanner:

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1) Product Description:

The Enterprise XR+ is a portable RFID Scanner designed to read FDX-A (125kHz) and FDX-B (134.2kHz) transponders - with or without Temperature Sensing – that comply with the ISO 11784/11785 Standards.

The unique ID Number of each transponder is displayed on the Enterprise XR+ Digital Display Screen. Internal memory allows storing up to 4,000 individual Transponder ID Numbers along with the Date and Time of each scan.

The Enterprise XR+ Scanner can be connected to any computer or hand-held device with the use of either a USB Cable (with Micro USB connector) or by pairing with a Bluetooth Wireless device.

2) What's Included:

- 1) Belt Hook/Wall Mount
 - a. Allows convenient storage and access between uses.
- 2) Large Loop Antenna for Extended Read Range
 - a. FDX-A (125kHz) Average Read Range = 2 inches
 - b. FDX-B (134.2kHz) Average Read Range = 6 inches
- 3) Backlit Two-Line Digital Display Screen
 - a. Displays the Unique ID of the Scanner Itself
 - b. Displays each scanned Transponders Unique ID Number
 - c. Displays Temperature for Transponders that include that feature.
 - d. Displays Battery Charge Level
 - e. Displays Bluetooth Status
- 4) Single Button Activation (The Scan Button)
- 5) Molded Soft Grip for Non-slip Handling
- 6) Built-in Bluetooth for Communication to Hand-held Devices.
- 7) MicroUSB Connector
 - a. Download Data to a computer using a MicroUSB Cable (Included)
 - b. For recharging the internal Lithium-Polymer Battery (Installed)
- 8) Lanyard Anchor allows attachment of a Wrist Lanyard (Included)



3) Packaging:

Molded Carrying Case protects the Enterprise XR+ Scanner during transport and storage.

- 1) Wall/Belt Hook.
- 2) Enterprise XR+ Scanner
- 3) Quick Start Guide
- 4) USB Cable w/Micro USB Connector.
- 5) Wrist Lanyard.
- 6) Keychain with encapsulated 134.2kHz Transponder for Test Scans



4) Getting Started:

Please read all instructions through once before using the Enterprise XR+ Scanner. Refer to Page 8 for instructions to set the internal clock.

4.1) Battery:

The Enterprise XR+ Scanner is equipped with a rechargeable, Lithium-Polymer Battery. It is best to connect to a USB Power Source and charge before the first use.

The Percentage of Battery Charge will be displayed each time the Scanner is turned on. It is best to connect the Scanner to a USB Power Source for recharging any time the Percentage Charge gets below 30%.

Do not use the Scanner near water while connected to a power source.

Be sure to push the rubber USB Connector Cap back into position whenever the Cable is not connected. When in place, the Connector Cap prevents water from entering the Scanner at the USB Connector opening.

The first time you connect the scanner to the USB Connection of a Desktop or Laptop Computer using a USB Cable the computer should display a message saying “New Hardware Found” – and the computer should automatically load the CH340 Driver that is used to communicate between the Enterprise XR+ Scanner and the Scanner Management Software available for download from the www.UnitelD.net website.

4.2) Enterprise XR+ Scanner Operation:

To turn the Enterprise XR+ Scanner on, press and release the “Scan Button” once.

During Startup, the Scanner will display:

INITIALIZING

Then:

**SCANNER -V0.16
Scanner-001**

The Revision Level of this Scanner

The “Name” for this Scanner

You can create your own name for the Scanner using the **Scanner Management Software** described in a later section 6.1.2) of this Guide.

Then:

BATTERY: 98%
b

Percentage Battery Charge Level

The “b” shows that Bluetooth is “turned on” – but the Scanner is not Paired with another Bluetooth device.

Then:

READY
b

and

SEARCHING
b

To Read a RFID Transponder, hold the handle of the Enterprise Scanner in your hand (use the lanyard included in the package if there is any risk of dropping the Scanner) and pass the loop end of the Scanner over the area where you believe the RFID transponder is located.

Read Range varies, but 125kHz (FDX-A) chips have a range of up to 2 inches and 134.2kHz (FDX-B) chips have a range of up to 6 inches.

If a Transponder is “found” then the information on the Transponder will be displayed

FDX-A (or FDX B) XXX XXXXXXXXXXXXX	The Coding Standard Used The ID Number of the Transponder
---	--

The ID Number will display on the screen for long enough for you to write it down and then the scanner will automatically turn off. You can change the time-to-shutdown using the Scanner Management Software discussed later in this Manual.

If the scanner does not find an ID Number to display, then it will display:

NO ID FOUND

If the Scanner is connected to a computer with a USB Cable or with Bluetooth, or connected to a smartphone with Bluetooth, then the Transponder ID Number will automatically be transferred to the computer or smartphone. See separate sections in this Guide for use of Computer or Smartphone Apps.

4.3) Test Scan with Key-Fob Test Transponder (Included):

The Scanner was packaged with a “Keychain” with a clear plastic “Fob.” This Fob contains a sample RFID Transponder which allows you to verify the correct function of the Enterprise XR+ Scanner.

Once “Searching” is displayed on the screen, pass the loop end of the Scanner over the Keychain Fob. Almost immediately you will hear a beep, and see a 15 digit ID Code appear on the screen. The first three digits of that Code identify the manufacturer of the test ship and the next 12 characters are the unique ID Number of that Chip.

FDX-B
985 XXXXXXXXXXXXX

Immediately above the ID Number the Display will show that this Test Chip was produced to the 134.2kHz FDX-B Standard.

The ID Number will display on the screen long enough for you to write it down and then the scanner will automatically turn off.

If the Scanner is connected to a computer with a USB Cable or with Bluetooth, or connected to a smartphone with Bluetooth, then the Chip ID Number will automatically be transferred to the computer or smartphone. See separate sections in this Guide for use of computer or Smartphone apps.

You should make note of the ID Number of the Test Chip. It will appear in the Scanner’s Memory each time you use the Test Chip to confirm that the Enterprise XR+ Scanner is functioning correctly.

If the scanner does not find an ID Number to display, then it will display:

NO ID FOUND

If this occurs when you are scanning the Test Chip in the Keychain Fob, then there is some malfunction. Please contact UniteID at 603-669-0800.

5) Bio-Thermo™ Chips:

The Enterprise XR+ Scanner will read Bio-Thermo™ Chips from Destron-Fearing. If a Bio-Thermo™ chip is found, the display will show:

**FDX-B **.*F
985 XXXXXXXXXXXXX**

You can use the Scanner Management Software to change the display from Fahrenheit to Celsius if you prefer. (See Section 6.1.7) in this Guide

6) Scanner Management Software:

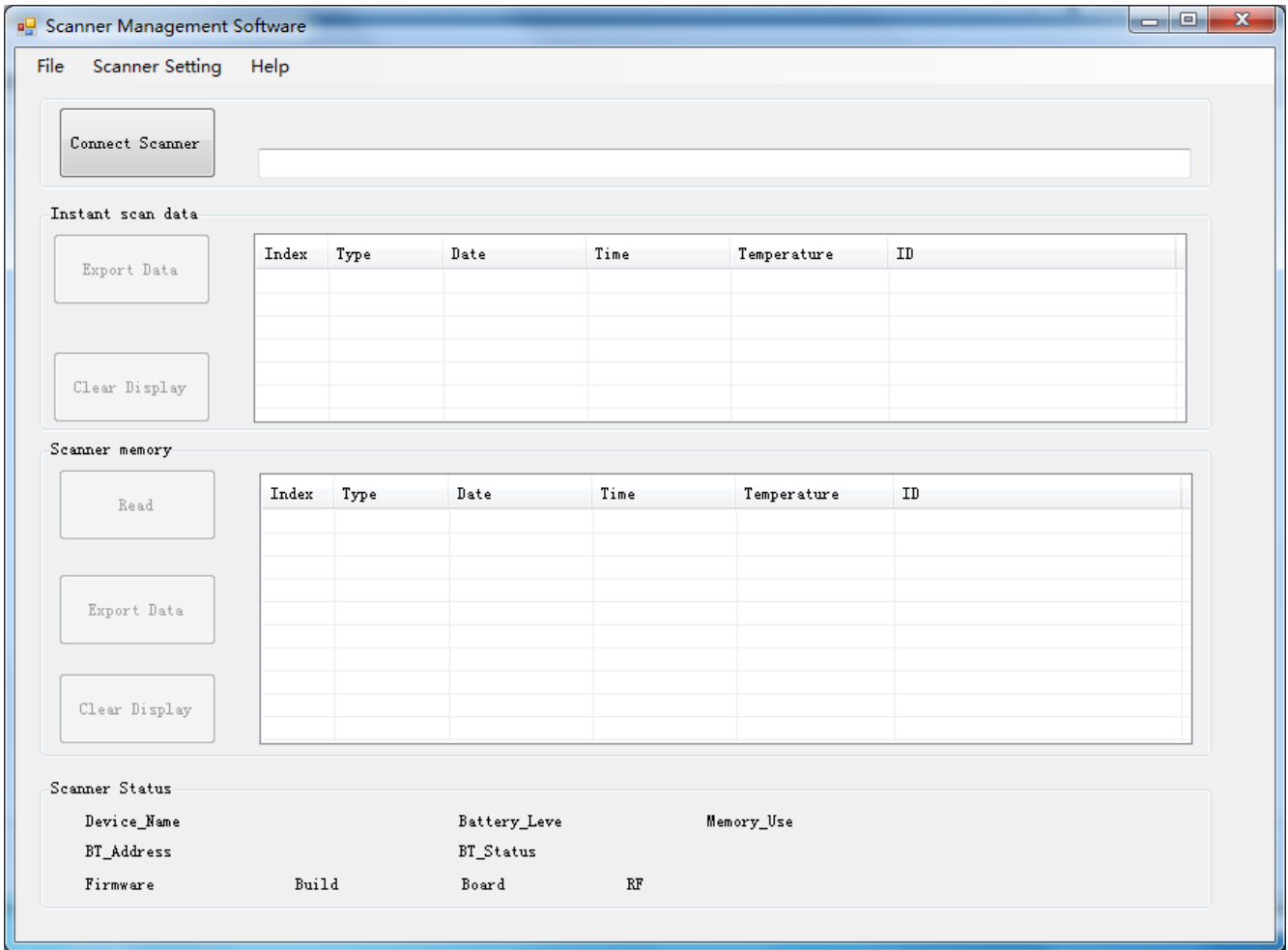
The Enterprise XR+ Scanner is designed to work with Desktop or Laptop Computers to help store, manipulate and use the data collected by the Scanner.

To load the Scanner Management Software, visit the www.UniteID.net website and click on the APPS Button.

Select the correct APP for your computer – Windows; Mac OS; iPhone; or Android – and click “Download.” Save the Scanner Management Software in a folder where you will be able to find it. We suggest an Enterprise XR+ folder.

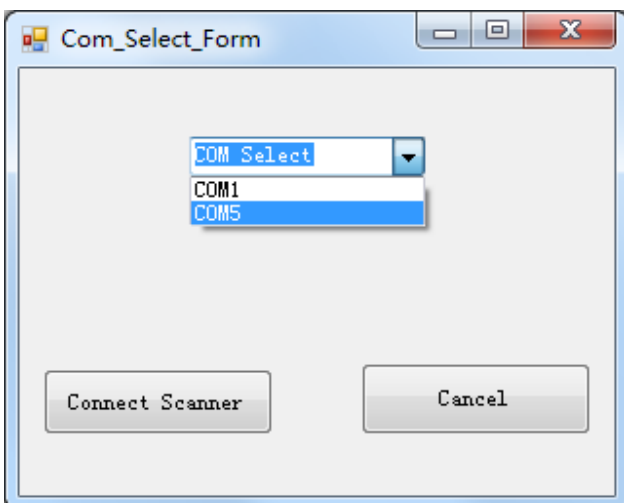
When the download is complete, open that folder and click on the Scanner V0.5.exe file.

You may want to create a Shortcut that will display on your Desktop for easy access to the Scanner Management Program. When you start the Scanner Management Software, your computer should display a Main Screen that looks similar to this:



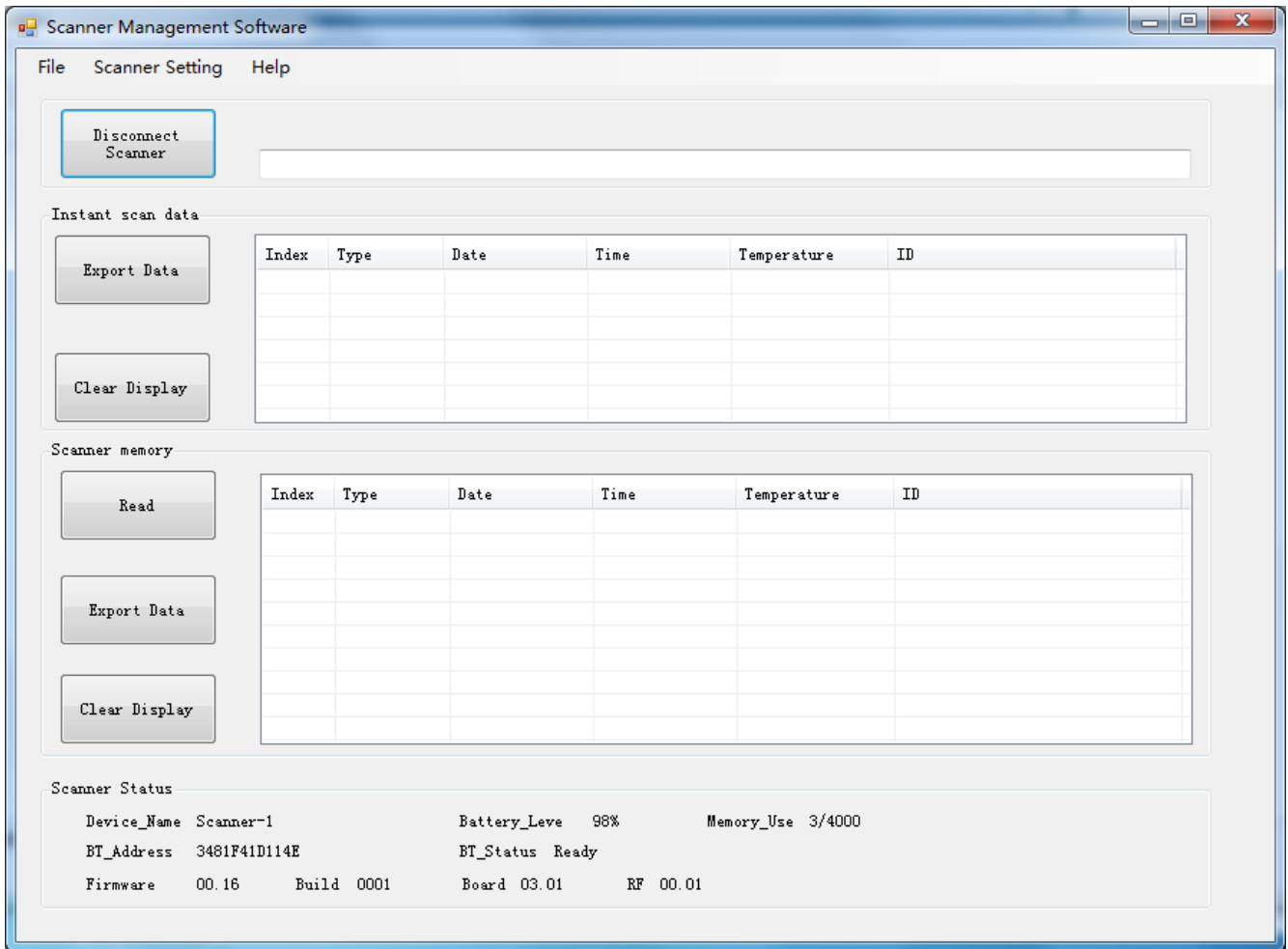
Use the USB Cable to connect the Enterprise XR+ Scanner to the computer. The Scanner will automatically be turned ON.

Click on the “Connect Scanner” button and this pop-up should appear:



If you select the “wrong” Com Port (Communication Port.), the program will display an error message and allow you to try again. When you select the correct Com Port, a Pop-up will display “Scanner Connected”

The screen should then change to appear like this.



Above the display shows *Scanner Status* which includes your *Device Name* and *BT Address* (your unique Bluetooth Address). This screen also shows battery charge level and how many “scans” are stored in the Scanner’s memory. Example: 3/4000 means 3 “scans” saved out of the maximum capacity of 4000 for this Scanner.

The lower block allows you to display any scans that were performed while the Scanner was not connected – and that are stored in the Scanner’s memory. Click on the “Read” button to read in all data stored in the Scanner’s memory.

Each “scan” can be viewed individually by clicking on, and highlighting, any specific “line.” The data on that line will appear in the bar near the top of the screen and from there can be manipulated and/or copied for use elsewhere. Duplicate Scans can be deleted.

6.1) Customizing You Enterprise XR+ Scanner

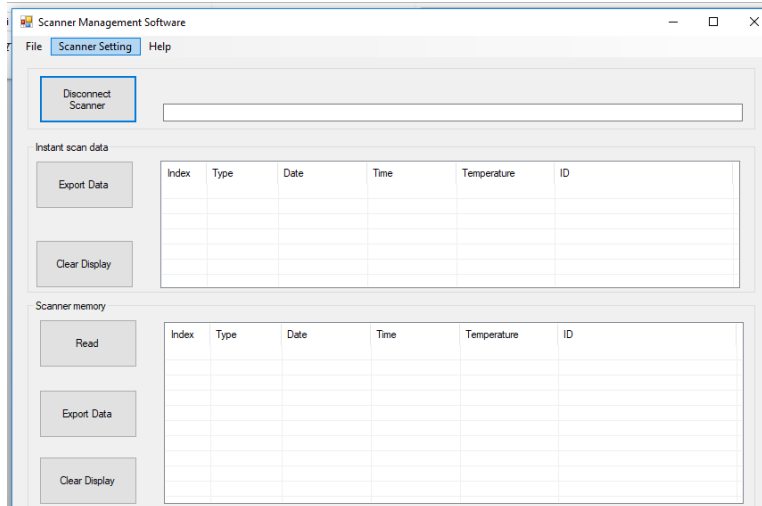
The Menu Bar at the top of the Scanner Management Software Screen has Tabs for “File”, “Scanner Settings”, and “Help.” Click on the “Scanner Setting” Tab to customize your Enterprise XR+ Scanner.

*** Before using the Scanner for the first time it is best to set the time on the internal clock. This will allow all scans to be Time & Date Stamped for future reference.**

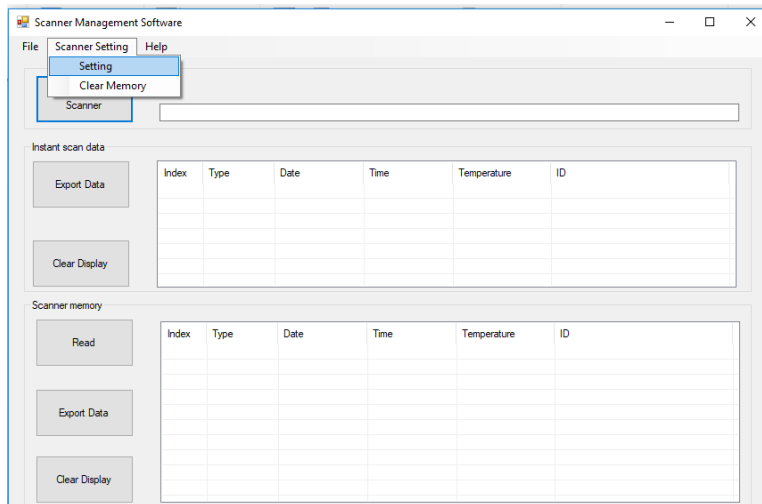
6.1.1) Setting the Scanner's Internal Clock

To set the internal clock, first confirm that the Scanner is "Connected" to the Scanner Management Software (see above.)

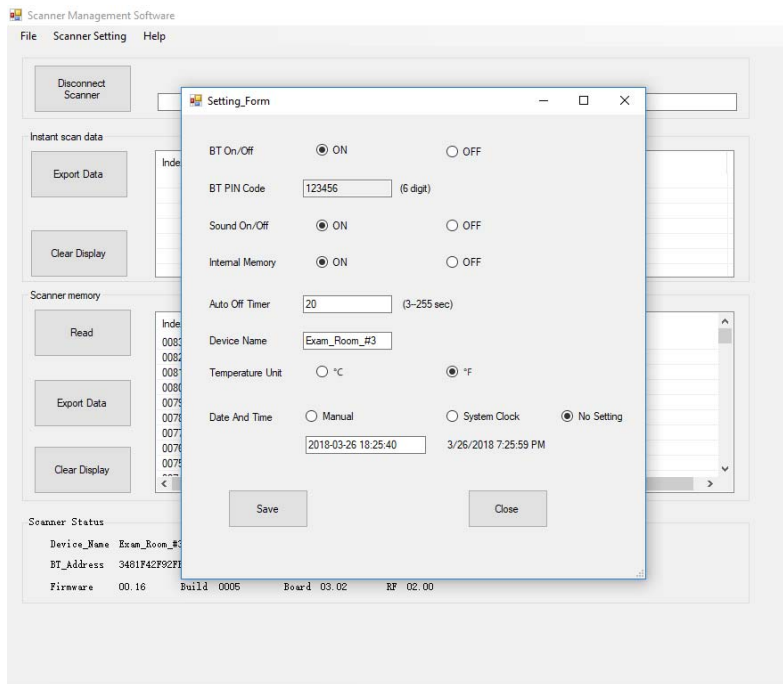
At the top of the Scanner Management Software Screen, click on the "Scanner Settings" box as shown here.



A Drop-down Menu will appear like this:



Click on “Settings” and this screen will appear:



Near the bottom of the “Settings” screen you will see “Date and Time.”

Compare the Scanner’s Date and Time, which appears in the box under the word Manual with the Date and Time of the System Clock of your computer that appears to the right.

If these are not the same, then click the ‘System Clock’ Button and then click “Save.”

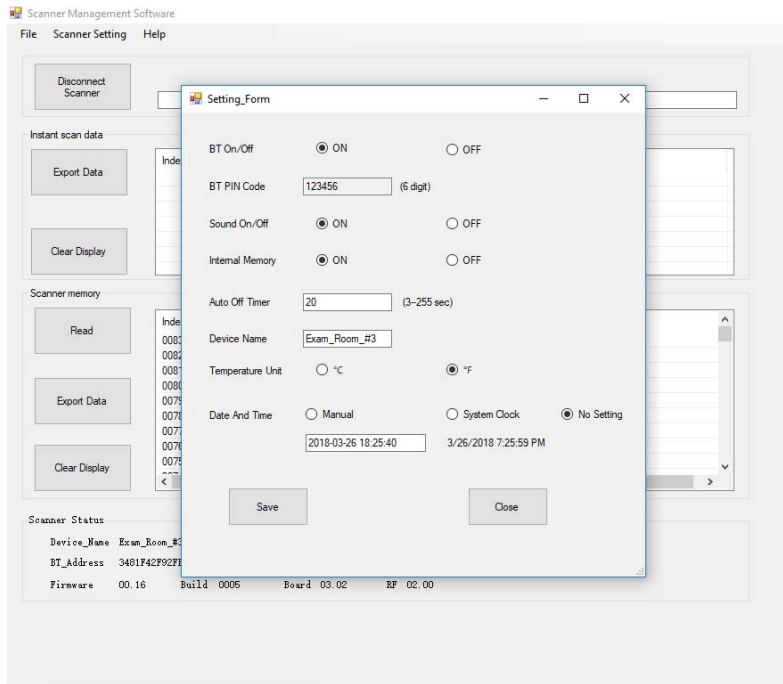
To confirm that the setting is correct, click on “Scanner Settings” again to verify that the Scanner Date & Time matches the System Date & Time. (Note: the System Clock continues to advance, but the Scanner Date & Time shows the time at the instant that you first clicked on “Scanner Settings”).

6.1.2) Setting the Enterprise Scanners “Name”

If you have more than one Enterprise XR+ Scanner, you may want to assign a unique name to each Scanner. Examples: “Exam_Room_#4” or “Field_Unit_#2”. The “Name” can be up to 16 Characters long and can include symbols like: / ; ; ? < > ! @ # % ^ * () + =. The “Name” cannot include the “&” symbol or spaces. For a “space” use either “-” or “_”.

With the Scanner Management Software Program screen open, click on “Scanner Settings” in the top Menu Line. The Setting Form Screen should pop up. About in the middle of the screen you will see a “Device Name” entry. Move your pointer into that block and click. You can edit the “Name” as you would edit any other text.

When you are finished, click on the “Save” Button in the bottom left hand corner.

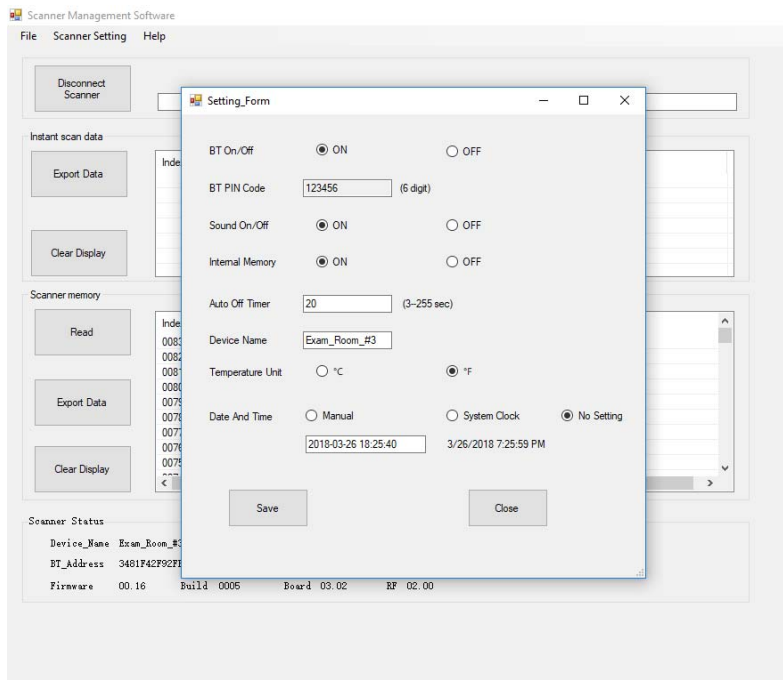


6.1.3) Turning Bluetooth Capability On or Off

Your Enterprise XR+ Scanner was shipped with the Bluetooth Capability turned on and ready to “Pair” with your Bluetooth Device (Laptop or Smartphone.) If you do not plan to use the Bluetooth Capability, we recommend you turn off this capability (this will increase the battery life).

Click on the Scanner Setting tab at the top of the Scanner Management Software screen.

The Setting Screen will pop up:



Near the top of that screen you should see “Bt On/Off” and two Buttons.

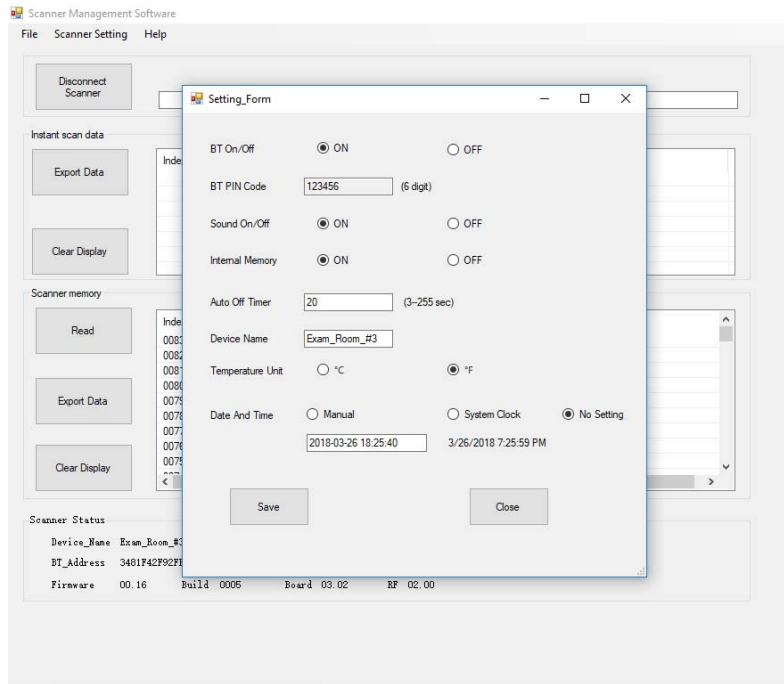
If you do not plan to use Bluetooth, then press the “Off” Button and then press “Save” at the bottom of the screen. You can always turn Bluetooth back on if needed in the future.

6.1.4) Turning the “Beep” On or Off:

Your Enterprise XR+ Scanner is shipped with a “Beep” Feature turned on so each time a RFID Chip is “Found” your Scanner will “Beep.”

Click on the Scanner Setting tab at the top of the Scanner Management Software screen.

The Setting Form Screen will pop up:



In the third entry on that screen you should see “Sound On/Off” and two Buttons.

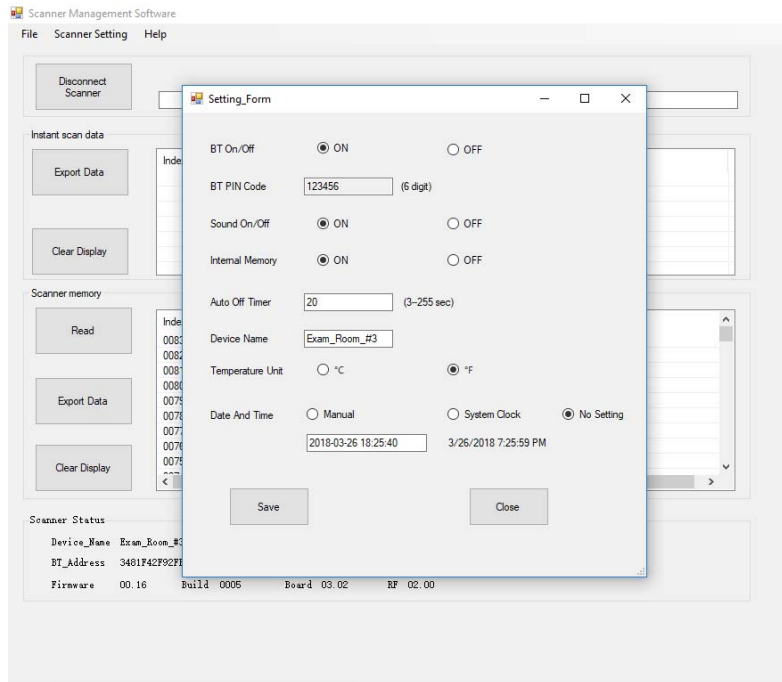
If you prefer not hear the Beep, press the “Off” Button and then press “Save” at the bottom of the screen.

6.1.5) Turning Internal Memory Storage On or Off

Your Enterprise XR+ Scanner is shipped with the **Internal Memory Storage** feature turned on. This allows the Transponder ID number to be saved each time an RFID Chip is “Found”. **If do not plan to use this feature to manipulate your data, then it is best it off to save battery life and to avoid a Memory Full Message.**

Click on The Scanner Setting tab at the top of the Scanner Management Software.

The Setting Screen will pop up:



In the fourth entry on that screen you should see “Internal Memory” and two Buttons.

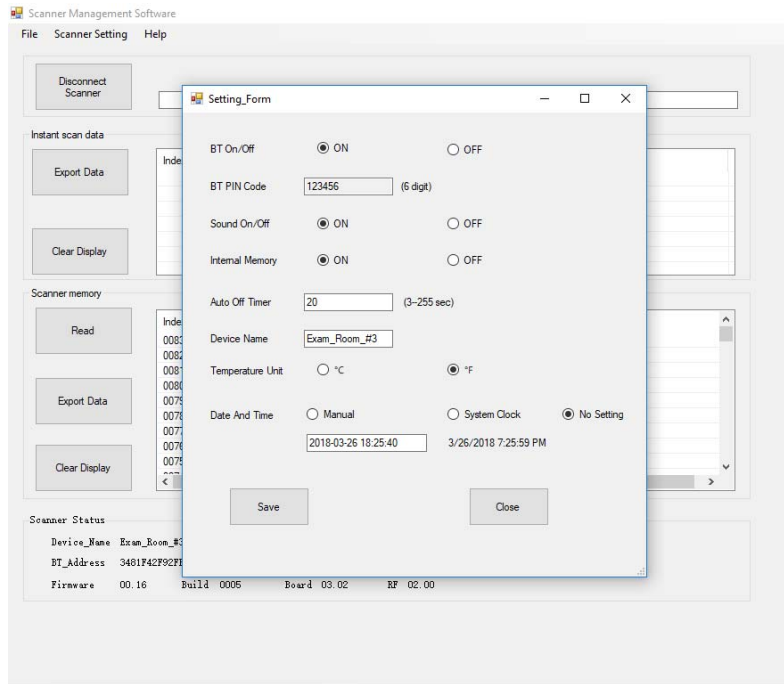
If you **do not** plan to use the “Internal Memory”, then press the “Off” Button and then press “Save” at the bottom of the screen. You can always turn the “Internal Memory” back on if needed in the future.

6.1.6) Setting the “Auto Off” Timer:

To conserve battery power, your Enterprise XR+ Scanner is shipped with its **Auto Off Timer** set to automatically turn off 20 seconds after an RFID Chip Number is displayed on the Scanner Display Screen.

Click on The Scanner Setting tab at the top of the Scanner Management Software.

The Setting Screen will pop up:



In the middle of the screen you will see “Auto Time Off” and a box that shows 20 Seconds.. To change the time, click in the box and edit it as you would edit any other text. **You can set the timer for any duration between 3 and 256 seconds.** Then press “Save” at the bottom of the screen. You can always change the **Auto Off Timer**.

6.1.7) Temperature Display for Bio-Thermo™ Chip:

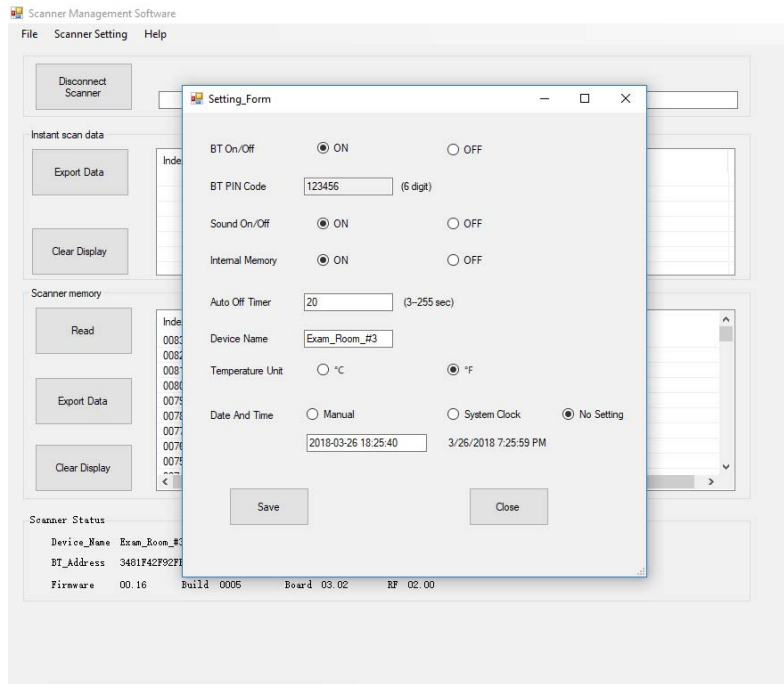
The Enterprise XR+ Scanner is capable of reading the Bio-Thermo™ Chip. If a Bio-Thermo™ chip is found, the display will show:

FDX-B	**.*F
985	XXXXXXXXXXXX

You can set the display to show either Centigrade or Fahrenheit.

Click on The Scanner Setting tab at the top of the Scanner Management Software screen.

The Setting Screen will pop up:



The entry just below the Scanner Name on that screen should read **“Temperature Unit”** and there are two Buttons: “ °C” and “ °F”

Click the button temperature that you would prefer.

You can always change the **Temperature Units**.

6.2) Manipulating Scanned Data:

If your application requires capturing and storing the data for a group of scans, the data displayed here can be saved to a file of your choice by clicking the “Export Data” button.

You can export the “Instant Scan Data” from scans taken in the time since the Enterprise XR+ Scanner was connected to the Scanner Management Program – or you can export all of the data that is stored in the Enterprise XR+ Scanner’s memory.

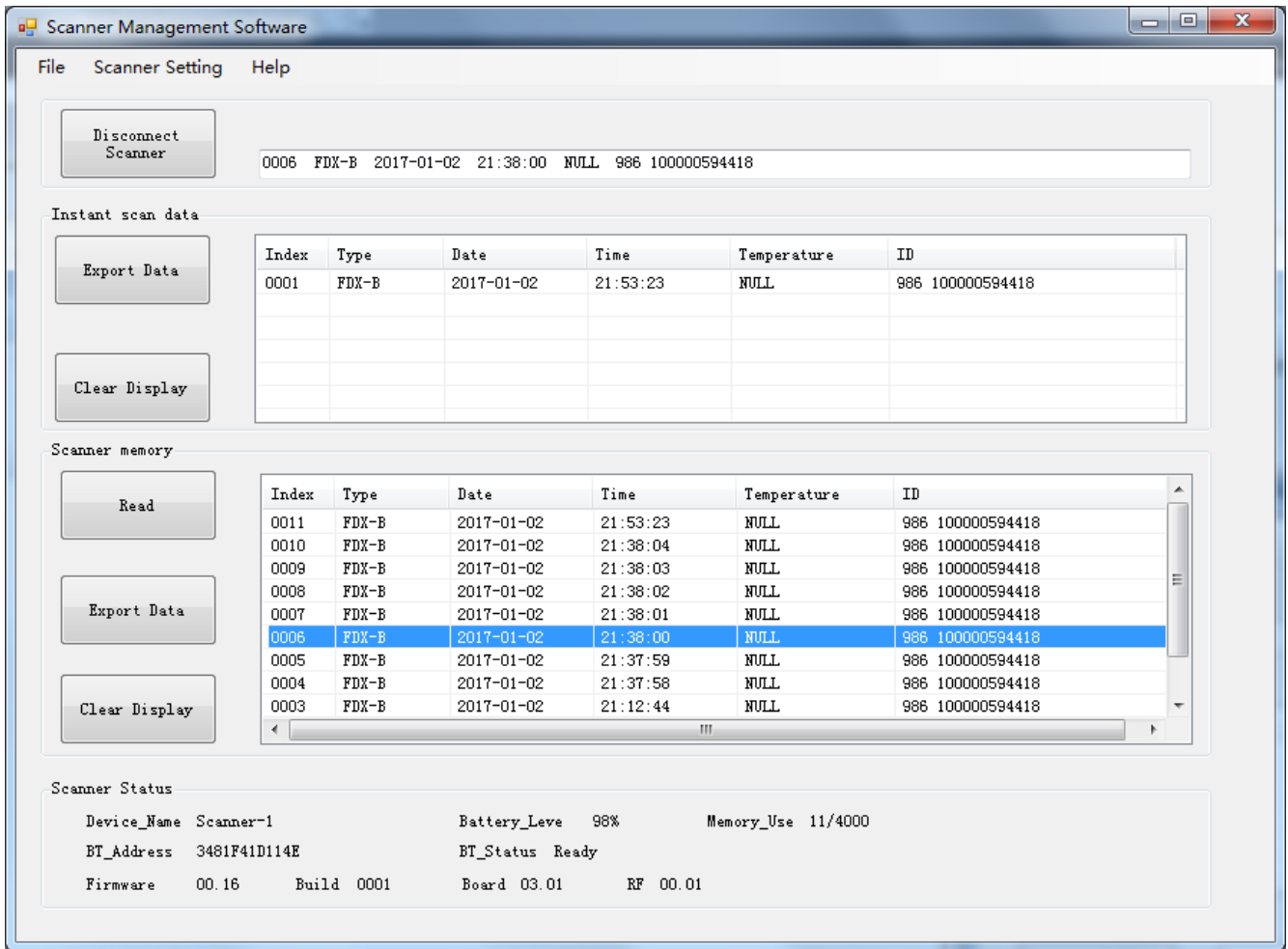
When you click on the Export Data Button it acts just like “Save As” in other programs. A Pop-up screen will display a normal Directory Screen.

If you click on the top “Export Data” button for Instant Data, the Directory Screen will show that it is ready to save a file named “Your_Scanner_Name Instant.csv” and shows that it will be saved in your Documents Folder.

You can change the file name, or change the folder where it will be stored, as you would with any other “Save As” command.

(a .csv file is a file that stores the data as “Comma Separated Values.” This file can be imported into Excel or other data management software.)

If you have clicked on the lower “Export Data” button for Scanner Memory, the Directory Screen will display that it is ready to save a file named “Your_Scanner_Name Data.csv - which contains all of the data currently in the Scanner Memory. The default is set to save the file in your Documents Folder. You can change the file name, or folder where it will be stored, as you would with other “Save As” command.



The Clear Display button clears the display on the screen, but does not delete the data in the Scanner’s memory.

The Scanner’s Memory can be cleared by clicking on the “Scanner” tab in the Menu Bar at the top of the screen and then clicking on “Clear Memory.”

FCC STATEMENT

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

RF warning statement:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

IC warning

- English:

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

(1) This device may not cause interference; and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

- French:

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."