



## **BCS36x8<sup>ex</sup> – Product Information**

### **Data Capture DNA - software and programming tools**

Bad Mergentheim, 01 April 2021 / Rev. -

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# **Zebra's Data Capture DNA**

## What is the ZEBRA Data Capture DNA?

DataCapture DNA is the genetic code that simplifies the entire scanning experience. The result is innovation-driven performance that not only makes our data capture devices the best in the industry, but also the easiest. From integration to deployment and then management, Zebra has stripped away all the complexity.

Zebra data capture devices turn into powerful tools that get more done and resolve tomorrow's challenges today.

Now this functionality is available in hazardous area with BARTEC BCS36x8<sup>ex</sup> series.

## For whom is it build?

For end users, IT administrators and App developers

## What does the ZEBRA Data Capture DNA resolves?

- Configuration complications
- Remote management problems

## Are the tools free?

Most of the tools are free and can be downloaded in the app store on the Zebra page

For further information to Data Capture DNA [click here](#)



	Benefits	Available Tools	User
<b>Productivity Tools</b>	<ul style="list-style-type: none"> <li>- Scan multiple barcodes with a single trigger pull</li> <li>- Faster, farther, smarter scanning</li> <li>- Eliminate WIFI interference</li> </ul>	<ul style="list-style-type: none"> <li>- Intelligent Document Capture</li> <li>- PRZM Intelligent</li> <li>- WI-FI Friendly Mode</li> <li>- Multi Code Data Formatting</li> <li>- Preferred Symbol</li> <li>- UDI Scan+</li> <li>- Label Parse+</li> <li>- Blood Bag Parse+</li> </ul>	End User Managers
<b>Management Tools</b>	<ul style="list-style-type: none"> <li>- Industry's easiest configuration</li> <li>- Easy remote management</li> <li>- Battery analytics</li> </ul>	<ul style="list-style-type: none"> <li>- 123 Scan</li> <li>- Remote Management</li> <li>- Power Precision</li> </ul>	IT Administration
<b>Visibility Tools</b>	<ul style="list-style-type: none"> <li>- Troubleshoot remotely</li> <li>- Validate device setup</li> </ul>	<ul style="list-style-type: none"> <li>- Remote Diagnostics</li> <li>- ScanSpeed Analytics</li> </ul>	IT Administration Managers
<b>App development Tools</b>	<ul style="list-style-type: none"> <li>- Pair scanners to mobile devices in one step</li> <li>- Control scanners from a mobile device</li> <li>- Simplify app development</li> </ul>	<ul style="list-style-type: none"> <li>- Scan to Connect</li> <li>- Scanner Control Application</li> <li>- Software Development Kits</li> </ul>	Developers IT Managers

# Compatibility list for ZEBRA Data Capture DNA Tools

- ✓ = supported
- ✓\* = supported with restrictions
- X = not supported
- N/A = not offered by Zebra

Management Tools	Development Tools	Visibility Tools	Productivity Tools
123 Scan Utility (USB-HID via programming cable or base station required)	Remote Management	Power Precision (only supported with Bluetooth version)	Scan-to-Connect (only supported with Bluetooth version) (Android or Windows OS required)
Scanner Control Application (only supported with Bluetooth version) (Android or iOS OS required)	Software Development Kits	Scan Speed Analytics	Remote Diagnostics
PRZM Intelligent Imaging	Multi-Code Data Formatting and Label Parse+	Wi-Fi Friendly Mode (only supported with Bluetooth version)	Preferred Symbol
Intelligent Document Capture (only supported with SE4750-HP scan engine)			

## BCS3608<sup>ex</sup> – corded – Zone 2/22 and Division 2

BCS3608 <sup>ex</sup> -NI – SE4750-HP	✓	✓	N/A	N/A	N/A	✓*	✓	✓	✓	✓	N/A	✓	✓
• with programming cable in safe area													
• with HMI limiting cable (USB) (depends on HMI if USB-HID is supported)													
BCS3608 <sup>ex</sup> -NI – SE4750-HP	X	X	N/A	N/A	N/A	✓*	X	X	✓	✓	N/A	✓	✓*
• with Universal Supply Module													
BCS3608 <sup>ex</sup> -NI – SE4850-ER	✓	✓	N/A	N/A	N/A	✓*	✓	✓	✓	✓	N/A	✓	N/A
• with programming cable in safe area													
• with HMI limiting cable (USB) (depends on HMI if USB-HID is supported)													
BCS3608 <sup>ex</sup> -NI – SE4850-ER	X	X	N/A	N/A	N/A	✓*	X	X	✓	✓	N/A	✓	N/A
• with Universal Supply Module													

## BCS3608<sup>ex</sup> – corded – Zone 1/21

BCS3608 <sup>ex</sup> -IS – SE4750-HP	✓	✓	N/A	N/A	N/A	✓*	✓	✓	✓*	✓	N/A	✓	✓
• with programming cable in safe area													
BCS3608 <sup>ex</sup> -IS – SE4750-HP	X	X	N/A	N/A	N/A	✓*	X	X	✓*	✓	N/A	✓	✓*
• with Universal Supply Module													
• with Supply Module Ex i													

# Compatibility list for ZEBRA Data Capture DNA Tools

- ✓ = supported
- ✓\* = supported with restrictions
- X = not supported
- N/A = not offered by Zebra

Management Tools			Development Tools			Visibility Tools		Productivity Tools				
123 Scan Utility (base station with USB connection required)	Remote Management	Power Precision (only supported with Bluetooth version)	Scan-to-Connect (only supported with Bluetooth version) (Android or Windows OS required)	Scanner Control Application (only supported with Bluetooth version) (Android or iOS OS required)	Software Development Kits	Scan Speed Analytics	Remote Diagnostics	PRZM Intelligent Imaging	Multi-Code Data Formatting and Label Parse+	Wi-Fi Friendly Mode (only supported with Bluetooth version)	Preferred Symbol	Intelligent Document Capture (only supported with SE4750-HP scan engine)

## BCS3678<sup>ex</sup> – Bluetooth – Zone 2/22 and Division 2

BCS3678 <sup>ex</sup> -NI – SE4750-HP • with base station (USB)	✓	✓	✓	N/A	N/A	✓	✓	✓	✓	✓	✓	✓	✓
BCS3678 <sup>ex</sup> -NI – SE4750-HP • with Universal Supply Module	X	X	✓	N/A	N/A	✓*	X	X	✓	✓	✓	✓	✓*
BCS3678 <sup>ex</sup> -NI – SE4750-HP Paired with other Bluetooth devices (e.g. BARTEC SMART USB Device, Smartphone, Laptop, ...)	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

## BCS3678<sup>ex</sup> – Bluetooth – Zone 1/21

BCS3678 <sup>ex</sup> -IS – SE4750-HP • with base station (USB)	✓*	✓	X	N/A	N/A	✓	✓	✓	✓*	✓	✓	✓	✓
BCS3678 <sup>ex</sup> -IS – SE4750-HP • with Universal Supply Module • with Supply Module Ex i	X	X	X	N/A	N/A	✓*	X	X	✓*	✓	✓	✓	✓*
BCS3678 <sup>ex</sup> -IS – SE4750-HP Paired with other Bluetooth devices (e.g. BARTEC SMART USB Device, Smartphone, Laptop, ...)	X	✓	X	✓	✓	✓	✓	✓	✓*	✓	✓	✓	✓

## **Data Capture DNA – Management Tools**

123 Scan Utility

Remote Management

Power Precision



## MANAGEMENT TOOLS

Dramatically simplify scanner deployments of any size with the industry's most intuitive configuration wizard, set-it-and-forget-it remote management and uptime-boosting battery analytics.



### 123Scan

Intuitive enough for first-time users, 123Scan has a wizard that creates a single barcode for programming scanners. It can also be used to update firmware on a single device or stage a large number of devices, as well as display and save barcode data and images.



### Remote Management

Through either the Zebra Scanner Management Service (SMS) or Windows Management Instrumentation (WMI), access asset information and statistics, set parameters and update firmware.



### PowerPrecision and Battery Management

Keep data capture devices up and running with smart batteries and software tools that provide visibility into a wealth of battery health-related data to prevent interruptions and improve shift life.

If you think configuring scanners is a hassle, think again. The Zebra's 123Scan utility has a patented configuration wizard that simplifies every step of deploying a scanner. Loaded with time-saving features and functionality, it's intuitive enough for first-time users. From the start, it automatically detects your data capture devices and walks you through the configuration process. You'll find it just as simple when it comes to updating scanner firmware, staging large numbers of devices, displaying barcode data and images, and generating reports. Little wonder then that hundreds of thousands of IT administrators swear by it.

## Overview

- 123Scan is an easy-to-use, PC-based software tool that enables the quick and easy set-up of Zebra and BARTEC scanners.
- 123Scan uses a wizard tool to guide users through a streamlined set up process. Once parameters are set, the values are saved to a configuration file that can be distributed via email, electronically downloaded via USB cable or used to generate a sheet of programming bar codes that can be scanned.
- 123Scan can generate multiple reports that can be easily rebranded using Microsoft Word and Access. Report options include parameters, asset tracking (inventory) information and a validation of scanned data.
- Additionally, 123Scan can display scanned barcode data including non-printable characters. It can display, optimize and save pictures from an imager scanner. It can also upgrade scanner firmware, automatically check online to enable support for newly released products, generate a single 2D barcode for one scan programming and stage large numbers of scanners simultaneously via USB hub(s).



## 123 Scan Utility functions

- Optimized for first time users
- Generation of an electronic configuration file
- Generation of your configuration as programming barcode
- Program Advanced Data Formatting (ADF) Rules
- Program Multi Data Formatting (MDF) Rules and Label Parse+ (for GS1 label)
- Firmware upgrade of scanners via a standard USB cable
- Data Viewer
- And more

## Supports only USB connection

- BCS3678<sup>ex</sup> Bluetooth scanner requires base station + USB programming/connection cable
- BCS3608<sup>ex</sup> corded scanner requires USB programming cable

For further information to 123 Scan Utility

Product homepage [click here](#)

Download/Support page [click here](#)



Reduce the time, cost and logistical headache of managing scanners remotely. With Zebra, you can choose from two options to remotely manage your Zebra Scanners: our easy to use Scanner Management Service (SMS) or Windows Management Instrumentation (WMI). While WMI may be used by some, it's complicated. By comparison, SMS is a cinch. A wizard helps you generate an SMS package. No need to learn any new network management tools. Simply use the ones you already have and know. In three easy steps, you can configure devices, load parameters, update firmware and query asset data.

## Supported devices:

- BCS3678<sup>ex</sup> Bluetooth scanner with base station or direct connection to other Bluetooth devices.  
Does not work in combination with Universal Supply module.
- BCS3608<sup>ex</sup> corded scanner with USB programming cable or HMI USB limiting cable.  
Does not work in combination with Universal Supply module.

For further information to Remote Management [click here](#)



Your mobile workforce relies on mobile computers, cordless scanners and mobile printers. How well your mobile devices perform depends in great part on the batteries that charge them. When they're not working well, neither are your employees – impacting productivity, customer service and profitability. But how can you know the status of your batteries until it's too late?

Zebra gives you smart ways to preempt problems. With PowerPrecision and PowerPrecision+ batteries, you have critical intelligence about their health, while the on-device Battery Management application gives you the visibility to anticipate and avoid issues. Now, you'll know when batteries need to be charged, replaced or retired before you go to work.

**PowerPrecision+ Batteries** deliver the ultimate in battery data. Electronically query battery asset information, plus a wealth of battery health-related information, including impedance tracking and battery status at the time of query. Use our State-of-Health meter to perform real-time modeling of the electrical characteristics of the battery pack to compare current performance with that of a new battery.

### Supported devices:

- PowerPrecision+ supports only the BCS3678<sup>ex</sup>-NI (Zone 2/22 and Division 2) Bluetooth scanner. The functionality is not supported by use of BCS3678<sup>ex</sup>-IS (Zone 1/21) Bluetooth scanner.

For further information to Power Precision [click here](#)



## Battery Statistics Capabilities

The DS3678 Bluetooth scanner is equipped with Power Precision+ (only BCS3678<sup>ex</sup>-NI) batteries. These intelligent batteries have the integrated technology required to collect the detailed real-time battery metrics needed to maximize useful battery life and ensure every battery is healthy and able to hold a full charge.

**The Power Precision+ batteries support the following remote management functionality:**

### Battery Asset Information

- Manufacture Date of Battery
- Serial Number of Battery
- Model Number of Battery
- Firmware Version of Battery
- Design Capacity

### Battery Life Statistics

- State of Health Meter
- Charge Cycles Consumed

### Battery Status (at Time of Poll)

- State of Charge
- Remaining Capacity
- Charge Status
- Remaining Time to Complete Charging
- Battery Voltage / Current

### Battery Temperature

- Present / Highest / Lowest



Battery statistic data can be viewed in 123Scan<sup>2</sup> at [www.zebra.com/123Scan](http://www.zebra.com/123Scan), or by using a third party remote management console.

## **Data Capture DNA – Development Tools**

Scan-to-Connect

Scanner Control Application

Software Development Kits

## DEVELOPMENT TOOLS

Reduce pairing to a single step and apply zero effort for developing data-intensive apps for swifter timelines and simpler integration.



### Scanner Software Development Kit (SDK)

Decrease development cycles by leveraging our comprehensive documentation, source code, sample applications and how-to videos that allow you to develop your own applications.



### Scan-To-Connect

In one step, connect your Bluetooth scanner to a phone, tablet or PC by simply scanning a STC barcode. Available as a standalone utility or source code for easy app integration.



### Scanner Control Application

This fully featured application with source code enables Bluetooth scanners to be connected and controlled by a tablet or smartphone.



# ZEBRA Data Capture DNA – Scan to connect (STC)

With Zebra's Scan-to-Connect (STC) utility, users can instantly connect Zebra data capture devices to a Bluetooth®-enabled PC, tablet or smartphone, in just a single action. STC reduces the process from up to 15 steps and screen changes to only one.

## Scan-To-Connect Features and Benefits

- **Pair it in one step**

Users simply scan the STC barcode that appears on their device's screen and the imager automatically connects to their Android or Windows PC, tablet or smartphone.

- **Instantly launch your app**

Once you connect your scanner to your Android device, STC will automatically launch your data-capture application. From then on, your scanner and application will remain paired.

## Supports only the BCS3678<sup>ex</sup> Bluetooth scanner

For further information to Scan to connect [click here](#)

Download the Android App [here](#)

Download the Windows App [here](#)



You can easily control the beeper and LEDs, display scanned barcode data, access battery health metrics and so much more. Show SCA to your customers' IT teams, and they're sure to get excited by its demonstration of just how effortless our scanners are to pair and control via a tablet or phone.

## Scanner Control Application Features and Benefits

- **Scanner settings**

Use SCA to set the beeper tone and volume, turn the LEDs on or off, and enable and disable symbologies—even remotely pull the trigger of the scanner.

- **Advanced capabilities**

From finding a lost imager to updating firmware, from querying asset data to accessing critical battery statistics, SCA's advanced capabilities gives invaluable control and actionable information to maximize uptime.

- **Apply it to Android and iOS**

SCA has been designed to work on any Android and iOS device.

## Supports only the BCS3678<sup>ex</sup> Bluetooth scanner

For further information to Scan Control Application [click here](#)

Download the Android or iOS App [here](#)



## App Development As It Should Be

Zebra's Scanner Software Development Kits (SDKs) give you everything you need to easily create fully featured applications. Capture and optimize images and control all aspects of your scanners and your data collection process. Upgrade firmware and enable multiple applications to simultaneously talk to one or more scanners. Keep enterprises ahead of the curve by solving tomorrow's challenges. With these SDKs, you ensure peak and continuous performance of Zebra scanners, now and in the future.

## Important Note:

The Universal Supply Module (USM) is an BARTEC own development to power the scanner and allow data transfer compliant to the Ex-standards inside of hazardous area.

The USM itself is not available as component in the SDK.

For further information to Software Development Kit [click here](#)



## **Data Capture DNA – Visibility Tools**

Remote Diagnostics

Scan Speed Analytics

## VISIBILITY TOOLS

Gain the foresight to avoid unexpected interruptions and expenses. With real-time analytics, you can validate set-up procedures, proactively schedule maintenance and expedite troubleshooting.



### ScanSpeed Analytics

Correct small issues before they become big problems by identifying performance trends and patterns that slow down scanning processes.



### Remote Diagnostics

Remotely gather asset information and data across the enterprise to diagnose performance issues. Proactively schedule maintenance calls to maximize uptime.

## Turn Device Diagnostics Into Lower Total Cost of Ownership

Not only does Remote Diagnostics give you up-to-the-minute insight into every aspect of your Zebra scanners, it makes it easy to understand. Now, you can easily turn information into action to prevent disruptions that drain profits. Rely on Remote Diagnostics to verify your set-up procedures, anticipate and schedule maintenance and remotely troubleshoot.

### Supported devices:

- BCS3678<sup>ex</sup> Bluetooth scanner with base station or direct connection to other Bluetooth devices.  
Does not work in combination with Universal Supply module.
- BCS3608<sup>ex</sup> corded scanner with USB programming cable or HMI USB limiting cable.  
Does not work in combination with Universal Supply module.

For further information to Remote Diagnostics [click here](#)



## Identify Problematic Barcodes. Speed Up Your Process.

You may not even realize it, but problematic barcodes are hindering your profitability. With patented technology, Zebra's ScanSpeed Analytics software helps you visually identify barcodes that slow down your processes and impact your efficiency. Over time, you can use the collected data to eliminate poor performing barcodes from your inventory. When your scanners capture and read data faster, your processes run faster.

### Supported devices:

- BCS3678<sup>ex</sup> Bluetooth scanner with base station or direct connection to other Bluetooth devices.  
Does not work in combination with Universal Supply module.
- BCS3608<sup>ex</sup> corded scanner with USB programming cable or HMI USB limiting cable.  
Does not work in combination with Universal Supply module.

For further information to Scan Speed Analytics [click here](#)



## **Data Capture DNA – Productivity Tools**

PRZM Intelligent Imaging

Multi-Code Data Formatting

Label Parse+

Preferred Symbol

Intelligent Document Capture

Wi-Fi Friendly Mode



## PRODUCTIVITY TOOLS

Reach new levels of productivity with innovations that streamline tasks, optimize device performance and keep you ahead of the curve by solving tomorrow's problems today.



### PRZM Intelligent Imaging

PRZM sets the bar for 2D imaging by enhancing decode performance and snappiness, dramatically improving the user experience.



### Multi-Code Data Formatting

Scan multiple barcodes with a single trigger pull. The application can be programmed to scan once and transmit only the barcodes users want, in the sequence they want.



### Preferred Symbol

Zebra's Preferred Symbol is a barcode prioritization technique that lets one barcode, scanned among other barcodes, to be singled out for decoding while excluding the others.



### Wi-Fi Friendly Mode

Allow Bluetooth® scanners to operate on Wi-Fi networks without interference, while maintaining peak network performance.



### Intelligent Document Capture

Eliminate the cost and space required for a document scanner. Capture an image while processing barcode data and automatically optimize image appearance by de-skewing and brightening.



### UDI Scan+

Unlock the benefits of UDI (Unique Device Identification) to improve efficiency and patient safety. A single scan captures and parses UDI information, sending data in the right order to the right fields in your application.



### Label Parse+






Instantly capture all of the barcodes you need on a pallet or item and automatically format and send the data directly to your application with one press of the scan trigger.



### Blood Bag Parse+

Instantly capture, parse and transmit the data on blood bags right to your application, all with a single scan.

# Data formatting options and tools

	Single Code Data Formatting*	Multi Code Data Formatting*	Label Parse+*
	<p>Standard data capture option to scan one barcode with 1 scan.</p> 	<p>Scan multiple barcodes with a single trigger pull. The application can be programmed to scan once and transmit only the barcodes users want, in the sequence they want.</p> 	<p>Instantly parse GS1 label barcode data to improve quality control, inventory visibility and traceability. Now, with one press of the scan trigger, you can instantly capture all of the barcodes you need and send the data directly to your application.</p> 
<b>SE4750</b>	Yes	Yes	Yes
<b>SE4850</b>	Yes	Yes	Yes
<b>Zebra Software</b>	<p>Not required (setup via Zebra 123 Scan Utility or Programming manual)</p>	<p>Multi-Code Data Formatting (via Zebra 123 Scan Utility or Programming manual)</p> <p>For further information <a href="#">click here</a></p> 	<p>Label Parse+ (via Zebra 123 Scan Utility)</p> <p>For further information <a href="#">click here</a></p> <p>Note: latest Firmware required!</p> 

\* The performance of the zone 1 scanners vary compared to the zone 2 version due to the required ex-modifications

	PRZM Intelligent Imaging*		Preferred Symbol*	Intelligent Document Capture*
	<p>PRZM sets the bar for 2D imaging by enhancing decode performance and snappiness, dramatically improving the user experience.</p> <div><div><div>Damaged</div><div>Crinkled</div><div>High density</div></div><div><div>Poorly printed</div><div>Torn</div><div>and more...</div></div></div>		<p>Zebra's Preferred Symbol is a barcode prioritization technique that lets one barcode, scanned among other barcodes, to be singled out for decoding while excluding the others.</p> <div></div>	<p>Eliminate the cost and space required for a document scanner. Capture an image while processing barcode data and automatically optimize image appearance by de-skewing and brightening.</p> <div></div>
SE4750	Yes		Yes	Yes
SE4850	Yes		Yes	No
Zebra Software	<div><div>PRZM Intelligent Imaging</div><div>For further information <a href="#">click here</a></div></div>	<div></div>	<div><div>Preferred Symbol (via Zebra 123 Scan Utility or Programming manual)</div><div>For further information <a href="#">click here</a></div></div>	<div><div>Intelligent Document Capture</div><div>For further information <a href="#">click here</a></div></div>

\* The performance of the zone 1 scanners vary compared to the zone 2 version due to the required ex-modifications

# ZEBRA Data Capture DNA – UDI Scan+ & Blood Bag Parse+

**UDI Scan+** and **Blood Bag Parse+** mainly defined tools and functions for health care applications.

Booth features are supported from functional side with the BCS36x8<sup>ex</sup> series.

The setup can be done via Zebra 123 Scan Utility.

### UDI Scan+

Unlock the benefits of UDI (Unique Device Identification) to improve efficiency and patient safety.

A single scan captures and parses UDI information, sending data in the right order to the right fields in your application.

For further information to UDI Scan+ [click here](#)

### Blood Bag Parse+

Instantly capture, parse and transmit the data on blood bags right to your application, all with a single scan.

For further information to Blood Bag Parse+ [click here](#)

**Note:** latest Firmware required!



Zebra has innovated a remarkable way for our cordless Bluetooth® scanners to avoid interfering with a wireless network. Exclusively from Zebra, Wi-Fi™ Friendly Mode ensures the two technologies never overlap, and therefore, never impact one another. That means, users can enjoy the convenience and high performance of our Bluetooth scanners without the risk of Wi-Fi disruptions.

## Wi-Fi Friendly Mode Features and Benefits

- **Bypass network interference**

Unlike competitors, Zebra gives users the ability to remove Wi-Fi channels—commonly 1, 6 and 11—from the hopping sequence of our Zebra Bluetooth scanners. As our Bluetooth technology hops from one channel to another, it will have zero chance of colliding with those channels utilized by the wireless network.

- **Implement with ease**

Wi-Fi Friendly Mode is simple to implement with our user-friendly wizard, 123Scan. Just choose the channels you want your Bluetooth scanners to use and organize them in your preferred order.

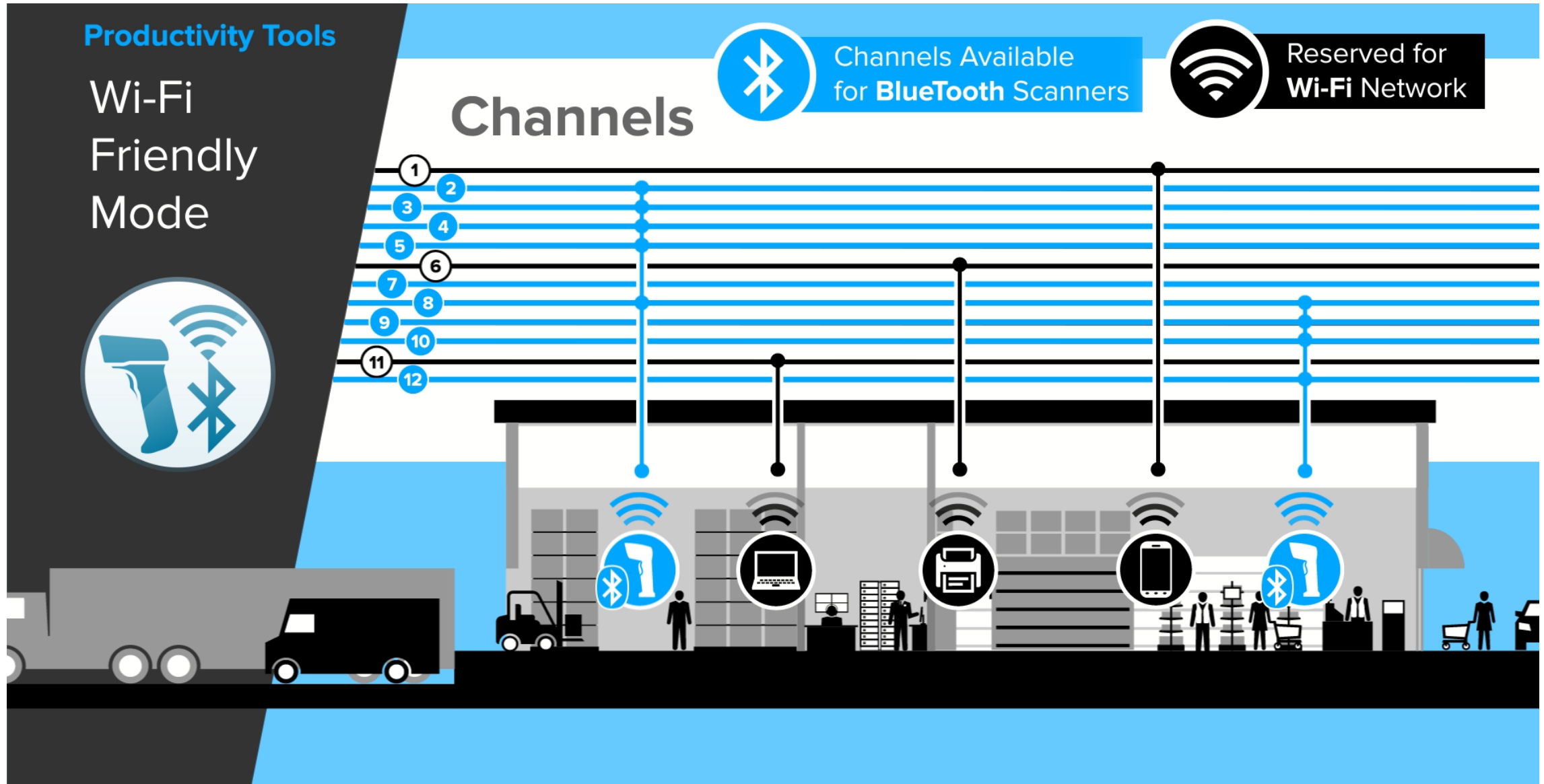
- **Benefit from cordless scanners**

Put Wi-Fi interference behind you and move ahead with the mobility and intelligence of our productivity-boosting Bluetooth scanners.

## Supports only the BCS3678<sup>ex</sup> Bluetooth scanner

For further information to WiFi Friendly Mode [click here](#)





## **Available programming options**

**Following methods and tools are available for programming and management of the scanner series.**

- Zebra 123 Scan Utility (part of Data Capture DNA)
- Zebra Software Development Kits (part of Data Capture DNA)
- Zebra Scanner Management Service (SMS) – for more information [click here](#)
- Zebra Scanner Control Application (part of Data Capture DNA) with basic setup functions (supported only with BCS3678<sup>ex</sup> Bluetooth version)
- Use of Zebra programming manuals  
Download is available on BARTEC support & download page under section manuals and section programming - [click here](#)  
Download available on Zebra support & download page - [click here](#)

Following programming manuals available:

Contains programming barcodes and instructions how to use it

- DS36X8 Product Reference Guide
- Advanced Data Formatting (ADF) Programmer Guide
- Multicode Data Formatting (MDF) and Preferred Symbol User Guide
- Simple Serial Interface Programmer's Guide
- Cordless SSI Programmer's Guide
- Zebra Scanner SDK for Android Developer Guide



# Available programming options

## Programming manual with programming barcodes

The available manuals for customizing the BCS36x8<sup>ex</sup> series consist of a variety of barcodes for programming.

For all functions and parameters the settings are made on the scanner by scanning the barcodes.

Barcodes for programming can also be generated using the 123 Scan Utility software.

The setting/parameterization is possible by scanning the barcodes in any environment.

Further product specific information can be found in the manuals.

The BARTEC user manual describes the intended connection, operation and handling of the device.

# Available programming options

123Scan is an easy-to-use, PC-based software tool that enables the quick and easy set-up of Zebra scanners.

Cost: free software

Tool allows:

- Programming incl. ADF and MDF
- Firmware Update
- Data Viewer for test of barcodes and images
- Creation of programming barcodes
- Upload of configuration to scanner
- And more



## The only limitations are:

- For battery management.  
The BCS3678<sup>ex</sup>-IS version does not use the original Zebra battery. It was necessary to use another battery to fulfill the requirements for hazardous location ATEX/IECEx Zone 1/21 → battery statistics and management operations can't be used with the zone 1 battery
- 123 Scan Utility can't be used with the “universal supply module” or the “Ex i supply module”.  
A USB-HID connection is required.  
The supply modules only support USB-SPP.

# Available programming options

## Category – Symbolologies (bar code types):

You can activate/deactivate the different supported symbolologies.

This menu allows:

- Symbology/barcode specific settings
- Other symbology/barcode specific options
- Symbology security level
- Digimarc (SE4850-ER only)
- Setup for “Preferred Symbol” function



### Change your bar code settings

Your scanner is already set up to recognize the most common types of bar codes. To modify your decoding options, select a symbology (bar code type) from the drop-down below.

Select symbology (bar code type) to modify

- Aztec
- Chinese 2 of 5
- Codabar
- Code 11
- Code 128
- Code 39
- Code93
- Composite
- Data Matrix
- Discrete 2 of 5
- DotCode
- Gridmatrix
- GS1 Databar
- Han Xin
- Interleaved 2 of 5
- Korean 3 of 5
- Matrix 2 of 5
- MaxiCode
- MSI
- Other Options
- PDF-417
- Postal
- Preferred Symbol
- QR
- Symbology Security Level
- Digimarc
- UPC EAN

123Scan

Start | Data view | Untitled1

Actions | Save file to PC | Print bar code | Load to scanner | Email Bar Code to Phone | Print/Save

Model List  
Plug-in Name  
Release Notes  
App Developer Report

DS3678-STANDARD SR  
MODEL S + CRADLE-027

1. Name and notes  
Name: Untitled1  
Notes:

2. Cable connection  
USB (default)

3. **Symbologies (bar code types)**  
Factory default settings

4. Modify Data  
No rules

5. Wireless - Bluetooth  
Factory default settings

6. Imaging  
Factory default settings

7. General  
Factory default settings

8. Printing Options

9. Load and print

Parameters changed from factory default

### Change your bar code settings

Your scanner is already set up to recognize the most common types of bar codes. To modify your decoding options, select a symbology (bar code type) from the drop-down below.

Code 128

**Select Code Types**

- ☒ Code 128
- ☐ ISBT 128
- ☒ GS1-128 (UCC/EAN-128)

Options for Code 128

Code 128 Lengths

Range

Min.length: 1 Max.length: 55

Code 128 Reduced Quiet Zone ☐

Code 128 Security Level Level 1

Ignore Code 128 <FNC4> ☐

Options for ISBT

ISBT Concatenation Redundancy 10

ISBT Concatenation Autodiscriminate

Check ISBT Table ☒

## Notes from BARTEC:

No notes.

# Available programming options

## Category – Modify Data:

You can create different kind of data formatting rules for your application.

This menu allows:

- Use of pre-defined suffix (Tab or Enter)
- Create your own prefix and suffix values

### Prefix / Suffix Simple Formatting

Select the layout for prefix & suffix value you want to use.

- |   |  |
|---|--|
| <input checked="" type="radio"/> <PREFIX> <DATA>            | <input type="radio"/> <DATA> <SUFFIX 1>            |
| <input type="radio"/> <PREFIX> <DATA> <SUFFIX 1>            | <input type="radio"/> <DATA> <SUFFIX 2>            |
| <input type="radio"/> <PREFIX> <DATA> <SUFFIX 2>            | <input type="radio"/> <DATA> <SUFFIX 1> <SUFFIX 2> |
| <input type="radio"/> <PREFIX> <DATA> <SUFFIX 1> <SUFFIX 2> |  |

Enter values for prefix and suffix.

PREFIX:  [code list](#)

SUFFIX 1:  [code list](#)

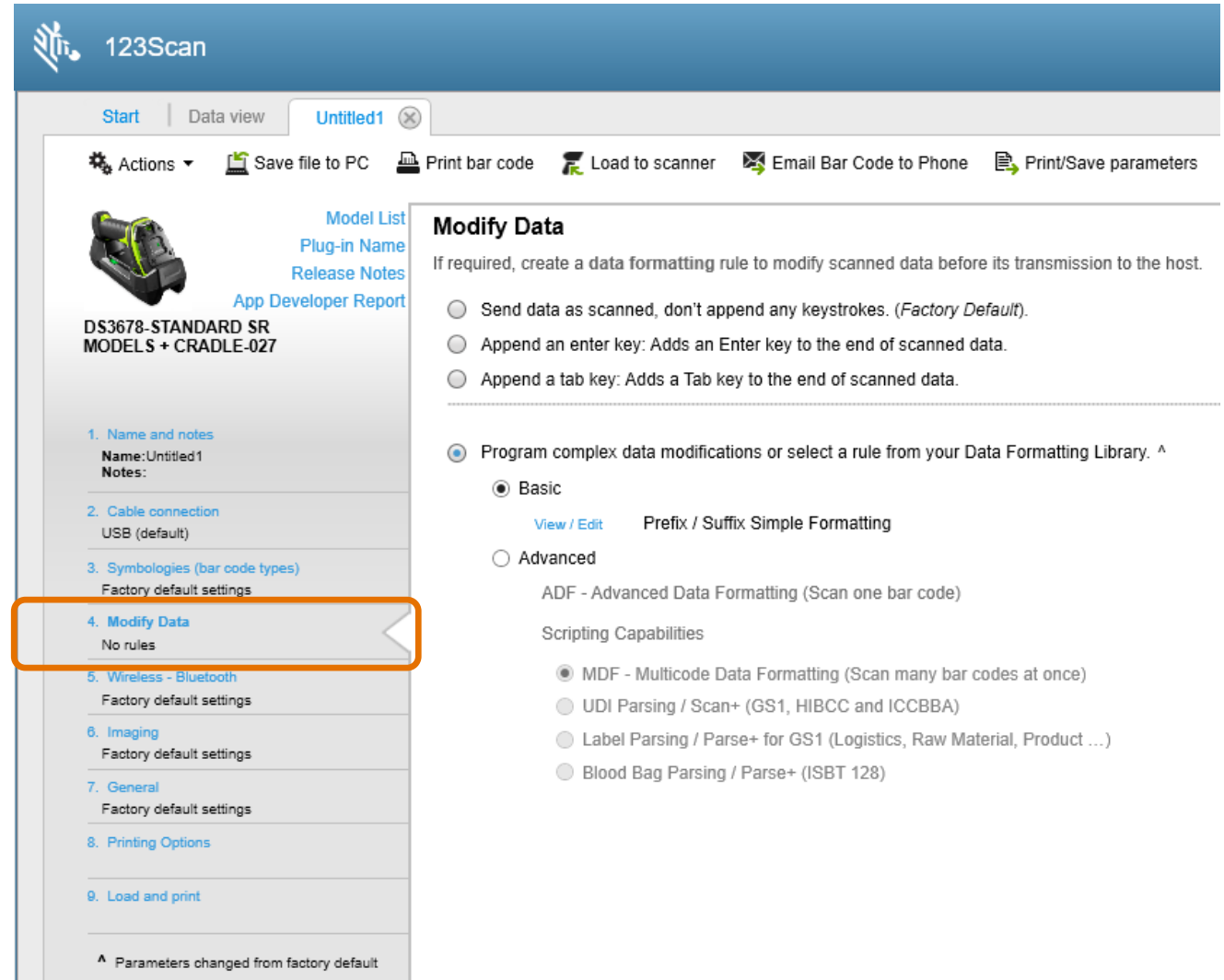
SUFFIX 2:  [code list](#)

Create ADF (Advanced Data Formatting) rules.  
You can watch “How to video” for ADF)

- Create your own scripting based rules  
You can watch “How to video” for this options)
  - MDF (Multidata Formatting) rules (scan up to 20 barcodes)
  - UDI- or Label- or Blood Bag parsing rules

## Notes from BARTEC:

The performance of the zone 1 scanners vary compared to the zone 2 version due to the required ex-modifications



# Available programming options

## Category – Wireless - Bluetooth:

You can do Bluetooth specific settings for your connections and application.

This menu allows:

- General Bluetooth parameters
- Scanner to Cradle (base station) options
- Cradle (base station) options
- Bluetooth HID options
- Security
- Wifi Friendly options

## Notes from BARTEC:

- Read Zebra Product Reference Guide for more detailed informaton about the different options.
- Multipoint-to-point is only available with use of base station (Cradle)
- Pair on Contacts should be disabled if you use base station only for charging

The screenshot displays the 123Scan software interface. The top navigation bar includes 'Start', 'Data view', and 'Untitled1'. Below this is a toolbar with icons for 'Actions', 'Save file to PC', 'Print bar code', 'Load to scanner', 'Email Bar Code to Phone', and 'Print/Save'. The main content area is divided into two panels. The left panel shows a list of settings categories: '1. Name and notes', '2. Cable connection', '3. Symbolologies (bar code types)', '4. Modify Data', '5. Wireless - Bluetooth' (highlighted with an orange box), '6. Imaging', '7. General', '8. Printing Options', and '9. Load and print'. The right panel displays the 'Wireless' settings, which are further categorized into 'General Bluetooth Parameters', 'Scanner(s) to Cradle Options', 'Cradle Options', 'Bluetooth HID Options', 'Security', and 'WiFi Friendly Options'. The 'General Bluetooth Parameters' section includes settings for 'Discoverable Mode' (set to 'General'), 'Beep On Reconnect Attempt' (checkbox), 'Reconnect Attempt Interval' (set to '30 sec'), 'Sleep Between Attempts' (set to '1 minute'), 'Number of Retry Attempts' (set to 'Do Not Retry'), 'Auto-reconnect' (set to 'Reconnect Immediately'), 'Batch Mode' (set to 'Normal'), and 'Persistent Batch' (checkbox).

# Available programming options

## Category – Imaging:

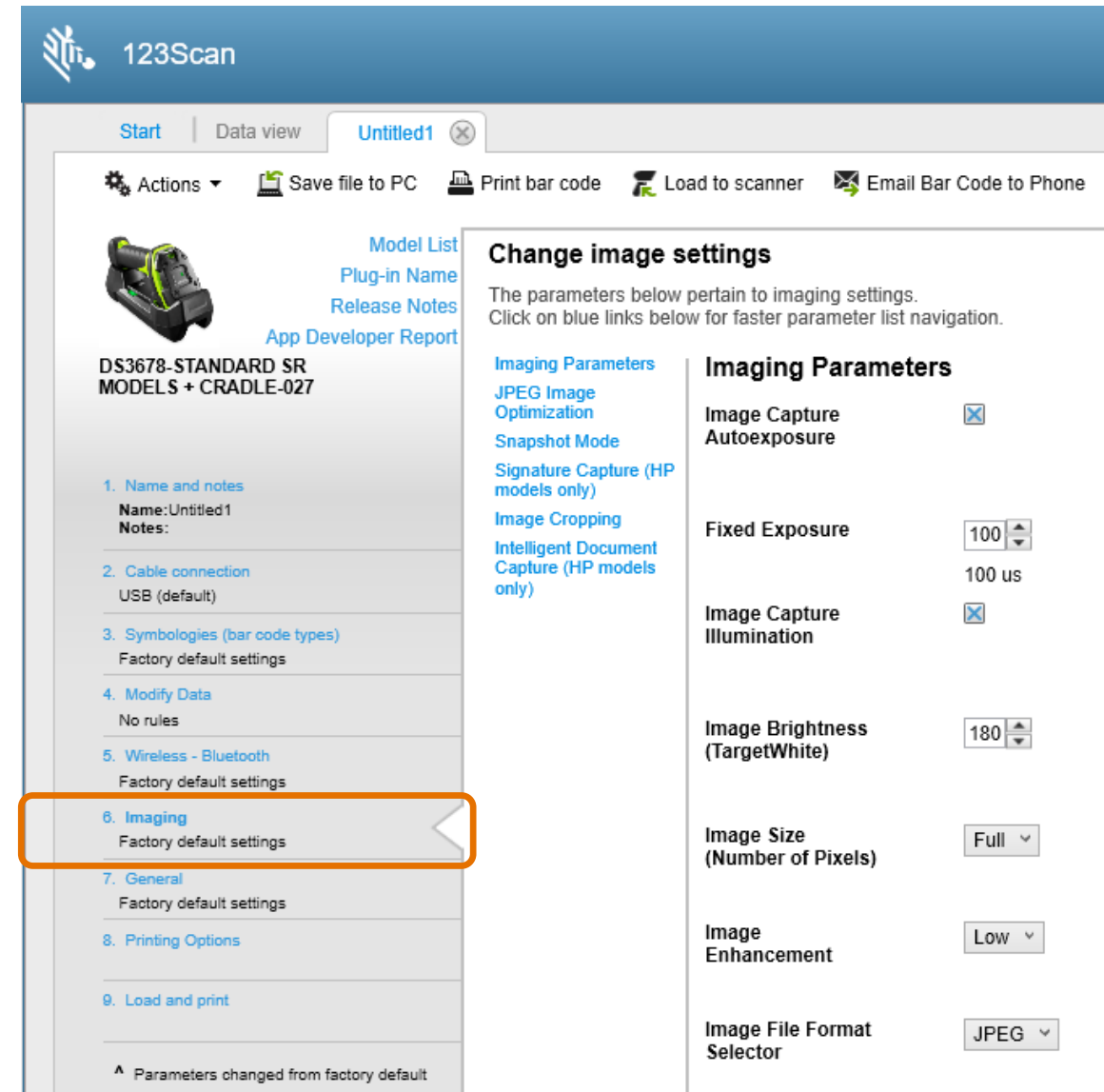
- You can do specific settings for capturing images.  
The version with SE4750-HP supports IDC, signature, basic and advanced document & picture capture
- The version with SE4850-ER supports basic document & picture capture

### This menu allows:

- Setup of general imaging parameters
- Setup of JPEG image optimization
- Setup of signature capture (SE4750-HP only)
- Setup of image cropping
- Use of IDC (Intelligent Document Capture) function (SE4750-HP only)

### Notes from BARTEC:

- The performance of the zone 1 scanners vary compared to the zone 2 version due to the required ex-modifications
- The image quality of the zone 1 scanners may vary slightly compared to the zone 2 version due to the required ex-modifications



# Available programming options

## Category – General:

You can do specific general scanner settings in this menu.

For example you can setup your used keyboard country language that data correct send to your host system.

This menu allows:

- Power settings and your own preferred battery status threshold for the status LED
- System relevant settings as your keyboard country, used unicode output, trigger modes, picklist mode (enables the digital scanner to decode only barcodes that are aligned under the LED aiming dot), and other options.
- Beeper setup as tone, volume, duration, and others
- OCR settings (SE4750-HP only)  
Allows activation and setup of OCR specific parameters.
- UID and UID parsing (Unique Item iDentification)

## Notes from BARTEC:

- The OCR and UID performance of the zone 1 scanners vary compared to the zone 2 version due to the required ex-modifications.
- The volume of the Zone 1 scanners are little quiet in compared to the zone 2 version due to the required ex-modifications.

