

# Motorola 123Scan<sup>2</sup> Scanner Configuration Utility v2.2.6.0

## Installation Software Part #: 123SCAN2-INS-2.02.0009

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Last revised: July 31, 2012

## Contents

- [Description](#)
  - [Device Compatibility](#)
  - [Release Notes](#)
  - [Components](#)
  - [Minimum PC Requirements](#)
  - [Installation](#)
- 

## Description

### Executive Overview

123Scan<sup>2</sup> is an easy-to-use, PC-based software tool that enables the quick and easy set up of Motorola scanners.

123Scan<sup>2</sup> 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 a USB or RS-232 cable, or used to generate a sheet of programming bar codes that can be scanned.

123Scan<sup>2</sup> 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<sup>2</sup> 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).

### Product Description

## **1. Utility is optimized for first time users**

- a. Patented wizard guides novice users through setup process
- b. Industry first, 123Scan2 can initiate a two-way communication link with a RSM scanner without scanning a programming barcode.
- c. Clearly defined list of supported functionality by programming interface available from help “123Scan2 Features and Programming Modes”
- d. Release notes clearly specify new functionality and software fixes implemented by firmware version\*
- e. All 123Scan2 generated files such as barcode sheets and parameter reports are accessible from Windows Start / All Programs / Motorola Scanner / 123Scan2 / Your 123Scan2 Files.
- f. Quick startup instructions available from “Start” tab hyperlinked to help

## **2. Generation of an electronic configuration file**

- a. Supported programming modes from a configuration file include
  - Electronic programming
    - USB OPOS connected scanners\*
    - RS-232 electronic programming
  - Barcode scanning
    - Printing of standard 1D barcodes
    - Printing of concatenated 1D programming bar codes
    - Printing a single scan programming barcode (Datamatrix)\*
    - Print preview
  - Scanner cloning
    - Retrieve settings from golden scanner and push to others
- b. Maintain a library of configuration files by saving files to your PC.

## **3. Program Advanced Data Formatting (ADF) Rules**

- a. Support for 3 new ADF functions: Find replace, Move to pattern and Skip to end\*
- b. Ability to save ADF files into a library for export / import to other users of 123Scan2
- c. ADF Rule - support for unprintable characters within an action

## **4. Firmware upgrade of RSM enabled scanners via a standard USB cable\***

To see if your scanner qualifies for its firmware to be upgraded using 123Scan2, do the following:

1. Plug a scanner(s) into 123Scan2 using a standard USB cable.

2. If 123Scan2 does not establish a two-way communication link with your scanner, scan the IBM Hand-Held mode programming barcode in the “Device Compatibility” sections of this document.
3. To confirm if 123Scan2 can be used to upgrade your scanner’s firmware, determine if the “Update Firmware” dialog box can be accessed from the main screen (Start Tab) within the utility.
  - a. To do so, click on the Start tab / Update scanner firmware button
  - b. If the “Update Firmware” dialog box is displayed, 123Scan2 can be used to upgrade your scanner’s firmware.
  - c. If the “Update Firmware” dialog box does not appear, your scanner firmware is not customer upgradeable.
4. Upgrade times can vary from under 2 minutes to over 1 hour. Note fastest upgrade times occur on SNAPI enabled scanners.

## **5. Report generation capabilities**

- a. Parameter Report: List of parameters programmed within a configuration file
  - Print only parameters changed from factory default settings
  - Print all parameters
- b. Activity Report: List of activities performed on a scanner(s) within a screen session
- c. Inventory Report: List of scanners configured and their asset tracking information
- d. Validation Report: Printout of scanned data can include non-printable characters

## **6. Rebranding out Reports / Partner Customization**

- a. Customize Programming Barcode Sheet after 123Scan2 outputs it to a Microsoft Word document
- b. Customize Reports after 123Scan2 outputs it to a Microsoft Word document

## **7. Data Viewer**

- a. Display scanned barcode data from a USB cable including non-printable characters.
- b. Display, optimize and save images from a USB connected imager scanner.

## **8. Discovered Scanner Tab**

- a. Access to scanner asset tracking information.
- b. Advance filtering on asset tracking information.
- c. Hot Swap Mode for Scanner Configuration and Firmware Download

- d. Retrieving parameter setting from a USB connected scanner
  - e. Ability to program scanners simultaneously using powered USB hubs. A 7-port hub must have at least a 3.5 Amp power supply.
- Loading a configuration file      14 Scanners or more
  - Upgrading firmware      14 Corded Scanners; or 3 to 7 Cordless Scanners

\* Support for asterisk (\*) noted functionality within your scanner must be verified using the process below.

1. First access your scanners release notes by clicking the Start tab / Create new configuration file / My scanner is NOT connected / Select your scanner model / Release notes.
2. If your scanner's release notes state RSM 2.0 features are supported, a firmware upgrade to meet the minimum firmware version may be required.
3. To see if your scanner qualifies for its firmware to be upgraded using 123Scan2, do the following:
  - a. Plug a scanner(s) into 123Scan2 using a standard USB cable.
  - b. If 123Scan2 does not establish a two-way communication link with your scanner, scan the IBM Hand-Held mode programming barcode in the Device Compatibility sections of this document.
  - c. To confirm if 123Scan2 can be used to upgrade your scanner's firmware, determine if the "Update Firmware" dialog box can be accessed.
    - i. To do so, click on the Start tab / Update scanner firmware button
    - ii. If the "Update Firmware" dialog box is displayed, 123Scan2 can be used to upgrade your scanner's firmware.
    - iii. If the "Update Firmware" dialog box does not appear, your scanner firmware is not customer upgradeable.

[Back to Top](#)

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## Device Compatibility

123Scan<sup>2</sup> can be used to program Motorola scanners through one of the three programming modes:

1. Programming barcodes      - All scanners
2. USB connection              - RSM enabled scanners only\*
3. RS-232 connection          - All scanners

For a list of supported scanners, launch 123Scan2 and click on 'Create new configuration file' and then click "My scanner is NOT connected". All supported scanners will be displayed.

Motorola scanners support the newest innovations in Remote Scanner Management (RSM) technology. For scanners with RSM 2.0 enabled firmware or newer, 123Scan2 automatically detects the scanner and initiates a two-way USB communication link between scanner and utility. This patent pending feature is an industry first.

Three levels of RSM enabled firmware exist:

**RSM 2.0 or newer:** Supports USB firmware upgrade, parameter loading and auto-switching

**RSM 1.0:** Supports USB firmware upgrade and parameter loading

**LEGACY:** Supports parameter loading via bar code scanning only

To determine if your scanner's firmware is RSM 2.0 enabled:

1. Plug in your scanner using a USB cable.
2. Launch 123Scan2.
3. Click Create new configuration file on the "Start" tab.
4. Click My scanner is connected via USB cable.

If your scanner is RSM 2.0 enabled, 123Scan2 displays an image of your scanner and plug-in options.

If 123Scan2 is unable to detect your scanner it lacks RSM 2.0 enabled firmware but may be RSM 1.0 enabled. If your scanner is RSM 1.0 enabled, scan the IBM Hand-Held mode programming bar code below to manually enable the scanner to establish a two-way communication link with 123Scan2.



*IBM Hand-Held USB*

Note<sup>1</sup> – If your scanner's not RSM 2.0 enable, but shipped with a previous version of RSM<sup>1</sup> enabled firmware, a USB firmware upgrade using 123Scan2 may be available. For details, see the Release Notes, asterisk (\*) marked section of this document.

Scanners not connected with a cable: Launch 123Scan2. The "Start" tab will appear, click on "Create new configuration file" then "My scanner is NOT connected". If your scanner is not listed, click Help (top right of utility screen) and select "Check for updates".

[Back to Top](#)

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## Release Notes

**Major Update – Initial Product Release (v1.1.11.3) - December 2009**

**Major Update – New Installation Software (v2.0.1.5) - February 2011**

1. Generate a list of supported scanners models including plug-in name and model of firmware. See Help menu.
2. Scan Log screen displays scanned data, including hidden characters. See Dataview tab.
3. Image Log screen captures and displays pictures on imaging enabled scanners via a USB connection.
4. Optimized to support EMEA / APAC sized paper. To permanently set, see Preferences tab.
5. Firmware upgrade optimized for SNAPi enabled scanners. Total upgrade time is less than 2 minutes.
6. A uniform naming convention applied to reports and printouts.
  - i. Configuration file: Config File\_Model\_Config name\_Date Stamp.scncfg
  - ii. Parameter Report: Parameter Settings\_Model\_Config name.rtf
  - iii. Programming Barcodes: Programming Barcode\_Model\_Config name.rtf
  - iv. Activity Report: Activity Report\_Date stamp\_Time stamp.csv
  - v. Inventory Report: Inventory Report\_Date stamp\_Time stamp.csv
  - vi. Scanner Output Report: Validation Report\_Model\_Config name\_Date stamp\_Time stamp.rtf
  - vii. Images: Image\_Date stamp\_Time stamp.bmp

#### **Minor Update – Over the Network Upgrade (v2.1.0.1) - May 2011**

1. Cordless scanner plug-in selection process optimized.

#### **Minor Update – Over the Network Upgrade (v2.1.1.1) - September 2011**

1. How to Videos link added to start tab and help menu.
2. Optimized check for updates screen layout.
3. Added support for additional ALT key sequences within the Data Formatting screen.
4. Full name of firmware displayed on the Discovered Scanners tab.

#### **Minor Update – Over the Network Upgrade (v2.1.2.0) - December 2011**

1. UI update on data formatting Prefix/Suffix Screen, added < >.
2. Updated Set Defaults Barcode Options report, added “Set Factory Defaults” and “Write to Custom Defaults” barcodes
3. Updated the print programming barcodes reports: Replace the “Set Defaults” parameter with “Set Factory Defaults” for RSM 2 scanner printouts. For RSM 1 and legacy scanner printouts, the Set Default parameter is still utilized.
4. Added two new RFID code types for RFID based ADF rules

#### **Minor Update – (v2.2.6.0) - July 2012**

1. Added ability to generate an SMS Package for use with the Scanner Management Service
2. Removed requirement for exact match between scanner and plug-in firmware when generating a configuration file. Now if your scanner has a newer version of firmware than present within a plug-in within 123Scan2, you can create a configuration file.
3. Simultaneous firmware upgrade for multiple cordless scanners\*.
 

\* Maximum number of simultaneous firmware upgrades typically varies between 3 to 7 cordless scanners in their cradle, depending on PC hardware capabilities.

- Note – clicking the “Blink scanner LED’s” or “Refresh” button during a cordless scanner firmware upgrade may halt the firmware upgrade process.
4. Operating System support for Windows 7 64 bit.

[Back to Top](#)

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## Components

The components are installed in the following folders:

Default location = C:\Program Files\Motorola Scanner\123Scan2

Component	Location
Application	Program Files\Motorola Scanner\123Scan2
Configuration Files	XP: All Users\Shared Documents\123Scan2\Configuration Files Windows 7: Users\Public\Documents\123Scan2\Configuration Files
Activity Reports	XP: All Users\Shared Documents \123Scan2\Activity Report Database Windows 7: Users\Public\Documents\123Scan2\Activity Report Database
Data View Reports	XP: All Users\Documents\123Scan2\Data View Reports Windows 7: Users\Public\Documents\123Scan2\Data View Reports
Saved Images	XP: All Users\Shared Documents \123Scan2\Images Windows 7: Users\Public\Documents\123Scan2\Images
Scanner Plug-Ins	XP: All Users\Application Data\123Scan2\Plug-ins Windows 7: ProgramData\123Scan2\Plug-ins
SMS Packages	XP: All Users\Documents\123Scan2\SMS Packages Windows 7: Users\Public\Documents\123Scan2\SMS Packages
Application Help Document	Program Files\Motorola Scanner\123Scan2\Languages\en-us

[Back to Top](#)

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## Minimum PC Requirements

## Hardware Requirements

- Pentium Dual-Core E214 1.6GHz or Pentium Mobile Dual-Core T2060 or Pentium Celeron E1200 1.6GHz
- 2GB RAM 1.2 GB free hard drive space
- USB port, 1.1 or higher, for the connection of USB Scanners
- RS-232 port for the connection of serial scanners

## Software and Operating System Requirements

- Microsoft Windows XP SP3 (32 bit) or Microsoft Windows 7 (32 bit/64 bit)
- If not present, Microsoft .NET Framework 3.5 SP1 loaded at time of initial 123Scan2 installation
- Minimum display resolution = 1024 by 768 pixels

[Back to Top](#)

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## Installation

**123Scan2 can be launched from the Windows Start button.**

- Start / All Programs / Motorola Scanner / 123Scan2

[Back to Top](#)

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