



FREQUENTLY ASKED QUESTIONS (FAQs) 123Scan² Scanner Configuration Utility

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1. Q. What model scanners are supported by 123Scan²?

A. At the initial release of 123Scan² all currently shipping 2009 scanners will be supported, except the ones listed below:

DS3407-SF3, DS3407-SF2, DS3407-DP, DS3408-HD, DS3408-SF, DS3478-DP, DS3478-HD, DS3478-SF, DS6707-DP, DS6707-HD, DS6707-SR2031xZZR, DS6707-SR2000xNSR, DS6708-SR2000xNSR, DS6708-DL, MS1207FZY, MS1207WA, MT2070, MT2090, MS2207, MS3207, MS4407, MS4407-HD and MS4407-DPM.

Plug-ins that enable 123Scan² to support additional scanners will be released in the future and can be downloaded through 123Scan² by clicking Help / Check for updates.

Some scanners manufactured in 2008 or earlier may be configured by 123Scan² through the scanning of traditional 1D programming barcodes generated by the utility. To check for this support launch 123Scan², from its "Start" tab, click "Create new configuration file" then "My scanner is NOT connected". If an image of your scanner is shown, you can use programming barcodes to configure your scanner.

If you require support for a scanner developed by the Custom Products Group, please submit a Custom Products Request (CPR) at <http://cpr.mot.com/>.

2. Q. What Operating Systems are supported by 123Scan²?

A. Supported operating systems include: Windows XP SP2 and Vista.

3. Q. How much does 123Scan² cost and where can I order it from?

A. 123Scan² is available for free for users of Motorola scanners. It can be downloaded starting November 30th from <http://support.symbol.com/support/product/123Scan2.html>.

4. Q. Has the original 123Scan been discontinued?

A. With the introduction of 123Scan², the original 123Scan introduced in 1999 has been discontinued. All scanners manufactured in 2009 or later are supported by the new 123Scan² scanner configuration utility. Motorola scanners that were no longer available for sale (obsolete) as of 2008 and are not supported by the new 123Scan2 can still be programmed using the scanner's Product Reference Guide.

5. Q. What programming options does 123Scan² support?

A. 123Scan² offers four programming modes:

Parameter Programming	Scan sheet of programming barcodes	All scanners
Parameter Programming	Electronic download via USB cable	RSM enabled scanners only
Parameter Programming	Electronic download via RS-232 cable	All scanners
Firmware Upgrade	Electronic download via USB cable	RSM enabled scanners only

6. Q. What reports can be generated by 123Scan²?

A. 123Scan² can generate three different report types, listed below:

- Parameter report – A list of all the parameters programmed to a scanner, contained within a configuration file.
- Activity report – A detailed list of all activities performed on a scanner through the Discovered Scanners tab.
- Inventory report – Asset tracking information for all scanners detected through the Discovered Scanner tab.



7. Q. Can 123Scan² be used to upgrade a scanners firmware?

A. Yes, using a standard USB cable and 123Scan², a scanner with the RSM 1.0 or newer enabled firmware can have its firmware upgraded.

8. Q. Does my scanner support two-way communication via a USB cable?

A. For scanners shipped from the factory with Remote Scanner Management (RSM) 1.0 enabled firmware or newer, 123Scan2 connected via a USB cable can be used to retrieve asset tracking information, program parameters and upgrade the scanners firmware. To determine your scanner's RSM level see the "Remote Scanner Management" section within 123Scan²'s help.

Three levels of RSM enabled firmware exist with incremental, additive feature sets:

RSM 2.0 - USB firmware upgrade, parameter loading, LED control, auto initiation of a two-way communication link.

RSM 1.0 - USB firmware upgrade, parameter loading.

LEGACY - Parameter programming 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 has RSM 1.0 enabled, a barcode must be scanned to establish USB communication with 123Scan². To print this barcode launch 123Scan² and from the toolbar click Tools / Frequently used bar codes / Enable USB communication bar code.

If this fails and 123Scan² does not display an image of your scanner, you have a legacy scanner.

9. Q. Can 123Scan² generate a single 2D barcode for programming a scanner?

A. Yes, 123Scan² can reduce the number of bar codes you must scan to program a scanner.

The utility can generate three different types of programming bar codes depending on your scanner.

- a traditional 1D -- Supported by all scanners
- concatenated 1D -- Supported by RSM 2.0 enabled laser and imaging scanners
- a single scan 2D bar code -- Supported by RSM 2.0 enabled imaging scanners

An actual customer reduced the number of bar codes scanned from 202 traditional 1D bar codes generated / copied from a scanner's Product Reference Guide to 131 traditional 1D generated by 123Scan². When scanned with an imaging scanner, the 202 traditional 1D bar codes were reduced to a single 2D bar code.

In another case, a customer reduced the number of bar codes scanned by a laser scanner from 143 traditional 1D bar codes generated / copied from a scanner's Product Reference Guide to 100 traditional 1D bar codes generated by 123Scan². In this example the customer was further able to reduce the number of bar codes to 38 concatenated 1D bar codes using 123Scan².

10. Q. Can I use 123Scan² to stage multiple scanners simultaneously?

A. Yes, scanners can be programmed simultaneously through the "Discovered Scanners" tab using powered USB hubs. A 7 port hub must have at least a 3 Amp power supply. This functionality can be accessed from the Actions menu on the start screen by selecting "View USB connected scanners".

The number of scanners programmed simultaneously varies by programming mode.

- Upgrading firmware -- 14 Scanners
- Loading a configuration file -- 14 Scanners or more depending on USB bus loading



11. Q. How can I download updates to 123Scan²?

A. Two methods of updating 123Scan² exist.

- 123Scan² has the ability to initiate a self upgrade from within the utility – launch 123Scan² and from the toolbar click Help / Check for updates.
- Beginning November 30, 123Scan² can be downloaded from <http://support.symbol.com/support/product/123Scan2.html>

12. Q. Are ADF rules created in 123Scan² portable across product families?

A. Yes, 123Scan² has the ability to save individual ADF rules to an ADF library within the utility. An ADF rule(s) can be loaded to any desired product line(s) such as a LS4278 scanner and also a DS9808.

An individual ADF rule or the whole ADF library can be accessed / exported to another PC running 123Scan2 from the toolbar - Tools / Data formatting library.

13. Q. Is it easy to create a configuration file?

A. 123Scan² has a patented wizard to streamline the set up process (creation of a configuration file) for first time users. The wizard guides a user through the process of creating a configuration file for your particular scanner and even suggests defaults settings.

14. Q. Can I email a configuration file?

A. Yes, configuration files can be emailed to others PCs running 123Scan². The option to email a configuration file exists within the utility.

15. Q. Does 123Scan² offer any new ADF functionality?

A. Yes, three new ADF actions have been introduced for scanners with RSM 2.0 enabled firmware (FAQ 8):

- Move to pattern,
- Find & replace and
- Skip to end.

16. Q. Can 123Scan² print directly to Microsoft Word?

A. 123Scan² allows a user to print a sheet of programming barcodes and a parameter report directly from the utility or export the contents as a document in a Microsoft Word compatible format (Rich Text file .rtf) enabling the document to be modified including re-branded.

17. Q. Can Inventory and Activity reports be exported to MS Access?

A. Yes, Inventory and Activity reports can be printed directly from the utility or converted to a Microsoft Access compatible format (.CSV).

18. Q. How do I import a configuration file into 123Scan²?

A. A configuration file attached to an email can be opened within 123Scan² by double clicking on the file. To save the configuration file to your PC's hard drive, from the 123Scan² toolbar click "Save file to PC".

19. Q. Do I have to scan a barcode before my USB scanner will work with 123Scan²?

A. scanners with RSM 2.0 enabled firmware or newer, 123Scan² automatically detects the scanner upon its USB cable being plugged into your PC and initiates a two-way USB communication link between scanner and utility. This patent pending feature is an industry first.

If your scanner has RSM 1.0 enabled firmware a barcode must be scanned to establish USB communication with 123Scan². To print this barcode launch 123Scan² and from the toolbar click Tools / Frequently used bar codes / Enable USB communication bar code.

Legacy scanners cannot communicate with 123Scan² using a cable. Legacy scanners can be programmed via scanning a sheet of 123Scan² generated programming bar codes.



20. Q. Can 123Scan² re-load my pre-upgrade settings after loading new firmware?

A. In another industry first, updating firmware no longer involves lost settings that prevent your scanner from communicating with its host — 123Scan² preserves and automatically re-loads your pre-upgrade settings upon completion of the firmware upgrade.

21. Q. Does 123Scan² provide me access to the latest scanner firmware?

A. Keeping your scanner at peak performance is easy — 123Scan² can automatically monitor Motorola's website for new firmware. The utility can download new firmware and provide access to release notes. To download new scanner firmware, launch 123Scan² and from the toolbar click Help / Check for updates.

22. Q. What are the key features of 123Scan² (100 word product overview)?

A. 123Scan² is a free, easy-to-use, PC-based software tool that enables rapid and easy customized set up of Motorola scanners.

123Scan² uses a wizard tool to guide users through a streamlined set up process. Settings are saved in 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 scannable programming bar codes.

Additionally 123Scan² can upgrade scanner firmware, check online to enable support for newly released products, generate a multi-setting barcode for single scan programming, stage large numbers of scanners simultaneously, generate reports with asset tracking information and create custom products.

23. Q. What is the first step to creating a configuration file?

A. The first step in creating a configuration file is selecting a plug-in. A scanner plug-in tells 123Scan² all the particulars of your scanner.

Most scanners built in 2009 support a communication protocol that allows 123Scan², without user intervention, to interrogate the scanner and determine which plug-in is appropriate. For additional information see [FAQ 19](#), "Do I have to scan a barcode before my USB scanner will work with 123Scan²".

Alternatively, to manually determine which plug-in is required to support your model scanner, launch 123Scan² and click on 'Create new configuration file" and then click "My scanner is NOT connected".

24. Q. During the staging process, can I "hot swap" completed scanners with new ones?

A. In an industry first, 123Scan²'s "Hot Swap Mode" enables a user to disconnect a scanner that has completed the programming process and in its place connect a new scanner. During this time, the utility will continue to program all USB connected scanners. Hot swap mode will repeat the last programmed user action on newly connected scanners such as loading a configuration, upgrading firmware or both actions.

25. Q. How long does it take to upgrade the firmware of 1 scanner versus 14 scanners?

A. The duration of the firmware update process can range from 10 minutes to over half an hour depending on the host PCs CPU and loading. Programming multiple scanners simultaneously occurs in parallel. The time required to program multiple scanners is the same as required to program one scanner.

26. Q. How do I interpret the scanner's different LED blinking sequences and colors?

A. The scanner's LED sequences and colors controlled by 123Scan² are as follows:

- Blinking Green -- Scanner connected to 123Scan²
- Fast Blinking Red -- File being transferred to the scanner
- Slow Blinking Red -- Firmware being activated on the scanner, loaded into memory
- Solid Green -- Programming completed successfully
- Solid Red -- Error state
- LED is Off -- Scanner and 123Scan² are NOT communicating.

Note: LED sequence control requires [RSM 2.0](#) (FAQ 8) or newer enabled scanner firmware.



27. Q. When was RSM 1.0 firmware cut in on my scanner?

A. Motorola scanners support the newest innovations in Remote Scanner Management (RSM) technology.

If your scanner has RSM 1.0 enabled firmware a barcode must be scanned to establish two-way USB communication with 123Scan². After two-communication with 123Scan² has been established, you can electronically program your scanner (download a configuration file to your scanner) and even upgrade its firmware. To print this barcode launch 123Scan² and from the toolbar click Tools / Frequently used bar codes / Enable USB communication bar code.

An RSM 1.0 enabled scanner can be upgrade by customers using a USB cable to RSM 2.0 or later using 123Scan².

If your scanner shipped from the factory with RSM 2.0 or new firmware or you upgraded your scanners firmware in the field, 123Scan² automatically detects the scanner upon its USB cable being plugged into your PC and initiates a two-way USB communication link between scanner and utility. This patent pending feature is an industry first.

See below for a table outlining when the first implementation of RSM 1.0 or later enabled firmware started shipping on your scanner.

Product	RSM Enabled (MM/YYYY)
LS4278	02/2006
LS4208	03//2006
LS3008	03/2006
DS6708	10/2006
DS6707	04/2007
LS3578	08/2007
LS7808	09/2007
LS7708	09/2007
DS3407	12/2007
LS3408	03/2008
LS9208i / 9203i	10/2008
DS3408	01/2009
DS9808	04/2009
LS2208	Target 01/2010
LS4208PR	Target 01/2010

28. Q. What is Remote Scanner Management (RSM)?

A. Motorola scanners support the newest innovations in Remote Scanner Management (RSM) technology. Remote Scanner Management enables the control of Motorola RSM enabled scanners by an application or driver. With a click of a button, an application can access asset-tracking information such as serial number, date of manufacture and firmware version. In addition, Remote Scanner Management enables an application to control the upgrade of firmware and loading of configurations settings.

Three levels of RSM enabled firmware exist with incremental, additive feature sets:

RSM 2.0 -- USB firmware upgrade, parameter loading, LED control, auto initiation of a two-way communication link.

RSM 1.0 -- USB firmware upgrade, parameter loading.

LEGACY-- Parameter programming via bar code scanning only.