

# CS1504 Consumer Memory Scanner

Owner's Guide

<http://www.symbol.com/consumer>



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## Warranty

For the complete Motorola hardware product warranty statement, go to:  
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## Patents

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72-50875-03 Revision B — March 2008

## Welcome!

Thank you for selecting this world class, bar code memory scanner. This scanner, when combined with a third party application (software not included), allows you to capture bar codes for a variety of uses. Whether you're scanning bar codes to generate a shopping list, purchasing products, or finding information on the Internet, this scanner is the easiest data capture device to use. Simply point, and scan!



## Unpacking Your Scanner

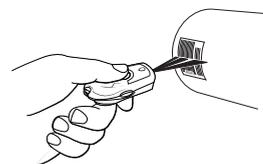
Depending upon the configuration purchased, the scanner is packaged with either a serial communication cable or a USB communication cable set. If items are missing, contact your reseller.

Scanner	Serial Communication Cable	USB-to-Serial Converter and Serial Communication Cable

## Getting Started

### Scan Bar Codes (Add Items to Memory)

1. Aim the scanner at the sample bar code shown below.
  2. Press and hold the large button on the scanner until you hear the tone and the blinking indicator turns solid green.
- Make sure the scanner beam covers the entire bar code and extends as far out as indicated by the end-points in the bar code below.
  - The scanner should be held approximately 2.5" from the bar code and at a slight angle.



Practice scanning this sample bar code.

### Delete Bar Codes (Remove Items from Memory)

1. Aim the scanner at the bar code to be deleted from memory.
2. Press and hold the small **Delete** button on the scanner until you hear a tone and the blinking indicator turns solid amber.

**Note:** If the sample bar code above is scanned three times there will be three listings of this bar code in the CS1504's memory. To delete all three listings of the bar code from memory, scan the sample bar code three times using the small **Delete** button (-) on the scanner. Upon each minus scan you will receive a single beep. When the last entry has been deleted, a long double beep will be emitted indicating all listings of that bar code have been removed from memory.

### Clear All

Use the small **Delete** button to clear the scanner memory of all stored items.

1. Aim the scanner **away** from any bar codes.
2. Press and hold the **Delete** button for 6 seconds, until you hear a long beep.

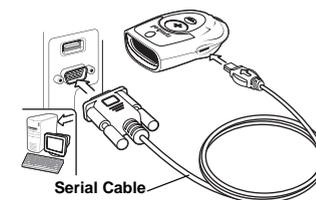


## Connecting the Scanner to Your Computer

**Note:** Before beginning, shut down your computer according to your computer manufacturer's directions.

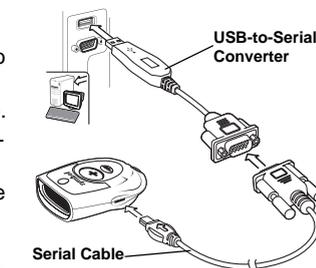
### Serial Connection

1. Connect the included serial (9-pin) connector to the corresponding communication port on the back of the computer according to the manufacturer's directions. Ensure that the connection is secure.
2. Holding the other end of the serial cable with the arrow facing up, slide the connector into the data communication jack on the side of the scanner.



### USB Connection

1. Connect the 9-pin connector of the serial cable to the 9-pin connector of the USB-to-Serial converter. Ensure that the connection is secure.
2. Connect the USB (4-pin) connector of the USB-to-Serial converter to the corresponding USB port on the back of the computer according to the manufacturer's directions. Ensure that the connection is secure.
3. Holding the other end of the serial cable with the arrow facing up, slide the connector into the data communication jack on the side of the scanner.



### Upload Bar Code Data to the Computer

To transfer bar code data from the scanner to the computer, use the third party application software to upload stored data from the scanner to your computer. (Application software is not included with the scanner.)

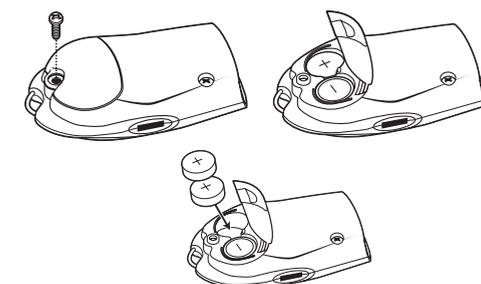
**Note:** The manner in which this transfer occurs depends on your specific application. Refer to the application software manual for instructions. When communication starts, the indicator blinks green and the scanner beeps.

For developers interested in writing software applications for a CS1504, a Software Developer's Kit is available for downloading. Visit: <http://www.symbol.com/consumer> for more information.

### Replacing the Batteries

When it is necessary to replace the batteries:

1. Remove screw securing the battery cover.
2. Lift battery cover.
3. Remove the old batteries.
4. Insert four new batteries noting the polarity.
5. Close battery cover and replace screw.



As per the EU Battery Directive 2006/66/EC, the waste battery should not be disposed of with household waste.

## Low Battery Warning

The CS1504 will indicate a low power state to the user by blinking the LED indicator red while trying to scan a bar code.

## Audio Control

To toggle the beeper tone on or off, press and hold the large button for 10 seconds until the LED indicator turns solid amber (beeper tone off) or until the LED turns solid amber and a double tone is heard (beeper tone on).

## Cleaning

Clean the CS1504 with a soft, clean cloth. Do NOT use any solvent such as alcohol or any abrasive substances.

## Troubleshooting

This section describes possible errors and suggested solutions to fix the errors.

Problem	Possible Cause	Possible Solution
The scanner is not working.	Batteries are loaded incorrectly.	Reload batteries. Make sure the (+) and (-) signs on the batteries line up with the signs inside of the battery cover.
	Batteries are dead.	Insert new batteries.
	Hardware failure.	Contact Motorola Enterprise Mobility Support.
The scanner is not scanning or deleting items.	The bar code may be damaged.	Try a different bar code.
	You are too far from or too close to the bar code.	Move the scanner closer to or farther from the bar code.
	You are scanning at an incorrect angle.	Change the angle until the scanner reads the bar code.
	You are scanning an unsupported or disabled bar code type or that bar code type may be disabled in the software.	Try a different bar code. Make sure the correct bar code support is enabled.
	The scanner is connected to the PC and communication has been established.	Scanner will not scan when the communication cable is connected to the scanner and a host communications session has been started. Disconnect the cable and try again.
Memory is full.		This situation is indicated by the red indicator steadily lit and the scanner emitting a series of continuous long beeps. Upload the scanner data to your application or press and hold the <b>Delete</b> button for 6 seconds to clear the scanner's memory. Caution: all data will be lost by performing this function.
Stored bar code information is not transferring to the PC.	The communication cable is not connected properly.	Check that the cable is properly connected to the scanner and the PC.
	The communication software is not properly loaded or is corrupt.	Check that the communication software is loaded properly on your PC. Consult your software application guide. If necessary, reload the communication software on the PC.
	The PC serial port is not properly configured.	Consult your hardware and operating system user documentation.
LED indicator blinks red.	Low battery	Replace batteries.
LED indicator flashes red, green and amber	Hardware failure.	Contact Motorola Enterprise Mobility Support or your reseller.

## Technical Specifications

Specification	Value
Supported Symbologies	UPC/EAN, Code 3 of 9, Code 128, I 2 of 5, D 2 of 5, Coupon Code
Storage Capability	Approximately 150 30-character bar codes
Power Requirements	4 batteries. Recommended type: *Energizer EPX 76 *Energizer 357 Maxell SR 44W Rayovac 357 * For best results use ENERGIZER brand batteries.
Battery Life	5,000 scans with new batteries.
Operating Temperature	5 °C to 40 °C (41 °F to 104 °F)
Operating Humidity	0 to 95% (non-condensing)
Weight	Approximately 1.8 oz. (without batteries) Approximately 2.7 oz. (with batteries)
Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F) (without batteries)

## Regulatory Information

### Radio Frequency Interference Requirements

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.

### Radio Frequency Interference Requirements - Canada

This device complies with RSS 210 of Industry & Science Canada. 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. This Class B digital apparatus complies with Industry Canada Standard ICES-003. Cet appareil numérique de la classe B est conform à la norme NMB-003 d'Industrie Canada.

## CE Marking and European Union Compliance



Products intended for sale within the European Union are marked with the CE Mark which indicates compliance to applicable Directives and European Normes (EN), as follows. Amendments to these Directives or ENs are included:

### Applicable Directives

- Electromagnetic Compatibility Directive 89/336/EEC
- Low Voltage Directive 73/23/EEC
- Battery Directive 2006/66/EC

### Applicable Standards

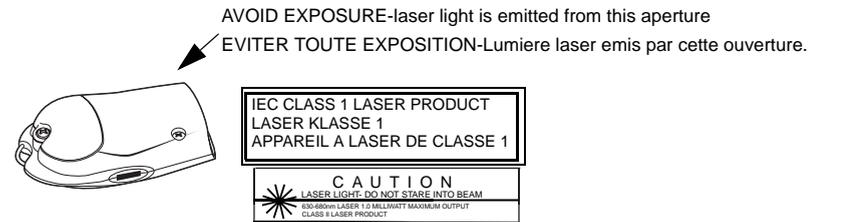
- EN 55022:1998, Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment
- EN 55024:1998; Information Technology equipment - Immunity characteristics - Limits and methods of measurement
- IEC 1000-4-2:1995; Electromagnetic compatibility (EMC); Part 4:Testing and measurement techniques; Section 4.2:Electrostatic discharge immunity test
- IEC 1000-4-3:1997; Electromagnetic Compatibility (EMC); Part 4:Testing and measurement techniques; Section 3. Radiated, radio frequency, electromagnetic field immunity test.
- IEC 1000-4-4:1995; Electromagnetic compatibility (EMC); Part 4: Testing and measurement techniques; Section 4:Testing electrical fast transient,/Burst immunity.
- IEC1000-4-5:1995; Electromagnetic compatibility (EMC), Part 4: Testing and measurement techniques; Section 5: Surge Immunity
- IEC 1000-4-6:1996; Electromagnetic compatibility (EMC), Part 4:Testing and measurement techniques; Section 6: Immunity to conducted disturbances, induced by radio frequency fields.

- IEC 1000-4-11:1994; Electromagnetic compatibility (EMC), Part 4: Testing and measurement techniques; Section 11: Voltage Dips, Short Interruptions, and Voltage Variations.
- EN 60 950 + A1+ A2 + A3 + A4 + A11 - Safety of Information Technology Equipment Including Electrical Business Equipment
- EN 60 825-1 (EN 60 825) - Safety of Devices Containing Lasers

## Laser Devices

Symbol products using lasers comply with US 21CFR1040.10, and IEC825-1:1993, EN60825-1:1994+A11:1996. The laser classification is marked on one of the labels on the product. Class 1 Laser devices are not considered to be hazardous when used for their intended purpose. The following statement is required to comply with US and international regulations:

**Caution:** Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure. Class 2 laser scanners use a low power, visible light diode. As with any very bright light source, such as the sun, the user should avoid staring directly into the light beam. Momentary exposure to a Class 2 laser is not known to be harmful.



In accordance with Clause 5, IEC 825 and EN60825, the following information is provided to the user:

ENGLISH	HEBREW
<p>CLASS 1 CLASS 2</p> <p>CLASS 1 LASER PRODUCT LASER LIGHT DO NOT STARE INTO BEAM CLASS 2 LASER PRODUCT</p>	<p>1 מוגר לייזר רמה 1 אזהרה לייזר רמה 2</p> <p>מגור לייזר רמה 1 אזהרה לייזר רמה 2</p>
<p>DANISH / DANSK</p> <p>KLASSE 1 KLASSE 2</p> <p>KLASSE 1 LASERPRODUKT LASERLYF SE IKKE IND I STRÅLEN KLASSE 2 LASERPRODUKT</p>	<p>ITALIAN / ITALIANO</p> <p>CLASSE 1 CLASSE 2</p> <p>PRODOTTO AL LASER DI CLASSE 1 LUCE LASER NON FISSARE IL RAGGIO PRODOTTO AL LASER DI CLASSE 2</p>
<p>DUTCH / NEDERLANDS</p> <p>KLASSE 1 KLASSE 2</p> <p>KLASSE-1 LASERPRODUKT LASERLICHT NIET IN STRAAL STAREN KLASSE-2 LASERPRODUKT</p>	<p>NORWEGIAN / NORSK</p> <p>KLASSE 1 KLASSE 2</p> <p>LASERPRODUKT, KLASSE 1 LASERLYS IKKE STRÅR INN I LYSTRÅLEN LASERPRODUKT, KLASSE 2</p>
<p>FINNISH / SUOMI</p> <p>LUOKKA 1 LUOKKA 2</p> <p>LUOKKA 1 LASERTUOTE LASERVALO ÄLÄ TUUJOTA SÄDETTÄ LUOKKA 2 LASERTUOTE</p>	<p>PORTUGUESE / PORTUGUÊS</p> <p>CLASSE 1 CLASSE 2</p> <p>PRODUTO LASER DA CLASSE 1 LUZ DE LASER NÃO FIXAR O RAIÃO LUMINOSO PRODUTO LASER DA CLASSE 2</p>
<p>FRENCH / FRANÇAIS</p> <p>CLASSE 1 CLASSE 2</p> <p>PRODUIT LASER DE CLASSE 1 LUMIÈRE LASER NE PAS REGARDER LE RAYON FIXEMENT PRODUIT LASER DE CLASSE 2</p>	<p>SPANISH / ESPAÑOL</p> <p>CLASE 1 CLASE 2</p> <p>PRODUCTO LASER DE LA CLASE 1 LUZ LASER NO MIRE FIJAMENTE EL HAZ PRODUCTO LASER DE LA CLASE 2</p>
<p>GERMAN / DEUTSCH</p> <p>KLASSE 1 KLASSE 2</p> <p>LASERPRODUKT DER KLASSE 1 LASERSTRAHLEN NICHT DIREKT IN DEN LASERSTRAHL SCHAUEN LASERPRODUKT DER KLASSE 2</p>	<p>SWEDISH / SVENSKA</p> <p>KLASS 1 KLASS 2</p> <p>LASERPRODUKT KLASS 1 LASERLJUS STIRRA INTE MOT STRÅLEN LASERPRODUKT KLASS 2</p>
<p>JAPANESE / 日本語</p> <p>クラス1 クラス1 レーザ製品 クラス2 レーザ光線 光線を直視しないでください クラス2 レーザ製品</p>	<p>KOREAN / 한국어</p> <p>1등급 1등급 레이저 제품 2등급 레이저 광선 이 광선을 주시하지 마십시오. 2등급 레이저 제품</p>
<p>CHINESE / 简体中文</p> <p>1 类 1 类激光产品 2 类 激光 切勿直视光束 2 类激光产品</p>	