WWS550i

Wasp
BARCODE TECHNOLOGIES

Table of Contents

Introduction

Barcoding is the most common Automated Data Collection (ADC) technology. It provides timely, error-free information that can be used to increase productivity, accuracy, and efficiency in the workplace. Virtually every type of industry is using barcodes to replace keyboard data entry. Studies have shown that a proficient data entry operator will make one error for every 300 characters that are manually entered. The error rate using barcodes is negligible and can be error-free using barcode symbologies with the check digit enabled.

The Wasp Charged Coupled Device (CCD) technology is a technique whereby a barcode is photographed, digitized, and electronically sampled by built-in photodetectors. The detectors process the measurement of every bar and space using the number of adjacent photodetectors which contrast a black mark and a white space. Of all the hand-held barcode scanning devices on the market, the CCD reader is the easiest to use and most cost effective for the typical business user.

The Wasp WWS550i Freedom Scanner is an extended distance scanner with a depth of reading of up to one foot depending on the mil size of the barcode. To activate the scanner, the user simply points the scanning aperture towards the barcode, pulls the trigger, and aims the red LED beam across the barcode. In addition to being easy to use, the Wasp WWS550i Freedom Scanner is extremely rugged since it has no moving parts.

Barcode Symbologies

Barcodes are symbols consisting of a series of bars and spaces which can be applied to packages, cartons, bottles, and other commercial products. The bars and spaces in each symbol are grouped in such a way to represent a specific ASCII character or function. The interpretation of these groups is based on a particular set of rules called symbologies. Various symbologies have been developed for particular applications. Some examples are shipping and receiving, manufacturing, retail, healthcare, transportation, document processing and tracking, and libraries.

The resolution of a barcode is dependent on the narrowest element of a barcode (X dimension), and can vary from high density (nominally less than 0.009 in./0.23 mm), medium density (between 0.009 in./0.23 mm and 0.020 in./0.50 mm), and low density (greater than 0.020 in./0.50 mm). Medium and low densities are the most common since these are the easiest to read (scan) with nearly all scanning devices. The Wasp WWS550i Freedom Scanner can read barcodes with X-dimensions as low as 5 mils (0.005 in/0.13mm).

The Wasp WWS550i Freedom Scanner can read the most popular barcode symbologies including Code 39, Code 93, Code 128, Interleaved 2 of 5, UPC-A, UPC-E, EAN/JAN-8, EAN/JAN-13, Codabar, and MSI/Plessey.

Please see test chart on pages 23.-24.

Quick Start

1. Unpack.
Open the box and remove all the pieces from their protective packaging.

2. Charging the WWS550i.
You must charge the scanner for 4 hours before first using it. To charge the scanner plug the power supply in to the bottom of the scanner.

3. Setting up the Bluetooth Adaptor.
If you already have Bluetooth setup on your PC or device, please continue to the next step.

To setup Bluetooth on your PC you will need to insert the Bluetooth adapter into an available USB port. Windows will detect the adapter and install the required Microsoft Bluetooth software. If Windows does not detect the Bluetooth adapter, please remove the adapter and insert the CD with the adapter's Bluetooth software on it. Follow the instruction on the CD for installing the Bluetooth software.

4. Connecting the scanner to a Bluetooth device.
The scanner will connect to most Bluetooth devices that support HID connection.

You will need to open your Bluetooth software and search for Bluetooth devices. The Bluetooth software can be found by clicking the Bluetooth symbol on the start bar near the computer time. If the Bluetooth symbol is not found, there could be a problem with the Bluetooth adapter installation.

Once you have the Bluetooth software open you will need to scan the Set Connection barcode (pg 7). This will make the scanner ready to be detected by the Bluetooth software.

The following screens are Microsoft's standard Bluetooth wizard.
*Most Bluetooth wizards will have similar steps. Instructions for XP users are displayed below. Instructions for Win7 users begin on page 5

Check the "My device is setup and ready to be found." and click Next.

The scanner will show up in the list of Bluetooth devices found. Select the Wasp Barcode Bluetooth Keyboard and click Next.

If Wasp Barcode Bluetooth Keyboard does not show up in the available devices please check the following:
1. Make sure the scanner is on by pressing the trigger.
2. If you are using a pre-installed Bluetooth adapter, make sure the adapter supports HID.
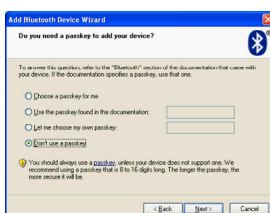
The next step will ask you to setup a passkey for the device. By default the scanner will not have a passkey set. Please select "Don't use a passkey" and click Next.

You can set a passkey later if you prefer,see Start/Stop Pin on page 6 for details.

(XP Instructions,

The Complete Wizard screen appears. Just click Finish to complete.

Once the wizard is complete the scanner will show up as a Wasp Keyboard. Click OK to close the screen. You are now ready to use the WWS550i.

Win7 Instructions
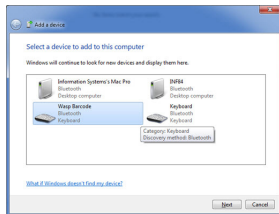
On the Add a Device screen, select Wasp Barcode. Click the Next button.
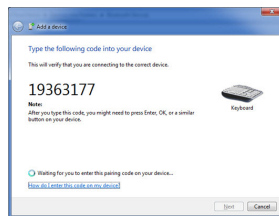
Enter the Pairing Code provided into your mobile device. Once the PC detects the pairing code has been entered and a connection has been established, the Next button will become enabled. Click
Next to contine.
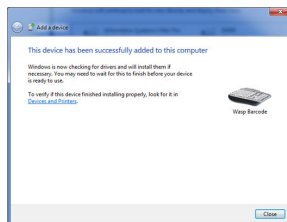
You can verify that your devices has been added by clicking the Devices and Printers link on the screen. Click Close to close the connection wizard.

Setup & Configuration

In order to configure the Wasp WWS550i Freedom Scanner, you must familiarize yourself with the setup procedures on the following pages. The default settings of the scanners are identified on each page and clearly marked using an asterisk (*). The default settings have been preprogrammed for the most common barcode configurations. Use the setup & configuration barcodes only to customize the WWS550i Freedom Scanner settings. If you need to configure the Scanner, the default settings will be overwritten. All the programmed settings are stored permanently in non-volatile memory.

In order to configure the Wasp WWS550i Freedom Scanner, two basic steps need to be followed:

(1) Locate the group that contains the options to be changed.
(2) Scan the barcode representing the option to be changed. The scanner will sound two beeps.

To change Minimum/Maximum Length:

(1) Scan the Minimum or Maximum Length barcode associated with the symbology.
(2) Scan a 2 digit value from the ASCII table on pages 25-28.
(3) Scan the Minimum or Maximum Length barcode again.

Example: To have a minimum length barcode of 1, you must scan a 0 then 1, then scan the minimum barcode again. To have a maximum length barcode of 10, you must scan a 1 then 0, then scan the maximum barcode again.

Factory Default

Use the Factory Default barcode to reset the scanner to the Default settings.

Factory Default

Autosense Stand Mode

Scan this Autosense Stand Mode barcode to enable the hands-free autosense feature of the WWS550i Freedom Scanner. If you desire to turn this mode "off," please scan the default barcode above.

Autosense Flash Mode Enable

Note: Enabling this option will significantly increase the WWS550i Freedom Scanners battery consumption.

Check Version

Scan the Check Version barcode to verify your current firmware's version number.

Check Version

Link Quality On/Off

The Link Quality affects the transmission quality. When Link Quality is turned on (default setting), data transfer is more secure, but slower. If you notice that your transmissions to the host are too slow, you can try turning the Link Quality setting to off.

Link Quality On

Link Quality Off

Set Connection

Scan this barcode to break your current connection and enable your device to connect to a new Bluetooth host.

Set Connection

Bluetooth SPP (Bluetooth COM)

The Bluetooth SPP (Serial Port Protocol) creates a virtual Bluetooth comport. This setting is not recommended. Only use this option if you have software capable of capturing data off of a comport.

Bluetooth SPP (Bluetooth COM)

Bluetooth HID

Use this setting (on by default) to pair with most Bluetooth connections. Bluetooth HID works just like a keyboard..

Bluetooth HID

Start and Stop Pin

Use the Start and Stop Pin barcodes when you are prompted for a password during Bluetooth pairing. To use this setting:

1. When prompted for a password, scan the Start Pin barcode

2. Scan the appropriate numbers (provided below) for your password.

3. Scan ENTER.

4. Scan the Stop Pin barcode.

Now the Pin is set and the scanner should pair to the PC.   Test the connection by scanning a barcode from WordPad, NotePad or the equivalent and verifying the scan is correct.

Start Pin

Stop Pin

Scan the numbers for your password, then scan ENTER.

1

2

3

4

5

6

7

8

9

0

ENTER

The 'Beep and Delay' configuration supports the general control options for the Wasp WWS550i Freedom Scanner. These options include the volume, intercharacter delay, and interblock delay.

Interblock delay (see page 10) is the minimum time interval between two adjacent scans. If the processing speed of your host device is slower than your scanning speed, a longer interblock delay may ensure the data integrity.

Intercharacter delay (see page 10) is the time period that the scanner will wait before transmitting the next character. If data sent by the scanner has incorrect or missing characters, a longer intercharacter delay may solve the problem. The intercharacter delay should be changed only if the transfer rate cannot be maintained between the scanner and the keyboard buffer of the computer.

Note: The default for the intercharacter delay is set to '140us' and is the most common configuration; however, your PC may be different. When you scan a barcode, if some stray or scrambled characters appear, increase the intercharacter delay to slow down the transfer rate.

Beep Settings

Beep Off

Beep Hi

Beep Medium *

Beep Low to High

Beep High to Low

Beep Low

*Default

Interblock Delay

|||||||||||||||||||||||||
0ms *

|||||||||||||||||||||||||
10ms

|||||||||||||||||||||||||
50ms

|||||||||||||||||||||||||
100ms

|||||||||||||||||||||||||
200ms

|||||||||||||||||||||||||
500ms

Intercharacter Delay

|||||||||||||||||||||||||
140us *

|||||||||||||||||||||||||
500us

|||||||||||||||||||||||||
1ms

|||||||||||||||||||||||||
4ms

|||||||||||||||||||||||||
16ms

- Caps Lock Auto (For PC XT/AT only):
  In Auto mode, the scanner will keep track of the Caps Lock status automatically. For some PCs, the scanning performance may be compromised because of the auto tracing. If the scanning performance is poor (or cannot scan) or the scanner cannot output the upper/lower case characters correctly, try to select one of the next two choices instead of auto tracing.
- Caps Lock Off:
  When the keyboard is in the unshifted state
  (Caps Lock is not pressed), select "Lower Case."
- Caps Lock On:
  When the keyboard is in the shifted state (Caps Lock is on),
  select "Upper Case."

|||||||||||||||||||||||||
Caps Lock On

|||||||||||||||||||||||||
Caps Lock Off *

|||||||||||||||||||||||||
Caps Lock Auto

*Default

The 'Keyboard Language' setting controls the key codes for your keyboard's language.

|||||||||||||||||||||||
U.S. *

|||||||||||||||||||||||
German

|||||||||||||||||||||||
French

|||||||||||||||||||||||
Spanish

|||||||||||||||||||||||
Italian

The 'Preamble/Postamble' configuration is used to add a prefix or suffix set of characters to the barcode value. Up to 8 characters may be added for each option separately. Preamble and postamble characters can function concurrently, but need to be configured separately.

To add preamble or postamble characters, follow the steps below:

1) Scan the 'Clear Pre/Postamble' barcode on this page.
2) Scan the 'Preamble' or 'Postamble' barcode.
3) Use Appendix B on pages 25-28 to locate the characters you want to add as preamble or postamble characters. Make sure that you scan the barcode associated with each letter before preceding to the next character. For example, to add the letter "A," scan the barcode corresponding to the letter "A". The letter "A" will always appear in your data as prefix or suffix to the barcode value.
4) Scan the corresponding 'Pre/Postamble' barcode on this page to exit this setting.

|||||||||||||||||||||||
Clear Pre/Postamble

|||||||||||||||||||||||
Preamble

|||||||||||||||||||||||
Postamble

Terminator

The 'Terminator' option is used to specify the end-of-text message and is primarily used to denote the end of the barcode value.

|||||||||| CR *

|||||||||| Tab

|||||||||| None

|||||||||| Space

|||||||||| LF

|||||||||| ESC

|||||||||| CR + LF

Code ID

The 'Code ID' option sends a specific value when a particular barcode symbology is scanned. For example, if 'Code ID' is enabled and Code 39 is scanned, an "M" will appear in the data stream in front of the barcode value.

|||||||||| Code ID On

|||||||||| Code ID Off *

O - MSI/Plessey   T - EAN 128
S - EAN 8   K - Code 128
E - UPC E   N - Codabar
A - UPC A   D - Full ASCII Code 39
F - EAN 13   M - Std. Code 39
L - Code 93   I - Interleaved 2 of 5

*Default
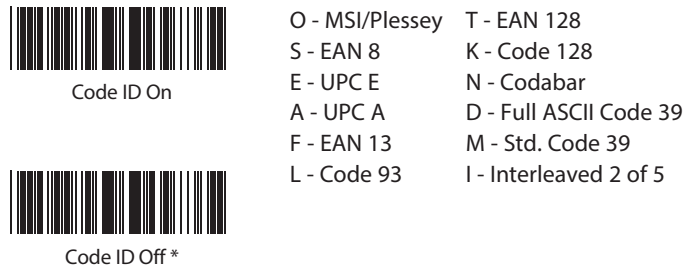
Enable	Disable
Enable All	Disable All
MSI Plessey	MSI Plessey *
Interleaved 2 of 5 *	Interleaved 2 of 5
Code 128 *	Code 128
Codabar *	Codabar
Code 39 *	Code 39
UPC A *	UPC A
UPC E *	UPC E
EAN 8 *	EAN 8
EAN 13 *	EAN 13
Code 93	Code 93 *

*Default

Code 39 is variable length and is the most frequently used symbology in industrial barcode systems today. It is extensively used within the Department of Defense (DOD). The principal feature is to encode messages using the full alphanumeric character set. Standard Code 39 contains only 43 characters (0-9, A-Z, $, /, %, +, -, ., SPACE) and can be extended to a 128 character symbology (full ASCII) by combining one of the special characters (S, /, %, +) with a letter (A-Z) to form the characters that are not present in the standard Code 39 symbology.

See page 6 for information on setting the minimum and maximum lengths.

Enable Code 39 *

Disable Code 39

Enable Code 39
Full ASCII *

Disable Code 39
Full ASCII

Check Digit Do
Not Calculate *

Check Digit Calculate
And Send

Check Digit Calculate
But Do Not Send *

Minimum Length (1 *)

Maximum Length (48 *)

Interleaved 2 of 5 is a variable length, even numbered, numeric barcode.
It is typically used in industrial and master carton labeling and also in the automobile industry. The symbology uses bars to represent the first digit of a pair and the interleaved (white) spaces to represent the second digit of a character pair.
See page 6 for information on setting the minimum and maximum lengths.

Enable Interleaved
2 of 5 *

Disable Interleaved
2 of 5

Check Digit Do
Not Calculate *

Check Digit Calculate
And Send

Check Digit Calculate
But Do Not Send

Minimum Length (6 *)

Maximum Length (48 *)

*Default

CODE 93 AND MSI PLESSEY SETTINGS

Code 93 encodes the full 128 ASCII character set using 9 modules arranged into 3 bars with adjacent spaces. Two of the characters are check characters. Code 93 is similar to Code 39 but encodes more characters per inch.

‖‖‖‖‖‖‖‖‖	‖‖‖‖‖‖‖‖‖
Enable Code 93	Disable Code 93 *
‖‖‖‖‖‖‖‖‖	‖‖‖‖‖‖‖‖‖
Minimum Length (6 *)	Maximum Length (48 *)

MSI Plessey is a variable length numeric symbology and is primarily used in marking retail shelves. Each character consists of four bars with intervening spaces for each encoded digit, one or two symbol check digits, and a reverse start code.

See page 6 for information on setting the minimum and maximum lengths.

‖‖‖‖‖‖‖‖‖	‖‖‖‖‖‖‖‖‖
Enable	Disable *
‖‖‖‖‖‖‖‖‖	‖‖‖‖‖‖‖‖‖
Check Digit Verify And Send *	Check Digit Verify And Do Not Send
‖‖‖‖‖‖‖‖‖	‖‖‖‖‖‖‖‖‖
Check Digit Double MOD 10	Check Digit Double 11 Plus MOD 10
‖‖‖‖‖‖‖‖‖	‖‖‖‖‖‖‖‖‖
Check Digit Single MOD 10	Minimum Length (6 *)
	‖‖‖‖‖‖‖‖‖
	Maximum Length (48 *)

Code 128 is the most flexible of all the common linear symbologies. It supports alpha and numeric characters easily, has the highest number of characters per inch, and is variable length.

See page 6 for information on setting the minimum and maximum lengths.

Enable Code 128 *

Minimum Length (5 *)

Disable Code 128

Maximum Length (48 *)

UCC/EAN 128
Enable *

UCC/EAN 128
Disable

UCC/EAN 128
Code ID Enable

UCC/EAN 128
Code ID Disable *

Function 1
Character Send

Function 1
Character Do Not Send *

Define UCC/EAN 128
Group Separator

To Define UCC/EAN 128 Group Separator:
1. Scan Define UCC/EAN 128 Group Separator
2. Scan ASCII code from pages 31-34
3. Scan Define UCC/EAN 128 Group Separator
Note: Default Group Separator is GS

*Default

Codabar is a variable length symbology capable of encoding six special alphanumeric characters, capital letters A through D, T, N, *, E, and all numeric digits. Codabar is one of the oldest barcode symbologies and is still used in some library applications. It should not be considered for new applications except under unusual circumstances.

See page 6 for information on setting the minimum and maximum lengths.

Codabar Enable *	Codabar Disable
Send Start/Stop *	Do Not Send Start/Stop
Check Digit Do Not Verify *	Check Digit Verify And Send
Check Digit Verify And Do Not Send	Minimum Length (6 *)
	Maximum Length (48 *)

UPC-A (Universal Product Code-A) is fixed length and is the most common UPC barcode for retail product labeling. It is seen in most grocery stores across the United States. The symbology encodes a 12-digit number. The first six digits are assigned from the Uniform Code Council (UCC). The next five digits are assigned by the manufacturer, and the final digit is a modulo 10 check digit. The nominal height for the UPC-A barcode is one inch. The reduced size is 80% of the nominal size.

UPC-A Enable *	UPC-A Disable
Send Leading Digit *	Do Not Send Leading Digit
Send Check Digit *	Do Not Send Check Digit

*Default

This option enables the two and five digit supplements for the UPC and EAN/JAN barcode symbologies.

5 Digit Supplement Enable	5 Digit Supplement Disable *
2 Digit Supplement Enable	2 Digit Supplement Disable *
Transmit if Present	Must Be Present *

This option expands the UPC-A barcode to EAN-13.

UPC-A to EAN-13 Enable	UPC-A to EAN-13 Disable *

UPC-E (Universal Product Code-E) is fixed length and is a compressed six digit code used for marking small packages, including magazines and paperback books. UPC-E symbols are UPC-A symbols that have been zero suppressed (i.e. consecutive zeros are not included in the symbol).
The printed value of the UPC-E code is a twelve digit code. The nominal height for the UPC-E barcode is one inch. The reduced size is 80% of the nominal size.

UPC-E Enable *	UPC-E Disable
Send Leading Digit *	Do Not Send Leading Digit
Send Check Digit *	Do Not Send Check Digit
Expand to UPC-A On	Expand to UPC-A Off *

*Default

This option enables the two and five digit supplements for the UPC and EAN/JAN barcode symbologies.

5 Digit Supplement Enable	5 Digit Supplement Disable *
2 Digit Supplement Enable	2 Digit Supplement Disable *
Transmit if Present	Must Be Present *

The EAN/JAN-8 is fixed length and is similar to the UPC-E code, but includes two more digits for the country code. The nominal height for the EAN/JAN-8 barcode is one inch. The reduced size is 80% of the nominal size.

EAN-8 Enable *	EAN-8 Disable
Send Leading Digit *	Do Not Send Leading Digit
Send Check Digit *	Do Not Send Check Digit

*Default

This option enables the two and five digit supplements for the UPC and EAN/JAN barcode symbologies.

5 Digit Supplement Enable	5 Digit Supplement Disable *
2 Digit Supplement Enable	2 Digit Supplement Disable *
Transmit if Present	Must Be Present *

The EAN/JAN-13 (European Article Number/Japanese Article Number) is fixed length and is similar to the UPC-A symbology, but encodes a 13th digit. The nominal height for the EAN/JAN-8 barcode is one inch. The reduced size is 80% of the nominal size.

EAN-13 Enable *	EAN-13 Disable
Send Leading Digit *	Do Not Send Leading Digit
Send Check Digit *	Do Not Send Check Digit
ISBN Enable	ISBN Disable *
ISSN Enable	ISSN Disable *

*Default

This option enables the two and five digit supplements for the UPC and EAN/JAN barcode symbologies.

5 Digit Supplement
Enable

5 Digit Supplement
Disable *

2 Digit Supplement
Enable

2 Digit Supplement
Disable *

Transmit if Present

Must Be Present *

*Default

See Chapter 3 for step-by-step setup instructions.

Connect and Disconnect

Scan the "Set Connection" barcode before pairing the WWS550i Freedom Scanner and the Bluetooth dongle/internal Bluetooth adaptor.

Set Connection

Bluetooth Power Off Settings

This option controls the length of time that the Bluetooth radio will stay powered on when not in use.

1 Minute

3 Minutes

5 Minutes

10 Minutes

Bluetooth Identifier

if you are using multiple scanners in the same location, it may be difficult to determine which one is which during the Bluetooth pairing process. This procedure allows you to set an identifier (name) within the scanner.

1. Scan "Clear Scanner ID" barcode.

Clear Scanner ID

2. Scan "Set Scanner ID" barcode.

Set Scanner ID

3. Enter the unique name for this device by scanning the barcodes found in Appendix B: ASCII Table. You can scan up to 7 characters.

4. Scan "Set Scanner ID" barcode again.

Now, when you pair the scanner, it will appear as "Wasp <identifier>".

For example, if you scanned barcodes for Unit 1, the scanner would appear as "Wasp Unit 1" in the pairing dialog.

Note: This procedure requires firmware version SM3-a-1.01. BTA-IN or later. To see the version of your scanner's firmware, scan the Check Version barcode. The scanner will send its firmware version to the paired compute r or device.

Check Version

Note: Make sure that the appropriate barcode symbology is configured properly and enabled before trying to scan. Use the 'Barcode Symbologies' configuration beginning on page 14 to enable specific symbologies.

Code 39*	UPC-A*
1234	1 23456 78901 2
Code 93	UPC-A w/5 digit supplement
123456	12345 ... 1 23456 78901 2
Interleaved 2 of 5 *	UPC-A w/2 digit supplement
123456	12 ... 1 23456 78901 2
Codabar *	UPC-E*
123456	0 123456 5
Code 128*	UPC-E w/5 digit supplement
12345	12345 ... 0 123456 5
MSI/Plessey	UPC-E w/2 digit supplement
123456	12 ... 0 123456 5

*Default

EAN/JAN-13*

1 234567 890128

EAN/JAN-13
w/5 digit supplement

12345

1 234567 890128

EAN/JAN-13
w/2 digit supplement

12

1 234567 890128

EAN/JAN-8*

1234 5670

EAN/JAN-8
w/5 digit supplement

12345

1234 5670

EAN/JAN-8
w/2 digit supplement

12

1234 5670

*Default

Use this ASCII Table to add preamble and postamble characters to your barcode value. Please refer to the appropriate configuration section for the number of characters that can be configured.

NUL	LF	DC4
SOH	VT	NAK
STX	FF	SYN
ETX	CR	ETB
EOT	SO	CAN
ENQ	SI	EM
ACK	DLE	SUB
BEL	DC1	ESC
BS	DC2	FS
HT	DC3	GS

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‖‖‖‖‖‖‖ F1	‖‖‖‖‖‖‖ F10	‖‖‖‖‖‖‖ Cursor Right
‖‖‖‖‖‖‖ F2	‖‖‖‖‖‖‖ F11	‖‖‖‖‖‖‖ Cursor Up
‖‖‖‖‖‖‖ F3	‖‖‖‖‖‖‖ F12	‖‖‖‖‖‖‖ Cursor Left
‖‖‖‖‖‖‖ F4	‖‖‖‖‖‖‖ Tab	‖‖‖‖‖‖‖ Cursor Down
‖‖‖‖‖‖‖ F5	‖‖‖‖‖‖‖ Back Tab	‖‖‖‖‖‖‖ Page Up
‖‖‖‖‖‖‖ F6	‖‖‖‖‖‖‖ Esc	‖‖‖‖‖‖‖ Page Down
‖‖‖‖‖‖‖ F7	‖‖‖‖‖‖‖ End	‖‖‖‖‖‖‖ Ins
‖‖‖‖‖‖‖ F8	‖‖‖‖‖‖‖ Home	‖‖‖‖‖‖‖ Enter
‖‖‖‖‖‖‖ F9	‖‖‖‖‖‖‖ Back Space	‖‖‖‖‖‖‖ Del

MODEL	WWS550i

OPTICAL

Depth of Field	2" to 12" (50mm to 304mm)
Width of Field	4.7 inches (120 mil)
Scan Rate	230 scans / second

ELECTRICAL

Light Source	625 ~ 660 nm visible red LED
Sensor	2088 Element linear imager
Operating Current	160mA
Standby Current	40mA
Battery Charger	
(AC Adaptor)	3.4 VDC
Battery Type	Lithium-ion (700 mA)

MECHANICAL

Dimensions	W 4.2" x L 2.4" x H 6.3"
Weight	5.6 ounces (160 g)
Housing	ABS
Impact Tolerance	5 feet (1.5 meter) drop

ENVIRONMENTAL

Operating Temperature	41°F to 104°F (5°C to 40°C)
Storage Temperature	14°F to 140°F (-10°C to 60°C)
Relative Humidity	10% to 95% non-condensing
Safety Certification	Conforms FCC Class B and CE requirements

Wasp Barcode Technologies products are warranted against defects in workmanship and materials for a period of one year from the date of shipment, provided that the product remains unmodified and is operated under normal and proper conditions.

This warranty is limited to repair or replacement at Wasp Barcode Technologies option, with reasonable promptness after being notified. These provisions do not prolong the original warranty term for any product which has been repaired or replaced by Wasp Barcode Technologies.

This warranty applies to the original owner and does not extend to any product which has been subject to misuse, neglect, accidental damage, unauthorized repair, or tampering.

No other express warranty is given. The replacement or repair of a product is your exclusive remedy. Any other implied warranty of merchantability or fitness is limited to the duration of this written warranty. Some states, provinces, and countries do not allow limits on how long an implied warranty lasts, so the above limitation may not apply to you.

In no event shall Wasp Barcode Technologies be liable for consequential damages. Some states, provinces, and countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

Q: How do I change the terminator to a Tab?
A: Scan the "Tab" barcode on page 12.

Q: How do I remove the terminator?
A: Scan the "None" barcode on page 12.

Q: How do I enable the Full ASCII character set for the Code 39
    barcode symbology?
A: Scan the "Enable Code 39 Full ASCII" barcode on page 14.

Q: If my PC is Bluetooth HID enabled should I still use the Bluetooth dongle/adaptor?
A: No. You can use the built in Bluetooth of your PC. See "Connecting the scanner to a Bluetooth device" on page 4.

Q: What to the various LED indicators and beep tones mean?
A: Green Light combined with beep tone: Successful scan
    Red Light: Ready to scan
    5 beep tones and flashing Green Light: Out of Bluetooth range
    Red and Green flash: Battery being charged
    Red and Green Light on: Battery fully charged
    5 beep tones: Low battery

If you experience any problems with the Wasp WWS550i Freedom Scanner that you are unable to resolve, call for technical assistance at (214) 547-4100 ext 2, Monday through Friday, 8:00 AM - 5:00 PM Central Standard Time.

Visit www.waspbarcode.com/support anytime.