USER MANUAL

WWS250i

Wasp®
BARCODE TECHNOLOGIES

Table of Contents

FCC WARNING STATEMENT

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 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.

CANADIAN DOC STATEMENT

This digital apparatus does not exceed the Class B limits for radio noise for digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de las classe B prescrites dans le Réglement sur le brouillage radioélectrique édicté par les ministère des Communications du Canada.

CE MARKING AND EUROPEAN UNION COMPLIANCE

Testing for compliance to CE requirements was performed by an independent laboratory. The unit under test was found compliant with all the applicable Directives, 2004/108/EC and 2006/95/EC.

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT

The WEEE directive places an obligation on all EU-based manufacturers and importers to take-back electronic products at the end of their useful life.

ROHS STATEMENT OF COMPLIANCE

This product is compliant to Directive 2002/95/EC.

NON-MODIFICATION STATEMENT

Changes or modifications to this document are not expressly approved. Any unapproved changes will void the compliance agreement with the parties responsible for creating this document.

WARNING AND CAUTION

1. Do not put metals into contact with the terminals in connectors.
2. Do not use scanner near any inflammable gases.

If the following conditions occur, immediately power off the host computer, disconnect the interface cable, and contact your nearest dealer.
1. Smoke, abnormal odors or noises come from the scanner.
2. Drop the scanner so as to affect the operation or damage its housing.

Do not:
1. Put the scanner in places with excessively high temperatures such as under direct sunlight.
2. Use the scanner in extremely humid areas or during drastic temperature changes.
3. Place the scanner in oily, smokey or steam-filled environments such as on a cooking range.
4. Cover or wrap up the scanner in poorly-ventilated areas such as under a cloth or blanket.
5. Insert or drop foreign materials or water into scanning window or vents.
6. Use the scanner while hand is wet or damp.
7. Use the scanner with anti-slip gloves containing plasticizer and chemicals or organic solvents such as benzene, thinner, insecticide etc to clean the housing.
8. Scratch or modify the scanner and bend, twist, pull or heat its interface cable.
9. Put heavy objects on interface cable.
Do not stare at the light source from the scanning window or point the scanning window at other people's eyes. Eyesight may be damaged by direct exposure to scanning light.

Do not put the scanner on an unstable or inclined plane. The scanner may drop, creating injuries.

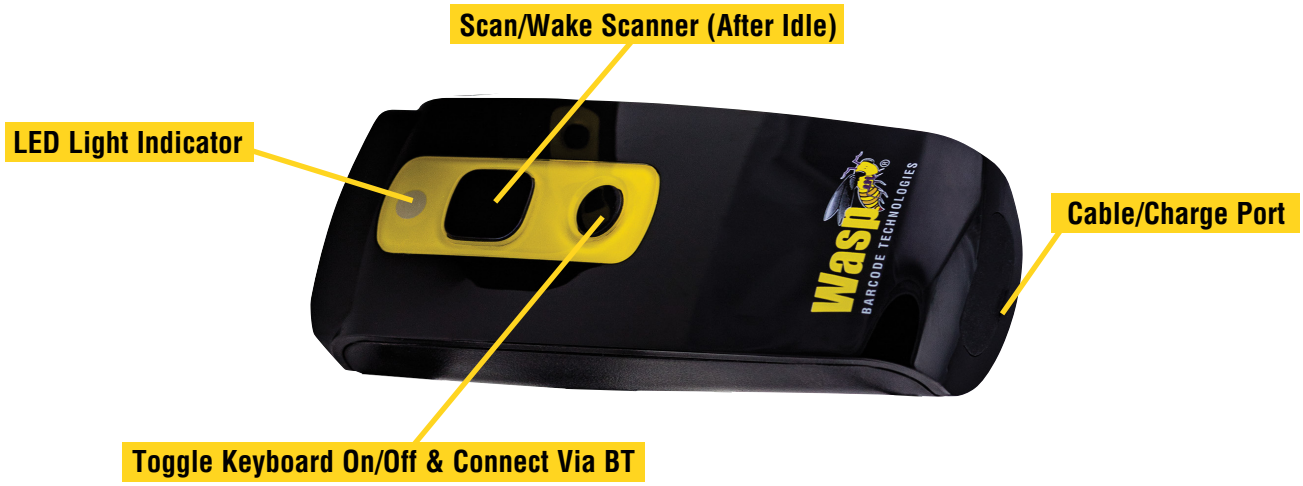
Once the interface cable is damaged, such as having exposed or broken copper wires, stop using immediately and contact your dealer. Otherwise, it could result in fire or electrical shock.

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 WWS250i 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.



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 WWS250i scanner can read barcodes with X-dimensions as low as 5 mils (0.005 in/0.13mm).

The Wasp WWS250i 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. The WWS250i Scanner is also capable of reading popular 2D barcode symbologies, including Aztec Code, Codablock A and F, Data Matrix, EAN-UCC Composite Codes, MaxiCode, MicroPDF417, PDF417, QR Code, Micro QR Code, and Chinese Sensible Code.

Please see test chart on pages 31-32.

Quick Start

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

2. Charging the WWS250i.
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 Bluetooth.
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 CD with the Bluetooth software on it. Follow the instruction on the CD for installing the Bluetooth software.

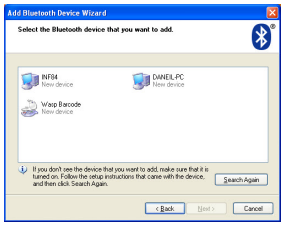
4. Connecting the scanner to a Bluetooth device.
The scanner will connect to most Bluetooth devices that support HID connection.

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 installation.

Once you have the Bluetooth software open you will need to scan the Set Connection barcode (pg 9). This will make the scanner ready to be detected by the Bluetooth software.

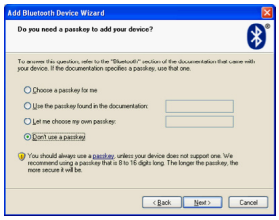
The following screens are Microsoft's standard Bluetooth wizard.
*Most Bluetooth wizards will have similar steps. Instructions for XP users are displayed below. Instructions for Win7 users begin on page 7

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.

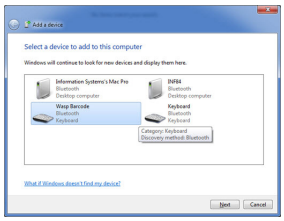
You can set a passkey later if you prefer,see Start/Stop Pin on page 10 for details.

(XP Instructions, cont.)

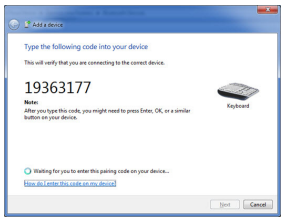
The Complete Wizard screen appears. Just click Finish to complete.

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 WWS250i.

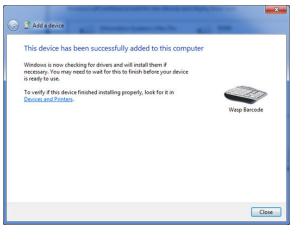
Win7 Instructions



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 device 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 WWS250i 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 WWS250i 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 WWS250i 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 numbers on page 10.
(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

Check Version

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

Check Version

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*

*Default Setting

Start and Stop Pin

Use the Start and Stop Pin barcodes if 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. For each digit in the password shown on your screen, scan the corresponding barcode (below).

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

Scan the numbers for your password, then scan ENTER.

1

2

3

4

5

6

7

8

9

0

ENTER

When numbers have been entered, scan Stop Pin.

Stop Pin

Interface Settings

Scan any one of the barcodes below to reset the scanner back to the desired interface:

BT HID

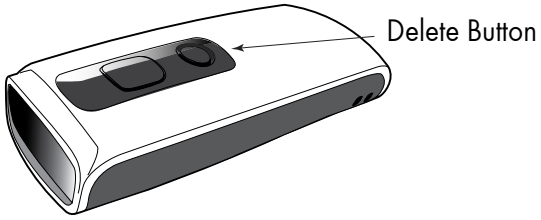
BT SPP

Memory Mode

Memory Mode*

After scanning the above barcode, the scanner will be able to collect barcode data off-line. The barcode data will be stored in the format of: < Date >, < Time >, < Barcode Data > < CR > (see below to change formats)
To retrieve stored data, please connect the scanner to the host with cable.
Access removable storage device “MiniScan” from which you may open or copy the file “BARCODE.txt” to your computer.
To delete ONE stored data, please scan below barcode or press Delete Button.

Delete Last Record



To delete ALL stored data, simply delete the file “BARCODE.txt” in the removable storage device “MiniScan” until you hear two beeps.

To exit memory mode, scan any interface barcode in the “interface” section of the manual.

Memory Mode

SET DATE

Example: To set Date to 2014-08-01 (Year-Month-Day):
1. Scan [Set Date]
2. Scan [1], [4], [0], [8], [0], [1] on page 10. (yymmdd)
3. Scan [Set Date]

SET TIME

Example: To set Time to 08:10:30 am (Hr:Min:Sec)
1. Scan [Set Time]
2. Scan [0], [8], [1], [0], [3], [0] on page 10. (hhmmss)
3. Scan [Set Time]

* To avoid Time and Date being reset to factory default due to running out of battery, please fully charge the scanner for at least 3 hours before use.

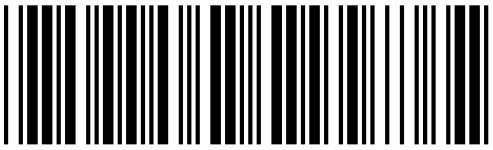
DATA FORMAT

The default Data Format is <Date>, <Time>, <Barcode Data>. Below are the codes for each item:

Code	Item
2	Date
3	Time
4	Barcode Data

Example:
To change Data Format to <Barcode Data>, <Date>, <Time>
1. Scan [Data Format]
2. Scan [4], [2], [3] on page 10.
3. Scan [Data Format]

. R008$



DATE FORMAT

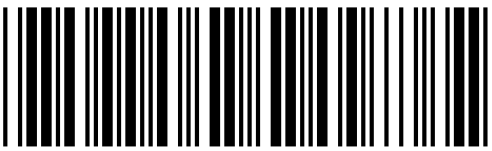
The default Date Format is DD/MM/YYYY (Code = 09). Below is full list of available formats and their setup codes:

Code	Format
01	DD-MM-YYYY
02	MM-DD-YYYY
03	DD-MM-YY
04	MM-DD-YY
05	YYYY-MM-DD
06	YY-MM-DD
07	DD-MM
08	MM-DD
09	DD/MM/YYYY
10	MM/DD/YYYY
11	DD/MM/YY
12	MM/DD/YY
13	YYYY/MM/DD
14	YY/MM/DD
15	DD/MM
16	MM/DD

Example:
To set Date Format to MM/DD/YY (Code =12)
1. Scan [Date Format]
2. Scan [1], [2] on page 11.
3. Scan [Date Format]

TIME FORMAT

. R009$



The default Time Format is HH:MM:SS (Code = 01). Below are available formats and their setup codes:

Code	Format
01	HH:MM:SS
02	HH:MM

Example:
To set Time Format to HH:MM (Code = 02)
1. Scan [Time Format]
2. Scan [0], [2] on page 11 & 12.
3. Scan [TimeFormat]

The 'Beep and Delay' configuration supports the general control options for the Wasp WWS250i Scanner. These options include the volume, intercharacter delay, and interblock delay.

Interblock delay (see page 18) 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 18) 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.

Beeper Indication

Single long beep	Power up
Single beep	Good read
Single short beep	The scanner reads a Code39 of ASCII in configuration procedure
Two beeps	i. Wireless connection ii. The scanner successfully reads a configuration barcode
Two short beeps	Good read (Batch mode/Memory mode)
Four beeps (Hi-Lo-Hi-Lo)	Out of range/Poor connection
Five beeps	Low power
Three beeps	Wireless disconnection
Three short beeps	i. The scanner reads a barcodes while disconnected. ii. The scanner reads an unexpected barcode during configuration procedure. (scan [ABORT] to abort and start over)
Several short beeps	The scanner switches from one communication mode to another

LED Indication

Off	Standby or Power off
Flashing Blue	Disconnected or Discoverable
Green for 2 sec	Good Read
Flashing Red	Low power
Solid Red	Charging
Solid Green	Fully Charged

Beep Settings

WWS250i

BEEP HIGH

BEEP MEDIUM*

BEEP LOW

BEEP OFF

Reading Mode

Trigger*

Continuous

Auto-Sensing

Vibration

Gives haptic feedback on successful scan (or wake from sleep).

Vibration Off*

Vibration On

*Default

Smartphone/Tablet Connection

Getting Connected - iOS & Android

1. Press the trigger for 1 second to power up the scanner.
2. Scan below configuration barcode to clear last pairing record.

. E031$

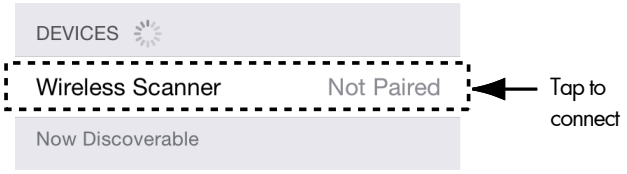
Disconnect

3. Scan below configuration barcode; the scanner will emit several beeps.

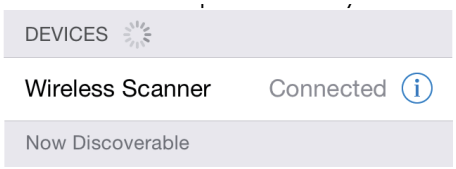
. E043$

BT mode - HID

4. Select “Wasp Bar/Wireless Scanner” from discovered device list.

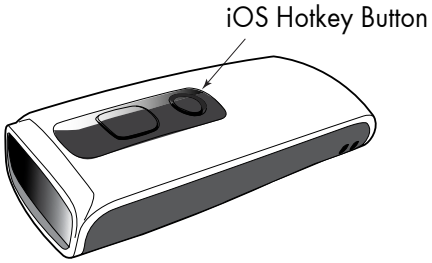


5. The scanner will beep twice to verify the connection.



Smartphone/Tablet Touch Keyboard

Touch Keyboard - iOS

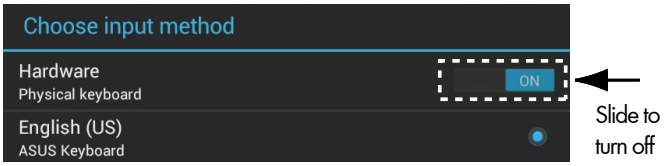


To toggle iOS Touch Keyboard, please press this button.

Touch Keyboard - Android

While connected with the scanner, the Touch Keyboard on the Android smartphone or tablet might disappear. To resolve this issue, please change settings on Android device with below steps:

1. Enter “Settings”
2. Enter “Language & input”
3. Tap on “Default keyboard”
4. Turn off “Physical keyboard”, or Turn on “On-screen keyboard” and the Touch Keyboard will function properly again.



Set Scanner ID

To customize your own Bluetooth device name for the wireless scanner, please follow below steps:

STEP 1

Default Wireless ID

.B022$

STEP 2

Set Wireless ID

.B023$

STEP 3

Scan up to 16 alphanumeric characters from Full ASCII Table (GROUP 46-52) as your desired ID name.

STEP 4

Set Wireless ID

.B023$

STEP 5

Scan a desired BT mode in Interface Settings (page 11) to complete the configuration.

*Note:
1. If you have connected the scanner with the host BEFORE customizing your Bluetooth device name, please remove the device and create a new connection to make sure device name is refreshed. For PC, it is recommended to restart the Bluetooth adaptor in order to refresh device name.
2. At Step 3, the scanner will beep three times as an alert if more than 16 characters are entered.
3. To reset the Bluetooth device name to default ("WASP BARCODE"), please simply do Step 1 & 5, skipping Step 2 to 4.

Interblock Delay

0ms *

10ms

50ms

100ms

200ms

500ms

Intercharacter Delay

140us *

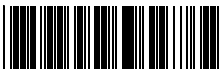
500us

1ms

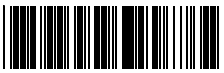
4ms

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.

.C010$	**ENGLISH*** **(USA)**	JAPAN (106 key)	.C009$
.C018$	ENGLISH (UK)	CANADIAN (FRENCH)	.C025$
.C012$	FRENCH	CANADIAN (TRADITIONAL)	.C034$
.C011$	GERMAN	NORWEGIAN	.C029$
.C014$	ITALIAN	SWEDISH	.C026$
.C013$	SPANISH	PORTUGUESE	.C031$
.C017$	CZECH (QWERTY)	BELGIAN (AZERTY)	.C030$
.C022$	CZECH (QWERTZ)	DUTCH	.C028$
.C021$	HUNGARIAN (QWERTZ)	DANISH	.C027$
.C024$	HUNGARIAN (101 KEY)	SLOVAK	.C032$
.C016$	SWISS (GERMAN)	BRAZILIAN (PORTUGUESE)	.C033$
.C023$	SWISS (FRENCH)	ALT CODE	.C015$

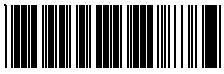
The 'Preamble/Postamble' configuration is used to add a prefix or suffix set of characters to the barcode value. Up to 8 characters may be added for each option separately. Preamble and postamble characters can function concurrently, but need to be configured separately.

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 33-36 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*

NONE

LF

SPACE

CR + LF

TAB

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 8 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 8 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 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 *)

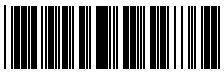
Maximum Length (48 *)

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 8 for information on setting the minimum and maximum lengths.

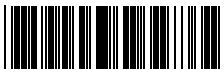
Enable

Disable *



Check Digit Verify And Send *

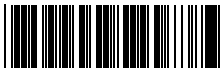
Check Digit Verify And Do Not Send



Check Digit Double MOD 10

Check Digit Double 11 Plus MOD 10

Check Digit Single MOD 10



Minimum Length (6 *)

Maximum Length (48 *)

*Default

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 8 for information on setting the minimum and maximum lengths.

Enable Code 128 *

Minimum Length (5 *)

Disable Code 128

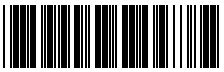
Maximum Length (48 *)

*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 8 for information on setting the minimum and maximum lengths.

Codabar Enable *

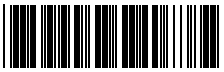


Codabar Disable

Send Start/Stop *

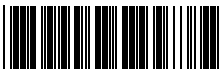
Do Not Send Start/Stop

Check Digit Do Not Verify *

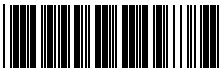


Check Digit Verify And Send

Check Digit Verify And Do Not Send



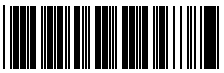
Minimum Length (6 *)



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 *

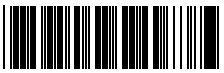


UPC-A Disable

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 *

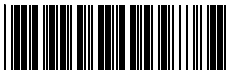
2 Digit Supplement Enable

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 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 *

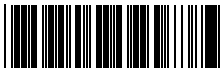
Do Not Send Check Digit

ISBN Enable

ISBN Disable *

*Default

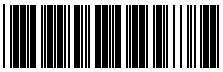
This option enables the two and five digit supplements for the UPC and EAN/JAN barcode symbologies.



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 WWS250i Scanner and the internal Bluetooth adaptor. Scanner LED light will turn blue when attempting to connect/reconnect via Bluetooth, LED will then turn green and blink to indicate successful pairing.

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.

Set Minute (Range 00-60)

Set Second (Range 00-60)

The timeout is 3 minutes by default, and is programmable to the second and minute, ranging from 10 seconds (00:10) to 60 minutes and 60 seconds (60:60)

For example, to set the timeout as 5 minutes 30 seconds:
1. Scan [Set Minute]
2. Scan [0] & [5] on below numeric barcode table.
(Range: 00-60)
3. Scan [Set Minute]
4. Scan [Set Second]
5. Scan [3] & [0] on below numeric barcode table.
(Range: 00-60)
6. Scan [Set Second]

Disable Timeout

Numeric Barcodes

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 22 to enable specific symbologies.

Code 39*

Code 93

Interleaved 2 of 5 *

Codabar *

Code 128*

MSI/Plessey

UPC-A*

UPC-A
w/5 digit supplement

UPC-A
w/2 digit supplement

UPC-E*

UPC-E
w/5 digit supplement

UPC-E
w/2 digit supplement

*Default

EAN

EAN/JAN-13*

EAN/JAN-13
w/5 digit supplement

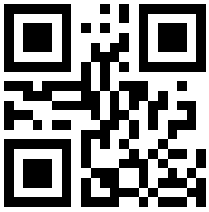
EAN/JAN-13
w/2 digit supplement

EAN/JAN-8*

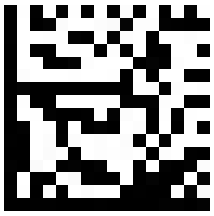
EAN/JAN-8
w/5 digit supplement

EAN/JAN-8
w/2 digit supplement

QR CODE
Value: ABCDEFG1234567



DATAMATRIX
Value: ABCDEFG1234567



*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


RS


US


SP


!


“


#


$


%


&


‘


(


)


*


+


,


-


.


/


0


1


2


3


4


5


6


7


8


9


:


;


<


=


>


?


J


U


@


K


V


A


L


W


B


M


X


C


N


Y


D


O


Z


E


P


[


F


Q


\


G


R


]


H


S


^


I


T


_


`


k


v


a


l


w


b


m


x


c


n


y


d


o


z


e


p


{


f


q


|


g


r


}


h


s


~


i


t


DEL


j


u


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

SPECIFICATIONS

OPTIC & PERFORMANCE	Light source: White LED with CCT 5000k
	Scan Rate: 30 frames/sec
	Resolution: 5mil/0.127mm (Code39, PCS=90%)
	Scan Angle: Horizontal: 37.8° Vertical: 28.8°
	Print Contrast: 45%
	D.O.F. (Environment: 800 lux): 5 Mil Code39: 50 ~ 120mm, 20 Mil Code39: 75 ~ 355mm, 13 Mil UPC-A: 65 ~ 225mm, 6.7 Mil PDF417: 60 ~ 115mm, 10 Mil DataMatrix: 60 ~ 90mm, 20 Mil QR Code: 50 ~ 215mm
PHYSICAL CHARACTERISTICS	Dimension: 1.67in W x 4.02 L x 0.85 H (W42.5xL102xH21.5 mm)
	Weight: 2.47oz. (70g)
	Cable: 5ft./1.5M (Micro USB cable)
POWER	Operation Voltage: 3.7 VDC ± 5%
	Working Current: < 330mA
	Standby Current: < 45mA
	Battery: 3.7 V, 1000mAh, Lithium batter
	Number of Scan (per full charge): > 7600 scans, (1 scan/5 secs, Bluetooth connected)
CONNECTIVITY	Radio: Bluetooth 2.1 + EDR (Class2)
	Range: 30ft./10m (line of sight)
	Interface/Profile: BT (SPP), BT (HID), USB (HID), USB (VCP)
USER ENVIRONMENT	Operating Temperature: -14°F-104°F (-10~40°C)
	Storage Temperature: -4°F-149°F (-20~65°C)
	Humidity: 0%~95% RH (Non-condensing)
	Drop Durability: 5ft./1.5M
	Sealing: IP55
	1D Symbologies: Codabar, Code 11, Code 32(PARAF), Code 128, Code 2 of 5, Code 39, Code 93, EAN/JAN-13, EAN/JAN 8, EAN-UCC Emulation, IATA Code 2 of 5, Interleaved 2 of 5, Matrix 2 of 5, MSI, GS1 DataBar, TCIF Linked Code 39, UPC-A, UPC E, UPC-A/EAN-13 with Extended coupon Code, Coupon GS1, GS1codebar
	2D Symbologies: Aztec Code, Codablock A, Codablock F, Data Matrix, EAN-UCC Composite Codes, MaxiCode, MicroPDF417, PDF417, QR Code, Micro QR Code, Chinese Sensible(Han Xin) code
REGULATORY	EMC: FCC - Part15B, Part15C, CE - EN 301489-1-1, EN 300328, EN 60950-1
	Safety: IEC62471

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.

If you experience any problems with the Wasp WWS250i 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.

Q: How do I change the terminator to a Tab?
A: Scan the "Tab" barcode on page 20.

Q: How do I remove the terminator?
A: Scan the "None" barcode on page 20.

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 22.

General	Description
.A001$	**Default**
.A007$	**Check Version**
.A002$	**Enable All Code**
.A003$	**Disable All Code**
.P023$	**Exit Triple Setting**
Code 39 (Incl. Code 32 - PARAF)	
.G008$	**Code 39 Enable** Default
.G009$	**Code 39 Disable**
.G003$	**Code 39 – Disable CDV** Default
.G004$	**Code 39 – CDV & Send CD**
.G005$	**Code 39 – CDV & Not Send CD**
.G014$	**Code 39 – Start/Stop Send** Default
.G015$	**Code 39 – Start/Stop Not Send**
.G006$	**Code 39 – Min Length** (Triple setting, range 01~48) Default: 01
.G007$	**Code 39 – Max Length** (Triple setting, range 01~48) Default:48
.P005$	**Set ID - Code 39** (Triple setting, range 0~2 characters) Default: Null
.G001$	**Full ASCII Code 39 Enable**
.G002$	**Full ASCII Code 39 Disable** Default
.P008$	**Set ID - Full ASCII Code 39** (Triple setting, range 0~2 characters) Default: Null
.K010$	**Code 32 Enable**

.K011$	**Code 32 Disable** Default
.P011$	**Set ID - Code 32** (Triple setting, range 0~2 characters) Default: Null
Codabar	
.I001$	**Codabar Enable** Default
.I002$	**Codabar Disable**
.I005$	**Codabar – Disable CDV** Default
.I006$	**Codabar – CDV & Send CD**
.I007$	**Codabar – CDV & Not Send CD**
.I003$	**Codaber – Send Start/Stop**
.I004$	**Codabar – Not Send Start/Stop** Default
.I032$	**Symbol Concatenation Off** Default
.I031$	**Symbol Concatenation On**
.I029$	**Symbol Concatenation Require**
.I008$	**Codabar – Min Length** (Triple setting, range 02~60) Default: 04
.I009$	**Codabar – Max Length** (Triple setting, range 02~60) Default: 60
.P007$	**Set ID – Codabar** (Triple setting, range 0~2 characters) Default: Null
Interleaved 2 of 5	
.J001$	**Interleaved 2 of 5 Enable** Default
.J002$	**Interleaved 2 of 5 Disable**
.J003$	**Interleaved 2 of 5 – Disable CDV** Default
.J004$	**Interleaved 2 of 5 – CDV & Send CD**

.J005$	**Interleaved 2 of 5 – CDV & Not Send CD**
.J006$	**Interleaved 2 of 5 – Min Length** (Triple setting, range 02~80) Default: 04
.J007$	**Interleaved 2 of 5 – Max Length** (Triple setting, range 02~80) Default: 80
.P006$	**Set ID - Interleaved 2 of 5** (Triple setting, range 0~2 characters) Default: Null
NEC 2 of 5	
.J033$	**NEC 2 of 5 Enable** Default
.J034$	**NEC 2 of 5 Disable**
.J035$	**NEC 2 of 5 – Disable CDV** Default
.J036$	**NEC 2 of 5 – CDV & Send CD**
.J037$	**NEC 2 of 5 – CDV & Not Send CD**
.J038$	**NEC 2 of 5 – Min Length** (Triple setting, range 02~80) Default: 04
.J039$	**NEC 2 of 5 – Max Length** (Triple setting, range 02~80) Default: 80
.P028$	**Set ID - NEC 2 of 5** (Triple setting, range 0~2 characters) Default: Null
IATA 2 of 5	
.N017$	**IATA Code Enable**
.N018$	**IATA Code Disable** Default
.N022$	**IATA Code – Min Length** (Triple setting, range 01~80) Default: 04
.N023$	**IATA Code – Max Length** (Triple setting, range 01~80) Default: 80
.P021$	**Set ID - IATA Code** (Triple setting, range 0~2 characters) Default: Null

Matrix 2 of 5	
.M010$	**Matrix 2 of 5 Enable**
.M011$	**Matrix 2 of 5 Disable** Default
.M015$	**Matrix 2 of 5 – Min Length** (Triple setting, range 01~80) Default: 04
.M016$	**Matrix 2 of 5 – Max Length** (Triple setting, range 01~80) Default: 80
.P017$	**Set ID - Matrix 2 of 5** (Triple setting, range 0~2 characters) Default: Null
Industrial 2 of 5	
.N001$	**Industrial 2 of 5 Enable**
.N002$	**Industrial 2 of 5 Disable** Default
.N006$	**Industrial 2 of 5 – Min Length** (Triple setting, range 01~48) Default: 04
.N007$	**Industrial 2 of 5 – Max Length** (Triple setting, range 01~48) Default: 48
.P018$	**Set ID - Industrial 2 of 5** (Triple setting, range 0~2 characters) Default: Null
Code-11 2 of 5	
.I010$	**Code 11 Enable**
.I011$	**Code 11 Disable** Default
.I042$	**Code 11 – CDV 1 digit**
.I043$	**Code 11 – CDV 2 digits** Default
.I015$	**Code 11– Min Length** (Triple setting, range 01~80) Default: 04
.I016$	**Code 11– Max Length** (Triple setting, range 01~80) Default: 80
.P009$	**Set ID - Code 11** (Triple setting, range 0~2 characters) Default: Null
MSI-Plessey	
.L001$	**MSI Code Enable** Default

.L002$	**MSI Code Disable**
.L003$	**MSI Code– Disable CDV & Not Send CD**
.L004$	**MSI Code – Single Mod 10 & Not Send CD** Default
.L009$	**MSI Code – Single Mod 10 & Send CD**
.L024$	**MSI Code –Double Mod 10 & Not Send CD**
.L007$	**MSI Code– Double Mod 10 & Send CD**
.L025$	**MSI Code– Check Digits MOD 11 & Not Send CD**
.L008$	**MSI Code– Check Digits MOD 11 & Send CD**
.L005$	**MSI Code– Min Length** (Triple setting, range 04~48) Default: 04
.L006$	**MSI Code– Max Length** (Triple setting, range 04~48) Default: 48
.P014$	**Set ID - MSI Code** (Triple setting, range 0~2 characters) Default: Null
EAN-13	
.H013$	**EAN-13 Enable** Default
.H014$	**EAN-13 Disable**
.H017$	**EAN-13 Check digit send** Default
.H018$	**EAN-13 Check digit not send**
.H049$	**ISBN On**
.H050$	**ISBN Off** Default (預設)
.H025$	**EAN-13 +5 On**
.H026$	**EAN-13 +5 Off** Default
.H027$	**EAN-13 +2 On**

.H028$	**EAN-13 +2 Off** Default
.H041$	**EAN-13 Add a Space On** Default
.H042$	**EAN-13 Add a Space Off**
.H058$	**EAN-13 Addenda required On**
.H057$	**EAN-13 Addenda required Off** Default
.P001$	**Set ID - EAN-13** (Triple setting, range 0~2 characters) Default: Null
UPC-A	
.H001$	**UPC-A Enable** Default
.H002$	**UPC-A Disable**
.H005$	**UPC-A Check digit send** Default
.H006$	**UPC-A Check digit not send**
.H077$	**UPC-A Number System On** Default
.H078$	**UPC-A Number System Off**
.H033$	**UPC-A +5 On**
.H034$	**UPC-A +5 Off** Default
.H035$	**UPC-A +2 On**
.H036$	**UPC-A +2 Off** Default
.H045$	**UPC-A Add a Space On** Default
.H046$	**UPC-A Add a Space Off**
.H060$	**UPC-A Addenda required On**
.H059$	**UPC-A Addenda required Off** Default

.H068$	**UPC-A Expand to EAN-13 Enable**
.H067$	**UPC-A Expand to EAN-13 Disable** Default
.P004$	**Set ID - UPC-A** (Triple setting, range 0~2 characters) Default: Null
EAN-8	
.H019$	**EAN-8 Enable** Default
.H020$	**EAN-8 Disable**
.H023$	**EAN-8 Check digit send** Default
.H024$	**EAN-8 Check digit not send**
.H029$	**EAN-8 +5 On**
.H030$	**EAN-8 +5 Off** Default
.H031$	**EAN-8 +2 On**
.H032$	**EAN-8 +2 Off** Default
.H043$	**EAN-8 Add a Space On** Default
.H044$	**EAN-8 Add a Space Off**
.H062$	**EAN-8 Addenda required On**
.H061$	**EAN-8 Addenda required Off** Default
.P002$	**Set ID - EAN-8** (Triple setting, range 0~2 characters) Default: Null
UPC-E	
.H007$	**UPC-E Enable** Default
.H008$	**UPC-E Disable**
.H011$	**UPC-E Check digit send** Default

.H012$	**UPC-E Check digit not send**
.H079$	**UPC-E Number System On** Default
.H080$	**UPC-E Number System Off**
.H037$	**UPC-E +5 On**
.H038$	**UPC-E +5 Off** Default
.H039$	**UPC-E +2 On**
.H040$	**UPC-E +2 Off** Default
.H047$	**UPC-E Add a Space On** Default
.H048$	**UPC-E Add a Space Off**
.H056$	**UPC-E Addenda required On**
.H055$	**UPC-E Addenda required Off** Default
.H053$	**UPC-E Expand to UPC-A Enable**
.H054$	**UPC-E Expand to UPC-A Disable** Default
.H065$	**UPC-E1 On**
.H066$	**UPC-E1 Off** Default
.P003$	**Set ID - UPC-E** (Triple setting, range 0~2 characters) Default: Null
Code 93	
.G010$	**Code 93 Enable** Default
.G011$	**Code 93 Disable**
.G012$	**Code 93 – Min Length** (Triple setting, range 01~80) Default: 01
.G013$	**Code 93 – Max Length** (Triple setting, range 01~80) Default: 80

.P013$	**Set ID - Code 93** (Triple setting, range 0~2 characters) Default: Null
Code 128	**Incl. ISBT-128**
.J010$	**Code 128 Enable** Default
.J011$	**Code 128 Disable**
.J040$	**ISBT Concatenation Enable**
.J041$	**ISBT Concatenation Disable** Default
.J012$	**Code 128 – Min Length** (Triple setting, range 01~80) Default: 01
.J013$	**Code 128 – Max Length** (Triple setting, range 01~80) Default: 80
.P010$	**Set ID - Code 128** (Triple setting, range 0~2 characters) Default: Null
GS1-128	**@EAN-128**
.M001$	**GS1-128 Enable**
.M002$	**GS1-128 Disable** Default
.M019$	**GS1-128 – Min Length** (Triple setting, range 01~80) Default: 01
.M020$	**GS1-128 – Max Length** (Triple setting, range 01~80) Default: 80
.P016$	**Set ID – GS1-128** (Triple setting, range 0~2 characters) Default: Null
GS1-Databar	
.N032$	**GS1-Databar Enable** Default
.N033$	**GS1-Databar Disable**
.P024$	**Set ID – GS1-Databar** (Triple setting, range 0~2 characters) Default: Null
.N010$	**Databar Limited Enable** Default
.N011$	**Databar Limited Disable**

.P019$	**Set ID - Databar –Limited** (Triple setting, range 0~2 characters) Default: Null
.N028$	**Databar - Expanded Stacked Enable** Default
.N029$	**Databar - Expanded Stacked Disable**
.N030$	**Databar - Expanded– Min Length** (Triple setting, range 04~74) Default: 04
.N031$	**Databar - Expanded– Max Length** (Triple setting, range 04~74) Default: 74
.P020$	**Set ID - Databar –Expanded** (Triple setting, range 0~2 characters) Default: Null
QR Code	**@incl. Micro QR**
.G025$	**Enable QR Code** Default
.G026$	**Disable QR Code**
.G029$	**QR Code Set Min Length** (Triple setting, range 1~4000) Default: 01
.G030$	**QR Code Set Max Length** (Triple setting, range 1~4000) Default: 4000
.P026$	**Set ID – QR Code** (Triple setting, range 0~2 characters) Default: Null
Data-Matrix	
.G031$	**Enable Data Matrix** Default
.G032$	**Disable Data Matrix**
.G033$	**Data Matrix Set Min Length** (Triple setting, range 1~3116) Default: 01
.G034$	**Data Matrix Set Max Length** (Triple setting, range 1~3116) Default: 3116
.P027$	**Set ID – Data Matrix** (Triple setting, range 0~2 characters) Default: Null
PDF-417	
.G021$	**PDF417 Enable** Default
.G022$	**PDF417 Disable**
.G023$	**PDF417 Set Min Length** (Triple setting, range 1~2750) Default: 01

.G024$	**PDF417 Set Max Length** (Triple setting, range 1~2750) Default: 2750 ◦
.P025$	**Set ID – PDF417** (Triple setting, range 0~2 characters) Default: Null
Micro-PDF	
.G039$	**Micro-PDF Enable**
.G040$	**Micro-PDF Disable** Default
.G041$	**Micro-PDF Set Min Length** (Triple setting, range 1~366) Default: 01
.G042$	**Micro-PDF Set Max Length** (Triple setting, range 1~366) Default: 366
.P029$	**Set ID – MicroPDF** (Triple setting, range 0~2 characters) Default: Null
MaxiCode	
.G043$	**MaxiCode Enable** Default
.G044$	**MaxiCode Disable**
.G045$	**MaxiCode Set Min Length** (Triple setting, range 1~150) Default: 01 ◦
.G046$	**MaxiCode Set Max Length** (Triple setting, range 1~150) Default: 150 ◦
.P030$	**Set ID –MaxiCode** (Triple setting, range 0~2 characters) Default: Null
Codablock-A	
.G047$	**Codablock-A Enable**
.G048$	**Codablock-A Disable** Default
.G049$	**Codablock-A Set Min Length** (Triple setting, range 1~600) Default: 01
.G050$	**Codablock-A Set Max Length** (Triple setting, range 1~600) Default: 600
.P031$	**Set ID –Codablock-A** (Triple setting, range 0~2 characters) Default: Null
Codablock-F	
.G051$	**Codablock-F Enable**

.G052$	**Codablock-F Disable** Default
.G053$	**Codablock-F Set Min Length** (Triple setting, range 1~2048) Default: 01
.G054$	**Codablock-F Set Max Length** (Triple setting, range 1~2048) Default: 2048
.P032$	**Set ID –Codablock-F** (Triple setting, range 0~2 characters) Default: Null
Aztec	
.G055$	**Aztec Enable** Default
.G056$	**Aztec Disable**
.G057$	**Aztec Set Min Length** (Triple setting, range 1~3832) Default: 01
.G058$	**Aztec Set Max Length** (Triple setting, range 1~3832) Default: 3832
.P033$	**Set ID –Aztec** (Triple setting, range 0~2 characters) Default: Null
Han-Xin	
.G059$	**Han-Xin Enable**
.G060$	**Han-Xin Disable** Default
.G061$	**Han-Xin Set Min Length** (Triple setting, range 1~4000) Default: 01
.G062$	**Han-Xin Set Max Length** (Triple setting, range 1~4000) Default: 4000
.P034$	**Set ID –Han-Xin** (Triple setting, range 0~2 characters) Default: Null
China Post	
.K001$	**China Post Enable**
.K002$	**China Post Disable** Default
.K006$	**China Post Set Min Length** (Triple setting, range 2~80) Default: 04
.K007$	**China Post Set Max Length** (Triple setting, range 2~80) Default: 80
.P012$	**Set ID –China Post** (Triple setting, range 0~2 characters) Default: Null

Korea Post	
.K018$	**Korea Post Enable**
.K019$	**Korea Post Disable** Default
.K020$	**Korea Post – CDV & Send CD**
.K021$	**Korea Post – CDV & Not Send CD** Default
.K022$	**Korea Post Set Min Length** (Triple setting, range 2~80) Default: 04
.K023$	**Korea Post Set Max Length** (Triple setting, range 2~80) Default: 48
.P035$	**Set ID –Korea Post** (Triple setting, range 0~2 characters) Default: Null
Other Postal	
.K024$	**Other Postal Code Disable** Default
.K025$	**Select Other Postal Code Mode**
.K026$	**Australian Post Interpretation** Default: 0
.K027$	**Planet Code – CDV & Send CD**
.K028$	**Planet Code – CDV & Not Send CD** Default
.K029$	**Postnet Code – CDV & Send CD**
.K030$	**Postnet Code – CDV & Not Send CD** Default
.P036$	**Set ID –Australian Post** (Triple setting, range 0~2 characters) Default: Null
.P037$	**Set ID –British Post** (Triple setting, range 0~2 characters) Default: Null
.P038$	**Set ID –Canadian Post** (Triple setting, range 0~2 characters) Default: Null
.P039$	**Set ID –Japanese Post** (Triple setting, range 0~2 characters) Default: Null
.P040$	**Set ID –KIX (Netherlands) Post** (Triple setting, range 0~2 characters) Default: Null

.P041$	**Set ID –InfoMail Code** (Triple setting, range 0~2 characters) Default: Null
.P042$	**Set ID –Intelligent Code** (Triple setting, range 0~2 characters) Default: Null
.P043$	**Set ID –Planet Code** (Triple setting, range 0~2 characters) Default: Null
.P044$	**Set ID –Postal-4i Code** (Triple setting, range 0~2 characters) Default: Null
.P045$	**Set ID –Postnet Code** (Triple setting, range 0~2 characters) Default: Null
Symbologies Code ID	
.A009$	**Disable Code ID** Default
.A008$	**Factory ID On**
.A014$	**AIM ID On.**
.A015$	**Set ID On**
Setup Code	
.B015$	**Setup Code On** Default
.B016$	**Setup Code Off**
Interface	
.C006$	**Interface USB-Virtual COM**
.C008$	**Interface USB-HID Keyboard**
.C035$	**Interface USB-Mass Storage**
.E043$	**BT mode – HID** Default
.E042$	**BT mode – SPP**
.E051$	**BT mode – For MT600 BT Dongle**
.E040$	**BT mode - HID (emulate mouse device)**
.E041$	**BT mode - HID plug & play (For MT600 BT Dongle)**

Bluetooth	
.E046$	**Bluetooth BCR – Disconnect (Keep pairing record)**
.E031$	**Bluetooth BCR – Disconnect (Delete pairing record)**
.E032$	**Bluetooth BCR – Pin code setting Enter** (Triple setting)
.E033$	**Bluetooth BCR – Pin code setting Exit** (Triple setting)
.E044$	**Bluetooth BCR - iPhone / iPad KeyPad control**
.B024$	**Bluetooth BCR – Set PIN Code (**Triple setting, SPP mode only**)**
.B022$	**Bluetooth BCR - Clear User Define ID to Default "Wasp Barcode"**
.B023$	**Bluetooth BCR - Set User Define ID (**Triple setting) (Max 16 Chars).
.B021$	**Bluetooth BCR - Power Off Function Disable**
.B030$	**Bluetooth BCR - Power Off delay time 0~60 min (**Triple setting) Default: 3 sec
.B029$	**Bluetooth BCR - Power Off delay time 0~60 sec (**Triple setting) Default: 00
Keyboard Layout	
.C010$	**Keyboard Layout - USA (Qwerty)** Default
.C015$	**Keyboard Layout - Universal Code**
.C018$	**Keyboard Layout - UK (Qwerty)**
.C011$	**Keyboard Layout - German (Qwertz)**
.C012$	**Keyboard Layout - French (Azerty)**
.C009$	**Keyboard Layout - Japan (106 Key , Qwerty)**
.C013$	**Keyboard Layout - Spanish (Qwerty)**
.C014$	**Keyboard Layout - Italian (Qwerty)**

.C016$	**Keyboard Layout - Swiss (German , Qwertz)**
.C017$	**Keyboard Layout - Czech (Qwerty)**
.C021$	**Keyboard Layout - Hungary (Qwertz)**
.C022$	**Keyboard Layout – Czech (Qwertz)**
.C023$	**Keyboard Layout – Swiss (French, Qwertz)**
.C024$	**Keyboard Layout – Hungarian (Qwerty)**
.C025$	**Keyboard Layout – Canadian (French, Qwerty)**
.C026$	**Keyboard Layout – Swedish (Qwerty)**
.C027$	**Keyboard Layout – Danish (Qwerty)**
.C028$	**Keyboard Layout – Dutch (Qwerty)**
.C029$	**Keyboard Layout – Norwegian (Qwerty)**
.C030$	**Keyboard Layout – Belgian (French, Azerty)**
.C031$	**Keyboard Layout – Portuguese (Qwerty)**
.C032$	**Keyboard Layout – Slovak (Qwerty)**
.C033$	**Keyboard Layout – Brazilian (Qwerty)**
.C034$	**Keyboard Layout – Canadian (Traditional)**
.A005$	**Caps Lock Off** (for Keyboard / USB-HID / BT-HID) Default
.A004$	**Caps Lock On** (for Keyboard / USB-HID / BT-HID)
.A006$	**Caps Lock Auto** (for Keyboard / USB-HID / BT-HID)
.D017$	**Numeric Key On**

.D018$	**Numeric Key Off** Default
.C019$	**Function Code Enable** (for Keyboard & USB-HID) Default
.C020$	**Function Code Disable** (for Keyboard & USB-HID)
.D025$	**Enable HT/CR/ESC Output as TAB/Enter/Escape**
.D026$	**Disable HT/CR/ESC Output as TAB/Enter/Escape** Default
Terminator	
.D010$	**Terminator – None** Default
.D011$	**Terminator - LF**
.D012$	**Terminator - CR**
.D013$	**Terminator - CR+LF**
.D014$	**Terminator - TAB**
.D015$	**Terminator - Space**
.D016$	**Terminator - ESC**
.E029$	**RS232 BCC Char On**
.E030$	**RS232 BCC Char Off** Default
Inter block & Character Delay	
.B001$	**Inter block Delay 0 ms** Default
.B002$	**Inter block Delay 10 ms**
.B003$	**Inter block Delay 50 ms**
.B004$	**Inter block Delay 100 ms**
.B005$	**Inter block Delay 200 ms**

.B006$	Inter block Delay 500 ms
.B010$	Inter character Delay 140 us Default
.B011$	Inter character Delay 500 us
.B012$	Inter character Delay 1 ms
.B013$	Inter character Delay 4 ms
.B014$	Inter character Delay 16 ms
Beep Tone	
.F012$	Beep Tone Off
.F018$	(2.7 KHz) Beep Medium Default
.F019$	(2.7 KHz) Beep High
.F022$	(2.7 KHz) Beep Low
.F026$	Beep Tone – Good Read Time Setting (Triple setting, 40~200 ms) Default: 150 ms
.F023$	Bluetooth BCR – Standard Beep tone Default
.F024$	Bluetooth BCR – Warning Beep tone only
.F025$	Bluetooth BCR – Disable Beep tone
Vibration	
.D034$	Vibration – Enable
.D035$	Vibration – Disable Default
Reading Mode	
.F002$	Trigger Mode Default
.F005$	Continuous Mode

.F007$	**Auto Sensing Mode**
.F060$	**Mobile Phone Mode**
Postamble & Preamble	
.A011$	**Clear Pre/ Post amble**
.A012$	**Preamble** (Triple setting , range 0~16 characters) Default: Null
.A013$	**Post amble** (Triple setting , range 0~16 characters) Default: Null
Memory Setting	
.R005$	**Memory BCR – Delete last record data**
.R011$	**Memory BCR – Set Field Output Sequence (**Triple setting)
.R010$	**Memory BCR – Set Field Separator (**Triple setting) Default: ","
.R008$	**Memory BCR – Set Date Format**
.R009$	**Memory BCR – Set Time Format**
Set Date & Time	
.R006$	**Scanner – Set Date (YY-MM-DD) (**Triple setting) Format: yyyy/mm/dd
.R007$	**Scanner – Set Time (HH:MM:SS) (**Triple setting) Format: hh:mm:ss