



Wasp WWS750 2D Duraline Wireless Scanner



Quick Reference Guide

Wasp Barcode Technologies

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Design patents: AU344427, AU344428, AU344429, EP001970237, EP002109371, TWD159476, TWD159477, TWD160254, TWD160255, USD682277, USD702238, USD716818, ZL201230284676.X, ZL201330082835.2

Utility patents: EP0996284B1, EP0999514B1, EP1114390B1, EP1128315B1, EP1172756B1, EP1396811B1, EP1413971B1, EP1816585B1, EP1828957B1, EP1873886B1, EP2275966B1, EP2517148B1, EP2521068, EP2649555B1, JP4435343B2, US6478224, US6512218, US6513714, US6561427, US6808114, US6877664, US6997385, US7053954, US7234641, US7387246, US7721966, US7948214, US8113428, US8245926, US8561906, US8743263, US8888003, US8915443, US9430689, US9482793, ZL200780030808.2, ZL200880132595.9, ZL200980163411.X

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- END -

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Wasp WS750

Description

The WWS750 series is the first handheld scanners family on the market capable of reading digital watermarks, including Digimarc® Barcode. The Wasp WWS750 is a feature-rich and rugged area imager reader. It is offered in several different models to better fit the different needs of each customer.

The table below shows the unique features of each model:

Model P/N	Optical feature
WWS750	Standard optic, standard and low density codes

General Features


Omni-directional Operating	To read a symbol or capture an image, you simply aim the reader and pull the trigger. Since the Wasp WWS750 is a powerful omni-directional reader, the orientation of the symbol is not important.
Decoding	Thanks to powerful algorithms, Wasp WWS750 reader reliably decodes all major 1D (linear) barcodes, 2D stacked codes (such as PDF417), 2D matrix symbols (such as DataMatrix), postal codes (such as POSTNET, PLANET). The data stream — acquired from decoding a symbol — is rapidly sent to the host. The reader is immediately available to read another symbol.
Formatting and Concatenating	The string of a decoded code may be processed according to either a simple or advanced data formatting and be concatenated.
Imaging	Wasp WWS750 reader can also function as a camera by capturing entire images (valid only for RS-232 and USB-COM on the Base Station).
Autoscanning	An autoscan command causes the reader to scan continuously and to monitor the central zone of its reading area.

Flash Memory	Flash technology allows you to upgrade the Wasp WWS750 reader as new symbologies are supported or as new features become available.
USA Driver License Parsing	The reader can be set up to select and output a subset of data elements from USA Driver License PDF417 barcodes. This feature can be enabled using the barcodes in the USA Driver License Parsing Quick Reference Guide (QRG), available on the Wasp website.

Using the Wasp WWS750

Wasp WWS750 reader normally functions by capturing and decoding bar codes. The reader is equipped with an internal Motionix™ motion-sensing function which activates the aiming system on device motion. The intelligent aiming system indicates the field of view which should be positioned over the bar code:

Table 1. Aiming System

Aimer pattern


The field of view indicated by the aiming system will be smaller when the reader is closer to the bar code and larger when it is farther from the code. Symbologies with smaller bars or elements (mil size) should be read closer to the unit. Symbologies with larger bars or elements (mil size) should be read farther from the unit.

If the entire bar code is within the aiming field, you will get a good read. Successful reading is signaled by an audible tone plus a good-read green spot LED indicator.

Refer to the Wasp WWS750 Product Reference Guide (PRG) for more information about this feature and other programmable settings.

Installing the Battery Pack

To install, charge and/or do any other action on the battery, follow the instructions in this manual.



NOTE

To charge the Battery Pack, See “Charging the Batteries” on page 6.

Wasp recommends annual replacement of rechargeable battery packs to ensure maximum performance.



WARNING

Do not discharge the battery using any device except for the scanner. When the battery is used in devices other than the designated product, it may damage the battery or reduce its life expectancy. If the device causes an abnormal current to flow, it may cause the battery to become hot, explode or ignite and cause serious injury.

Lithium-ion battery packs may get hot, explode or ignite and cause serious injury if exposed to abusive conditions. Be sure to follow the safety warnings that follow:

- Do not place the battery pack in fire or heat.
- Do not connect the positive terminal and negative terminal of the battery pack to each other with any metal object (such as wire).
- Do not carry or store the battery pack together with metal objects.



WARNING

- Do not pierce the battery pack with nails, strike it with a hammer, step on it or otherwise subject it to strong impacts or shocks.
- Do not solder directly onto the battery pack.
- Do not expose the battery pack to liquids, or allow the battery to get wet.
- Do not apply voltages to the battery pack contacts.

In the event the battery pack leaks and the fluid gets into your eye, do not rub the eye. Rinse well with water and immediately seek medical care. If left untreated, the battery fluid could cause damage to the eye.



CAUTION

Always charge the battery at 32° – 113°F (0° - 45°C) temperature range.

Use only the authorized power supplies, battery pack, chargers, and docks supplied by your Wasp reseller. The use of any other power supplies can damage the device and void your warranty.

Do not disassemble or modify the battery. The battery contains safety and protection devices, which, if damaged, may cause the battery to generate heat, explode or ignite.

Do not place the battery in or near fire, on stoves or other high temperature locations.

Do not place the battery in direct sunlight, or use or store the battery inside cars in hot weather. Doing so may cause the battery to generate heat, explode or ignite. Using the battery in this manner may also result in a loss of performance and a shortened life expectancy.

Do not place the battery in microwave ovens, high-pressure containers or on induction cookware.

Immediately discontinue use of the battery if, while using, charging or storing the battery, the battery emits an unusual smell, feels hot, changes color or shape, or appears abnormal in any other way.



CAUTION

Do not replace the battery pack when the device is turned on.

Do not remove or damage the battery pack's label.

Do not use the battery pack if it is damaged in any part. Battery pack usage by children should be supervised.

As with other types of batteries, Lithium-Ion (LI) batteries will lose capacity over time. Capacity deterioration is noticeable after one year of service whether the battery is in use or not. It is difficult to precisely predict the finite life of a LI battery, but cell manufacturers rate them at 500 charge cycles. In other words, the batteries should be expected to take 500 full discharge / charge cycles before needing replacement. This number is higher if partial dis-

charging / recharging is adhered to rather than full / deep discharging.

The typical manufacturer advertised useful life of LI batteries is one to three years, depending on usage and number of charges, etc., after which they should be removed from service, especially in mission critical applications. Do not continue to use a battery that is showing excessive loss of capacity, it should be properly recycled / disposed of and replaced. For most applications, batteries should be replaced after one year of service to maintain customer satisfaction and minimize safety concerns.

Collect and recycle waste batteries separately from the device in comply with European Directive 2006/66/EC, 2011/65/EU, 2002/96/EC and 2012/19/EU and subsequent modifications, US and China regulatory and others laws and regulations about the environment.

Charging the Batteries

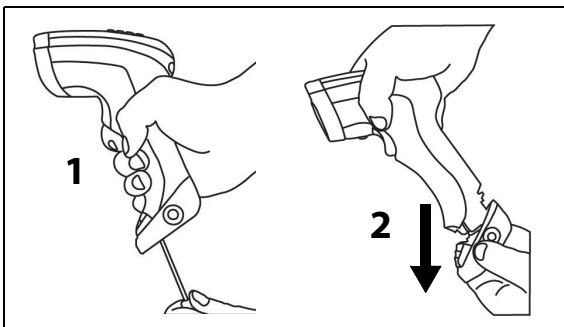
Once the WWS750-BS Base Station is powered, you can charge the reader's batteries. Place the Wasp WWS750 into the cradle. The Reader LED on the cradle/battery charger turns red.

The battery is completely charged when the Reader LED on the cradle/battery charger turns green.

Changing the Batteries

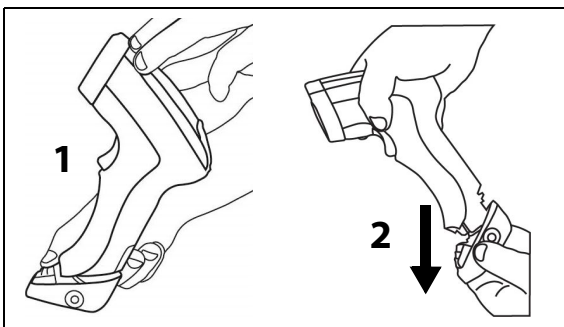
Fixed Pack Models

1. Unscrew the bottom of the handle as shown to release the battery.
2. Pull down to remove the battery.



Removable Pack models

1. Push the button at the bottom of the handle as shown to release the battery.
2. Pull down to remove the battery.





WARNING

Do not incinerate, disassemble, short terminals or expose to high temperature. Risk of fire, explosion. Use specified charger only. Risk of explosion if the battery is replaced by an incorrect type. Dispose of the batteries as required by the relevant laws in force.

Programming

The reader is factory-configured with a set of standard default features. Customize your reader through use of the programming bar codes available in the Wasp WWS750. Check the corresponding features section for your interface, and also the Data Editing and Symbologies chapters of the PRG.

Using Programming Bar Codes

This manual contains bar codes which allow you to reconfigure your reader. Some programming bar code labels, like the "Reset Default Settings" on page 9, require only the scan of that single label to enact the change.

Other bar codes require the reader to be placed in Programming Mode prior to scanning them. Scan an ENTER/EXIT bar code once to enter Programming Mode; scan the desired parameter settings; scan the ENTER/EXIT bar code again to accept your changes, which exits Programming Mode and returns the reader to normal operation.

Configure Other Settings

Additional programming bar codes are available in the PRG to allow for customizing programming features. If your installation requires different programming than the standard factory default settings, refer to the PRG.

Resetting Product Defaults

If you aren't sure what programming options are in your reader, or you've changed some options and want your custom factory settings restored, scan the bar code below to reset the reader to initial configuration. See the PRG for other options, and a listing of standard factory settings.



NOTE

Factory defaults are based on the interface type. Be sure your reader is configured for the correct interface before scanning this label.



Reset Default Settings

Set Date and Time

1. Scan the Enter/Exit Programming barcode below to set date and time.



ENTER/EXIT PROGRAMMING MODE

2. Scan the Set Date barcode + six digits for Year, Month and Day (YYMMDD) from the [Hex-Numeric Keypad](#) on page 36.



Set Date

3. Scan Set Time + six digits for Hours, Minutes and Seconds (HHMMSS) from the [Hex-Numeric Keypad](#) on page 36.



Set Time

4. Scan the Enter/Exit Programming barcode to complete.

Linking the Reader

Link Wasp RF Devices to Base

For RF devices, before configuring the interface it is necessary to link the handheld with the base.

To link the handheld and the base, press the trigger to wake up the handheld and mount it into the base. If the reader was previously linked to another base, you must first press and hold the button on the base (>5 seconds), then scan the **Unlink** bar code before re-linking to the new base.



Unlink

Linking to a Bluetooth Adapter in Serial Port Profile (Slave) Mode

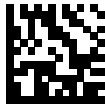
1. Install any drivers provided with the Bluetooth adapter.
2. Scan the **Enable RF Link to Server** label below to make the scanner visible to the host computer.
3. Use the host computer's Bluetooth manager to "Discover new devices" and select "Wasp Scanner." If you receive an error message, it may be necessary to disable security on the device.
4. Use an RS-232 terminal program to see incoming data on the port designated by the computer's Bluetooth manager.



Enable RF Link to Server

Linking to a Bluetooth Adapter in HID mode

1. Install any drivers provided with the Bluetooth adapter.
2. Scan the **Link to PC in HID** label below..
3. Use the host computer's Bluetooth manager to "Discover new devices" and select "Wasp Scanner." If you receive an error message, it may be necessary to disable security on the device.
4. Use a text editor to see incoming data on the port designated by the computer's Bluetooth manager.



Link to PC in HID



NOTE

The WWS750-BS can be set up to require a PIN code when connecting. If you want to set up a PIN, or when adding new equipment to a system that uses a custom security PIN, please see the PRG for information.

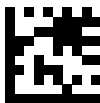
Variable PIN Code

Some Bluetooth drivers on the Host (such as WIDCOMM and BlueSoleil 8) require a Variable PIN Code. When attempting connection, the application presents a window that includes a PIN Code which is to be input using the WWS750. Please read the bar code "Variable PIN Code" and restart the sequence from step 2 above.



Variable PIN Code

When you hear the beep and see the Green LED blinking indicating the reader is waiting for an alphanumeric entry, enter the required variable PIN Code by scanning the corresponding bar codes in the 'Hex-Numeric Keypad' section at the back of this manual for alphanumeric entry. Finish by scanning the **Exit HID Variable PIN Code** label.



Exit HID Variable PIN Code

HID Country Mode

When the Reader is connected with a Bluetooth Adapter in HID mode, you may want to set the country for which your PC is localized. In order to do that, read one of the configuration command labels below.

HID COUNTRY MODE



ENTER/EXIT PROGRAMMING MODE



Country Mode = U.S.



Country Mode = Belgium



Country Mode = Britain



Country Mode = Croatia

HID COUNTRY MODE (continued)



Country Mode = Czech Republic



Country Mode = Denmark



Country Mode = France



Country Mode = French Canadian



Country Mode = Germany



Country Mode = Hungary

HID COUNTRY MODE (continued)

Country Mode = Italy



Country Mode = Japanese 106-key



Country Mode = Lithuanian



Country Mode = Norway



Country Mode = Poland



Country Mode = Portugal

HID COUNTRY MODE (continued)



Country Mode = Romania



Country Mode = Spain



Country Mode = Sweden



Country Mode = Slovakia



Country Mode = Switzerland

HID Caps Lock State

This option specifies the format in which the reader sends character data.

 ENTER/EXIT PROGRAMMING MODE
 ◆ Caps Lock State = Caps Lock OFF
 Caps Lock State = Caps Lock ON
 Caps Lock State = AUTO Caps Lock Enable

HID Alt Mode

Read the configuration command label below for the HID Alt Mode feature.



ENTER/EXIT PROGRAMMING MODE



◆ HID Alt Mode = OFF



HID Alt Mode = ON

Power Off

Scan the bar code below to shut off power to the BT handheld until the next trigger pull.



PowerOff

Reading Parameters

Move the reader toward the target and center the aiming pattern and illumination system to capture and decode the image. See [Using the Wasp WWS750 on page 2](#) for more information.

The aiming system will briefly switch off after the acquisition time, and if no code is decoded will switch on again before the next acquisition. The illuminator will remain on until the symbol is decoded.

As you read code symbols, adjust the distance at which you are holding the reader.

Good Read Green Spot Duration

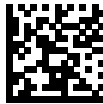
Successful reading can be signaled by a good read green spot. Use the bar codes that follow to specify the duration of the good read pointer beam after a good read.



ENTER/EXIT PROGRAMMING MODE



Disabled



◆ Short (300 ms)



Medium (500 ms)



Long (800 ms)

Digital Watermark Reading



ENTER/EXIT PROGRAMMING MODE



◆ Disable



Enable

Operating Mode

Scan Mode

The imager can be set to operate in one of several scanning modes. See the PRG for more information and settings for any of the options:

Trigger Single (Default) — When the trigger is pulled, scanning is activated until one of the following occurs:

- a programmable duration¹ has elapsed
- a label has been read
- the trigger is released

Trigger Hold Multiple — When the trigger is pulled, scanning starts and the product scans until the trigger is released or 'maximum scan on time'¹ has elapsed. Reading a label does not disable scanning. Double Read Timeout¹ prevents undesired multiple reads in this mode.

Trigger Pulse Multiple — When the trigger is pulled and released, scanning is activated until programmable duration¹ has elapsed or the trigger has been pulled again to transition to another state. Double Read Timeout¹ prevents undesired multiple reads while in this mode.

Flashing — The reader flashes¹ on and off regardless of the trigger status.

Always On — No trigger pull is required to read a bar code. Scanning is continually on. If the trigger is pulled, the reader acts as if it is in Trigger Single (Default) Mode. Double Read Timeout¹ prevents undesired multiple reads while in this mode.

Stand Mode — No trigger pull is required to read a bar code. Scanning is turned on automatically when an item is placed in reader's field of view. If the trigger is pulled, the reader acts as if it is in Single Read mode. Double Read Timeout¹ prevents undesired multiple reads while in this mode.

1. See the Product Reference Guide (PRG) for more information

Operating Mode (continued)



ENTER/EXIT PROGRAMMING MODE



◆ Scan Mode =
Trigger Single



Scan Mode = Trigger
Pulse Multiple



Scan Mode =
Trigger Hold Multiple



Scan Mode = Flashing



Scan Mode = Always On



Scan Mode = Stand Mode

Motion Aiming Control

This feature configures the ability of the scanner to Enable/Disable the Aiming system when motion is detected (Motionix™ motion-sensing technology). Scan

the Enter/Exit Programming bar code above, then either of the barcodes below.



◆ Motion Aiming Control =
Enable



Motion Aiming Control =
Disable

Pick Mode

Pick Mode is a Decoding and Transmission process where bar codes that are not within the configurable distance from the center of the aiming pattern are not acknowledged or transmitted to the host. It is active only in Trigger Single mode. If the scanner switches to a different Read Mode, Pick Mode is automatically disabled.



NOTE

This feature is not compatible with Multiple Labels Reading in a Volume. See the PRG for more information.



ENTER/EXIT PROGRAMMING MODE



◆ Pick Mode = Disable



Pick Mode = Enable

Multiple Label Reading

The reader offers a number of options for multiple label reading. See the PRG or software configuration tool for descriptions of these features and programming labels.

Technical Specifications

The following tables contain Physical and Performance Characteristics, User Environment and Regulatory information.

Item	Description
PHYSICAL CHARACTERISTICS	
Dimensions	Height: 212 mm Length: 110 mm Width: 74 mm
Weight	395 g
ELECTRICAL CHARACTERISTICS	
Battery Type	Li-Ion battery pack
Charge time for full charge from full discharge	4 hours with external power supply adapter ^a
	Typical 10 hours with Host power (in this case no supply adapter is needed) ^a
Operating autonomy (continuous reading)	30,000 reads (typical)
Cradle consumption and DC input supply range	Volt 10-30 VDC; Power <8W ^b ; Max 500mA when in host/bus powered mode ^b .

- a. Charge Times are much lower when battery is within daily typical operating condition.
- b. Typical input current measured under factory default configuration.

PERFORMANCE CHARACTERISTICS	
Light Source	LED
Roll (Tilt) Tolerance	$\pm 180^\circ$
Pitch Tolerance	$\pm 40^\circ$
Skew (Yaw) Tolerance	$\pm 40^\circ$
Print Contrast Minimum	15% minimum reflectance
Resolution	Max resolution 1D: 4 mils Max resolution 2D: 7.5 mils

DEPTH OF FIELD (TYPICAL)^A	
Symbology	Working Ranges
Code 39	4 mils: 6-17 cm 20 mils: 4-55 cm 40 mils: 4-85 cm
EAN 13	13 mils: 4-48 cm
PDF-417	10 mils: 2-25 cm
DataMatrix	7.5 mils: 7-14 cm 10 mils: 4-18 cm

- a. 13 mils DOF based on EAN. All other 1D codes are Code 39. All labels grade A, 300 lux ambient light, 20°C, label inclination 10°

DECODE CAPABILITY	
1D BAR CODES GS1 Databar linear codes, UPC/EAN (A,E,13,8), UPC/EAN with P2/P5 Addons, UPC/EAN Coupons, ISBN, Code128, EAN128, ISBT128, Code39, Code39 Full ASCII, Code39 CIP, Code 32, Codabar, Interleaved 2 of 5, IATA, Industrial 2 of 5, Standard 2 of 5, Code11, MSI, Plessey, Code 93, Follet 2/5	
2D / STACKED CODES DataMatrix, MaxiCode and QR Codes (QR, Micro QR and Multiple QR codes), Aztec - Postal codes including: Australian Post, China Post, Japanese Post, KIX Post, Planet Code, Postnet, Royal Mail Code(RM45CC), IMB - stacked codes including EAN/JAN Composites; GS1 Databar Composites, GS1 Databar Expanded Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; MacroPDF; Micro PDF417; PDF417; UPC A/E Composites, French CIP13, Grid Matrix(Chinese) code	
Interfaces Supported	RS-232, Keyboard Wedge, and USB.
USER ENVIRONMENT	
Operating Temperature	-4° to 122° F (-20° - +50° C)
Storage Temperature	-40° to 158° F (-40° to 70° C)
Humidity	0 to 95% non-condensing
Drop Specifications	Scanner withstands >50 times 6.5' (2 m) drops to concrete
Ambient Light Immunity	100,000 Lux
Contaminants: Spray/rain, Dust/particulates	IP65
ESD Level	20 KV

Beeper/Speaker	>= 80 dB @ 10 cm
REGULATORY	
Electrical Safety	UL 60950, CSA C22.2 No. 60950, IEC 60950
EMI/RFI	See Regulatory addendum
Laser Class Safety	IEC Class 2 Radiation 1 mW Avg., Emitted wavelength 650 nm, 12ms pulse, Beam Divergence 8.4 deg x 8.1 deg
RADIO FEATURES	
Frequency working center	2400 to 2483.5 MHz
Range (in open air)	up to 100m
Max number of devices per base station	7

LED and Beeper Indications

The reader's beeper sounds and its LED illuminates to indicate various functions or errors on the reader. An optional 'Green Spot' also performs useful functions. The following tables list these indications. One exception to the behaviors listed in the tables is that the reader's functions are programmable, and so may or may not be turned on. For example, certain indications such as the power-up beep can be disabled using programming bar code labels.

Table 2. Normal Operating Indicators

INDICATION	DESCRIPTION	LED	BEEPER
Power-up Beep	The reader is in the process of powering-up.	N/A	Reader beeps four times at highest frequency and volume upon power-up.
Good Read Beep	A label has been successfully scanned by the reader.	LED behavior is configurable via the feature 'Good Read: When to Indicate' (see the PRG for information.)	The reader will beep once at current frequency, volume, tonal setting and duration upon a successful label scan.
Green Spot ^a flashes momentarily	Upon successful read of a label, the software turns the green spot on for the time specified	N/A	N/A
Image Capture	When ready to capture image	Blue light flashes 2 times when updating	N/A

^aExcept when in sleep mode or when a Good Read LED Duration other than 00 is selected

Table 3. Error Indicators

INDICATION	DESCRIPTION	LED	BEEPER
Link Attempt	The reader is trying to link to the base	Slow Flashes	N/A
Configuration Alignment	Reader and Base are aligning the parameters' configuration	Fast Flashes	N/A
Link	The reader has successfully linked to the base	N/A	3 beeps of ascending frequency
Unlink	The reader has unlinked from the base	N/A	3 beeps of descending frequency
ROM Failure	There is an error in the reader's software/programming	Flashes	Reader sounds one error beep at highest volume.
Limited Scanning Label Read	Indicates that a host connection is not established.	N/A	Reader 'chirps' six times at the highest frequency and current volume.
Reader Disabled	The reader has been disabled by the host.	The LED blinks continuously	N/A

Programming Mode - The following indications ONLY occur when the reader is in Programming Mode.

INDICATION	DESCRIPTION	LED	BEEPER
Label Programming Mode Entry	A valid programming label has been scanned.	LED blinks continuously	Reader sounds four low frequency beeps.
Label Programming Mode Rejection of Label	A label has been rejected.	N/A	Reader sounds three times at lowest frequency and current volume.

INDICATION	DESCRIPTION	LED	BEEPER
Label Programming Mode Acceptance of Partial Label	In cases where multiple labels must be scanned to program one feature, this indication acknowledges each portion as it is successfully scanned.	N/A	Reader sounds one short beep at highest frequency and current volume.
Label Programming Mode Acceptance of Programming	Configuration option(s) have been successfully programmed via labels and the reader has exited Programming Mode.	N/A	Reader sounds one high frequency beep and 4 low frequency beeps followed by reset beeps.
Label Programming Mode Cancel Item Entry	Cancel label has been scanned.	N/A	Reader sounds two times at low frequency and current volume.

Error Codes

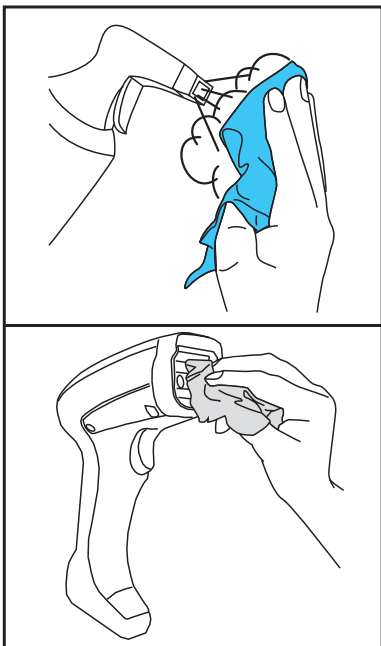
Upon startup, if the reader sounds a long tone, this means the reader has not passed its automatic Selftest and has entered FRU (Field Replaceable Unit) isolation mode. If the reader is reset, the sequence will be repeated. Press and release the trigger to hear the FRU indication code.

The following table describes the LED flashes/beep codes associated with an error found.

Number of LED Flashes/Beeps	Error	Corrective Action
1	Configuration	Contact Helpdesk for assistance
2	Interface PCB	
6	Digital PCB	
11	Imager	

Cleaning

Exterior surfaces and scan windows exposed to spills, smudges or debris require periodic cleaning to ensure best performance during scanning.



Use a soft, dry cloth to clean the product. If the product is very soiled, clean it with a soft cloth moistened with a diluted non-aggressive cleaning solution or diluted ethyl alcohol.



CAUTION

Do not use abrasive or aggressive cleansing agents or abrasive pads to clean scan windows or plastics.

Do not spray or pour liquids directly onto the unit.

Wasp Technologies Limited Factory Warranty

Warranty Coverage

Wasp warrants to Customer that Wasp's products will be free from defects in materials and workmanship for a period of three years from product shipment. Wasp hardware products are warranted against defects in material and workmanship under normal and proper use. The liability of Wasp under this warranty is limited to furnishing the labor and parts necessary to remedy any defect covered by this warranty and restore the product to its normal operating condition. Repair or replacement of product during the warranty does not extend the original warranty term. Products are sold on the basis of specifications applicable at the time of manufacture and Wasp has no obligation to modify or update products once sold.

If Wasp determines that a product has defects in material or workmanship, Wasp shall, at its sole option repair or replace the product without additional charge for parts and labor, or credit or refund the defective products duly returned to Wasp. To perform repairs, Wasp may use new or reconditioned parts, components, subassemblies or products that have been tested as meeting applicable specifications for equivalent new material and products. Customer will allow Wasp to scrap all parts removed from the repaired product. The warranty period shall extend from the date of shipment from Wasp for the duration published by Wasp for the product at the time of purchase (Warranty period). Wasp warrants repaired hardware devices against defects in workmanship and materials on the repaired assembly for a 90 day period starting from the date of shipment of the repaired product from Wasp or until the expiration of the original warranty period, whichever is longer. Wasp does not guarantee, and it is not responsible for, the maintenance of, damage to, or loss of configurations, data, and applications on the repaired units and at its sole discretion can return the units in the "factory default" configuration or with any software or firmware update available at the time of the repair (other than the firmware or software installed during the manufacture of the product). Customer accepts responsibility to maintain a back up copy of its software and data.

Refer to:

<http://www.waspbarcode.com/support/warranty-claims>

Warranty Claims:

<http://www.waspbarcode.com/support/warranty-claims>

Warranty Claims Process

In order to obtain service under the Factory Warranty, Customer must notify Wasp of the claimed defect before the expiration of the applicable Warranty period and obtain from Wasp a return authorization number (RMA) for return of the product to a designated Wasp service center. If Wasp determines Customer's claim is valid, Wasp will repair or replace product without additional charge for parts and labor. Customer shall be responsible for packaging and shipping the product to the designated Wasp ser-

vice center, with shipping charges prepaid. Wasp shall pay for the return of the product to Customer if the shipment is to a location within the country in which the Wasp service center is located. Customer shall be responsible for paying all shipping charges, duties, taxes, and any other charges for products returned to any other locations. Failure to follow the applicable RMA policy, may result in a processing fee. Customer shall be responsible for return shipment expenses for products which Wasp, at its sole discretion, determines are not defective or eligible for warranty repair.

Warranty Exclusions

The Wasp Factory Warranty shall not apply to:

- (i) any product which has been damaged, modified, altered, repaired or upgraded by other than Wasp service personnel or its authorized representatives;
- (ii) any claimed defect, failure or damage which Wasp determines was caused by faulty operations, improper use, abuse, misuse, wear and tear, negligence, improper storage or use of parts or accessories not approved or supplied by Wasp;
- (iii) any claimed defect or damage caused by the use of product with any other instrument, equipment or apparatus;
- (iv) any claimed defect or damage caused by the failure to provide proper maintenance, including but not limited to cleaning the upper window in accordance with product manual;
- (v) any defect or damage caused by natural or man-made disaster such as but not limited to fire, water damage, floods, other natural disasters, vandalism or abusive events that would cause internal and external component damage or destruction of the whole unit, consumable items;
- (vi) any damage or malfunctioning caused by non-restoring action as for example firmware or software upgrades, software or hardware reconfigurations etc.;
- (vii) the replacement of upper window/cartridge due to scratching, stains or other degradation and/or
- (viii) any consumable or equivalent (e.g., cables, power supply, batteries, keypads, touch screen, triggers etc.).

No Assignment

Customer may not assign or otherwise transfer its rights or obligations under this warranty except to a purchaser or transferee of product. No attempted assignment or transfer in violation of this provision shall be valid or binding upon Wasp.

WASP'S LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ORAL OR WRITTEN, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. WASP SHALL NOT BE LIABLE FOR ANY DAMAGES SUSTAINED BY CUSTOMER ARISING FROM DELAYS IN THE REPLACEMENT OR REPAIR OF PRODUCTS UNDER THE ABOVE. THE REMEDY SET FORTH IN THIS WARRANTY STATE-

MENT IS THE CUSTOMER'S SOLE AND EXCLUSIVE REMEDY FOR WARRANTY CLAIMS. UNDER NO CIRCUMSTANCES WILL WASP BE LIABLE TO CUSTOMER OR ANY THIRD PARTY FOR ANY LOST PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL IN-DIRECT, SPECIAL OR CONTINGENT DAMAGES REGARDLESS OF WHETHER WASP HAD ADVANCE NOTICE OF THE POSSIBILITY OF SUCH DAMAGES.

Risk of Loss

Customer shall bear risk of loss or damage for product in transit to Wasp. Wasp shall assume risk of loss or damage for product in Wasp's possession. In the absence of specific written instructions for the return of product to Customer, Wasp will select the carrier, but Wasp shall not thereby assume any liability in connection with the return shipment.

Ergonomic Recommendations



In order to avoid or minimize the potential risk of ergonomic injury follow the recommendations below. Consult with your local Health & Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.

- Reduce or eliminate repetitive motion
- Maintain a natural position
- Reduce or eliminate excessive force
- Keep objects that are used frequently within easy reach
- Perform tasks at correct heights
- Reduce or eliminate vibration
- Reduce or eliminate direct pressure
- Provide adjustable workstations
- Provide adequate clearance
- Provide a suitable working environment
- Improve work procedures.

Services and Support

Wasp provides several services as well as technical support through its website. Log on to www.waspbarode.com and click on the links indicated for further information.

Hex-Numeric Keypad

Use the barcodes that follow to enter numbers as you would select digits/characters from a keypad.



0



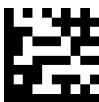
1



2



3



4



5

Hex-Numeric Keypad (continued)



6



7



8



9



A



B

Hex-Numeric Keypad (continued)



C



D



E



F

For HID Variable Pin Code only

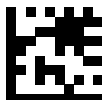
If you make a mistake, scan the **CANCEL** barcode below to abort and not save the entry string. You can then restart.



Cancel an incomplete HID Variable PIN Code

Finish by scanning the **Exit HID Variable PIN Code** label.

Exit HID Variable PIN Code



NOTES

NOTES



www.waspbarcode.com

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