Wasp

BARCODE TECHNOLOGIES

Wasp WDI4700

2D Barcode Reader



Quick Reference Guide

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NOTES

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Wasp WDI4700

About the Scanner

With rich feature sets and extensive model options, the Wasp WDI4700 product series from Wasp represents the premium level of data collection equipment for general purpose applications. The Wasp WDI4700 reader has enhanced Megapixel optics with improved motion tolerance, allowing codes placed on fast-moving objects to be easily and quickly captured, creating the ideal reader for tasks requiring high throughput like those found in retail, light industrial environments and healthcare.

Omni-Directional Operating

To read a symbol or capture an image, simply aim the reader and pull the trigger. The Wasp WDI4700 is a powerful omni-directional reader, so the orientation of the symbol is not important. The exclusive patented 'Green Spot' for good-read feedback helps to improve productivity in noisy environments or in situations where silence is required. When positioning the product into the stand, the magnetic coupling will make the scanner automatically detect a bar code inside the field of view, and switch the reading system from trigger mode to auto-sense mode.

Decoding

The Wasp WDI4700 reliably decodes all standard 1D (linear) and 2D bar codes, including GS1 DataBar™ linear codes, Postal Codes (China Post), Stacked Codes (such as GS1 DataBar Expanded Stacked, GS1 DataBar Stacked, GS1 DataBar, Stacked Omnidirectional). The data stream - acquired from decoding a symbol - is rapidly sent to the host. The reader is immediately available to read another symbol.

Imaging

The Wasp WDI4700 reader can also function as a camera by capturing entire images or image portions of labels, signatures, and other items.

Hands Free Stand/Holder

An accessory is available which holds the reader (except those with integrated stand) at a convenient angle, allowing hands free scanning of items. It can also be used as a holder. The holder 'cup" can be positioned at several different angles. The reader automatically recognizes the insertion and changes its Scan Mode to allow the user to operate in hands-free mode.

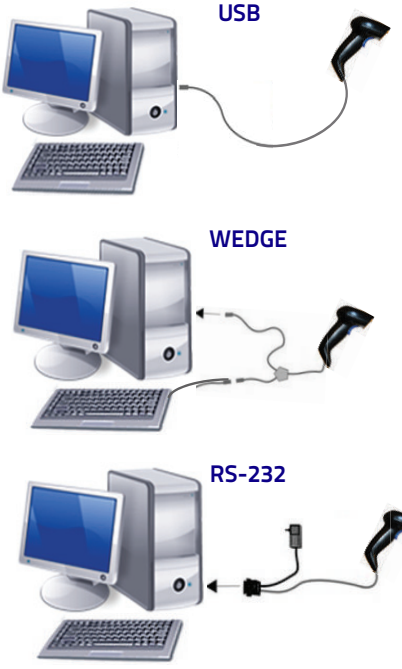


Setting Up the Reader

Follow the steps below to connect and get your reader up and communicating with its host.

1. Connect the Cable to the reader and the Host as shown below.
2. Configure the Interface (see page 8).
3. Program the Reader starting on page 21 (optional, as needed).

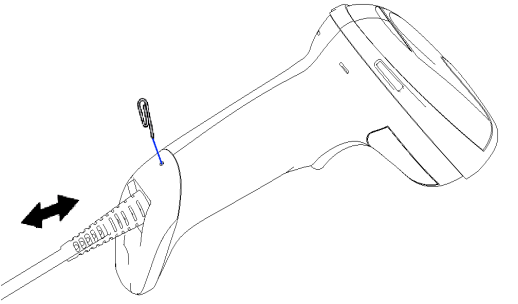
Connecting to the Host Interface



Disconnecting the Cable

To remove the interface cable from the reader, first locate the hole on the back of the handle. Next, take a paper clip and modify it as shown in the figure below. Insert the end of the paper clip into the hole and press it to push on the clip that holds the connector. As you apply pressure, pull out the cable.

When reinserting the cable, make sure the connector clip is on the same side as the reader release hole. Insert the cable, it should click when it is fully inserted.



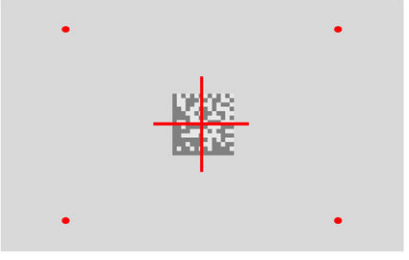
Using the Wasp WDI4700

The Wasp WDI4700 normally functions by capturing and decoding 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:

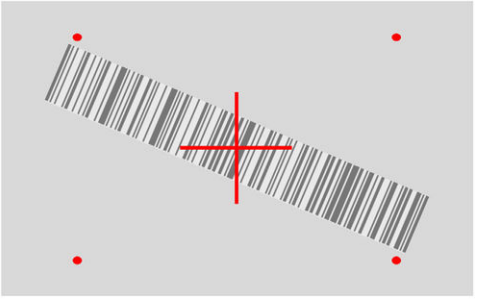
Aiming System



Relative Size and Location of Aiming System Pattern



2D Matrix Symbol



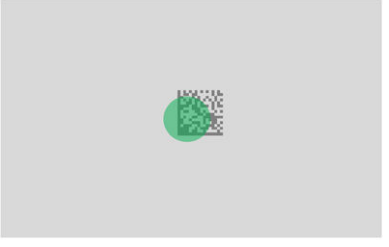
Linear Bar

A red beam illuminates the label. 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.

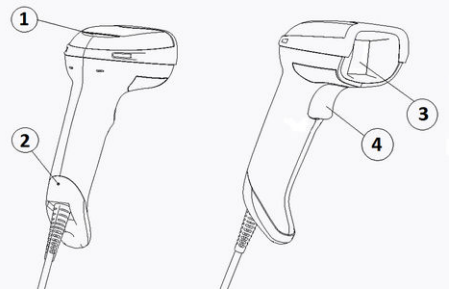
If the aiming system is centered and the entire bar code is within the aiming field, you will get a good read. Successful reading is signaled by an audible tone plus a good-read green spot LED indicator.

Refer to the Wasp WDI4700 Product Reference Guide (PRG) for more information about this feature and other programmable settings.

Relative Size and Location of Green Spot



Parts of the Reader



1. LED
2. Cable Release Hole
3. Scan Window
4. Trigger

Selecting the Interface Type

Upon completing the physical connection between the reader and its host, proceed directly to Interface Selection below for information and programming for the interface type supported by the reader and scan the appropriate bar code to select your system's correct interface type, according to your application.

For interfaces other than those listed in this manual, see the Wasp WDI4700 Product Reference Guide (PRG), available online at www.waspbarcode.com.

Interface Selection

The reader will support all the following host interfaces:

- RS-232 STD
- RS-232 WN
- IBM46XX port 9b (a specific cable's required)
- USB HID POS
- USB Toshiba TEC
- USB (Keyboard, COM, OEM)
- USB Composite (Keyboard + COM)
- USB for Magellan Scanners
- Keyboard Wedge

Information and programming options for each interface type are provided in this section. For defaults and additional information associated with each interface, proceed to the corresponding chapter in the Wasp WDI4700 PRG.

Configuring the Interface

Scan the appropriate programming bar code to select the interface type for your system.



NOTE

Unlike some other programming features and options, interface selections require that you scan only one programming bar code label. DO NOT scan an ENTER/EXIT bar code prior to scanning an interface selection bar code.

Some interfaces require the scanner to start in the disabled state when powered up. If additional scanner configuration is desired while in this state, pull the trigger and hold for 5 seconds. The scanner will change to a state that allows programming with bar codes.

RS-232
RS-232 standard interface Select RS232-STD
RS-232 Wincor-Nixdorf Select RS232-WN

RS-232 (continued)

RS-232 for use with OPOS/UPOS/JavaPOS



Select RS-232 OPOS

USB Com to simulate RS-232 standard interface



Select USB-COM-STD*

*Download the correct USB Com driver from www.waspbarcode.com

USB-OEM

USB-OEM (can be used for OPOS/UPOS/JavaPOS)



Select USB-OEM

USB-COMPOSITE

USB-Composite



Select USB-Composite

IBM46xx

IBM46xx Port 9b



Select IBM46xx Port 9b

USB for Terminals

USB HID POS



Select USB HID POS

USB Toshiba TEC



Select USB Toshiba TEC

USB for Magellan Scanners

USB for Magellans



Select for USB Magellan Scanners

Keyboard Interface

Use the programming bar codes to select options for USB Keyboard and Wedge Interfaces.

KEYBOARD
AT, PS/2 25-286, 30-286, 50, 50Z, 60, 70, 80, 90 & 95 w/ Standard Key Encoding  Select KBD-AT
Keyboard Wedge for IBM AT PS2 with standard key encoding but without external keyboard  Select KBD-AT-NK
AT, PS/2 25-286, 30-286, 50, 50Z, 60, 70, 80, 90 & 95 w/Alternate Key  Select KBD-AT-ALT

KEYBOARD (continued)
Keyboard Wedge for IBM AT PS2 with alternate key encoding but without external keyboard  Select KBD-AT-ALT-NK
USB Keyboard with standard key encoding  ♦ Select USB Keyboard
USB Keyboard with alternate key encoding  Select USB Alternate Keyboard

♦ = default value

Scancode Tables

Refer to the Wasp WDI4700 PRG for information about control character emulation for keyboard interfaces.

Country Mode

This feature specifies the country/language supported by the keyboard. Only these interfaces support ALL Country Modes:

- USB Keyboard with alternate key encoding
- USB Keyboard with standard key encoding
- AT, PS/2 25-286, 30-286, 50, 50Z, 60, 70, 80, 90 & 95 w/ Std Key Encoding
- Keyboard Wedge for IBM AT PS2 with standard key encoding but without external keyboard
- AT, PS/2 25-286, 30-286, 50, 50Z, 60, 70, 80, 90 & 95 without Alternate Key
- Keyboard Wedge for IBM AT PS2 without alternate key encoding but without external keyboard

All other interfaces support ONLY the following Country Modes: U.S., Belgium, Britain, France, Germany, Italy, Spain, Sweden.

COUNTRY MODE
 ENTER/EXIT PROGRAMMING MODE
 ♦ Country Mode = U.S.

♦ = default value

COUNTRY MODE (continued)



Country Mode = Belgium



Country Mode = Croatia*



Country Mode = Czech Republic*



Country Mode = Denmark*



Country Mode = France

* Supports only the interfaces listed in the Country Mode feature description.

COUNTRY MODE (continued)



Country Mode = French Canadian*



Country Mode = Germany



Country Mode = Hungary*



Country Mode = Italy



Country Mode = Japanese 106-key*

* Supports only the interfaces listed in the Country Mode feature description.

COUNTRY MODE (continued)



Country Mode = Lithuanian*



Country Mode = Norway*



Country Mode = Poland*



Country Mode = Portugal*

* Supports only the interfaces listed in the Country Mode feature description.

COUNTRY MODE (continued)



Country Mode = Romania*



Country Mode = Spain



Country Mode = Sweden



Country Mode = Slovakia*



Country Mode = Switzerland*

* Supports only the interfaces listed in the Country Mode feature description.

Programming

The reader is factory-configured with a set of standard default features. After scanning the interface bar code from the Interfaces section, select other options and customize your reader through use of the programming bar codes available in the Wasp WDI4700 PRG. 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" below, 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 its initial configuration. Reference 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. See "Selecting the Interface Type" on page 7 **for more information.**



Reset Default Settings

Numlock

This option specifies the setting of the Numbers Lock (Numlock) key while in keyboard wedge interface. This only applies to alternate key encoding interfaces. It does not apply to USB keyboard.

NUMLOCK
 ENTER/EXIT PROGRAMMING MODE
 ♦ Numlock = Numlock key unchanged
 Numlock = Numlock key toggled

♦ = default value

Caps Lock State

This option specifies the format in which the reader sends character data. This applies to keyboard wedge interfaces. This does not apply when an alternate key encoding keyboard is selected.

CAPS LOCK STATE
 ENTER/EXIT PROGRAMMING MODE
 ♦ Caps Lock State = Caps Lock OFF
 Caps Lock State = Caps Lock ON
 Caps Lock State = AUTO Caps Lock Enable

♦ = default value

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 WDI4700" on page 5 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.

Aiming System

A number of options for customizing control of the Aiming System are available. See the Wasp WDI4700 PRG for more information and programming bar codes.

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.

GOOD READ GREEN SPOT DURATION	
ENTER/EXIT PROGRAMMING MODE	
Disabled	♦ Short (300 ms)
Medium (500 ms)	Long (800 ms)

♦ = default value

Operating Modes

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) This mode is associated with typical handheld reader operation. When the trigger is pulled, illumination is turned on and the scanner attempts to read a label. Scanning is activated until one of the following occurs:

- the programmable 'maximum scan on time'[1] has elapsed
- a label has been read
- the trigger is released

Trigger Pulse Multiple Scanning begins when the trigger is pulled and continues after the trigger is released, until the trigger is pulled again or until the programmable 'maximum scan on time'[1] has elapsed. Reading a label does not disable scanning. Double Read Timeout[1] prevents undesired multiple reads while in this mode.

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 Timeout[1] prevents undesired multiple reads while in this mode.

Always On The illuminator is always ON and the reader is always ready for code reading. Double Read Timeout[1] prevents undesired multiple reads.

FlashingThe reader illuminator flashes on and off regardless of the trigger status. Code reading takes place only during the Flash On[2] time. Double Read Timeout[1] prevents undesired multiple reads.

Object Detection The scanner looks for changes within its field-of-view. The Aiming Pattern is always on to show the optimum reading area. If a predefined amount of movement is detected, the white illumination switches on. Scanning continues until a label is read or 'maximum scan on time' is reached.

1. See the Product Reference Guide (PRG) for these and other programmable features
2. Controlled by Flash On Time and Flash Off Time. Use the PRG to program these options.

SCAN MODE



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

♦ = default value

Pick Mode

Specifies the ability of the reader to decode labels only when they are close to the center of the aiming pattern, which is the area indicated by the red cross. 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 while the scanner is 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.

PICK MODE
 ENTER/EXIT PROGRAMMING MODE
 ♦ Pick Mode = Disable
 Pick Mode = Enable

♦ = default value

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 Features

Wasp WDI4700

Physical Features	
Color	Black White
Dimensions	Heigth 16.6 cm (6.5") Length 10.9 cm (4.3") Width 6.8 cm (2.7")
Weight (without cable)	WDI4700 approx. 161 g (5.7 oz.) WDI4700 with integrated stand approx. 374 g (13.2 oz.)
Electrical Features	
Power Supply	GD4520: 5 VDC GD4590: 4.5 - 14.0 VDC
Consumption:	Operating (Typical): <300 mA @ 5V <200 mA @ 12V Standby/Idle (Typical): <90 mA @ 5V <50 mA @ 12V
Max. Scan Rate	50 frames/sec
Reading Indicators	Top and rear illumination, Good Read Spot, Beep
Environmental Features	
Operating Temperature	0 °C to + 50 °C (+32° F to +122 °F)
Storage Temperature	-40 °C to + 70 °C (-40 ° F to +158 °F)
Humidity	95% non condensing
Drop Resistance	IEC 68-2-32 Tested 1.8 m (6 ft)
ESD Protection	16 KV
Protection Class	IP52
Cable Length	Refer to www.waspbarcode.com

Optical Features	
Optical Format	1/4"
Active Imager Size	3896 um (H) x 2453 um (V)
Active Pixels	1280 H x 800 V
Illumination System	LED source Warm White Emission (wavelength = 350 - 770 nm) Hyper Red Emission (wavelength = 660 nm, DGM model only) IEC 62471 Exempt Risk Group
Aiming System	Red laser source IEC 60825-1 Class 2 Radiation 1 mW Avg., Emitted wavelength 650 nm, 10ms pulse
Ambient Light	Up to 100,000 lux
Tilt Tolerance	0° - 360°
Pitch Tolerance	± 65°
Skew Tolerance	± 65
Field of View	36° H x 23° V
PCS (Test Chart)	minimum 15%

DOF - Depth of Field (Typical)[a]	
Symbology	**SR**
Code 39	5 mil: 7.0 - 38.0 cm (2.7" - 14.9") 10 mil: 2.2 - 58.0 cm (0.8" - 22.8") 20 mil: FOV lim. - 110 cm (up to 43.3")
EAN13	7.5 mil: 9.0 - 30.0 cm (3.5" - 11.8") 13 mil: 1.0 - 71.0 cm (0.4" - 27.9")
PDF417	6.6 mil: 6.5 - 24.0 cm (2.6" - 9.4") 10 mil: 2.5 - 41.0 cm (1.0" - 16.1") 15 mil: 2.3 - 65.0 cm (0.9" - 25.6")
Datamatrix	10 mil: 5.5- 27.0 cm (2.2" - 10.6") 15 mil: 2.8 - 41.0 cm (1.1" - 16.1")
Max Resolution	1D Min = 4 mils PDF417 Min = 5 mils Datamatrix Min = 7.5 mils

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

Decode Capability
1D Bar Codes UPC/EAN/JAN (A, E, 13, 8); UPC/EAN/JAN (including P2 /P5); UPC/EAN/JAN (including; ISBN / Bookland & ISSN); UPC/EAN Coupons; Code 39 (including full ASCII); Code 39 Trioptic; Code39 CIP (French Pharmaceutical); LOGMARS (Code 39 w/ standard check digit enabled); Danish PPT; Code 32 (Italian Pharmacode 39); Code 128; Code 128 ISBT; Interleaved 2 of 5; Standard 2 of 5; Interleaved 2 of 5 CIP (HR); Industrial 2 of 5; Discrete 2 of 5; Matrix 2 of 5; IATA 2of5 Air cargo code; Code 11; Codabar; Codabar (NW7); ABC Codabar; EAN 128; Code 93 ; MSI; PZN; Plessey; Anker Plessey; GS1 DataBar Omnidirectional; GS1 DataBar Limited; GS1 DataBar Expanded; GS1 DataBar Truncated; DATABAR Expanded Coupon.
2D / Stacked Codes The Wasp WDI4700 scanner is capable of decoding the following symbologies using multiple frames (i.e. Multi-Frame Decoding): Datamatrix; Inverse Datamatrix; Datamatrix is configurable for the following parameters:; Normal or Inverted; Square or Rectangular Style; Data length (1 - 3600 characters); Maxicode; QR Codes (QR, Micro QR and Multiple QR Codes); Aztec; Postal Codes - (Australian Post; Japanese Post; KIX Post; Planet Code; Postnet; Royal Mail Code (RM45CC); Intelligent Mail Barcode (IMB); Sweden Post; Portugal Post); LaPoste A/R 39; PDF-417; MacroPDF; Micro PDF417; GS1 Composites (1 - 12); French CIP13[a]; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; GS1 DataBar Expanded Stacked; GSl Databar Composites; Chinese Sensible Code; Inverted 2D codes[b]. [a]It is acceptable to handle this with ULE [b]The SW can apply the Normal/Reverse Decoding Control to the following symbologies: Datamatrix, QR, Micro QR, Aztec and Chinese Sensible Code.

LED and Beeper Indications

The imager's beeper sounds and its illumination flashes or changes color to indicate various functions or errors on the reader. A 'Green Spot" also lights to indicate a good read. The tables below list these indications. Reference the PRG for a more detailed list.

Indication	LED	Beeper
Power-up	Upper LED flashes/blinks on power-up, however, this may be too rapid to view. With a USB interface, the LED blinks until enumeration with the host is completed.	Imager beeps four times at highest frequency and volume upon power-up.
Good Read	Upper green LED comes on for programmed time (default). LED behavior for this indication is configurable using Aladdin utility.	One beep at current frequency, volume, mono/bitonal setting upon a successful label scan. It is also possible to upload custom jingles with Aladdin.
ROM Failure	200ms on / 200ms off	Imager sounds one error beep at highest volume for 200 mS.
Limited Scanning Label Read	N/A	Imager 'chirps' six times at the highest frequency and current volume.
Imager Disabled	The LED blinks continuously 100mS on / 900 mS off	N/A

Troubleshooting

Problem	Possible Cause	Possible Solutions
Nothing happens when the scan button is pulled.	No power to the imager.	Check system power. Ensure power supply is connected.
	Interface or power cables are loose.	Ensure all cable connections are secure.
LED comes on, but bar code does not decode.	Imager not programmed for correct bar code type.	Ensure imager is programmed to read the type of bar code scanned. Refer to the PRG for more information.
	Bar code label is unreadable.	Check the label to ensure it is not defaced. Try scanning another bar code type.
	Distance between imager and bar code is incorrect.	Move imager closer to or further from the bar code.
Bar code is decoded but not transmitted to the host.	Imager not programmed for the correct host type.	Scan the appropriate host type bar code. Refer to the PRG for more information.



NOTE

For detailed troubleshooting, refer to the PRG (Product Reference Guide)

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 five (5)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, Cus-

tomer 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 service 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 STATEMENT 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



CAUTION

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.

Cleaning Procedure

Exterior surfaces and scan windows exposed to spills, smudges or debris accumulation require periodic cleaning to ensure best performance during scanning operations. Follow the procedures described in this instruction sheet to keep your device in good operating condition.



CAUTION

DO NOT use abrasive pads or cleaning agents.



CAUTION

Be sure to turn off power and unplug the device from electrical outlet before cleaning.

Common Cleaning Solutions

The cleaners and disinfectants listed below are tested for use on Disinfectant-Ready Enclosures:

Cleaners	Disinfectants
Formula 409® Glass and surface cleaner	CaviWipes™
Isopropyl alcohol	Clorox® bleach
Dish soap and water	Hepacide Quat® II
Windex® Original (Blue)	Sani-Cloth®
	Virex® II 256



NOTE

Disinfectants may be harsh on metal. They are recommended for use only on enclosures.



DO NOT spray or pour cleaner directly onto the unit.
DO NOT use solutions in their concentrated form.
DO NOT use aerosols, solvents or abrasives.
DO NOT use paper towels or rough cloths to clean windows.

Cleaning enclosure and window surfaces

1. Moisten a soft cloth with a recommended cleaning solution. Be sure to apply the solution to your cloth first. Wring excessive liquid from the cloth.
2. Use the cloth to wipe down the surface of the unit. Use cotton swabs, lightly moistened, to reach in corners and crevices.
3. Use another clean dry cloth to remove any residue of the cleaning agent and ensure the unit is dry.





Services and Support

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



www.waspbarcode.com

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