

**Balluff BVS HS-PC
Industrial Corded Handheld
Barcode Reader**



Quick Guide



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BVS HS-PC
Industrial Corded Handheld Barcode Reader

END USER SOFTWARE LICENSE AGREEMENT (EULA)	4
Description	8
General Features	8
Setting Up the Reader	9
Connecting the Cable	9
Using the BVS HS-PC reader	10
Selecting the Interface Type	11
Interface Selection	11
Configuring the Interface	11
Scancode Tables	14
Country Mode	14
Caps Lock State	18
Programming	19
Using Programming Barcodes	19
Configure Other Settings	19
Resetting Product Defaults	19
Reading Parameters	20
Good Read Green Spot Duration	20
Operating Modes	21
Scan Mode	21
Motion Aiming Control	22
Pick Mode	23
Multiple Label Reading	23
Technical Specifications	24
LED and Beeper Indications	27
Error Codes	29
Cleaning	30
Regulatory Addendum	31
Regulatory Information	33
Power Supply	34
Imager Labeling	35
Aiming System	35
WEEE Statement	39
Letter of Conformity	41
Ergonomic Recommendations	42
Services and Support	42

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2

Description

2 Description

The Balluff BVS HS-PC-Series hand held readers are a featurerich 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
BVS HS-PC-HDW-MA-02	Autofocus optic, High, standard and low density codes, wide angle
BVS HS-PC-DPW-MA-01	High Density optic, high and medium density codes, DPM (laser, ink jet and dot peen)

2.1 General Features

Omni-directional Operating	To read a symbol or capture an image, you simply aim the reader and pull the trigger. Since the Balluff BVS HS-PC-Series hand held is a powerful omni-directional reader, the orientation of the symbol is not important.
Decoding	Thanks to powerful algorithms, Balluff BVS HS-PC-Series hand held 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	The Balluff BVS HS-PC-Series hand held can also function as a camera by capturing entire images or image portions of labels, signatures, and other items.
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 Balluff BVS HS-PC-Series hand held reader as new symbologies are supported or as improved decoding algorithms become available.

3

Setting Up the Reader

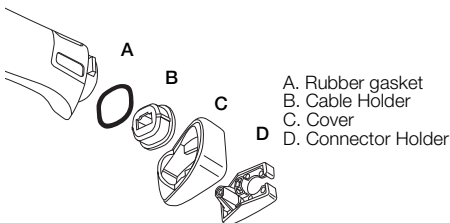
3 Setting Up the Reader

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

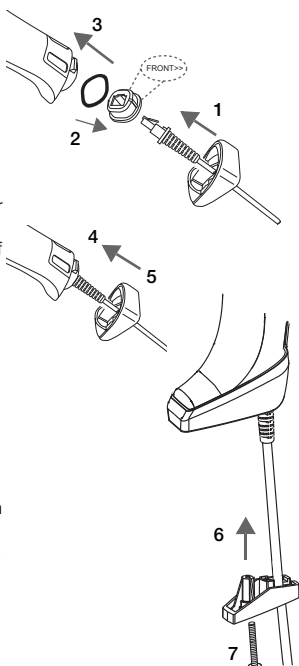
- 1 Connect the Cable to the reader and the Host, shown [on page 9](#).
- 2 Configure the Interface ([see page 11](#)).
- 3 Configure the Reader starting [on page 19](#) (optional, depends on settings needed)

Connect the BVS HS-PC readers hand held by plugging directly into the host device as shown. The power can also be supplied through an external power supply via the Interface Cable supplied with a power jack.

3.1 Connecting the Cable



- 1 Slip the cable through the Cover.
- 2 Push the Rubber Gasket onto the Cable Holder.
- 3 Push the Cable Holder and gasket into the handle. Ensure that the "Front" marking on the Cable Holder is facing out, with the arrow pointing towards the front of the scanner.
- 4 Insert the end of the cable into the socket of the Cable Holder.
- 5 Push the Cover along the cable towards the reader, and hook it over the yellow "tooth" on the back of the handle.
- 6 Insert the cable through the Connector Holder, and push it up into the Cover.
- 7 Insert and tighten the screw to affix the cable assembly to the reader handle.

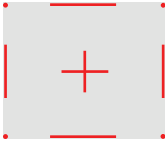


4 Using the BVS HS-PC reader

4 Using the BVS HS-PC reader

The BVS HS-PC reader normally functions by capturing and decoding barcodes. The reader is equipped with an internal 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 barcode:

Aiming System

Model P/N	Aimer pattern
BVS HS-PC-DPW-MA-01	
BVS HS-PC-HDW-MA-02	

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

If the entire barcode 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 which is backprojected at the read code.

Reference the BVS HS-P series operation manual (OPM) for more information about this feature and other programmable settings.

5

Selecting the Interface Type

5 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 the reader is connected to (for example: RS-232, USB, etc.) and scan the appropriate barcode to select your system's correct interface type.

5.1 Interface Selection

All models are multi-interface and support RS-232 and USB.

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 BVS HS-P series operation manual (OPM).

5.1.1 Configuring the Interface

Scan the appropriate programming barcode 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 barcode label. **DO NOT** scan an ENTER/EXIT barcode prior to scanning an interface selection barcode.

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 barcodes.

5

Selecting the Interface Type

RS-232

RS-232 standard interface



RS-232

RS-232 Wincor-Nixdorf



RS232-WN

USB

USB Com to simulate RS-232 standard interface



USB-COM^a

USB-OEM



USB-OEM

a. Download the correct USB Com driver from www.Balluff.com

5

Selecting the Interface Type

USB (continued)

USB Keyboard with standard key encoding



USB-KBD

USB Keyboard with alternate key encoding



USB-KBD-ALT

USB Keyboard for Apple computers



USB-KBD-APPLE

5 Selecting the Interface Type

5.1.2 Scancode Tables

Reference the BVS HS-PC-Series OPM for information about control character emulation for keyboard interfaces.

5.1.3 Country Mode

This feature specifies the country/language supported by the keyboard. This option is usable only with USB-KBD interface without the "Alternate Key" mode.

COUNTRY MODE
 ENTER/EXIT PROGRAMMING MODE
 Country Mode = U.S.
 Country Mode = Belgium
 Country Mode = Britain
 Country Mode = Croatia*

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

5

Selecting the Interface Type

COUNTRY MODE (continued)



Country Mode = Czech*



Country Mode = Denmark*



Country Mode = France



Country Mode = French Canadian*



Country Mode = Germany



Country Mode = Hungary*

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

5

Selecting the Interface Type

COUNTRY MODE (continued)



Country Mode = Italy



Country Mode = Japanese 106-key*



Country Mode = Lithuanian*



Country Mode = Norway*



Country Mode = Poland*



Country Mode = Portugal*

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

5

Selecting the Interface Type

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

5 Selecting the Interface Type

5.1.4 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.



ENTER/EXIT PROGRAMMING MODE



Caps Lock State = Caps Lock OFF



Caps Lock State = Caps Lock ON



Caps Lock State = AUTO Caps Lock Enable

6

Programming

6 Programming

The reader is factory-configured with a set of standard default features. After scanning the interface barcode from the Interfaces section, select other options and customize your reader through use of the programming barcodes available in the BVS HS-PC reader. Check the corresponding features section for your interface, and also the Data Editing and Symbologies chapters of the OPM.

6.1 Using Programming Barcodes

This manual contains barcodes which allow you to reconfigure your reader. Some programming barcode labels, Programming like the "Reset Default Settings" on page 15, require only the scan of that single label to enact the change.

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

6.2 Configure Other Settings

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

6.3 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 barcode below to reset the reader to its initial configuration. Reference the OPM 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 11](#) for more information.



Reset Default Settings

7

Reading Parameters

7 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 BVS HS-PC reader" on page 10](#) 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.

7.1 Good Read Green Spot Duration

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



ENTER/EXIT PROGRAMMING MODE



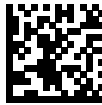
Disabled



Short (300 ms)



Medium (500 ms)



Long (800 ms)

8 Operating Modes

8 Operating Modes

8.1 Scan Mode

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

Trigger Single (Default) — This mode is associated with typical handheld reader operation. Motion Sense is active and if the scanner detects motion the aiming pattern is turned on. 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 Timeout¹ 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 Timeout¹ prevents undesired multiple reads in this mode.

Always On — The illuminator is always ON and the reader is always ready for code reading. Double Read Timeout¹ prevents undesired multiple reads.

Flashing — The reader illuminator flashes on and off regardless of the trigger status. Code reading takes place only during the Flash On² time. Double Read Timeout¹ prevents undesired multiple reads.

Stand Mode — 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 red illumination switches on. Scanning continues until a label is read or "maximum scan on time" is reached.

1. See the operation manual (OPM) for these and other programmable features
2. Controlled by Flash On Time and Flash Off Time. Use the OPM to program these options.

8 Operating Modes

Scan 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

8.2 Motion Aiming Control

This feature configures the ability of the scanner to Enable/Disable the Aiming system when motion is detected. Scan the Enter/Exit Programming barcode above, then either of the barcodes below.



Motion Aiming Control = Enable Motion Aiming Control = Disable

8 Operating Modes

8.3 Pick Mode

Specifies the ability of the reader to decode labels only when they are close to the center of the aiming pattern. Pick Mode is a Decoding and Transmission process where barcodes 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 OPM for more information.



ENTER/EXIT PROGRAMMING MODE



"" Pick Mode = Disable



Pick Mode = Enable

8.4 Multiple Label Reading

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

9 Technical Specifications

9 Technical Specifications

The following table contains Physical and Performance Characteristics, User Environment and Regulatory information.

Item	Description	
Physical Characteristics		
Dimensions	Height: 212 mm Length: 110 mm Width: 74 mm	
Weight (without cable)	330 gr (without cable)	
Electrical Characteristics		
Voltage & Current	BVS HS-PC-HDW-MA-02	BVS HS-PC-DPW-MA-01
Input Voltage	5 VDC +/- 5%	5 VDC +/-5%
Input Current		
Operating (typical):	335mA	350mA
Operating (max):	475mA	480mA
Idle/Standby (typical)	180mA	120mA
Performance Characteristics		
Light Source	LED, White	
Roll (Tilt) Tolerance	± 180°	
Pitch Tolerance	± 40°	
Skew (Yaw) Tolerance	± 40°	
Print Contrast Minimum	15% minimum reflectance	
Resolution	1D 2.5 mil 2D 4 mil	

Depth of Field (Typical) ^a		
Symbology	BVS HS-PB-HDW-MZ-01	BVS HS-PB-DPW-MZ-01
Code 39	2.5 mils: 2-6 cm 20 mils: 3-70 cm 40 mils: 3-110 cm	2 mils 2.8-6.3 cm 2,5 mils 2.5-7.8 cm 5 mils 1.2-9.0 cm
EAN 13	13 mils: 3-60 cm	13 mils: 2,5-16,0 cm
PDF-417	10 mils: 2-30cm	5 mils: 1.2-9.0 cm 10 mils: 1.0-12.5 cm
DataMatrix	4 mil: 2-6 cm 10 mil: 2-20 cm	4mil: 2.6-5.2 cm 5mil: 2.2-7.2 cm 10mil: 2.0-10.5 cm

- a. All labels grade A,300 lux ambient light, 20°C, label inclination 10°
The following specs represent standard barcodes that are traditionally printed black on white on paper labels. Reading distances for DPM may vary depending from the printing technology , the code type and the surface material the DPM is used on

Decode Capability	
1D Barcodes 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 and USB. See page 11 for a listing of available interface options.
DIRECT PART MARKING (DPM) CAPABILITY: BVS HS-PC-DPW:	BVS HS-PC-DPW: Codes are generally readable when marked by laser or chemical etching or ink jet printed; Data Matrix codes are also readable when marked by dot peening on flat materials. Any codes needs to be tested for reliable reading. BVS HS-PC-HDW: NONE

9

Technical Specifications

User Environment	
Operating Temperature	-20° - +50° C
Storage Temperature	-40° to 70° C
Humidity	0 to 95% non-condensing
Drop Specifications	Reader withstands >50 times 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	North America (FCC) : Part 15 Class B; Canada (IC) : ICES-003 Class B; Russia (EAC); European Union EMC Directive; VCCI-Japan; Korean KCC; Taiwan EMC (BSMI); Australia (ACMA); Mexico (NOM Nyce)
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 ("plus" pattern)
LED Classification	IEC 62471 Exempt group



CAUTION

Do not look directly into the light source – there is a risk of glare and irritation

10 LED and Beeper Indications

10 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 barcode labels.

Indicator	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 for this indication is configurable via the feature "Good Read: When to Indicate" (see the OPM for information.)	The reader will beep once at current frequency, volume, mono/bi-tonal setting and duration upon a successful label scan.
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 Active Mode	The reader is active and ready to scan.	The LED is lit steadily ^a	N/A
Reader Disabled	The reader has been disabled by the host.	The LED blinks continuously	N/A
Green Spot ^a flashes momentarily	Upon successful read of a label, the software shall turn the green spot on for the time specified by the configured value.	N/A	N/A
Image Capture	When ready to capture image	Blue light flashes 2 times when updating	N/A

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

10

LED and Beeper Indications

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.
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.

11 Error Codes

11 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.

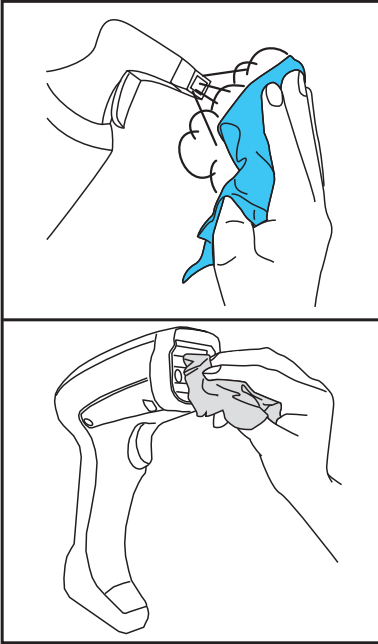
Number of LED Flashes/Beeps	Error	Corrective Action
1	Configuration	Contact Helpdesk for assistance
2	Interface PCB	
6	Digital PCB	
11	Imager	

12

Cleaning

12 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.

13

Regulatory Addendum

13 Regulatory Addendum

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13**Regulatory Addendum**

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All contact should be to us.

Disclaimer

Datalogic has taken reasonable measures to provide information in this manual that is complete and accurate, however, Datalogic reserves the right to change any specification at any time without prior notice.

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Patents

See www.patents.datalogic.com for patent list.

This product is covered by one or more of the following patents:

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

Utility patents: EP0996284B1, EP0999514B1, EP1128315B1, EP1172756B1, EP1396811B1, EP1413971B1, EP1828957B1, JP4435343B2, US6478224, US6512218, US6513714, US6561427, US6808114, US6877664, US6997385, US7053954, US7234641, US7387246, US7721966, US8245926, US8561906, US8743263.

13 Regulatory Addendum

13.1 Regulatory Information

All models are designed to be compliant with rules and regulations in locations they are sold and will be labeled as required.

Any changes or modifications to equipment, not expressly approved by Datalogic or Balluff could void the user's authority to operate the equipment.

Statement of Agency Compliance

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Class B Compliance Statement

The user is cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or television technician for help.

FCC RF Radiation Exposure Statement



Exposure to Radio-Frequency Radiation

CAUTION

To comply with FCC RF exposure compliance requirements, for mobile configurations, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons.

This device must not be co-located or operating in conjunction with any other antenna or transmitter.

13 Regulatory Addendum

Canadian Notice

This equipment does not exceed the Class B limits for radio noise emissions as described in the Radio Interference Regulations of the Canadian Department of Communications.

Le present appareil numerique n’émet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la classe B prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada.



Do not attempt to open or otherwise service any components in the optics cavity. Opening or servicing any part of the optics cavity by unauthorized personnel may violate laser safety regulations.

Customs Union

The CU conformity certification has been achieved; this allows the Product to bear the Eurasian mark of conformity.



13.2 Power Supply

This device is intended to be connected to a UL Listed/CSA Certified computer which supplies power directly to the reader or else be supplied by UL Listed/CSA Certified Power Unit marked “Class 2” or LPS power source rated 5-14 V minimum 900 mA.

Model P/N	Power Supply
PD9530-HP	5 VDC
PD9530-DPM	5 VDC

Argentina Power Statement



Atención



Características de la fuente de alimentación eléctrica.

Entrada: 100 - 240 Vca
min 0.35A 50-60 Hz

Salida: 5VDC, máx 2.5A
(-)Negativo al centro

Entrada: 100 - 240 Vca
min 600mA 50-60 Hz

Salida: 12VDC, máx1500mA
(-)Negativo al centro

Utilice en su red solo fuentes certificadas en Argentina.

El uso de fuentes de alimentación no compatibles puede resultar en riesgo de incendio o de choque eléctrico para el usuario.

13 Regulatory Addendum

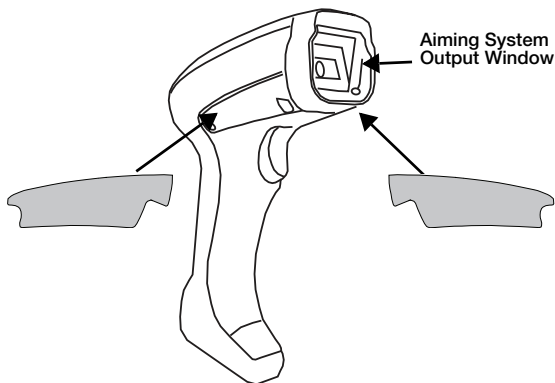
13.3 Imager Labeling

13.3.1 Aiming System

The PowerScan™ aiming system meets the Class 2 requirements for laser safety. The laser information is located on the sides of the Scanner as shown below.

Sample labels are shown here to illustrate their location only. Please view the labels on your product for actual details, as they may vary from those depicted.

Scanner Regulatory Labels



I	D	F	E
LA LUCE LASER È VISIBILE ALL'OCCHIO UMANO E VIENE EMESSA DALLA FINESTRA INDICATA NELLA FIGURA.	DIE LASER-STRAHLUNG IST FÜR DAS MENSCHLICHE AUGE SICHTBAR UND WIRD AM STRAHLAUSTRITTSFENSTER AUSGESENDET (SIEHE BILD)	LE RAYON LASER EST VISIBLE À L'OEIL NU ET IL EST ÉMIS PAR LA FENÊTRE DÉSIGNÉE SUR L'ILLUSTRATION DANS LA FIGURE	A LUZ LÁSER ES VISIBLE AL OJO HUMANO Y ES EMITIDA POR LA VENTANA INDICADA EN LA FIGURA.
LUCE LASER NON FISARE IL FASCIO APPARECCHIO LASER DI CLASSE 2 MASSIMA POTENZA D'USCITA: LUNGHEZZA D'ONDA EMESSA: CONFORME A EN 60825-1 (2007)	LASERSTRAHLUNG NICHT IN DEN STRAHL BLICKEN PRODUKT DER LASERKLASSE 2 MAXIMALE AUSGANGSLEISTUNG: WELLENLÄGE: ENTSPR. EN 60825-1 (2007)	RAYON LASER EVITER DE REGARDER LE RAYON APPAREIL LASER DE CLASSE 2 PUISSANCE DE SORTIE: LONGUEUR D'ONDE EMISE: CONFORME A EN 60825-1 (2007)	RAYO LÁSER NO MIRAR FIJO EL RAYO APARATO LÁSER DE CLASE 2 MÁXIMA POTENCIA DE SALIDA: LONGITUD DE ONDA EMITIDA: CONFORME A EN 60825-1 (2007)

13

Regulatory Addendum

ENGLISH

The following information is provided to comply with the rules imposed by international authorities and refers to the correct use of your terminal.

STANDARD LASER SAFETY REGULATIONS

This product conforms to the applicable requirements of both CDRH 21 CFR 1040 and EN 60825-1 at the date of manufacture.

For installation, use and maintenance, it is not necessary to open the device.

**WARNING**

Use of controls or adjustments or performance of procedures other than those specified herein may result in exposure to hazardous visible laser light.

The product utilizes a low-power laser diode. Although staring directly at the laser beam momentarily causes no known biological damage, avoid staring at the beam as one would with any very strong light source, such as the sun. Avoid that the laser beam hits the eye of an observer, even through reflective surfaces such as mirrors, etc.

ITALIANO

Le seguenti informazioni vengono fornite dietro direttive delle autorità internazionali e si riferiscono all'uso corretto del terminale.

NORMATIVE STANDARD PER LA SICUREZZA LASER

Questo prodotto risulta conforme alle normative vigenti sulla sicurezza laser alla data di produzione: CDRH 21 CFR 1040 e EN 60825-1.

Non si rende mai necessario aprire l'apparecchio per motivi di installazione, utilizzo o manutenzione.

**ATTENZIONE**

L'utilizzo di procedure o regolazioni differenti da quelle descritte nella documentazione può provocare un'esposizione pericolosa a luce laser visibile.

Il prodotto utilizza un diodo laser a bassa potenza. Sebbene non siano noti danni riportati dall'occhio umano in seguito ad una esposizione di breve durata, evitare di fissare il raggio laser così come si eviterebbe qualsiasi altra sorgente di luminosità intensa, ad esempio il sole. Evitare inoltre di dirigere il raggio laser negli occhi di un osservatore, anche attraverso superfici riflettenti come gli specchi.

13

Regulatory Addendum

DEUTSCH

Die folgenden Informationen stimmen mit den von internationalen Behörden festgelegten Sicherheitshinweisen überein, und beziehen sich auf den korrekten Gebrauch des Scanners

NORM FÜR DIE LASERSICHERHEIT

Am Tag der Herstellung entspricht dieses Gerät den gültigen Lasersicherheitsnormen EN 60825-1 und CDRH 21 CFR 1040.

Das Gerät muss für den Betrieb oder Installations- und Wartungsarbeiten nicht geöffnet werden.

Es ist nicht notwendig, das Gerät wegen Betrieb oder Installations-, und Wartungs-Arbeiten zu öffnen.

**ACHTUNG**

Jegliche Änderungen am Gerät sowie jegliche Benutzung, die nicht in dieser Betriebsanleitung beschrieben ist, können gefährliches Laserlicht verursachen

Das Produkt verfügt über eine Laserdiode. Obwohl zur Zeit nicht bekannt ist, dass durch kurze Einstrahlung von Laserlicht ins Auge Augenschäden entstehen können, sollten Sie es vermeiden für längere Zeit in den Laserstrahl zu schauen. Richten Sie den Laserstrahl nicht auf die Augen eines Beobachters, noch auf reflektierende Oberflächen.

FRANÇAIS

Les informations suivantes sont fournies selon les règles fixées par les autorités internationales et se réfèrent à une correcte utilisation du terminal.

NORMES DE SECURITE LASER

Ce produit est conforme aux normes de sécurité laser en vigueur à sa date de fabrication: CDRH 21 CFR 1040 et EN 60825-1.

Il n'est pas nécessaire d'ouvrir l'appareil pour l'installation, l'utilisation ou l'entretien.

**ATTENTION**

L'utilisation de procédures ou réglages différents de ceux donnés ici peut entraîner une dangereuse exposition à lumière laser visible.

Le produit utilise une diode laser. Aucun dommage aux yeux humains n'a été constaté à la suite d'une exposition au rayon laser. Eviter de regarder fixement le rayon, comme toute autre source lumineuse intense telle que le soleil. Eviter aussi de diriger le rayon vers les yeux d'un observateur, même à travers des surfaces réfléchissantes (miroirs, par exemple).

NORMATIVAS ESTÁNDAR PARA LA SEGURIDAD LÁSER

No es necesario abrir el aparato para la instalación, la utilización o la
manutención.



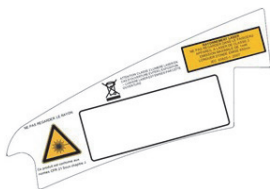
ATENCIÓN

El aparato utiliza un diodo láser a baja potencia. No son notorios daños a los ojos humanos a consecuencia de una exposición de corta duración. Eviten de mirar fijo el rayo láser así como evitarían cualquiera otra fuente de luminosidad intensa, por ejemplo el sol. Además, eviten de dirigir el rayo láser hacia los ojos de un observador, también a través de superficies reflectantes como los espejos.



The PowerScan™ Handheld Reader is not user-serviceable. Opening the case of the unit can cause internal damage and will void the warranty.

CAUTION



13 Regulatory Addendum

13.4 WEEE Statement

	Waste Electrical and Electronic Equipment (WEEE) Statement
---	--

English

Our BVS HS-P and BVS HS-Q series handheld readers are only intended for commercial use as B2B devices as per the WEEE Directive. The WEEE Directive, valid across the EU, is a standard defining how waste electrical equipment has to be handled.

For you, this means that the handheld readers must not be disposed of in normal household waste or taken to a collection point of public waste disposal authorities.

In the event of disposal, you can return the handheld reader to us. We will then ensure it is recycled in accordance with the applicable legal requirements.

For your return shipment, please use our RMA process, which you will find on our website.

We are unable to reimburse costs for shipping/packageging.

If the handheld reader to be returned is type BVS HS-QB or BVS HS-PB, the internationally valid shipping regulations for lithium-ion batteries must be observed.

German

Unsere Handheld Reader der BVS HS-P bzw. BVS HS-Q Baureihe sind ausschließlich für den gewerblichen Gebrauch vorgesehen als sog. B2B-Geräte gemäß der WEEE-Richtlinie.

Die EU-weit gültige WEEE-Richtlinie definiert einheitlich wie Elektro-Altgeräten behandelt werden müssen.

Für Sie bedeutet das, dass die Handheld Reader weder über den normalen Hausmüll entsorgt, noch bei einer Sammelstelle eines öffentlich-rechtlichen Entsorgungsträger abgegeben werden dürfen. Im Falle einer Entsorgung können Sie die Handheld Reader an uns zurücksenden.

Wir stellen dann die Verwertung nach den jeweils geltenden gesetzlichen Vorschriften sicher.

Für die Rücksendung verwenden Sie bitte unseren RMA-Prozess, den Sie auf unserer Webseite finden.

Die Kosten für Versand/Verpackung können wir nicht erstatten. Falls der zurückzusendende Handheld Reader vom Typ BVS HS-QB oder BVS HS-PB ist, sind die international gültigen Versandvorschriften für Lithium-Ionen-Batterien zu beachten.

13 Regulatory Addendum

CHINA ROHS TABLE OF RESTRICTED ELEMENTS

PART	部件名称	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr(VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
		铅	汞	镉	六价铬	多溴联苯	多溴二苯醚
Cable	电缆	X	O	O	O	O	O
Printed Circuit Board Assembly	电路板组	X	O	O	O	O	O
Assy, Module	光学组件	X	O	O	O	O	O
Power Supply	电源	X	O	O	O	O	O
O：代表此种部件的所有均质材料中所含的该种有毒有害物质均低于中华人民共和国信息产业部所颁布的 《电子信息产品中有毒有害物质的限量要求》(SJ/T 11363-2006) 规定的限量。							
X：代表此种部件所用的均质材料中，至少有一类材料其所含的有毒有害物质高于中华人民共和国信息产业部所颁布的 《电子信息产品中有毒有害物质的限量要求》(SJ/T 11363-2006) 规定的限量							

EFUP determined by "Look-up Method" (scanner). 环保使用期限取决于“查表法”（扫描仪）

13 Regulatory Addendum

13.5 Letter of Conformity



Datalogic ADC Srl
Via S. Vitalino, 13
Lippo di Calderara di Reno (BO)
40012 Italy

EC-092
Rev.: 1
Pag.: 1 di 1

La presente dichiarazione di conformità è rilasciata sotto la responsabilità esclusiva di Datalogic ADC Srl per:

This Declaration of Conformity is issued under the sole responsibility of Datalogic ADC Srl for:

Cette déclaration de conformité est établie sous la seule responsabilité de Datalogic ADC Srl pour:

Diese Konformitätserklärung wird unter der alleinigen Verantwortung des Datalogic ADC Srl erteilt für:

Esta declaración de conformidad se expide bajo la exclusiva responsabilidad de Datalogic ADC Srl para:

PowerScan PD9530

e tutti i suoi modelli
and all its models
et tous ses modèles
und seine Modelle
y todos sus modelos

sono conformi alle Direttive del Consiglio Europeo sottoelencate:

are in conformity with the requirements of the European Council Directives listed below:

sont conformes aux spécifications des Directives de l'Union Européenne ci-dessous:

den nachstehenden angeführten Direktiven des Europäischen Rats:

cumple con los requisitos de las Directivas del Consejo Europeo, según la lista siguiente:

2004/108/EC - EMC Directive
2011/65/EU - RoHS Directive

Basate sulle legislazioni degli Stati membri in relazione alla compatibilità elettromagnetica ed alla sicurezza dei prodotti.

On the approximation of the laws of Member States relating to electromagnetic compatibility and product safety.

Basée sur la législation des Etats membres relative à la compatibilité électromagnétique et à la sécurité des produits.

Über die Annäherung der Gesetze der Mitgliedsstaaten in bezug auf elektromagnetische Verträglichkeit und Produktsicherheit entsprechen.

Basado en la aproximación de las leyes de los Países Miembros respecto a la compatibilidad electromagnética y las Medidas de seguridad relativas al producto.

Questa dichiarazione è basata sulla conformità dei prodotti alle norme seguenti:

This declaration is based upon compliance of the products to the following standards:

Cette déclaration repose sur la conformité des produits aux normes suivantes:

Diese Erklärung basiert darauf, dass das Produkt den folgenden Normen entspricht:

Esta declaración se basa en el cumplimiento de los productos con las siguientes normas:

EN 55022 (CLASS B I TE), DECEMBER 2010: *LIMITS AND METHODS OF MEASUREMENTS OF RADIO DISTURBANCE*

AC1 (CLASS B I TE), OCTOBER 2011: *CHARACTERISTICS OF INFORMATION TECHNOLOGY EQUIPMENT*

EN 55024, NOVEMBER 2010: *INFORMATION TECHNOLOGY EQUIPMENT
IMMUNITY CHARACTERISTICS
LIMITS AND METHODS OF MEASUREMENT*

EN 50581, SEPTEMBER 2012: *TECHNICAL DOCUMENTATION FOR THE ASSESSMENT OF ELECTRICAL AND ELECTRONIC PRODUCTS WITH RESPECT TO THE RESTRICTION OF HAZARDOUS SUBSTANCES*

Ruggero Cacioppo

Lippo di Calderara, July, 31st, 2014

Quality & Reliability MGR - Europe

14

Ergonomic Recommendations

14 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.

14.1 Services and Support

Balluff provides several services as well as technical support through its website. Log on to www.Balluff.com.

Products

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Notes

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