PowerScan™ PD9600

QUICK REFERENCE GUIDE

Industrial Corded Handheld
Area Imager Bar Code Reader

DATALOGIC

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The number of arbitrators will be three, with each side to the dispute being entitled to appoint one arbitrator. The two arbitrators appointed by the parties will appoint a third arbitrator who will act as chairman of the proceedings. Vacancies in the post of chairman will be filled by the president of the SIAC. Other vacancies will be filled by the respective nominating party. Proceedings will continue from the stage they were at when the vacancy occurred. If one of the parties refuses or otherwise fails to appoint an arbitrator within 30 days of the date the other party appoints its, the first appointed arbitrator will be the sole arbitrator, provided that the arbitrator was validly and properly appointed. All proceedings will be conducted, including all documents presented in such proceedings, in the English language. The English language version of these terms and conditions prevails over any other language version.

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NOTES

POWERSCAN™ PD9600

ABOUT THE SCANNER

The PowerScan™ PD9600 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	TYPE	OPTICAL FEATURE
PD9630	SR	Standard Range, standard and low density codes
PD9630	HP	High Performance, high, standard and low density codes
PD9630	DC	Document Capture, wide angle, standard and low density code, color sensor for image capture
PD9630	AR	Auto range area reader, auto range optics
PD9630	DPX	Direct Part Marking (DPM) reader with auto range optics and multi-color illumination system

General Features

Omni-directional Operating	To read a symbol or capture an image, you simply aim the reader and pull the trigger. Since the PowerScan™ PD9600 is a powerful omni-directional reader, the orientation of the symbol is not important.
Decoding	Thanks to powerful algorithms, PowerScan™ PD9600 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) and DPM barcodes on different material supports (e.g. metal, plastic, glass, printed circuits, components case, etc.). 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	PowerScan™ PD9600 can also function as a camera by capturing images. Color images are possible with -DC model.
Autoscanning	An autoscan command causes the reader to scan continuously and to monitor the central zone of its reading area. Not available for PD9630-AR model.

Flash Memory	Flash technology allows you to upgrade the PowerScan™ PD9600 reader as new symbologies are supported or as improved decoding algorithms 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 either Datalogic Aladdin™ or the barcodes in the USA Driver License Parsing Quick Reference Guide (QRG), available on the Datalogic website.

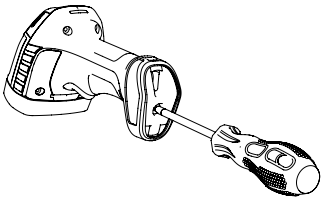
SETTING UP THE READER

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

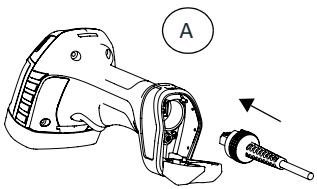
1. Connect the Cable to the reader and the Host as shown below.
2. Configure the Interface (see page 10).
3. Configure the Reader starting on page 18 (optional, as needed).

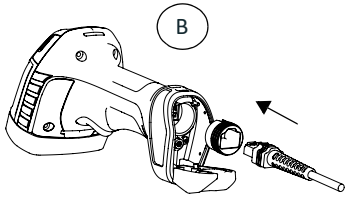
Connect the PowerScan™ by plugging directly into the host device as shown. The power can also be supplied through an external power supply via the Interface Cable supplied with a power jack.

Connecting the Cable

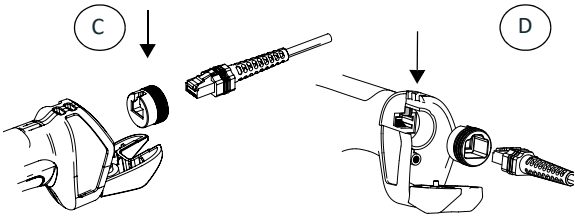


1. Use a screwdriver to open the handle.

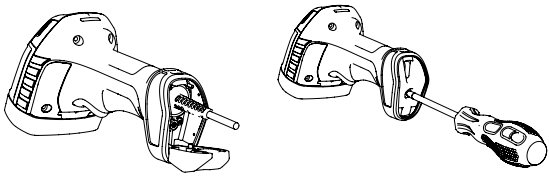




2. Insert the circular RJ45 cable (figure A) or use the adapter with non-circular RJ45 cables (figure B).



3. In this case, make sure to insert the adapter with the slot facing up (C). The rib (D) inside the adapter seat must fit into this slot.



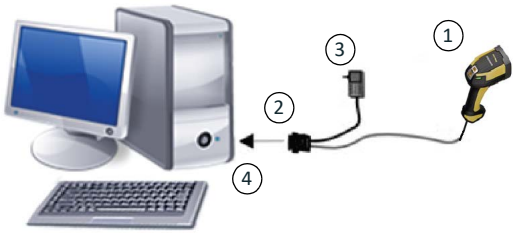
4. Once the cable is properly inserted, close the handle and screw it back into the body.

Connecting to the Host Interface

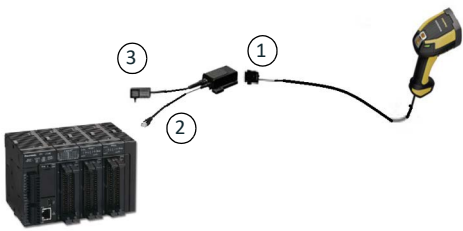
Follow the steps indicated by the pictures below to connect the gun to the Host, according to the communication cable available.

USB

RS-232

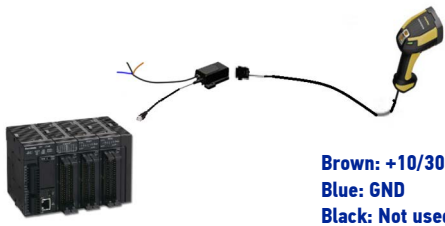


ETHERNET
CM9680



ETHERNET
CM9681 - PoE Connection

ETHERNET
with CM9681 - External Power Supply

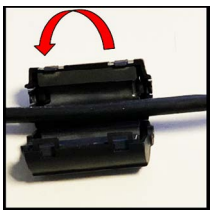


Brown: +10/30 VDC
Blue: GND
Black: Not used

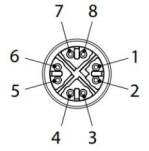
CAUTION: To avoid damage to the scanner and/or to the host, first install correctly the cable into the scanner and then connect the other end of the cable into the host port of the PC.

NOTE: When using the CM9680/CM9681 modules, apply the ferrite provided with the device to the Ethernet cable 5 cm from the box. See the example below.

Figure 1 - How to mount a ferrite



CM9681 Power Over Ethernet (PoE) Connection

PIN	NAME	DESCRIPTION	
1	TX+	Transmit Data +	
2	TX-	Transmit Data -	
3	RX+	Receive Data +	
4	RX-	Receive Data -	
5	DC1-	DC Power -	
6	DC2-	DC Power -	
7	DC1+	DC Power +	
8	DC2+	DC Power +	

M12 X-Coded Female Ethernet Network Connector

Power can be applied to any of the data pairs according to the IEE 802.3af standard for Alternative A (Mid and End-span) or Alternative B.

CM9681 External Power Connection

DESCRIPTION	
1 - BROWN 10-30V	
2 - NOT USED (WITH HOLE)	
3 - BLUE GND	
4 - BLACK	
5 - NOT USED (WITH HOLE)	

CM9680/CM9681 Compatible Cables

CABLE	PART NUMBER
PWR-IN CONNECTOR M12 5P F. A-Coded	93A050045
CABLE RS232 2M POT COIL IP67	CAB-559
3-POLE STRAIGHT CABLE 3M	95A251290
3-POLE STRAIGHT CABLE 5M	95A251300
3-POLE STRAIGHT CABLE 10M	95A251340
CAB-ETH-X-RJ ADAPTER FULL GETH-X to RJ45	93A050141
CAB-ETH-X-M01 M12-IP67 GETH-X CAB 1M	93A050122
CAB-ETH-X-M03 M12-IP67 GETH-X CAB 3M	93A050123

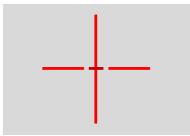
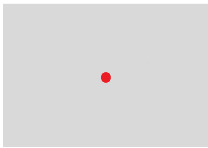
CAUTION: Use only the recommended RS232 cables. If you use a cable that is not recommended, do not connect the power supply to the cable.

CAUTION: Use only the recommended Ethernet cables or in alternative only high quality shielded cables.

USING THE POWERSCAN™ PD9600

The PowerScan™ PD9600 normally functions by capturing and decoding 1D and 2Ds 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

OPTICS TYPE	AIMER PATTERN
SR Optics HP Optics	
DC Optics	
AR Optics DPX Optics	

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.

NOTE: Placing the aiming pointer over the barcode is strongly recommended to maximize the reading capability of DPM barcodes.

Successful reading is signaled by an audible tone plus a good-read green spot LED indicator (not present in AR model) and vibration.

With AR model, if enabled, a partial trigger press produces a red spot, which should be aimed over the code center to get the best reading performance. By completely pressing the trigger the illumination area appears and the code scanning starts.

Reference the PowerScan™ 9600 Family Product Reference Guide (PRG) for more information about this feature and other programmable settings.

Aiming Pointer

Scan the following symbols to enable or disable the aiming pointer.

Aiming Pointer = Disable

★ Aiming Pointer = Enable

NOTE: Disabling the aiming pointer in PD9630-AR and PD9630-DPX models is strongly discouraged as it ensures best decoding performances.

SELECTING THE INTERFACE TYPE

Upon completing the physical connection between the reader and its host, proceed directly to the Interface Selection paragraph below, to program the reader for the interface type it is connected to (for example: RS-232, USB, Ethernet etc.). Scan the appropriate bar code to select your system's correct interface type.

Interface Selection

All models are multi-interface and support RS-232, USB and Ethernet. 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 PowerScan™ 9600 Family 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 label. DO NOT scan an ENTER/EXIT label prior to scanning an interface selection label.

Some interfaces require the scanner to start in the disabled state when powered up. If you read one of these interface selections by mistake, or 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 reading programming labels.

This procedure is allowed only once after the reader is powered up. If it is necessary to repeat the procedure, you must cycle power to the reader before repeating.

SERIAL INTERFACE

RS-232 standard interface

★ Select RS232-STD

RS-232 Wincor-Nixdorf

Select RS232-WN

RS-232 for use with OPOS/UPOS/JavaPOS

Select RS-232 OPOS

USB Com to simulate RS-232 standard interface

Select USB-COM-STD[a]

USB-OEM

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

Select USB-OEM

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

★ Factory setting

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 USB Magellan Scanners

ETHERNET

Select Ethernet Interface

Keyboard Interface

Use the programming labels to select options for USB Keyboard Interfaces.

KEYBOARD
USB Keyboard with standard key encoding  **Select USB Keyboard**
USB Keyboard with alternate key encoding  **Select USB Alternate Keyboard**
USB -Composite  **★ Select USB-Composite**

★ Factory setting

COUNTRY MODE

ENTER/EXIT PROGRAMMING MODE

★ Country Mode = US

Country Mode = Belgium

Country Mode = Croatia

Country Mode = Czech Republic

Country Mode = Denmark

★ Default Value

COUNTRY MODE (CONTINUED)

Country Mode = France

Country Mode = French Canadian

Country Mode = Germany

Country Mode = Hungary

Country Mode = Italy

Country Mode = Japanese 106-Key

COUNTRY MODE (CONTINUED)
 Country Mode = Lithuanian
 Country Mode = Norway
 Country Mode = Poland
 Country Mode = Portugal
 Country Mode = Romania
 Country Mode = Spain

COUNTRY MODE (CONTINUED)

Country Mode = Sweden

Country Mode = Slovakia

Country Mode = Switzerland

Country Mode = United Kingdom

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 PowerScan™ PD9600 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 bar code "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 10 for more information.

Reset Default Settings

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 PowerScan™ PD9600" on page 8 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. In AR model the aiming system remains on until the trigger is released.

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

OPERATING MODES

Scan Mode

The reader 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. Motion Sense[1] is active. 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 "Scanning Active Time"[2] 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 "Scanning Active Time"[2] has elapsed. Motion Sense[1] is active. Reading a label does not disable scanning. Double Read Timeout[2] 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 "Scanning Active Time"[2] has elapsed. Motion Sense[1] is active. Reading a label does not disable scanning. Double Read Timeout[2] 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[2]

1. If the scanner detects motion the aiming pattern is turned on. In the AR model the aiming system turns on with a partial pull of the trigger.
2. See the Product Reference Guide (PRG) for these and other programmable features.

prevents undesired multiple reads. Not available for AR model.

Flashing — The reader illuminator flashes on and off regardless of the trigger status. Code reading takes place only during the Flash On[1] time. Double Read Timeout[2] 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 white illumination switches on. Scanning continues until a label is read or "Scanning Active Time" is reached. Not available for AR model.

Retained Trigger Hold Multiple — Same as Trigger Hold Multiple but all decoded labels are transmitted when the trigger is released. Motion Sense[3] is active. The labels can be sorted before transmission.

SCAN MODE
 ENTER/EXIT PROGRAMMING MODE
 ★ Scan Mode = Trigger Single
 Scan Mode = Trigger Pulse Multiple

1. Controlled by Flash On Time and Flash Off Time. Use the PRG to program these options.
2. See the Product Reference Guide (PRG) for these and other programmable features.
3. If the scanner detects motion the aiming pattern is turned on. In the AR model the aiming system turns on with a partial pull of the trigger.

Scan Mode = Trigger Hold Multiple

Scan Mode = Flashing

Scan Mode = Always On[a]

Scan Mode = Stand Mode[a]

Scan Mode= Retained Trigger Hold Multiple

a. Not available for AR model.

POWER OPTIMIZATION

ENTER/EXIT PROGRAMMING MODE

★ Power Optimization = Performance

Power Optimization = Consumption

★ Factory setting

TECHNICAL SPECIFICATIONS

PowerScan™ PD9600

PHYSICAL CHARACTERISTICS	
Color	Yellow/Black
Dimensions	Height 19.0 cm (7.5'') Length 14.0 cm (5.5") Width 7.9 cm (3.1")
Weight (without cable)	SR/HP/DC: Approx. 305 g (10.7 oz.) AR: 320 g (11.28 oz.) DPX: 316 g (11.1 oz.)
ELECTRICAL CHARACTERISTICS	
Input Voltage	5 - 30 VDC ± 5%
Current Consumption	**Operating (Typical)[a]:** SR: 200mA @ 5V; 120mA @ 12V HP/DC: 280mA @ 5V / 140mA @ 12V AR: 410mA @5V /180 mA @12V DPX: 470mA @ 5V; 190 mA @ 12V **Operating (max[b]):** SR/HP/DC: 500mA @5V / 200mA @12V AR:850mA @5V (550mA with Power Optimization enabled); 350mA @12V DPX: 1A @5V; 400 mA @12V **Standby/Idle (Typical):** SR/HP/DC: 187mA @ 5V / 92mA @ 12V AR: 140mA @ 5V / 80mA @ 12V DPX: 89mA @ 5V / 41mA @ 12V
Reading Indicators	Top illumination, Good Read Spot[c], Beep, Vibration
Interfaces Supported	USB, RS-232, Ethernet see page 10 for a listing of available interface options

a. Mean value reading in 1 sec.
b. Peak consumption with 10% tolerance
c. Not available for AR model.

ENVIRONMENTAL CHARACTERISTICS	
Operating Temperature	-20° to 50° C (-4° to 122° F) -30° to 50° C (-22° to 122° F) (for AR model)
Storage Temperature	-40° to 70° C (-40° to 158° F)
Humidity	0 to 95% non-condensing
Drop Resistance	Withstands 50 drops from 2.5 m/8.2 ft @20° C; Withstands 50 drops from 2.0 m/6.6 ft @-20° C
Ambient Light Immunity	100,000 Lux
Contaminants: Spray/rain, Dust/particulates	IP67 and IP65
ESD Protection	20 KV
Regulatory	See Regulatory Addendum

OPTICAL CHARACTERISTICS	
Optical Format	1/4"
Imager Sensor	1280 H x 800 V
Illumination System	SR, HP, DC: White LED AR: 1 red LED (near field) + 1 red LED (far field) DPX: White, Red and Blue LED
Aiming System	SR, HP, DC: 630 - 680 nm VLD AR, DPX: 650nm VLD
Reading Angle	SR, HP, DC: Pitch: +/- 52°; Skew: +/- 52° AR: Pitch: +/- 60°; Skew: +/- 60° DPX: Pitch: +/- 52°; Skew: +/- 52°
Field of View	HP: 38° x 24° SR: 38° x 24° DC: 51° x 33.5° AR: Near field 34°H x 22°V Far field 12°H x 7.5°V DPX: 38° x 29°
Print Contrast Ratio	SR, HP, DC: minimum 15% AR: minimum 20% DPX: minimum 15%

DECODE CAPABILITY
1D Bar Codes GS1 Databar linear codes, UPC/EAN (A,E,13,8), including P2/P5 Addons, ISBN ,ISSN, Code128, EAN128, ISBT128, Code39, Code39 Full ASCII, Code39 CIP, Code 32, Trioptic, Interleaved 2 of 5, IATA, Industrial 2 of 5, Standard 2 of 5, matrix2 of 5, data-logic 2 of 5, follet 2 of 5, Codabar, Code11, MSI, Plessey, Code 93, Pharmacode, BC412
2D / Stacked Codes DataMatrix (square, rectangular), MaxiCode ,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, Sweden Post,Portugal Post, LaPoste A/R 39 Stacked codes including EAN/JAN Composites, GS1 Databar Composites, GS1 Databar Expanded Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional, PDF417, Macro PDF, Micro PDF417, China sensible, DotCode
Other OCR, Digimarc[a]

a. Not available for AR and DPX model.

DOF - DEPTH OF FIELD[A] (TYPICAL)

Symbology	DOF range
Code 39	**AR Optics:** 3 mils: 13-95 cm (5.1- 37.4in) 20 mils: up to 600 cm (up to 236.2in)
Code 128	**SR Optics:** 5 mils: 6.4-30.9 cm (2.5-12.2 in) 20 mils: 4-103.7 cm (1.6-40.8 in) 40 mils: 5.5-175 cm (2.2-68.9 in) **DC Optics:** 5 mils: 3.1-39.7 cm (1.2-15.6 in) 20 mils: 3.5-119.1 cm (1.3-46.9 in) 40 mils: 4.5-186.6 cm (1.7-73.4 in) **HP Optics:** 2.5 mils: 6.3-11.5 cm (2.5-4.5 in) 5 mils: 3.8-41 cm (1.5-16.1 in) 20 mils: 4-157 cm (1.6-61.8 in) 40 mils: 5.5-242.9 cm (2.1-95.6 in) **AR Optics:** 40 mils: up to 1000 cm (up to 393.7 in) 100 mils: up to 2000 cm (up to 787.4 in) **DPX Optics:** 2.5 mils: 2.5-9.8 cm (1.0-3.9 in) 5 mils: 2.5-16.9 cm (1.0-6.7 in)
EAN13	**SR Optics:** 13 mils: 4-67.5 cm (1.5-26.5 in) **DC Optics:** 13 mils: 3.5-102 cm (1.3-40.1 in) **HP Optics:** 13 mil: 4-120.2 cm (1.5-40.2 in) **AR Optics:** 13 mils: up to 320 cm (up to 126 in) **DPX Optics:** 13 mils: 2.5-22.5 cm (1.0-8.9 in)
PDF417	**HP Optics:** 10 mils: 0.5-46.1 cm (0.2-18.1 in) **DPX Optics:** 5 mils: 2.0-14.7 cm (0.8-5.8 in) 10 mils: 1.0-21.5 cm (0.4-8.5 in)

Datamatrix	**SR Optics:** 10 mils: 6.4-30 cm (2.5-11.8 in) **DC Optics:** 10 mils: 4.2-30.2 cm (1.6-11.8 in) **HP Optics:** 4 mils: 6.5-9.3 cm (2.5-3.6 in) 10 mils: 4.2-32.1 cm (1.6-12.6 in) **AR Optics:** 10 mils: up to 110 cm (up to 43.3 in) 55 mils: up to 650 cm (up to 255.9 in) 100 mils: up to 1000 cm (up to 393.7 in) **DPX Optics:** 5 mils: 2.0-10.0 cm (0.8-3.9 in) 10 mils: 2.0-16.2 cm (0.8-6.4 in)
Max Resolution	**SR Optics:** 1D = 3 mils, 2D = 6 mils **DC Optics:** 1D = 3 mils, 2D = 5 mils **HP Optics:** 1D = 2.5 mils, 2D = 4 mils **AR Optics:** 1D = 2.5 mils, PDF = 3 mils Datamatrix = 5 mils **DPX Optics:** 1D = 2 mils 2D = 4 mils

a. All labels grade A, typical environmental light, 20°C, label inclination 10°. Only for AR model: All labels grade A, ambient light level 200-300lux, pitch angle 10°, tilt angle 10°, skew angle 0°, room temperature 20°C.

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 (not available in AR model). 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.

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.	Reader beeps four times at highest frequency and volume upon power-up.
Good Read	LED behavior for this indication is configurable via the feature "Good Read: When to Indicate" (see the PRG for information). The Green spot turns on for a configurable time (not available in AR model).	The reader will beep once at current frequency, volume, mono/bi-tonal setting and duration upon a successful label scan.
ROM Failure	Flashes	Reader sounds 4 long beeps.
Limited Scanning Label Read	N/A	Reader 'chirps' six times at the highest frequency and current volume.
Reader Disabled	The LED blinks continuously 100mS on / 900mS off	N/A
Image Capture	Blue light	N/A

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Nothing happens when the scan button is pulled.	No power to the reader.	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.	Reader not programmed for correct bar code type.	Ensure reader 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 reader and bar code is incorrect.	Move the reader closer to or further from the bar code.
Bar code is decoded but not transmitted to the host.	Reader 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)

CLEANING PROCEDURE

Proper cleaning is needed on the external plastic surfaces and output window to guarantee reliable scanning and charging of the battery.

A regular cleaning routine will remove the dust and dirt that may accumulate on the product over time. The maintenance activity may be repeated more frequently depending on the severity of the environment in which the scanner is used.

A periodic deeper cleaning is suggested once per month.

CAUTION: Do not use abrasive pads or cleaning agents.

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

Common Cleaning Solutions

The cleaners and disinfectants (or their equivalent) listed below have been tested for use on the PowerScan™ 9600.

PRODUCT	CHEMICAL CONTENT
Alcohol Wipes	70% Isopropyl Alcohol
Formula 409® Glass and Surface Cleaner	n-Alkyl Dimethyl Benzyl Ammonium Chloride; n-Propoxypropanol
Windex® Multisurface	2-Hexoxyethanol, Butoxypropanol
Clorox® Bleach; Clorox Healthcare Bleach Germicidal Cleaner	Diluted to reach max 0.8% of concentration Sodium Hypochlorite; Sodium Hydroxide
Hydrogen Peroxide	3%
100% Gentle dish soap and water	

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

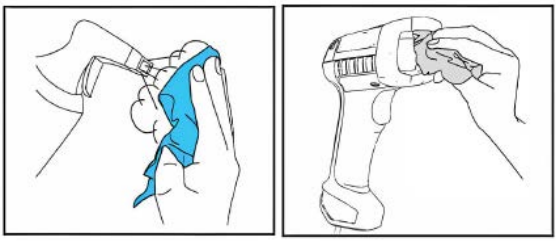
CAUTION: DO NOT spray or pour cleaner directly onto the unit.
DO NOT use solutions in their concentrated form.
DO NOT use aerosols, solvents or abrasives.
DO NOT use paper towels or rough cloths to clean windows.

NOTE: The PowerScan™ 9600 is tolerant to occasional contact to the following industrial fluids:

- **Brake fluid (DOT3)**
- **Carburetor Cleaner (STP)**
- **Gasoline**
- **Motor oil (SAE30)**
- **Automatic Transmission Fluid (ATF)**

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.



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.

Technical Support

Support Through the Website

Datalogic provides several services as well as technical support through its website. Log on to (www.datalogic.com). For quick access, from the home page click on the search icon, and type in the name of the product you're looking for. This allows you access to download Data Sheets, Manuals, Software & Utilities, and Drawings.
Hover over the Support & Service menu for access to Services and Technical Support.

Reseller Technical Support

An excellent source for technical assistance and information is an authorized Datalogic reseller. A reseller is acquainted with specific types of businesses, application software, and computer systems and can provide individualized assistance.

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