Lynx™ D

User's Manual

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GENERAL VIEW

LYNX™ D

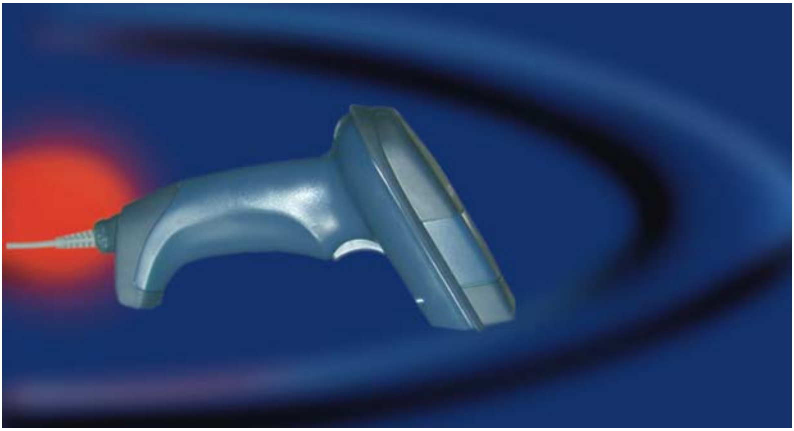


Figure A

1. Aiming System ON/ Wrong Read LED (red)

2. Good Read LED (green)

COMPLIANCE

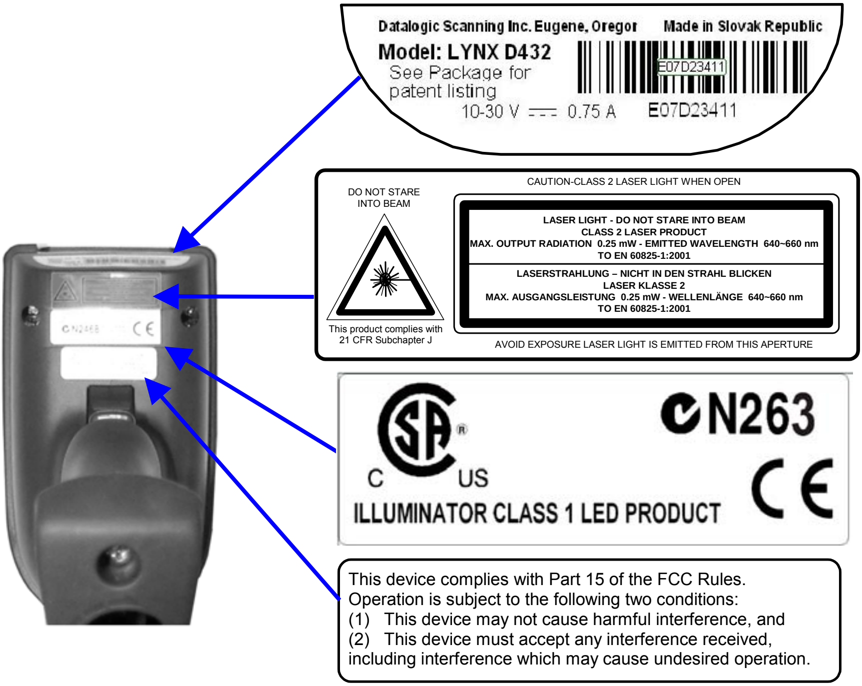


Figure B - LYNX™ D Reader Product Labels

FCC COMPLIANCE

Modifications or changes to this equipment without the expressed written approval of Datalogic could void the authority to use this equipment.

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 which may cause undesired operation.

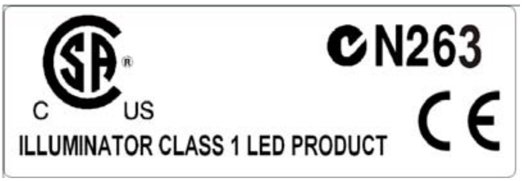
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

LASER SAFETY

The Lynx™ D hand-held reader is a Class 1 LED product regarding its Illuminator and a Class 2 laser product regarding its Aiming System.

LED Illuminator

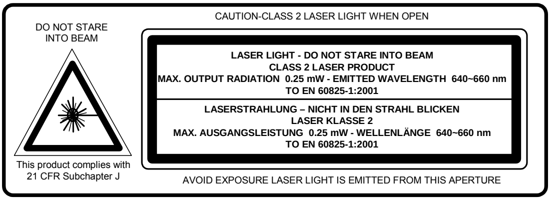
The use of an illuminator in the Lynx™ D hand-held reader is a Class 1 LED product:



ILLUMINATORE LED CLASSE 1
AUSLEUCHTER LED KLASSE 1
ILLUMINATEUR A LED DE CLASSE 1
ILUMINADOR LED DE CLASE 1

Aiming System

The Lynx™ D aiming system meets the requirements for laser safety.



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 STRAHLAUS-TRITTSFENTSTER AUSGESENDET (SIEHE BILD)	LE RAYON LASER EST VISIBLE À L'OEUIL NU ET IL EST ÉMIS PAR LA FENÊTRE DÉSIGNÉE SUR L'ILLUSTRATION DANS LA FIGURE	LA LUZ LÁSER ES VISIBLE AL OJO HUMANO Y ES EMITIDA POR LA VENTANA INDICADA EN LA FIGURA.
LUCE LASER NON FISSARE IL FASCIO APPARECCHIO LASER DI CLASSE 2 MASSIMA POTENZA D'USCITA: LUNGHEZZA D'ONDA EMESSA: CONFORME A EN 60825-1 (2001)	LASERSTRAHLUNG NICHT IN DEN STRAHL BLICKEN PRODUKT DER LASERKLASSE 2 MAXIMALE AUSGANGSLEISTUNG: WELLENLÄGE: ENTSPR. EN 60825-1 (2001)	RAYON LASER EVITER DE REGARDER LE RAYON APPAREIL LASER DE CLASSE 2 PUISSANCE DE SORTIE: LONGUER D'ONDE EMISE: CONFORME A EN 60825-1 (2001)	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 (2001)

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'appa-recchio 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.

DEUTSCH

Die folgenden Informationen stimmen mit den Sicherheitshinweisen überein, die von internationalen Behörden auferlegt wurden, und sie beziehen sich auf den korrekten Gebrauch vom Terminal.

NORM FÜR DIE LASERSICHERHEIT

Dies Produkt entspricht am Tag der Herstellung den gültigen EN 60825-1 und CDRH 21 CFR 1040 Normen für die Lasersicherheit.
Es ist nicht notwendig, das Gerät wegen Betrieb oder Installations-, und Wartungs-arbeiten zu öffnen.

ACHTUNG

Jegliche Änderungen am Gerät sowie Vorgehensweisen, die nicht in dieser Betriebsanleitung beschreiben werden, können ein gefährliches Laserlicht verursachen.

Der Produkt benutzt eine Laserdiode. Obwohl zur Zeit keine Augenschäden von kurzen Einstrahlungen bekannt sind, sollten Sie es vermeiden für längere Zeit in den

Laserstrahl zu schauen, genauso wenig wie in starke Lichtquellen (z.B. die Sonne). Vermeiden Sie es, den Laserstrahl weder gegen die Augen eines Beobachters, noch gegen reflektierende Oberflächen zu richten.

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).

ESPAÑOL

Las informaciones siguientes son presentadas en conformidad con las disposiciones de las autoridades internacionales y se refieren al uso correcto del terminal.

NORMATIVAS ESTÁNDAR PARA LA SEGURIDAD LÁSER

Este aparato resulta conforme a las normativas vigentes de seguridad láser a la fecha de producción: CDRH 21 CFR 1040 y EN 60825-1.
No es necesario abrir el aparato para la instalación, la utilización o la manutención.

ATENCIÓN

La utilización de procedimientos o regulaciones diferentes de aquellas describidas en la documentación puede causar una exposición peligrosa a la luz láser visible.

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.

CAUTION

The LYNX™ D Hand-Held Reader is not user-serviceable. Opening the case of the unit can cause internal damage and will void the warranty.

WEEE COMPLIANCE

POWER SUPPLY

This device is intended to be supplied by a UL Listed or CSA Certified Power Unit marked "Class 2" or "LPS" output rated 10-30 V, minimum 0.75 A which supplies power directly to the scanner via the jack connector on the cable.

PATENTS

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

U.S. patents: 6,512,218 B1; 6,877,664 B1; 6,478,226 B2 and 6,442,180 B1.

Additional patents pending.

SERVICES AND SUPPORT

Datalogic provides several services as well as technical support through its website. Log on to **www.scanning.datalogic.com** and click on the links indicated for further information including:

- **PRODUCTS**

  Search through the links to arrive at your product page where you can download specific **Manuals** and **Software & Utilities**.

- **SERVICES & SUPPORT**

  - **Datalogic Services -** Warranty Extensions and Maintenance Agreements
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1 INTRODUCTION

1.1 LYNX™ D DESCRIPTION

The Lynx™ D Hand-Held Reader packs a lot of performance into an attractive, rugged, hand-held device. It operates in commercial and industrial environments as well as the front office.

Omni-directional Operating

To read a symbol or capture an image, you simply aim the reader and pull the trigger. Since Lynx™ D is a powerful omni-directional reader, the orientation of the symbol is not important.

Decoding

Thanks to powerful algorithms, Lynx™ D 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 to other codes (up to 4 different codes).

Imaging

Lynx™ D can also function as a camera by capturing entire images or image portions of labels, signatures, and other items. Two different control modes are available for managing the camera exposure and calibration.

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 to upgrade the Lynx™ D reader as new symbologies are supported or as improved decoding algorithms become available.

1.2 PACKAGE CONTENTS

The following parts are included in the Lynx™ D package contents:

- Lynx™ D Hand-Held Reader
- CD-ROM containing the Lynx™ D Configuration Tools software and Lynx™ D Reference Manual
- Lynx™ D User's Manual

You may want to save your packing material in case you need to ship the reader at some later time.

1.3 CONFIGURATION METHODS

The Lynx™ D reader configuration can be performed in three ways:

- by reading the configuration codes with the Lynx™ D reader;
- by setting the configuration through the VisualSetup configuration program from the Host PC via the RS232 interface;
- by sending configuration strings from the Host PC via the RS232 interface (see Lynx™ D Reference Manual for details);

NOTE

This manual allows configuring the most common parameters through code symbols, while for complete configuration you can refer to the Lynx™ D Reference Manual available on the CD-ROM. See also the table in par. ***4.1*** *for a list of all configurable parameters.*

2 USING LYNX™ D

2.1 AIMING SYSTEM

The Lynx™ D reader uses an intelligent aiming system similar to those on cameras. By partially pulling the trigger, the aiming system indicates a field of view to be positioned over the code:

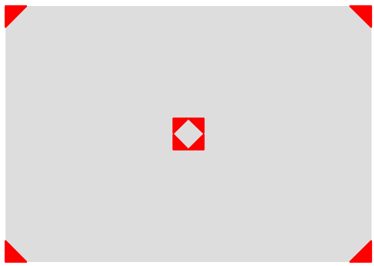

Figure 1 - Aiming System

When you pull the trigger completely a red beam illuminates the code. If the aiming system is centered and the entire symbology is within the aiming system, you will get a good read. The field of view changes size as you move the reader closer or farther away from the code.

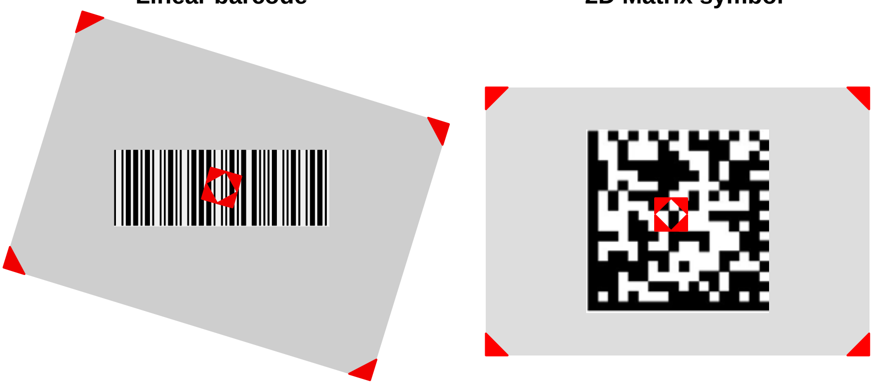

Figure 2 - Relative Size and Location of Aiming System Pattern

The field of view indicated by the aiming system will be smaller when the Lynx™ D is closer to the 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. (See chapter 7 for further details).

NOTE

If reading codes positioned on reflective surfaces, it may be necessary to tilt the reader with respect to the barcode and/or set the Camera Control parameters. For configuring the Camera Control parameters refer to the Lynx™ D Reference Manual available on the CD-ROM.

2.2 INDICATORS

2.2.1 LED Indicators

The following LED indicators signal the reader functions:

LED	**Behavior**
Red	at power on, blinks briefly, then a beep occurs. Then, it turns off. lights when a wrong read occurs. lights when the aiming system is enabled. It turns off only when the trigger is released and the aiming system is disabled.
Green	lights when a symbol has been read and decoded.

2.2.2 Beeper

The Lynx™ D basic software provides beeper signals for good/wrong reading and for indicating errors. Its tone, volume and duration can be directly configured by using the codes given on page 45.

The application program can also manage the beeper (User Defined Beeper) when the reader is controlled by a Host PC. For details refer to the Lynx™ D Reference Manual.

3 INITIAL SETUP

This procedure allows setting up the reader to operate with the default settings:

Whenever you need to change the default values refer to chapter 4.

3.1 RS232 INTERFACE SELECTION

The Lynx™ D reader requires the RS232 interface cable and the AC/DC power adapter to be connected.

To install and configure your reader with the RS232 interface, follow these instructions:

1. Make all system connections as shown in Figure 3:

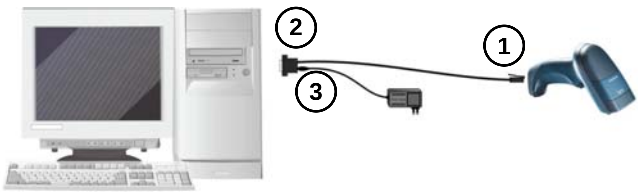

Figure 3 - RS232 Connection

2. Read the restore default parameter code below:

Restore Default

3. Read the RS232 interface selection code:

RS232

4. Power up your PC.

RS232 is the default interface set at the factory.

3.2 WEDGE INTERFACE SELECTION

The Lynx™ D reader requires the Wedge interface cable and the AC/DC power adapter to be connected.

To install and configure your reader with the Wedge interface, follow these instructions:

1. Make all the Lynx™ D reader connections as shown in Figure 4:

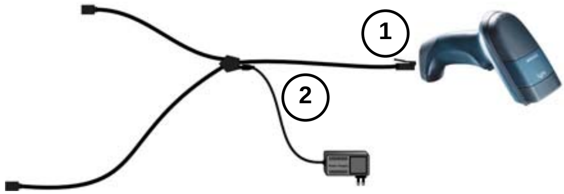

Figure 4 – Reader Wedge Connections

2. Read the restore default parameter code below:

Restore Default

3. Read the Wedge IBM AT interface selection code:

Wedge – IBM AT

4. Make all PC system connections as shown in Figure 5:

Figure 5 – PC Wedge Connection

5. Power up your PC.

CAUTION

When not using the Lynx™ D reader remember to disconnect the Wedge interface from the PC before disconnecting the power cord.

NOTE

While using the Lynx™ D it is always necessary to use cables adopting an external power supply.

3.3 USB INTERFACE SELECTION

The Lynx™ D reader requires the USB interface cable and the AC/DC power adapter to be connected.

The USB interface is compatible with:

Windows 98 (and later)	IBM POS for Windows
Mac OS 8.0 (and later)	4690 Operating System

To install and configure your reader with one of the USB interfaces, follow these instructions:

1. Make all the Lynx™ D reader connections as shown in Figure 6;

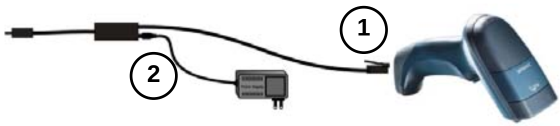

Figure 6 – Reader USB Connections

2. Read the restore default parameter code below:

Restore Default

3. Read the desired USB interface selection code:

USB-COM EMULATION

USB-KBD EMULATION

USB BULK

USB Generic HID

4. Connect the USB cable to PC as shown in Figure 7. The PC automatically recognizes the device and asks to install the device driver.

Figure 7 – PC USB connection

5. Install the USB driver on your PC (the first time only) to complete the connection.

- For USB Bulk the relevant files and drivers must be installed from the CD-ROM. See the “DLBulkUSB User Guide” file provided on the CD-ROM for more information.
- For USB COM the relevant files and drivers must be installed from the USB Device Installation software which can be downloaded from the web page http://www.scanning.datalogic.com.
- For USB Keyboard and for USB Generic HID the correct USB driver is included in the Host Operating System and will either be loaded automatically or will be suggested by the O.S. and should therefore be selected from the dialog box.

NOTE

The Lynx™ D reader is a USB self-powered device.

NOTE

If you need to change the USB device interface, after having reconfigured the reader, you have to disconnect and reconnect the cable to the PC.

4 CONFIGURATION USING CODE SYMBOLS

This section describes the programming method of using configuration code symbols to program your reader. By using the Lynx™ D reader to read/decode these special configuration symbols, you can configure, and obtain information from its system software.

NOTE

This manual allows configuring the most common parameters through code symbols. For complete configuration refer to the Lynx™ D Reference Manual. See also the default values table in par. 4.1 for a complete list of all configurable parameters.

When you are reading configuration code symbols, carefully aim the Lynx™ D 2D reader to avoid reading adjacent symbols.

The configuration code symbols in this chapter are divided into logical sections according to the type of configuration required, (RS232 configuration, Code selection, etc.). If arguments are required with a command, you can read additional code labels (typically digits) from Appendix B**.**

To configure your reader:

1. Read the **Enter Configuration** code ONCE, available on top of each page.
2. Modify the desired parameters in one or more sections by reading the parameter code and selecting the value from the Hex/Numeric table (see Appendix B) or by following the given procedures.
3. Read the **Exit and Save Configuration** code ONCE, available on top of each page.

Example for step 3:
To set the maximum length of characters in a Code 39 barcode symbol that the reader will decode to 32:

- first read the Maximum Length symbol for Code 39 on page 36
- then read the symbol for the digit "3" and lastly the symbol for the digit "2" in Appendix B.

4.1 DEFAULT SETTINGS

The following table lists the default values of all configurable parameters.
The parameters preceded by the (✓) symbol may be configured in this manual. For a complete configuration of all parameters refer to the Lynx™ D Reference Manual available on the CD-ROM.

	Configuration Field	Default Setting
RS232 Communication		
✓	Baud Rate	115200
✓	Parity, Data Bits, Stop Bits	No parity; 8 Data bits; 1 Stop bit
✓	Handshake	None
✓	ACK/NACK Protocol	None
✓	FIFO	Enabled
✓	Intercharacter Delay	0
✓	Intercode Delay	0
✓	RX Timeout	10 seconds
USB COM Emulation		
✓	Handshake	None
✓	ACK/NACK Protocol	None
✓	FIFO	Enabled
✓	Intercharacter Delay	0
✓	Intercode Delay	0
✓	RX Timeout	10 seconds
USB Keyboard Emulation		
✓	FIFO	Enabled
✓	Intercharacter Delay	0
✓	Intercode Delay	0
✓	*Keyboard Nationality	USA
✓	*Keyboard Speed	Normal
WEDGE-Communication		
✓	*Keyboard Nationality	USA
✓	CapsLock	OFF
✓	CapsLock Auto-Recognition	ON
✓	NumLock	OFF
✓	Intercharacter Delay	0
✓	Intercode Delay	0
Data Format-Symbology Independent Parameters		
✓	Code Identifier	Disabled
✓	Custom Code Identifier	Disabled
✓	Code Length	Disabled

* The default values of these parameters are set when reading the interface selection.

Configuration Field		Default Setting
Data Format-Symbology Indep. Pars. (continued)		
✓	*Header	No headers
✓	*Terminator	CR and LF terminators for RS232, USB BULK, USB COM, USB Generic HID ENTER terminator for Wedge, USB Keyboard
Data Format-Symbology Dependent Parameters		
	Symbology Specific Format	Select All
	Header Symbology	No headers
	Terminator Symbology	No terminators
	Symbology Character Substitution	No character to substitute
	Symbology Character Deletion	No character to delete
Data Format-Concatenation		
	Concatenation	Disabled
	Define Concatenation	2 EAN/UPC codes concatenated
	Set First Concatenated Code Length	000 = any length
	Set Second Concatenated Code Length	000 = any length
	Set Third Concatenated Code Length	000 = any length
	Set Fourth Concatenated Code Length	000 = any length
	Concatenation with Intercode Delay	Disabled
	Concatenation Timeout	10 seconds
	Concatenation Failure Transmission	Tx codes causing failure
	Transmission after Timeout	No code transmission
	Concatenation Result Code ID	No code Identifier
Advanced Formatting		
	Format enable/disable	Disabled
Camera Control		
	Exposure Mode	Automatic, based on entire image
Power Save		
	Illumination Power	Max power
Code Selection		
✓	Issue Identical Codes	Enabled
EAN/UPC		
✓	Selection	Enabled
✓	Add-On	Disabled
✓	UPCE Expansion	Disabled
Code 39		
✓	Selection	Enabled - no check digit
✓	Code39 Full ASCII	Disabled
✓	Code Length Check	Disabled

* The default values of these parameters are set when reading the interface selection.

Configuration Field	Default Setting
Code 39 (continued)	
✓ Minimum Length	001
✓ Maximum Length	255
✓ Start/Stop Character	Disabled
Code 32	
✓ Selection	Disabled
Interleaved 2 of 5	
✓ Selection	Enabled - check digit control and tx
✓ Code Length Check	Disabled
✓ Minimum Length	014
✓ Maximum Length	255
Codabar	
✓ Selection	Disabled
✓ Code Length Check	Disabled
✓ Minimum Length	001
✓ Maximum Length	255
Code 128	
✓ Code128 Selection	Enabled
✓ Code Length Check	Disabled
✓ Minimum Length	001
✓ Maximum Length	255
EAN 128	
✓ Selection	Disabled
✓ Code Length Check	Disabled
✓ Minimum Length	001
✓ Maximum Length	255
Code 93	
✓ Selection	Disabled
✓ Code Length Check	Disabled
✓ Minimum Length	001
✓ Maximum Length	255
PDF417	
✓ Selection	Enabled
✓ Option	Macro PDF417 Buffered Mode
✓ Micro PDF417	Disabled
RSS Family	
✓ RSS Expanded	Disabled
✓ RSS Limited	Disabled
✓ RSS 14	Disabled
✓ RSS Expanded Stacked	Disabled
✓ RSS 14 Stacked	Disabled

	Configuration Field	Default Setting
	Data Matrix	
✓	Selection	Enabled - normal & inverted
✓	Rectangular Style	Enabled
✓	Minimum Code Length	0001
✓	Maximum Code Length	3600
	QR	
✓	Selection	Enabled
	Postal Codes	
✓	Selection	Disabled
	Maxicode	
✓	Maxicode Mode 1	Disabled
✓	Maxicode Mode 2	Disabled
✓	Maxicode Mode 3	Disabled
✓	Maxicode Mode 4	Disabled
✓	Maxicode Mode 5	Disabled
✓	Maxicode Mode 6	Disabled
	Composite Codes	
✓	Selection	Disabled
✓	Discard Linear Part	Enabled
	Reading Parameters	
✓	Trigger Mode	Trigger level
✓	Trigger Type	Normal trigger
	Flash ON	2 sec
	Flash OFF	2 sec
✓	Beeper Tone	Tone 1
✓	Beeper Volume	High volume
✓	Beeper Duration	50 ms
✓	Reads per Cycle	One read per cycle
	Scan Timeout	5 sec
	User Defined Beeper Tone	Tone 1
	User Defined Beeper Volume	High Volume
	User Defined Beeper Duration	100 ms
	Codes per Scan	One code per scan
	Central Code Transmission	Enabled
	Order by Code Length	Disabled
	Order by Code Symbology	Disabled
	Autoscan Mode	Disabled
	Autoscan Aiming System	Enabled
	Autoscan Hardware Trigger	Enabled
	Autoscan Illumination System	Disabled
✓	Safety Time	500 ms (if Autoscan mode or Software trigger type is selected and the Multiple Reads per Cycle option is enabled.

Configuration Field	Default Setting
Image Formatting	
Image Preset 1, 2, 3, 4	
Image Format	JPEG format
Resolution	Full (640x480)
Set JPEG Quality Factor	50
Window Origin	(0,0)
Window Dimensions	(640x480)
Brightness	0%
Contrast	0%
Zoom	100%
Color Depth	256 gray levels

4.2 RS232 INTERFACE

BAUD RATE

1200 baud

2400 baud

4800 baud

9600 baud

14400 baud

19200 baud

38400 baud

57600 baud

115200 baud

PARITY

None

Odd

Even

DATA BITS

7 Bits

8 Bits

STOP BITS

1 Bit

2 Bits

ACK/NACK PROTOCOL

Disabled

Enabled

FIFO

Disabled

Enabled

HANDSHAKE

None

XON/XOFF

RTS/CTS

INTERCHARACTER DELAY

Intercharacter Delay

00 = disabled
01-99 = delay from 1 to 99 msec

INTERCODE DELAY

Intercode Delay

00 = disabled
01-99 = delay from 1 to 99 sec

RX TIMEOUT

RX Timeout

Read a number in the range **00-99,** where:
00 = disabled
01-99 = timeout from 1 to 99 secs

4.3 USB

4.3.1 USB COM Emulation

HANDSHAKE

None

XON/XOFF

RTS/CTS

ACK/NACK PROTOCOL

Disabled

Enabled

FIFO

Disabled

Enabled

INTERCHARACTER DELAY

Intercharacter Delay

00 = disabled
01-99 = delay from 1 to 99 msec

INTERCODE DELAY

Intercode Delay

00 = disabled
01-99 = delay from 1 to 99 sec

RX TIMEOUT

RX Timeout

Read a number in the range **00-99,** where:
00 = disabled
01-99 = timeout from 1 to 99 secs

4.3.2 USB Keyboard Emulation

FIFO

Disabled

Enabled

INTERCHARACTER DELAY

Intercharacter Delay

00 = disabled
01-99 = delay from 1 to 99 msec

INTERCODE DELAY

Intercode Delay

00 = disabled
01-99 = delay from 1 to 99 sec

KEYBOARD NATIONALITY

This parameter default value is restored through the Interface Selection code and not Restore Default.

Belgian

English

French

German

Italian

Japanese

Spanish

Swedish

USA

KEYBOARD SPEED

This parameter default value is restored through the Interface Selection code and not Restore Default.

Normal

Fast

NOTE

After setting the Keyboard Speed, it is necessary to disconnect and reconnect the USB cable to the PC.

4.4 WEDGE INTERFACE

CAPS LOCK

Caps Lock Off

Caps Lock On

CAPS LOCK AUTO-RECOGNITION

Disabled

Enabled

Note: Caps lock manual configuration is ignored when Caps Lock Auto-Recognition is enabled

NUM LOCK

Num Lock Off

Num Lock On

INTERCHARACTER DELAY

Intercharacter Delay

00	= disabled
01-99	= delay from 1 to 99 msec

INTERCODE DELAY

Intercode Delay

00	= disabled
01-99	= delay from 1 to 99 sec

KEYBOARD NATIONALITY

This parameter default value is restored through the Interface Selection code and not Restore Default.

Belgian

English

French

German

Italian

Japanese

Spanish

Swedish

USA

KEYBOARD SETTING

The values set by this procedure are not effected by the Restore Default code but will be lost if the Interface Selection code is read.

Set Alphanumeric Keys

The reader can be used with terminals or PCs with various keyboard types and nationalities through a simple keyboard setting procedure.

Keyboard setting consists of communicating to the reader how to send data corresponding to the keyboard used in the application. The keys must be set in a specific order.

Press and release a key to set it.

Some characters may require more than one key pressed simultaneously during normal use (refer to the manual of your PC or terminal for keyboard use). The exact sequence must be indicated to the reader in this case pressing and releasing the different keys.

Example:
If one has to press the "Shift" and "4" keys simultaneously on the keyboard to transmit the character "$" to the video, to set the "$", press and release "Shift" then press and release "4".

Each pressed and released key must generate an acoustic signal on the reader, otherwise repress the key. Never press more than one key at the same time, even if this corresponds to the normal use of your keyboard.

Press "Backspace" to correct a wrong key entry. In this case the reader emits a wrong beep.

Note: "CAPS LOCK" and "NUM LOCK" must be off before starting the keyboard setting procedure. "SHIFT" must be repressed for each character and cannot be substituted by "CAPS LOCK".

1. Read the "Set Alphanumeric Keys" code.

2. Press the keys shown in the following table according to their numerical order:

Some ASCII characters may be missing as this depends on the type of keyboard: these are generally particular characters relative to the various national symbologies. In this case:

- **The first 4 characters (Shift, Alt, Ctrl, and Backspace) can only be substituted with keys not used, or substituted with each other.**
- Characters can be substituted with other single symbols (e.g. "SPACE") even if not included in the barcode set used.
- Characters can be substituted with others corresponding to your keyboard.

The reader signals the end of the procedure with 3 beeps indicating the keys have been registered.

<table>
<tr><td colspan="3">01 : Shift</td></tr>
<tr><td colspan="3">02 : Alt</td></tr>
<tr><td colspan="3">03 : Ctrl</td></tr>
<tr><td colspan="3">04 : Backspace</td></tr>
<tr><td>05 : SPACE</td><td>28 : 7</td><td>51 : N</td></tr>
<tr><td>06 : !</td><td>29 : 8</td><td>52 : O</td></tr>
<tr><td>07 : "</td><td>30 : 9</td><td>53 : P</td></tr>
<tr><td>08 : #</td><td>31 : :</td><td>54 : Q</td></tr>
<tr><td>09 : $</td><td>32 : ;</td><td>55 : R</td></tr>
<tr><td>10 : %</td><td>33 : <</td><td>56 : S</td></tr>
<tr><td>11 : &</td><td>34 : =</td><td>57 : T</td></tr>
<tr><td>12 : '</td><td>35 : ></td><td>58 : U</td></tr>
<tr><td>13 : (</td><td>36 : ?</td><td>59 : V</td></tr>
<tr><td>14 :)</td><td>37 : @</td><td>60 : W</td></tr>
<tr><td>15 : *</td><td>38 : A</td><td>61 : X</td></tr>
<tr><td>16 : +</td><td>39 : B</td><td>62 : Y</td></tr>
<tr><td>17 : ,</td><td>40 : C</td><td>63 : Z</td></tr>
<tr><td>18 : -</td><td>41 : D</td><td>64 : [</td></tr>
<tr><td>19 : .</td><td>42 : E</td><td>65 : \</td></tr>
<tr><td>20 : /</td><td>43 : F</td><td>66 :]</td></tr>
<tr><td>21 : 0</td><td>44 : G</td><td>67 : ^</td></tr>
<tr><td>22 : 1</td><td>45 : H</td><td>68 : _ (underscore)</td></tr>
<tr><td>23 : 2</td><td>46 : I</td><td>69 : `</td></tr>
<tr><td>24 : 3</td><td>47 : J</td><td>70 : {</td></tr>
<tr><td>25 : 4</td><td>48 : K</td><td>71 : |</td></tr>
<tr><td>26 : 5</td><td>49 : L</td><td>72 : }</td></tr>
<tr><td>27 : 6</td><td>50 : M</td><td>73 : ~</td></tr>
<tr><td></td><td></td><td>74 : DEL</td></tr>
</table>

Acoustic Signals

Four types of acoustic signals are associated with the following steps:

1. Enter keyboard setup
2. Exit keyboard setup
3. SHIFT, ALT, CTRL, BACKSPACE keys
4. Keyboard keys (SHIFT, ALT, CTRL, BACKSPACE excluded)

These signals facilitate the selection of those characters requiring more than one key pressed simultaneously.

Example

The transmission of the "%" character implies two different steps:

1. Press the SHIFT key
2. Press the "5" key

The different tones produced by the reader indicate that both steps have been successful and that the character has been transmitted.

EXTENDED HEADER/TERMINATOR KEYS

For the WEDGE interface, the following extended keyboard values can also be configured:

These values are restored through the Interface Selection code and not Restore Default.

EXTENDED KEYBOARD TO HEX CONVERSION	
	IBM AT
HEX	KEY
83	ENTER
84	TAB
85	F1
86	F2
87	F3
88	F4
89	F5
8A	F6
8B	F7
8C	F8
8D	F9
8E	F10
8F	F11
90	F12
91	HOME
92	END
93	PG UP
94	PG DOWN
95	↑
96	↓
97	←
98	→
99	ESC
9A	CTRL (Right)
9B	Euro

SET CUSTOM EXTENDED HEADER/TERMINATOR KEYS

Set Extended Keys

The extended Header/Terminator keys for **Wedge Interface users** can be customized by defining them through a simple keyboard setting procedure.

For example, the Numeric Keypad keys can be set for use as Headers or Terminators by substituting the default extended keys during this procedure.

Press and release a key to set it.

Some characters may require more than one key pressed simultaneously during normal use (refer to the manual of your PC or terminal for keyboard use). The exact sequence must be indicated to the reader in this case pressing and releasing the different keys.

Example:
If one has to press the "Shift" and "4" keys simultaneously on the keyboard to transmit the character "$" to the video, to set the "$", press and release "Shift" then press and release "4".

Each pressed and released key must generate an acoustic signal on the reader, otherwise repress the key. Never press more than one key at the same time, even if this corresponds to the normal use of your keyboard.

Press "Backspace" to correct a wrong key entry. In this case the reader emits a wrong beep.

Note: "CAPS LOCK" and "NUM LOCK" must be off before starting the keyboard setting procedure. "SHIFT" must be repressed for each character and cannot be substituted by "CAPS LOCK".

1. Read the "Set Extended Keys" code.
2. Press the first 4 keys indicated in the following table.
3. Define all keys from 5 to 28 in the following table.

If the first 4 KEYS (Shift, Alt, Ctrl, and Backspace) are not available on your keyboard, you can only substitute them with keys not used, or substitute them with each other.

The reader signals the end of the procedure with 3 beeps indicating the keys have been registered.

CUSTOM EXTENDED KEYBOARD SETTING TABLE		
		Custom
Order	HEX	KEY
01	-	Shift
02	-	Alt
03	-	Ctrl
04	-	Backspace
05	**83**	
06	**84**	
07	**85**	
08	**86**	
09	**87**	
10	**88**	
11	**89**	
12	**8A**	
13	**8B**	
14	**8C**	
15	**8D**	
16	**8E**	
17	**8F**	
18	**90**	
19	**91**	
20	**92**	
21	**93**	
22	**94**	
23	**95**	
24	**96**	
25	**97**	
26	**98**	
27	**99**	
28	**9A**	

Acoustic Signals

Four types of acoustic signals are associated with the following steps:

1. Enter keyboard setup
2. Exit keyboard setup
3. SHIFT, ALT, CTRL, BACKSPACE keys
4. Keyboard keys (SHIFT, ALT, CTRL, BACKSPACE excluded)

These signals facilitate the selection of those characters requiring more than one key pressed simultaneously.

Example

The transmission of the "%" character implies two different steps:

1. Press the SHIFT key
2. Press the "5" key

The different tones produced by the reader indicate that both steps have been successful and that the character has been transmitted.

4.5 DATA FORMAT

The “Data Format Default” code restores all the Data Format configuration parameters to their default values, with the exception of the Symbology Independent Header and Terminator selections.
The Symbology Independent Header and Terminator parameters are set to their default values when reading the interface selection code.

DATA FORMAT DEFAULT

Data Format Default

4.5.1 Symbology Independent Parameters

CODE IDENTIFIER

Disabled

Custom Code ID

AIM Standard Code ID

CUSTOM CODE IDENTIFIER

Custom Code Identifier

1. Select a Datalogic Standard Code Identifier from the Code Identifier Table in Appendix A.
2. Set the number of characters in the range **0-3**, where **0** = Code ID disabled.
3. Read the corresponding characters as Hex values from the Hex/Numeric table. Valid values are in the range **00-7F.**

CODE LENGTH

Disabled

Enabled

SET HEADERS

Set Headers

1. Set the number of characters in the range **00-10**.
2. Read the corresponding characters as Hex values from the Hex/Numeric table. Valid values are in the range:
   00-7F for RS232, USB BULK, USB COM, USB Generic HID
   00-9B for Wedge and USB Keyboard
3. Read the following code to enable the configuration you have set.

HEADERS

Disabled

Enabled

SET TERMINATORS

Set Terminators

1. Set the number of characters in the range **00-10**.
2. Read the corresponding characters as Hex values from the Hex/Numeric table. Valid values are in the range:
   00-7F for RS232, USB BULK, USB COM, USB Generic HID
   00-9B for Wedge and USB Keyboard
3. Read the following code to enable the configuration you have set.

TERMINATORS

Disabled

Enabled

4.6 CODE SELECTION

Disable All Symbologies

Disable All Linear Symbologies

Disable All 2D Symbologies

ISSUE IDENTICAL CODES

Disabled

Enabled

4.6.1 Linear Symbologies

UPC/EAN/JAN FAMILY

EAN/UPC/JAN Disabled

EAN/UPC/JAN Enabled

Add-On Disabled

Add-On Enabled

UPCE Expansion Disabled

UPCE Expansion Enabled

CODE 39 FAMILY

Code 39 Std - Disabled

Code 39 Std - No Check Digit Control

Code 39 Std - Check Digit Control without Transmission

Code 39 Std - Check Digit Control and Transmission

Code 39 Full ASCII - Disabled

Code 39 Full ASCII- Enabled

Code Length Check - Disabled

Code Length Check - Enabled

Minimum Code Length

Read the number in the range **001-255**.

Maximum Code Length

Read the number in the range **001-255**.

Start-Stop Character Transmission - Disabled

Start-Stop Character Transmission - Enabled

CODE 32 FAMILY

Disabled

Enabled

INTERLEAVED 2 OF 5 FAMILY

Disabled

Enabled - No Check Digit Control

Enabled - Check Digit Control and without Transmission

Enabled - Check Digit Control and Transmission

Code Length Check - Disabled

Code Length Check - Enabled

Minimum Code Length

Read the number in the range **001-255**.

Maximum Code Length

Read the number in the range **001-255**.

CODABAR FAMILY

Disabled

Enabled - No Check Digit Control

Enabled - Check Digit Control without Transmission

Enabled - Check Digit Control and Transmission

Code Length Check - Disabled

Code Length Check - Enabled

Minimum Code Length

Read the number in the range **001-255**.

Maximum Code Length

Read the number in the range **001-255**.

CODE 128 FAMILY

Code 128 - Disabled

Code 128 - Enabled

Code Length Check - Disabled

Code Length Check - Enabled

Code 128 - Min. Code Length

Read the number in the range **001-255**.

Code 128 - Max. Code Length

Read the number in the range **001-255**.

EAN 128 - Disabled

EAN 128 - Enabled

EAN 128 - Code Length Check Disabled

EAN 128 - Code Length Check Enable**d**

EAN 128 - Min. Code Length

Read the number in the range **001-255**.

Maximum Code Length

Read the number in the range **001-255**.

CODE 93 FAMILY

Disabled

Enabled

Code Length Check - Disabled

Code Length Check - Enabled

Minimum Code Length

Read the number in the range **001-255**.

Maximum Code Length

Read the number in the range **001-255**.

RSS FAMILY

Disable RSS Expanded

Enable RSS Expanded

Disable RSS Limited

Enable RSS Limited

Disable RSS 14

Enable RSS 14

Disable RSS Expanded Stacked

Enable RSS Expanded Stacked

Disable RSS 14 Stacked

Enable RSS 14 Stacked

4.6.2 2D Symbologies

PDF417

Disabled

Enabled

Macro PDF417 Unbuffered Mode

Macro PDF417 Buffered Mode

The following command carries out its specific function and does not require reading the Enter or Exit and Save Configuration codes.

Abort Macro PDF417 Buffered Mode

It stops buffering the read codes at any time. All the buffered codes will not be saved.

MICRO PDF417

Disabled

Enabled

DATAMATRIX FAMILY

Disabled

Enabled

Minimum Code Length

Read the number in the range **0001-3600**.

Maximum Code Length

Read the number in the range **0001-3600**.

Rectangular Style – Disabled

Rectangular Style - Enabled

QR FAMILY

Disabled

Enabled

POSTAL CODES FAMILY

All Disabled

Australian Post - Enabled

Japan Post - Enabled

PLANET - Enabled

POSTNET - Enabled

POSTNET with B and B' - Enabled

POSTNET and PLANET - Enabled

POSTNET with B and B' and PLANET - Enabled

KIX Code - Enabled

Royal Mail Code (RM4SCC) - Enabled

MAXICODE FAMILY

Maxicode Mode 0 - Disabled

Maxicode Mode 0 Enabled

Maxicode Mode 1 - Disabled

Maxicode Mode 1 - Enabled

Maxicode Mode 2 - Disabled

Maxicode Mode 2 - Enabled

Maxicode Mode 3 - Disabled

Maxicode Mode 3 - Enabled

Maxicode Mode 4 - Disabled

Maxicode Mode 4 - Enabled

Maxicode Mode 5 - Disabled

Maxicode Mode 5 - Enabled

Maxicode Mode 6 - Disabled

Maxicode Mode 6 - Enabled

COMPOSITE CODES

NOTE

Before enabling this symbology, it is necessary to enable the linear barcode family (among RSS, EAN128 or UPC/EAN) contained in the composite code to be read.

Disabled

Enabled

Keep Linear Part

Discard Linear Part

4.7 READING PARAMETERS

TRIGGER MODE

Trigger Level

Trigger Pulse

TRIGGER TYPE

Normal Trigger

Software Trigger

BEEPER TONE

Tone 1

Tone 2

Tone 3

Tone 4

BEEPER VOLUME

Beeper OFF

Low Volume

Medium Volume

High Volume

BEEPER DURATION

Beeper Duration

Read a number in the range **01-99**, which corresponds to a max 99 ms duration.

READS PER CYCLE

One Read per Cycle

Multiple Reads per Cycle

SAFETY TIME

Disabled

Enabled

Valid only with software trigger.

SAFETY TIME DURATION

Set Duration

Read a number in the range **01-99**, where 01 corresponds to 100 ms and 99 to 9.9 seconds.

4.8 CONFIGURATION EDITING COMMANDS

The following commands carry out their specific function and do not require reading the Enter or Exit and Save Configuration codes.

Command	Description
	Restore Lynx™ D reader default configuration:
	Transmit the Lynx™ D reader Software release.
	Transmit the Lynx™ D current configuration in ASCII format to Host.
	Transmit the Lynx™ D current data format configuration in ASCII format to Host.

5 TEST CODE SYMBOLS

Use these 1D and 2D test symbols to check that the reader is imaging and decoding properly, according to your configuration.

UPC-A

1 52637 48509 2

EAN-13

1 234567 000992

Code 39 (Standard)

1 7 1 6 2

Code 128

t e s t

QR

PDF417

DataMatrix (Normal)

DataMatrix (Inverse)

6 MAINTENANCE

You do not need to perform regular preventative maintenance on the Lynx™ D reader.

Do not try to open the case, because you might damage the interior electronic components and such action voids the warranty.

You can keep your reader in good operating condition by:

- periodically cleaning the reading window using water or a mild detergent solution and a soft cloth or tissue.
- watching for any damage to the housing.

CAUTION

Do not use abrasive cleaning agents on the reader's window to avoid scratches. Do not use solvents on the housing or window to avoid damage. Do not submerge the reader in water. It is not waterproof.

7 TECHNICAL FEATURES

LYNX™ D432 / D432E Common Features

Electrical Features	
Operating Voltage	10 to 30 V
Power Consumption @ 12V (Stand-by) @ 12V (Typical) @ 10V (Peak current)	 110 mA 245 mA 305 mA
Communications Features	
Standard Interfaces Proprietary Interfaces	RS232, Keyboard emulation AT IBM, , USB COM emulation, USB Keyboard emulation USB Bulk, USB Generic HID
Environmental Features	
Operating Temperature	0° to+ 55 °C (+32° to +131 °F)
Storage Temperature	-20° to +70 °C (-4° to +158 °F)
Humidity	0 to 95% NC
Drop Resistance	IEC 68-2-32 Test ED – 1.8 m.
Mechanical Features	
Dimensions	203 x 117 x 69 mm (8 x 4.6 x 2.7 inches)
Weight	265 g (9.3 oz.) without cable
Decoding Capability	
1D	Interleaved 2 of 5, Code39, Code32, Code128, EAN 128, Code93, UPC/EAN/JAN, Codabar, RSS
2D	PDF417, Micro PDF417, Macro PDF417, Maxicode, DataMatrix (ECC200), QR, Composite Codes
Postal Codes	POSTNET, PLANET, Japan Post, Australia Post, KIX Code, Royal Mail Code (RM4SCC)
Imaging Option	
Image	640 x 480 pixel format (VGA)
	320 x 240 pixel format (CIF);
Graphic Format	JPEG, 256 gray levels
	BMP, 2, 16, 256 gray levels
	TIFF, 2, 16, 256 gray levels

LYNX™ D432 / D432E Common Features

Optical Features	
Sensor	640 x 480 pixel element, 2D CMOS Array
Illuminator Wavelength	LED array In the range 630 ~ 670 nm
Max. LED Output Power	0.896 mW
LED Safety Class	Class 1 to EN 60825-1
Aiming System Wavelength Laser Safety Class	Visible Laser Diode 650 nm Class 2 - EN 60825-1; Class II CDRH
Ambient light	0 - 100000 lux (artificial)

LYNX™ D432

Optical Features			
Focus distance	115 mm		
Field of view	21.8° (H) x 16.7° (V)		
Horizontal field of view at distance (**d**) in mm	0.4**d** + 12		
Vertical field of view at distance (**d**) in mm	0.3**d** + 9		
Max Resolution	**Linear codes - mm (mils)**	**DataMatrix – mm (mils)**	
	0.10 (4)	0.17 (6.6)	
Depth of field*			
1D (linear):	**X-dimension mm (mils)**	**Symbol size cm (in)**	**DOF cm (in)**
Code39	0.13 (5)	1.2 (0.47)	8.0 to 15.0 (3.15 to 5.90)
	0.5 (20)	3.2 (1.26)	8.0 to 33.0 (3.15 to 12.99)
EAN13	0.33 (13)	3.1 (1.22)	7.5 to 24.5 (2.95 to 9.65)
2D:	**X-dimension mm (mils)**	**Symbol size cm (in)**	**DOF cm (in)**
POSTNET	0.5 (20)	4.0 x 0.4 (1.57 x 0.16)	11.5 to 30.0 (4.53 to 11.81)
PDF417	0.13 (5)	1.1 x 0.9 (0.43 x 0.35)	8.5 to 15.5 (3.35 to 6.10)
	0.17 (6.6)	1.4 x 1.2 (0.55 x 0.47)	7.0 to 19.0 (2.76 to 7.48)
	0.25 (10)	2.2 x 1.8 (0.86 x 0.71)	4.5 to 24.0 (1.77 to 9.45)
DataMatrix	0.19 (7.5)	0.8 x 0.8 (0.31 x0.31)	9.0 to 13.0 (3.54 to 5.12)
	0.25 (10)	0.8 x 0.8 (0.31 x 0.31)	7.5 to 16.5 (2.95 to 6.50)
	0.38 (15)	1.0 x 1.0 (0.39 x 0.39)	6.0 to 22.0 (2.36 to 8.66)
Skew	±40°		
Pitch	±35°		
Rotation	360°		
Print Contrast (Min.)	23%		

* Reading distances are measured from the nose of the reader.

LYNX™ D432E

Optical Features			
Focus distance	65 mm		
Field of view	20° (H) x 15° (V)		
Horizontal field of view at distance (**d**) in mm	0.32**d** + 8.67		
Vertical field of view at distance (**d**) in mm	0.24**d** + 6.50		
Max Resolution	**Linear codes - mm (mils)**		**DataMatrix – mm (mils)**
	0.05 (2)		0.10 (4)
Depth of field*			
1D (linear):	**X-dimension mm (mils)**	**Symbol size cm (in)**	**DOF cm (in)**
Code39	0.076 (3)	1.2 (0.47)	5.0 to 7.5 (1.96 to 2.95)
	0.13 (5)	1.2 (0.47)	4.0 to 9.5 (1.57 to 3.74)
2D:	**X-dimension mm (mils)**	**Symbol size cm (in)**	**DOF cm (in)**
PDF417	0.76 (3)	0.65 x 0.55 (0.26 x 0.22)	5.0 to 8.0 (1.96 to 3.15)
	0.25 (10)	2.2 x 1.8 (0.86 x 0.71)	4.0 to 13.3 (1.57 to 5.24)
DataMatrix	0.13 (5)	0.5 x 0.5 (0.20 x0.20)	5.0 to 7.5 (1.96 to 2.95)
	0.25 (10)	0.8 x 0.8 (0.31 x 0.31)	4.5 to 10.5 (1.77 to 4.13)
Skew	±40°		
Pitch	±35°		
Rotation	360°		
Print Contrast (Min.)	27%		

* Reading distances are measured from the nose of the reader.

A CODE IDENTIFIER TABLE

EAN/UPC

CODABAR

CODE 128

EAN 128

CODE 93

CODE 32

CODE 39

INTERLEAVED 2 OF 5

PDF417

MICRO PDF417

DATAMATRIX

MAXICODE

QR

AUSTRALIA POST

JAPAN POST

POSTNET

PLANET

RSS

KIX CODE

RM4SCC

B HEX AND NUMERIC TABLE

CHARACTER TO HEX CONVERSION TABLE

char	decimal	hex	char	decimal	hex	char	decimal	hex
NUL	000	00	*	042	2A	U	085	55
SOH	001	01	+	043	2B	V	086	56
STX	002	02	,	044	2C	W	087	57
ETX	003	03	-	045	2D	X	088	58
EOT	004	04	.	046	2E	Y	089	59
ENQ	005	05	/	047	2F	Z	090	5A
ACK	006	06	0	048	30	[	091	5B
BEL	007	07	1	049	31	\	092	5C
BS	008	08	2	050	32	]	093	5D
HT	009	09	3	051	33	^	094	5E
LF	010	0A	4	052	34	_	095	5F
VT	011	0B	5	053	35	`	096	60
FF	012	0C	6	054	36	a	097	61
CR	013	0D	7	055	37	b	098	62
SO	014	0E	8	056	38	c	099	63
SI	015	0F	9	057	39	d	100	64
DLE	016	10	:	058	3A	e	101	65
DC1	017	11	;	059	3B	f	102	66
DC2	018	12	<	060	3C	g	103	67
DC3	019	13	=	061	3D	h	104	68
DC4	020	14	>	062	3E	i	105	69
NAK	021	15	?	063	3F	j	106	6A
SYN	022	16	@	064	40	k	107	6B
ETB	023	17	A	065	41	l	108	6C
CAN	024	18	B	066	42	m	109	6D
EM	025	19	C	067	43	n	110	6E
SUB	026	1A	D	068	44	o	111	6F
ESC	027	1B	E	069	45	p	112	70
FS	028	1C	F	070	46	q	113	71
GS	029	1D	G	071	47	r	114	72
RS	030	1E	H	072	48	s	115	73
US	031	1F	I	073	49	t	116	74
SPACE	032	20	J	074	4A	u	117	75
!	033	21	K	075	4B	v	118	76
"	034	22	L	076	4C	w	119	77
#	035	23	M	077	4D	x	120	78
$	036	24	N	078	4E	y	121	79
%	037	25	O	079	4F	z	122	7A
&	038	26	P	080	50	{	123	7B
'	039	27	Q	081	51	|	124	7C
(	040	28	R	082	52	}	125	7D
)	041	29	S	083	53	~	126	7E
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Datalogic Scanning, Inc.
959 Terry Street
Eugene, OR 97402

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dichiara che
declares that the
déclare que le
bescheinigt, daß das Gerät
declare que el

LYNX D432, 2D Reader
LYNX D432 E, 2D Reader

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:

89/336/EEC EMC Directive	e	**92/31/EEC, 93/68/EEC**	emendamenti successivi
and		further amendments	
et		ses successifs amendements	
und		späteren Abänderungen	
y		succesivas enmiendas	

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 A ITE), AUGUST 1994: **AMENDMENT A1 (CLASS A ITE), OCTOBER 2000:**	LIMITS AND METHODS OF MEASUREMENTS OF RADIO DISTURBANCE CHARACTERISTICS OF INFORMATION TECHNOLOGY EQUIPMENT (ITE)
EN 61000-6-2, OCTOBER 2001:	ELECTROMAGNETIC COMPATIBILITY (EMC). PART 6-2: GENERIC STANDARDS - IMMUNITY FOR INDUSTRIAL ENVIRONMENTS

March 1st, 2007

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