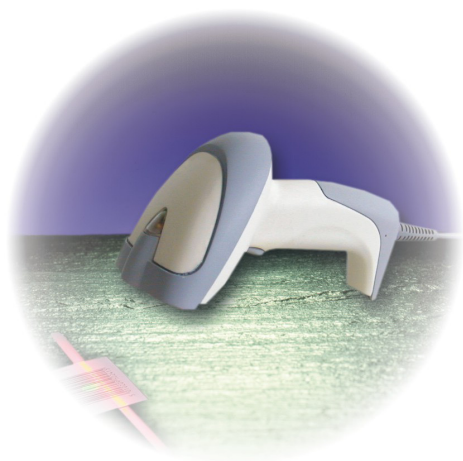


DATALOGIC

Gryphon™

Dx30 Readers

QUICK REFERENCE



820001611 (Rev. B)

UPDATES AND LANGUAGE AVAILABILITY

UK/US

The latest drivers and documentation updates for this product are available on Internet.

Log on to : www.datalogic.com

I

Su Internet sono disponibili le versioni aggiornate di driver e documentazione di questo prodotto. Questo manuale è disponibile anche nella versione italiana.

Collegarsi a : www.datalogic.com

F

Les versions mises à jour de drivers et documentation de ce produit sont disponibles sur Internet. Ce manuel est aussi disponible en version française.

Cliquez sur : www.datalogic.com

D

Im Internet finden Sie die aktuellsten Versionen der Treiber und Dokumentation von diesem Produkt. Die deutschsprachige Version dieses Handbuchs ist auch verfügbar.

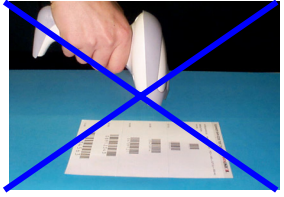
Adresse : www.datalogic.com

E

En Internet están disponibles las versiones actualizadas de los drivers y documentación de este producto. También está disponible la versión en español de este manual.

Dirección Internet : www.datalogic.com

USING GRYPHON™ DX30 READERS



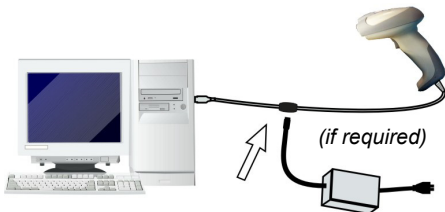
Gryphon™ guns automatically scan barcodes **at a distance**. Simply aim and pull the trigger. Code scanning is performed along the center of the light bar emitted from the reading window. This bar must cover the entire code. Successful scanning is obtained by tilting the scanner with respect to the barcode to avoid direct reflections which impair the reading performance, see the figure above. Successful reading is signaled by an audible tone plus a good-read green spot.

CONNECTIONS

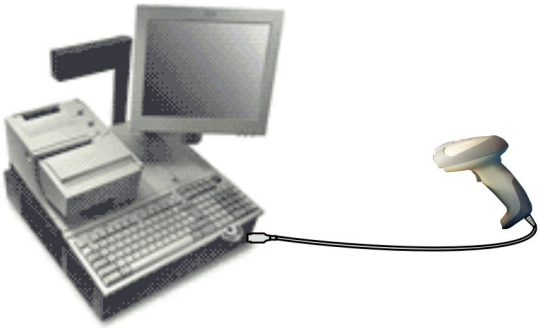
RS232



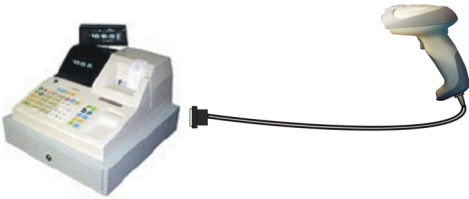
USB



IBM USB POS



PEN



WEDGE



WEDGE



DISCONNECTING THE CABLE



INTERFACE SELECTION

Follow the procedure to configure the interface required by your application.

- USB Interface
- RS232 Interface
- Wedge Interface
- Pen Interface

USB INTERFACE CONFIGURATION

The USB interface is compatible with:

Windows 98 (and later)

IBM POS for Windows

Mac OS 8.0 (and later)

4690 Operating System

START-UP

As with all USB devices, upon connection, the Host performs several checks by communicating with the Gryphon™. During this phase the green LED on the Gryphon™ reader blinks and normal operations are suspended. Two basic conditions must be met before Gryphon™ is ready to read codes, the correct USB driver must be loaded and sufficient power must be supplied to the reader.

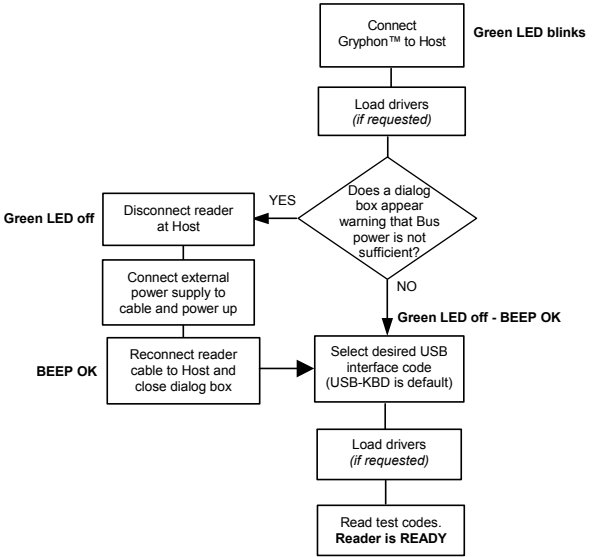
For all systems, the correct USB driver for the default USB-KBD interface is included in the Host Operating System and will either be loaded automatically or will be suggested by the O.S. and should therefore be selected from the dialog box (the first time only).

If the Host supplies sufficient power to the reader, the start-up phase ends correctly, the green LED stops blinking and the reader emits the beep OK signal.

If the Host does not supply sufficient power to the reader, a dialog box will appear on the Host and the reader will be blocked (green LED continues blinking). In this case, disconnect the USB cable at the Host (green LED stops blinking), connect and power-up an external supply to USB cable then reconnect the USB cable to the Host and close the dialog box. The reader emits the beep OK signal. You can now read codes. At this point you can read the USB interface configuration code according to your application. Load drivers from the O.S. (if requested). When configuring the USB-COM interface, the relevant files and drivers must be installed from the USB Device Installation software which can be downloaded from the web site <http://www.datalogic.com>.

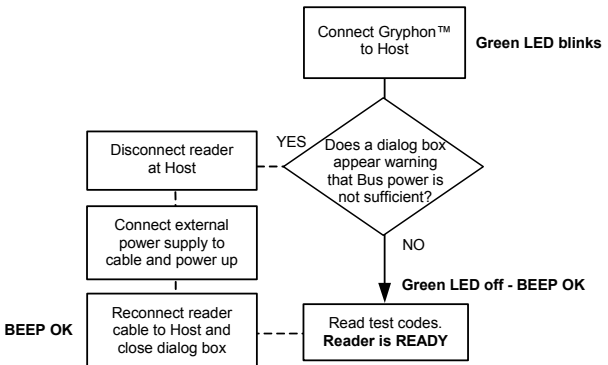
The reader is ready.

First Start-Up



Successive start-ups will automatically recognize the previously loaded drivers. If external power is used, verify that external power is already supplied.

Successive Start-Ups



USB INTERFACE SELECTION

USB-KBD



USB-KBD-ALT-MODE



USB-KBD-APPLE



USB-COM*



USB-IBM-Table Top



USB-IBM-Hand Held



* When configuring USB-COM, the relevant files and drivers must be installed from the USB Device Installation software, which can be downloaded from the web site <http://www.datalogic.com>.

USB KEYBOARD NATIONALITY

USB-KBD users should select one of the following keyboard nationality codes.

Belge



Deutsch



English



Español



Français



Italiano



Svenskt



USA



Japanese



RS232 READER CONFIGURATION

Read the restore default code, then read the interface selection code for your application.

RESTORE DEFAULT



RS232

Standard



POS SYSTEMS

Nixdorf Mode A



Fujitsu



ICL Mode



WEDGE READER CONFIGURATION

Read the restore default code, then read the interface selection code for your application.

RESTORE DEFAULT



WEDGE

IBM AT or PS/2 PCs



IBM XT



PC Notebook



IBM SURE1



IBM Terminal 3153



WEDGE (CONTINUED)

IBM Terminals 31xx, 32xx, 34xx, 37xx:

To select the interface for these IBM Terminals, read the correct key transmission code. Select the keyboard type if necessary (default = advanced keyboard).

KEY TRANSMISSION MODE

make-only keyboard



make-break keyboard



KEYBOARD TYPE

advanced keyboard



typewriter keyboard



ALT MODE

The following interface selection allows barcodes sent to the PC to be interpreted correctly independently from the Keyboard Nationality used. **You do not need to make a Keyboard Nationality selection.**

(default = Num Lock Unchanged)

Make sure the Num Lock key on your keyboard is ON.

IBM AT - ALT mode



PC Notebook - ALT mode



WEDGE (CONTINUED)

WYSE TERMINALS

ANSI Keyboard



PC Keyboard



ASCII Keyboard



VT220 style Keyboard



DIGITAL TERMINALS

VT2xx/VT3xx/VT4xx



APPLE

APPLE ADB Bus



WEDGE KEYBOARD NATIONALITY

Wedge users should select one of the following wedge keyboard nationality codes.

Belge



Deutsch



English



Español



Français



Italiano



Svenskt



USA



The following Keyboard Nationality selection is only valid for IBM AT compatible PCs:

Japanese



PEN READER CONFIGURATION

Read the restore default code, then read the pen interface selection code.

RESTORE DEFAULT



PEN



DEFAULT VALUES

USB DEFAULT SETTINGS

DATA FORMAT: code identifier disabled, no field adjustment, code length not transmitted, character replacement disabled.

USB KEYBOARD: USA keyboard, FIFO enabled, inter-character and inter-code delays disabled, USB keyboard speed normal.

USB COM: no handshaking, delay disabled, rx timeout 5 sec., ack/nack disabled, FIFO enabled, serial trigger lock disabled.

Default Headers and Terminators for each USB mode:

- USB-KBD: no header, terminator = ENTER
- USB-KBD-ALT-MODE: no header, terminator = CR
- USB-COM: no header, terminator = CR-LF
- USB-IBM-TABLE TOP: not applicable
- USB-IBM-HAND HELD: not applicable

RS232 Standard DEFAULT SETTINGS

9600 baud, no parity, 8 data bits, 1 stop bit, no handshaking, delay disabled, rx timeout 5 sec., ack/nack disabled, FIFO enabled, serial trigger lock disabled.

DATA FORMAT: code identifier disabled, no field adjustment, code length not transmitted, *no header, terminator = CR-LF*, character replacement disabled.

RS232 Nixdorf DEFAULT SETTINGS

9600 baud, parity odd, 8 data bits, 1 stop bit, handshaking hardware (RTS/CTS), delay disabled, rx timeout 9.9 sec., ack/nack disabled, FIFO disabled, serial trigger lock disabled.

DATA FORMAT: code identifier enabled, no field adjustment, code length not transmitted, *no header, terminator = CR*, character replacement disabled.

RS232 Fujitsu DEFAULT SETTINGS

9600 baud, no parity, 8 data bits, 1 stop bit, no handshaking, delay disabled, rx timeout 2 sec., ack/nack disabled, FIFO enabled, serial trigger lock disabled.

DATA FORMAT: code identifier enabled, no field adjustment, code length not transmitted, *no header, terminator = CR*, character replacement disabled.

RS232 ICL DEFAULT SETTINGS

9600 baud, parity even, 8 data bits, 1 stop bit, handshaking RTS always on, delay disabled, rx timeout 9.9 sec., ack/nack disabled, FIFO enabled, serial trigger lock disabled.

DATA FORMAT: code identifier enabled, no field adjustment, code length not transmitted, *no header, terminator = CR*, character replacement disabled.

WEDGE DEFAULT SETTINGS

USA keyboard, caps lock off, caps lock auto-recognition enabled, num lock unchanged, inter-character and inter-code delays disabled.

DATA FORMAT: code identifier disabled, no field adjustment, code length not transmitted, *no header, terminator = ENTER*, character replacement disable.

PEN EMULATION DEFAULT SETTINGS

interpret mode, conversion to code 39 disabled, output level normal, idle level normal, minimum output pulse 600 μ s, overflow medium, inter-block delay disabled.

POWER SAVE

scan rate 270scans/s, standby disabled, sleep state/USB suspend disabled.

READING PARAMETERS

hardware trigger, trigger active level, no trigger timeout, Flash On = 1 sec, Flash Off = .6 sec, one read per cycle, safety time .5 sec, beeper intensity high, tone 2, beeper type monotone, beeper length short, good read spot duration medium, automatic operation aiming light enabled.

DECODING PARAMETERS

ink spread enabled, overflow control enabled, interdigit control enabled, Puzzle Solver™ disabled, decoding safety = one read.

CODE SELECTION

Enabled codes

- Code PDF417 (only Gryphon™ D230)
- EAN 8/EAN 13 / UPC A/UPC E without ADD ON check digit transmitted, no conversions
- Interleaved 2/5
check digit control and transmission, variable length code; 4-99 characters
- Standard Code 39
no check digit control, variable length code; 1-99 characters
- Code 128
variable length code; 1-99 characters

Disabled codes:

EAN 128, ISBT128, Code 93, Codabar, pharmaceutical codes, MSI, Plessey, Telepen, Delta IBM, Code 11, Code 16K, Code 49, RSS Codes

ADVANCED FORMATTING PARAMETERS

concatenation disabled, no advanced formats defined.

OPERATING TEST

Read the TEST codes below.

EAN-8



EAN-13



Code 39 (Normal)



Code 128



Interleaved 2 of 5



PDF417



DATALOGIC PDF417 Test Code

YOUR READER IS NOW READY TO READ CODES.

To change the defaults refer to the "Gryphon™ Dx30/Mx30 Reference Manual", part number **90ACC1930**, or to the DL Sm@rtSet™ Configuration program, both downloadable from the website.

TECHNICAL FEATURES

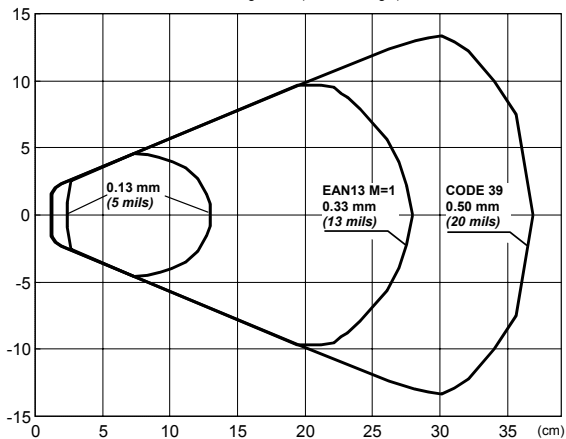
Gryphon™ Dx30

| Electrical Features | | |
|-------------------------------|---|------------------------|
| Power Supply | 5 Vdc \pm 5% | |
| Consumption: | Gryphon D130 | Gryphon D230 |
| Maximum | 270 mA@ 5 Vdc | 270 mA@ 5 Vdc |
| Operating | 165 mA@ 5 Vdc | 210 mA@ 5 Vdc |
| Sleep mode/USB Suspend | <500 μ A@ 5 Vdc | 4 mA@ 5 Vdc |
| Max. Scan Rate | 270 scans/sec | |
| Reading Indicators | LED, Good Read Spot, Beeper | |
| Optical Features | | |
| Sensor | CCD solid state (3648 pixels) | |
| Illuminator | LED array | |
| Wavelength | 630 ~ 670 nm | |
| Max. LED Output Power | 0.33 mW | |
| LED Safety Class | Class 1 EN 60825-1 | |
| Reading Field | see reading diagram | |
| Max. Resolution | Gryphon Dx30-Std | Gryphon D130-LR |
| | 0.076 mm (3 mils) | 0.11 mm (4.3 mils) |
| PCS (Datalogic Test Chart) | min. 15% | |
| Environmental Features | | |
| Working Temperature | 0 °C to + 55 °C / 32° to +131 °F | |
| Storage Temperature | -20 °C to + 70 °C / -4° to +158 °F | |
| Humidity | 90% non condensing | |
| Drop Resistance | IEC 68-2-32 Test ED 1.8 m (5 ft. 11 in.) | |
| Protection Class | IP30 | |
| Mechanical Features | | |
| Weight (without cable) | about 210 g. (7.4 oz.) | |
| Cable Length | 2 m. (6 ft. 6 in.) | |

READING DIAGRAMS

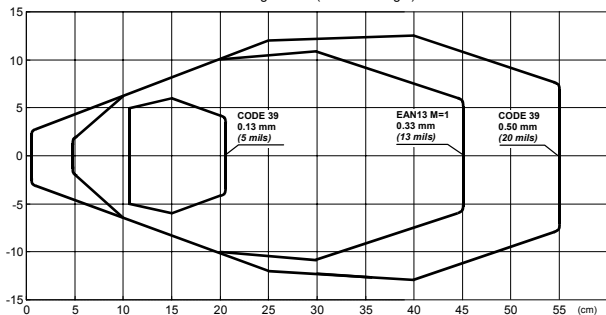
GRYPHON™ D130

Reading diagram at 25 °C and 300 lux ambient lighting
Reading Zones (10° skew angle)



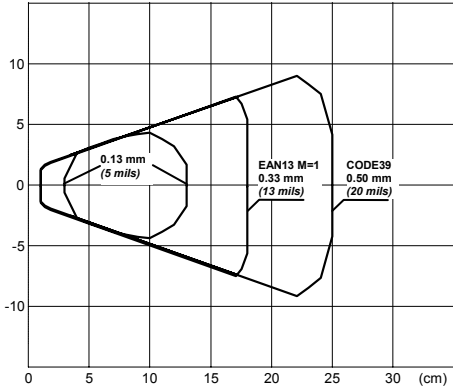
GRYPHON™ D130-LR

Reading diagram at 25 °C and 300 lux ambient lighting
Reading Zones (10° skew angle)

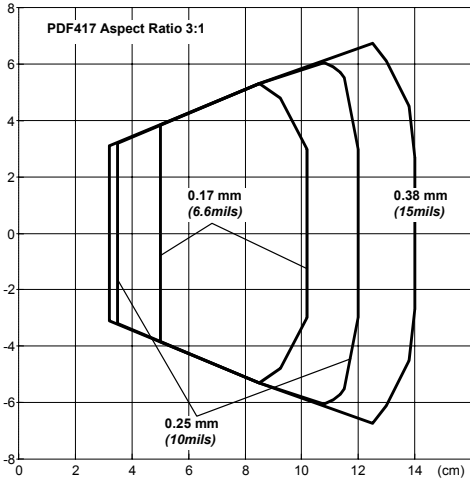


GRYPHON™ D230

Reading diagram at 25 °C and 300 lux ambient lighting
Reading Zones (10° skew angle)



Reading diagram at 25 °C and 300 lux ambient lighting Reading
Zones (10° skew angle)



WARRANTY

Datalogic warrants this product against defects in workmanship and materials, for a period of 5 years from the date of shipment, provided that the product is operated under normal and proper conditions.

Datalogic has the faculty to repair or replace the product, these provisions do not prolong the original warranty term.

The warranty does not apply to any product that has been subject to misuse, accidental damage, unauthorized repair or tampering.

SERVICES AND SUPPORT

Datalogic provides several services as well as technical support through its website. Log on to **www.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** including:

- **DL Sm@rtSet™** a Windows-based utility program which allows device configuration using a PC. It provides RS232 interface configuration as well as configuration barcode printing.

- **SERVICES & SUPPORT**

- **Datalogic Services** - Warranty Extensions and Maintenance Agreements
- **Authorised Repair Centres**

- **CONTACT US**

E-mail form and listing of Datalogic Subsidiaries

PATENTS

This product is licensed under the following U.S. patent:

6,158,661

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

U.S. patents 5,992,740; 6,305,606 B1; 6,517,003 B2; 6,631,846 B2; 6,712,271 B2; 6,808,114 B1; 6,817,525 B2; and 6,834,806 B2

European patents 851,378 B1; 895,175 B1; 962,880 B1; 997,760 B1; 1,128,315 B1; and 1,164,536 B1

Additional patents pending.

COMPLIANCE

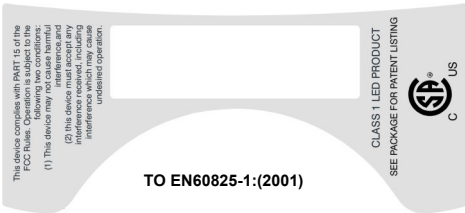
FCC COMPLIANCE

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

LED CLASS



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 a UL Listed/CSA Certified Power Unit marked "Class 2" or LPS power source rated 5 V, minimum 270 mA, which supplies power directly to the reader via the power connector of the cable.

WEEE COMPLIANCE



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

Gryphon D1XX

Gryphon D2XX

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 | | sucesivas 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 la siguientes normas:

| | |
|---|---|
| EN 55022 (CLASS B ITE), AUGUST 1994: AMENDMENT A1 (CLASS B ITE), OCTOBER 2000: | LIMITS AND METHODS OF MEASUREMENTS OF RADIO DISTURBANCE OF INFORMATION TECHNOLOGY EQUIPMENT (ITE) |
| EN 55024, SEPTEMBER 1998: | INFORMATION TECHNOLOGY EQUIPMENT. IMMUNITY CHARACTERISTICS. LIMITS AND METHODS OF MEASUREMENTS |

Lippo di Calderara, February 24th, 2006

Ruggero Cacioppo
Ruggero Cacioppo
Quality Assurance Laboratory Manager