Datalogic Skorpio™

User's Manual

DATALOGIC

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DATALOGIC S.p.A.
Via Candini 2
40012 - Lippo di Calderara di Reno
Bologna - Italy

Datalogic Skorpio™ - User's Manual

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11. General Provisions. This Agreement shall be governed by and construed in accordance with the laws of Italy. All disputes arising out of or in connection with this Agreement will be subject to the exclusive jurisdiction of the competent Court of the place where Datalogic has its registered office. If any portion hereof is found to be void or unenforceable, the remaining provisions of this Agreement shall remain in full force and effect. Except as expressly provided herein, this Agreement constitutes the entire agreement between the parties with respect to the license of the Software and supercedes any conflicting or additional terms contained in the purchase order.

REFERENCES

CONVENTIONS

This manual uses the following conventions:

"User" refers to anyone using a Datalogic Skorpio™ mobile computer.
"You" refers to the System Administrator or Technical Support person using this manual to install, configure, operate, maintain or troubleshoot a Datalogic Skorpio™ mobile computer.

REFERENCE DOCUMENTATION

For further information regarding Datalogic Skorpio™ refer to the SDK Help on-Line.

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**

- **SERVICES & SUPPORT**

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

    - **Authorised Repair Centres**

- **CONTACT US**

    E-mail form and listing of Datalogic Subsidiaries

SAFETY REGULATIONS

NOTE	*Read this manual carefully before performing any type of connection to the Datalogic Skorpio™ mobile computer.* *The user is responsible for any damages caused by incorrect use of the equipment or by inobservance of the indication supplied in this manual.*

GENERAL SAFETY RULES

− Use only the components supplied by the manufacturer for the specific Datalogic Skorpio™ being used.

− Do not attempt to disassemble the Datalogic Skorpio™ mobile computer, as it does not contain parts that can be repaired by the user. Any tampering will invalidate the warranty.

− When replacing the battery pack or at the end of the operative life of the Datalogic Skorpio™ mobile computer, disposal must be performed in compliance with the laws in force.

− Do not submerge the Datalogic Skorpio™ in liquid products.

LASER SAFETY

The laser light is visible to the human eye and is emitted from the window indicated in the figure.

Laser output window

AVOID EXPOSURE
LASER LIGHT
IS EMITTED FROM
THIS APERTURE

This product complies with
21 CFR Subchapter J

LASER LIGHT - DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT
MAX. OUTPUT RADIATION 1.4 mW
EMITTED WAVELENGTH 630~680 nm
EN60825-1:2001

CAUTION-CLASS 2 LASER LIGHT WHEN OPEN - DO NOT STARE INTO BEAM

I	D	F	E
La luce laser è visibile all'occhio umano e viene emessa dalla finestra indicata nella figura.	Die Laserstrahlung ist für das menschliche Auge sichtbar und wird am Strahlaustrittsfenster ausgesendet (siehe Bild).	Le rayon laser est visible à l'oeil nu et il est émis par la fenêtre désignée sur l'illustration dans la figure.	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 MINIMA POTENZA DI USCITA: LUNGHEZZA D'ONDA EMESSA: CONFORME A EN 60825-1 (2001)	LASERSTRAHLUNG NICHT IN DER STRAHL BLINKEN PRODUKT DER LASERKLASSE 2 MAXIMALE AUSGANGLEISTUNG: WELLENLÄNGE: 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 mobile computer.

STANDARD LASER SAFETY REGULATIONS
This product conforms to the applicable requirements of both CDRH 21 CFR 1040 and EN 60825-1 at the date of manufacture.
For installation, use and maintenance, it is not necessary to open the device.

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

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

ITALIANO

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

NORMATIVE STANDARD PER LA SICUREZZA LASER
Questo prodotto risulta conforme alle normative vigenti sulla sicurezza laser alla data di produzione: CDRH 21 CFR 1040 e EN 60825-1.
Non si rende mai necessario aprire l'apparecchio per motivi di installazione, utilizzo o manutenzione.

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

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

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 beschrieben 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 descritas 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.

RADIO COMPLIANCE

In radio systems configured with mobile computers and access points, the frequencies to be used must be allowed by the spectrum authorities of the specific country in which the installation takes place. Be absolutely sure that the system frequencies are correctly set to be compliant with the spectrum requirements of the country.

The Radio modules used in this product automatically adapt to the frequencies set by the system and do not require any parameter settings.

The following shows the correspondence between the Datalogic Skorpio™ models and the Radio modules:

▪ Datalogic Skorpio™ 5XX-XXX-XXX 802.11b (Wi-Fi) radio card

INFORMATION FOR THE USER

ENGLISH

Contact the competent authority responsible for the management of radio frequency devices of your country to verify the eventual necessity of a user license. Refer to the web site http://europa.eu.int/comm/enterprise/rtte/spectr.htm for further information.

ITALIANO

Prendi contatto con l'autorità competente per la gestione degli apparati a radio frequenza del tuo paese, per verificarne l'eventuale necessità della licenza d'uso. Inoltre puoi trovare ulteriori informazioni al sito:
http://europa.eu.int/comm/enterprise/rtte/spectr.htm.

FRANÇAIS

Contactez l'autorité compétente en la gestion des appareils à radio fréquence de votre pays pour vérifier la nécessité du permis d'usage. Pour tout renseignement vous pouvez vous adresser au site web:
http://europa.eu.int/comm/enterprise/rtte/spectr.htm.

DEUTSCH

Um die Notwendigkeit der Verwendungslizenz zu prüfen, wenden Sie sich an die Behörde, die auf der Radiofrequenzgerätsführung Ihres Lands bewandert ist. Weitere Informationen sind verfügbar auf dem Web Site:
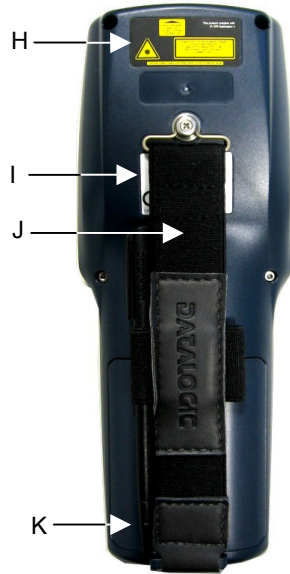http://europa.eu.int/comm/enterprise/rtte/spectr.htm.

ESPAÑOL

Contacta con la autoridad competente para la gestión de los dispositivos de radio frecuencia de tu país, para verificar si es necesario la licencia de uso. Además se puede encontrar mas información en el sitio web:
http://europa.eu.int/comm/enterprise/rtte/spectr.htm.

CE ①

WEEE COMPLIANCE

GENERAL VIEW

A) Transflective display
B) User programmable LED
C) Speaker
D) Charging status and battery low warning LED
E) Scan key

F) Keyboard
G) Microphone
H) Laser safety label
I) Product label
J) Adjustable elastic strap with stylus holders
K) Battery pack

L) Data capture/Laser Output window
M) Mini USB connector

N) RS232/USB Communication /Charger pins

1   INTRODUCTION

1.1   DATALOGIC SKORPIO™ DESCRIPTION

Datalogic Skorpio™ is a rugged mobile computer particularly suitable for mobile commerce solutions in the retail environment, both on store shelves and in the stock room.

Thanks to one of the best ergonomics ever seen on the market, Datalogic Skorpio™ reduces operator fatigue with no compromise in terms of reliability and robustness, resisting harsh environments, multiple drops, strong shocks and repetitive tumbles.

Datalogic Skorpio™ offers the unique feature of integrated data capture technology combined with "green spot" feedback (Datalogic patent), providing a "good read" green dot directly on the code, where the operator usually tends to be looking.

Datalogic Skorpio™ system architecture is based on the fastest Intel X-Scale series processors coupled with the latest release of the Windows CE operating system. It is ready to satisfy the most demanding customer needs (i.e. expandable memory thanks to the Mini Secure Digital standard slot).

Its wireless communication capabilities (Bluetooth®, Wi-Fi) enable fast transactions and complete interaction with the information system, as well as wearable peripherals, while its long lasting Li-ION batteries grant full shift coverage in terms of autonomy.

Furthermore, its large high visibility color graphic display with touch screen helps users work more efficiently, while the practical 38-key "alpha & numeric" keypad allows data, codes and descriptions to be input very quickly.

Datalogic Skorpio™ is able to fulfill 100% of traditional text-based applications (i.e. terminal emulation, through the DL-TCL-NET™ software client) as well as the most modern Web-based solutions (i.e. exploiting Microsoft Internet Explorer through the DL Locked-Web-Browser application).
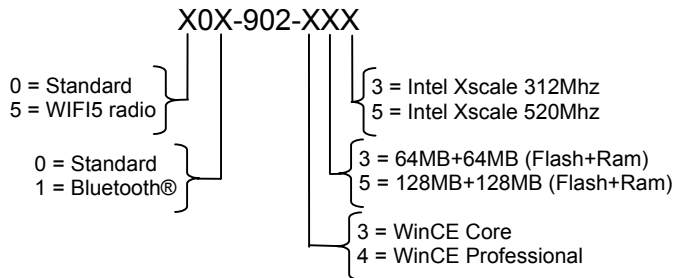
Developers can create and deploy single or multiple data collection applications rapidly exploiting the MCL Collection, while IT managers can centralize the management of mobile devices revising configurations, synchronizing software and updating firmware and drivers remotely and seamlessly thanks to the Wavelink Avalanche software.

Datalogic Skorpio™ offers retailers the best mobile commerce solution to gain the greatest benefit in the least time for those "selling and serving on the move"!

1.2   AVAILABLE MODELS

The brand new Datalogic Skorpio™ is available in different models depending on the options it is equipped with. Options are listed below:

- communication options: Wi-Fi 802.11b, Bluetooth®

- hardware options: microprocessor type/speed, memory size

- software options: operating system version

X0X-902-XXX

```
0 = Standard          3 = Intel Xscale 312Mhz
5 = WIFI5 radio        5 = Intel Xscale 520Mhz

0 = Standard          3 = 64MB+64MB (Flash+Ram)
1 = Bluetooth®         5 = 128MB+128MB (Flash+Ram)

                      3 = WinCE Core
                      4 = WinCE Professional
```

For further details about the Datalogic Skorpio™ models refer to the web site: http://www.datalogic.com.

1.3   PACKAGE CONTENTS

The Datalogic Skorpio™ package contains:

- 1 Datalogic Skorpio™ mobile computer

- 1 CD-ROM Datalogic-NET SDK (Windows CE.5 SDK for Datalogic mobile computers)

- 1 stylus

- 1 user's manual

- 1 rechargeable battery pack

- 1 elastic strap with stylus holder

- 1 belt clip

- 1 belt clip pivot

Any other packages will contain the accessories necessary for the Datalogic Skorpio™ connection to the host computer and to the network: the cradle, power supply, and one or more connection cables.

Remove all the components from their packaging; check their integrity and congruity with the packing documents.

⚠️ **CAUTION**	*Keep the original packaging for use when sending products to the technical assistance center. Damage caused by improper packaging is not covered under the warranty.*

👆 **NOTE**	*Rechargeable battery packs are not initially charged. Therefore the first operation to perform is to charge them. See paragraph 4.1.*

1.3.1 Inserting Mini SD card

Datalogic Skorpio™ provides the possibility to add a mini storage disk to increase the on-board memory capacity. To access the Mini SD card slot and to insert the card, proceed as follows:

1. Turn off the Datalogic Skorpio™ and remove the battery pack, by turning its lock screw to the open position (horizontal) and pulling the lock runner up.

2.   Remove the Mini SD card slot's protective rubber cover.

3.   Insert the card with the written part upward (as shown in the figure) and push it in, aided by the stylus, until it clicks into place.

To recognize the card simply turn off and turn on the Datalogic Skorpio™. See par. 3.4.
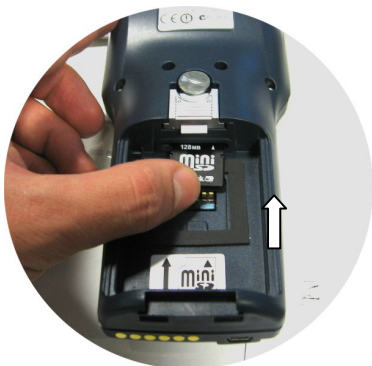
To remove the Mini SD card, just push it toward the inside, aided by the stylus, until it clicks; a spring system will return it out.

1.3.2 Using the Belt Clip

To use the belt clip, proceed as follows:

1.   Remove the elastic strap and unscrew the strap pivot.

2.   Screw the belt clip pivot on the terminal by using the fixing screw.

3. Insert the terminal in the belt clip by sliding the belt clip pivot into the belt clip until it clicks into place.

4. To release the terminal, press the belt clip unlock button.
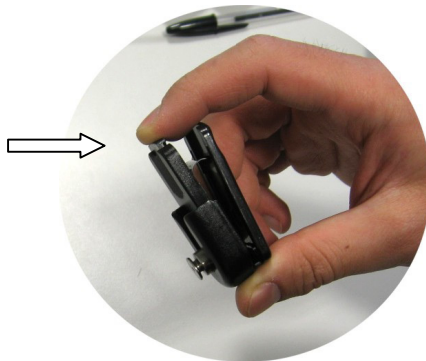
1.4 ACCESSORIES

❑ **Cradles**
94A151099 Datalogic Skorpio™ Single Cradle USB for USB communication
94A151091 F-Color Multiple Cradle
94A151092 F-Color Single Cradle for RS232 communication only
94A151094 F-Color Vehicle Cradle for RS232 communication only

❑ **Charger**
94A151030 MBC8600 Multi-Battery Pack Charger (4 slots)

❑ **Batteries**
94ACC1309 Datalogic Skorpio™ Standard Battery Pack (Li-Ion battery pack 2100 mAh@3.7 V)

❑ **Power Supply**
94ACC1312 PG5-20 MiniUSB AC/DC Power Supply (without Cord)
94ACC1322 PG5-20 MiniUSB AC/DC Power Supply EU KIT

94ACC4595 FPS18 Power Supply without power cord for Single Cradle Desk, for MBC8600 Multi-Battery Charger
94ACC1150 Power Cord EU 3-pin (5pcs)

❑ **Cables**
94A051016 CAB-421 USB Type A-B Mini Straight
94A051017 CAB-381 USB Type A-B Straight

❑ **Various**
94ACC1311 Datalogic Skorpio™ Functional Case
94ACC1301 Stylus Pen (20 pcs)

2 CONNECTIONS

2.1 CONNECTION TO THE HOST COMPUTER

2.1.1 USB Connection

You can use a cable to connect the Datalogic Skorpio™ to a host computer to transfer data.

94A051016 (Standard Mini USB)

Key:

A Host computer   C USB cable
B Datalogic Skorpio™

For USB communication using the USB cradle it is necessary to insert the power supply plug into the power jack on the base of the cradle and attach the power supply to a power outlet. Once the Host has been turned on, insert the Datalogic Skorpio™ terminal into the cradle.
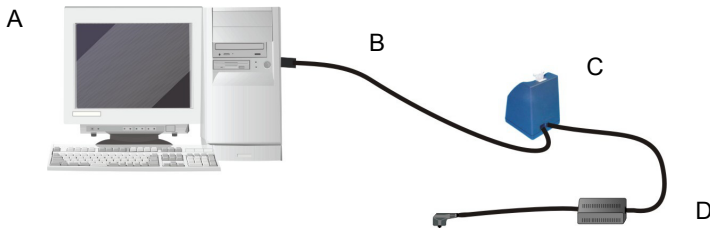
Key:

A Host computer   C Datalogic Skorpio™ Single USB Cradle
B 94A051017 USB type   D Power Supply*
  A-B Straight Cable

* Recommended Power Supply: FPS18 AC/DC Power Supply (94ACC4595).

2.1.2 RS232 Connection

The single or multiple RS232 cradle can be connected to the Host by cable 94A054000 for 9-pin connections. The RJ45 connector of the desired cable must be connected to the RS232 port of the cradle.

Then, it is necessary to insert the power supply plug into the power jack on the base of the cradle and attach the power supply to a power outlet.

Once the Host has been turned on, insert the Datalogic Skorpio™ terminal into the cradle.
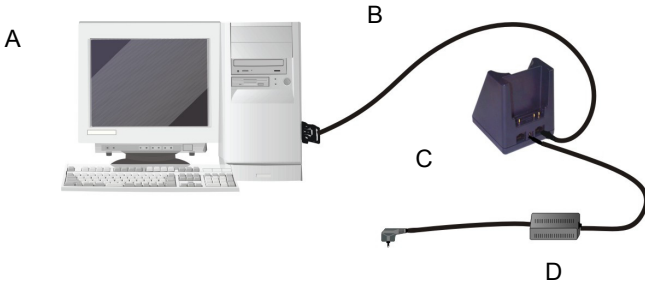
Key:

A	Host computer	C	F-COLOR single cradle or F-COLOR Multiple Cradle
B	94A054000 9-pin serial cable	D	Power Supply*

* Recommended Power Supply: FPS18 AC/DC Power Supply (94ACC4595).

2.1.3 WLAN Connection

Datalogic Skorpio™ Wi-Fi models can communicate with the host using the on-board radio frequency module and an Access Point connected to the host computer.

Key:
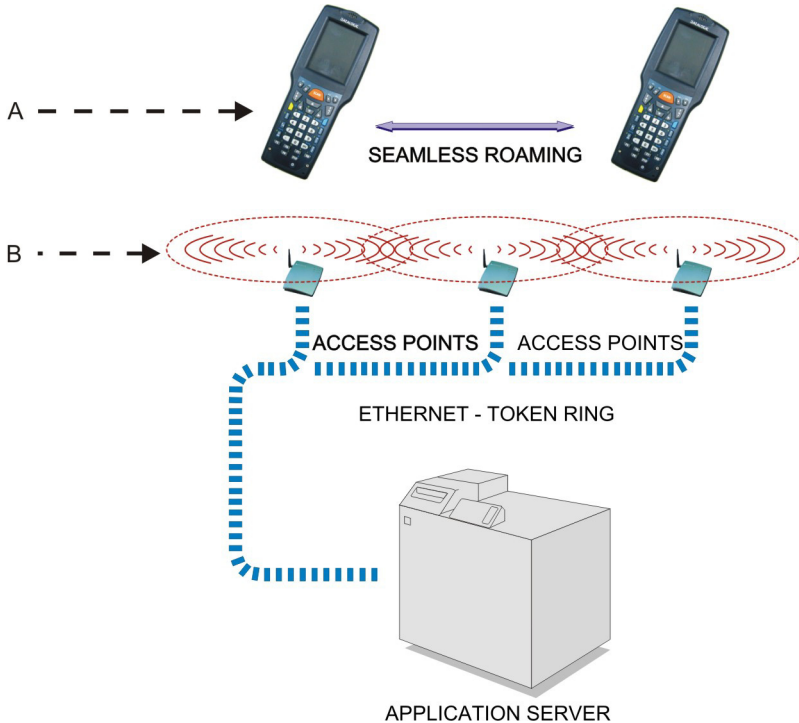
A) Datalogic Skorpio™
B) Access point

> **NOTE**
>
> *In order to avoid wasting power, the Wi-Fi module is off by default. If you need to have the Wi-Fi module working, the module must be powered on using the Wireless Communications applet* (see par. 3.7.4). *To start configuring your WLAN connection, tap the Wi-Fi icon at the bottom of the screen.*

2.1.4 WPAN Connections

Datalogic Skorpio™ Bluetooth® models can communicate with a Bluetooth® device, such as a printer, within a range of 10 m, using the on-board Bluetooth® module.

Key:
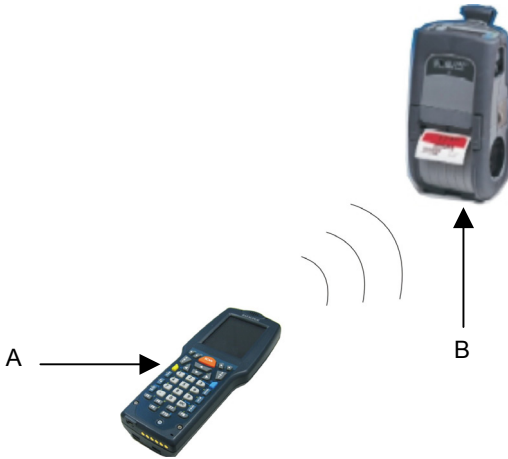
    A) Datalogic Skorpio™

    B) Bluetooth® printer

NOTE

In order to avoid wasting power, the Bluetooth® module is off by default. If you need to have Bluetooth® working, the module must be powered on using the Wireless Communications applet (see par. 3.7.4), and perform the Discovery procedure (see par. 3.8.2).

3   USE AND FUNCTIONING

The use of the Datalogic Skorpio™ depends on the application software loaded. However there are several parameters that can be set and utilities that can be used to perform some basic functions such as data capture, communications, file management, etc.

3.1   STARTUP

The Datalogic Skorpio™ turns on when the battery pack or the external supply is inserted.

After the battery pack is installed, use the [ON/OFF] key to turn the mobile computer on and off.

As soon as the mobile computer is on, the Windows CE desktop configuration will appear on the screen. Wait a few seconds before starting any activity so that the mobile computer completes its startup procedure.

Use the stylus as suggested in paragraph 3.2 to select icons and options.

The mobile computer goes into power-off (low power with display backlight off), when it is no longer used for more than a programmable timeout, which is defined in the POWER applet of the Control Panel. In this mode it can be awakened (resuming operation) by the [ON/OFF] key.

NOTE	*The mobile computer can also be awakened or turned off by the application program.*

3.2   USING THE STYLUS

The stylus selects items and enters information. The stylus functions like a mouse.

Tap:	Touch the screen once with the stylus to open items and select options.
Drag:	Hold the stylus on the screen and drag across the screen to select text and images. Drag in a list to select multiple items.
Tap-and-hold:	Tap and hold the stylus on an item to see a list of actions available for that item. On the pop-up menu that appears, tap the action you want to perform.

The stylus is factory aligned; however, it is possible to align the cursor on the screen with the tip of the stylus. Enter the STYLUS applet of the Control Panel and tap the center of each target that appears on the screen with the tip of the stylus.

3.3   DATA CAPTURE

To configure and enable data capture parameters refer to par. 3.6.

3.3.1   Laser Data Capture

To scan barcodes, point the Datalogic Skorpio™ laser model onto the code from a distance within the reading range while pressing the SCAN key.

The lighted band emitted by the laser must completely intercept the barcode as shown in the figure below. If enabled, the emission of an acoustic signal will indicate that the scan has taken place correctly.
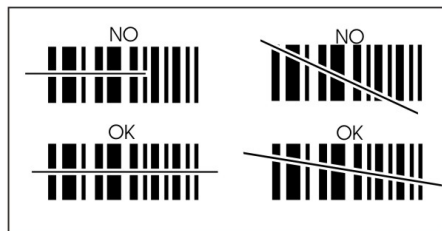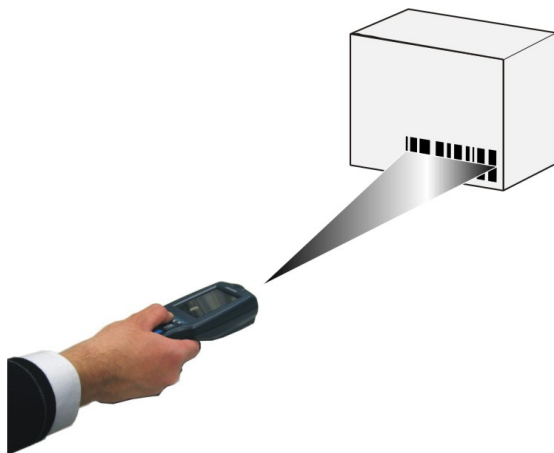
3.4   DESCRIPTION OF THE KEYS

The Datalogic Skorpio™ provides a 38-key alphanumeric keyboard. The following image shows this keyboard.

Main Keys Function

KEY	FUNCTION
SCAN	It starts data capture.
	They let you move forwards, backwards, upwards or downwards within text fields, scroll through a Menu list or browse among folder files.
	After a blue modifier key press, the blue arrows allow moving forwards or backwards within the Internet Explorer browser pages.
	Yellow modifier: when pressed before a standard key, it enables the character printed in yellow above the key. All yellow characters will remain selectable until the yellow modifier key is pressed again.
	Blue modifier: when pressed before a standard key, it enables the function printed in blue above the key. After the function is pressed the keyboard returns to standard mode.
Symb SPC	After a blue modifier key press, subsequent key presses allow the selection of seldom used characters (symbols). The selected character is entered after a short timeout or if a different key is pressed.
⓪	It powers the Datalogic Skorpio™ ON or OFF. It is recessed to avoid accidental power off during use.
Home	After a blue modifier key press, it allows returning to the Home page.
Stop	After a blue modifier key press, it allows ending a page downloading.
Refresh	After a blue modifier key press, it performs a page refresh.

Special Function Icons

ICON   FUNCTION

After a blue modifier key press, it opens the Start menu.

After a blue modifier key press, it opens the file manager.

After a blue modifier key press, it modifies the display backlight intensity (5 levels available through subsequent presses).

After a blue modifier key press, it locks and unlocks the keyboard.

Hardware and Software Reset

By pressing these keys simultaneously, a system hardware reset is performed.

By pressing these keys simultaneously, a system software reset is performed.

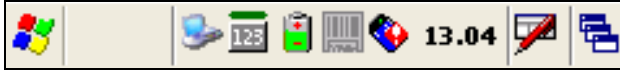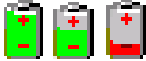|	
CAUTION	*Before performing a hardware or software reset, it is recommended to:* - *execute a system backup to keep your more important files and applications persistent. See par. 3.9;* - *save the registry to non-volatile memory to guarantee the persistence of the Windows configuration. See par. 3.7.2.*

3.5   STATUS INDICATORS

3.5.1   LED Status

The Datalogic Skorpio™ provides two different LEDs signaling the mobile computer status.

LED	STATUS	
Good Read and General Purpose (left-side)	Green	It is constant for a configurable time to signal that a successful read has occurred.
	Green/Red	It is also available to the application program.
Charging Status and Battery Low Warning (right side)	Green constant	It is constant once the charging process has been completed.
	Red blinking	When the mobile computer is powered by the battery (not by the cradle nor by the cable), this LED blinks red to signal that the battery is running down.
	Red constant	It is constant while charging.
	Orange blinking	It blinks when a charging error has occurred, for example when safe charging timeout has expired.

3.5.2   Status Bar

The Status Bar provides information about the time, the battery level, the keyboard function, the decoding status and the communication with the host.

| ICONS	DESCRIPTION
Time and Battery Icons	
10.50	It displays the time.
	They are representative of five different icons indicating the battery level. The icon is partially green when the power left is >20% and partially red colored when the power left is <20%.
	It indicates that the mobile computer is powered by a USB connector or through the cradle.
Keyboard Status Icons	
The green segment over any of the following icons is lit when the Capslock is active.	
Fun	It indicates that the blue modifier key has been pressed and is going to affect the next key press.
Fun	It indicates that the yellow modifier key has been pressed and is going to affect the next key press.
ABC	It indicates that the yellow modifier key has enabled the selection of the characters printed in yellow above the keyboard.
123	It indicates the standard keys selection, so that the yellow modifier key has not been pressed.
ABC	It indicates that the yellow modifier key has enabled the selection of the characters printed in yellow above the keyboard and the Capslock is active.
	It indicates that the keyboard is locked.
Decoding Status Icons	
	It indicates that the decoder is active (green), not active (grey).

3.6   DATA CAPTURE CONFIGURATION

From the Taskbar, tap the "Data Capture" icon to open a drop–down menu. Data Capture can also be accessed from the Control Panel.
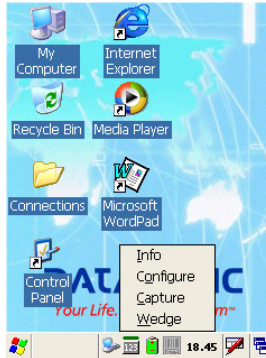
By selecting the *Info* item from this drop-down menu you can access information about the Scanner and the Software; the *Configure* item opens the configuration applet (Data Capture Configuration Window), while *Capture* accesses the data capture applet (Data Capture Window), which enables code reading.
The last menu item (*Wedge*) enables Wedge Emulation.

3.6.1   Configure

The Configuration applet contains the barcode scanning configuration parameters in a directory tree structure. The available barcode parameters are divided into two groups: Reader Parameters and Scan Parameters.

The Reader Parameters depend on the type of scanner module installed on the mobile computer and allow barcode configuration (i.e. enable/disable Code 39, check digit control, etc.).

The Scan Parameters are common to all scanner modules and allow control of the scanning device (i.e. beeper control, LED control, laser timeout, etc.).

Each Data Capture screen window corresponds to a branch of the tree, and the name of the current branch is displayed at the bottom of each screen window.
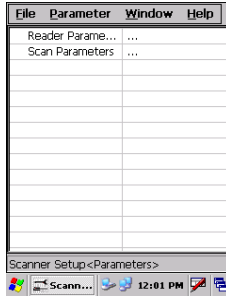
Data Capture Configuration Window

The screen format shows two columns where the left column indicates branches or parameters. Branches have three dots in the right column (...). You can navigate through the tree structure using the stylus or keyboard arrows directly on the item field or from the menu.

Parameters have their corresponding current values in the right column. You can edit parameter values using the stylus or keyboard arrows directly on the item field or from the menu. To change a value for example, select the line of the value to be changed, choose Edit from the Parameter Menu then choose a new value from the values listed in the box (see following figures).
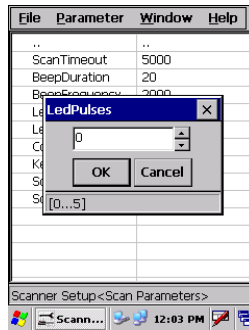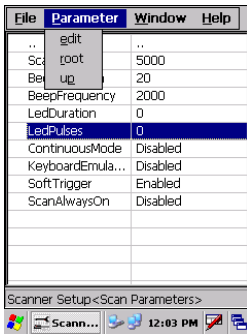
Selecting Data Capture Setup Parameters

Alternatively using the stylus, you can tap once directly on the value on the right column; continue tapping until the desired value is reached.

To activate a new configuration select the File ->Save Menu to send the new configuration to the barcode decoding software and save the new configuration. This will save the configuration to non-volatile memory preventing loss at the next system reset.

Reader Parameters

The barcode reading parameters and values are dependent upon the type of scanner module mounted in your mobile computer. For a detailed list of parameters and of their configuration procedures, please refer to the SDK Help file on the CD.

Scan Parameters

The Scan Parameters are common to all scanner modules and allow control of the scanning device. The Scan parameters are described as follows:

ScanTimeout: the maximum time, in milliseconds, during which the scanner remains on without decoding any barcode.

BeepType: if set to dual tone, the good read beep is a sequence of high and low pitch sounds. If set to monotone, the beep is a single pitch sound.

BeepDuration: the time interval, in milliseconds, during which the beeper will sound when the scanner reads a code. To disable the beeper, set this value to 0.

BeepFrequency: determines the frequency in Hertz of the beeper.

GoodReadSound: is the filename of a wav file played when the scanner reads a code.

LedDuration: the length of the good-read led pulse, in milliseconds.

LedPulses: the number of times the good-read led pulse is emitted when the scanner reads a code.

Green Spot Duration: determines the duration (measured in milliseconds) of the green spot feedback, which provides a "good read" green dot directly on the code, where the operator usually tends to be looking.

ContinuousMode: disables the effect of the ScanTimeout parameter.

KeyboardEmulation: if enabled all scanned data are transformed into keyboard events and can therefore be displayed and saved to a file as if input from the mobile computer keyboard.

SoftTrigger: when enabled, the laser can be turned on/off by the application software.

ScanAlwaysOn: enables the scanner for barcode reading independently from the application software.

Default Settings

The following tables contain the default values for the major barcode setup parameters, according to the type of scan engine mounted on the mobile computer. For a complete list of parameters and of their configuration procedures, please refer to the SDK Help file on the CD.

SCAN PARAMETERS	
ScanTimeout	5000
BeepType	Dual tone
BeepDuration	20
BeepFrequency	2000
GoodReadSound	Beep.wav
LedDuration	200 mS
LedPulses	1
GreenSpotDuration	1000
ContinuousMode	Disabled
KeyboardEmulation	Disabled
SoftTrigger	Enabled
ScanAlwaysOn	Disabled

BARCODE SYMBOLOGY SPECIFIC READER PARAMETERS	
UPC A	Enabled
UPC E	Enabled
EAN 8	Enabled
EAN 13	Enabled
Code 39	Enabled
Code 39 Full ASCII	Disabled
Code 32	Disabled
2/5: Interleaved	Enabled
2/5: Industrial	Disabled
2/5: Matrix	Disabled
Code 128	Enabled
EAN 128	Enabled
Codabar	Enabled

BARCODE SYMBOLOGY SPECIFIC READER PARAMETERS	
MSI	Enabled
Plessey	Disabled
Code 93	Disabled
Code 11	Disabled

3.6.2 Capture

The Data Capture applet (Capture) enables code reading.
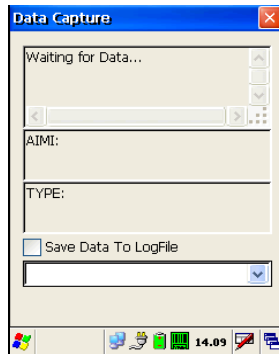
Data Capture Window

Data Capture can also be enabled through the Configuration applet by selecting File ->Scanner from the main menu, or by enabling the parameter Scan Always On in the Scan Parameters branch.
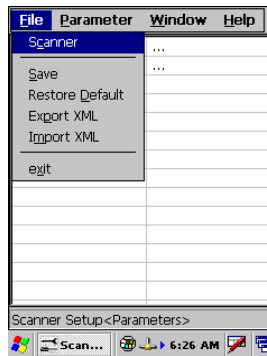
Enabling the Data Capture

3.7   CONTROL PANEL

From the Desktop, double tap on the "Control Panel" icon to open the Windows CE control panel main window. The Control Panel can also be launched from Start ->Settings ->Control Panel.

APPLET programs are displayed as icons; one icon corresponds to each APPLET.
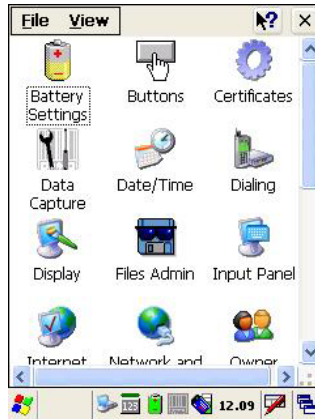
Control Panel

3.7.1   Buttons

The BUTTONS Applet allows assigning desired applications to be launched by the Act button or one of the function keys (F1, F2, F3, F4).

3.7.2   Registry

The REGISTRY ADMIN applet provides management of Windows CE registry.

Select the REGISTRY ADMIN applet by double tapping the Registry Admin icon.

The Registry Administration Main window appears. Two functions are available:

- Save Registry allows permanently saving the Windows configuration (example: custom configuration of screen desktop background color, or network adapter configuration) to non-volatile memory (SAVE button).

- Restore Default Registry allows restoring the initial factory default configuration (Restore Default button). After restoring the factory default configuration, you must perform a software reset.

Saving the registry to non-volatile memory guarantees the persistence of the Windows configuration in case of battery pack replacement.
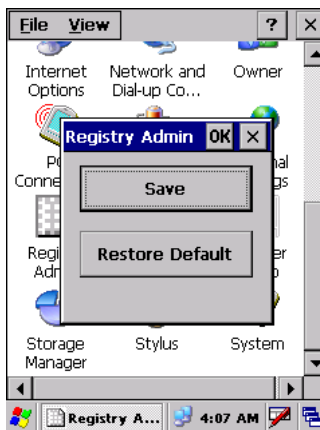
Registry Administration Window

3.7.3 Files Admin

The FILES ADMIN applet enables control of the permanence of files in the System Folder. Two functions are available on the Files Admin Main window by means of two buttons:

Files Admin Main Window

Save Session: with this button all files will be permanently saved in the \Windows directory in non-volatile memory. This function guarantees the steady maintenance of every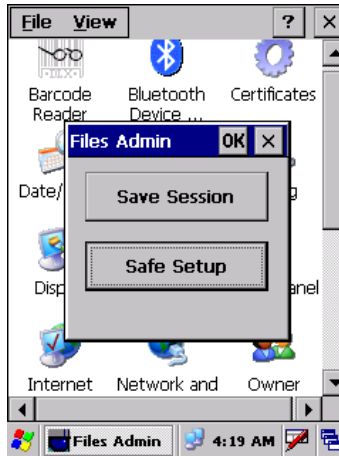 file produced during the current working session - even of sub-directories and relevant files - with the exception of the files belonging to the FLASH image.
These current working session files will be backed-up in the \Backup\Windows directory.
At the next hardware reset, the files previously saved in the \Backup\Windows directory will be restored to the Windows directory (see par. 3.9).

Safe Setup: with this button, the installation of software programs will be saved to non-volatile memory (Backup directory). Before doing this, it will be checked that the Backup directory has enough space to save the files. If the directory space is not enough, an error message will be shown and the program will exit the Safe Setup function.

Two activating procedures are available for Safe Setup:

- Select an installation file (for example, a .CAB cabinet file) from the Safe Setup mask.
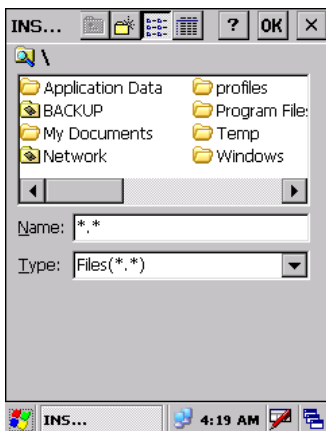
Safe Setup First Mask

Then select \Windows or a relevant sub-directory in the path box. Then, Safe Setup will recognize the new files and directories present in the \Windows directory, and will copy them to the \Backup\Windows directory. At the next hardware reset, these files will be restored (see par. 3.9).

- Simply skip the first mask either by closing it or by pressing the ESC key. When it closes, a new mask will pop up: it will enable any type of installation (even remote ones like ActiveSync® installations). Make sure the installation directory is \Windows or one of its sub-directories. After installation, tap OK: Safe Setup will save the new files in the \Backup\Windows directory.

Safe Setup Second Mask

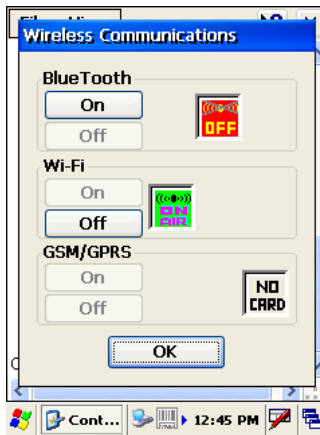## 3.7.4   Wireless Communications

The WIRELESS COMMUNICATIONS applet provides management of the Wi-Fi Card and of the Bluetooth® module.

Select the WIRELESS COMMUNICATIONS applet by double tapping the Wireless Communications icon. The following window will appear:

Wireless Communications Window

NOTE

In order to avoid wasting power, all modules are off by default.

3.8   WINDOWS CONNECTIONS

From the Desktop, double tap on the "Connections" folder to open the following window:
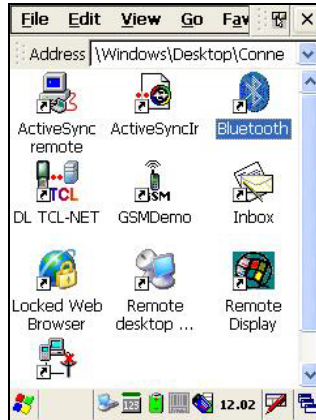
Windows Connections

3.8.1   Microsoft® ActiveSync®

Microsoft® ActiveSync® gives you the possibility to connect your desktop computer to your Datalogic Skorpio™ and synchronize the information on them. Synchronization compares the data on the Datalogic Skorpio™ with that on the desktop computer and updates both computers with the most recent information.

With ActiveSync®, it is possible to:
- Back up and restore Datalogic Skorpio™ data.
- Copy files between Datalogic Skorpio™ and desktop computer.
- Synchronize files by selecting a synchronization mode.

It is possible to constantly synchronize while connected to a desktop computer or, alternatively, synchronization can be performed only when the synchronize command is chosen. You can select which information types are synchronized and control how much data is synchronized.

NOTE

By default, ActiveSync® does not automatically synchronize all types of information. Use ActiveSync® options to turn synchronization on and off for specific information types.

For example:

Synchronize Microsoft Word and Microsoft Excel files between the Datalogic Skorpio™ and the desktop computer. The files will automatically be converted to the correct format.

You can establish a connection directly through a USB cable or through a Datalogic Skorpio™ Single USB Cradle.

	Visit the following Microsoft Web site for the latest in updates, technical information, and samples:
NOTE	*http://www.microsoft.com/windowsmobile/resources/downloads*

	If uploading/downloading files through a serial connection, Microsoft® ActiveSync® is not used. Refer to par. 3.8.2 for details.
NOTE	

ActiveSync® Remote

After a Partnership between mobile computer and desktop computer is established, it is also possible to establish a remote connection via Wireless LAN: disconnect the actual connection via ActiveSync® by double tapping the ActiveSync® connection icon on the taskbar and press Disconnect, then go to the \Windows\Desktop\Connection folder and double tap the ActiveSync® remote icon. In the dialog box that will appear it will be possible to choose a method to connect to the desktop computer. Choose Network Connection and press the Connect button:

	To set up your network connection you have to correctly set up your wireless connection. These settings depend on the wireless card that you have installed on your Datalogic Skorpio™ and on your wireless network settings. For more information about these settings contact your network administrator.
NOTE	

3.8.2   Uploading/Downloading   Files   through   an   RS232 Connection

Files can be uploaded/downloaded through the device cradle connected via an RS232 cable.

Before performing this operation, it is first necessary to define the PC and the mobile computer settings and connection.

NOTE

If uploading/downloading files through a serial connection, Microsoft[®] ActiveSync[®] is not used.

1 - PC Settings

Follow the procedure to install the modem and define the connection settings:

a) Select Start ->Settings ->Control Panel and run the "Phone and Modem" options; choose the "Modem" tab and press the "Add" button to make the "Add Hardware Wizard" window appear;

b) From the "Add Hardware Wizard" window choose "Don't detect my modem" and press the "Next" button. Then, choose "Standard Modem" from the "Manufacturer" list, and "Communications cables between two computers" from the "Models" list. Select the COM port to be used for connection and press the "Next" button. Now the modem is available on the installed modem list.

c) From the same ("Add Hardware Wizard") window select the installed modem and press the "Properties" button to open a further window where selecting the "Modem" tab and changing the "Maximum port speed" to 115200. Then, press the "Ok" button and close all windows to return to Control Panel.

d) From Control Panel choose "Network Connections" to open the related "New Connection Wizard" window. From this window press the "Next" button, choose "Set Up an advanced Connection" and press "Next" again. Then, choose "Accept Incoming Connections", press "Next", choose "Communications cables between two computers" and press "Next" again. Choose if VPN connections are allowed and press "Next". Then, it is necessary to select one or more users which can access the computer or eventually insert a new one through the "Add" button. Then press "Next" twice to complete the connection.

2 - Mobile Computer Settings

Follow the procedure to define the connection settings:

a) From the device desktop activate "Control Panel", then "Network and Dial-up connections" and choose "Make New Connection". From this window type your connection name, select "Direct Connection" and press "Next". From the device list select "Serial cable on COM1" and change the communication speed under "Configure" to 115200 baud. Then, press "Security Settings" and select the "Preview user name and password" flag. Press "Finish" to save the configuration and close all windows.

3 –PC Connection

Follow the procedure to start the connection from the PC side:

a) Connect the device cradle to the PC through a serial cable (refer to the cradle Instruction Manual);

b) Share the desired directories as if working in a typical network connection.

4 –Mobile Computer Connection

Follow the procedure to start the connection from the mobile computer side:

a) Insert the mobile computer into the cradle.

b) Activate "Control Panel"->"Network and Dial-up connections"->"<your connection name>". Within the "Enter Network Password" window insert user name and password (among those allowed in step d of the PC Settings procedure) and press the "Ok" button. If the connection succeeds, the "Connected" message will appear within the "<your connection name>Status" window.

c) Activate "My Device"; then, select "Address Bar" from the "View" menu, insert \\<*host name*> and press "Enter" from the keyboard. Insert user name, password and host domain within the new window.

Now, the directory list will display those directories previously shared by the PC. All directories can be managed as if working in a typical LAN connection.

3.8.3   Bluetooth® Manager Device Setup

In order to enable a Bluetooth® device for communication with the Datalogic Skorpio™ you must perform the discovery procedure and enable the device as follows:

1. Place the Bluetooth® device within the range of the Datalogic Skorpio™ (10 meters).

2. From the "Connections" folder double tap on the "Bluetooth" applet to open the Bluetooth® Manager Device window:

3. Tap on the "Me" button to enter the related window; then, tap on the "ON" button to activate the Bluetooth® module. The module activation may be also performed by using the WIRELESS COMMUNICATION applet as described in par. 3.7.4.
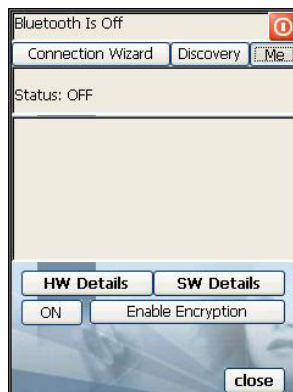
By tapping on the "HW Details" and "SW Details" buttons, information about the mobile computer Bluetooth® hardware and software will be 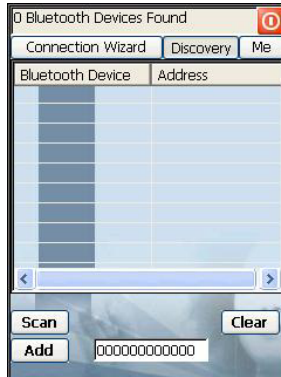displayed, while the "Enable Encryption" button starts encryption of the Bluetooth® communication data. If tapping on the "Close" button the Bluetooth® Manager Device window will be closed.

4. Tap on the "Discovery" button to enter the related window; then, tap on the "Scan" button to run the Discovery procedure:

Once the Discovery procedure has been completed, select the desired Bluetooth® device from the list. It is also possible to digit (12 hexadecimal digits) the Bluetooth® address of the desired device by tapping on the "Add" button. The "Clear" button deletes all discovered devices from the list.

5. Once the desired Bluetooth® device has been selected, tap on the "Connection Wizard" button to enter the related window where selecting the connection type to be used for communication with the Bluetooth® device:

The "Serial Port" button starts communication through the Bluetooth® serial port COM 5.

The "Printer" button starts communication with a printer through the Bluetooth® serial port COM 5.

The "Kbd Emulation" button allows connection with a barcode reader using the keyboard emulation.

The "ActiveSync" button starts communication with a PC equipped with a Bluetooth® antenna and the related ActiveSync.

6. Hide the Bluetooth® Manager Device window by tapping on the icon available on each window or close it through the "Close" button available in the "Me" window (see step 3 of this procedure).

3.9   BACKUP DIRECTORY FILE MANAGEMENT

All of the Windows CE system files reside in RAM (volatile memory) except for the Backup directory, which resides in FLASH (non-volatile memory). Therefore the contents of the Backup directory are persistent even if the mobile computer is re-booted or the battery pack is changed.

You can save your more important files that you don't want to lose due to mobile computer re-boot, in the Backup directory or create a sub-directory within Backup.

Even though the Windows Directory resides in RAM, it often contains files or sub-directories created by the user or by installation programs that you don't want to lose at re-boot. To keep these files persistent it is necessary to copy them to the directory \Backup\Windows. This directory doesn't exist originally (only Backup exists), and therefore it must be created. At the next hardware reset, before activating the shell, Windows CE will copy the contents including all sub-directories of \Backup\Windows to \Windows.

Likewise, to maintain files that must be run at Windows CE startup, (i.e. .exe, .lnk, .vb, .htm, etc.), it is necessary to copy them to the directory \Backup\Startup. This directory does not exist originally (only Backup exists), and therefore it must be created. The application programs will be run after any type of re-boot (both software and hardware reset).

As an alternative to the Safe Setup function, it is possible to copy the .cab files to the directory \Backup\Cabfiles (the Cabfiles sub-directory doesn't exists originally and must therefore be created) and perform a mobile computer cold boot to have the application installed. Once these files are copied to the directory \Backup\Cabfiles, the application will be run after each re-boot.

From the second cold boot on, a message may be displayed such as "<application name> is already installed. Re-install?". This message blocks the boot process. Press the [Enter] key to continue the system initialization.

4   MAINTENANCE

NOTE

Rechargeable battery packs are not initially charged. Therefore the first operation to perform is to charge them. See below.

4.1   CHARGING THE BATTERY PACK

The battery pack autonomy varies according to factors, such as the frequency of barcode scanning, RF usage, etc.

When the battery pack is low, the LED positioned at the right side of the display blinks red.

It is possible to recharge the battery pack by using the PG5-20 MiniUSB AC/DC Power Supply directly connected to the Datalogic Skorpio™.

Alternatively, it is also possible to recharge the battery pack by using the Datalogic Skorpio™ Single USB Cradle or one of the F-COLOR cradles (even when not connected to the host).

Moreover recharging is possible by USB Direct connection with the host computer, but with longer charging times.

During the charging process the LED positioned at the right side of the display is red constant. Once the charging process has been completed this LED is green constant (see par. 3.5).

If the battery pack is removed from the mobile computer, it can be recharged by inserting it into the MBC8600 Multi-Battery Charger.

CAUTION

If the battery pack is new or has not been recharged for a long time, it is necessary to perform two or three charging and discharging cycles (complete use) before it can reach its maximum charge capability.
The maximum time required to recharge a completely run-down battery pack is 4 hours if recharged into the mobile computer.
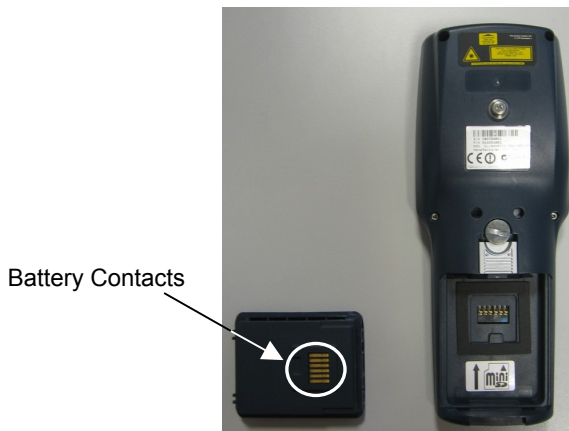
4.2   REPLACING THE BATTERY PACK

To correctly replace the battery pack, proceed as follows.

1.   Turn off the Datalogic Skorpio™.

2.   Turn the battery lock screw to the open position (horizontal), then pull the lock runner up, as indicated in the figure below.

3.   Remove the battery pack.

Battery Contacts

4. To correctly insert the new battery pack, first insert the bottom and then the upper part of the battery pack into the slot as indicated in the following figure:

5. Press it until the battery latch is automatically closed.

⚠️ **WARNING**	***Do not incinerate, disassemble, short terminals or expose to high temperature. Risk of fire, explosion. Use specified charger only. Risk of explosion if the battery is replaced by an incorrect type. Dispose of the batteries as required by the relevant laws in force.***

☝ **NOTE**	*In order to guarantee an adequate operating autonomy, when replacing the battery pack the mobile computer checks the battery energy level. If the battery is not sufficiently charged, Datalogic Skorpio™ does not turn on (when pressing the ON button).* *In this case, either substitute the battery pack with a charged one (sufficiently charged) or insert Datalogic Skorpio™ into a powered cradle or plug it into the direct power supply.*

☝ **NOTE**	*In case of USB recharging, Datalogic Skorpio™ will remain off until an adequate charging level will be reached.*

☝ **NOTE**	*Due to a large internal capacitor, Datalogic Skorpio™ can remain on for about two minutes with no loss of data in the volatile memory, for example when replacing the battery pack.*

4.3   COMPACT FLASH AND SECURE STORAGE CARDS

The Datalogic Skorpio™ supports both Compact Flash and Mini Secure Digital storage cards.

The Mini Secure Digital storage card slot accepts storage cards only, while the Compact Flash card slot accepts either a storage card or the 802.11b radio card.

To install a Compact Flash, it is recommended to contact a Datalogic representative for technical assistance since to access the card slot it is necessary to open the mobile computer by removing its screws and causes warranty loss, while the Mini Secure Digital storage card can be installed by removing the battery, without opening the mobile computer.

⚠ **CAUTION**	Opening the Datalogic Skorpio™ may damage internal components.

4.4   CLEANING THE MOBILE COMPUTER

Periodically clean the Datalogic Skorpio™ with a slightly dampened cloth.

Do not use alcohol, corrosive products or solvents.

5   TECHNICAL FEATURES

5.1   TECHNICAL DATA

Datalogic Skorpio™ Common Features

Electrical Features		
Power		
DC supply	5.25 V ± 6%	
Battery pack	2 cell Li-Ion 2100 mAh@ 3.7 V (7.8 Watt-hours)	
Communication Features		**Windows CE COM Port**
Bluetooth interface		COM5
Serial interface	RS232	COM1
	USB 1.1	COM6
Wireless Features		
WLAN	IEEE 802.11b DSSS	
WPAN	Bluetooth® IEEE 802.15, Class 2, Version 1.2	
Environmental Features		
Working temperature**	-10° to + 50 °C / 14° to +122 °F	
Storage temperature	-20° to +70 °C / -4° to +158 °F	
Humidity	90% non condensing for temperatures<40°C	
Protection	IP64	
ESD protection	4 KV contact discharge, 8 KV air discharge	
Drop resistance	1.5 m / 5 ft	
Hardware Features		
FLASH	64/128MB *	
RAM	64/128MB *	
Microprocessor	Intel XScale PXA 270 @ 312/ 520MHz *	
Audio	Speaker, Microphone	
LED	Two-color Good Read/Programmable LED Charging Status (two-color LED)	
Display	65K Color TFT LCD, 2.8", 320 x 240 pixel resolution (QVGA), with LED backlight and touch screen, transflective lighting, antiglare and antiscratch protection	
Keyboard	38 Rubber Keys	
Mechanical Features		
Dimensions (LxWxH)	19.6 x 7.7 x 3.3 cm / 7.7 x 3.0 x 1.3 in	
Weight (depending on model)	310 - 360 g / 10.9 - 12.7 oz (incl. battery)	

*   Depending on models.

**   Batteries must be charged at a temperature ranging from 0° to +45 °C (+32° to +113 °F).

Programming Features	
Operating system	Windows CE 5.0
Laser Models	
Decoded barcodes 1D	UPC A, UPC E, EAN 8, EAN 13, Code 39, Code 39 Full ASCII, Code 32, Interleaved 2 of 5, Industrial 2 of 5, Matrix 2 of 5, Code 128, EAN 128, Codabar, MSI, Plessey, Code 93, Code 11
Laser Optical Features	
Maximum resolution	0.10 mm / 4 mils
Skew angle	± 50°
Pitch angle	± 65°
Scan rate - bidirectional	104 ± 12 scan/sec
Light source laser scanner	VLD, wavelength in the range 630 to 680 nm
Safety class	Class II EN 60825-1/CDHR

6   TEST CODES

High Density Codes

0.25 mm (10 mils)

Code 39

||||||||||||||||||||||||||||

17162

2/5 Interleaved

||||||||||||||||||||

0123456784

Code 128

||||||||||||||||||

test

80%

EAN 13

8 012345 000012

80%

EAN 8

6450 9723

Medium Density Codes

<u>0.38 mm (15 mils)</u>

Code 39

17162

Interleaved 2/5

0123456784

Code 128

test

<u>100%</u>

EAN 13

8 012345 000012

<u>100%</u>

EAN 8

6450 9723

Low Density Codes

0.50 mm (20 mils)

Code 39

17162

Interleaved 2/5

0123456784

Code 128

test

120%

EAN 13

8 012345 000012

120%

EAN 8

6450 9723

GLOSSARY

Access Point

A device that provides transparent access between Ethernet wired networks and IEEE 802.11 interoperable radio-equipped mobile units. Hand-held mobile computers, PDAs or other devices equipped with radio cards, communicate with wired networks using Access Points (AP). The mobile unit (mobile computer) may roam among the APs in the same subnet while maintaining a continuous, seamless connection to the wired network.

Barcode

A pattern of variable-width bars and spaces which represents numeric or alphanumeric data in binary form. The general format of a barcode symbol consists of a leading margin, start character, data or message character, check character (if any), stop character, and trailing margin. Within this framework, each recognizable symbology uses its own unique format.

Baud Rate

A measure for data transmission speed.

Bit

Binary digit. One bit is the basic unit of binary information. Generally, eight consecutive bits compose one byte of data. The pattern of 0 and 1 values within the byte determines its meaning.

Bluetooth®

A standard radio technology using a proprietary protocol. The onboard Bluetooth module in the mobile computer is compatible with the 1.2 protocol.

Byte

On an addressable boundary, eight adjacent binary digits (0 and 1) combined in a pattern to represent a specific character or numeric value. Bits are numbered from the right, 0 through 7, with bit 0 the low-order bit. One byte in memory can be used to store one ASCII character.

Decode

To recognize a bar code symbology *(e.g.,* Codabar, Code 128, Code 3 of 9, UPC/EAN, etc.) and analyze the content of the bar code scanned.

EEPROM

Electrically Erasable Programmable Read-Only Memory. An on-board non-volatile memory chip.

Flash Disk

Non-volatile memory for storing application and configuration files.

Host

A computer that serves other mobile computers in a network, providing services such as network control, database access, special programs, supervisory programs, or programming languages.

Liquid Crystal Display (LCD)

A display that uses liquid crystal sealed between two glass plates. The crystals are excited by precise electrical charges, causing them to reflect light outside according to their bias. They use little electricity and react relatively quickly. They require external light to reflect their information to the user.

Light Emitting Diode (LED)

A low power electronic light source commonly used as an indicator light. It uses less power than an incandescent light bulb but more than a Liquid Crystal Display (LCD).

RAM

Random Access Memory. Data in RAM can be accessed in random order, and quickly written and read.

RF
Radio Frequency.

RTC
Real Time Clock.

INDEX

DATALOGIC S.p.A.,
Via Candini, 2
40012 - Lippo di Calderara
Bologna - Italy

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Datalogic Skorpio XXX-YYY-ZZZ

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 de la Directives de l'Union Européenne ci-dessous:
der nachstehenden angeführten Direktiven des Europäischen Rats:
cumple con los requisitos de las Directivas del Consejo Europeo, según la lista siguiente:

1999/5/EEC R&TTE

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:

ETSI EN 301 489-3 v1.4.1, August 2002: ELECTROMAGNETIC COMPATIBILITY AND RADIO SPECTRUM MATTERS (ERM); ELECTROMAGNETIC COMPATIBILTY (EMC) STANDARD FOR RADIO EQUIPMENT AND SERVICES; PART 3: SPECIFIC CONDITIONS FOR SHORT-RANGE DEVICES (SRD) OPERATING ON FREQUENCIES BETWEEN 9kHZ AND 40 GHZ

ETSI EN 301 489-17 v1.2.1, August 2002: ELECTROMAGNETIC COMPATIBILITY AND RADIO SPECTRUM MATTERS (ERM); ELECTROMAGNETIC COMPATIBILITY (EMC) STANDARD FOR RADIO EQUIPMENT AND SERVICES; PART 17: SPECIFIC CONDITIONS FOR 2,4GHZ WIDEBAND TRANSMISSION SYSTEMS AND 5GHZ HIGH PERFORMANCE RLAN EQUIPMENT

ETSI EN 300 328 v1.6.1, November 2004: ELECTROMAGNETIC COMPATIBILITY AND RADIO SPECTRUM MATTERS (ERM); WIDEBAND TRANSMISSION SYSTEMS; DATA TRANSMISSION EQUIPMENT OPERATING IN THE 2,4 GHZ ISM BAND AND USING WIDE BAND MODULATION TECHNIQUES; HARMONIZED EN COVERING ESSENTIAL REQUIREMENTS UNDER ARTICLE 3.2 OF THE R & TTE DIRECTIVE
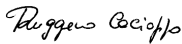
ETSI EN 300 330-2 v1.1.1, June 2001:   ELECTROMAGNETIC COMPATIBILITY AND RADIO SPECTRUM MATTERS (ERM); SHORT RANGE DEVICES (SRD); RADIO EQUIPMENT IN THE FREQUENCY RANGE 9 KHZ TO 25 MHZ AND INDUCTIVE LOOP SYSTEMS IN THE FREQUENCY RANGE 9 KHZ TO 30 MHZ; PART 2: HARMONIZED EN UNDER ARTICLE 3.2 OF THE R&TTE DIRECTIVE

EN 60950-1, December 2001:   INFORMATION TECHNOLOGY EQUIPMENT – SAFETY – PART 1: GENERAL REQUIREMENTS

Lippo di Calderara, March 16th 2006

Ruggero Cacioppo
Quality Assurance Laboratory Manager