

# Mobile Computer



**User's Manual**

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**Patents**

See [www.patents.datalogic.com](http://www.patents.datalogic.com) for patent list.

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# REFERENCES

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## CONVENTIONS

This manual uses the following conventions:

“User” refers to anyone using a Falcon X3+ mobile computer.

“Mobile computer” and “Falcon X3+” refer to the Falcon X3+ mobile computer.

“You” refers to the System Administrator or Technical Support person using this manual to install, configure, operate, maintain or troubleshoot an Falcon X3+ mobile computer.

“Single Dock” refers to the Falcon X3+ Single Slot Dock.

The label artworks may be only a draft. Refer to the product labels for more precise information.

## REFERENCE DOCUMENTATION

For further information regarding Falcon X3+ refer to the SDK Help on-Line.

## SUPPORT THROUGH THE WEBSITE

Datalogic provides several services as well as technical support through its website. Log on to [www.datalogic.com](http://www.datalogic.com) and click on the **SUPPORT** link which gives you access to:

**Downloads** by selecting your product model from the dropdown list in the Search by Product field for specific Data Sheets, Manuals, Software & Utilities, and Drawings;

**Repair Program** for On-Line Return Material Authorizations (RMAs) plus Repair Center contact information;

**Customer Service** containing details about Maintenance Agreements;

**Technical Support** through email or phone.

## WARRANTY TERMS AND CONDITIONS

The warranty period is 1 year for the device and 90 days for consumables (e.g. battery, power supply, cable etc.) from date of purchase at our company.

# GENERAL VIEW

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- A) VGA Color Display\*
- B) ON/OFF Power Key
- C) LEDs
- D) Microphone
- E) Front Scan Key
- F) Keyboard
- G) Stylus
- H) Laser Safety Label
- I) Product Label
- J) Color Camera
- K) Flash
- L) Loudspeaker
- M) Reset Key (under battery)
- N) MicroSD Card Slot (under battery)

\* Remove protective film cover before use



O) Data Capture Window\*



P) Handylink™ Connector (host/slave)

\* Remove protective film cover before use



# 1 INTRODUCTION

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## 1.1 FALCON X3+ DESCRIPTION

The new Datalogic Falcon X3+ mobile computer delivers the ultimate in ruggedness, ergonomics, computing and data capture technologies. Falcon X3+ options provide a tailored solution for demanding environments needing real time transaction visibility.

The Falcon X3+ delivers rugged construction, laser and image data capture, along with real time communications in a product that is effortless to develop for, deploy and manage.

Enterprises rely on accurate inventories to both plan and manage activities. Four data capture options optimize the Falcon X3+ to the application. A laser scanner tackles high volume environments where speed is essential to receiving and shipping operations. The imager captures linear, stacked and 2D codes to reduce failed reads due to damaged and poor quality barcodes. An optional camera takes pictures for the documentation of damaged or returned goods. Datalogic's patented Green Spot good read feedback reduces errors in both noisy and quiet environments. For applications like cross docking where bar codes can be close at hand or far away, an auto ranging laser and an extended long range imager offer aggressive scanning solutions.

The parallel computer architecture of the Falcon X3 melds the strengths of an XScale™ PXA310 microprocessor with a Cortex-M3 coprocessor. This combination gears the device for real time information management. Memory of 256 MB RAM / 1 GB Flash accommodates multiple simultaneous applications, for managing large databases or enabling off-line autonomy of thick applications. A Micro SD Card Slot provides a simple way for users to increase memory storage capacity as needed.

The Falcon X3+ tailors itself to the information technology practices of the enterprise through either the Microsoft Windows CE 6.0 or Microsoft Windows Mobile 6.5 operating system.

As information is collected the Falcon X3 turns to the task of communication via a Summit IEEE 802.11 a/b/g/n radio. Complimented by a CCX v4 certification from Cisco, the Falcon X3+ provides infrastructure compatibility focused on enterprise requirements for encrypted communication and seamless roaming. Voice applications leverage the internet protocol connection for hands-free voice picking and push to talk communications. Bluetooth® Wireless Technology connects headsets, printers and other peripherals eliminating cumbersome wires. An extensive accessory offering accommodates existing installation needs for USB, RS232, modem or Ethernet communications.

The Falcon X3+ comes in two form factors to tackle the differing scanning intensities found in an enterprise. A pistol grip version with numeric keypad tackles the high volume scan and quantity entry found at the receiving dock. While a hand held with alpha numeric keypad better suits the lighter pick and pack duty of preparing goods for shipment. The Falcon's low weight balances a large 3.5" display with a full size keyboard and a single piece 5200 mAh battery into both of these packages.

The Falcon X3+ must do more than function for a full shift, it must survive daily abuse and trauma. The new Falcon X3+ survives drops from 6 feet (1.8 meter) to concrete. Coupled with an IP65 sealing against water and dust, and featuring Gorilla Glass 3® on the scan window, allows the Falcon X3+ to literally take an industrial pounding. Plastic key caps with metal snap dome actuation withstand not only the abusive environment but the heavy use found in third party logistics centers, literally millions of cycles per year.

Falcon delivers Datalogic's trademark ergonomics in a contoured package. An arched pistol grip handle and ergonomic trigger make the rapid receiving of goods comfortable throughout the day. Falcon X3+ numeric and alphanumeric keyboards use a phone key layout placing numeric keys at the device top with navigation, scan and enter keys. This highly functional layout places high use keys at the user's finger tips. Maximized key sizes drive additional user efficiency with or without gloves. A choice of crystal clear full VGA and QVGA displays and the back lit keyboard make the Falcon X3+ readable in dark back corners or full sunlight.

The Falcon X3+ leverages Datalogic's software development kit (SDK) for creating applications. The Datalogic™ SDK provides a set of libraries allowing easy application development using C++, .NET and Java programming languages. Both MCL Collection and Wavelink® Studio™ offer additional solutions to enable development. For terminal emulation environments available tools include the Wavelink Industrial Browser™, Wavelink Terminal Emulation, and Wavelink Speakeasy.

Wavelink Avalanche™ device management tools make the Falcon X3+ an easy device to both deploy and maintain. Datalogic Desktop, Configuration and Firmware Utilities deliver unprecedented ability to customize and update device configuration to the use environment or process. For small or remote installations, Scan to Configure provides simple barcodes that anyone can use to configure the Falcon X3+. Wavelink Remote Control allows an administrator to remotely diagnose and remedy both applications and device settings. For added security the Falcon X3+ can be implemented with Wavelink CE Secure and Wavelink Certificate Manager.

## 1.2 AVAILABLE MODELS

The Falcon X3+ is available in different models depending on the options it is equipped with. All options are listed below:

- communication options: 802.11 a/b/g/n/n radio, Bluetooth®
- data capture options: high performance laser with green spot, 2D imager with green spot, 2D extended range imager (XLR) with green spot, auto ranging laser (XLR), camera
- operating system: Windows CE 6.0, Windows Embedded Handheld 6.5
- form factor: hand held, pistol grip
- keyboard options: numeric, alphanumeric.

For further details about the Falcon X3+ models refer to the website:

<http://www.datalogic.com>.

For further information regarding Windows Embedded Handheld refer to the website:

<http://www.microsoft.com/windowsembedded>.

The currently available models are:

- 945200030 FALCONX3+ 00A0HP-2N0-CEU1  
Falcon X3+ Hand held, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 29-Key Numeric, High Performance Laser w Green Spot, Windows CE 6.0
- 945200031 FALCONX3+ 00A0WI-2N0-CEU1  
Falcon X3+ Hand held, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 29-Key Numeric, Standard Range Imager w Green Spot, Windows CE 6.0
- 945200032 FALCONX3+ 00A0HP-2N1-MEN1  
Falcon X3+ Hand held, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 29-Key Numeric, High Performance Laser w Green Spot, Camera 3.1MP, WEHH 6.5
- 945200033 FALCONX3+ 00A0WI-2N1-MEN1  
Falcon X3+ Hand held, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 29-Key Numeric, Standard Range Imager w Green Spot, Camera 3.1MP, WEHH 6.5
- 945200034 FALCONX3+ 00A0HP-2F0-CEU1  
Falcon X3+ Hand held, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 52-Key Alpha Numeric, High Performance Laser w Green Spot, Windows CE 6.0

- 945200035 FALCONX3+ 00A0WI-2F0-CEU1  
Falcon X3+ Hand held, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 52-Key Alpha Numeric, Standard Range Imager w Green Spot, Windows CE 6.0
- 945200036 FALCONX3+ 00A0HP-2F1-MEN1  
Falcon X3+ Hand held, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 52-Key Alpha Numeric, High Performance Laser w Green Spot, Camera 3.1MP, WEHH 6.5
- 945200037 FALCONX3+ 00A0WI-2F1-MEN1  
Falcon X3+ Hand held, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 52-Key Alpha Numeric, Standard Range Imager w Green Spot, Camera 3.1MP, WEHH 6.5
- 945200043 FALCONX3+ 00A0HP-2B0-CEU1  
Falcon X3+ Hand held, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 29-Key Functional Numeric F1-F12, High Performance Laser w Green Spot, Windows CE 6.0
- 945200044 FALCONX3+ 00A0WI-2B0-CEU1  
Falcon X3+ Hand held, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 29-Key Functional Numeric F1-F12, Standard Range Imager w Green Spot, Windows CE 6.0
- 945200045 FALCONX3+ 00A0HP-2B1-MEN1  
Falcon X3+ Hand held, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 29-Key Functional Numeric F1-F12, High Performance Laser w Green Spot, Camera 3.1MP, WEHH 6.5
- 945200046 FALCONX3+ 00A0WI-2B1-MEN1  
Falcon X3+ Hand held, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 29-Key Functional Numeric F1-F12, Standard Range Imager w Green Spot, Camera 3.1MP, WEHH 6.5
- 945250051 FALCONX3+ 00A0HP-3N0-CEU1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 29-Key Numeric, High Performance Laser w Green Spot, Windows CE 6.0
- 945250052 FALCONX3+ 00A0HP-3F0-CEU1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 52-Key Alpha Numeric, High Performance Laser w Green Spot, Windows CE 6.0

- 945250053 FALCONX3+ 00A0XL-3N0-CEU1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 29-Key Numeric, Auto ranging Laser (XLR), Windows CE 6.0
- 945250054 FALCONX3+ 00A0XL-3F0-CEU1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 52-Key Alpha Numeric, Auto ranging Laser (XLR), Windows CE 6.0
- 945250055 FALCONX3+ 00A0WI-3N0-CEU1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 29-Key Numeric, Standard Range Imager w Green Spot, Windows CE 6.0
- 945250056 FALCONX3+ 00A0WI-3F0-CEU1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 52-Key Alpha Numeric, Standard Range Imager w Green Spot, Windows CE 6.0
- 945250057 FALCONX3+ 00A0LR-3N0-CEU1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 29-Key Numeric, Extended Range Imager (XLR), Windows CE 6.0
- 945250058 FALCONX3+ 00A0LR-3F0-CEU1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 52-Key Alpha Numeric, Extended Range Imager (XLR), Windows CE 6.0
- 945250059 FALCONX3+ 00A0HP-3N1-MEN1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 29-Key Numeric, High Performance Laser w Green Spot, Camera 3.1MP, WEHH 6.5
- 945250060 FALCONX3+ 00A0HP-3F1-MEN1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 52-Key Alpha Numeric, High Performance Laser w Green Spot, Camera 3.1MP, WEHH 6.5
- 945250061 FALCONX3+ 00A0XL-3N1-MEN1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 29-Key Numeric, Auto ranging Laser (XLR), Camera 3.1MP, WEHH 6.5

- 945250062 FALCONX3+ 00A0XL-3F1-MEN1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 52-Key Alpha Numeric, Auto ranging Laser (XLR), Camera 3.1MP, WEHH 6.5
- 945250063 FALCONX3+ 00A0WI-3N1-MEN1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 29-Key Numeric, Standard Range Imager w Green Spot, Camera 3.1MP, WEHH 6.5
- 945250064 FALCONX3+ 00A0WI-3F1-MEN1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 52-Key Alpha Numeric, Standard Range Imager w Green Spot, Camera 3.1MP, WEHH 6.5
- 945250065 FALCONX3+ 00A0LR-3N1-MEN1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 29-Key Numeric, Extended Range Imager (XLR), Camera 3.1MP, WEHH 6.5
- 945250066 FALCONX3+ 00A0LR-3F1-MEN1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 52-Key Alpha Numeric, Extended Range Imager (XLR), Camera 3.1MP, WEHH 6.5
- 945250074 FALCONX3+ 00A0HP-3B0-CEU1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 29-Key Functional Numeric F1-F12, High Performance Laser w Green Spot, Windows CE 6.0
- 945250075 FALCONX3+ 00A0XL-3B0-CEU1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 29-Key Functional Numeric F1-F12, Auto ranging Laser (XLR), Windows CE 6.0
- 945250076 FALCONX3+ 00A0WI-3B0-CEU1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 29-Key Functional Numeric F1-F12, Standard Range Imager w Green Spot, Windows CE 6.0
- 945250077 FALCONX3+ 00A0LR-3B0-CEU1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, QVGA, 29-Key Functional Numeric F1-F12, Extended Range Imager (XLR), Windows CE 6.0

- 945250078 FALCONX3+ 00A0HP-3B1-MEN1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 29-Key Functional Numeric F1-F12, High Performance Laser w Green Spot, Camera 3.1MP, WEHH 6.5
- 945250079 FALCONX3+ 00A0XL-3B1-MEN1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 29-Key Functional Numeric F1-F12, Auto ranging Laser (XLR), Camera 3.1MP, WEHH 6.5
- 945250080 FALCONX3+ 00A0WI-3B1-MEN1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 29-Key Functional Numeric F1-F12, Standard Range Imager w Green Spot, Camera 3.1MP, WEHH 6.5
- 945250081 FALCONX3+ 00A0LR-3B1-MEN1  
Falcon X3+ Pistol Grip, 802.11 a/b/g /n CCX v4, Bluetooth v2.1, 256MB RAM/1GB Flash, VGA, 29-Key Functional Numeric F1-F12, Extended Range Imager (XLR), Camera 3.1MP, WEHH 6.5

### 1.3 PACKAGE CONTENTS

The Falcon X3+ package contains:

- 1 Falcon X3+ mobile computer
- 1 rechargeable battery pack
- 1 blank keypad overlay
- 1 Falcon X3+ Quick Start Guide
- 1 Wavelink Avalanche Insert
- 1 End User License Agreement (EULA) Sheet

Accessories necessary for the Falcon X3+ connection to the host computer and to the network are packaged separately: the cradle and/or one or more connection cables.

Remove all the components from their packaging; check their integrity and compare them 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 2.1.*



## 1.4 INSERTING A MICROSD CARD

Falcon supports microSD memory cards. To access the microSD card slot and insert the card, proceed as follows:

1. Turn off the Falcon X3+.
2. Press the latch release and lift the battery from the enclosure, as indicated in the figure below:



3. Open the microSD card slot by pulling up the locking plate:



4. Insert the microSD card with the written part upward. Lock the card into place by pushing the cardholder down:



5. Replace battery.

### 1.4.1 Removing the MicroSD Card

To remove the microSD card, follow the steps above to access the SD area, and remove it from its slot.



**CAUTION**

*Follow proper ESD precautions to avoid damaging the SD. Proper ESD precautions include, but are not limited to, working on an ESD mat and ensuring that the operator is properly grounded.*

*Do not force the card. If you feel resistance, remove the card, check the orientation, and reinsert it.*

*Do not use the microSD card slot for any other accessories.*

*It is highly recommended to lock the card holder even if the card is not present.*

## 1.5 ACCESSORIES

### ❑ Cradles

- 94A150057 Dock, Single Slot, FalconX3
- 94A151131 Dock, Powered Mobile, FalconX3
- 94A150056 Dock, Ethernet 4 Slot, FalconX3
- 94A151135 Charger, 4 Slot Dock, FalconX3
- 94A151137 Charger, 4 Slot Battery, FalconX3

### ❑ Batteries

- 94ACC1386 Battery, High Capacity, FalconX3

### ❑ Power Supply

- 94ACC1381 Power Supply, Dock, PWR Plug 2.1mm
- 94ACC1385 Power Supply, Charger, MBC and Dock

### ❑ Cables

- 94A051970 Cable, USB Handylink, Client
- 94A051971 Cable, USB Handylink, Host
- 94A051972 Cable, RS232 Handylink, Client
- 94A051973 Cable, RS232 Handylink, Host
- 94A051968 Cable, MicroUSB, Client
- 94A051969 Cable, MicroUSB, Host

### ❑ Various

- 94ACC0104 Rubber Shell, FalconX3+
- 95ACC1056 Holster, FalconX3
- 94ACC1371 Module, Ethernet, Single Slot Dock
- 94ACC1372 Module, Modem, Single Slot Dock
- 94ACC1388 Softcase, FalconX3
- 94ACC1390 Handle Kit, Falcon X3+
- 94ACC1391 Coverplate Kit, FalconX3
- 94ACC1392 Stylus, FalconX3 Pen with Tether (5pcs)

**NOTE**

*Use only Datalogic approved power supply and cables. Use of an alternative power supply will invalidate any approval given to this device and may be dangerous.*



## 2 BATTERIES AND MAINTENANCE

**CAUTION**

*Do not incinerate, disassemble, short terminals, or expose to high temperature. Risk of fire and explosion. Use specified charger only. Risk of explosion if the battery is replaced by an incorrect type. Dispose of batteries as required by local authorities.*

**NOTE**

*Rechargeable backup batteries and battery packs are not initially fully charged. Therefore the initial operation to perform is to charge them. See below.*

**NOTE**

*By default, the battery pack is disconnected at the factory to avoid damage due to excessive draining.*

**CAUTION**

*Annual replacement of rechargeable battery pack avoids possible risks or abnormalities and ensures maximum performance.*

### 2.1 CHARGING THE BATTERY PACK

**NOTE**

*The battery pack autonomy varies according to many factors, such as the frequency of barcode scanning, RF usage, battery life, storage, environmental conditions, etc.*

The battery icon on the Taskbar indicates when the battery pack is low.

It is possible to recharge the battery pack by connecting the power supply directly to the Falcon X3+.

Alternatively, it is also possible to recharge the battery pack by inserting the Falcon X3+ into the single slot dock or the multi battery charger.

Moreover recharging is possible by USB direct connection with the host computer, but with longer charging times and only if the mobile computer off.

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.

The stand-alone battery pack may be recharged outside a Falcon X3+ using the spare battery charging slot on the back of the single slot dock or the multi battery charger.



**CAUTION**

*Do not use the Falcon X3+ until batteries are charged for minimum 4 hours.*



**WARNING**

*Use only Datalogic approved batteries and accessories for battery charging.*

*Risk of explosion if battery is replaced by an incorrect type.*

*Dispose of used batteries according to the instructions.*

*Il y a un risque d'explosion si la batterie est remplacée par une batterie de type incorrect.*

*Mettre au rebut les batteries usagées conformément aux instructions.*



**CAUTION**

*Avoid storing batteries for long periods in a state of full charge or very low charge.*

*We recommend charging the battery pack every two to three months to keep its charge at a moderate level to maximize battery life.*



**NOTE**

*Even if the storage temperature range is wider, it is recommended to store the terminal and the batteries between -30 to 70 °C (-22 to 158 °F), in order to achieve the longest battery life.*

*The Falcon X3+ should be charged at an ambient temperature between 0 - 35° C (32 to 95 °F) to achieve the maximum charging rate.*

*Never charge the main device or spare batteries in a closed space where excessive heat can build up.*

*Close to the limits of the working temperature, some display and/or battery performance degradation may occur.*

**NOTE**

*The battery level may display incorrectly for several minutes after the Falcon X3+ is disconnected from its charger if the charging cycle is not completed.*

**NOTE**

*The Falcon X3+ may get warm during charging, this is normal and does not mean a malfunction.*

**NOTE**

*Use only a USB-IF compliant USB port as a charging source.*

**NOTE**

*When the battery is very low, the audio feature and the scanning feature of imager, long range and XLR laser models are disabled. They will be re-enabled a few minutes after the charging starts.*

## 2.2 REPLACING THE BATTERY PACK

To correctly replace the battery pack, proceed as follows.

1. Turn off the Falcon X3+.
2. Press the latch release and lift battery from the enclosure as indicated in the figure below:



3. Install the new battery pack, first insert the top end, then the latch bottom as indicated in the following figure:





**WARNING**

*Installing, charging and/or any other action should be done by authorized personnel and following this manual.*

*The battery pack may get hot, explode, ignite, and/or cause serious injury if exposed to abusive conditions.*

*If the battery pack is replaced with an improper type, there is risk of explosion and/or fire.*

*Do not place the battery pack in or near a fire or other heat source; do not place the battery pack in direct sunlight, or use or store the battery pack inside unventilated areas in hot weather; do not place the battery pack in microwave ovens, in clothes dryers, in high pressure containers, on induction cook surfaces or similar devices. Doing so may cause the battery pack to generate heat, explode or ignite. Using the battery pack in this manner may also result in a loss of performance and a shortened life expectancy.*

*Use only a Datalogic approved power supply. The use of an alternative power supply will void the product warranty, may cause product damage and may cause heat, an explosion, or fire.*

*The area in which the units are charged should be clear of debris and combustible materials or chemicals.*

*Do not use the battery pack of this terminal to power devices other than this mobile computer.*

*Immediately discontinue use of the battery pack if, while using, charging or storing the battery pack, the battery pack emits an unusual smell, feels hot, changes colour or shape, or appears abnormal in any other way.*

**WARNING**

*Do not short-circuit the battery pack contacts connecting the positive terminal and negative terminal. This might happen, for example, when you carry a spare battery pack in your pocket or purse; accidental short-circuiting can occur when a metallic object such as a coin, clip, or pen causes direct connection of the contacts of the battery pack (these look like metal strips on the battery pack). Short-circuiting the terminals may damage the battery pack or the connecting object.*

*Do not apply voltages to the battery pack contacts.*

*Do not pierce the battery pack with nails, strike it with a hammer, step on it or otherwise subject it to strong impacts, pressures, or shocks.*

*Do not disassemble or modify (i.e. bend, crush or deform) the battery pack. The battery pack contains safety and protection devices, which, if damaged, may cause the battery pack to generate heat, explode or ignite.*

*In case of leakage of liquid from the battery, avoid contact with liquid the skin or eyes. If the contact occurs, immediately wash the affected area with water and consult a doctor.*

*Do not solder directly onto the battery pack.*

*Do not expose the battery pack to liquids.*

*Avoid any knocks or excessive vibrations. If the device or the battery is dropped, especially on a hard surface, you should take it to the nearest Authorised Repair Centre for inspection before continuing to use it.*

*Do not replace the battery pack when the device is turned on.*

*Do not remove or damage the battery pack's label.*

*Do not use the battery pack if it is damaged in any part.*

*Battery pack usage by children should be supervised.*

*Collect and recycle waste batteries separately from the device in compliance with European Directive 2006/66/EC, 2011/65, 2002/96/EC and subsequent modifications, with US and China regulatory laws and regulations about the environment.*

**NOTE**

*In order to maximize operating autonomy, the Falcon X3+ checks its battery level at all times. If the battery is not sufficiently charged, the Falcon X3+ will not turn on when the ON/OFF Power button is pressed.*

*In this case, either substitute a sufficiently charged battery, insert the Falcon X3+ into a powered cradle, or plug it into a wall charger.*

**NOTE**

*To maximize battery life, turn off radios when they are not needed.*

## 2.3 CLEANING THE MOBILE COMPUTER

Periodically clean the Falcon X3+ with a slightly dampened cloth.

Do not use alcohol, corrosive products or solvents.

## 3 CONNECTIONS

### 3.1 USB CONNECTION

You can use the Datalogic Handylink cable 94A051970 to directly connect the Falcon X3+ to a host computer to transfer data through the USB interface.



Key:

A Host computer

C Falcon X3+

B 94A051970 Handylink USB Client  
Cable

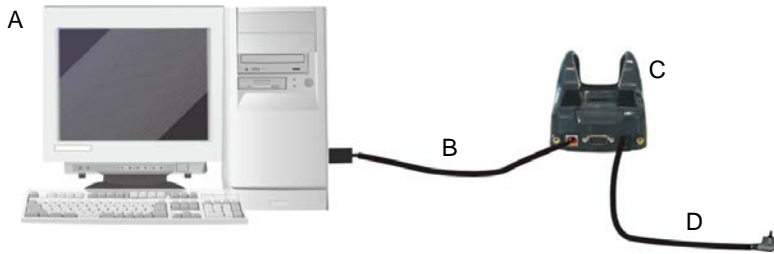


**NOTE**

*Connection through the cable complies to USB 2.0 standard.*

The Single Dock can be connected to the Host using the A to B USB cord included in the box.

Once the host has been turned on, insert the Falcon X3+ into the dock.



Key:

A Host computer

A) 94A150057 Falcon X3+ Single Slot Dock

B) A to B USB straight cable  
(included in the box)

D 94ACC1381 Power Adapter



**NOTE**

*Connection through the cradle complies to USB 2.0 standard.*



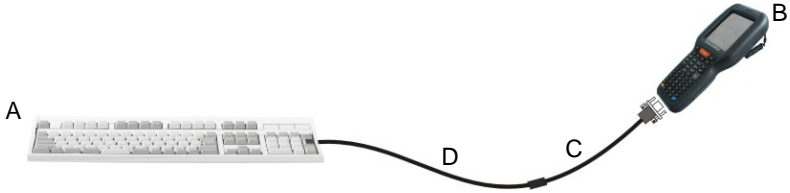
**NOTE**

*The actual data transfer speed can be appreciably lower than the maximum theoretical speed.*

### 3.2 CONNECTION TO USB PERIPHERALS

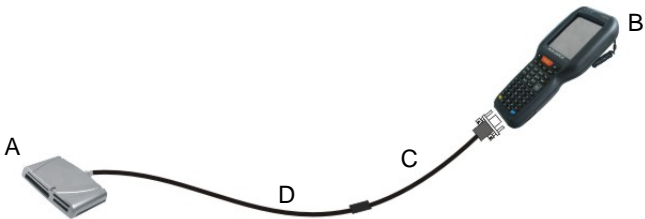
To connect the Falcon X3+ to a USB keyboard or a memory device, connect the terminal to the Datalogic 94A051969 cable or to the Datalogic 94A051971 cable (together with a standard A to micro A USB cable).

For all these devices maximum current withdrawal must be below 100mA.



Key:

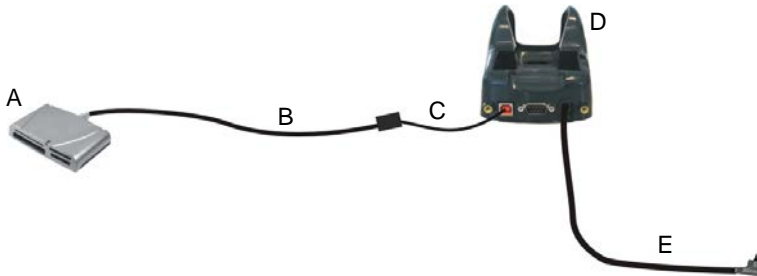
- |                               |  |
|-------------------------------|--|
| A Keyboard with USB interface | C 94A051969 Micro USB Host Cable/<br>94A051971 Handylink Micro USB Host<br>Cable |
| B Falcon X3+                  | D Standard A to Micro A USB Cable  |



Key:

- |   |   |
|---|---|
| A USB hard drive/ external<br>memory source | C 94A051971 Handylink Micro USB Host<br>Cable |
| B Falcon X3+                                | D Standard A to Micro A USB Cable             |

Connect the Single Slot Dock to the peripheral using the A to B USB cord included in the box (together with a standard USB cable if needed).



- |   |   |   |                                       |
|---|---|---|---------------------------------------|
| A | USB Peripheral (memory)                         | D | 94A150057 Falcon X3+ Single Slot Dock |
| B | Standard A to Micro A USB Cable                 | E | 94ACC1381 Power Adapter               |
| C | A to B USB straight cable (included in the box) |   |                                       |



**NOTE**

*Falcon X3+ works with most of the mentioned USB peripherals. In any case, we can't guarantee the interoperability of Falcon X3+ with all devices on the market.*



**NOTE**

*Connection complies to USB 2.0 standard.*



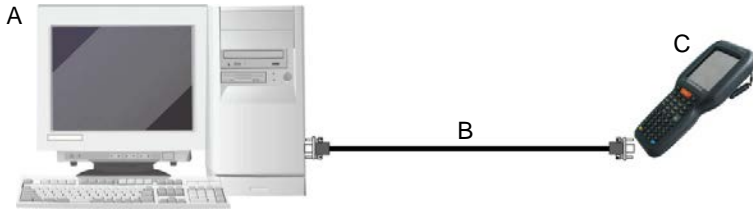
**NOTE**

*The actual data transfer speed can be appreciably lower than the maximum theoretical speed.*



### 3.3 RS232 CONNECTION

You can use the Datalogic 94A051972 cable to directly connect the Falcon X3+ to a host computer to transfer data through the RS232 interface.

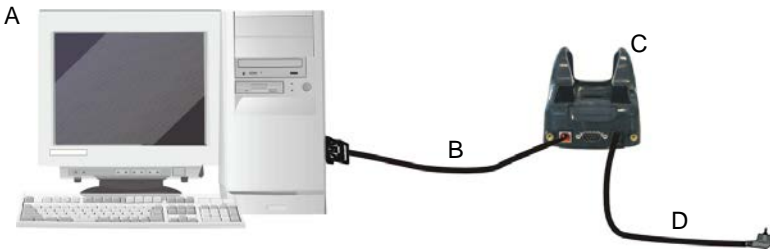


Key:

- A Host computer
- B 94A051972 Handylink Micro RS232 Client Cable
- C Falcon X3+

The Single Slot Dock can be connected to the Host by means of a standard null modem cable such as Datalogic 94A051020 CAB-427 for 9-pin connections.

Once the Host has been turned on, insert the Falcon X3+ into the dock.



Key:

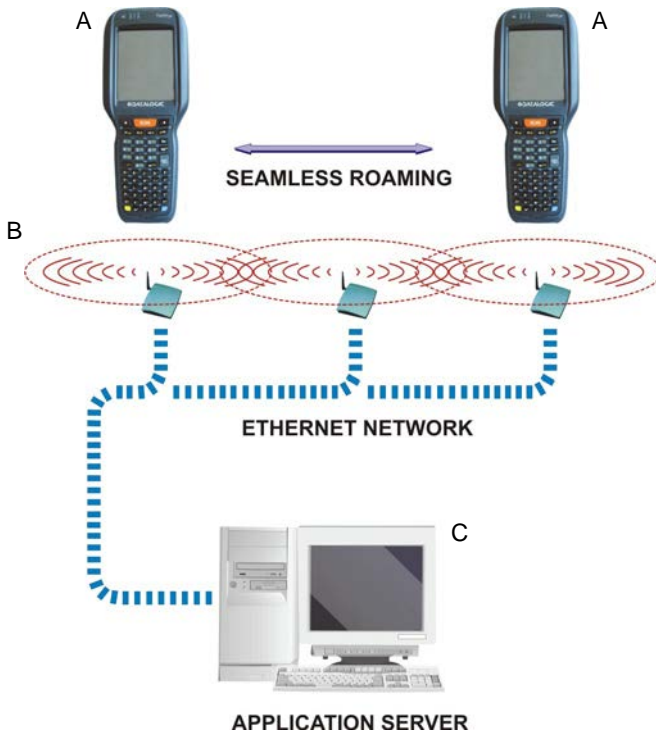
- A Host Computer
- B 94A051020 CAB-427 RS232 Null Modem Cable
- C 94A150057 Falcon X3+ Single Slot Dock
- D 94ACC1381 Power Adapter

### 3.4 WLAN CONNECTION

Falcon X3+ 802.11 a/b/g/n radio models can communicate with the host using the on-board radio frequency component and an Access Point connected to the host computer.

For models using the 802.11 a/b/g/n radio, you can find information about the applet for radio configuration: <http://www.summitdatacom.com/SCU.htm>.

To launch this utility you can tap the specific icon if it is visible on the taskbar or you can select the menu item: Start-> Summit and tap the 'Summit Client Utility' icon.



Key:

- A) Falcon X3+
- B) Access point
- C) Host – Application Server

**NOTE**

*802.11 a/b/g/n radio module is on by default, in order to avoid wasting energy, you can switch it off using the Wireless Communications applet.*

**NOTE**

*Suspending the terminal powers off the 802.11 a/b/g/n radio and drops the radio connection. When the terminal resumes, depending on the radio power mode and security protocol selected, it may take up to 30 seconds for the 802.11 a/b/g/n radio driver to re-associate the radio to the network.*

**NOTE**

*Area coverage and radio performance may vary, due to environmental conditions, access point types or interference caused by other devices (microwave ovens, radio transmitters, etc.).*

**NOTE**

*In case of heavy usage the Falcon X3+ may get warm; this is normal and does not mean a malfunction.*

### 3.5 WPAN CONNECTIONS

Falcon X3+ models with Bluetooth® can communicate with other Bluetooth® devices, such as a printer, within a range of 10 m, using the on-board Bluetooth® module.



Key:

- A) Falcon X3+
- B) Bluetooth® printer



**NOTE**

*In order to extend battery life, the Bluetooth® module is off by default. If you need to have Bluetooth® working, the module must be powered on using the Wireless Manager applet (see par. 4.6.6), and perform the Discovery procedure (see par. 4.7.2).*



**NOTE**

*Suspending the terminal powers off the Bluetooth® radio and drops the piconet (Bluetooth® connection). When the terminal resumes, it takes approximately 10 seconds for the Bluetooth® radio driver to re-initialize the radio.*



**NOTE**

*Area coverage and Bluetooth® radio performance may vary, due to environmental conditions or interference caused by other devices (microwave ovens, radio transmitters, etc.).*

### 3.6 WIRELESS AND RADIO FREQUENCIES WARNINGS

**WARNING**

*Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications or attachments could damage the product and may violate laws and regulations.*

**WARNING**

*Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against the RF signals generated by Falcon X3+.*

**WARNING**

*Datalogic recommends persons with pacemakers or other medical devices to follow the same recommendations provided by Health Industry Manufacturers Associations for mobile phones.*

*Persons with pacemakers:*

- *Should ALWAYS keep this device more than twenty five (25) cm from their pacemaker and/or any other medical device;*
- *Should not carry this device in a breast pocket;*
- *Should keep the device at the opposite side of the pacemaker and/or any other medical device;*
- *Should turn this device OFF or move it immediately AWAY if there is any reason to suspect that interference is taking place.*
- *Should ALWAYS read pacemaker or any other medical device guides or should consult the manufacturer of the medical device to determine if it is adequately shielded from external RF energy.*

*In case of doubt concerning the use of wireless devices with an implanted medical device, contact your doctor.*

**WARNING**

*Turn this device OFF in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may use equipment that could be sensitive to external RF energy.*

**WARNING**

*RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle.*

**WARNING**

*An air bag inflates with great force. DO NOT place objects, including either installed or portable wireless equipment, in the area over the air bag or in the air bag deployment area. If a vehicle's wireless equipment is improperly installed and the air bag inflates, serious injury could result.*

**WARNING**

*Turn off the device when in any area with a potentially explosive atmosphere. Observe restrictions and follow closely any laws, regulations, warnings and best practices on the use of radio equipment near fuel storage areas or fuel distribution areas, chemical plants or where any operation involves use of explosive materials.*

*Do not store or carry flammable liquids, explosive gases or materials with the device or its parts or accessories.*

*Areas with a potentially explosive atmosphere are often, but not always, clearly marked or shown.*

*Sparks in such areas could cause an explosion or fire, resulting in injury or even death.*

## 4 USE AND FUNCTIONING

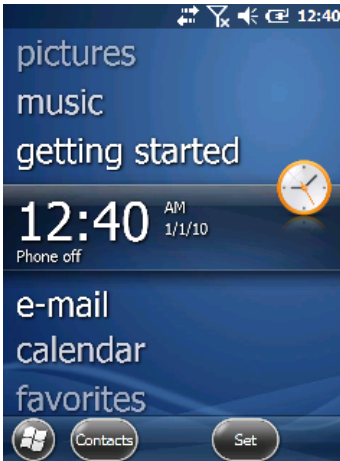
The use of the Falcon X3+ depends on the application software loaded. However there are several parameters that can be set and utilities that can be used to perform some basic functions such as data capture, communications, file management, etc.

### 4.1 STARTUP

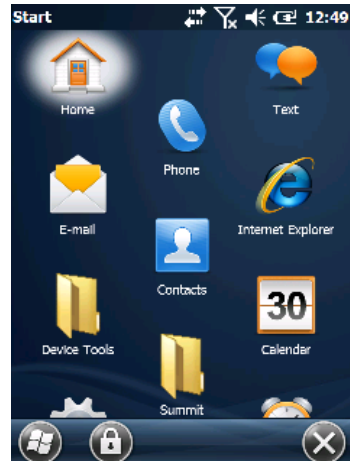
The Falcon X3+ turns on when the battery pack or the external supply is inserted and the ON/OFF Power button is pressed.

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 Embedded Handheld 6.5 desktop configuration will appear on the screen. Wait a few seconds before starting any activity so that the mobile computer completes its startup procedure.



Today Screen



Start Menu

Use the stylus (par. 4.1.1) as suggested to select icons and options.

The mobile computer goes into power-off (low power with display and keyboard backlight off), when it is not 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 suspended programmatically.*

### 4.1.1 Using the Stylus

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

<b>Tap:</b>	Touch the screen once with the stylus to open items and select options.
<b>Drag:</b>	Hold the stylus on the screen and drag across the screen to select text and images. Drag in a list to select multiple items.
<b>Tap-and-hold:</b>	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.

To recalibrate the touch screen use the Screen Applet (see par. 4.6.7).



**CAUTION**

*Use only original Datalogic styluses supplied with the product itself.*

*In harsh applications, use of screen protectors should be taken into consideration, in order to extend the touch screen operating life.*

*To prevent damage to the screen, do not use sharp objects or any tool other than the Datalogic provided stylus.*

*Do not apply too much pressure when touching the screen.*

*For applications where an intensive use of the touch screen is foreseen, please consider that touch screen components are subject to progressive wear.*



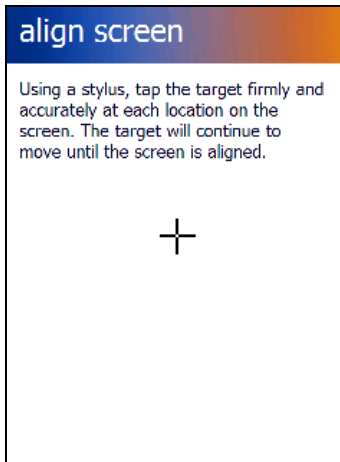
## 4.2 WINDOWS EMBEDDED HANDHELD WELCOME WIZARD

In Windows Embedded Handheld, at the very first Falcon X3+ startup, following a clean boot or following a Registry restore to default values, the mobile computer startup (see par. 4.1) is preceded by the Welcome Wizard.



**Welcome Wizard Screen**

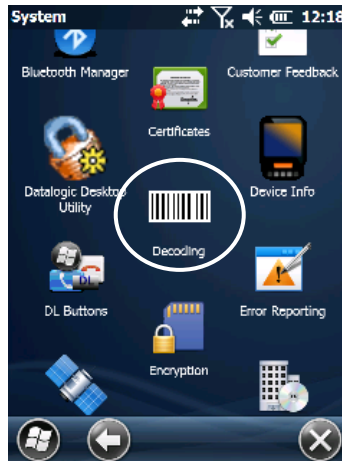
The Welcome Wizard allows the user to calibrate the touch screen (see par. 4.6.7)



**Touch Screen Calibration Screen**

## 4.3 DATA CAPTURE

To capture data first of all tap Start > Settings > System > Decoding:

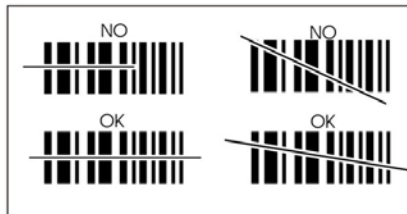
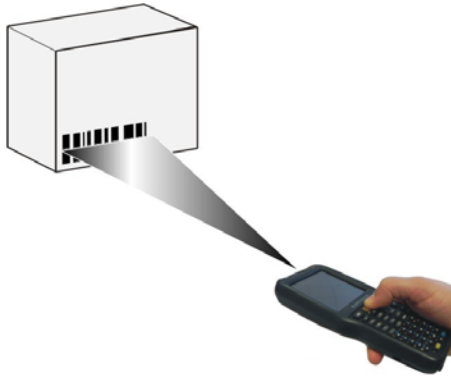


To configure and enable data capture parameters refer to par. 4.6.1.

### 4.3.1 Laser Data Capture

To scan barcodes, point the Falcon X3+ laser model onto the code from a distance within the reading range while pressing the SCAN key or the pistol trigger.

The lighted band emitted by the laser must completely cross the barcode as shown in the figure below.



The XLR engine includes a pointer mode that projects a highly visible scan line at longer ranges to make it easier to accurately target bar codes. The user simply holds the trigger down until the aimer is on the appropriate code. Releasing the trigger then initiates the bar code scan.

If the scan has taken place correctly:

- the Good Read LED glows steadily Green for a configurable time;
- if enabled, the Good Read Beep plays;
- if enabled, the GreenSpot projects a green spot onto the bar code image.

**NOTE**

*Remove the protective film cover over the Laser Output Window before use.*

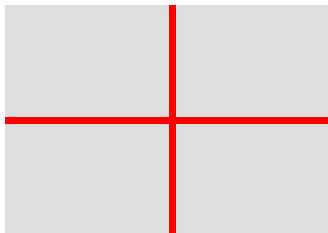
### 4.3.2 Imager Data Capture

The Falcon X3+ Imager captures a picture of the entire bar code. The omnidirectional scanning does not require that the operator orient the bar code to align with the scan pattern.

To read a 1D or 2D code, simply point the Falcon X3+ Imager model onto the code and press the SCAN Key or the pistol trigger.



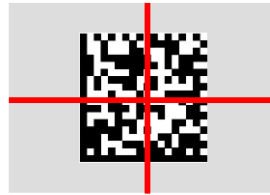
The Falcon X3+ Imager uses an intelligent aiming system pattern, similar to those on cameras, indicating the field of view, which should be positioned over the code:



**Aiming System**

If the aiming system pattern is centered over the entire symbology as shown in the following figure, either wait for the timeout or release the Scan key to capture the image.

A red beam illuminates the code, which is captured and decoded. You will get a good read.

**Linear barcode****2D Matrix symbol****Relative Size and Location of Aiming System Pattern**

The field of view changes its size as you move the reader closer or farther away from the code. The field of view indicated by the aiming system pattern will be smaller when the Falcon X3+ Imager 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 par. 5.1 for further details).

If the scan has taken place correctly:

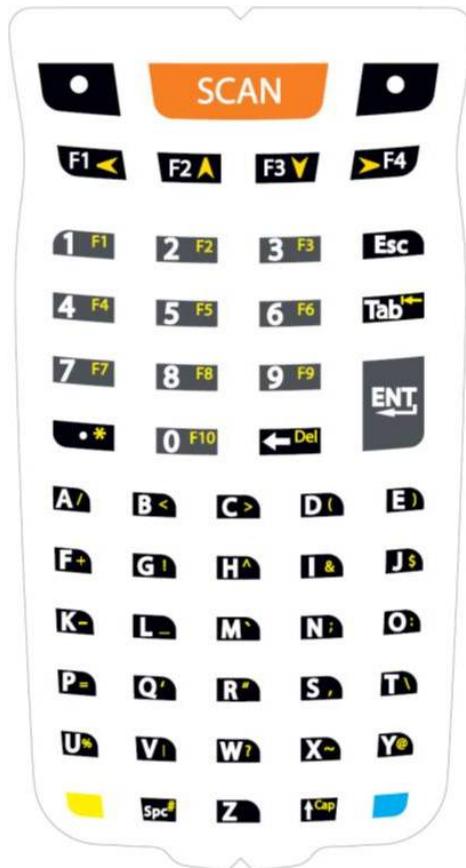
- the Good Read LED glows steadily Green for a configurable time;
- if enabled, the GoodReadSound emits an acoustic signal;
- If enabled, the Good Read Beep plays.

## 4.4 DESCRIPTION OF THE KEYS

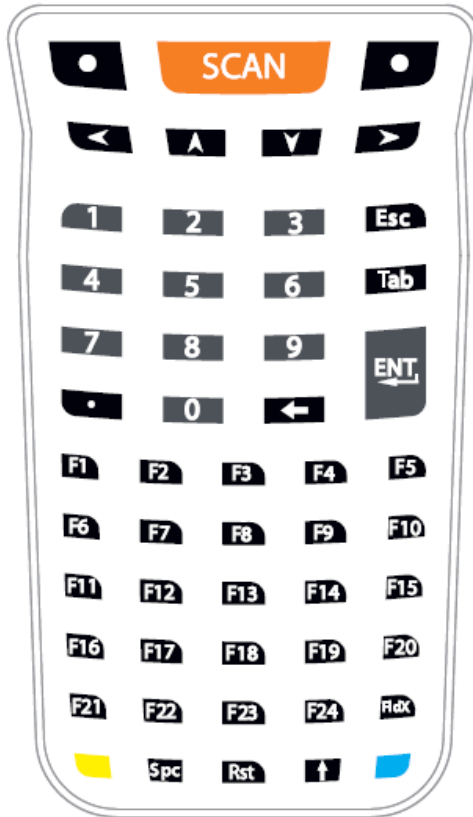
The Falcon X3+ comes with three different keyboards:

- A 52-key alphanumeric keyboard
- A 52-key keyboard specific for Terminal Emulation
- A 29-key numeric keyboard
- A 29-key functional numeric keyboard

### 4.4.1 52-Key Alphanumeric Keyboard



#### 4.4.2 52-Key Terminal Emulation 5250 Keyboard





## Main Keys Function

### KEY



### FUNCTION

Pressing the SCAN key starts barcode data capture.

Direct access to F1-F4.

If pressed after the Yellow toggle, these keys let you to move forwards, backwards, upwards or downwards within text fields, scroll through a Menu list or browse among folder files.

Yellow modifier (toggle key): when pressed before a standard key, it enables the character or function printed in yellow above the key.






Blue modifier (one shot key): when pressed before a standard key, it enables the character or function printed in blue above the key.

It powers the Falcon X3+ on or off. It is placed on the upper left side of the terminal.

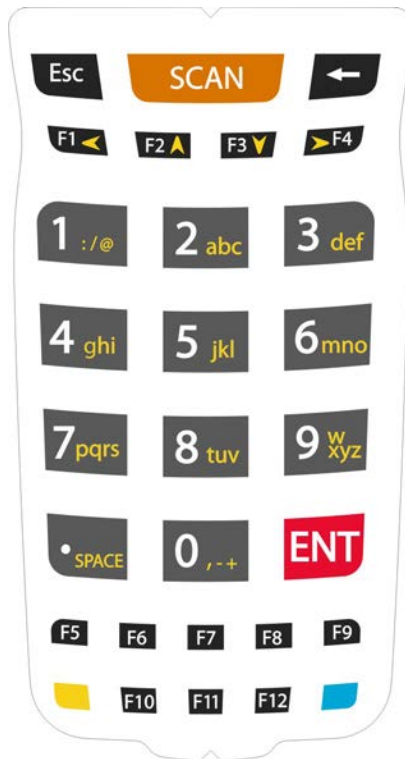
### 4.4.3 Numeric Keyboard











## Main Keys Function

KEY	FUNCTION
	Pressing the SCAN key starts barcode data capture.
	Pressing cursor keys let you move forwards, backwards, upwards or downwards within text fields, scroll through a Menu list or browse among folder files.
	Yellow modifier (toggle key): when pressed before a standard key, it enables the character or function printed in yellow above the key.
	Blue modifier (one shot key): when pressed before a standard key, it enables the character or function printed in blue above the key.
	It powers the Falcon X3+ ON or OFF. It is placed on the upper left side of the terminal.

#### 4.4.4 Functional Numeric Keyboard (F1-F12)



## Main Keys Function

KEY	FUNCTION
	It starts barcode data capture.
   	They let you move forwards, backwards, upwards or downwards within text fields, scroll through a Menu list or browse among folder files.
	Yellow modifier (toggle key): when pressed before a standard key, it enables the character or function printed in yellow above the key.
	Blue modifier (one shot key): when pressed before a standard key, it enables the character or function printed in blue above the key.
	It powers the Falcon X3+ ON or OFF. It is placed on the upper left side of the terminal.

## 4.4.5 Resetting the Falcon X3+

There are several reset methods for the Falcon X3+.

A warm boot terminates an unresponsive application and clears the working RAM, but preserves the file system. Registry is restored from persistent memory if available or returned to factory default.

A cold boot forces all applications to close, completely reinitializing the system. It clears the working RAM, but the file system is preserved. Registry is restored from persistent memory.

A clean boot restores the Falcon X3+ to a clean configuration: both the Registry and the file system returns to a clean status that conforms to factory default.

### Warm Boot

To perform a warm boot, press and hold the following keys simultaneously:



### Cold Boot

To perform a cold boot, do the following steps:

1. Turn off the Falcon X3+ by pressing the on-off key.
2. Pull the battery latch down and remove the battery pack.
3. Press and hold the scan button and then press the reset button.
4. Insert the battery pack.
5. Turn on the Falcon X3+ by pressing the on-off key.

## Clean Boot

To perform a clean boot, do the following steps:

1. Perform a Cold Boot (see Cold Boot)
2. Press and hold down the 0 and Esc keys simultaneously and then press the on-off key:



A dialog box will appear asking for confirmation. Press the Enter Key.

	<b>Warm Boot</b>	<b>Cold Boot</b>	<b>Clean Boot</b>
<b>Registry</b>	Restored from flash	Restored from flash	Clean configuration (no user config)
<b>File System</b>	Preserved	Preserved	Clean Installation (no user files)

## 4.5 STATUS INDICATORS

### 4.5.1 LED Status

The Falcon X3+ provides three different LEDs signaling the mobile computer status.

LED	STATUS	
<b>Good Read</b> (right side)	Red	Scanning LED is ON from the time the user hits the scan button or the trigger button until the bar code is decoded (laser models) Time-out (imager models).
	Green	Scanning LED is ON, showing a good decode.
<b>Charging Status</b> (left side)	Green	It is solid once the charging process has been completed (full charge).
	Red	It is solid while charging.
	Red blinking	It blinks in case of charge fault.
<b>Keyboard Status</b> (center)	Off	Keyboard in primary.
	Yellow solid	Yellow alternate key mode.
	Blue solid	Blue alternate key mode
	Pink	CapsLock enabled.








## 4.5.2 Taskbar

The title bar provides information about the time, the battery level, the keyboard function, and the decoding status.



**Windows Embedded Handheld Taskbar**

ICONS	DESCRIPTION
	Zooms the screen.
	Opens the Connections balloon, which includes hypertext links to the Wireless Manager and the Connections applet. (see par.4.6.6).
	Displays the system battery status.
	Opens the Volume balloon, which allows the user to control the main volume, in-call volume, to mute all volumes, and to control the vibrator.
	Opens Clock & Alarms control panel applet. It allows the user to set date, time and alarms.

## 4.6 SETTINGS

From the Start menu, tap Settings. The settings are organized hierarchically.



Control panel applets are displayed as icons; each icon corresponds to one applet:



**Windows Embedded Handheld Control Panel**

## 4.6.1 Data Capture Configuration

You can configure the Falcon X3+'s decoding options by tapping Start -> Settings -> System -> Decoding:



There are two sections in the Decoding control panel, each containing additional pages. There are seven General Configuration pages and multiple Barcode symbology pages.

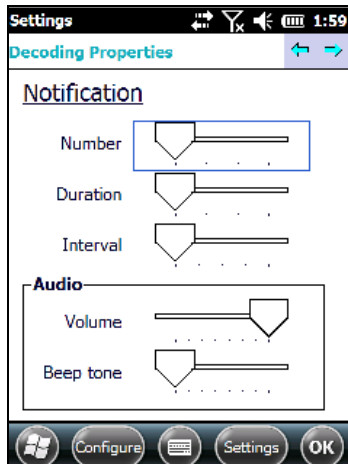
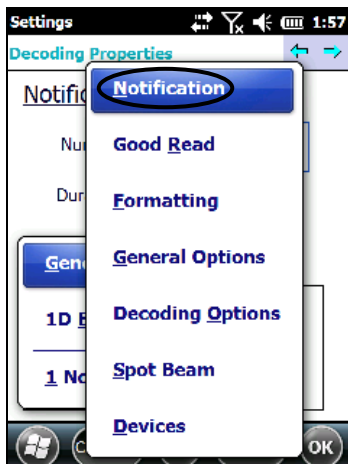
### Decoding configuration pages

Select the desired configuration from the options shown in the figure below, and the other Decoding Properties figures on the following pages.

Select General, 1D Bar Code or 2D Bar Code, then use the menu or tap the left and right arrow keys to navigate the different pages of the Decoding utility. The menu options will change to reflect the items most recently selected.

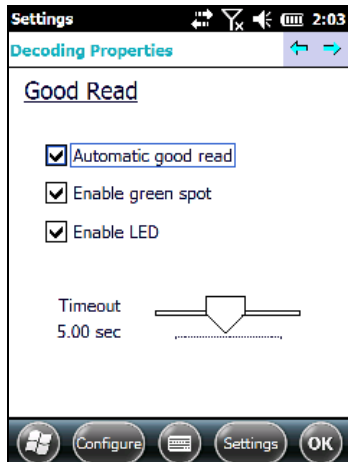
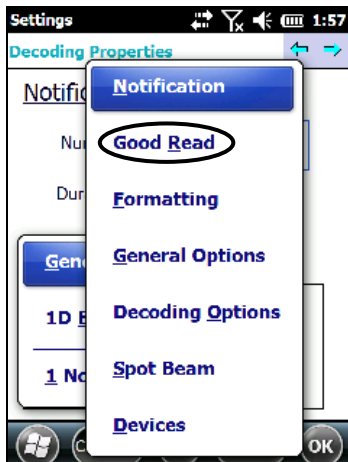
## Notification

From the Decoding menu, tap Configure > General > Notification. Use it to set volume, tone, duration, and number of various types of beeps.



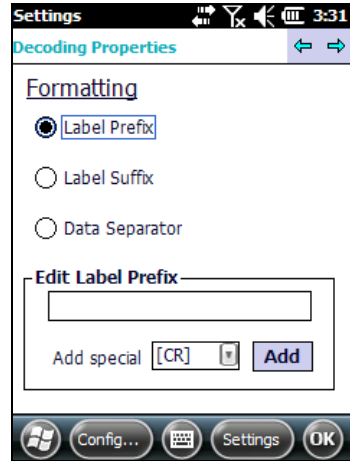
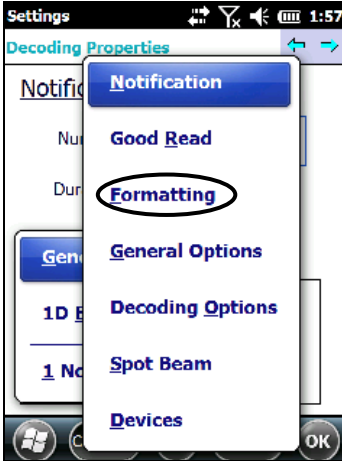
## Good Read

From the Decoding Properties applet, tap Configure > General > Good Read. Use it to enable Good Read indications, the LED, the use of Green Spot and a to set the decoding timeout for decoding labels.



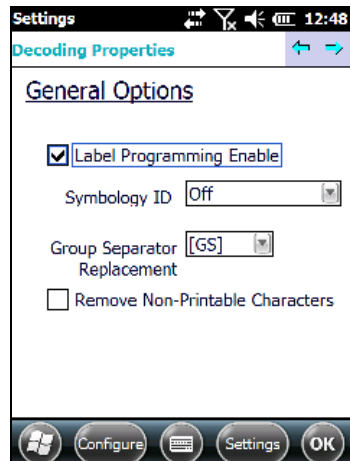
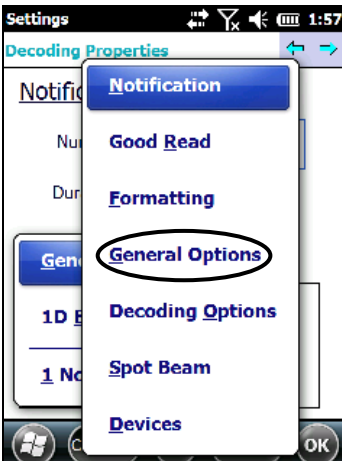
## Formatting

From the Decoding Properties page, tap Configure > General > Formatting. Use it to configure prefix, suffix and data separator character strings.



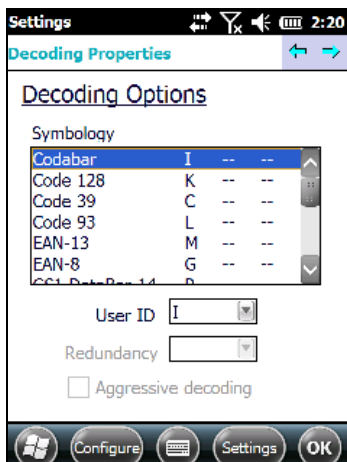
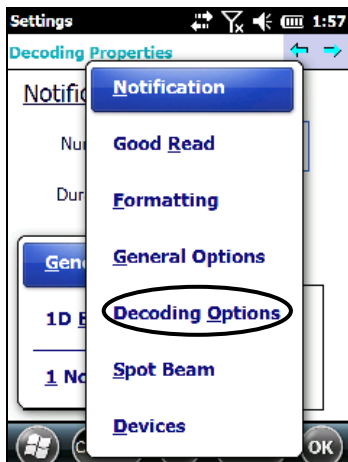
## General Options

From the Decoding menu, tap Configure > General > General Options. Select from Label Programming Enable, Symbology IDs and Group Separator Replacement.



## Decoding Options

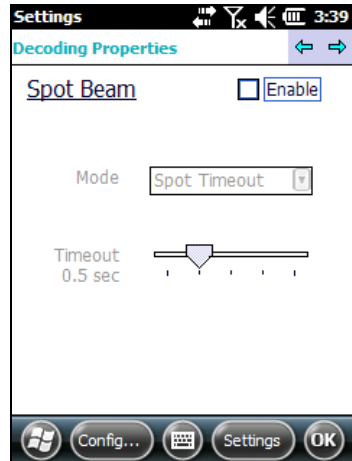
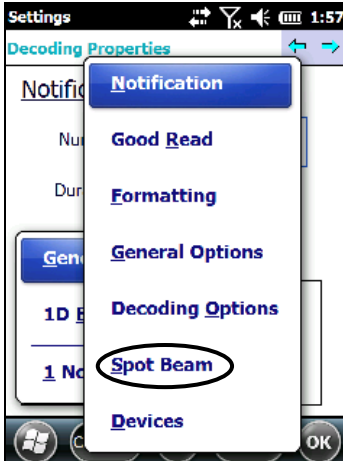
From the Decoding Properties applet, tap **Configure > General > Decoding Options**. Use it to configure the User ID for symbologies, Redundancy and Aggressive Decoding (if supported by the decoding module). Select a symbology to view or change the available properties settings.



## Spot Beam

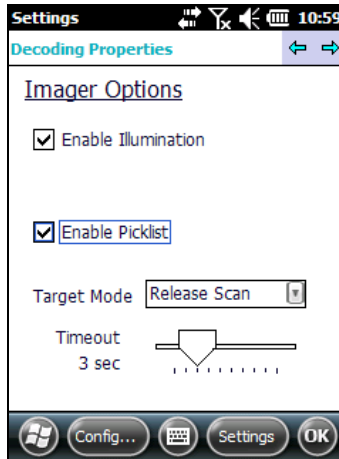
From the Decoding Properties applet, tap Configure > General > Spot Beam. It allows enabling and configuration of Spot Beam and triggering modes.

It is only available on devices equipped with laser and advanced long range laser decoding modules that support the Spot Beam Feature.



## Imager Options

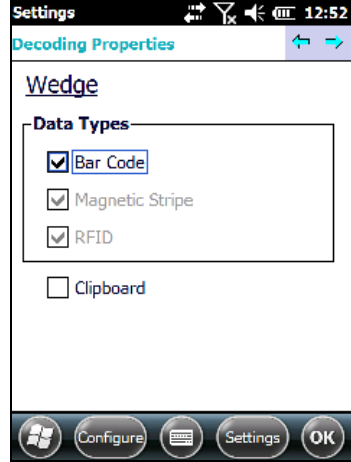
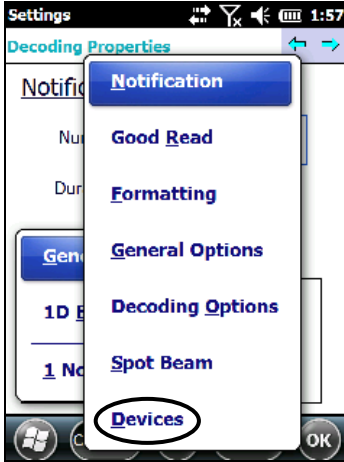
From the Decoding Properties applet, tap Configure > General > Imager Options. It configures illumination, target beam and Pick List mode, and triggering modes. It is only available on devices equipped with 2D decoding engines.





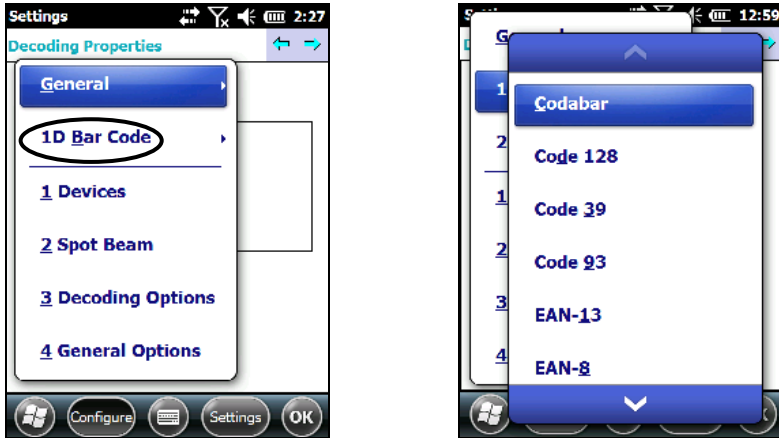
## Devices

From the Decoding Properties applet, tap Configure > General > Devices. Use it to enable or disable the keyboard wedge for Barcode scanner.

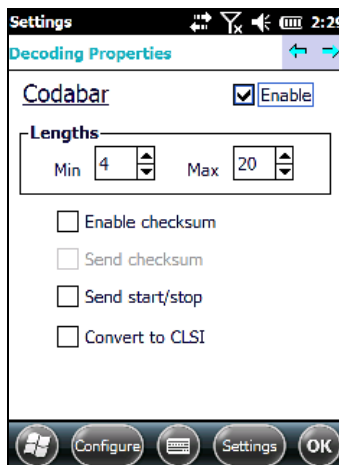


## 1D Barcode Symbology Pages

Use the drop-down menus from Configure > 1D Barcode, or tap the left and right arrow keys to navigate the different pages of the barcode symbology pages.



Each barcode symbology opens to its own page, as shown in the figure below. Refer to the sample symbology control panels for examples of the types of fields and options you can modify.

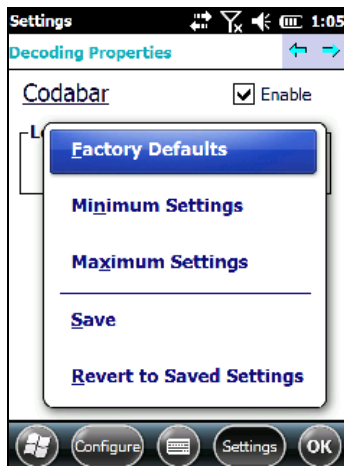


Codabar: Select Enable, Min/Max Lengths, Enable Checksum, Send Checksum, Send Start/Stop, Convert to CLSI and Wide Gaps.

## Decoding Settings

Select from the Decoding Properties Settings menu to restore previous configurations and/or other available default settings. Choose from:

- Factory Defaults
- Minimum Settings
- Maximum Settings
- Save (New Settings)
- Revert to Saved Settings



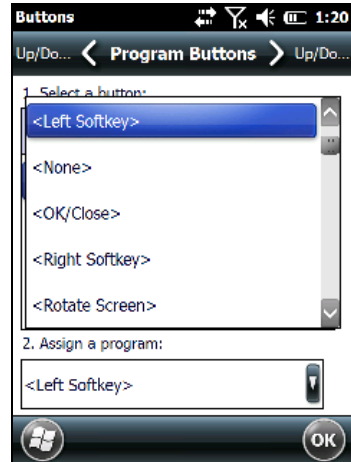
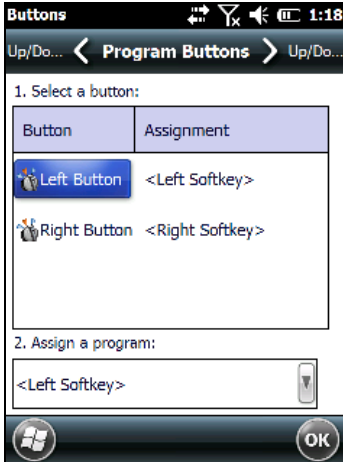
The settings are saved when you tap 'Yes'.

When open, Decoding Properties acts as a simple barcode test tool that provides the Data decoded and the Data Type of the barcode scanned.

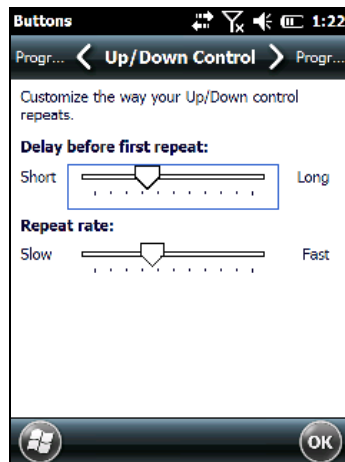
## 4.6.2 Buttons

From the Start menu, tap Settings > Personal > Buttons.

On the Program Buttons tab, customize the program hardware buttons to launch your most used applications. Under 'Select a button', tap the button you want to assign a program to, and then select a program from 'Assign a program'.



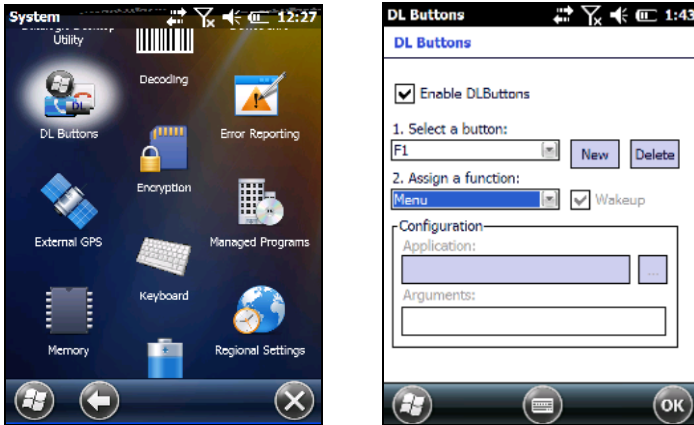
To configure the way the up/down control repeats, use the Up/Down Control applet (Start > Settings > Personal > Buttons and then tap Up/Down Control).



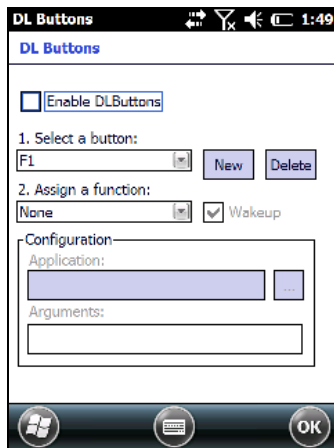
### 4.6.3 DL Buttons

In Windows Embedded Handheld devices, <F1>-<F10> buttons (excluding F5) are assigned by Windows to default applications. F5 is commonly used by applications to refresh the few, but is not explicitly controlled by default.

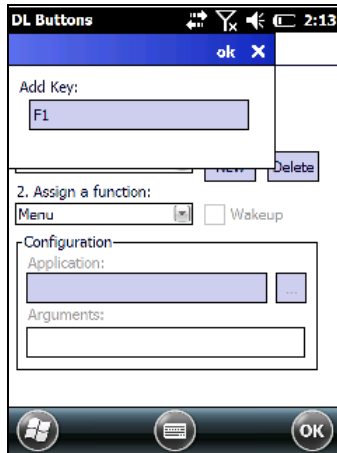
To disable an assigned function, tap Start > Settings > System > DL Buttons to display the DL Buttons window:



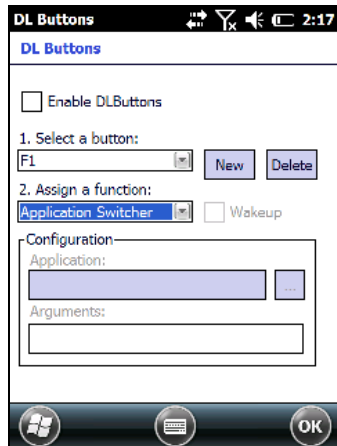
Select the button you want to disable. Select the function 'None' and the tap OK.



To add the button, tap 'New' and then press the button you wish to add:



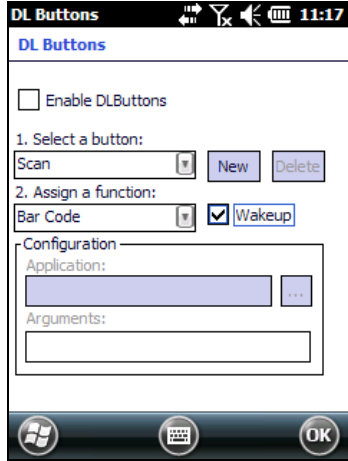
To assign a new function to the button, select the desired function and then tap 'OK':



To restore the old settings, do a clean boot

### 4.6.4 Triggers

Triggers are special customizable buttons that are mapped by default by DL Buttons. Also, they can be set as wakeup buttons:

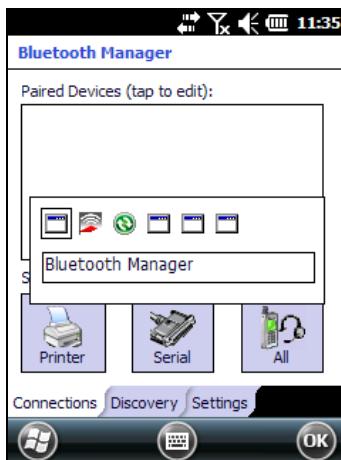


TRIGGERS	DEFAULT CONFIGURATION	
	Assigned Function	Wake-up
Scan	Bar Code	Disabled
Pistol Trigger	Bar Code	Enabled

## 4.6.5 Application Switcher

The application switcher provides the same functionality as the standard Windows® Alt+Tab function. This allows the user to switch between the various open applications.

The application switcher can be activated via an assigned shortcut key specified in the “DL Buttons” tab (refer to par. 4.6.3). When the assigned button is pressed, the dialog shown below will be displayed:



### NOTE

The **<Esc>** key can be used to close the **Application Switcher**.

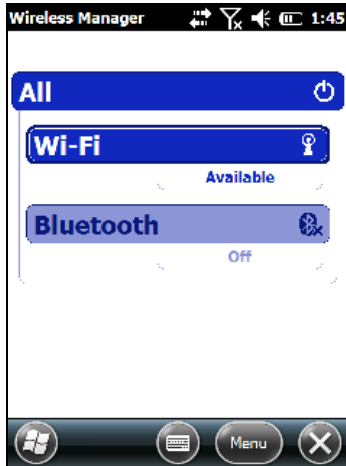
Press the assigned button to open the application switcher. Press the assigned button to cycle through the running applications when the dialog is open. Press **<Enter>** to switch to the selected application or **<Esc>** to close the application switcher.



## 4.6.6 Wireless Communications

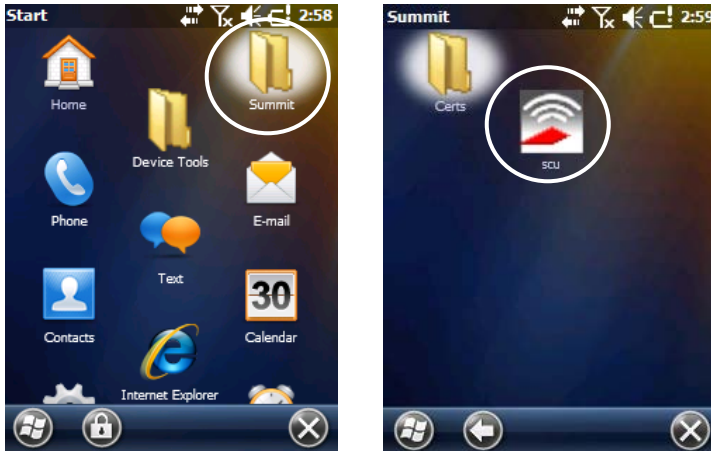
The Wireless Manager application is a sort of 'Control Panel' for wireless connections. From here it's possible to turn on or off bluetooth® and radio modules.

Open the Wireless Manager by tapping Start > Settings > Connections > Wireless Manager, or by tapping the connectivity icon on the taskbar and then tapping the "Wireless Manager" hypertext link (see par. 4.5.2). The following window will appear:

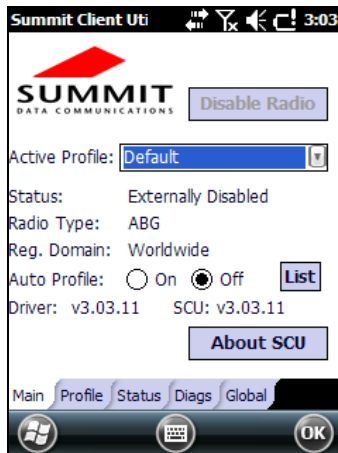


## Summit Client Utility (SCU)

Wireless networking has a customized control, Summit Client Utility (SCU). From the Start menu, tap: Summit > SCU:

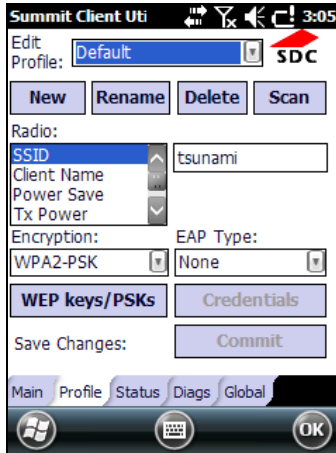


The SCU will open to the “Main” tab:



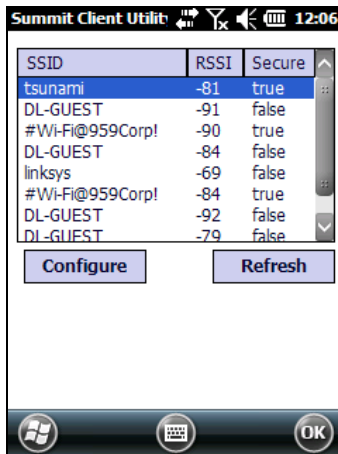
**Summit Client Utility**

1. To create a new profile, tap the "Profile" tab:



Information about the wireless network can be entered directly in the profile tab or by pressing "Scan" when the desired network SSID is in range.

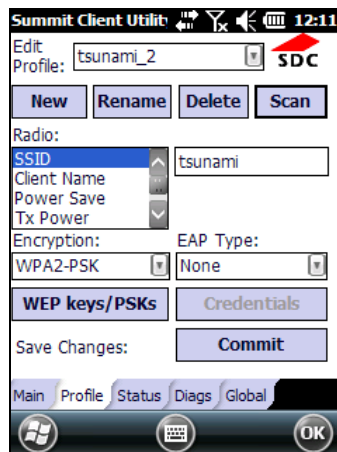
2. At the "Scan" screen, select the desired SSID:



3. Tap the "Configure" button

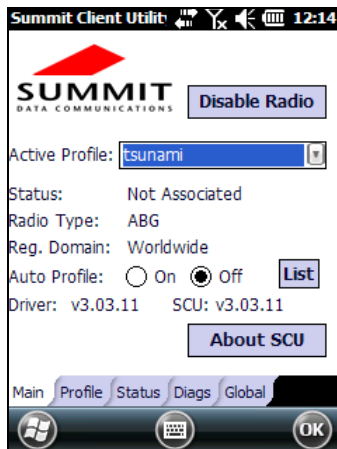


4. Follow the on-screen instructions to configure security parameters for your network. For more detailed settings specific to your installation please contact your wireless network administrator.
5. When finished, tap "Commit" to save your settings.

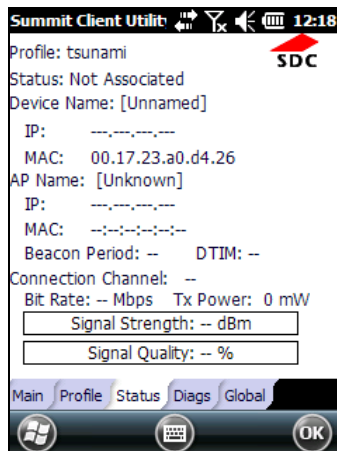


6. Return to the "Main" tab, if you have not previously selected "Commit" you will be prompted to save your changes.

- At the “Main” tab select the profile you just created. If you used the “scan” button the desired profile will have the same name as the SSID.



- Use the “Status” tab to check connectivity to the network.



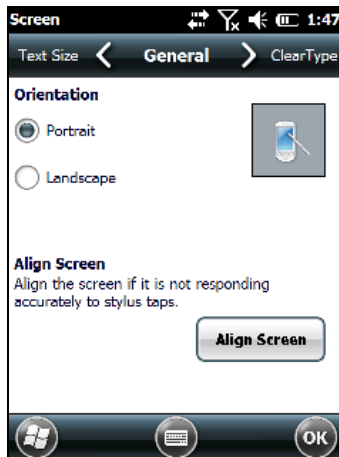
More detailed information about the applet for radio configuration can be found at [http://www.summitdata.com/Documents/summit\\_users\\_guide\\_3\\_03.html](http://www.summitdata.com/Documents/summit_users_guide_3_03.html).

## 4.6.7 Stylus Calibration

You might need to recalibrate the touch screen (i.e. when you attempt to select one item with the stylus, another item is erroneously selected).

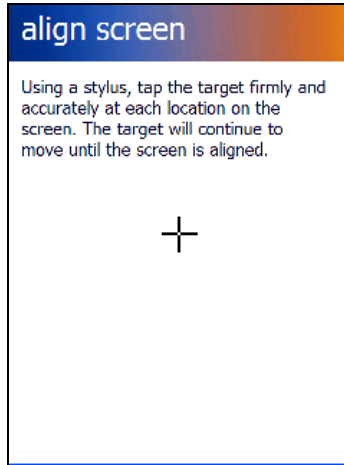
To recalibrate the touch screen, complete the following steps:

1. Select **Start > Settings > System > Screen** to open the **Screen Settings**.
2. Tap **Align Screen** to open the Calibration screen shown in the figure below:



3. Carefully press and briefly hold stylus on the center of the target. Repeat as the target moves around the screen.

New calibration settings are persistently saved in Registry.



## Startup Stylus Calibration

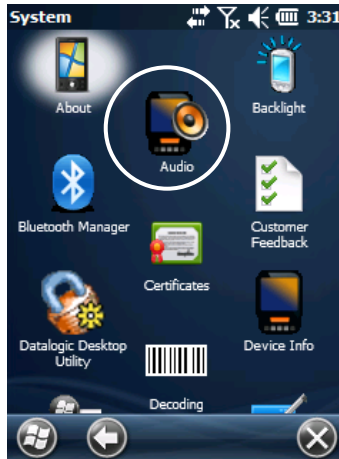
When clean booting the terminal, a Welcome Wizard (with Stylus Calibration) comes up if valid calibration settings are not available.

## 4.6.8 Audio Settings

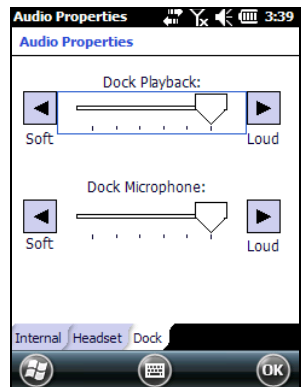
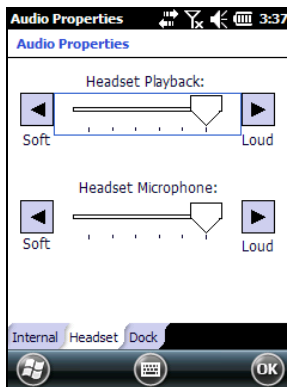
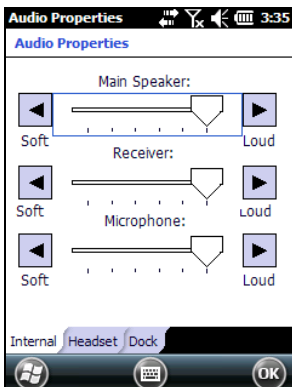
There are two applets that control volume: Audio and Volume & Sounds.

### Audio

From the Start Menu, tap Settings > System > Audio:



The audio control panel can be used to independently set the playback or recording volume for different types of audio inputs and outputs, such as a headset, powered mobile dock, or the internal speakers and microphone.

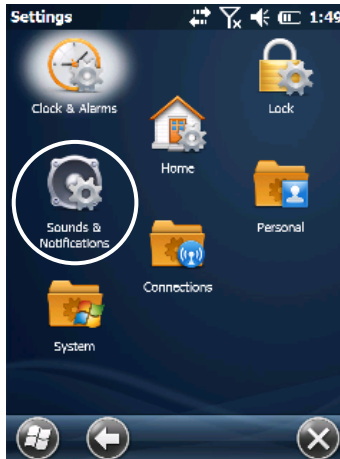


Audio Windows

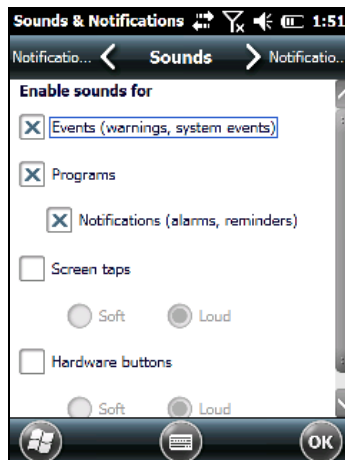


## Sounds & Notifications

From the Start Menu, tap Settings > Sounds and Notifications:



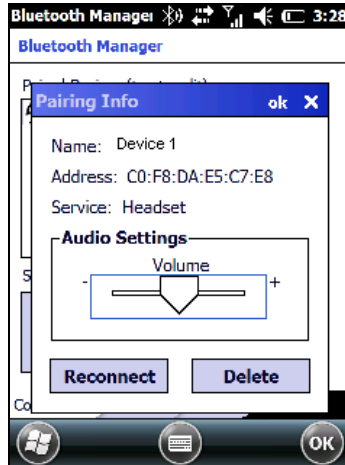
The Sounds & Notifications applet configures audio features of all speakers and headphones:



Sounds Tab

You can also set the volume of a paired Bluetooth® headset. Tap:

Start > Settings > System > Bluetooth Manager, select the Connections tab and then select the headset pairing in the Paired Devices list. The following window will appear:



## 4.7 CONNECTING TO OTHER COMPUTERS

To connect the Falcon X3+ to another device (i.e. Host PC) which run Windows, several programs are available. These programs require specific electrical connections in order to function properly.

### 4.7.1 Windows Mobile® Device Center

The desktop application Windows Mobile® Device Center gives you the ability to synchronize information between a desktop computer and your Falcon X3+. Synchronization compares the data on the Falcon X3+ with that on the desktop computer and updates both with the most recent information.

Windows Mobile® Device Center can be downloaded from Microsoft website [www.microsoft.com](http://www.microsoft.com). It is only compatible with Windows Vista and Windows 7; if you run Windows XP or earlier, you have to download Microsoft ActiveSync.

You can establish a connection to your Falcon X3+ through the following interfaces:

- USB either directly or through the Single Dock
- RS232 either directly or through the Single Dock
- Bluetooth® (see par. 4.7.2)

To establish a partnership between the Falcon X3+ and a host PC, start Windows Mobile® Device Center and follow the steps below:

1. Connect the Falcon X3+ to the host PC. Windows Mobile® Device Center configures itself and then opens.
2. On the license agreement screen, click Accept.
3. On the Windows Mobile® Device Center's Home screen, click Set up your device.
4. Select the information types that you want to synchronize, then click Next.
5. Enter a device name and click Set Up.

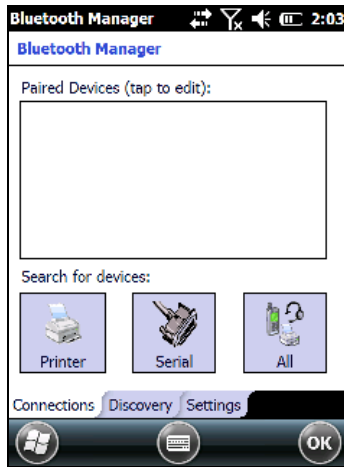
When you finish the setup wizard, Windows Mobile® Device Center synchronizes the mobile computer automatically. Microsoft® Office Outlook® emails and other information will appear on your device after synchronization.

## 4.7.2 Bluetooth® Manager Device Setup

### Using the Falcon X3+ to connect to another device

To create a Bluetooth® pairing between your device and another device that has Bluetooth® capabilities, ensure that the two devices are turned on, discoverable, and within close range.

1. Open the Bluetooth® control panel by tapping Start > Settings > System > Bluetooth Manager:

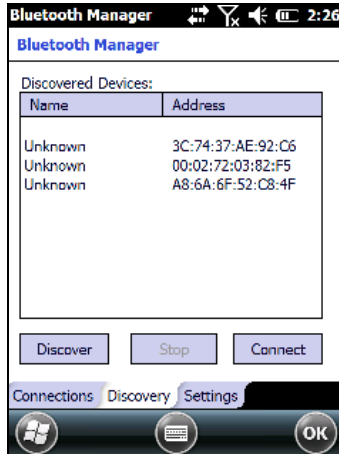


2. Search for available Bluetooth® devices by tapping the button for the type of device you want (Printer, Serial or All) or tap the Discovery tab and then tap the Discover button to skip this step. The Falcon X3+ will search for Bluetooth® devices within range.

**NOTE**

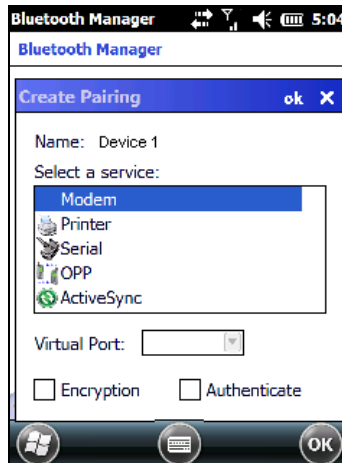
*If you attempt to set up a connection when the Bluetooth® radio is disabled, you will receive a message reminding you that the radio is turned off, and asking if you want to turn it on. Tap Yes if you need to enable the Bluetooth® radio.*

- Once searching is complete, Bluetooth® devices will be displayed in the Discovery tab. You can set up a connection to a device in the list by selecting the device and then tapping the 'Connect' button:













To create a pairing:

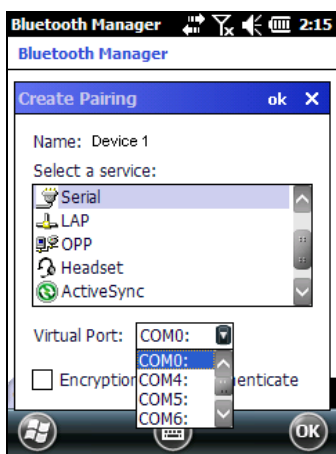
- Select a service:



- Configure any encryption, authentication, or virtual port options required by the service selected.

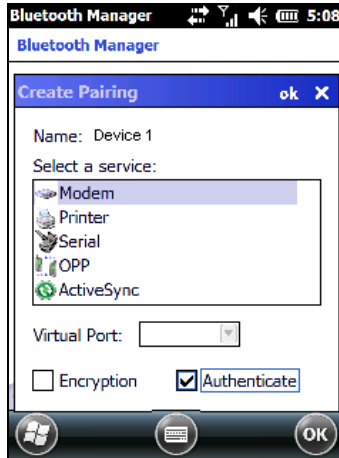
Icon	Service
	Dialup Networking
	Printer
	Object Push (OPP) or Object Exchange (OBEX)
	ActiveSync
	Human Interface Device (HID) - Keyboard
	Serial
	Personal Area Network (PAN)
	Modem
	Headset
	Handsfree

Virtual Port allows you to specify the incoming port, which is used to communicate serially with an incoming device just as if it were a physical COM port. This option is available only if you have selected a Printer or Serial service.



You can also select Encrypt or Authenticate from the Bluetooth® control panel to apply or modify those settings.

1. To require Authentication, check the checkbox, then tap OK.



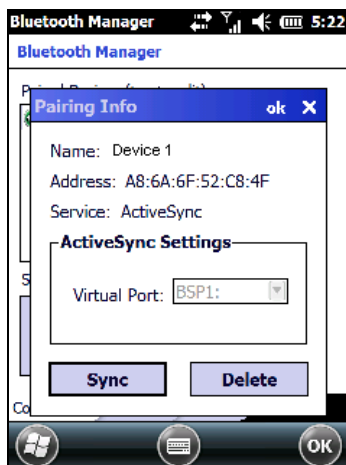
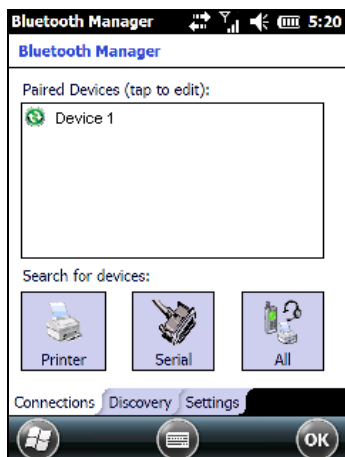
2. If required, the Authentication Request dialog will then open, requesting that you enter a PIN. Use the Input Panel or the keyboard to type the PIN.



3. Tap OK to complete.

The dialog will also appear when an Authentication request is received from another device.

Once you have set up a Pairing, you can view the settings by double-tapping its name in the Connections tab. Tap the arrow to change the Virtual Port, or Delete to remove the device pairing. Tap Sync to initiate a Sync (available only if the service is an ActiveSync connection).

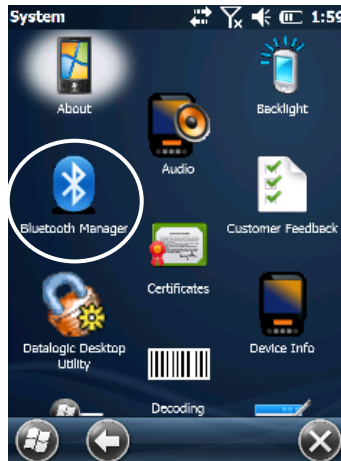




## Using your device to connect to the Falcon X3+

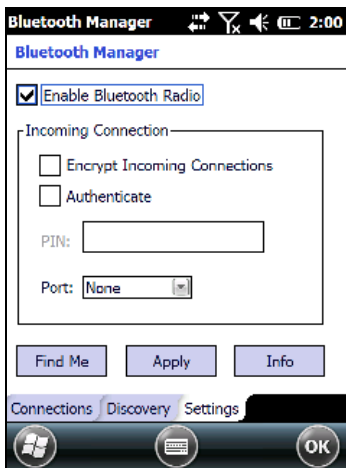
Before turning on Bluetooth® ensure that the two devices are within close range and that both Bluetooth-enabled devices are discoverable.

1. Tap Start > Settings > System > Bluetooth Manager to open the Bluetooth® control panel.

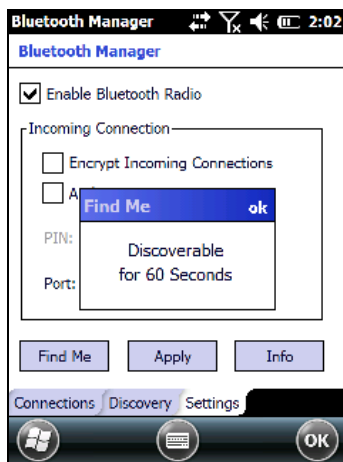


2. Tap Settings. The Settings tab allows you to enable or disable the Bluetooth® radio and specify settings for Incoming Connections.

3. Select or clear the “Enable Bluetooth Radio” check box. If you’re going to be attaching a serial device (i.e. a scanner) to the Falcon X3+, use the Port control to select a virtual COM port to use for the connection.



4. Tap 'Find Me' if you want to make the Falcon X3+ visible to other Bluetooth® devices for 60 seconds, allowing them to set up a connection.



**NOTE**

*By default, Bluetooth® is turned off. If you turn it on, and then turn off your device, Bluetooth® also turns off. When you turn on your device again, Bluetooth® turns on automatically.*

## 4.8 DATALOGIC FIRMWARE UTILITY

The Datalogic devices are equipped with a field upgradeable firmware mechanism. Firmware updates are available on the Datalogic website:

<http://www.datalogic.com/eng/support-services/automatic-data-capture/downloads/software-utilities-sw-2.html>.

After you have downloaded the desired update, there are several ways you can update the firmware on your device.

- Use Wavelink Avalanche™ if you have multiple Datalogic devices to update. For more information refer to the dedicated section of the Wavelink website: <http://www.wavelink.com/Datalogic-device-downloads>.
- If Wavelink Avalanche™ is not available or you have only a few Datalogic devices to update, use the Datalogic Firmware Utility (DFU), described below, to install or update the firmware using an ActiveSync connection.

The following sections provide procedures for the retrieval and installation of the most current firmware image onto a Datalogic device.

### 4.8.1 Retrieving a Firmware Image Update

The following instructions use Internet Explorer to retrieve the most current firmware image.

1. Launch Internet Explorer on your PC and navigate to the Datalogic website.
2. Navigate to the Downloads section of the website.
3. Using the device selection fields, select the file you want to download, then click Save to begin copying the files to your local machine (or local network location).

## 4.8.2 Installing DFU on the Host PC

The Datalogic Firmware Utility (DFU) provides administrators with a field upgrade mechanism. You must have Microsoft® ActiveSync (for Windows XP devices) or Windows Mobile® Device Center (for Windows 7 and Vista devices) already loaded and running on the host PC to use DFU. Refer to par. 4.7.1 for more information about Windows Mobile® Device Center.

**NOTE**

*Prior to installing, you must remove any previous versions of DFU installed on the host PC.*

To install the Datalogic Firmware Utility, complete the following steps on the PC:

1. Go to the Datalogic website and download the most current version of the Datalogic Firmware Utility. Unzip the file, then double-click to run `DFU_Setup.exe`.
2. Click OK to continue once you have removed previous versions of DFU.
3. The Welcome to DFU Setup Program screen opens.
  - Please exit all Windows applications before running this installer.
  - Click Next to continue the Setup.
4. Follow the onscreen instructions to complete the installation.

### 4.8.3 Updating the Firmware

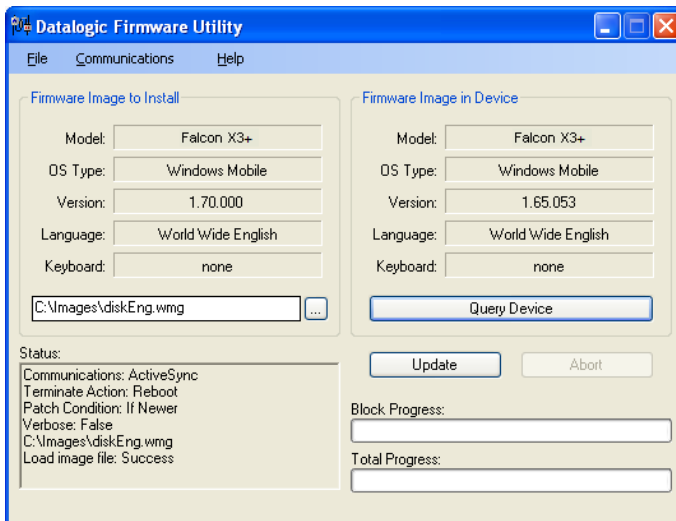
After copying the firmware image to the host PC (see par. 4.10.1) and installing DFU (see par. 4.8.2), you can upgrade the firmware on your Datalogic device.



#### NOTE

*The following steps require that you have already established an ActiveSync or Windows Mobile® Device Center connection between the host computer and the Datalogic device.*

1. Go to Start > Programs > Datalogic > DFU > Datalogic Firmware Utility.
2. Verify that ActiveSync is selected by clicking Communications > WMDC/ActiveSync.
3. Click browse (...) and navigate to the location where you saved the firmware file for your terminal.



4. Select the current \*.out file and click Open.
5. Click Update.
6. DFU will compare the selected firmware image with the firmware already loaded on the device; if the image is compatible with the connected device, DFU will proceed to update the firmware image on your device.
7. After the firmware of your device has been updated, DFU will automatically perform a warm reset of the device.

## 4.9 DATALOGIC CONFIGURATION UTILITY

Datalogic Configuration Utility (DCU) is a Datalogic Windows-based utility tool allowing the uploading, modifying and downloading of the configuration of a Datalogic device. Configuration settings include Scanner, Control Panel, and Datalogic Desktop Utility (DDU). The DCU installer is downloadable from the Datalogic website (<http://www.datalogic.com/eng/support-services/automatic-data-capture/downloads/software-utilities-sw-2.html>).

DCU functions in both direct (with an ActiveSync connection) and indirect (with Wavelink Avalanche™) modes.

In direct mode, connect a device through ActiveSync and then click on the Get from Device icon to receive the device's current configuration.

Once loaded, the Configuration Tree (on the left side of the window) is used to navigate the device's configuration. The right side of the window is a work area where the values of different parameters may be set for each branch of the configuration tree. Click on the parameter group branch to open it and inspect the parameters you wish to modify.

After altering the device's configuration, the new configuration can be sent to the terminal by clicking on the Send to Device icon.

Reference the Wavelink Avalanche™ documentation on the Wavelink website ([www.wavelink.com/Datalogic-device-downloads](http://www.wavelink.com/Datalogic-device-downloads)) for a description of indirect mode for DCU, which will allow you to update the configuration of multiple devices simultaneously over Wi-Fi.

## 4.10 DATALOGIC DESKTOP UTILITY

Datalogic Desktop Utility (DDU) allows administrators to configure Windows® CE and Embedded Handheld devices to control individual user access. This includes the ability to:

- Prevent users from changing your device OS settings.
- Use the Application Selector to replace the desktop with a selection of authorized applications.
- Restrict user access in Internet Explorer.
- Set up configuration and customized error recovery mechanisms.
- Create quick access hot keys and configure trigger actions.

To open DDU for the first time, tap Start > Settings > System > and then tap the icon for “Datalogic Desktop Utility”.



You can also open DDU by pressing the appropriate key shortcut. The default is “Alt + 6”.



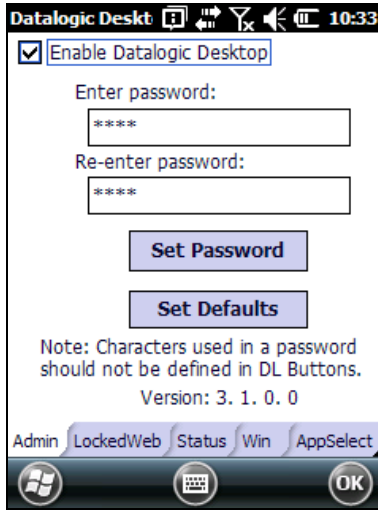
### NOTE

*The key combination can be changed by using DL Buttons to redefine the association for specific keys (such as <F1>-<F10>). See par.4.6.3. for more information.*



### 4.10.1 Administrative Options (Admin tab)

When you open the DDU control panel, the “Admin” tab appears.



COMMAND	DESCRIPTION
Enable Datalogic Desktop	Select/tap this checkbox to activate the DDU functions such as Windows Access Restrictions and Application Selector.
Enter Password	Enter a password in the text box. This allows the user to specify a password when this utility is launched. By default the password is “1234”. A password can consist of all standard keyboard characters.
Re-Enter Password	Carefully re-enter the password in the second text box.
Set Password	Select/tap “Set Password” to enable the password. To change or remove the password, enter a new value, re-enter the new value, and select/tap “Set Password”.
Set Defaults	Select/tap “Set Defaults” to reset the default values of all the functions on all the tabs. After you select this option, you will receive a prompt to verify this selection.

## Setting a Password

To set a password:

1. Enter a password in the field. This allows the user to specify a password when this utility is launched. By default the password is "1234".



### NOTE

*Be sure to record the Password for future reference.*

2. Re-enter the password in the second field.
3. Select/tap "Set Password" to enable the password.
4. Select/tap "OK" to close the "Set Password Confirmation" dialog.



### NOTE

*You must select/tap "Set Password" prior to exiting DDU in order to store and activate your new password. It is not necessary to select "Enable Datalogic Desktop".*



### CAUTION

*If you select/tap "Set Defaults" it will remove all custom settings and restore all the factory default settings, except a previously set password.*

## Changing a Password

To change to a new password:

1. Enter a new value in the "Enter Password field".
2. Re-enter the new value in the "Re-enter Password" field.
3. Select/tap "Set Password".

## Removing a Password

To remove a password:

1. Enter blanks in both “Password” fields.
2. Select/tap “Set Password”.

## Password Request Dialog Box

Once the password is set, the next time you open the “Datalogic Desktop Utility”, the DDU Password dialog box opens.

This dialog box will only open if a password was defined.



1. Type in your password using either the keypad on the unit, or using the stylus on the soft input panel (SIP).  
If you enter an incorrect password, the system will prompt you to input the correct one.
2. Select/tap “OK” to verify the password. Or tap “X” to cancel.

## 4.10.2 Locked Web Browser Options (LockedWeb tab)

Tap the **LockedWeb** tab to access the **Locked Web Browser Configuration**.



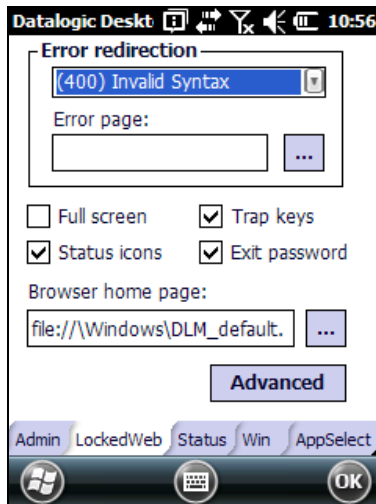
**NOTE**

*Locked Web Browser is disabled by default. To enable, go to “Advanced settings” on the next page for more information.*

For additional information about Locked Web Browser commands and metatags, see section 4.12, “Locked Web Browser”.

## Error Page Redirection

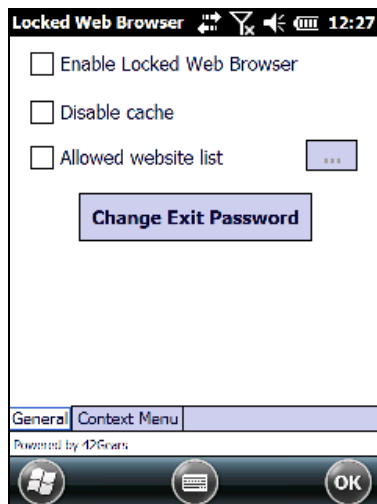
Use the Error Redirection option to provide customized recovery from common errors. When an error occurs, the browser can redirect access to a specified error page with instructions on how to recover from the problem.



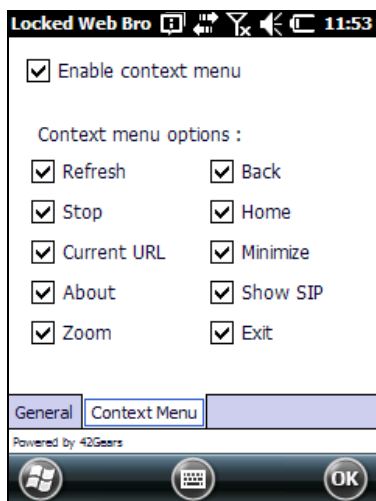
**Locked Web Configuration Tab**

<b>Error Redirection options</b>	
Error Type	The "Error Type" pull-down list displays available Error Types:  (400) Invalid Syntax, (403) Request Forbidden, (404) Object Not Found, (406) No Response Format, (410) Page Doesn't Exist, (500) Internal Server Error, (501) Server Can't Do That, Generic Error, Network Disconnected
Error Page	Edit this textbox to associate a website or html file with the specified error.
<b>Other options</b>	
Full Screen	Set the web browser in full screen mode. This is the only option available for Windows Mobile.
Status Icon	Enable or disable the status icons view (see par. 4.10.3). The status icons can be configured on the Status tab of DDU.
Trap Keys	When checked: <ul style="list-style-type: none"> <li>– all key presses will be trapped by the Locked Web Browser to prevent the user from accessing unsafe parts of the system. For example, pressing Ctrl+O to Open a File will not work;</li> <li>– safe key presses (e.g. Alpha numeric) will still get processed by the Locked Web Browser as normal. For example entering a number in a text field on a web page;</li> <li>– DL Buttons keys will not work in the LockedWeb Browser;</li> <li>– all Locked Web Browser command keys will work (e.g. Ctrl+O to exit).</li> </ul> When unchecked: <ul style="list-style-type: none"> <li>– all keys will be processed normally by the system and the browser;</li> <li>– DL Buttons keys will work normally;</li> <li>– all Locked Web Browser command keys will work (e.g. Ctrl+O to exit).</li> </ul>
Exit Password	When checked, a password will be required before the Locked Web Browser can exit. This password is different than the DDU exit password, with a default value of "0000", and can be changed in the "Advanced" settings.
Browser Home Page	This sets the Internet Explorer home page, regardless of the enable state of the Locked Web Browser.
Advanced	Pressing this button will launch a dialog used to enable Locked Web Browser and to configure Advanced settings.

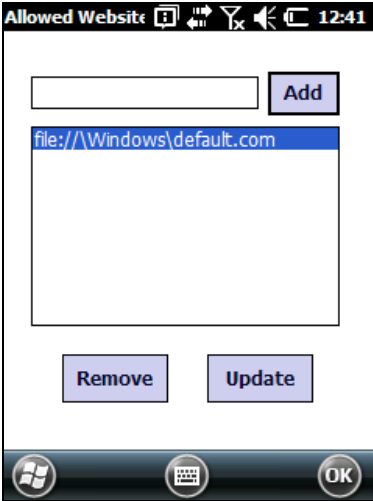
## Advanced settings



General Tab



Context Menu

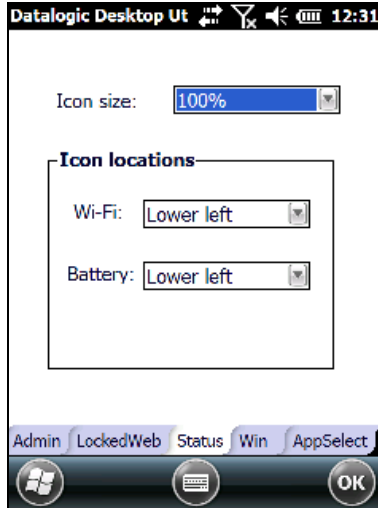
<b>Advanced Locked Web Browser options</b>	
<b>General</b>	
Enable Locked Web Browser	When checked, enables the Locked Web Browser when Internet Explorer is launched.
Disable Cache	Prevents the browser from loading the local intranet page from cache instead of navigating to the "Network Disconnected" error redirection page.
Allowed Website List	<p>Enables a "white list," which restricts browsing only to files and URLs in the Allowed Website list (accessed by the "..." button). The following dialog appears:</p>  <p style="text-align: center;"><b>Allowed Website List</b></p> <p>Click the "Add" button to add allowed URLs to the white list. Other sites will be restricted when the option is enabled. Domain names must be exactly specified.</p>
Change Exit Password	Pressing this button brings up a dialog which allows the user to change the password required to exit the Locked Web Browser (when the "Exit password" option is selected on the LockedWeb tab in DDU).

<b>Context Menu</b>	
Enable Context Menu	Enables the context menu accessed by a touch screen press in the Locked Web Browser.
Refresh	Adds a “Refresh” item to the Locked Web Browser context menu. Selecting the “Refresh” item refreshes the web page.
Stop	Adds a “Stop” item to the Locked Web Browser context menu. Selecting during navigation stops the downloading of a page.
Current URL	Adds a “Current URL” item to the Locked Web Browser context menu. Selecting the item pops up a dialog displaying the URL for the current web page.
About	Adds an “About” item to the Locked Web Browser context menu. Selecting the “About” item pops up the “About” dialog.
Zoom	(WEHH only) Adds a “Zoom” item to the Locked Web Browser context menu. Selecting the item brings up the IE Zoom Tool.
Back	Adds a “Back” item to the Locked Web Browser context menu. Selecting the “Back” item performs a navigation to the previous page.
Home	Adds a “Home” item to the Locked Web Browser context menu. Selecting the “Home” item navigates to the IE home page.
Minimize	Adds a “Minimize” item to the Locked Web Browser context menu. Selecting the item minimizes the Locked Web Browser and allows access to other programs.
Show SIP	Adds a “Show SIP” item to the Locked Web Browser context menu. Selecting the “Show SIP” item toggles the show state of the SIP.
Exit	Adds an “Exit” item to the Locked Web Browser context menu. Selecting the item exits the Locked Web Browser with an optional password (set in the Locked Web Browser Advanced options).



### 4.10.3 Status Icons Options (Status Tab)

Tap the “Status” tab to access the Status Icons option. You can configure the view of some status icons that are used in “LockedWeb” and in “Application Selector” to display the status of: wi-fi radio and battery.



#### NOTE

*The GSM status icon feature is available only on devices that support GSM.*

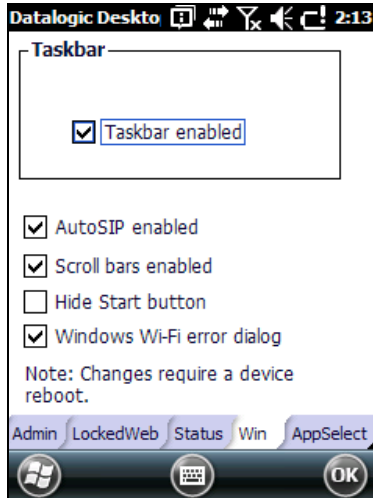
#### Status Icons Options

Set Status Icon Defaults	Restores the status icons' factory settings.
Icon Size	Sets the status icons' size.
Icon Location	Selects the preferred location for each status icon.

#### 4.10.4 Windows Controls

Select/tap the “Win” (Windows Controls) tab to access the Windows Controls option. Use Windows controls to allow or restrict access to Windows system functions.

You can disable normal Windows functions such as the taskbar, leaving nothing but a blank workspace. This allows applications to be run in full screen mode and prevents users from accidental or unauthorized use of the taskbar, Internet Explorer, and any other resident applications.



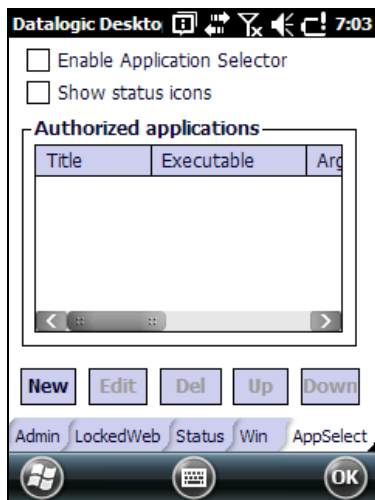
<b>Windows Controls</b>	
Taskbar Enabled	Select/tap “Taskbar Enabled” to specify whether the taskbar is accessible.
AutoSIP Enabled	Enables the AutoSIP Windows feature.
Scroll Bars Enabled	This control only take effects in WebAppLock. When checked, displays horizontal and vertical scroll bars to help view large web pages which do not fit the screen. When unchecked, those scrolls will not be present.
Hide Start Button	Select/tap “Hide Start Button” to specify whether the Start Button is displayed or not. This option works only when “Task Bar Enabled” is checked.
Windows Wifi Error Dialog	This control only takes effects in WebAppLock and Internet Explorer. When checked, the device will display a warning dialog when the WiFi connected device moves out of range of an access point and the user attempts to navigate to a web page. This dialog box allows the user to reconfigure the wifi on the device. When unchecked, that dialog box will not appear and the “Network Disconnected” error page redirection is used to prevent users from reconfiguring the wifi on the device. Tap the “WebAppLock Configuration Tab” to configure the “Network Disconnected” error page redirection (see par 4.10.2).

**NOTE**

*Changes require a device reboot.*

### 4.10.5 AppSelector Options (AppSelect tab)

Tap the Application Selector (“AppSelect” Tab) to edit, add, or delete applications for the application selector.



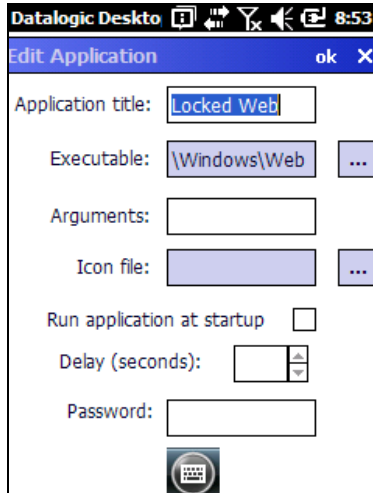
Application Selector Options	
Enable Application Selector	Select/tap “Enable Application Selector” to enable/disable the application selector. When enabled, the Application Selector replaces the desktop and allows only authorized use of applications.
Show status icons	Enable or disable the status icons view (see par. 4.10.3). The status icons can be configured on the Status tab of DDU.
Authorized Applications	Displays a list of applications that the user may access.


<b>Application Selector Commands</b>	
New	Select/tap "New" to create a new application entry.
Edit	Select/tap "Edit" to edit the selected entry.
Del	Select/tap "Del" to delete the selected entry.
Up/Down	Select/tap "Up/Down" to move an entry up or down in the Authorized Applications list.


## Add Applications

The “Add Application” dialog opens when you tap either “New” or “Edit”. From the “Add Application” dialog the administrator can configure and/or add/change a new application entry in the list.

Applications with the “Run Application at Startup” option enabled will start automatically when the Application Selector starts up.



COMMAND	DESCRIPTION
Application Title	Type the name of the application in this textbox in the way you wish it to appear for the user.
Executable	Displays the path for the executable file which you want to run.
Browse	Select/tap  to browse for the desired executable file. The results of this search are placed in the “Executable” textbox.
Arguments	Type any command line arguments to be used when an application is executed.

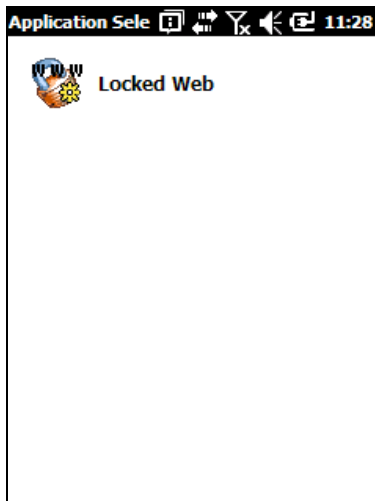
COMMAND	DESCRIPTION
Icon File	Displays the path/link to the desired icon file.
Browse	Select/tap  to browse for the desired icon file. The results of this search are placed in the "Icon File" textbox.
Run Application at Startup	Select/tap this box to force this application to auto start when the Application Selector starts up. Applications will be started in the order listed in the authorized application list.
Delay	Enter a delay duration in seconds in the combo box. This option delays auto start of application(s) to allow drivers to load prior to starting applications.
OK	Select/tap "OK" to add/save changes.
X	Select/tap "X" to cancel the creation of this entry.

## 4.11 APPSELECTOR (APPLICATION SELECTOR)

The Application Selector is an application that allows a device to run in kiosk mode.

The administrator can choose for the user to have access to the desktop or not. The Application Selector can replace the desktop and limit the user to the specified list of applications.

By default, the Application Selector comes with the LockedWeb preset.



**Application Selector**

The administrator can customize this list as shown in chapter 4.10.5. To run an application, tap on its name.

Additionally, the page template can be modified to display a different background. Contact your Datalogic representative for more information on this feature.

To exit from Application Selector, press ALT + 6, uncheck the 'Enable Application Selector' check box on the AppSelect tab and press OK to exit DDU.



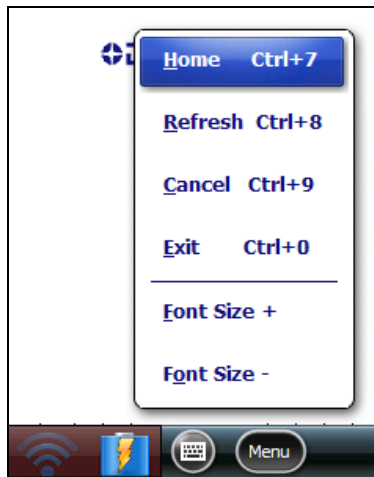
## 4.12 LOCKED WEB BROWSER

The Locked Web Browser is a web browser helper object for Internet Explorer. It allows an administrator to define a restricted internet usage environment. Once in the restricted environment, a password is required to exit. This means users can only access web applications and websites set by the administrator.



### NOTE

*Configuration is set up through the DDU control panel. See section 4.10.2 for more information.*



If the taskbar has been disabled, the Settings menu is not displayed. However, the user can still navigate within the web application by using the following keyboard shortcuts:

Home	Ctrl + 7
Refresh	Ctrl + 8
Cancel	Ctrl + 9
Exit	Ctrl + 0

For firmware versions 1.60 and newer, the following command line arguments are supported:

- **/E** optional parameter which allows for Exit without entering a password
- **@URL** optional parameter which specifies a URL to use as a home page.
- **/C** optional parameter which disables the ctrl keys (including the one to exit).

## 4.12.1 Locked Web Browser Special Meta-tags

### General Metatag Comments

A metatag is a special HTML tag that stores information about a Web page but does not display in a Web browser. For example, metatags provide information such as the program used to create the page, a description of the page, and keywords relevant to the page.

As per the HTML specification, all metatags must be contained within a <head> ... </head> tag set.

Also, the head tag set must be complete within the first 15K of the web page.

The Datalogic Locked Web Browser defines some special metatags that allow the web application to interact with the device:

In particular, the special metatags allow it to:

- enable/disable scan engine triggers
- enable/disable specific symbologies in the scan engine
- easily assign a key press to a javascript function.

Metatag settings of trigger enable, symbology enable, or DL\_Key assignments persist past the page in which they are loaded. The settings stay in effect until they are changed by another metatag.

### Trigger Metatag

DL\_Triggers – “Enable” or “Disable” all triggers

If the page contains this tag, the triggers are enabled or disabled, depending on the “content=” value.

Example:

```
<meta http-equiv="DL_Triggers" content="Disable">
```

### **GetSerialNumber Metatag**

DL\_GetSerialNumber – Obtains the device serial number and sends it as an argument to a customer's javascript function.

Content – name of function to pass serial number to. Example:

```
<meta http-equiv="DL_GetSerialNumber" content="Javascript:CustomerFunction">
```

When a page with this metatag is loaded, the content should be a javascript function that receives one parameter, the serial number. An example would be function CustomerFunction(SerialNumber).

### **Reboot – Warm boot device Metatag**

DL\_Reboot – Warm boot device.

Content – “OnPageLoad” – Warm boot immediately upon page load.

Example:

```
<meta http-equiv="DL_Reboot" content=" OnPageLoad ">
```

### **Exit Metatag**

DL\_Exit – Exit the Locked Web Browser.

Content – “OnPageLoad” – Exit immediately upon page load. If “Exit password” has been enabled in the Locked Web Browser options, the Exit password will be required before exit.

Example:

```
<meta http-equiv="DL_Exit " content=" OnPageLoad ">
```

**Decoding Metatags:**

Each decoding metatag has a possible content of "Enable" or "Disable". The settings are valid for the entire page (enables/disables each symbology).

DL\_Code\_39  
DL\_Code\_128  
DL\_Code\_I25  
DL\_Code\_S25  
DL\_Code\_M25  
DL\_Code\_CODABAR  
DL\_Code\_93  
DL\_Code\_UPCA  
DL\_Code\_UPCE  
DL\_Code\_EAN13  
DL\_Code\_EAN8  
DL\_Code\_MSI  
DL\_Code\_MSR  
DL\_Code\_GS1\_14  
DL\_Code\_GS1\_LIMIT  
DL\_Code\_GS1\_EXP  
DL\_Code\_PDF417  
DL\_Code\_DATAMATRIX  
DL\_Code\_MAXICODE  
DL\_Code\_TRIOPTIC  
DL\_Code\_PHARMA39  
DL\_Code\_RFID  
DL\_Code\_MICROPDF417  
DL\_Code\_COMPOSITE  
DL\_Code\_QRCODE  
DL\_Code\_AZTEC  
DL\_Code\_POSTAL

Examples:

```
<meta http-equiv="DL_Code_39" content="Disable">
```

```
<meta http-equiv="DL_Code_I25" content="Enable">
```

## Key press Metatags

The key press metatags can be used to call JavaScript functions. They have the name structure: "DL\_Key\_xxx" where xxx is the VKey code.

Example:

```
<meta http-equiv="DL_Key_13" content="Javascript:CheckEnter();">
```

Assigning a key press via a DL\_Key metatag overrides its use on the page. For instance, when entering data in a text box a character assigned as a DL\_Key would not be entered in the text box. Instead, the javascript action would occur.

Refer to the Microsoft website to find the list of all the possible Vkey codes:

<http://msdn.microsoft.com/en-us/library/bb431750.aspx>  
[http://msdn.microsoft.com/en-us/library/aa243025\(VS.60\).aspx](http://msdn.microsoft.com/en-us/library/aa243025(VS.60).aspx)



**NOTE**

*Because DL\_Keys persist past the page in which they were loaded, the DL\_Clear metatag is provided to clear the settings on subsequent page loads.*

## Scanning Metatags

DL\_Scan – Captures scan results and sends barcode/tag value to a javascript function on the web page.

If the "content=" value is a javascript function the device will be taken out of keyboard wedge mode and start listening for scan events. A scanned barcode/tag result will be used as an argument to that javascript function which is then invoked.

If the "content=" value is "Wedge" then the device will stop listening for scanned event and enter keyboard wedge mode.

If the "content=" value is "Disable" then the device will stop listening for scanned events but not enter keyboard wedge mode.

Example:

```
<meta http-equiv="DL_Scan" content="Javascript:ValidateInput()">
```

## 4.13 AUTOSTART

The AutoStart program provides three functions:

- Allows you to create a list of applications (with optional command line arguments) to run automatically prior to loading CAB files.
- Automatically reinstalls specified CAB files when the Falcon X3+ is cold booted.
- Allows you to create a list of applications (with optional command line arguments) to run automatically after loading CAB files.

AutoStart launches each time the Falcon X3+ is rebooted executing each line with the specified command line arguments. It will take into account any AutoStart options at the beginning of the line.

Upon a Cold Boot, AutoStart installs all the CAB files located in the \CAB folder. If the CAB folder does not exist, no CAB files will be installed.

AutoStart will then run the **Autostart.ini** from the \root directory, executing each line with the specified command line arguments. It will take into account any AutoStart options at the beginning of the line.

### 4.13.1 Installing CAB Files

Copy any CAB files you want to install into the \CAB folder. These CAB files will then be automatically in-stalled in alphabetical order the next time you start the device.

### 4.13.2 How AutoStart Uses Wceload



#### NOTE

*If you intend to create highly interactive installers, you should either install the CABs manually or review the section on “Interactive CAB Install” in this chapter..*



#### CAUTION

*In certain environments, CAB files will be deleted after execution. To prevent the CAB file from being deleted, write protect the file before copying the file onto the device.*

CAB files are installed by AutoStart using the **Wceload.exe** application. The following table shows available command line option:

Option	Description
/noui	Specifies that you will not be prompted for any input during the installation. If the CAB file is signed, any responses will automatically be answered ‘Yes.’ If the CAB is unsigned, then any responses will be answered ‘No.’
/silent	Suppresses dialog boxes during the installation.

Please refer to the Microsoft documentation on your device for further details on **Wceload.exe**.

#### Sample:

```
\Windows\Wceload.exe /delete 1 /noui /silent  
“\CAB\<cab file>”
```



### 4.13.3 Interactive CAB Install

- If the CAB installer requires user interaction that must be performed during the AutoStart CAB installation process, you can specify a special file name to disable the silent mode installation. If this mode is specified, the CAB file will be installed with `wceload` without any command line arguments specified.

An example of what AutoStart would execute is:

```
\Windows\Wceload.exe <cab file>
```

To force this mode of installation via AutoStart, rename the CAB file to include a '\_' character before the ".cab" extension of the file.

**Example:**

"**File.cab**" should be renamed "**File\_.cab**" to force AutoStart to not install the CAB in silent mode. This specially-named CAB file should be placed in the AutoStart folder with other CAB files intended for installation on the next reboot.

### 4.13.4 Autostart.ini



**NOTE**

*A file named 'PreAuto.ini' can also be created in addition to or instead of Autostart.ini. PreAuto.ini is executed before CAB files in the \Cab folder are installed. Autostart.ini is executed after CAB files in the \Cab folder are installed. The format for the PreAuto.ini is identical to that of Autostart.ini.."*

Autostart.ini is a text file that AutoStart will run upon startup of the Falcon X3+, and after any CAB files are installed. This file should be placed in the \root folder. AutoStart will run the Autostart.ini file on each reboot of the device.

### Line Formatting

Each line of the `Autostart.ini` can consist of Autostart options, an executable, and any command line arguments.

```
< Autostart option(s)> <full path to executable>  
<command line arguments>
```

**Sample:**

```
- \windows\pword.exe \file.doc
```

The following table breaks down the sample Autostart.ini line:

Autostart option(s)	Full path to executable	Command line arguments
-	\windows\pword.exe	\file.doc

Spaces must be placed between each component of the line in the Autostart.ini.

If the executable path is in a folder that contains spaces in the name, quotes are required to distinguish what the actual executable name is. The following is an example of this:

```
"\Program Files\ScannerApp.exe" /run  
(valid)  
\Program Files\ScannerApp.exe /run  
(invalid)
```

The second line is an invalid line because there is no way to distinguish the executable from the argument.

## AutoStart Options

The table below shows options you can use when writing a line in the Autostart.ini file.

Description	Character	Comments
Comment: This line will not be executed.	'#' OR ' ' (space)	This may only be used as the first character of the line. If the comment option is specified in the options elsewhere, it is ignored.
Do not wait on line completion: This will cause the line to execute and immediately move onto the next line.	','	
Query: Request user confirmation when running the executable.	'?'	This will halt parsing the Autostart.ini until the confirmation is answered. This is intended for debugging the Autostart.ini file.
Execute only on Cold Reset	'!'	
Execute only after a warm boot	'%'	

**Cold Reset Only:** This will cause the line to execute only after a Cold Reset.



### NOTE

*An empty line will be treated as a comment line.*

## Combining Options

Autostart options can be combined together as shown in the following sample:

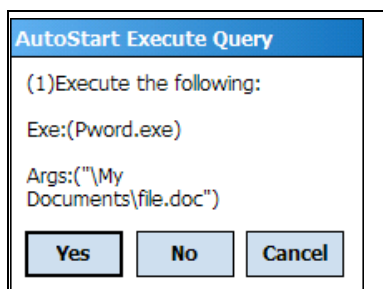
```
?- \Windows\Pword.exe
```

This line would:

- Request confirmation before executing the line. The next line would not be processed before the confirmation is answered.
- Run the next line without waiting on the current line to complete execution.

## Query Option

The query option is intended for use when debugging the autostart.ini. When a line with this option is executed, the following dialog will appear with the specified executable and command line arguments. The populated fields shown in the AutoStart Execute Query are described the next table:



Field	Description
Line Number	This is the line number in the script being executed.
Exe	The executable as parsed by AutoStart.
Args	The argument as parsed by AutoStart.

**NOTE**

*The fields may be broken up into multiple lines (as shown in the example) due to limited space in the dialog.*

**AutoStart Query Options**

Parentheses are used to surround the given field and make it very clear what the value of the field is.

The following table describes the results of each choice:

<b>Button</b>	<b>Action</b>
Yes	The current line will execute.
No	The current line will not execute. AutoStart will continue parsing the Autostart.ini.
Cancel	The current line will not execute and AutoStart will discontinue parsing the Autostart.ini.

## Autostart.ini Samples

The next table is a collection of sample Autostart.ini lines:

Line	Description
? \windows\wceload.exe "My Documents\Sample.cab"	This will confirm the execution of \Windows\wceload.exe with specified argument "My Documents\Sample.cab"
\Program Files\App.exe	(invalid) This will execute \Program with the argument Files\App.exe.
\Program Files\App.exe /run	(invalid) This will execute \Program with the argument Files\App.exe /run.
"\Program Files\App.exe" /run	This will execute the program \Program Files\App.exe with the argument /run.
?- \Windows\Pword.exe	This will confirm the execution of \Windows\Pword.exe. If the execution is confirmed, AutoStart will immediately process the next line.
!"\Program Files\App.exe" /run	This will execute the program \Program Files\App.exe with the argument /run ONLY after a Cold Reset.

## 5 TECHNICAL FEATURES

### 5.1 TECHNICAL DATA

#### Falcon X3+ Common Features

PHYSICAL CHARACTERISTICS	
DIMENSIONS (LXWXH)	Hand held: 225 x 88 x 55 mm, 64 x 40 mm at keyboard (8.9 x 3.5 x 2.2 in, 2.5 x 1.6 in) Pistol grip: 225 x 88 x 168 mm (8.9 x 3.5 x 6.6 in)
WEIGHT (DEPENDING ON MODEL)	Hand held: 608 g (21.4 oz) Pistol Grip: 674 g (23.8 oz) Hand held: 626 g (22.08 oz) Pistol Grip: 699 g (24.66 oz)
AUDIO	Integrated microphone; high volume speaker; Microphone
LEDS	Three LEDs Decoding Status/ Keyboard Status/ Charging Status
DISPLAY	Reflective TFT daylight readable color display, 320 x 240 pixels (CE only) or 640 x 480 (WEHH only), 8.9 cm / 3.5 in diagonal, 65K colors, backlight, touch screen Transflective TFT daylight readable color display, 240 x 320 pixels, 3.5 inch diagonal, 64 K colors, 200 nit backlight, touch screen
KEYBOARD	Polycarbonate hard cap keyboards with backlight; 29- key numeric or 52- key alpha numeric with discrete navigation
OPERATING TEMPERATURE*	-20°C to 50°C (-4°F to 122°F)
STORAGE TEMPERATURE	-30 to 70 °C (-22 to 158 °F) -40°C to +70°C (-40°F to 158°F)
DROP RESISTANCE	Withstands drops from 1.8 m / 6.0 ft onto concrete and 1500 random drops from 1.0 m /3.3 ft, according to IEC68-2-32
ENVIROMENTAL SEALING	IP65
ESD ROBUSTNESS	8/15kV

\* Falcon X3 should be charged at an ambient temperature between 0 - 35° C to achieve the maximum charging rate. Never charge the main device or spare batteries in a closed space where excessive heat can build up. Close to the limits of the working temperature, some display and/or battery performance degradation may occur.

<b>SYSTEM</b>	
OPERATING SYSTEM	Microsoft Windows Embedded Handheld 6.5 with Office Mobile 2010: Text, Messaging, Word Mobile, Excel Mobile, PowerPoint Mobile, One Note Mobile and Internet Explorer Mobile 6.0
MICROPROCESSOR	XScale™ PXA310 @ 806 MHz
COPROCESSOR	Cortex-M3, 32 bit @ 72 MHz
SYSTEM RAM MEMORY	256 MB
SYSTEM FLASH MEMORY	1 GB
EXPANSION SLOTS	MicroSD card slot compatible with microSD-HC cards, user-accessible
REAL-TIME CLOCK	Time and date stamping under software control
POWER SUPPLY*	Removable battery pack with rechargeable Li-ion batteries; 3.7 V 5200 mAh (19.2 Watt hours) Removable battery pack with rechargeable Li-ion batteries; 3.7 V 5000 mAh (18.5 Watt hours)
<b>COMMUNICATIONS</b>	
INTERFACES	Main connector with USB 1.1 Host, USB 2.0 Hi-Speed Client, RS-232 up to 115.2 Kbps Ethernet: via single-slot or multi-slot docks (external modules) Main connector with USB Host, USB Client, RS232 up to 115.2 Kbps, and audio headset support
LOCAL AREA NETWORK (LAN)	Laird/Summit IEEE 802.11 a/b/g/n Frequency range: Country dependent, typically 2.4 GHz and 5.2 GHz; Cisco Compatible CCX v4 Security Summit IEEE 802.11a/b/g Frequency range: Country dependent, typically 2.4 and 5.2 GHz Cisco Compatible CCX v4 Security
PERSONAL AREA NETWORK (PAN)	Bluetooth® Wireless Technology IEEE 802.15 Class 2.1 with EDR Bluetooth® Wireless Technology IEEE 802.15 Class 2 with EDR

\* Use only DL approved power adapters.



<b>READING OPTIONS</b>	
<b>LASER CHARACTERISTICS</b>	High Performance Laser (HPL) with Green Spot, Auto Long-Rangeing Laser (XLR)
SCANNING RATE	HPL: 104 +/- 12 scans/sec. 40 ± 6 scan/sec XLR: 31-41 scans/sec.
MINIMUM RESOLUTION	0.20 mm / 7.5 mils 0.20 mm / 7.5 mils
DEPTH OF FIELD	HPL: 1 to 83 cm / 1 to 32 in, depending on bar code and density; 7 - 91 cm (3 - 36 inches) depending on bar code density XLR: Non-reflective labels from 9 to 490 cm / 3.5 to 192 in, depending on bar code density; Reflective labels: up to 1509 cm / 594 in. Near range determined by degree of reflectivity and width of the bar code. All ranges dependent on bar code size and density Non reflective labels from 18 - 393 cm (7 to 154 in) depending on bar code density; Reflective labels to 1376 cm (542 in) All ranges dependent bar code size and density. Near range on reflective bar codes determined by degree of reflectivity and width of bar code
BAR CODES	GS1 Databar, EAN/UPC, Code 39, Code 32, 2/5 Codes, Codabar, Code 128, EAN128, MSI, Code 93
<b>IMAGER CHARACTERISTICS</b>	Standard Range Imager (2D) with Green Spot Extra-Long Range Imager (2D XLR)
SCANNING RATE	60 frames/sec maximum
MINIMUM RESOLUTION	2D: Linear codes: 5 mils; 2D codes: 6.7 mils; 2D XLR: Linear codes: 5 mils; 2D codes: 10 mils
DEPTH OF FIELD	2D: 2 to 60 cm / 1 to 24 in, depending on bar code size and density; 2D XLR: 17 to 952 cm / 7 to 375 in, depending on bar code size and density
BAR CODES	PDF417, Micro PDF, Datamatrix, QR Code, Micro QR, Maxicode, Aztec, Postnet, Planet, Japan Post, Aztec, Australia Post, KIX Code, Royal Mail, Intelligent Mail and UPU FICS, GS1 Databar, EAN/UPC, Code 32, Code 39, 2/5 Codes, Codabar, Code 128, EAN128, MSI, Code 93, ISBT 128, Bookland EAN and ISSN EAN

<b>READING OPTIONS</b>	
<b>SCAN WINDOW</b>	All scan engines feature Corning® Gorilla® Glass II exit window
<b>CAMERA</b>	3.1 Megapixel color with auto-focus and LED flash (WEHH only); Image Formats: BMP, JPEG

<b>SAFETY AND REGULATORY</b>	
<b>LASER CLASSIFICATION</b>	VLD - Class 2 IEC/EN60825-10. Compliant with 21 CFR 1040.10 except for deviations pursuant to laser notice Number 50, dated June 24, 2007
<b>LED CLASSIFICATION</b>	Exempt Risk Group IEC/EN62471

<b>SOFTWARE</b>	
<b>DEVELOPMENT</b>	Windows SDK, Datalogic SDK (C/C++, .NET, Java); Wavelink Studio®; MCL-Collection™; Java Virtual MachineDatalogic Windows SDK™ Wavelink® Studio™ MCL-Collection™ Java Virtual Machine
<b>TERMINAL EMULATION</b>	Wavelink Terminal Emulation pre-licensed, Wavelink Industrial Browser™Wavelink® Industrial Browser™ Wavelink® Terminal Emulation™ prelicensed
<b>CONFIGURATION MAINTENANCE</b>	& Wavelink Avalanche pre-licensed, Avalanche Remote Control™, Datalogic Firmware Utility (DFU), Datalogic Desktop Utility (DDU), Datalogic Configuration Utility (DCU)Wavelink Avalanche® MC prelicensed Wavelink Avalanche® SE prelicensed Avalanche Remote Control™ Datalogic Firmware Utility Datalogic Desktop Utility Datalogic Configuration Utility
<b>SECURITY</b>	Wavelink SecurePlus; Wavelink Certificate ManagerWavelink CE Secure Wavelink Certificate Manager
<b>VOICE</b>	Vo-CE™; Wavelink SpeakEasy™Vo-CE™ (voice recognition) Wavelink® SpeakEasy (voice recognition)
<b>APPLICATIONS</b>	Pal Application Library pre-licensedPal Application Library

## 5.2 READING DIAGRAMS

### HIGH PERFORMANCE LASER 1D

<b>Symbol Density/ Bar Code Type/ W-N Ratio</b>	<b>Far Typical Working Ranges</b>
5.0 mil Code 128;	1.97 in 4.99 cm
5.0 mil Code 39; 2.5:1	7.47 in 18.96 cm
7.5 mil Code 39; 2.5:1	15.67 in 39.79 cm
10 mil Code 128;	14.77 in 37.51 cm
13 mil 100% UPC	22.62 in 57.45 cm
15 mil Code 128	23.87 in 60.62 cm
20 mil Code 39; 2.2:1	41.87 in 106.34 cm
55 mil Code 39; 2.2:1	75.37 in 191.43 cm
100 mil Code 39; 3.0:1 reflective	178.87 in 454.32 cm

**AUTO RANGING LASER (XLR) 1D**

<b>Symbol Density/ Bar Code Type/ W-N Ratio</b>	<b>Far Typical Working Ranges</b>
7.5 mil Code 39; 2.5:1	14.37 in 36.49 cm
10 mil Code 39; 2.5:1	29.37 in 74.59 cm
15 mil Code 39; 2.5:1	49.37 in 125.39 cm
20 mil Code 39; 2.2:1	69.37 in 176.19 cm
40 mil Code 39; 2.2:1	149.37 in 379.39 cm
55 mil Code 39; 2.2:1	169.37 in 429.89 cm
70 mil reflective Code 39; 3:1	299.37 in 760.39 cm
100 mil reflective Code 39; 3:1	431.37 in 1095.67 cm

**WIDE ASPECT IMAGER 1D/2D**

<b>Symbol Density/ Bar Code Type/ W-N Ratio</b>	<b>Far Typical Working Ranges</b>
5.0 mil Code 39	6.21 in 15.77 cm
6.67 mil PDF417	5.61 in 14.25 cm
7.5 mil Code 39	9.01 in 22.88 cm
10 mil PDF417	8.41 in 21.36 cm
13 mil UPC-A	13.61 in 34.57 cm
15 mil PDF417	12.61 in 32.02 cm
15 mil Data Matrix	in n.a. cm n.a.
20 mil Code 39	21.21 in 53.87 cm

## LONG RANGE IMAGER 2D

<b>Symbol Density/ Bar Code Type/ W-N Ratio</b>	<b>Far Typical Working Ranges</b>
5.0 mil Code 39	25.11 in 63.78 cm
7.5 mil Code 39	37.11 in 94.26 cm
10 mil Code 39	43.11 in 109.5 cm
15 mil Code 128	48.11 in 122.2 cm
20 mil Code 39	99.11 in 251.74 cm
40 mil Code 39	169.11 in 429.54 cm
55 mil Code 39	229.11 in 581.94 cm
100 mil Code 39	359.11 in 912.14 cm
70 mil Reflective Code 39*	287.11 in 729.26 cm
100 mil Reflective Code 39*	359.11 in 912.14 cm
Data Matrix 10 mil	23.11 in 58.7 cm
Data Matrix 55 mil	129.11 in 327.94 cm
Data Matrix 100 mil	209.11 in 531.14 in

\* Mount reflective bar codes on white or black background with minimum 4" border. Luminance in the line-of-sight direction should be 50-120 cd/mm<sup>2</sup>. Ensure there is no extraneous illumination or shadow on the bar code and that it is centered within the aiming pattern.

## 6 TEST CODES

---

### High Density Codes

0.25 mm (10 mils)

Code 39



17162

2/5 Interleaved



0123456784

Code 128



test

---

EAN 13



8 012345 000012

EAN 8



6450 9723

## Medium Density Codes

0.38 mm (15 mils)

Code 39



17162

Interleaved 2/5



0123456784

Code 128



test

EAN 13

100%



8 012345 000012

EAN 8

100%



6450 9723



### Low Density Codes

0.50 mm (20 mils)

Code 39



17162

Interleaved 2/5



0123456784

Code 128

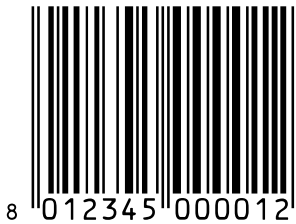


test

---

EAN 13

120%



8 012345 000012

EAN 8

120%



6450 9723

## 2D Codes

Datamatrix ECC200



Example

Inverse  
Datamatrix ECC200



Example

## REGULATORY INFORMATION

---



### NOTE

*Read this manual carefully before performing any type of connection to the Falcon X3+ mobile computer.*

*The user is responsible for any damage 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 Falcon X3+ being used.
- Do not attempt to disassemble the Falcon X3+ 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 Falcon X3+ mobile computer, disposal must be performed in compliance with the laws in force in your jurisdiction.
- Before using the devices and the battery packs, read par.2.
- Do not submerge the Falcon X3+ in liquid products.
- For further information, refer to this manual and to the Datalogic website: [www.datalogic.com](http://www.datalogic.com).

## POWER SUPPLY

This device is intended to be connected to a UL Listed/CSA Certified computer which supplies power directly to the Falcon X3+ or else be supplied by a UL Listed/CSA Certified Power Unit marked “Class 2” or LPS power source rated 5 V, 3.0 A, which supplies power directly to the Falcon X3+ via the power connector of the cable.

The package includes three international plug adapters. The adapters must be plugged in the power supply before the power supply itself is plugged on the wall outlet.

# LASER SAFETY

This information applies to both laser models and the Falcon X3+ Imager Aiming System.

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

**LASER LIGHT - DO NOT STARE INTO BEAM**  
**CLASS 2 LASER PRODUCT**  
**MAX OUTPUT RADIATION 1 mW AVG**  
**EMITTED WAVE LENGTH 630~680 nm**  
**COMPLIANT WITH EN 60825-1:2014**

**Scan Window**

**Laser Warning Label**

LASER LIGHT  
 DO NOT STARE INTO BEAM  
 CLASS 2 LASER PRODUCT  
 MAX. OUTPUT RADIATION 1 mW AVG  
 EMITTED WAVE LENGTH 630~680 nm  
 EN 60825-1:2007 and EN 60825-1:2014

AVOID EXPOSURE  
 LASER LIGHT  
 IS EMITTED FROM  
 THIS APERTURE

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

This product complies with 21 CFR 1040.10  
 except for deviations pursuant to Laser  
 Notice No. 50, dated June 24, 2007

激光照射 勿直视光束  
 类激光产品

**Data Label**

**MODEL (型号): FalconX3+**  
  
**S/N: G14G04386**  
**P/N: 946260066 MFD: Jul 2014**  
**TYPE: 00A0W1-3N0-CEU1**

**Product Label**






C US  
 239045

Patent. See  
[www.patents.datalogic.com](http://www.patents.datalogic.com)  
 for patent list

**Input (输入): 5Vdc --- 3.0A**

Datalogic S.r.l.  
 Lippo di Calderara di Reno (BO) - Italy

I	D	F	E
<p>La luce laser è visibile all'occhio umano e viene emessa dalla finestra indicata nella figura.</p>	<p>Die Laserstrahlung ist für das menschliche Auge sichtbar und wird am Strahlaustrittsfenster ausgesendet (siehe Bild).</p>	<p>Le rayon laser est visible à l'oeil nu et il est émis par la fenêtre désignée sur l'illustration dans la figure.</p>	<p>La luz láser es visible al ojo humano y es emitida por la ventana indicada en la figura.</p>
<p>LUCE LASER NON FISSARE IL FASCIO APPARECCHIO LASER DI CLASSE 2 MASSIMA POTENZA DI USCITA: 1 mW LUNGHEZZA D'ONDA EMESSA: 630-680 nm CONFORME A EN 60825-1 (2014)</p>	<p>LASERSTRAHLUNG NICHT IN DER STRAHL BLINKEN PRODUKT DER LASERKLASSE 2 MAXIMALE AUSGANGLEISTUNG: 1 mW WELLENLÄNGE: 630-680 nm ENTSPR. EN 60825-1 (2014)</p>	<p>RAYON LASER EVITER DE REGARDER LE RAYON APPAREIL LASER DE CLASSE 2 MAXIMUM PUISSANCE DE SORTIE: 1 mW LONGUER D'ONDE EMISE: 630-680 nm CONFORME A EN 60825-1 (2014)</p>	<p>RAYO LÁSER NO MIRAR FIJO EL RAYO APARATO LÁSER DE CLASE 2 MÁXIMA POTENCIA DE SALIDA: 1 mW LONGITUD DE ONDA EMITIDA: 630-680 nm CONFORME A EN 60825-1 (2014)</p>

## 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.



**CAUTION**

*Do not attempt to open or otherwise service any components in the optics cavity. Opening or servicing any part of the optics cavity by unauthorized personnel may violate laser safety regulations. The optics system is a factory only repair item.*



**CAUTION**

*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.



**CAUTION**

*Use of optical systems with the scanner will increase eye hazard. Optical instruments include binoculars, microscopes, eye glasses and magnifying glasses.*

## 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**

*Non tentare di accedere allo scomparto contenete i componenti ottici o di farne la manutenzione.*

*L'apertura dello scomparto, o la manutenzione di qualsiasi parte ottica da parte di personale non autorizzato, potrebbe violare le norme della sicurezza. Il sistema ottico può essere riparato solamente alla fabbrica.*



**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.



**ATTENZIONE**

*L'uso di strumenti ottici assieme allo scanner può aumentare il pericolo di danno agli occhi. Tali strumenti ottici includono cannocchiali, microscopi, occhiali e lenti di ingrandimento.*

## 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 Wartungsarbeiten zu öffnen.



**ACHTUNG**

*Unter keinen Umständen darf versucht werden, die Komponenten im Optikhohlraum zu öffnen oder auf irgendwelche andere Weise zu warten. Das Öffnen bzw. Warten der Komponenten im Optikhohlraum durch unbefugtes Personal verstößt gegen die Laser-Sicherheitsbestimmungen. Das Optiksystem darf nur werkseitig repariert werden.*



**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.



**ACHTUNG**

*Die Verwendung von Optiksystemen mit diesem Scanner erhöht die Gefahr einer Augenbeschädigung. Zu optischen Instrumenten gehören unter anderem Ferngläser, Mikroskope, Brillen und Vergrößerungsgläser.*

## 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**

*Ne pas essayer d'ouvrir ou de réparer les composants de la cavité optique. L'ouverture de la cavité optique ou la réparation de ses composants par une personne non qualifiée peut entraîner le nonrespect des règles de sécurité relatives au laser. Le système optique ne peut être réparé qu'en usine.*





**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).



**ATTENTION**

*L'utilisation d'instruments optiques avec le scanneur augmente le danger pour les yeux. Les instruments optiques comprennent les jumelles, les microscopes, les lunettes et les verres grossissants.*

## 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**

*No intente abrir o de ninguna manera dar servicio a ninguno de los componentes del receptáculo óptico. Abrir o dar servicio a las piezas del receptáculo óptico por parte del personal no autorizado podría ser una violación a los reglamentos de seguridad. El sistema óptico se puede reparar en la fábrica solamente.*



**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.



**ATENCIÓN**

*El uso de sistemas ópticos con el escáner aumentará el riesgo de daños oculares. Los instrumentos ópticos incluyen binoculares, microscopios, lentes y lupas.*

## **LED CLASS**

LED illuminator integrated in the Falcon X3+ models with imager engines are compliant with exempt risk group requirements according to IEC62471.

## MARKING AND EUROPEAN ECONOMIC AREA (EEA)

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.

Requirements in

AT/BE/BG/CZ/DK/EE/FR/DE/IS/IE/IT/EL/ES/CY/LV/LI/LT/LU/HU/MT/NL/NO/PL/PT/R  
O/SI/SK/TR/FI/SE/CH/UK/HR.5150MHz~5350MHz is for indoor use only.

### STATEMENT OF COMPLIANCE

Hereby, Datalogic S.r.l. declares that the radio equipment type LYNX is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: [www.datalogic.com](http://www.datalogic.com).

BG	С настоящото Datalogic S.r.l. декларира, че този тип радиосъоръжение LYNX е в съответствие с Директива 2014/53/ ЕС. Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: <a href="http://www.datalogic.com">www.datalogic.com</a> .
ES	Por la presente, Datalogic S.r.l. declara que el tipo de equipo radioeléctrico LYNX es conforme con la Directiva 2014/53/UE. El texto completo de la declaración UE de conformidad está disponible en la dirección Internet siguiente: <a href="http://www.datalogic.com">www.datalogic.com</a> .
CS	Tímto Datalogic S.r.l. prohlašuje, že typ rádiového zařízení LYNX je v souladu se směrnicí 2014/53/EU. Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese: <a href="http://www.datalogic.com">www.datalogic.com</a> .
DE	Hermed erklærer Datalogic S.r.l., at radioudstyrstypen LYNX er i overensstemmelse med direktiv 2014/53/EU. EU-overensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse: <a href="http://www.datalogic.com">www.datalogic.com</a> .
ET	Käesolevaga deklareerib Datalogic S.r.l., et käesolev raadioseadme tüüp LYNX vastab direktiivi 2014/53/EL nõuetele. Eli vastavusdeklaratsiooni täielik tekst on kättesaadav järgmisel internetiaadressil: <a href="http://www.datalogic.com">www.datalogic.com</a> .
EL	Με την παρούσα ο/η Datalogic S.r.l., δηλώνει ότι ο ραδιοεξοπλισμός LYNX πληροί την οδηγία 2014/53/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο: <a href="http://www.datalogic.com">www.datalogic.com</a> .
FR	Le soussigné, Datalogic S.r.l., déclare que l'équipement radioélectrique du type LYNX est conforme à la directive 2014/53/UE. Le texte complet de la déclaration UE de conformité est disponible à l'adresse internet suivante: <a href="http://www.datalogic.com">www.datalogic.com</a> .
HR	Datalogic S.r.l. ovime izjavljuje da je radijska oprema tipa LYNX u skladu s Direktivom 2014/53/EU. Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi: <a href="http://www.datalogic.com">www.datalogic.com</a> .

IT	Il fabbricante, Datalogic S.r.l., dichiara che il tipo di apparecchiatura radio LYNX è conforme alla direttiva 2014/53/UE. Il testo completo della dichiarazione di conformità UE è disponibile al seguente indirizzo Internet: <a href="http://www.datalogic.com">www.datalogic.com</a> .
LV	Ar šo Datalogic S.r.l. deklarē, ka radioiekārta LYNX atbilst Direktīvai 2014/53/ES. Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē: <a href="http://www.datalogic.com">www.datalogic.com</a> .
LT	Aš, Datalogic S.r.l., patvirtinu, kad radijo įrenginių tipas LYNX atitinka Direktyvą 2014/53/ES. Visas ES atitikties deklaracijos tekstas prieinamas šiuo interneto adresu: <a href="http://www.datalogic.com">www.datalogic.com</a> .
HU	Datalogic S.r.l. igazolja, hogy a LYNX típusú rádióberendezés megfelel a 2014/53/EU irányelvnek. Az EU-megfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen: <a href="http://www.datalogic.com">www.datalogic.com</a> .
MT	B'dan, Datalogic S.r.l. niddikjara li dan it-tip ta' tagħmir tar-radju LYNX huwa konformi mad-Direttiva 2014/53/UE. It-test kollu tad-dikjarazzjoni ta' konformità tal-UE huwa disponibbli f'dan l-indirizz tal-Internet li ġej: <a href="http://www.datalogic.com">www.datalogic.com</a> .
PL	Datalogic S.r.l. niniejszym oświadcza, że typ urządzenia radiowego LYNX jest zgodny z dyrektywą 2014/53/UE. Pełny tekst deklaracji zgodności UE jest dostępny pod następującym adresem internetowym: <a href="http://www.datalogic.com">www.datalogic.com</a> .
PT	O(a) abaixo assinado(a) Datalogic S.r.l. declara que o presente tipo de equipamento de rádio LYNX está em conformidade com a Diretiva 2014/53/UE. O texto integral da declaração de conformidade está disponível no seguinte endereço de Internet: <a href="http://www.datalogic.com">www.datalogic.com</a> .
RO	Prin prezenta, Datalogic S.r.l. declară că tipul de echipamente radio LYNX este în conformitate cu Directiva 2014/53/UE. Textul integral al declarației UE de conformitate este disponibil la următoarea adresă internet: <a href="http://www.datalogic.com">www.datalogic.com</a> .
SK	Datalogic S.r.l. týmto vyhlasuje, že rádiové zariadenie typu LYNX je v súlade so smernicou 2014/53/EÚ. Úplné EÚ vyhlásenie o zhode je k dispozícii na tejto internetovej adrese: <a href="http://www.datalogic.com">www.datalogic.com</a> .
SL	Datalogic S.r.l. potrjuje, da je tip radijske opreme LYNX skladen z Direktivo 2014/53/EU. Celotno besedilo izjave EU o skladnosti je na voljo na naslednjem spletnem naslovu: <a href="http://www.datalogic.com">www.datalogic.com</a> .
FI	Datalogic S.r.l. vakuuttaa, että radiolaitetyyppi LYNX on direktiivin 2014/53/EU mukainen. EU-vaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa: <a href="http://www.datalogic.com">www.datalogic.com</a> .
SV	Härmed försäkrar Datalogic S.r.l. att denna typ av radioutrustning LYNX överensstämmer med direktiv 2014/53/EU. Den fullständiga texten till EU-försäkran om överensstämmelse finns på följande webbadress: <a href="http://www.datalogic.com">www.datalogic.com</a> .

## Information for the User

### ENGLISH

Contact the competent authority responsible for the management of radio frequency devices of your country to verify any possible restrictions or licenses required.

### ITALIANO

Contatta l'autorità competente per la gestione degli apparati a radio frequenza del tuo paese, per verificare eventuali restrizioni o licenze.

### FRANÇAIS

Contactez l'autorité compétente en la gestion des appareils à radio fréquence de votre pays pour vérifier d'éventuelles restrictions ou licences.

### DEUTSCH

Wenden Sie sich an die für Radiofrequenzgeräte zuständige Behörde Ihres Landes, um zu prüfen ob es Einschränkungen gibt, oder eine Lizenz erforderlich ist.

### ESPAÑOL

Contacta la autoridad competente para la gestión de los dispositivos de radio frecuencia de tu país, para verificar cualesquiera restricciones o licencias posibles requerida.

## Frequency Ranges

Bluetooth and Wi-Fi radio:

2400-2483.5 MHz eirp < 20 dBm,

Wi-Fi 5 GHz.

5150-5350<eirp 20 dBm,

5470-5725<eirp 20 dBm.

## **FCC COMPLIANCE**

### **FCC Interference Statement**

- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiated radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- This device is restricted to indoor use when operated in the 5.15 to 5.25 GHz frequency range.

**IMPORTANT NOTE:****FCC Radiation Exposure Statement**

This model device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg.

\*Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

While there may be differences between the SAR levels of various devices and at various positions, they all meet the government requirement.

The FCC has granted an Equipment Authorization for this model device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model device is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on the below FCC ID: U4GFX3P.

This device is compliant with SAR for general population /uncontrolled exposure limits in ANSI/IEEE C95.1-1999 and had been tested in accordance with the measurement methods and procedures specified in OET Bulletin 65 Supplement C.

For body worn operation, this device has been tested and meets the FCC RF exposure guidelines for use with an accessory that contains no metal and the positions the handset a minimum of 1.5 cm from the body. Use of other enhancements may not ensure compliance with FCC RF exposure guidelines. If you do not use a body-worn accessory and are not holding the device at the ear, position the handset a minimum of 1.5 cm from your body when the device is switched on.

## IC COMPLIANCE

### IC Statement:

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class B digital apparatus complies with Canadian ICES-003. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter. The Country Code Selection feature is disabled for products marketed in the US/Canada.

### Caution:

- (i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- (ii) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and
- (iii) the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.
- (iv) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. Ce dispositif et ses antennes ne doivent pas être coimplantés ou utilisés avec une autre antenne ou un autre émetteur. La fonction de sélection de code de pays est désactivée pour les produits commercialisés en États-Unis/Canada.

### Avertissement:

Le guide d'utilisation des dispositifs pour réseaux locaux doit inclure des instructions précises sur les restrictions susmentionnées, notamment

- (i) les dispositifs fonctionnant dans la bande 5 150-5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
- (ii) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5 250-5 350 MHz et 5 470-5 725 MHz doit se conformer à la limite de p.i.r.e.;
- (iii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5 725-5 825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.
- (iv) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité)



pour les bandes 5 250-5 350 MHz et 5 650-5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

(iv) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 250-5 350 MHz et 5 650-5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

### **IMPORTANT NOTE:**

#### **IC Radiation Exposure Statement:**

This EUT is compliant with SAR for general population/uncontrolled exposure limits in IC RSS-102 and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528. This equipment can be installed and operated with minimum distance of 1.5 cm between the radiator & your body.

#### **Déclaration d'exposition aux radiations:**

Ce EUT est conforme au DAS (Débit d'absorption spécifique) pour l'exposition de la population à des limites non contrôlée en IC RSS-102 et il a été testé conformément aux méthodes de mesure et aux procédures spécifiées dans la norme IEEE 1528. Cet équipement peut être installé et utilisé à une distance minimale de 1,5 cm entre le radiateur et votre corps.

### **SAR COMPLIANCE**

This product has been tested and found to comply with the following standards:

- OET BULLETIN 65 SUPPLEMENT C: evaluating compliance with FCC guidelines for human exposure to radio frequency electromagnetic fields.
- IC RSS 102 Issue 4: Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands).
- The portable device FalconX3+ from Datalogic complies with the following European standards:
  - EN 50360:2001+AC:2006+A1:2012
  - EN 62209-1:2006
  - EN 62209-2:2010
  - EN 62311:2008

### **CANADIAN STATEMENT**

Ne pas regarder le faisceau.

Attention classe 2 lumière laser en cas d'ouverture éviter l'exposition - lumière est émise de la ouverture.

Ce produit est conform au sous-chapitre J de CFR 21.

Rayonnement laser – ne pas regarder dans le faisceau – ne par regarder avec instrumentation optique - appareil à laser de classe 2 – emission maximale de 1mw – longueur d'onde emise 630 - 680nm – selon EN 60825-1:2007.

## WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)



### Information for the User

At the end of its useful life, the product marked with the crossed out wheeled wastebin must be disposed of separately from urban waste.

For more detailed information about disposal, contact the supplier that provided you with the product in question or consult the dedicated section at the website <http://www.datalogic.com>.

### Informazione per gli utenti

L'apparecchiatura che riporta il simbolo del bidone barrato deve essere smaltita, alla fine della sua vita utile, separatamente dai rifiuti urbani.

Per maggiori dettagli sulle modalità di smaltimento, contattare il Fornitore dal quale è stata acquistata l'apparecchiatura o consultare la sezione dedicata sul sito <http://www.datalogic.com>.

### Information aux utilisateurs

Au terme de sa vie utile, le produit qui porte le symbole d'un caisson à ordures barré ne doit pas être éliminé avec les déchets urbains.

Pour obtenir des informations complémentaires concernant l'élimination, veuillez contacter le fournisseur auprès duquel vous avez acheté le produit ou consulter la section consacrée au site web <http://www.datalogic.com>.

### Benutzerinformation bezüglich

Am Ende des Gerätelebenszyklus darf das Produkt nicht über den städtischen Hausmüll entsorgt werden. Eine entsprechende Mülltrennung ist erforderlich.

Weitere Informationen zu dieser Richtlinie erhalten sie von ihrem Lieferanten über den sie das Produkt erworben haben, oder besuchen sie unsere Homepage unter <http://www.datalogic.com>.

### Información para el usuario

Al final de su vida útil, el producto marcado con un simbolo de contenedor de basura móvil tachado no debe eliminarse junto a los desechos urbanos.

Para obtener una información más detallada sobre la eliminación, por favor, póngase en contacto con el proveedor donde lo compró o consultar la sección dedicada en el Web site <http://www.datalogic.com>.

# GLOSSARY

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## **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.

## **Applet**

Diminutive form of app (application), it refers to simple, single-function programs that often ship with a larger product. Programs such as Windows' Calculator, File Manager, and Notepad are examples of applets.

## **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 device is compatible with the 2.1 protocol with Enhanced Data Rate (EDR).

## **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 convert the content of the bar code scanned from a visual pattern into electronic data.

**Depth of Field (DOF)**

The portion of a scene that appears acceptably sharp in the image. Although a lens can precisely focus at only one distance, the decrease in sharpness is gradual on each side of the focused distance, so that within the DOF, the unsharpness is imperceptible under normal viewing conditions.

**EEPROM**

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

**Ethernet**

The standard local area network (LAN) access method. A reference to "LAN," "LAN connection" or "network card" automatically implies Ethernet. Defined by the IEEE as the 802.3 standard, Ethernet is used to connect computers in a company or home network as well as to connect a single computer to a cable modem or DSL modem for Internet access.

**Firmware**

Firmware is a software program or set of instructions programmed on a hardware device. It provides the necessary instructions for how the device communicates with the other computer hardware. Firmware is typically stored in the flash ROM of a hardware device. While ROM is "read-only memory," flash ROM can be erased and rewritten because it is actually a type of flash memory.

**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.

**IEEE 802.11**

A set of standards carrying out wireless local area network (WLAN) computer communication in the 2.4, 3.6 and 5 GHz frequency bands. They are created and maintained by the IEEE LAN/MAN Standards Committee.

**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).

**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.

**Null modem cable**

RS-232 serial cable where the transmit and receive lines are crosslinked. In some cables there are also handshake lines crosslinked. In many situations a straight through serial cable is used, together with a null modem adapter. The adapter contains the necessary crosslinks between the signals.

**Pairing**

A Bluetooth pairing occurs when two Bluetooth devices agree to communicate with each other and establish a connection.

**Piconet**

A piconet is a Bluetooth PAN that links up to eight devices. Each piconet is controlled by one master device, and up to seven slave devices at any one time. Any device may be a member of more than one piconet, changing its membership as a user moves from one area to another.

**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.

**TDMA**

Time division multiple access (TDMA) is digital transmission technology that allows a number of users to access a single radio-frequency (RF) channel without interference by allocating unique time slots to each user within each channel. The TDMA digital transmission scheme multiplexes three signals over a single channel. The current TDMA standard for cellular divides a single channel into six time slots, with each signal using two slots, providing a 3 to 1 gain in capacity over advanced mobile-phone service (AMPS). Each caller is assigned a specific time slot for transmission.

**USB**

Universal Serial Bus. Type of serial bus that allows peripheral devices (disks, modems, printers, digitizers, data gloves, etc.) to be easily connected to a computer. A "plug-and-play" interface, it allows a device to be added without an adapter card and without rebooting the computer (the latter is known as hot-plugging). The USB standard, developed by several major computer and telecommunications companies, supports data-transfer speeds up to 12 megabits per second, multiple data streams, and up to 127 peripherals.

**WLAN**

A Wireless Local Area Network links devices via a wireless distribution method (typically spread-spectrum or OFDM radio), and usually provides a connection through an access point to the wider internet. This gives users the mobility to move around within a local coverage area and still be connected to the network.

**WPAN**

A Wireless Personal Area Network is a personal area network - a network for interconnecting devices centered around an individual person's workspace - in which the connections are wireless. Typically, a wireless personal area network uses some technology that permits communication within about 10 meters - in other words, a very short range

**WWAN**

Stands for "Wide Area Network." It is similar to a Local Area Network (LAN), but it is not limited to a single location and it uses Mobile telecommunication cellular network technologies such as UMTS, GPRS, CDMA2000, GSM, CDPD, Mobitex, HSDPA or 3G to transfer data. WWAN connectivity allows a user with a laptop and a WWAN card to surf the web, check email, or connect to a Virtual Private Network (VPN) from anywhere within the regional boundaries of cellular service.

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822001741 (Rev. A) Jan. 2018

