



## Coletor de Dados Datalogic Skorpion X5

O novo Skorpion X5 permite que as empresas de varejo, transporte e logística, fabricação e saúde atinjam novos níveis de confiabilidade e flexibilidade. Este computador móvel ultrarrápido e de alto desempenho com teclado possui o maior display multi-touch do mercado de Terminal Portátil de Dados (PDT). Oferece tudo o que as empresas precisam para garantir a máxima produtividade e se diferenciarem no mercado em termos de eficácia e eficiência.

O Skorpion X5 também apresenta potência de CPU computacional dominante e a última geração de mecanismos de leitura, especificamente projetados e desenvolvidos pela Datalogic, incluindo um único Mid-Range imager.

# Skorpio™ X5

## USER'S MANUAL



Rugged Mobile Computer with 1D/2D Imager



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

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# INTRODUCTION

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## CONVENTIONS

This manual uses the following conventions:

"Mobile computer", "device" and "Skorpio X5" refer to the Skorpio X5. The label artworks may be only a draft. Refer to the product labels for more precise information.

## PRODUCT OVERVIEW

Datalogic's Skorpio X5 is the next powerful generation of Datalogic's key-based mobile computers to face the toughest Enterprise challenges in data capture.

Lightweight, ergonomic, fully rugged and with plenty of different configurations and differentiating features, the Skorpio X5 is the perfect business companion for professionals in different markets, including Retail, T&L and Manufacturing. Its superior performance allows it to support multiple applications in various environments, from distribution centers to retail stores and manufacturing plants. The options to choose between 2 convertible form factors, 3 scan engines, 3 keyboard layouts, 2 charging technology and 2 memory configurations allows our customers to have a tailored solution to solve their needs.

Packed with the latest technology, the Skorpio X5 is equipped with the largest high visibility 4.3" display in its class, providing plenty of space for the most modern applications. It is powered by the market leader Qualcomm Snapdragon® 660 platform running at 2.2 GHz, the latest Google OS Android™ 10 with Google Mobile Services (GMS) and it is validated by Google as an 'Android Enterprise Recommended' (AER) rugged device.

Fully rugged in the most demanding environments, the Skorpio X5 features a 1.8 m / 6.0 ft drop resistance and an IP65 sealing grade. With the dedicated rubber boot, the resistance is even more increased.

With the Standard 3500 mAh or the High Capacity 6200 mAh battery, hot swappable battery technology and Datalogic's smart Battery Management application, Skorpio X5 can guarantee 24/7 operations with no interruptions in the most demanding and scanning intensive applications.

This innovative device, designed and developed to withstand the most demanding environments, also incorporates (as an option) Datalogic's industry-first wireless charging system for ultra-reliable contactless charging, being the first to introduce this future-proof technology in this class of devices.

## AVAILABLE MODELS

The Skorpion X5 is available in different models depending on the features it is equipped with. All options are listed below:

### 1D Imager - HANDHELD

- 943500001 Skorpion X5 Hand held, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 28-Key Numeric, 1D Imager w Green Spot, Android 10.
- 943500002 Skorpion X5 Hand held, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 38-Key Functional, 1D Imager w Green Spot, Android 10.
- 943500003 Skorpion X5 Hand held, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 47-Key Alpha-Numeric, 1D Imager w Green Spot, Android 10.

### 1D Imager - PISTOL GRIP

- Skorpion X5 Pistol Grip, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 28-Key Numeric, 1D Imager w Green Spot, Android 10, with Extended Battery.
- 943500024 Skorpion X5 Pistol Grip, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 38-Key Functional, 1D Imager w Green Spot, Android 10, with Extended Battery.
- 943500025 Skorpion X5 Pistol Grip, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 47-Key Alpha-Numeric, 1D Imager w Green Spot, Android 10, with Extended Battery.

### 2D Imager Standard Range - HANDHELD

- 943500007 Skorpion X5 Hand held, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 28-Key Numeric, 2D Imager SR w Green Spot, Android 10.
- 943500009 Skorpion X5 Hand held, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 47-Key Alpha-Numeric, 2D Imager SR w Green Spot, Android 10.
- 943500010 Skorpion X5 Hand held, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 28-Key Numeric, Contactless, 2D Imager SR w Green Spot, Android 10.
- 943500011 Skorpion X5 Hand held, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 47-Key Alpha-Numeric, Contactless, 2D Imager SR w Green Spot, Android 10.
- 943500019 Skorpion X5 Hand held, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 28-Key Numeric, 2D Imager SR w Green Spot, Android 10, China.
- 943500021 Skorpion X5 Hand held, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 28-Key Numeric, Contactless, 2D Imager SR w Green Spot, Android 10, China.
- 943500013 Skorpion X5 Hand held, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 4GB RAM/64GB Flash, 28-Key Numeric, 2D Imager SR w Green Spot, Android 10.
- 943500014 Skorpion X5 Hand held, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 4GB RAM/64GB Flash, 38-key Functional, 2D Imager SR w Green Spot, Android 10.
- 943500018 Skorpion X5 Hand held, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 4GB RAM/64GB Flash, 47-Key Alpha-Numeric, Contactless, 2D Imager SR w Green Spot, Android 10.

## 2D Imager Standard Range - PISTOL GRIP

- 943500029 Skorpion X5 Pistol Grip, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 28-Key Numeric, 2D Imager SR w Green Spot, Android 10, with Extended Battery.
- 943500031 Skorpion X5 Pistol Grip, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 47-Key Alpha-Numeric, 2D Imager SR w Green Spot, Android 10, with Extended Battery.
- 943500035 Skorpion X5 Pistol Grip, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 4GB RAM/64GB Flash, 28-Key Numeric, 2D Imager SR w Green Spot, Android 10, with Extended Battery.
- 943500036 Skorpion X5 Pistol Grip, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 4GB RAM/64GB Flash, 38-Key Functional, 2D Imager SR w Green Spot, Android 10, with Extended Battery.
- 943500037 Skorpion X5 Pistol Grip, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 4GB RAM/64GB Flash, 47-Key Alpha-Numeric, Contactless, 2D Imager SR w Green Spot, Android 10, with Extended Battery.

## 2D Imager Mid Range - HANDHELD

- 943500041 Skorpion X5 Hand held, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 28-Key Numeric, 2D Imager MR w Green Spot, Android 10.
- 943500042 Skorpion X5 Hand held, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 4GB RAM/64GB Flash, 47-Key Alpha-Numeric, Contactless 2D Imager MR w Green Spot, Android 10.
- 943500043 Skorpion X5 Hand held, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 47-Key Alpha-Numeric, 2D Imager MR w Green Spot, Android 10.

## 2D Imager Mid Range – PISTOL GRIP

- 943500054 Skorpion X5 Pistol Grip, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 28-Key Numeric, 2D Imager MR w Green Spot, Android 10, with Extended Battery.
- 943500055 Skorpion X5 Pistol Grip, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 3GB RAM/32GB Flash, 47-Key Alpha-Numeric, 2D Imager MR w Green Spot, Android 10, with Extended Battery.
- 943500056 Skorpion X5 Pistol Grip, 802.11 a/b/g/n/ac, 4.3" display, BT V5, 4GB RAM/64GB Flash, 47-Key Alpha-Numeric, Contactless 2D Imager MR w Green Spot, Android 10, with Extended Battery.

For further details about the Skorpion X5 models refer to the web site:

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

For further information regarding Android refer to the website: [www.android.com](http://www.android.com).

## OUT OF THE BOX

The Skorpion X5 package contains:

- Skorpion X5 Device
- Rechargeable one-piece battery pack
- USB Type-A to Type-C Cable
- Handstrap (Handheld Models Only)
- Handstrap Lower Bridge (Handheld Models Only)
- Lanyard (Pistol Grip Models Only)
- Quick Start Guide
- Safety & Regulatory Addendum
- End User License Agreement (EULA) Sheet
- Warranty Addendum

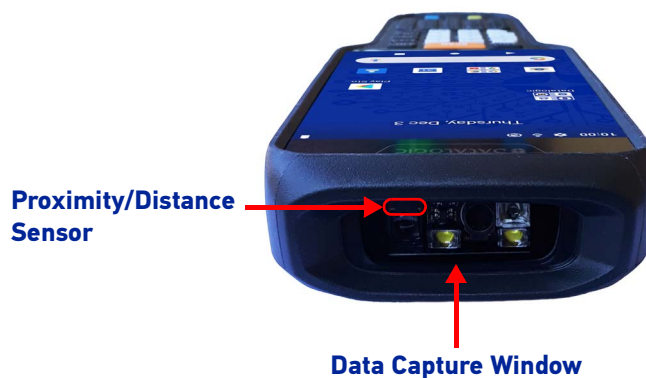
Remove all the components from their packaging; check their integrity and compare them with all the packing documents.



**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.**

# GENERAL VIEW

## Top View



## Front View





## Side View



## Back View



## Bottom View



## ACCESSORIES

### Docks

94A150106	Skorpio X5 Single Dock Wireless Charging
94A150107	Skorpio X5 Single Dock With Contacts
94A150108	Skorpio X5 3 Slot Dock Wireless Charging
94A150109	Skorpio X5 3 Slot Dock Wireless Charging Locking
94A150110	Skorpio X5 3 Slot Dock With Contacts
94ACC0274	Skorpio X5 4 Slot Battery Charger

### Cases/Holsters

94ACC0323	Skorpio X5 Rubber Boot (HH & Gun)
94ACC0050	Belt Holster, Skorpio

### Batteries & Chargers

91ACC0092	Skorpio X5 Standard Battery pack
91ACC0093	Skorpio X5 Extended Battery pack
94ACC0329	Skorpio X5 USB-type C wall adapter
94ACC0327	Skorpio X5 USB A – USB Type-C Cable

### Miscellaneous

94ACC0325	Skorpio X5 Handle
94ACC0317	Skorpio X5 3 Slot Dock Unlocking Key
94ACC0318	Skorpio X5 3 Slot Dock Metal Plate
94ACC0324	Skorpio X5 Screen Protector (5 pcs)
94ACC0326	Skorpio X5 Handstrap (pack of 5)
94ACC0328	Skorpio X5 BT Headset
94ACC0081	Skorpio X5 Lanyard (pack of 5)

### Power Supplies - Cords

91ACC0048	Skorpio X5 Docks & Multi Battery Charger Power Supply
91ACC0049	Skorpio X5 3 Slot Docks & MBC Power Jumper (5 Pcs)
95ACC1113	Power Cord, 120V AC, IEC/US
95ACC1213	Power Cord, 240V AC, UK
95A051041	Power Cord, AC, IEC/EUR
95ACC1215	Power Cord, IEC/Australian
95ACC1212	Power Cord, IEC/Japan
95ACC1284	Power Cord, IEC C13, Black Argentina, ROHS

# BATTERY

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## INSTALL THE BATTERY

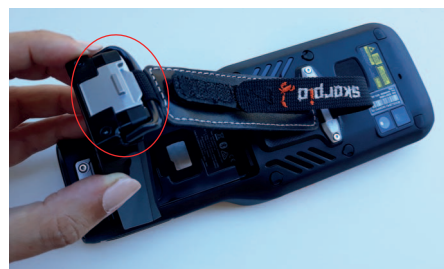
1. Attach the handstrap to the eyelet as shown.



2. Insert the handstrap lower bridge into the hand strap.



3. Attach the handstrap lower bridge to the battery pack.



4. Insert the battery pack into the slot, top first, and press it into place until it clicks.



## CHARGE THE BATTERY

The battery pack is not initially fully charged. After installing the battery, charge it with the Datalogic USB Type-C wall adapter or with a dock.

During the charging process the charging LED positioned at the top left side of the display glows orange constantly. Once the charging process has been completed, the charging LED glows green constantly.



**NOTE: The Skorpio X5 may get warm during charging. This is normal and does not mean a malfunction.**

### Charge with USB

Use the Skorpio X5 USB-type C wall adapter (available as an accessory, p/n 91ACC0048) to charge the device from a power outlet.



You can also use the supplied Type-A/Type-C cable to charge the Skorpio X5 from any self-powered USB hub or USB port on a computer.



## Charge with the optional dock

Insert the device into the dock with the screen facing front and the head facing up.



**CAUTION:** Use only a Datalogic approved power supply to power any of the docks.

Do not put any foreign object such as, but not limited to, coins, paper clips, stickers inside the slot of any of the wireless docks.

Do not apply any sticker to the Skorpio X5 (see the examples below).

Foreign objects could overheat.



No Clip



No Coin



No Sticker



No Sticker



**NOTE:** For information on the docks, refer to the Quick Start Guide included in the dock's box.



**CAUTION:** Keep the wireless logo area free. Do not place stickers or write on the logo surface area.



## Battery Charging Time

The BY-07 standard battery pack typically charges from 0% to 90% capacity in less than 2h 15min when the device is docked in a wireless or wired dock at 25°C room temperature.

The BY-08 extended battery pack typically charges from 0% to 90% capacity in less than 2h 40min when the device is docked in a wired dock and typically in less than 3h 30min when it is docked in a wireless dock at 25°C room temperature.



**NOTE:** Intensive usage of the device while charging may lead to longer charging time.

## BATTERY SWAP

Battery Swap mode is a low power suspend mode that allows you to replace the battery pack without closing files and applications. It preserves the main memory contents, Wi-Fi and Bluetooth connection and keeps applications running, but does not allow you to operate any of the device's functions.

When you remove the battery, the display turns off, the good read LED starts blinking green and the device enters a low power state. Replace the battery within 30 seconds to preserve the active Wi-Fi and Bluetooth sessions. A few seconds before the device turns off, the charging LED starts blinking red.




**NOTE:** It can take up to 2 minutes to fully charge the backup source after a battery swap.



**NOTE:** When the battery is removed, the USB is suddenly disconnected and any active file transfer or communication will be aborted.



**CAUTION:** The battery swap procedure is not available if:

- the device is connected via USB cable.
- the device is powered by an external source.
- the backup battery is not charged enough to withstand a battery swap (the following notification is displayed on screen:  )

## REAL-TIME CLOCK BACKUP

The Skorpion X5 provides a Real-time Clock (RTC) backup feature. The RTC retention time, when the main battery is completely discharged or removed, is about 6 days.



## BATTERY INFORMATION



**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.

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

Close to the limits of the working temperature, some battery performance degradation may occur.

The Skorpion X5 battery charge allowed temperature range is 0°C - 40°C (32°F - 104°F).

Never charge the device battery in a closed space where excessive heat can build up.

As a safety precaution, the battery may stop charging to avoid overheating.

The Skorpion X5 may get warm during charging; this is normal and does not mean a malfunction.

Even if the storage temperature range is wider, it is recommended to store the device and the batteries at environmental temperature, in order to achieve the longest battery life.



**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.

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



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

Mettre au rebut les batteries usagées conformément aux instructions.



**CAUTION:** Do not use or leave the product close to heat sources as fire or heater. The device must operate in its operating temperature range.



## BATTERY SAFETY GUIDELINES



**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.

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.

To power the cradle, 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 device to power devices other than this device.

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 color or shape, or appears abnormal in any other way.

Do not short-circuit the battery pack contacts connecting the positive device and negative device. 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 devices 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, contact of the liquid to the skin or eyes. If 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 Authorized Repair Center for inspection before continuing to use it.



**WARNING:** If your device stops working for any reason, do not use its battery on other electronic devices without a prior check and approval by an Authorized Repair Center.

**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.**

# SD CARD

---

## INSTALL THE SD CARD

The Skorpio X5 supports microSD card up to UHS-1 (104 MB/s bus speed). Contact the sales support team to select the memory card for your device.

To install the memory card:

1. Remove the battery pack.



2. Remove the microSD card slot cover.



3. Slide the cardholder to the right and then pull it up.



4. Insert the microSD card into the cardholder; push the cardholder down and then slide it to the left.



5. Replace the microSD card slot cover.



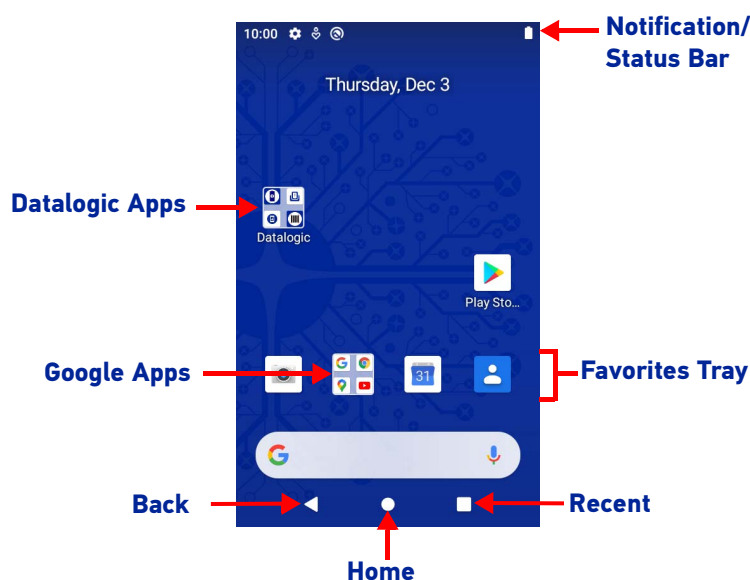
6. Replace the battery pack (see ["Install the Battery" on page 9](#)).

# GETTING STARTED

## TURN ON THE DEVICE

To turn on the Skorpion X5, press and hold the power button for at least 4 seconds.











## HOME SCREEN



## Home Screen Items

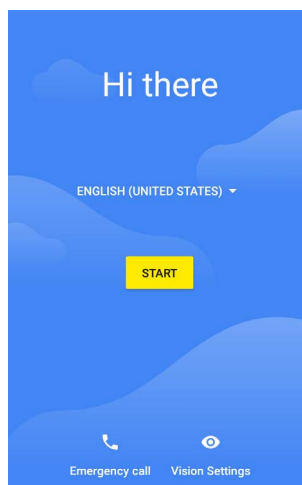
Notification/Status Bar	Displays the time, status icons (right side), and notification icons (left side).
Favorites Tray	It is like a dock for your home screen. By default, it includes commonly used apps, but you can customize it.
Datalogic Apps	Shortcut to Datalogic's native applications and settings: Battery Manager, Dock Manager, Scan2Deploy, Scanner, SoftSpot, SureFox, SureLock, Datalogic Settings.
Google Apps	Shortcut to Google's native applications: Google, Chrome, Gmail, Maps, YouTube, Drive, YT Music, Play Movie, Photos.

## Status Bar Icons

	Wi-Fi is on.		Battery is low.
	Wi-Fi not connected.		External power source is connected.
	Wi-Fi connected no internet.		Battery is full.
	Connected to a Wi-Fi network.		Battery is partially drained.
	Bluetooth is on.		Airplane mode.

## SETUP WIZARD

After the first boot or a factory reset, the start dialog of the Setup Wizard is displayed, with initial settings for you to configure.



## Device Owner Mode

The Device Owner is an app that controls local device policies and system applications on devices. In case of Corporate-owned devices, provisioning the devices as Device Owner ensures the organization has full control of the device and provides more features to ensure the device and the confidential data in the device are secure and away from any unauthorized access.

The Device Owner can enable or disable hardware functions and software functions, configure a password policy, configure user accounts on the device, configure network parameters, CA certificates and VPN information, wipe the device or contents on external storage and set global settings, like airplane mode, GPS, Bluetooth, roaming etc.

Scan the Device Owner (DO) QR code with the front SCAN key, or one of the side triggers, to activate the Device Owner mode for Android Enterprise.

## Android Enterprise QR Code Generator

The Android Enterprise QR Code Generator creates a standard Android Enterprise Enrollment QR code that can be used to provision any Android device.

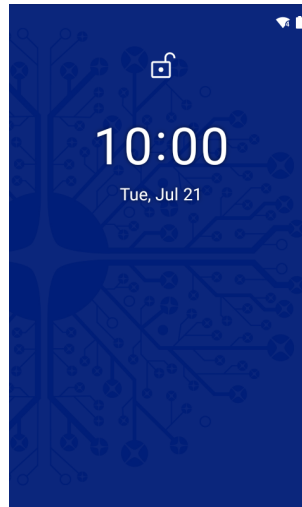
For Datalogic devices, the enrollment process has been enhanced to include additional properties in the QR code and the option to encrypt the QR code. These Datalogic specific options can be configured using the Android Enterprise QR Code Generator.

For details, refer to <https://datalogic.github.io/aeqrdoc/overview/>.

## SUSPEND MODE

Suspend mode automatically turns the screen off and locks the device to save battery power when the terminal is inactive for a programmed period of time.

Press and release the power button to toggle the terminal in or out of suspend mode:

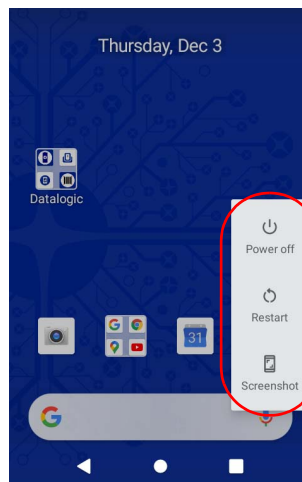


To unlock the home screen, tap anywhere on the screen and drag your finger upward.

To set the timeout limit, see "[Suspend Timeout](#)" on page 52.

## LONG PRESS POWER MENU

Press and hold the **Power** button until the **Long Press Menu** menu displays:



### Power Off

Tap **Power Off** to turn off the terminal. When you turn off the terminal, the session you are working on expires and it won't be possible to restore it.

### Restart

Tap **Restart** to restart the terminal.

### Screenshot










Tap **Screenshot** to take a screenshot.


















## APPLICATIONS







The **All Apps** screen displays icons for all installed applications. The tables below list the default applications installed on the Skorpion X5.

### Datalogic Applications

Icon	Description
	Battery Manager - Provides information on the battery type, charge, status and temperature, allows to set the charging profile and to log battery data (see " <a href="#">Battery Manager</a> " on page 74)
	Dock Manager - Provides information on the dock and allows unlocking the docked devices (see " <a href="#">Dock Manager</a> " on page 82).
	Scan2Deploy - Configuration tool (see " <a href="#">Scan2Deploy</a> " on page 85).
	Scan Demo – Enables data capture (see " <a href="#">Data Capture</a> " on page 93).
	SoftSpot - A configurable application meant to provide easy access to frequently used functionalities, as well as activating the scan engine of the device (see " <a href="#">SoftSpot™</a> " on page 86).
	SureFox - Use to control web access for the users (see " <a href="#">SureFox</a> " on page 90).
	SureLock - Use to secure and lock your device (see " <a href="#">SureLock</a> " on page 90).
	Datalogic Settings - See " <a href="#">Datalogic Settings</a> " on page 40.
	WiFi Guard - Network scanner that runs through your network at set intervals and reports immediately if it has found any unrecognised connected devices that could possibly belong to an intruder.

## Android Applications

Icon	Description
	Calculator - Provides the basic and scientific arithmetic functions.
	Calendar - Lets you manage events and appointments.
	Camera - Use it to take photos or record videos.
	Chrome - Google's own web browser. Use it to access the Internet or intranet.
	Clock - Lets you schedule alarms for appointments or as a wake-up.
	Contacts - Allows you to manage contacts information.
	Drive - Google's own file storage and synchronization service. Use it to safely store, synchronize and share your photos, videos, files and more in the cloud.
	Duo - Google's own video chat mobile. Use it to make video calls in high definition.
	Files - Lets you manage files and folders.
	Gmail - Use it to send and receive email.
	Google - Google's own web search engine.
	Keep Notes - Note-taking service developed by Google. It offers a variety of tools for taking notes, including text, lists, images, and audio.
	Maps - Google's own mapping mobile app.
	Photos - Google's own photo sharing and storage service.
	Play Movies & TV - Google's own online video on demand service. It offers movies and television shows for purchase or rental, depending on availability.

Icon	Description
	Play Store - Google's own digital distribution service. It serves as the official app store for the Android operating system and as a digital media store.
	Screenshot Easy - Use it to take editable screenshots.
	Settings - Use it to configure the Skorpion X5 (see " <a href="#">Settings</a> " on page 39).
	Sound Recorder - Tool for recording the sound and editing the saved recordings.
	Youtube - Google's own video-sharing website
	YT Music - Music streaming service from YouTube

## TOUCH GESTURES




<b>Tap</b>	Tap the screen with your finger or with a stylus to open items and select options.
<b>Drag</b>	Hold your finger or a stylus on the screen and drag across the screen to scroll or pan. Drag in a list to select multiple items.
<b>Tap-and-hold</b>	Tap and hold your finger or a 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.

## KEYBOARDS

The Skorpion X5 comes with three different keyboards: a 47-key alphanumeric, a 38-key function numeric keyboard and a 28-key numeric keyboard.




### Alphanumeric Keyboard (47 Keys)



Key	Function
	The SCAN key starts data capture. If enabled, it also wakes up the mobile computer from low-power (see <a href="#">"Triggers" on page 56</a> ). For pistol grip models only, the trigger performs the same function as the SCAN key.
	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.

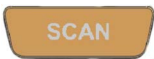


## Function Numeric Keyboard (38 Keys)



Key	Function
	The SCAN key starts data capture. If enabled, it also wakes up the mobile computer from low-power (see " <a href="#">Triggers</a> " on page 56). For pistol grip models only, the trigger performs the same function as the SCAN key.
	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.

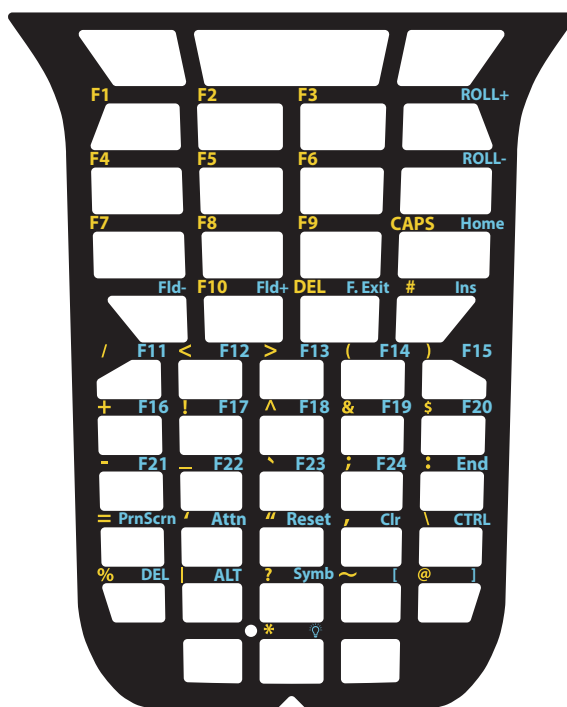
# Numeric Keyboard (28 Keys)



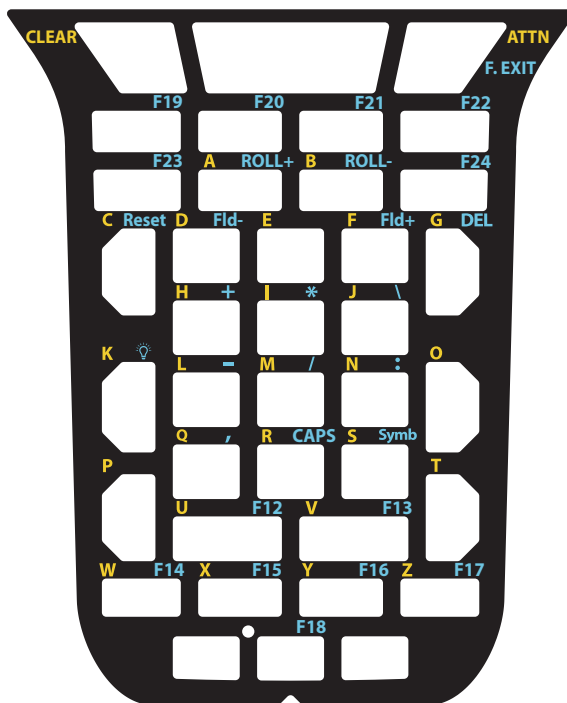
Key	Function
	The SCAN key starts data capture. If enabled, it also wakes up the mobile computer from low-power (see "Triggers" on page 56). For pistol grip models only, the trigger performs the same function as the SCAN key.
	Yellow modifier (toggle key): when pressed before a standard key, it enables 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.

## Terminal Emulation Overlays

### Terminal Emulation Overlay for Alphanumeric Keyboard (47 Keys)

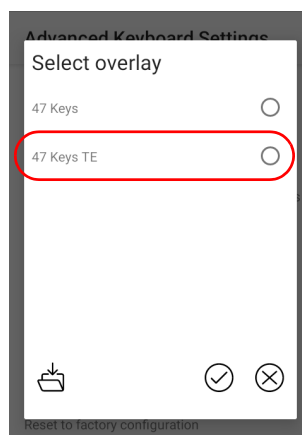


### Terminal Emulation Overlay for Function Numeric Keyboard (38 Keys)



**CAUTION:** Use plastic tweezers only to replace the overlay.

To enable the terminal emulator, go to the **Datalogic Settings** screen (see "[Datalogic Settings](#)" on page 40) and tap **Key Settings > Advanced Keyboard Settings > Install New Keyboard/Overlay** and select the TE overlay.





# RESET THE DEVICE

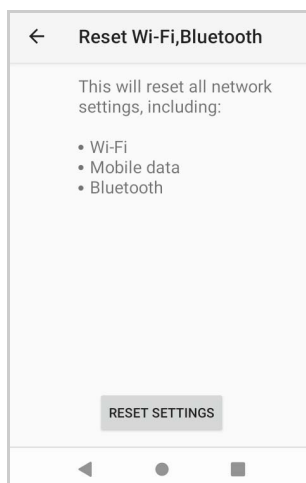
## Configuration Reset

Configuration reset sets the configuration of the device (all its settings) to a known status: the factory status or an enterprise-user-defined status.

### Reset Wi-Fi, Bluetooth

Resets all network settings.

1. Tap **Settings > System > Advanced > Reset options > Reset Wi-Fi, Bluetooth**.

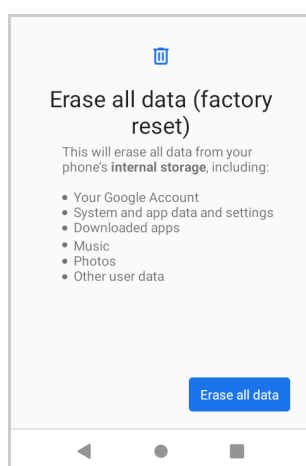


2. Tap **RESET SETTINGS**.

## Factory Reset

Brings the device to the default configuration, clearing all user-customized settings.

1. Tap **Settings > System > Advanced > Reset options > Erase all data (factory reset)**.



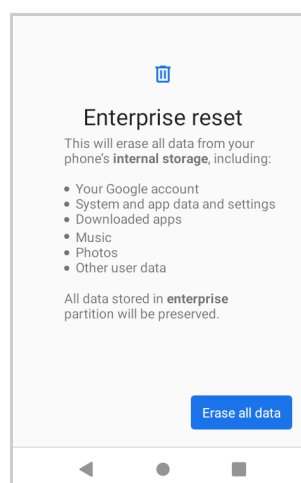
2. Tap **Erase all data**.

## Enterprise Reset

Enterprise Reset brings the device to an enterprise-user-defined configuration, clearing all data and settings except the ones persisted by the enterprise system applications in the **enterprise** flash partition and in the **splash** flash partition.

The Enterprise folder is a file system storage that is used for deployment and device-unique data. It is persistent and maintains data after an Enterprise reset. Applications and custom settings (i.e. custom boot animation and wallpaper) can persist data after an Enterprise Reset by saving them to the enterprise folder.

1. Tap **Settings > System > Advanced > Reset options > Enterprise reset**.



2. Tap **Erase all data**.
- 3.

## Hard Reset

Restarts the device resetting all the hardware components. This procedure guarantees the safe reboot of the device in any condition, without causing damage to the device and without data loss. Application data in cache are lost. It is generally used when the device stops responding or after a critical failure that compromises its usability.

To perform a hard reset, press and hold the power button and the ESC button simultaneously for at least 5 seconds.



**CAUTION:** Before performing a hard reset, ensure the battery is charged.



**CAUTION:** Performing a hard reset with a microSD card installed in the device may cause damage or data corruption to the microSD card. All unsaved data is lost after performing a hard reset.

## LED INDICATORS

The LEDs illuminate to indicate various functions or errors on the device. The following table lists these indications. The good read LED indicator is programmable, and may or may not be enabled ("[Scanner Settings](#)" on page 40 for more details). The Charging LED is configurable via SDK.

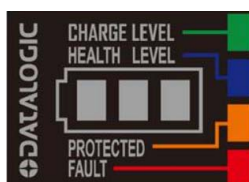
LED	Status	Description
	Solid red	The device is in pre-charge status.
Charging Status/ Android Notifica- tions LED	Solid orange	The device is charging.
	Solid green	Charging is complete.
	Blinking red	Charge fault.
	Blinking blue (the color could change depending on Android settings)	Android notification.
Good Read Indicator	Solid red	Light is solid red from the time the user presses the scan key until the barcode is decoded, until the scanner times out, or until the user releases the scan key.
	Solid green	A good decode is completed.
	Blinking green fading to red through orange	Battery swap mode.

## Battery Pack LEDs

The battery pack LEDs indicators notify the battery charge level, the battery health and the power failures. To activate the LED indicators and display the battery status information, remove the battery pack from the Skorpio X5 or from the 4 Slot Battery Charger and press the locking lever:








The label on the battery pack indicates the meaning of the LEDs color:









The following table lists battery status indicators.

Information displaying flow:

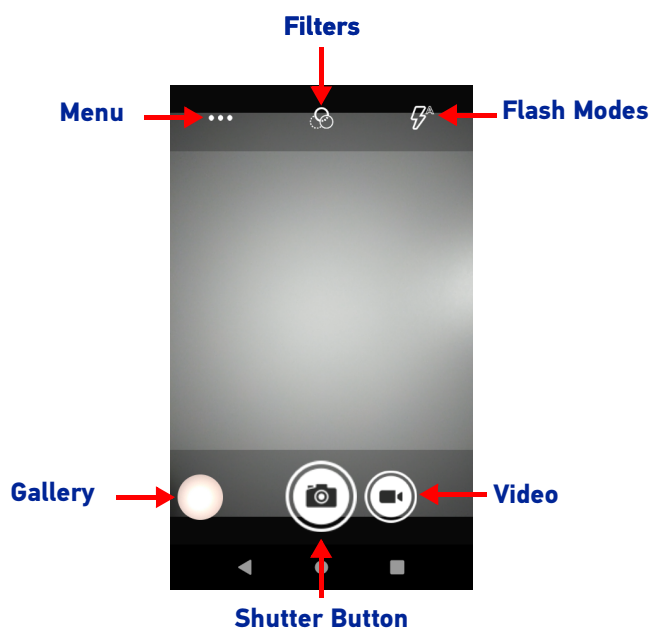
1. Wait a triggering event.
2. Show “state of charge” information for 2 seconds.
3. Show “health status” information for 2 seconds.
4. If any, show “failure status” information for 2 seconds.

Status	Description
Off State	 <p>All LEDs are turned off.</p>
State of Charge (displayed for 2 seconds)	 <p>Below 5%: right LED, blinking green</p>
	 <p>Between 5% and 33%: right LED, solid green.</p>
	 <p>Between 34% and 66%: right and center LEDs, solid green.</p>
	 <p>Between 67% and 100%: right, center and left LEDs, solid green.</p>

Status	Description
Health Status (displayed for 2 seconds)	 <p>Below 80% of cells state of health: right LED, blinking blue.</p>
	 <p>Between 80% and 84% of cells state of health: right LED, solid blue.</p>
	 <p>Between 85% and 89% of cells state of health: right and center LEDs, solid blue.</p>
	 <p>Between 100% and 90% of cells state of health: right, center and left LEDs, solid blue.</p>
Failure Status (displayed for 2 seconds in case of error)	 <p>Temporary failure (battery FETs are opened but the normal operating can be restored by removing the fault condition, eg. over/under-voltages, over-currents, over/under-temperature): all LEDs blinking orange.</p>
	 <p>Permanent failure (battery FET are open and it is not possible to recover the normal operating): all LEDs blinking red.</p>

## CAMERA

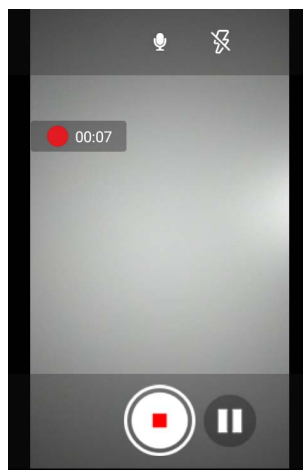
Tap the **Camera** application icon to take photos or video.



To zoom in or out, press two fingers on the display and pinch or expand fingers. The zoom controls appear on the screen.

Tap the **Shutter** button to take a picture.

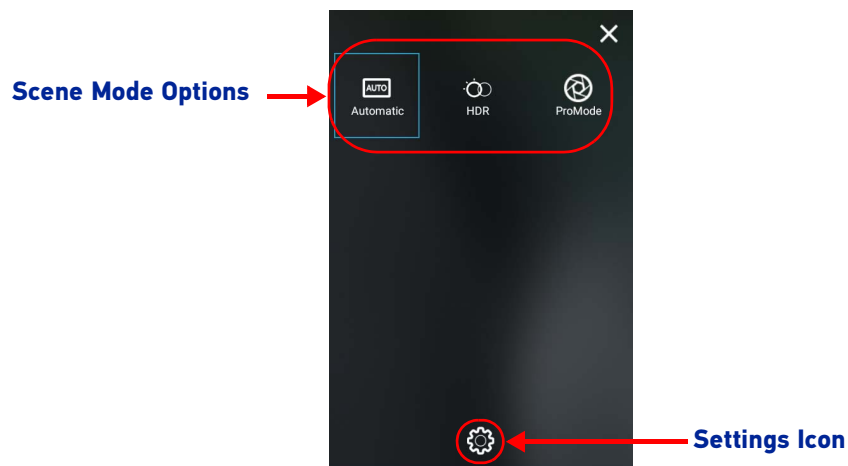
Tap **Video** to start recording a video.



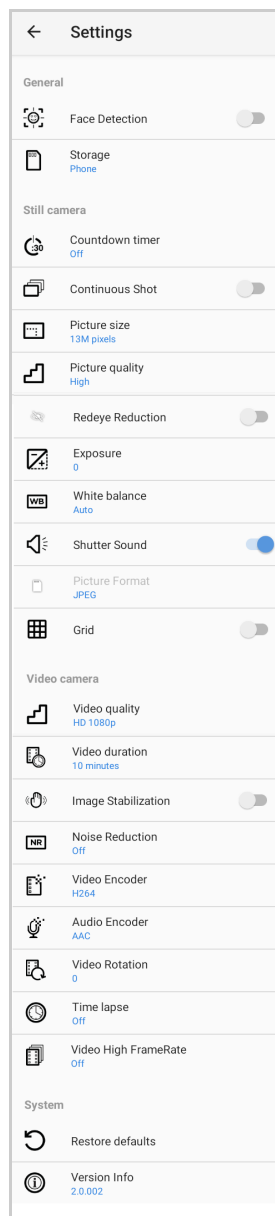
Tap the **Shutter Button** to end the recording.

## Camera Settings

Tap the menu icon to select the scene mode and to display the settings icon.



Tap the **Setting** icon to display the camera settings options:



## General

These settings apply to both the still camera and the video camera.

### Face Detection

Enables/disables face detection.

### Storage

Sets the phone storage to: Phone (default) or SD Card.

## Still Camera

These settings apply only to the still camera.

### Countdown timer

Sets the countdown timer to: Off (default), 2 seconds, 5 seconds or 10 seconds.

### Continuous Shot

If enabled, allows you to take multiple photos within a short timeframe and in rapid succession.

### Picture size

Sets the size of the photo.

### Picture quality

Sets the picture quality to: Low, Standard, or High (default).

### Redeye reduction

Helps to reduce redeye effect.

### Exposure

Sets the exposure settings.

### White balance

Adjusts the color balance of light according to the color temperature of a light source:

#### *Auto*

Adjusts the white balance automatically (default).

#### *Incandescent*

Adjust the white balance for incandescent lighting.

#### *Fluorescent*

Adjust the white balance for fluorescent lighting.

#### *Daylight*

Adjust the white balance for daylight.

#### *Cloudy*

Adjusts the white balance for a cloudy environment.

### Shutter Sound

Select to play a shutter sound when taking a photo.

### Picture Format

All the pictures are saved in JPEG format.



### **Grid**

If enabled, it divides the frame of your photos using four lines which run horizontally and vertically along the screen.

## **Video Camera**

These settings apply only to the video camera.

### **Video quality**

Sets the video quality to HD 1080p (default), HD 720p, SD 480p, VGA, CIF, or QVGA.

### **Video duration**

Set the video duration to: 30 seconds (MMS), 10 minutes (default), 30 minutes, or no limit.

### **Image Stabilization**

Select to reduce blurry videos due to device movement.

### **Noise Reduction**

Reduces noise in your pictures (bright spots, randomly-spaced bright pixels, or fog). The options are: Off (default), Fast, High Quality.

### **Video Encoder**

Sets the video encoder to: MPEG4, H264 (default), H265.

### **Audio Encoder**

Sets the audio encoder to: AMRNB, or AAC (default).

### **Video Rotation**

Select to rotate your video.

### **Time Lapse**

Sets the time lapse interval.

### **Video High FrameRate**

Sets the high frame rate to Off (default), HFR 60, or HSR 60.

## **System**

### **Restore default**

Select to restore all settings to the default values.

### **Version Info**

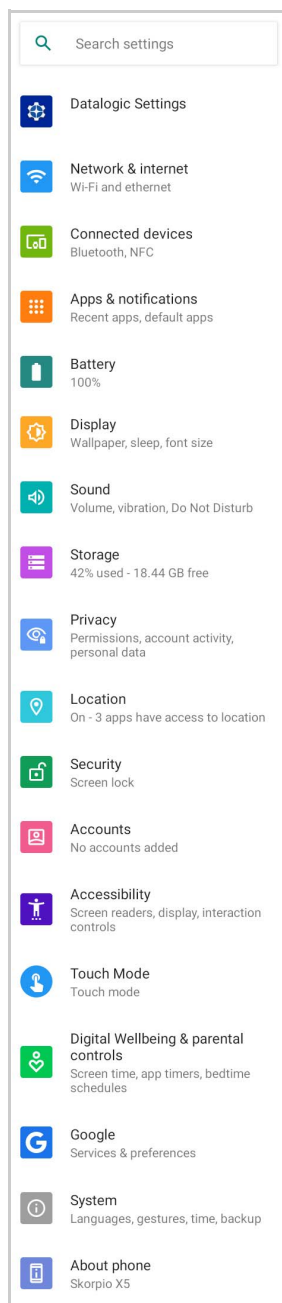
Displays the software version of the camera.

# SETTINGS

---

## OVERVIEW

The **Settings** app allows you to check or set system parameters to customize your device. To open the **Settings** screen, tap the **Settings** icons on the **All Apps** screen or pull down the notification panel and then tap the **Settings** icon on the bottom right corner:



## DATALOGIC SETTINGS

### Scanner Settings

Before you start reading barcodes, use the **Settings** app to view and configure all settings for the scanner.

From the applications menu, tap **Settings > Datalogic Settings > Scanner Settings**. Select the desired configuration from the following options:

Scanner Settings
Notification
Good read
Formatting
Scanner options
Wedge
Symbology settings
Scan engine details
Global settings
Enable all symbologies Enables all supported symbologies
Disable all symbologies Disables all supported symbologies
Reset configuration Reset the decoding subsystem configuration
Commit Saves the configuration

## Notification

Use it to configure the good read tone and display notification:

### Good Read Duration

Sets the duration of the notification (LED, green spot or beep) the scanner emits on a good read.

### Good Read Interval

Sets the interval between each notification (LED, green spot or beep) the scanner emits on a good read.

### Good Read Number

Sets the number of notifications (LED, green spot or beep) the scanner emits on a good read.

### Enable Display Notification

Enables display notifications (toasts). If cleared, the scanner is disabled until you launch a scanner listener application developed using the Datalogic SDK or enable a keyboard/intent wedge.

### Good Read Audio Mode

Sets the audio tone to:

- None
- Beep tone
- Audio file
- Viper beep
- Baroque beep

If **Audio file** is selected, the option **Good read audio file** displays. Tap it to select the file you want to use as good read ringtone.



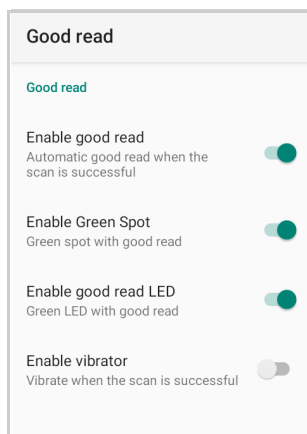
**NOTE: The Notification settings do not apply to an audio file.**

## Good Read Audio Volume

Sets the volume of beep tone or audio file (if enabled).

## Good Read

Use it to enable good read notifications (LED, Green Spot):

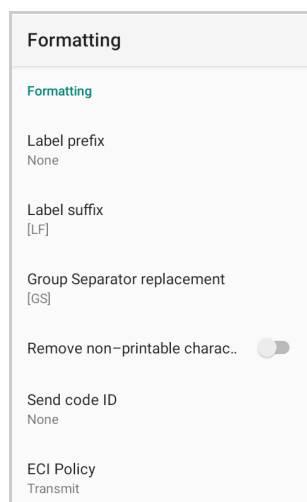


Tap **Enable good read** to enable/disable notifications (main enabler), then select the notification you want to use.

## Formatting

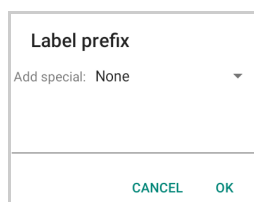
### Standard Formatting

Allows to format the barcode text by enabling and configuring the use of prefix, suffix, group separator and code identifier:



### Label Prefix

Tap **Label prefix** to enter the characters you will be using as prefix. Tap **Add special** to select a special character to be added in the current cursor position:



### Label Suffix

Tap **Label suffix** to enter the characters you will be using as suffix. Tap **Add special** to select a special character to be added in the current cursor position:

### Group Separator Replacement

The Group Separator replacement is a non printable data separator character (ASCII code 1D hex). Tap **Group Separator replacement** to enter a string that will be used as GS data separator substituting the standard GS character.

Tap **Add special** to select a special character to be added in the current cursor position:

### Remove Non-Printable Characters

Enable it to remove non-printable characters from a unicode string.

### Send Code ID

Tap **Send code ID** to add a code identifier prefix or suffix to the barcode string:

The AIM ID (Association for Automatic Identification and Mobility) is an international barcode identifier. When **AIM identifier before** is enabled, the AIM ID is inserted at the beginning of the decoded barcode.

**DLM identifier** is a Datalogic specific character identifier.

**User defined identifier** is a user specific character identifier you can set in the related symbology settings menu.

### ECI Policy

Extended Channel Interpretation (ECI) is an extension to the communication protocol that is used to transmit data from a bar code reader to a host when a bar code symbol is scanned. It enables the application software to receive additional information about the intended interpretation of the message contained within the barcode symbol and even details about the scan itself.

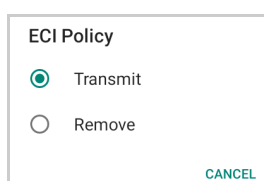
There are two reference models for data interchange in bar coding systems:

The Basic Channel Model (BCM) describes the functional components that co-operate to convey a message via a traditional bar coding system.

The Extended Channel Model (ECM) adds a processing layer to the front and back ends of the Basic Channel, to enable ECI-capable data carriers to convey both the message and information about that message.

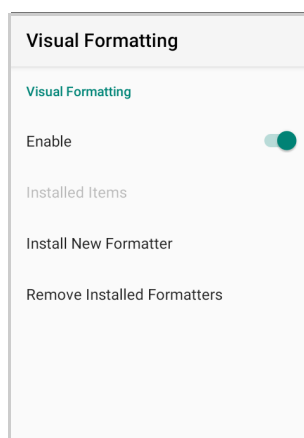
Select **Transmit** to set the data interface in "Extended Channel Mode".

Select **Remove** to set the data interface in "Basic Channel Mode".



### Visual Formatting

Enable to set up barcode visual formatting.



For more details, refer to <https://datalogic.github.io/scan2deploy/studio/#visual-formatter>.

## Scanner Options

Tap **Scanner Options** to customize the Skorpio X5 scanning behavior.

Scanner options

Scanner options

Enable picklist

Enable illumination

Enable aim

Display mode

Target mode

No delay

Target timeout

1 seconds

Release scan timeout

2 seconds

Decode timeout

5.0 s

Multi Scan

Enable multi scan

Capture multiple labels sequentially

Number of required labels

2

Enable single notification

Notify on each read label

### Enable Picklist

If enabled, it allows you to pick and decode a barcode from multiple barcodes printed close together, when the scan illumination intersects more than one barcode. Only the targeted barcode will be returned.

### Enable Illumination

If enabled, it causes the scanner to turn on the illumination to aid decoding.

### Enable Aim

Enables the laser aim.

### Display Mode

Optimizes the reading of a barcode from a screen.

### Target Mode

If enabled, when the scan button is pressed, the scanner will project an aiming pattern to assist in centering over the barcode before scanning. Tap **Target mode** to select the desired targeting behavior:

Target mode

No delay

Spot Timeout

Release Scan

CANCEL

### No Delay

Target mode is disabled.



### Spot Timeout

Scanning takes place after a programmable time upon pressing the scan button. Tap **Target timeout** to set the duration of the spot:

**Target timeout**

☐ 0.25 seconds

☐ 0.5 seconds

☒ 1 seconds

☐ 1.5 seconds

☐ 2 seconds

CANCEL

### Release Scan

Scanning takes place after the scan button is released. Tap **Release scan timeout** to set the scanning timeout after releasing the scan button:

**Release scan timeout**

☐ 1 seconds

☒ 2 seconds

☐ 3 seconds

☐ 4 seconds

☐ 5 seconds

☐ 6 seconds

☐ 7 seconds

CANCEL

### Decode Timeout

Drag the **Decode timeout** slider to set the maximum amount of time the scanner attempts to decode after target timeout (in case **Spot Timeout** is enabled) or after the scan button is pressed (in case **Target mode** is disabled):

**Decode timeout**

5.0 s

### Enable Multi Scan

If selected, the scanner captures multiple labels sequentially.

**Enable multi scan**  
Capture multiple labels sequentially ☒

**Number of required labels**  

2

**Enable single notification**  
Notify on each read label ☐

### Number of Required Labels

Drag the slider to indicate how many barcodes you want to collect.

### Enable Single Notification

If selected, it enables indicators for each label, in order to get an intermediate notification for each label decoded.

## Wedge

Use it to enable or disable the keyboard wedge and the intent wedge:

Wedge

Keyboard wedge

Enable keyboard wedge

The captured data will be sent to the foreground application in the form of key events

Keyboard wedge only on focus

Send captured data in the form of key events only to the current text area with active keyboard input

Keyboard wedge input mode

Text injection

Intent wedge

Enable intent wedge

The captured data will be sent to an application in the form of an implicit Intent

Intent delivery mode

Broadcast intent

Intent action

com.datalogic.decodedwedge.decode\_action

Intent category

com.datalogic.decodedwedge.decode\_category

Intent extra barcode string

com.datalogic.decode.intentwedge.barcode\_string

Intent extra barcode type

com.datalogic.decode.intentwedge.barcode\_type

Intent extra barcode data

com.datalogic.decode.intentwedge.barcode\_data

Web wedge

Enable web wedge

The captured data will be sent to the internet browsing application, in the form of a valid URL

### Enable Keyboard Wedge

Enables/disables the keyboard wedge mode.

### Keyboard Wedge Only on Focus

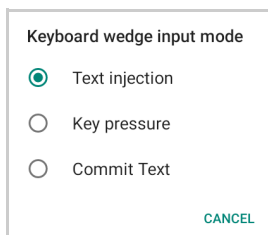
If selected, the scanner is enabled whenever a text area is in focus and can receive text.

It provides a safer way to input keystrokes into the foreground application, allowing to send captured data in the form of key events only to the current text area with active keyboard input.

If this setting is not enabled, keystrokes will always be dispatched to the foreground application.

### Keyboard Wedge Input Mode

Allows to select the scanned data input mode.



Keyboard wedge input mode

☒ Text injection

☐ Key pressure

☐ Commit Text

CANCEL

#### *Text Injection*

The scanned barcode is injected into the text area.

#### *Key Pressure*

The scanned barcode is translated into keyboard strokes.

#### *Commit Text*

The printable characters are injected into the text area, emulating the pressure of keyboard keys for non-printable keys.

### Enable Intent Wedge

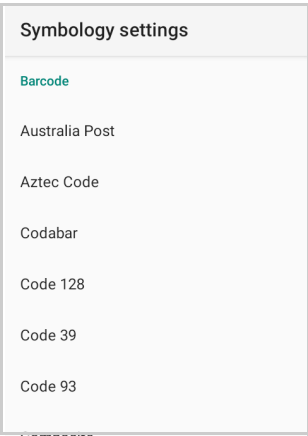
Enables the broadcast of specific intents to the listening applications. The broadcasted intent can have its custom Action, Category and extra content fields. The scanner is enabled whenever the intent option is flagged.

### Enable Web Wedge

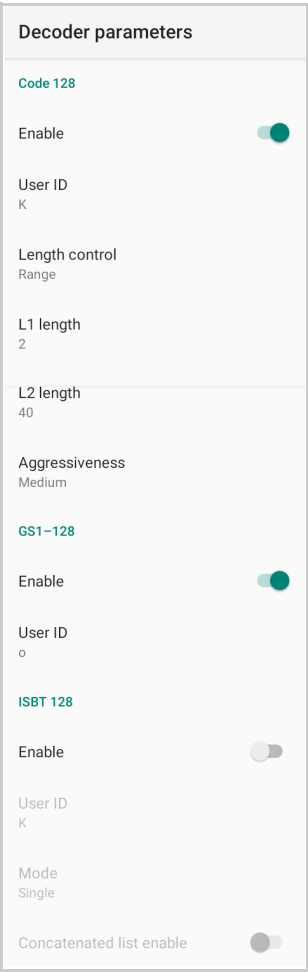
Enables direct data input into internet browsing applications, in the form of a valid URL.

## Symbology Settings

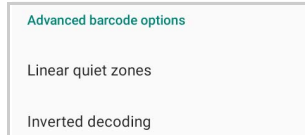
Each barcode symbology can be customized with additional settings that may affect that specific barcode decoding. Tap **Symbology settings** to configure symbology decoding options:



Refer to the sample symbology control panels for examples of the types of fields and options you can modify. The example below shows the settings of a Code 128 barcode symbology:

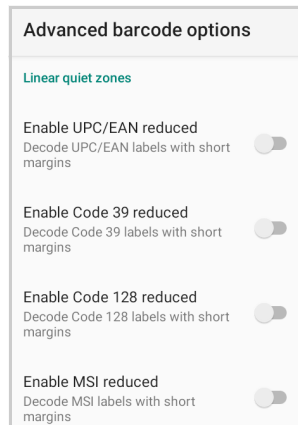


## Advanced Barcode Options



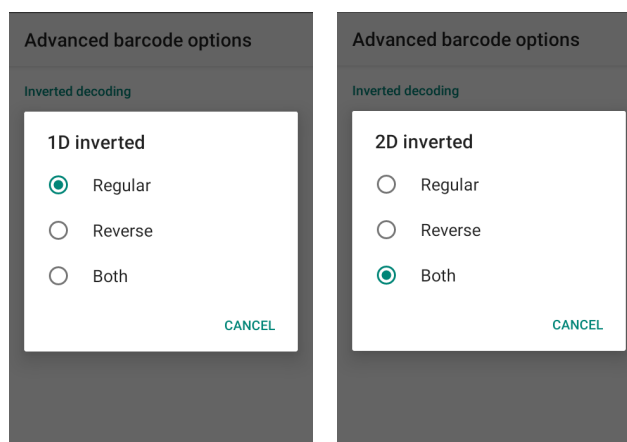
### Linear Quiet Zones

Tap **Linear quiet zones** to reduce the blank margin on either side of a linear barcode.



### Inverted Decoding

Defines the decoding mode for regular/reverse barcodes for both 1D and 2D barcodes:



## Scan Engine Details

Provides information on the scan engine.

Scan engine model Datalogic DE2112
Library details Decoding library version VL5.14.06U.49905658.12
Module Firmware version 1.2.0.1
Module Hardware version 1
Module Name DE2112
Module Name ID 3
Software Application version 1.3.2.1

## Global Settings

Use this section to change symbologies settings globally and to persist them.

Global settings
Enable all symbologies Enables all supported symbologies
Disable all symbologies Disables all supported symbologies
Reset configuration Reset the decoding subsystem configuration
Commit Saves the configuration

### Enable All Symbologies

Enables all barcode symbologies.

### Disable All Symbologies

Disables all barcode symbologies.

### Reset Configuration

Resets back to default scanner configuration settings.

### Commit

Saves the configuration settings to a persistent storage. Any change you make is temporary and will be lost when the system restarts, unless you tap **Commit**.

## Power Management

### Suspend Timeout

You have two options to set the suspend timeout (see "[Suspend Mode](#)" on page 21 for more information on Suspend Mode):

1. Tap **Settings > Datalogic Settings > Power Management**:
  - **Suspend on external power** sets the number of seconds without user input activity before the system is suspended while running on external power.

Suspend on external power

☐ 4 minutes

☐ 5 minutes

☐ 10 minutes

☐ 15 minutes

☐ 20 minutes

☐ 30 minutes

☒ Never Timeout

CANCEL

- **Suspend on internal battery** sets the number of seconds without user input activity before the system is suspended while running on battery power.

Suspend on internal battery

☐ 4 minutes

☐ 5 minutes

☐ 10 minutes

☐ 15 minutes

☐ 20 minutes

☐ 30 minutes

☒ Never Timeout

CANCEL

2. Tap **Settings > Display > Advanced > Screen timeout** to set the number of seconds without user input activity before the system is suspended while running on either battery power or external power.

Screen timeout

☐ 4 minutes

☐ 5 minutes

☐ 10 minutes

☐ 15 minutes

☐ 20 minutes

☐ 30 minutes

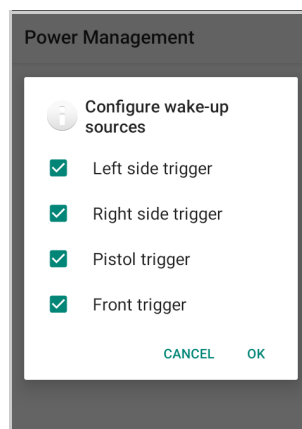
☒ Never

CANCEL

If you use the **Advanced settings** page to set the auto-suspend timeouts, the **Display** page's **Sleep** control will display the **Suspend on internal battery** if no external power is connected; if the device is connected to an external power source (USB or dock), it will display the **Suspend on external power**.

## Wake-Up Configuration

The default wake-up sources are the left side trigger, the right side trigger and the pistol trigger. Tap **Settings > Datalogic Settings > Power Management > Configure wake-up sources** to enable/disable wake-up sources.





## Key Settings

### Lock Keyboard Input

If enabled, it locks user input from the keyboard.

### Key Remapping

Tap **Key remapping** to remap an input key, then press the key you want to remap. The following window displays on screen:

Key remapping

Scancode: LEFT ENTER  
Keycode: ENTER

Choose a type of remapping

Remap type ▼

ADD A NEW MAPPING

- **Scancode** represents the physical location of a keyboard key.
- **Keycode** represents the value that is mapped to a specific key.

Tap **Remap type** to select the remapping type:

Key remapping

Scancode: LEFT ENTER  
Keycode: ENTER

Choose a type of remapping

Keycode ▼

Unicode

Start activity

### Keycode

Select **Keycode** to map the selected key to a new function:

Key remapping

Scancode: LEFT ENTER  
Keycode: ENTER

Choose a type of remapping

Keycode ▼

Desired Android key code  
VOLUME DOWN ▼

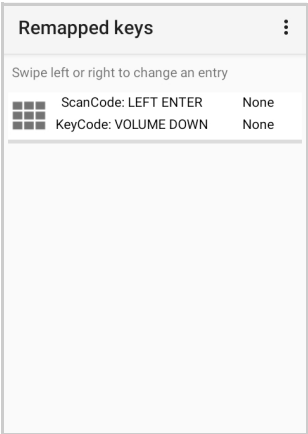
Desired Android meta state  
None ▼

Confirm after configuring a valid remapping

ADD A NEW MAPPING

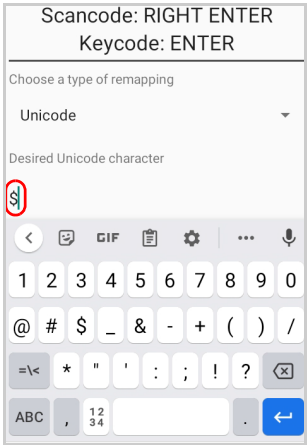
- Tap the second menu (default = **DISABLE KEY**) to select the new function you want to assign to the selected key.
- Tap the last menu (default = **None**) to add a modifier key (such as **Ctrl**, **Shift** or **Alt**).

Tap **ADD A NEW MAPPING**. A window displays showing the new keymap.

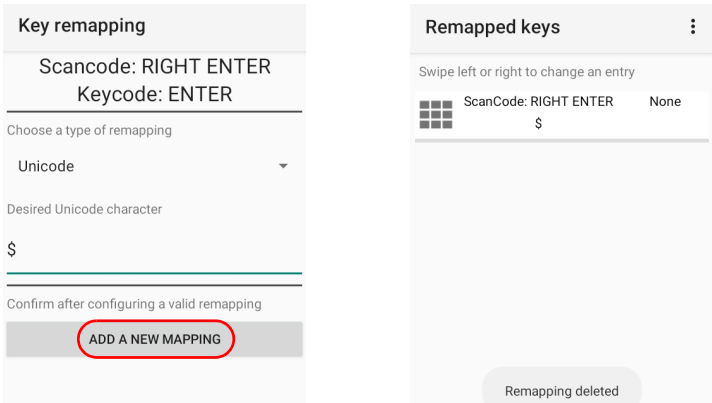


Unicode

Select **Unicode** to remap a key to display Unicode characters (such as symbol "\$"):

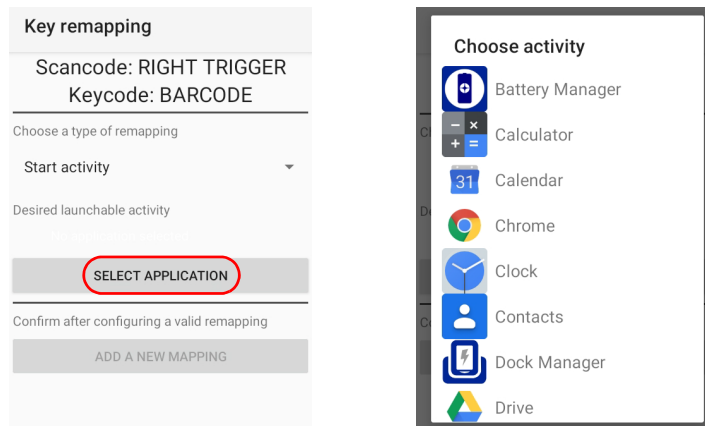


Press the Back Button on the navigation bar and then tap **ADD A NEW MAPPING**. A window displays showing the new keymap:

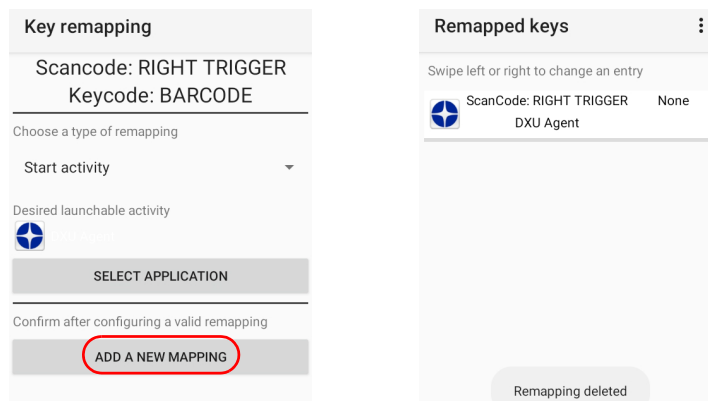


## Start Activity

Select **Start activity** to remap a key to launch an application loaded on your device. Tap **SELECT APPLICATION**:



Select the desired application and then tap **ADD A NEW MAPPING**. A window displays showing the new keymap:

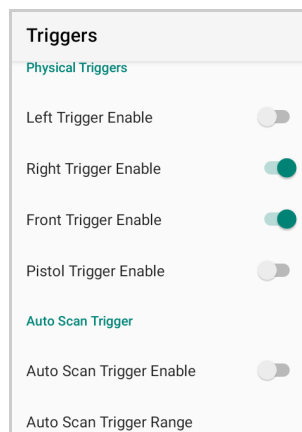


## View All Remapped Keys

Tap View all remapped keys to display all remapped keys. Swipe left to edit an entry. Swipe right to remove an entry and reset the key mapping back to default.

## Triggers

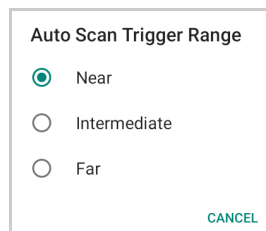
Tap **Triggers** to enable/disable the trigger keys. The physical triggers are enabled by default.



## Auto Scan Trigger

The Skorpio X5 has a proximity sensor able to detect the presence of nearby objects without any physical contact. If enabled, **Auto Scan Trigger Enable** allows to automatically read barcodes without pressing the trigger button.

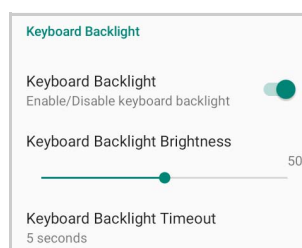
Tap **Auto Scan Trigger Range** to select the maximum distance at which the device will automatically start scanning barcodes.



## Advanced Keyboard Settings

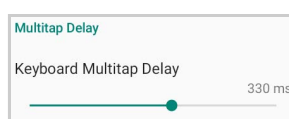
### Keyboard Backlight

If enabled, you can set the keyboard backlight brightness and timeout.

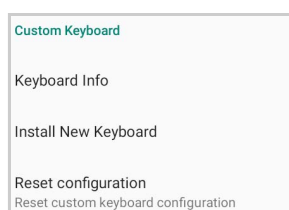


### Multitap Delay

The numeric keypad uses a multitap ABC input mode. **Multitap Delay** defines after how much time from the first key press the associated character will be submitted to the user interface.



### Custom Keyboard



#### Keyboard Info

Displays keyboard info.

#### Install New Keyboard

Allows to install a new keyboard (see "Terminal Emulation Overlays" on page 28).

#### Reset Configuration

Restores default keyboard.

# Dock Management

Allows you to manage the dock’s firmware update through the **Dock Manager** application (see "Dock Manager" on page 82).

# Wi-Fi Settings

## Wi-Fi Scan Settings

Use the Wi-Fi Scan Settings to set the interval between scans when the device is connected and when it is disconnected.

Wi-Fi Scan Settings

Scan Interval

Interval between scans when the device screen is on and disconnected

5 s

Scan Interval Max

Maximum interval between scans when the device screen is on and disconnected

10 s

Connected Scan Interval

Interval between scans when the device screen is on and connected

20 s

Connected Scan Interval Max

Maximum interval between scans when the device screen is on and connected

160 s

Global settings

Reset configuration

Reset scan settings configuration

Commit

Saves the configuration

## Wi-Fi Module Settings

Use the Wi-Fi Module Settings to select the 802.11 mode and the band, and to enable/disable power save and the verbose Wi-Fi module logging.

If enabled, the verbose Wi-Fi module logging increases the Wi-Fi logging level for each wireless network (SSID) you connect to according to its relative received signal strength (RSSI).

Wi-Fi Module Settings

802.11 mode

All Enabled

Band Selection

All Enabled

Power save

Power save enabled

Verbose Wi-Fi module logging

Enables the verbose Wi-Fi module logging

☒

Global settings

Reset configuration

Reset module settings configuration

Commit

Saves the configuration

## Wi-Fi Roaming Settings

The roaming RSSI threshold is a CPS configurable parameter, that controls the signal strength a radio needs to see before searching for another site.

The roaming RSSI difference controls the signal difference between the current access point the device is connected to and the target access point the device wants to roam to. If the target AP signal is higher than the current by at least the value of this parameter, the device will roam.

Use the **Wi-Fi Roaming Settings** to configure the roaming RSSI threshold and the roaming RSSI difference.

**Wi-Fi Roaming Settings**

Roaming RSSI threshold

76 db

Roaming RSSI Difference

5 db

[Global settings](#)

**Reset configuration**  
Reset roaming settings configuration

**Commit**  
Saves the configuration

## System Update

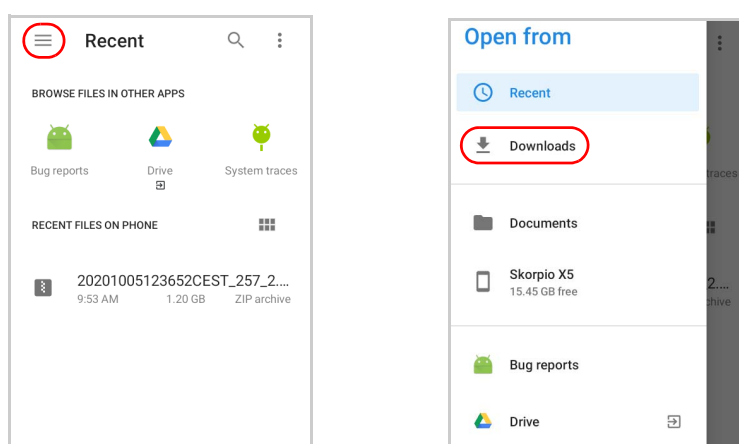
The A/B system update ensures a workable booting system remains on the disk during an over-the-air (OTA) update. OTA updates can occur while the system is running, without interrupting the user. Users can continue to use their devices during an OTA, the only downtime during an update is when the device reboots into the updated disk partition.

To transfer the OTA package from your PC to the Skorpion X5, follow the steps below:

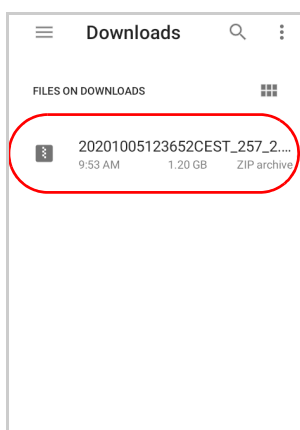
1. Connect the device and the PC via USB cable (see “USB Connection” on page 94);
2. Copy the OTA package to the device **Download** folder;

## Local Upgrade

From the **Settings** menu, tap **Datalogic Settings > System Update > Local upgrade**. Tap the menu icon on the top left corner of the screen and then tap **Downloads**.



Select the update package you want to install:



**NOTE:** The OTA package would also be available if copied into another folder. You just need to select the right folder.

The following window displays on screen, showing information about the device and the update package components:

The **PROPERTIES** section shows information about the device model and OS version and the update package version.

The **ACTIONS** section allows to:

- reset the device configuration after the update (see “Reset the Device” on page 30).
- force the update of all components, including those already updated.

Tap **Install Update**. The device will reboot and a success notification will be displayed. Tap the notification to display a report showing the installed update components.



**NOTE:** During the update, ensure that:

- battery level is more than 20% if the Skorprio X5 is not connected to a power source;

or

- battery level is more than 15% if the Skorprio X5 is connected to a power source (USB or dock).



# Device Info

The Device info screen displays information about the device including: serial number, scan engine, espresso extensions, sdk, system versions.

Device Info

Device Info

Factory

Factory configuration

Datalogic SDK  
1.25

Datalogic services  
1.3.2.01 r8.1 SX5

Espresso Extensions  
1.0.0

Factory configuration

Factory Version  
Rev: 3 Ver: 8

Device ID  
SX5

Serial Number  
B20P14635

Part Number  
943500009

Hardware revision  
03

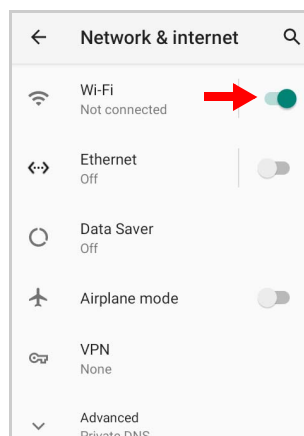
Barcode reader  
Datalogic DE2112

Wi-Fi  
Qualcomm Atheros - WCN3990

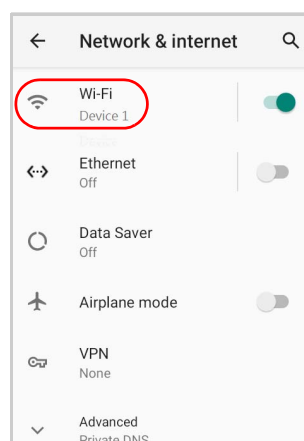
## NETWORK & INTERNET

### Connect to Wi-Fi Network

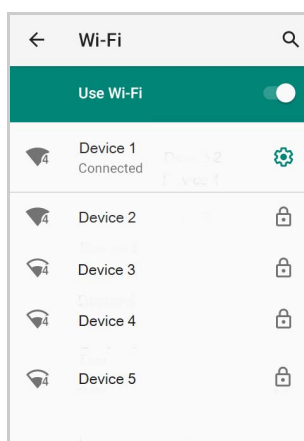
1. To turn on the Wi-Fi, tap **Settings > Network & Internet** and switch right to the **On** position.



If the device finds a network that you connected to previously, it will connect to it automatically.

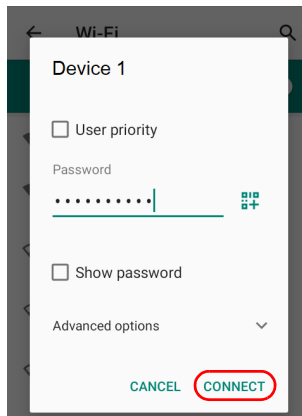


2. Tap **Wi-Fi**. The Skorpio X5 scans for available Wi-Fi networks within range and lists them. Secured networks are indicated with a lock icon.



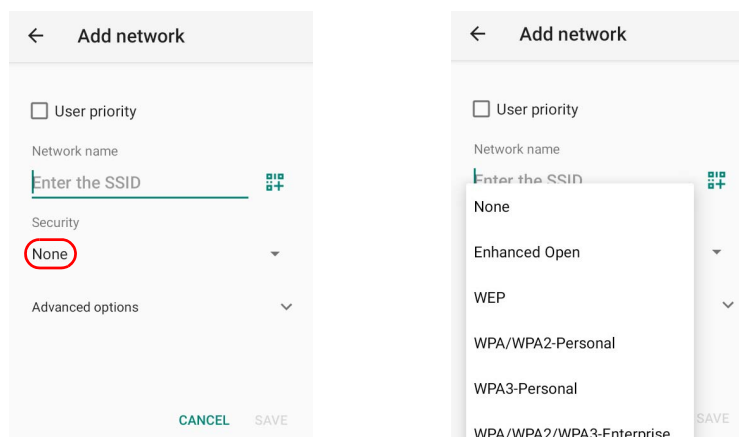
3. Select the network name you want to connect to from the available network list.
4. If the network is open, tap the profile and then tap **Connect**, or press and hold and then select **Connect**.

If the network is secured, a dialog box appears requesting information relevant to the network security protocol (e.g., password, key, or certificate). Enter the required information, then tap **Connect**:



## Add a Wi-Fi Network

1. Tap **Settings** > **Network & Internet** and verify that the Wi-Fi is turned on.
2. Tap **Wi-Fi**.
3. Tap **Add network** at the end of the available network list:
4. Enter the Network SSID (Wi-Fi network name). For secure Wi-Fi network connections, tap **None** under **Security**, and then select the type of security protocol required from the pop-up menu. Enter any additional security information required by the type of security protocol selected.

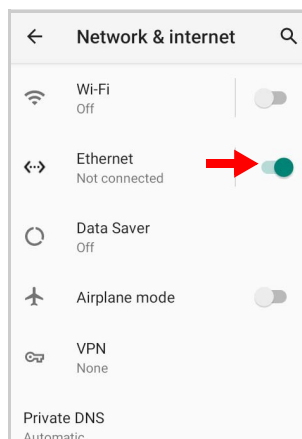


5. Tap **Save**.

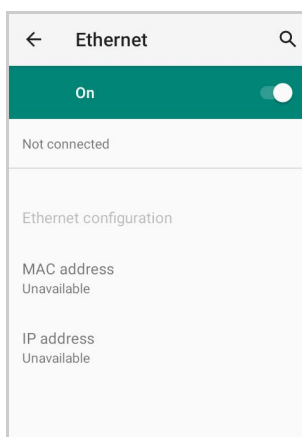
## Ethernet

Use the 3 Slot Dock Wired to connect your device to an Ethernet network (see "[Ethernet Connection](#)" on page 96).

To enable ethernet communication, tap **Settings** > **Network & Internet** > **Ethernet** and switch right to the **On** position.



Tap **Ethernet** to display the MAC address and the IP address:



Tap **Ethernet configuration** to configure the ethernet settings.

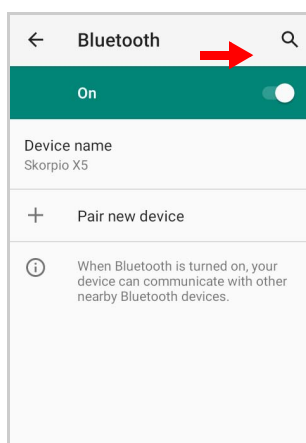
## CONNECTED DEVICES

### Bluetooth Settings

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 operable range.

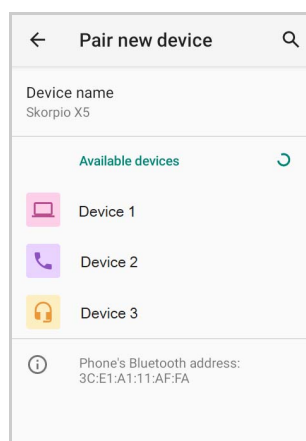
#### Enable Bluetooth®

1. To turn on the Bluetooth®, tap **Settings > Connected Devices > Connection preferences > Bluetooth** and switch right to the **Bluetooth On** position.

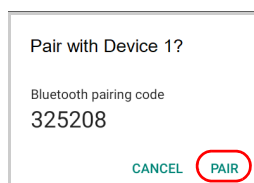


#### Connect to Other Bluetooth® Devices

1. Tap **Pair new device**. The device automatically starts searching for discoverable devices.



2. Swipe up the list and select a device. The **Bluetooth pairing request** dialog box displays on the screen:

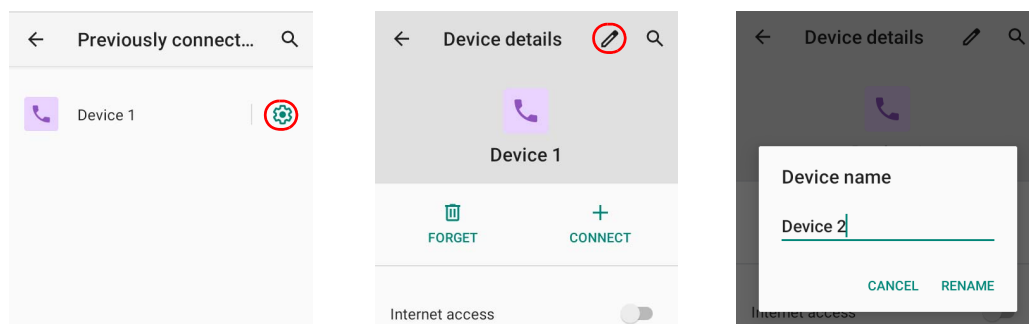


3. Make sure both devices show the same passkey and tap **Pair**.
4. The selected Bluetooth® device is added to the **Previously connected devices** list and a paired connection is established.

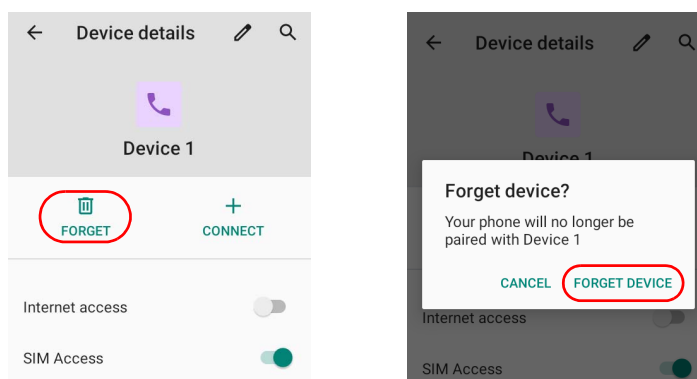
## Configure, Rename or Unpair Bluetooth® Devices

Tap **Settings > Connected devices > Previously connected devices**.

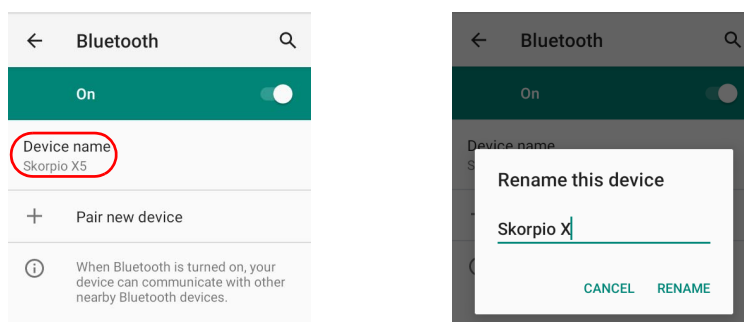
Select a device and tap the settings icon next to its name. The **Device Details** window displays on the screen. Type the **Edit** icon to rename the paired device.



Tap **FORGET** to unpair:



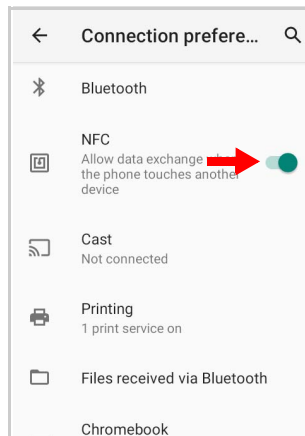
To rename your device, tap **Device name**. Type in the new name.



Tap **Rename** to confirm.

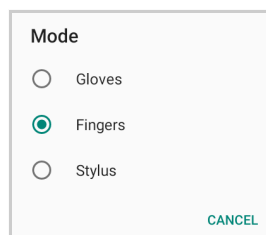
## NFC

To enable enable short-range wireless data exchange, tap **Settings > Connected Devices > Connection preferences** and switch right to the On position.



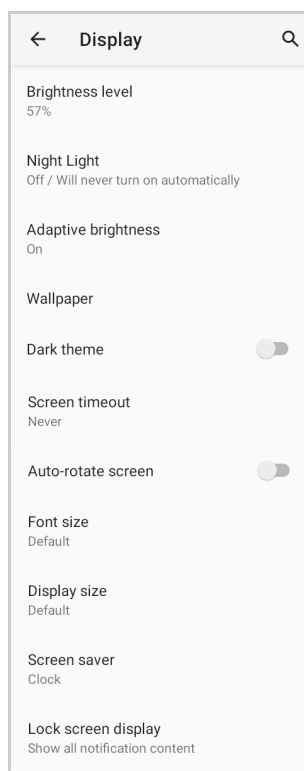
## TOUCH MODE

Adjusts touch-screen sensitivity for input with a bare, a gloved finger or a stylus.



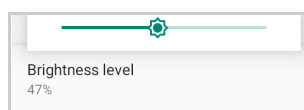
## DISPLAY

Use the Display settings to set the screen brightness and theme, enable night light, change the background image and the screensaver, enable screen rotation, set display and font size.



### Brightness Level

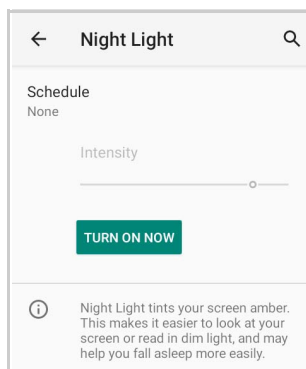
Use the slider to adjust the screen brightness level.





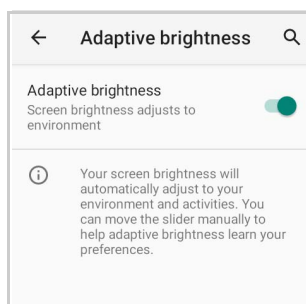
## Night Light

Tap to enable Night Light and adjust its intensity.



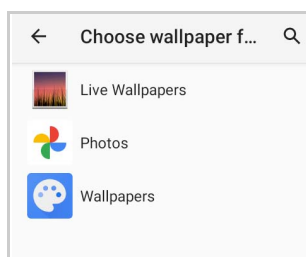
## Adaptive Brightness

If enabled, your screen brightness will automatically adjust to your environment.



## Wallpaper

Tap to select a wallpaper.



## Dark Theme

Tap to enable black background.

## Screen Timeout

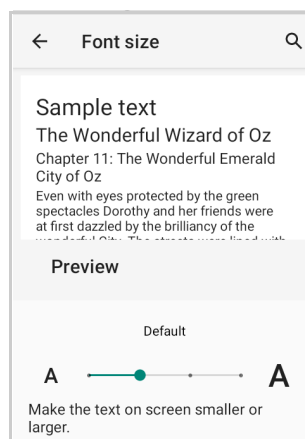
Tap to set the suspend timeout (see "[Suspend Timeout](#)" on page 52).

## Auto-Rotate Screen

Enables/disables screen auto-rotation.

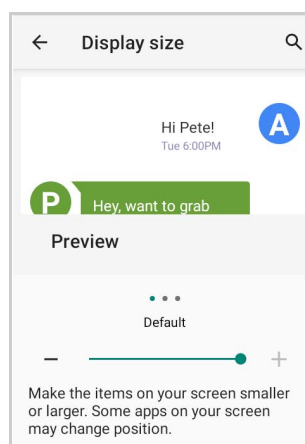
## Font Size

Tap to set the size of the font.



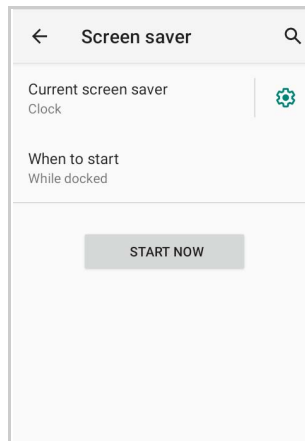
## Display Size

Tap to set the size of the items on your screen.



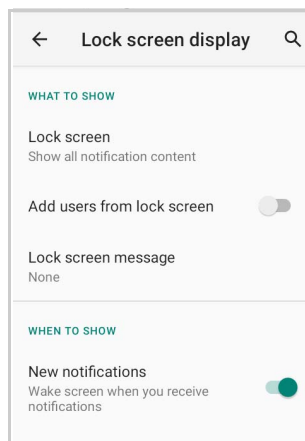
## Screen Saver

Tap to select the screen saver, set the style (**Analog** or **Digital**) and time (**When to start**), or enable the **Night mode**.



## Lock Screen Display

Tap to customize your lock screen.



## RECOVERY MODE

Recovery is an independent, runtime environment that's included on a separate bootable partition from the main Android OS. It contains tools to help repair your installations as well as install official OS updates by using a combination of key presses. Its main purpose is to reset the device, wipe data or perform system updates when the system crashes and the screen is unresponsive.

To enter boot menu:

1. Turn off the Skorpion X5 (see “Long Press Power Menu” on page 21).
2. Press the power key and the right trigger simultaneously.
3. The device turns on and the **Recovery Mode** screen appears.



4. Use the right/left triggers to navigate the menu. You can apply/force updates and perform a configuration reset. Press the power key to select.
5. Select **Reboot system now**. The device reboot is complete.



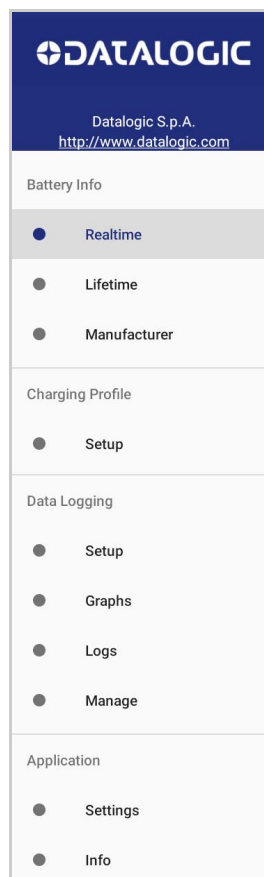
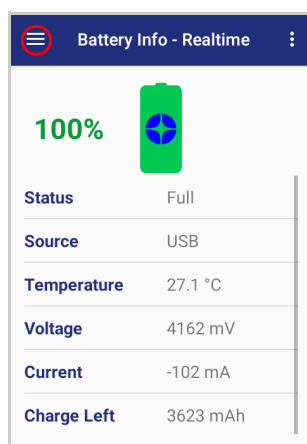
**NOTE: In Recovery mode, you can only apply updates from external storage (see “Local Upgrade” on page 60).**

# DATALOGIC APPLICATIONS

## BATTERY MANAGER

This application provides information about the battery features and status, allows to configure the battery charging profile and to log battery data.

Tap **All Apps > Battery Manager** icon, then tap the menu icon on the top left corner of the screen, or swipe right to display the menu.

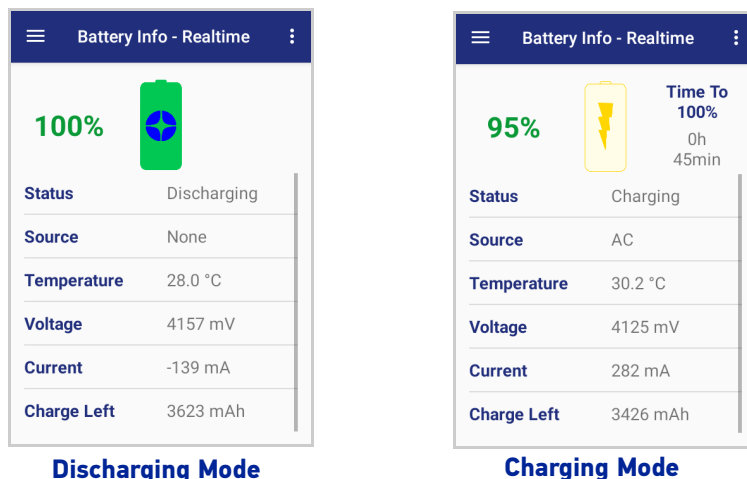


# Battery Info

The **Battery Info** section provides information about the battery's health, capacity, manufacturer, level and charging status.

## Battery Info - Realtime

This window provides real-time information about the battery.



The top section shows the battery level and the time left to full discharge (when in discharge mode) and to full charge (when in charge mode).

### Status

Displays the charging status.

### Source

Displays the charging source.

### Temperature

Displays the real-time temperature.

### Voltage

Displays the real-time voltage.

### Current


Displays the real-time current.

### Charge Left

Shows how much battery power is left.

## Battery Info - Lifetime

This window displays information and statistics about battery life, health and usage over its whole life cycle.

Battery Info - Lifetime	
HEALTH GOOD	STATE OF HEALTH 100%
	
Total Discharge	0.0 Ah
Full Charge	3623 mAh
Temperature	min = -19.0 °C max = 34.0 °C
Voltage	min = 0 mV max = 4207 mV
Charge Current	max = 1526 mA
Discharge Current	max = 4458 mA

### Health

Shows the current battery health and warns potential errors.

### State of Health

Shows the current battery's health level.

### Total Discharge

Shows how much the battery has been used over its whole life cycle.

### Full Charge

Shows the actual maximum capacity available to the user.

### Temperature

Shows the maximum and minimum temperature reached by the battery.

### Voltage

Shows the maximum and minimum voltage reached by the battery.

### Charge Current

Shows the maximum charge current.

### Discharge Current

Shows the maximum discharge current.

## Battery Info - Manufacturer

This window displays the model name, the type, the nominal capacity, the serial number, the product number and the manufacture date of the battery.



<b>Model</b>	BY-07
<b>Technology</b>	Li-ion
<b>Cell Capacity</b>	3460 mAh
<b>Product Number</b>	126000701
<b>Serial Number</b>	GS200500408
<b>Manufacture Date</b>	05-20



# Charging Profile

## Charging Profile - Setup

This window allows to customize the charging process according to the user's needs and priorities.

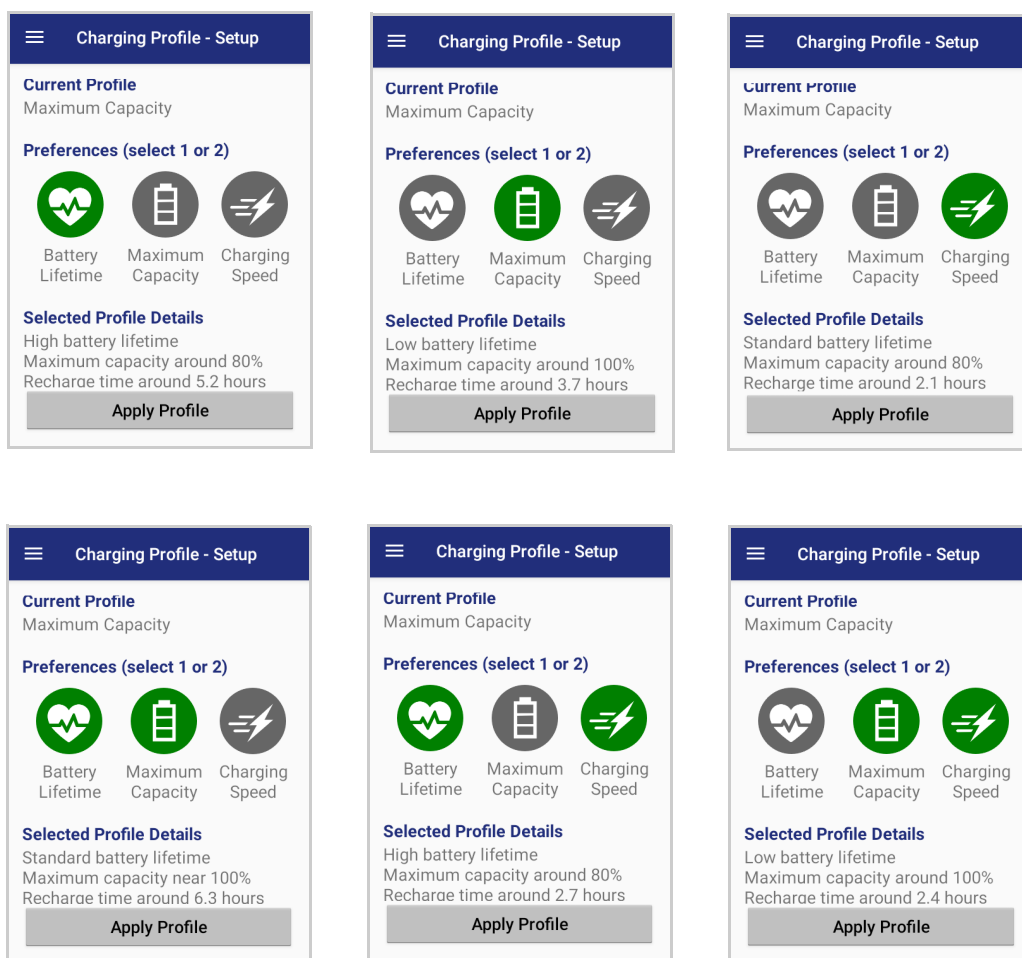
To configure a charging profile, select 1 or 2 of the following preferences:

- Battery Lifetime.
- Maximum Capacity.
- Charging Speed.

If a third preference is selected, the system will automatically clear the oldest option.

Tap **Apply Profile** to confirm.

You can configure up to 6 different charging profiles:



Once you have set your profile, it will be applied by default whenever you charge the device.



**NOTE: The selected profile is saved into the battery memory. When the battery is changed, the device load the current profile from the new battery.**

You can change your profile at any time, even during charging.

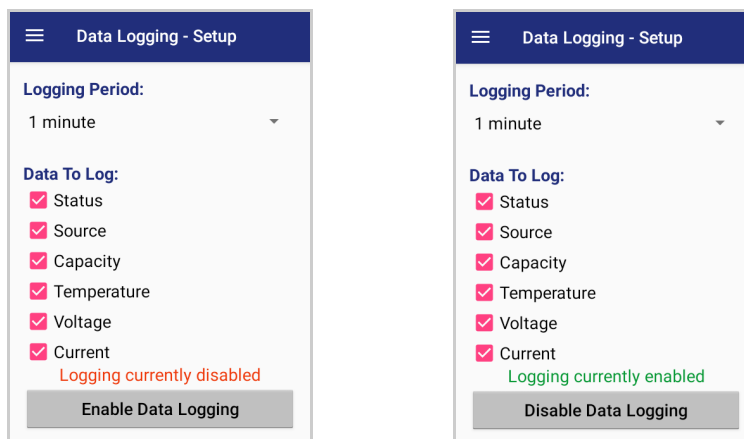
# Data Logging

The data logging feature allows to collect, store, display and analyze minute-by-minute battery data.

## Setup

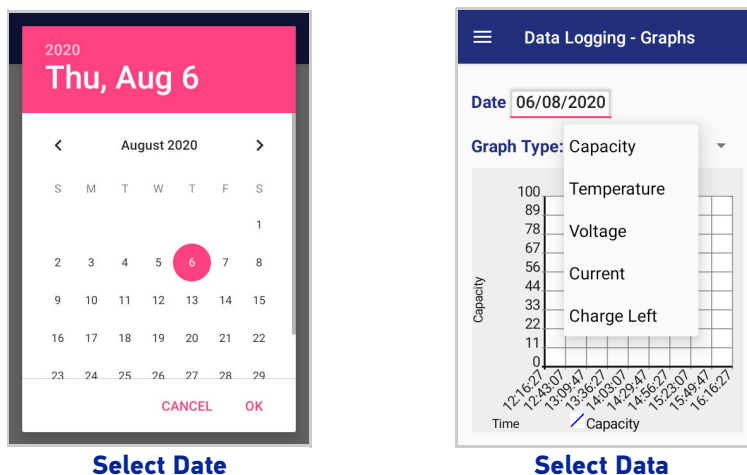
Use the **Setup** window to select the data you want to log.

The data logging is disabled by default. To enable it, tap **Enable Data Logging**. When enabled, the log is always running, even when the device is in suspend mode.



## Graphs

The **Graphs** window provides a graphical display of selected data on a specific date.



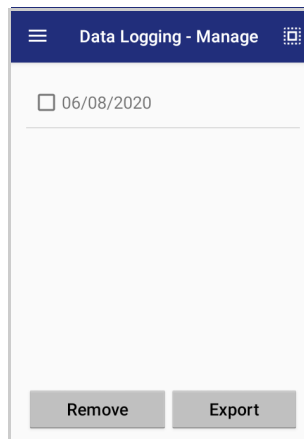
## Logs

The **Logs** window displays data details by date.

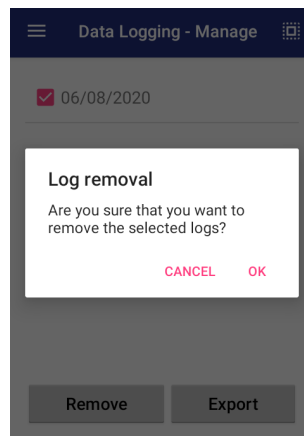
Data Logging - Logs		
Date: 06/08/2020		
Date	Status	Source %
16:13:35	FULL (GOOD)	AC 100
16:16:27	FULL (GOOD)	AC 100
16:17:22	FULL (GOOD)	AC 100
16:18:22	FULL (GOOD)	AC 100
16:19:22	FULL (GOOD)	AC 100

## Manage

The **Manage** window allows to remove or export logs.



Select one or more logs and tap **Remove** to remove them. Tap **OK** to confirm:



Select one or more logs and tap **Export** to export data and store them for extended periods.

The selected log files will be saved in the "battery" folder in the internal storage of your device.

# Application

## Settings

The **Settings** section allows to set the value ranges that will be used to create the graphs.

Application - Settings

Graph Time (hours)

Graph Capacity  -

Graph Temperature  -

Graph Voltage  -

Graph Current  -

Graph Charge Left  -

☒ Show Wireless Pad Notification

If you charge the Skorpion X5 with a wireless charging pad, you're not allowed to customize the charging profile.

If the **Show Wireless Pad Notification** check box is selected, the system displays a warning message saying that the charging profile won't be applied.

**Show Wireless Pad Notification** is enabled by default. To disable it, clear the **Show Wireless Pad Notification** check box.

## Info

The **Info** section displays information about the device name and the software version.

Application - Info

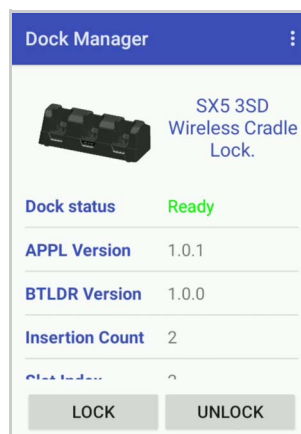
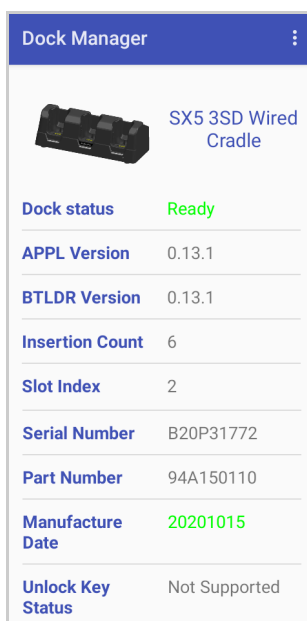
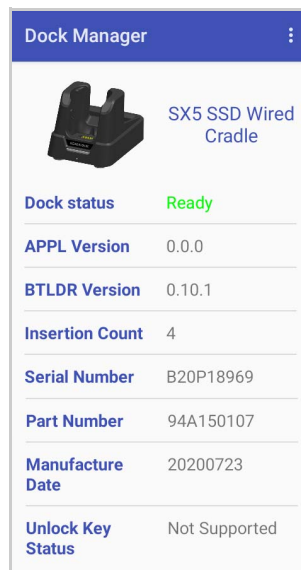
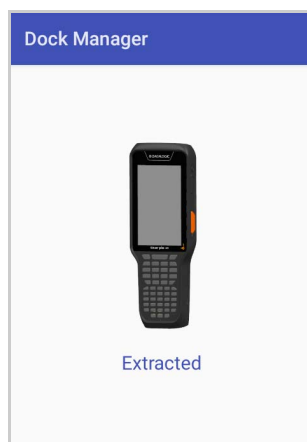
**Device Name**  
Skorpion X5

**Application Version**  
1.5.0

# DOCK MANAGER

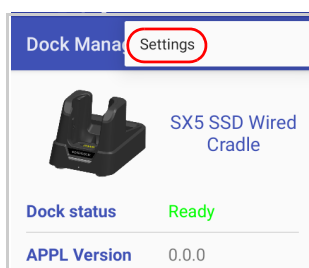
This application provides information about the cradle you're currently using and allows to enable/disable some of its properties.

Below are some screenshots showing different cradle options:



If the Skorpion X5 is inserted into the 3 Slot Dock WLC Locking, you can unlock and lock the device without using the unlock key, by tapping the **UNLOCK** and **LOCK** buttons.

In addition, you have further details and options. Tap the menu icon on the right top of the screen to access the **Settings** menu:



# Settings

Settings
Unlock timeout [s] 5
Set slot ID 10e1
Behavior on unlock Led On
Favourite cradle source power 15 Watt
Enable cradle failures

## Unlock Timeout

You can set the time available to the user to remove the cradle after tapping the **UNLOCK** button. Tap **Unlock timeout [s]** to set your desired unlock timeout (5 by 5 seconds):

Unlock timeout [s]  
5

5

CANCEL OK

## Set Slot ID

Allows to change the ID of the slot where your device is inserted.

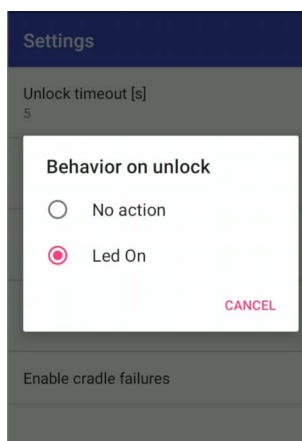
Settings

Set slot ID  
14

14

CANCEL OK

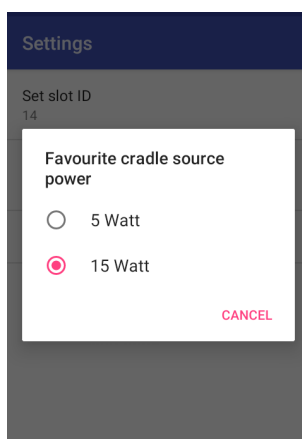
## Behavior on Unlock



If **Led On** is selected, the dock bottom LED illuminates solid green anytime you unlock the device. It is enabled by default.

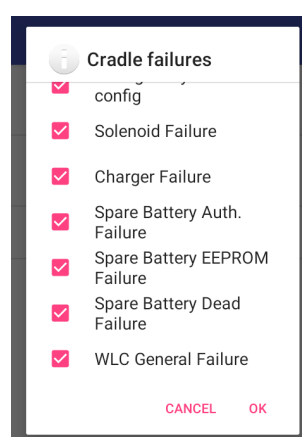
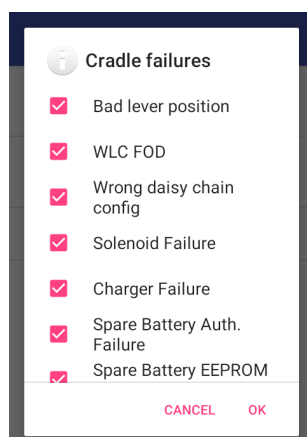
## Favorite Cradle Source Power

Allows to select the charging mode (standard or fast).



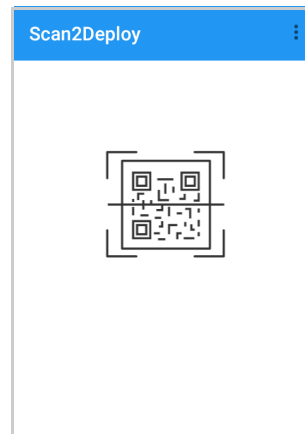
## Enable Cradle Failures

In case of a failure notification, it displays the reason of the failure (see the dock's Quick Start Guide for more details).



## SCAN2DEPLOY

Scan2Deploy is a configuration tool that uses special barcode labels.



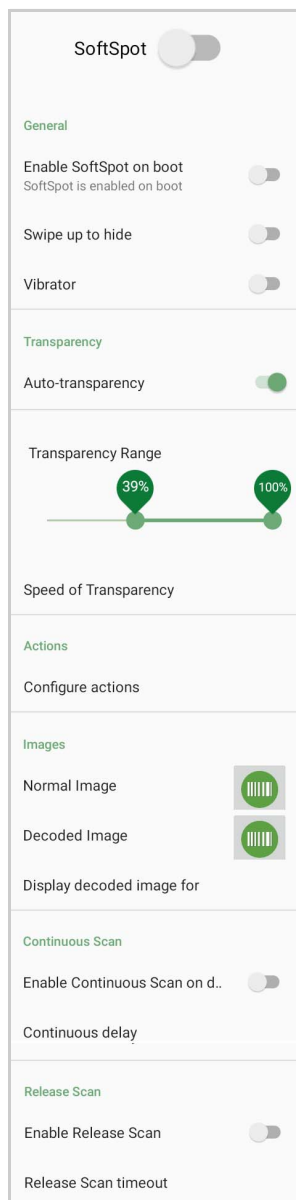
For more details, visit the website: <https://datalogic.github.io/scan2deploy>.



# SOFTSPOT™

Datalogic's SoftSpot technology is a user-definable "floating soft trigger" meant to provide easy access to the barcode scanner application and other frequently used functionalities on mobile scanning devices.

Tap the SoftSpot icon on the favorites tray or on the All Apps screen to launch SoftSpot:



Tap the SoftSpot to scan barcodes.

## SoftSpot

Enables the SoftSpot.

## Enable SoftSpot on boot

Enables SoftSpot on boot.

## Swipe to hide

If enabled, it allows to hide the SoftSpot from the screen by swiping it up in the Notification/Status bar.

## Vibrator

Enables the vibrator.

## Auto-transparency

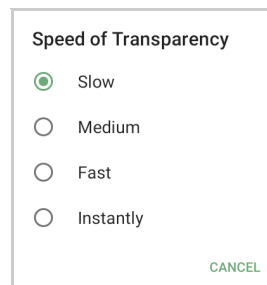
If enabled, the SoftSpot turns transparent automatically when it is not used.

## Transparency Range

Sets the SoftSpot transparency level when it is used or when the auto-transparency feature is not enabled.


## Speed of transparency

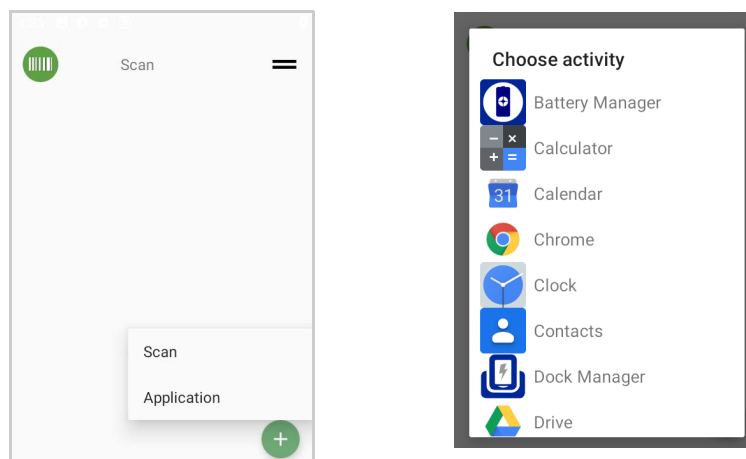
Sets the lapse of time it takes for the SoftSpot to turn transparent.



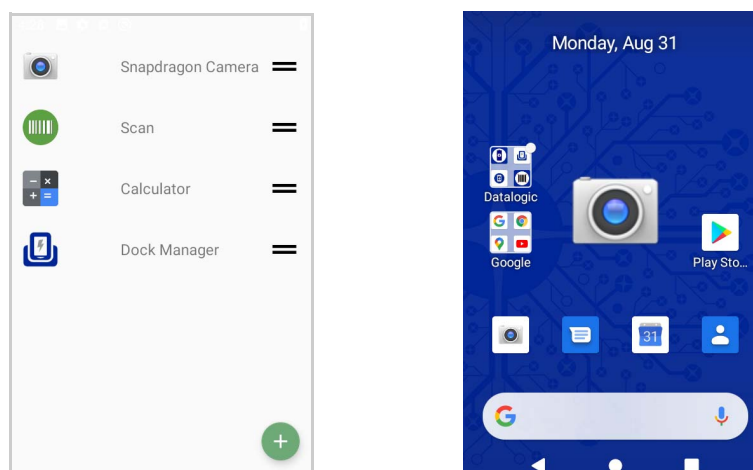
## Actions

You can use SoftSpot to quickly switch between the applications you actively use.

Tap **Configure actions** >  > **Application** to add the applications you want to launch with SoftSpot.



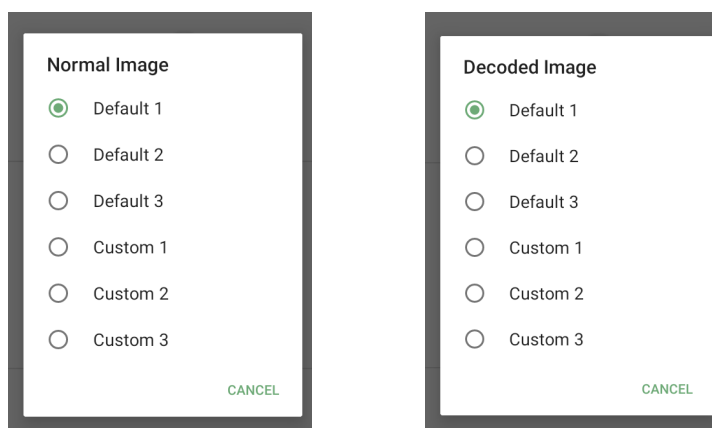
Only one action is active at a given moment. Tap the SoftSpot to launch the application. You can switch between actions by swiping left and right on the SoftSpot.



To remove an application from the actions list, tap and swipe right.

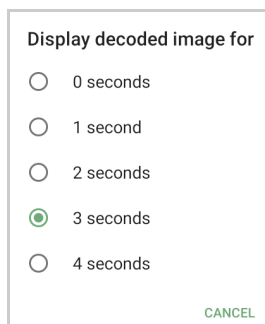
## Images

Tap **Normal Image** and/or **Decoded Image** to change the SoftSpot images. You have six options: three default images and three custom images.



## Display Decoded Image For

Sets the duration of the decoded image.



## Enable Continuous Scan on Double Tap

To enable the Continuous Scan mode and scan barcodes consecutively, switch right and then double-tap the SoftSpot. Tap one more time to stop laser emission.

### Continuous Delay

Allows to set the continuous delay time.

Continuous delay

☒ 500 ms
 ☐ 1 second
 ☐ 2 seconds
 ☐ 3 seconds
 ☐ 4 seconds
 ☐ 5 seconds

CANCEL

## Enable Release Scan

Scanning takes place after the scan button is released. Tap Release scan timeout to set the scanning timeout after releasing the scan button:

Release Scan timeout

☒ 2 seconds
 ☐ 3 seconds
 ☐ 4 seconds
 ☐ 5 seconds
 ☐ 6 seconds
 ☐ 7 seconds
 ☐ 8 seconds

CANCEL

## SUREFOX

Businesses require use of browsers to run web applications on devices with Android and there may be situations when controlled web access for the users is required to ensure appropriate use of the devices.

**SureFox** creates locked browsing environment in your devices with Android making them apt for deployments as public web kiosks or as field devices for your mobile workforce. You can specify the websites that you wish to allow. **SureFox** will then block all other websites and allow the users to browse the allowed websites in locked down kiosk mode.

A Datalogic Standard version of **SureFox** is preloaded on the Skorpion X5. You have the option to upgrade to the Advanced version by contacting 42Gears: <http://www.42gears.com/contact.html>.

Refer to the [SureFox Documentation for Android](#) on the 42Gears website for further details on **SureFox**.

## SURELOCK

With **SureLock** you can secure and lock the Skorpion X5 to ensure its responsible usage, improve productivity and reduce maintenance cost.

It allows access to only required applications and prevents the users from making any intended or unintended changes in the device. Only administrators can access the password protected settings to either modify lockdown configurations or exit the lockdown.

A Datalogic Standard version of **SureLock** is preloaded on the Skorpion X5. You have the option to upgrade to the Advanced version by contacting 42Gears: <http://www.42gears.com/contact.html>.

Refer to the [SureLock Documentation for Android](#) on the 42Gears website for further details on **SureLock**.

# TOOLS

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Refer to the Datalogic Mobile Computers Software Tools main page to find more detailed and up-to-date information: <https://datalogic.github.io/>.

## USB ADB DRIVER

USB connection allows to read and write files on both the internal storage memory and the external storage memory, but doesn't allow to install applications.

Android Debug Bridge (ADB) is a command-line utility included with Google's Android SDK and you can use it to control your device over USB from a computer, copy files back and forth, install and uninstall apps and run shell commands.

## SDK ADD-ON

SDK add-on is a library which extends the Android SDK and development tools.

For more information and instructions to install SDK Add-on, Android™ Studio and Android SDK, visit the website <https://datalogic.github.io/android/overview>.

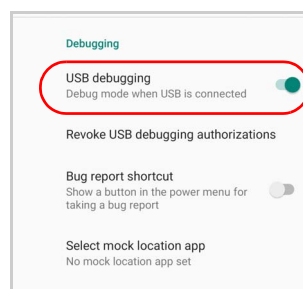
## Install ADB Driver

1. Download and install the Google USB Driver (see <https://developer.android.com> for further information).



**NOTE: Before installing the Google USB Driver, ensure you have installed the Datalogic plug-in.**

2. In order to use ADB with your device connected over USB, you must enable USB debugging in the device system settings. To enable Android **Developer options**, go to **Settings > System > About phone** and tap on the **Build Number** section 7 times. After the 7th tap, the Developer options will be unlocked and available. Go back to **Settings > System > Advanced** and tap **Developer options**. Enable **USB debugging**:



## Create a New Application based on Datalogic SDK Add-on with Android Studio

For information and instructions to configure Datalogic SDK Add-on in Android Studio, refer to the website:

<https://datalogic.github.io/android/overview>.

## DATALOGIC SDK

For information on the Datalogic SDK APIs, visit the web site: <https://datalogic.github.io/android/overview>.

## DATALOGIC OEMCONFIG

OEMConfig is a new Android standard that enables device manufacturers to create custom device features that can be immediately and universally supported by enterprise mobility management (EMM platforms). Instead of integrating enterprise APIs from each OEM to support their custom features such as control of barcode scanners or enabling extra security features, EMMs can easily use an OEM-built application that configures all of the unique capabilities of a device.

OEMConfig utilizes a feature in Android Enterprise called managed configurations, which allows developers to provide built-in support for the configuration of apps. With OEMConfig, EMMs can support all of a device manufacturer's diverse set of controls without any incremental development work on their end.

For more details, visit the website: <https://datalogic.github.io/oemconfig>.

## WI-FI QR CODE GENERATOR

Allows to generate a QR code that will automatically connect your device to a Wi-Fi network when scanned.

For more details, visit the website: <https://datalogic.github.io/wifiqr>.

# DATA CAPTURE

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The Skorpion X5 has an integrated imager that collects data by scanning bar codes.

See "[Scanner Settings](#)" on [page 40](#) for instructions on configuring the scanner settings.

## IMAGER DATA CAPTURE

The imager uses digital camera technology to take a digital picture of a bar code, the image is stored in memory and software decoding algorithms are executed to extract the data from the image.

To scan a bar code symbol:

1. Point the scan window at the bar code.
2. Press one of the scan triggers. The imager projects a laser aiming pattern that is used to position the barcode or object within the field of view.
3. Center the symbol in any orientation within the aiming pattern. Ensure the entire symbol is within the rectangular area formed by the brackets in the aiming pattern, then either wait for the timeout or release the Scan Key to capture the image. A red beam illuminates the symbol, which is captured and decoded.



If the scan has been successful:

- If enabled, the good read beep plays.
- If enabled, the GreenSpot projects a green spot onto the bar code image.
- If enabled, the good read indicator positioned at the top left side of the display glows solid green.

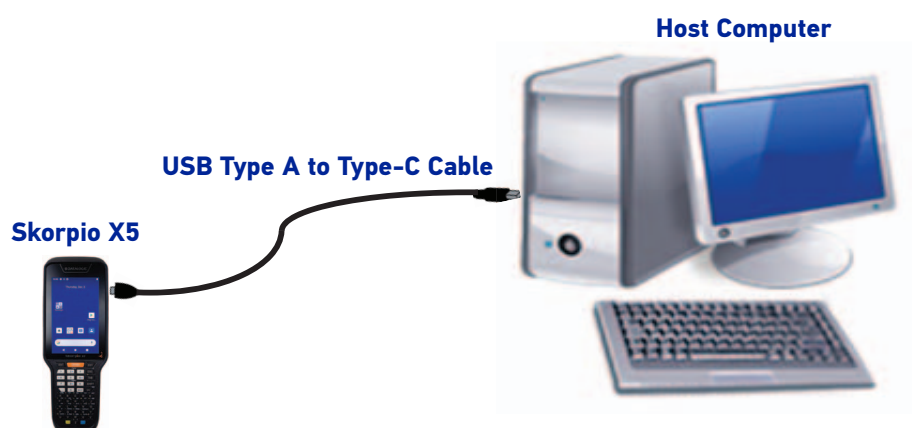


# CONNECTIONS

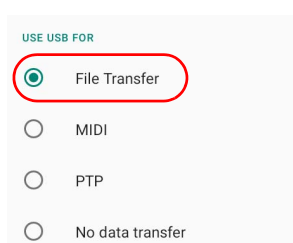
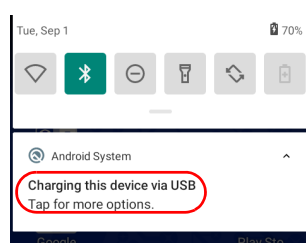
## USB CONNECTION

### USB Direct Connection

You can use the provided USB Type A to Type-C cable to directly connect the Skorpio X5 to a host computer and transfer data through the USB interface.



1. Turn on the Skorpio X5.
2. Turn on the host computer.
3. Connect the device to the host PC via USB cable.
4. Scroll down the notification bar, tap the charging notification and change to **Transfer files**.



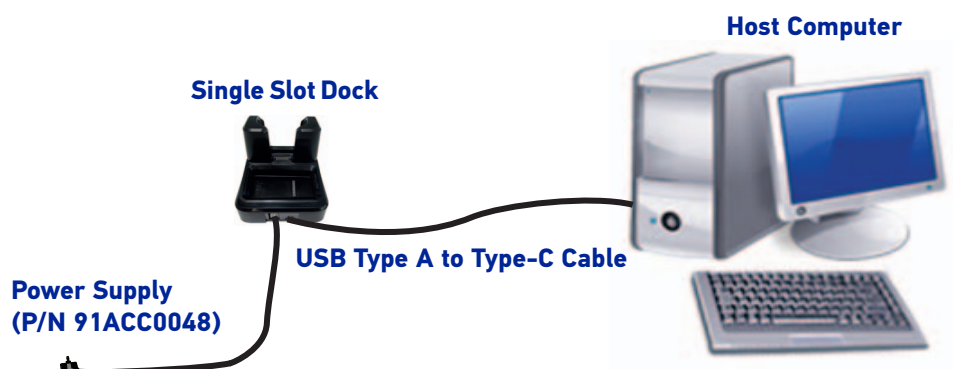
5. The device is now visible in your PC as a USB disk. You can start the data transfer.



**NOTE: Connection through the cable complies to USB 3.1 standard.**

## USB Dock Connection

1. Turn on the host computer.
2. Connect the single slot dock full to the power supply (available as an accessory, p/n 91ACC0048).
3. Connect the single slot dock full to the host computer by means of a standard USB Type A to Type-C cable.
4. Turn on the Skorpion X5.
5. Insert the Skorpion X5 into the dock.



**NOTE:** When the device is inserted into the dock, all ongoing USB connections shall be kept until the corresponding port is unplugged.

## ETHERNET CONNECTION

Use the 3 Slot Dock Wired to build a reading system for the collection, decoding and transmission of barcoded data.

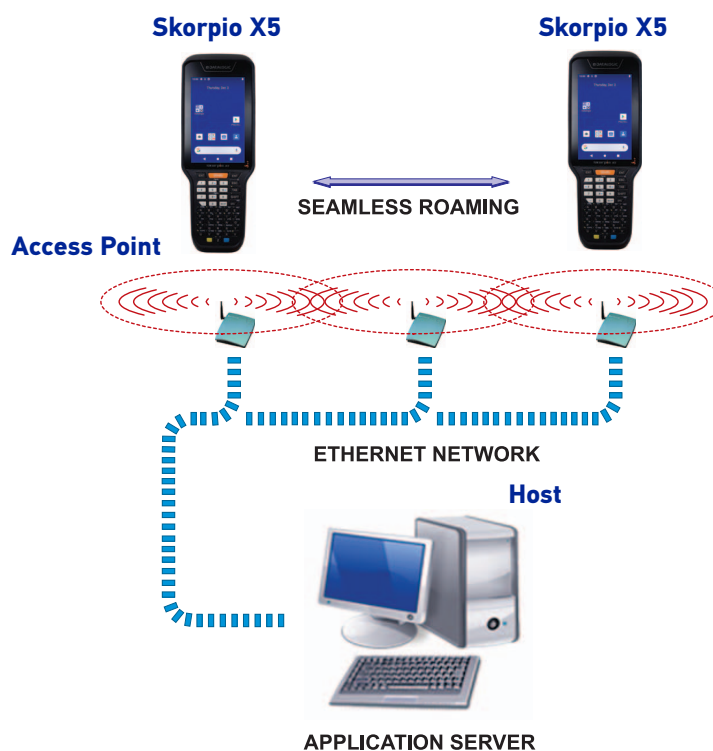
### Ethernet Dock Connection

1. Connect the 3 Slot Dock to the power supply (available as optional accessory, p/n 91ACC0048).
2. Plug a Cat.5E or higher ethernet cable into the ethernet port on the back of the dock.
3. Plug the ethernet cable into the ethernet hub or a port on the host device.
4. Turn on the Skorpion X5.
5. Enable ethernet communication (see "[Ethernet](#)" on page 65).
6. Insert the Skorpion X5 into the dock.



## WI-FI CONNECTION

The Skorpio X5 has a IEEE 802.11 a/b/g/n/ac and 802.11 d/e/h/i/k/r/v/w/mc WLAN (Wireless Local Area Network) radio and can communicate with other IEEE 802.11 a/b/g/n/ac and 802.11 d/e/h/i/k/r/v/w/mc Wi-Fi compliant products including access points, workstations via PC card adapters and other wireless portable devices.



**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.).

## BLUETOOTH® SERIAL CONNECTION

The Skorpio X5 can communicate with a Bluetooth® device, such as a printer, within a range of 10 m, using the on-board Bluetooth® module.



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

## NEAR FIELD COMMUNICATION (NFC)

NFC technology allows short-range, wireless data transfer between the terminal and NFC tags or other NFC enabled devices placed in close proximity to the back of the terminal.

Skorpio X5 support the following modes of operation:

- NFC tag reader/writer mode: the terminal reads and/or writes digital information from or to an NFC tag.
- Peer-to-Peer (P2P) mode: the terminal uses Android Beam and/or Bluetooth® technology to transfer screen content (e.g., a picture, web page url, or file) between NFC enabled devices.
- NFC card emulation mode - The terminal emulates an NFC card (smart card) that an external card reader can access.

### Read NFC Tags

1. Make sure NFC is enabled (see "NFC" on page 68).
2. Hold the NFC tag close to the back of the terminal.
3. When an NFC tag is recognized, the terminal emits a sound and the tag data displays on the terminal screen.



**NOTE:** Suspend mode and the screen lock temporarily turns the NFC radio off.

## WIRELESS AND RADIO FREQUENCIES WARNINGS



**WARNING:** Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against the RF signals generated by Skorpion X5.

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.

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.

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.

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.

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.

# TECHNICAL FEATURES

## TECHNICAL DATA

Physical Characteristics	
Dimensions	Front size: 218 x 78,5 mm / 6.69 x 3.14 in Thickness Max 31.3 Head; Max 35.6 WLC coil area and hand strap area
Weight	Handheld: with Std. battery 488 g, with high capacity battery 514 g; Pistol: with Std. battery 600 g, with high capacity battery 626 g
Display	4.3 inch TFT / Transflective LCD with 800x480 WVGA pixel resolution; LED backlight and integrated touch screen, High brightness for Indoor and Outdoor High Visibility
Keyboard	47-key alphanumeric, 38-key function numeric, 28-key numeric. Keyboard with backlight
Touch Panel	Touch Screen: 6 points multi-touch capacitive panel with hardened Gorilla Glass 3; Support for gloves and stylus
Electrical	
Battery	Removable battery pack with rechargeable Li-Ion batteries; USB type-C for fast battery charging. Standard: 3.7 V; Rated 3460mAh typical 3500mAh (12.8 Watt-hours); standard on all handheld models Extended: Rated 6080 mAh typical 6200mAh (22.1 Watt-hours); standard on all Pistol Grip models
Wireless Charging	15W fast charging
Sensors	
Inertial measurement unit	6-DoF MEMS accelerometer and gyroscope
eCompass	3-DoF Hall-effect magnetometer
Ambient Light	Auto adjusts display backlight
Proximity	Presentation Mode sensor for 2D models only (based on ToF)
Vibration	Software programmable for duration and intensity
Interfaces	
Interfaces	USB Type-C: USB 3.1 gen 1 (3.2 gen 1x1), host and device; Gigabit Ethernet connectivity (via 3-slot dock)


<b>Environmental</b>	
Drop Resistance	Withstands multiple drops from 1.8 m / 6.0 ft onto concrete according to IEC62-2-32
Tumbles	Withstands 1000 from 1 m / 3.3 ft, 2000 hits
Particulate and Water Sealing	IP65
Chemical Resistance	Chemical cleanser and industrial oil resistant
Temperature	Operating: -20 to 50 °C / -4 to 122 °F Storage/Transport: -30 to 70 °C / -22 to 158 °F
Electrostatic Discharge (ESD)	+/- 15kV air discharge, +/-8kV contact discharge
<b>Wireless Communications</b>	
Local Area Network (WLAN)	IEEE 802.11 a/b/g/n/ac and 802.11 d/e/h/i/k/r/v/w/mc (for indoor localization); IPv4, IPv6, 2x2 MU-MIMO for higher throughput and coverage Frequency range: Country dependent, typically 2.4 GHz and 5 GHz bands;
Personal Area Network (WPAN)	Class 2, Bluetooth V5.0 with BR/EDR and Bluetooth Low Energy (BLE) Support
NFC Communication	Support for the following standards: ISO14443-4 (type-A, type-B); ISO15693; Mifare; Felica
Type of DFS	Slave (Not supporting hotspot function)
<b>System</b>	
Memory	RAM Memory: 3 / 4 GB; Flash Memory: 32/64 GB (partially used for firmware and reserved data)
Microprocessor	Qualcomm SD660 Octa-core 2.2 GHz
Operating System	Android 10 with GMS – 2 Main OS Upgrade Support
Audio	Wideband Speech (HD Audio) supported on Android
Expansion Slots	Micro Secure Digital slot (SDXC) up to 256 GB
<b>Decoding Capability</b>	
1D/Linear Codes	Codabar, Code 128, GS1-128, ISBT 128, Code 39, Code 93, Discrete 2 of 5, UPC/EAN, GS1 DataBar™ linear codes, Interleaved 2 of 5, Matrix 2 of 5, MS
2D Codes (DE2112-SR DE2112-MR)	Aztec Code, Data Matrix, Maxi Code, Micro QR Code, QR Code
Postal Codes (DE2112-SR DE2112-MR)	Australian Post, Japan Post, KIX Code, PLANET, POST-NET, Royal Mail Code (RM4SCC), USPS Intelligent Mail
Stacked Codes (DE2112-SR DE2112-MR)	Micro-PDF417, PDF417, GS1 DataBar Expanded Stacked, GS1 DataBar Stacked, GS1 DataBar Stacked Omnidirectional UPC/EAN/JAN Composites, GS1 DataBar Composites and GS1-128 Composite



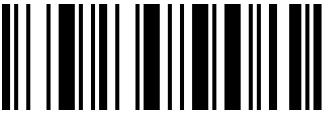






Reading Performance	
Camera	Rear Camera: Resolution: 13MP; Illumination: User controllable LED flash;
Scan Engine	<p><b>1D Imager</b>; Linear CCD 2500 pixels; Sharp green LED scan line. Print contrast minimum: 15%. Optical Resolution: 2.5 mils (linear codes) Depth of Field (typical): 4.0 to 74 cm / 1.5 to 29.1 in (13 mil/ EAN)</p> <p><b>2D Imager Standard Range</b> (supports 1D / 2D codes); White LED Illumination, laser aim 650nm; Print contrast minimum: 25%; Optical Resolution: 1D codes: 3 mils; 2D codes: 7.5 mils (DM), 6.6 mils (PDF); Depth of Field (typical): 4.5 to 74 cm / 1.7 to 29.1 in (13 mil/EAN); 6.5 to 40 cm / 2.5 to 15.7 in (15 mil/DM)</p> <p><b>2D Imager Mid Range</b>: White LED Illumination; Print contrast minimum: 25%; Optical Resolution: 1D codes: 3 mils; 2D codes: 7.5 mils (DM), 6.6 mils (PDF) Depth of Field (typical): 8.0 to 100 cm / 3.1 to 31.4 in (13 mil/EAN); up to 160 cm / up to 63 in (55 mil/DM)</p>
Software	
Applications	Pre-licensed device and browser lockdown powered by 42Gears; Datalogic WiFi Guard; compatible with enterprise class PTT by Zello; Datalogic's SoftSpot soft triggers
Provisioning	Scan2Deploy Studio, Android Zero-Touch, QR Code enrollment
Configuration and Maintenance	Scan2Deploy Studio, OEMConfig
Software Maintenance	Datalogic Shield: recurring security patches, firmware updates, and OS upgrades
Development	Android: Datalogic Android SDK, Xamarin SDK, Ionic Cordova SDK and React Native SDK
MDM	SOTI MobiControl, VMWare AirWatch, Ivanti Avalanche, 42Gears SureMDM, Microsoft Intune
Terminal Emulation	StayLinked SmartTE, Ivanti Velocity
Safety & Regulatory	
Agency Approvals	The product meets necessary safety and regulatory approvals for its intended use
Environmental Compliance	Complies to EU RoHS Directive 2011/65/EU
Laser Classification	VLD - Class 2 IEC/EN60825-1; Compliant with 21 CFR 1040.10 except for deviations pursuant to laser notice No. 50 dated June 24, 2007
Led Classification	Exempt Risk Group IEC/EN62471
Warranty	
Warranty	1-Year Factory Warranty



# TEST CODES

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High Density Codes - 0.25 mm (10 mils)	
Code 39	 17162
Interleaved 2/5	 0123456784
Code 128	 test
80% EAN 13	 8 012345 000012
80% EAN 8	 6450 9723

Medium Density Codes - 0.38 mm (15 mils)	
Code 39	 17162
Interleaved 2/5	 0123456784
Code 128	 test
100% EAN 13	 8 012345 000012
100% EAN 8	 6450 9723

Low Density Codes - 0.50 mm (20 mils)	
Code 39	 17162
Interleaved 2/5	 0123456784
Code 128	 test
120% EAN 13	 8 012345 000012
120% EAN 8	 6450 9723

2D Codes
<p>Datamatrix ECC200</p>  <p>Example</p>
<p>Inverse Datamatrix ECC200</p>  <p>Example</p>

# MAINTENANCE

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**CAUTION:** Do not apply any sticker to the Skorpion X5.



## CLEANING

Periodically clean the Skorpion X5 device using a soft cloth slightly dampened with only water or Isopropyl Alcohol (70%).

Do not use any other cleaning agents (e.g. different alcohol, abrasive or corrosive products, solvents) or abrasive pads to clean the device.

Periodically clean the side guides:



## ERGONOMIC RECOMMENDATIONS



**CAUTION:** In order to avoid or minimize the potential risk of ergonomic injury follow the recommendations below. Consult with your local Health & Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.

- Reduce or eliminate repetitive motion
- Maintain a natural position
- Reduce or eliminate excessive force
- Keep objects that are used frequently within easy reach
- Perform tasks at correct heights
- Reduce or eliminate vibration
- Reduce or eliminate direct pressure
- Provide adjustable workstations
- Provide adequate clearance
- Provide a suitable working environment
- Improve work procedures.

# SAFETY AND REGULATORY INFORMATION

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**NOTE:** Read this manual carefully before performing any type of connection to the Skorpion X5.

The user is responsible for any damage caused by incorrect use of the equipment or by inobservance of the indication supplied in the user manual.

## GENERAL SAFETY RULES

- Before using the device and the battery pack, read carefully the chapter [Battery](#).
- Use only the components and accessories supplied by the manufacturer for the specific Skorpion X5 being used.
- Do not attempt to disassemble the Skorpion X5 device, 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 Skorpion X5 device, disposal must be performed in compliance with the laws in force in your jurisdiction.
- Do not submerge the Skorpion X5 in liquid products.
- For further information or support, refer to this manual and to the Datalogic web site: [www.datalogic.com](http://www.datalogic.com).




**NOTE:** See the [Safety & Regulatory Addendum](#) included with your product for additional regulatory, safety and legal information.

# TECHNICAL SUPPORT

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## 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)).

For quick access, from the home page click on the search icon , and type in the name of the product you're looking for. This allows you access to download Data Sheets, Manuals, Software & Utilities, and Drawings.

Hover over the Support & Service menu for access to Services and Technical Support.

## Reseller Technical Support

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

## REFERENCE DOCUMENTATION

For further information regarding Skorpio X5 refer to the SDK Help on-line and to the Skorpio X5 User's Manual, downloadable from our developer portal:  
<https://developer.datalogic.com/mobile-computers>.

## WARRANTY TERMS AND CONDITIONS

Datalogic warrants that the Products shall be free from defects in materials and workmanship under normal and proper use during the Warranty Period. Products are sold on the basis of specifications applicable at the time of manufacture and Datalogic has no obligation to modify or update Products once sold. The Warranty Period shall be **one year** from the date of shipment by Datalogic, unless otherwise agreed in an applicable writing by Datalogic.

Datalogic will not be liable under the warranty if the Product has been exposed or subjected to any: (1) maintenance, repair, installation, handling, packaging, transportation, storage, operation or use that is improper or otherwise not in compliance with Datalogic's instruction; (2) Product alteration, modification or repair by anyone other than Datalogic or those specifically authorized by Datalogic; (3) accident, contamination, foreign object damage, abuse, neglect or negligence after shipment to Buyer; (4) damage caused by failure of a Datalogic-supplied product not under warranty or by any hardware or software not supplied by Datalogic; (5) any device on which the warranty void seal has been altered, tampered with, or is missing; (6) any defect or damage caused by natural or man-made disaster such as but not limited to fire, water damage, floods, other natural disasters, vandalism or abusive events that would cause internal and external component damage or destruction of the whole unit, consumable items; (7) use of counterfeit or replacement parts that are neither manufactured nor approved by Datalogic for use in Datalogic-manufactured Products; (8) any damage or malfunctioning caused by non-restoring action as for example firmware or software upgrades, software or hardware reconfigurations etc.; (9) loss of data; (10) any consumable or equivalent (e.g. cables, power



supply, batteries, etc.); or (11) any device on which the serial number is missing or not recognizable.

THE DATALOGIC WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. DATALOGIC SHALL NOT BE LIABLE FOR ANY DAMAGES SUSTAINED BY BUYER ARISING FROM DELAYS IN THE REPLACEMENT OR REPAIR OF PRODUCTS UNDER THE ABOVE. THE REMEDY SET FORTH IN THE WARRANTY STATEMENT IS THE BUYER'S SOLE AND EXCLUSIVE REMEDY FOR WARRANTY CLAIMS. NO EXTENSION OF THIS WARRANTY WILL BE BINDING UPON DATALOGIC UNLESS SET FORTH IN WRITING AND SIGNED BY DATALOGIC'S AUTHORIZED REPRESENTATIVE. DATALOGIC'S LIABILITY FOR DAMAGES ON ACCOUNT OF A CLAIMED DEFECT IN ANY PRODUCT DELIVERED BY DATALOGIC SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE PRODUCT ON WHICH THE CLAIM IS BASED. DATALOGIC SHALL NOT BE LIABLE FOR DAMAGES RELATING TO ANY INSTRUMENT, EQUIPMENT, OR APPARATUS WITH WHICH THE PRODUCT SOLD UNDER THIS AGREEMENT IS USED. Further details on warranty coverage, rights and conditions are addressed under and regulated by the Terms and Conditions of Sales of Datalogic available at [https://www.datalogic.com/terms\\_conditions\\_sales](https://www.datalogic.com/terms_conditions_sales).

# 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.

## AER (Android Enterprise Recommended)

Android Enterprise Recommended (AER) it's a shortlist of devices and service providers that meet Google's strict enterprise requirements. It helps ensure devices are up to date with regular security patches delivered within 90 days.

## ASCII

American Standard Code for Information Interchange. A 7 bit-plus-parity code representing 128 letters, numerals, punctuation marks and control characters. It is a standard data transmission code in the U.S.

## 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.

## 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).

## Boot

The process a computer goes through when it starts. During boot, the computer can run self-diagnostic tests and configure hardware and software.

## 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.

### **CDRH**

Center for Devices and Radiological Health. A federal agency responsible for regulating laser product safety. This agency specifies various laser operation classes based on power output during operation.

### **Character**

A pattern of bars and spaces which either directly represents data or indicates a control function, such as a number, letter, punctuation mark, or communications control contained in a message.

### **Decode**

To recognize a barcode symbology (e.g., Codabar, Code 128, Code 3 of 9, UPC/EAN, etc.) and convert the content of the barcode scanned from a visual pattern into electronic data.

### **Density (Barcode Density)**

The number of characters represented per unit of measurement (e.g., characters per inch).

### **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.

### **Dock**

A dock is used for charging the terminal battery and for communicating with a host computer, and provides a storage place for the terminal when not in use.

### **ESD**

Electro-Static Discharge

### **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**

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 Memory**

Non-volatile memory for storing application and configuration files.

### **Google Mobile Services (GMS)**

Google Mobile Services (GMS) are the apps by Google that often come pre-installed on Android devices. GMS is not a part of the Android Open Source Project (AOSP), which

means an Android manufacturer needs to obtain a license from Google in order to legally pre-install GMS on an Android device. This license is provided by Google without any license fees.

### 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.

### IEC

International Electrotechnical Commission. This international agency regulates laser safety by specifying various laser operation classes based on power output during operation.

### 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.

### IP

Internet Protocol. The IP part of the TCP/IP communications protocol. IP implements the network layer (layer 3) of the protocol, which contains a network address and is used to route a message to a different network or subnetwork. IP accepts "packets" from the layer 4 transport protocol (TCP or UDP), adds its own header to it and delivers a "datagram" to the layer 2 data link protocol. It may also break the packet into fragments to support the maximum transmission unit (MTU) of the network.

### IP Address

(Internet Protocol address) The address of a computer attached to an IP network. Every client and server station must have a unique IP address. A 32-bit address used by a computer on a IP network. Client workstations have either a permanent address or one that is dynamically assigned to them each session. IP addresses are written as four sets of numbers separated by periods; for example, 204.171.64.2.

### LAN

Local area network. A radio network that supports data communication within a local area, such as within a warehouse of building.

### Laser

Light Amplification by Stimulated Emission of Radiation. The laser is an intense light source. Light from a laser is all the same frequency, unlike the output of an incandescent bulb. Laser light is typically coherent and has a high energy density.

### Laser Diode

A gallium-arsenide semiconductor type of laser connected to a power source to generate a laser beam. This laser type is a compact source of coherent light.

### 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.

### **MIL**

1 mil = 1 thousandth of an inch.

### **Near-Field Communication (NFC)**

A form of contactless communication two electronic devices over a distance of 4 cm (1 1/2 in) or less. Contactless communication allows a user to wave a device over a NFC compatible device to send information without needing to touch the devices together or go through multiple steps setting up a connection.

### **Pairing**

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

### **Parameter**

A variable that can have different values assigned to it.

### **RAM**

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

### **Resolution**

The narrowest element dimension which is distinguished by a particular reading device or printed with a particular device or method.

### **RF**

Radio Frequency.

### **ROM**

Read-Only Memory. Data stored in ROM cannot be changed or removed.

### **Scanner**

An electronic device used to scan bar code symbols and produce a digitized pattern that corresponds to the bars and spaces of the symbol. Its three main components are:

- Light source (laser or photoelectric cell) - illuminates a bar code.
- Photodetector - registers the difference in reflected light (more light reflected from spaces).
- Signal conditioning circuit - transforms optical detector output into a digitized bar pattern.

### **SDK**

Software Development Kit.

### **Subnet**

A subset of nodes on a network that are serviced by the same router.

### **Symbol**

A scannable unit that encodes data within the conventions of a certain symbology, usually including start/stop characters, quiet zones, data characters and check characters.

### Symbology

The structural rules and conventions for representing data within a particular bar code type (e.g. UPC/EAN, Code 39, PDF417, etc.).

### 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).

### Visible Laser Diode (VLD)

A solid state device which produces visible laser light.

### 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.

# NOTES

# NOTES



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