DATALOGIC Skorpio X5 Rugged Mobile Computer User Manual

SKORPIOTM X5
SAFETY & REGULATORY ADDENDUM

Rugged Mobile Computer with 1D/2D Imager

This document is an addendum to the Quick Start Guide (QSG) for this product. See the QSG for additional product information.

www.datalogic.com

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NOTE: Read carefully the Skorpio X5 User Manual (available at **www.datalogic.com**) before performing any type of connection to the Skorpio 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.

Contents

GENERAL SAFETY RULES

 CAUTION:

- Before using the devices and the battery packs, read this Addendum carefully.
- Use only the components and accessories supplied by the manufacturer for the specific Skorpio X5 being used.
- Do not attempt to disassemble the Skorpio 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 Skorpio X5 device, disposal must be performed in compliance with the laws in force in your jurisdiction.
- Do not submerge the Skorpio X5 in liquid products.
- For further information or support, refer to the Datalogic web site: **www.datalogic.com**.

POWER SUPPLY

The device is intended to be supplied by a self-contained rechargeable Lithium Ion battery pack (UL recognized LPS/PS2/SELV power source) and/or by UL Listed Power Unit LPS/PS2/SELV power source which supplies power directly to the unit via the micro USB connector of the cable. The device could be also used with Certified Accessories (Dock/Cradle). The Dock/Cradle accessories are intended to be supplied by a UL Listed Power Unit LPS/PS2/SELV which supplies power via the power connector of the cable. Any changes or modifications to equipment, not expressly approved by Datalogic could void the user's authority to operate the equipment.

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.

By default, the main battery pack is disconnected at the factory to avoid damage due to excessive draining.
The rechargeable battery pack is less than half of full charge when delivered. Charge the battery pack as indicated in the Quick Start Guide or in the User Manual, before using the Skorpio X5.
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 Skorpio X5 and the spare batteries should be charged at 0°C – 40°C (32°F 104°F) ambient temperature range, in order to achieve the maximum charging rate. 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 Skorpio 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.

CAUTION: Do not use or leave the product close to heat sources as fire or heater. The device must operate in it's 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 colour 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 shortcircuiting 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). Shortcircuiting 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.

WARNING: Do not disassemble or modify (i.e. bend, crush or deform) the battery pack. The battery pack contains safety and protection devices, which, if damaged, may cause the battery pack to generate heat, explode or ignite. In case of leakage of liquid from the battery, avoid contact with liquid the skin or eyes. If the contact occurs, immediately wash the affected area with water and consult a doctor.

Do not solder directly onto the battery pack.

Do not expose the battery pack to liquids.

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

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 Authorised Repair Centre. 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. 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.

WIRELESS AND RADIO FREQUENCIES WARNINGS

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

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

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

Do not store or carry flammable liquids, explosive gases or materials with the device or its parts or accessories. Areas with a potentially explosive atmosphere are often, but not always, clearly marked or shown. Sparks in such areas could cause an explosion or fire, resulting in injury or even death.

LASER SAFETY

The following information applies to Laser Aiming System, used on Skorpio X5 variants with 2D imager. The laser radiation is visible to the human eye and is emitted from the window indicated in the figure below.

LASER RADIATION – DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT
MAX OUTPUT RADIATION 1 mW
COMPLIANT WITH EN 60825-1 (2007) and EN 60825-1 (2014)

NOTE: The artwork below may be only a draft. Please refer to the label attached to the product for information about certification marks.

The following information is provided to comply with the rules imposed by international authorities and refers to the correct use of your device. STANDARD LASER SAFETY REGULATIONS

This product conforms to the applicable requirements of both CDRH 21 CFR 1040.10, CFR 1040.11 and EN 60825-1 at the date of manufacture.

For installation, use and maintenance, it is not necessary to open the device.

WARNING: Do not attempt to open or otherwise service any components in the optics cavity. Opening or servicing any part of the optics cavity by unauthorized personnel may violate laser safety regulations. The optics system is a factory only repair item. Use of controls or adjustments or performance of procedures other than those specified herein may result in exposure to hazardous visible laser light. Use of optical systems with the scanner will increase eye hazard. Optical instruments include binoculars, microscopes, eye glasses and magnifying glasses.

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

LED CLASS

LED illuminators integrated in the 1D and 2D imager are classified as "EXEMPT RISK GROUP" according to IEC62471.

MARKING AND EUROPEAN ECONOMIC AREA (EEA)

In radio systems configured with mobile computers and access points, the frequencies to be used must be allowed by the spectrum authorities of the specific country in which the installation takes place. Be absolutely sure that the system frequencies are correctly set to be compliant with the spectrum requirements of the country. The Radio modules used in this product automatically adapt to the frequencies set by the system and do not require any parameter settings.

Statement of Compliance

Hereby, Datalogic S.r.l. declares that the radio equipment type SKORPIO X5 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: **www.datalogic.com**.

RADIO TECHNOLOGIES AND FREQUENCY BANDS (EUROPE)

Radio Technology	Frequency Band	Maximum Transmitted Power
WrFi	2400 — 2472 MHz	19.96 dBm (EIRP)
	5150 — 5350 MHz	22.77 dBm (EIRP)
	5470 — 5725MHz	22.93 dBm (EIRP)
Bluetooth	2400 — 2483.5 MHz	6.44 dBm (EIRP)
RFID/NFC	13.56 MHz	-6,89 dBuAim at 10m

This device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.						
AT	BE	BG	HR	CY	CZ	DK
EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL
PT	RO	SK	SI	ES	SE	UK
IS	LI	NO	CH	TR		

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

Information for the User

At the end of its useful life, the product marked with the crossed out wheeled wastebin must be disposed of separately from urban waste. For more detailed information about disposal, contact the supplier that provided you with the product in question or consult the dedicated section at the website **http://www.datalogic.com**.

FCC/IC LABELING

Handheld Variants	Pistol Grip Variants
FCC ID: U4GSX5WB IC: 3862E-SX5WB HVIN: SX5 WB HH WR	FCC ID: U4GSX5WB IC: 3862E-SX5WB HVIN: SX5 WB GUN WR

FCC COMPLIANCE

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1)this device may not cause harmful interference, and (2)this device must accept any interference received, including interference that may cause undesired operation.

NOTICE:

This device is restricted to indoor use when operated in the 5.15 to 5.25 GHz frequency range. Changes or modifications made to this equipment not expressly approved by Datalogic S.r.l. may void the FCC authorization to operate this equipment.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off

and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter expect those approved under the filing. For product available in the USA/Canada market, only channel 1~11 WLAN 2.4 GHz can be operated. No additional channels are supported in WLAN 2.4 GHz.

Federal Communication Commission (FCC) Radiation Exposure Statement
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance.

ISED COMPLIANCE

NOTICE:
This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

CAUTION
(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to cochannel mobile satellite systems;
(ii) high-power radars are allocated as primary users (i.e. priority users) of the bands 52505350MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

RADIO TECHNOLOGIES AND FREQUENCY BANDS (USA AND CANADA)

Radio Technology	Frequency Band
WiFi	2400 – 2462 MHz
	5150 – 5350 MHz
	5470 – 5725MHz
	5.735— 5.825 MHz
Bluetooth	2400 – 2483.5 MHz
RFID/NFC	13.56 MHz

RADIO FREQUENCY EXPOSURE INFORMATION

The SKORPIO X5 is designed to be held by the End User hands and carried close to the End User body only using the belt holster accessory.

⚠️ **CAUTION:** The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

CE SAR COMPLIANCE

The Skorpio X5 complies with CE SAR limits for general population/uncontrolled exposure specified in Council Recommendation 1999/519/EC, ICNIRP Guidelines and RED (Directive 2014/53/ EU).

CE SAR Values

- Body-worn= 0,242 W/Kg at 10g (for body-worn use the device must be properly held in the Datalogic genuine holster)
- Limbs=0,712 W/Kg at 10g

The Skorpio X5 has been tested for handheld and typical body-worn use (0mm distance from the body, using a belt holster), according to EN 50360:2017, EN50566:2017, EN 62311: 2020, EN 50665:2017, EN 62479:2010, EN 50663:2017 and EN 62209-2:2010.

In order to meet the CE SAR Compliance, only genuine Datalogic Skorpio X5 Belt Holster must be used. The use of third-party holsters (or similar accessories) may not comply with CE SAR compliance requirements, thus should be avoided.

The genuine Datalogic belt holster must be properly worn, so that the Skorpio X5 faces to the end user body its front (display) side or its back (battery) side. Refer to **https://www.datalogic.com** for Skorpio X5 genuine holster and accessories.

FCC/ISED SAR COMPLIANCE

The Skorpio X5 complies with the FCC SAR limits specified in the FCC 47 CFR part2 (2.1093) and ANSI/IEEE C95.1-1992, and complies with the ISED SAR limits specified in ISED RSS-102 Issue 5 (2015).

FCC/ ISED SAR Values

- Body-worn= 1,19 W/Kg at 1g (for body-worn use the device must be properly held in the Datalogic genuine holster)
- Limbs=1,98 W/Kg at 10g

The Skorpio X5 has been tested for handheld and typical body-worn use (0mm distance from the body, using a belt holster), according to the specific SAR testing method referred at the Display Exhibits section of **https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm**, filling the FCC IDs specified in the FCC/IC labeling section of this Addendum.

In order to meet the FCC/ISED SAR Compliance, only genuine Datalogic Skorpio X5 Belt Holster must be used. The use of third-party holsters (or similar accessories) may not comply with FCC/ ISED SAR compliance requirements, thus should be avoided.

The genuine Datalogic holster must be properly worn, so that the Skorpio X5 faces to the end user body its front (display) side or its back (battery) side. Refer to **https://www.datalogic.com** for Skorpio X5 genuine holster and accessories.

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Disclaimer

Datalogic has taken reasonable measures to provide information in this manual that is complete and accurate, however, Datalogic shall not be liable for technical or editorial errors or omissions contained herein, nor for incidental or consequential damages resulting from the use of this material. Datalogic reserves the right to change any specification at any time without prior notice.

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Patents

See **www.patents.datalogic.com** for patent list.

Skorpio X5 – 1D Imager

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

Design patents: EP002696088, USD805078, USD830362, ZL201530439997.6

Utility patents: EP1797521B1, EP2649555B1, IT1396943, US10204248, US6808114, US6997385, US7387246, US7506816, US8888003, ZL201080071124.9.

Skorpio X5 – 2D Imager This product is covered by one or more of the following patents:

Design patents: EP002421560, USD737822, USD779491, ZL201430286638.7

Utility patents: EP1172756B1, EP1804089B1, EP1825417B1, EP1828957B1, EP2315156B1, EP2517148B1, EP2649555B1, IT1396943, JP5192390B2, US6808114, US6877664, US6997385, US7234641, US7387246, US7721966, US8113430, US8245926, US8561906, US8888003, US8915443, US9430689, US9798948, ZL200680050007.8, ZL200980163411.X, ZL201080071124.9.

CLEANING INSTRUCTIONS

Periodically clean the Skorpio 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.

Documents / Resources

	DATALOGIC Skorpio X5 Rugged Mobile Computer [pdf] User Manual SX5WB, U4GSX5WB, Skorpio X5 Rugged Mobile Computer, Skorpio X5, Rugged Mobile Computer

References

- ◎ **Logic.com ™**
- ◎ **datalogic**
- ✪ **Datalogic | Automatic Data Capture and Process Automation - Datalogic**

- 🌐 **Patents - Datalogic**
- 🔶 **System Maintenance | Federal Communications Commission**
- 🔷 **Datalogic | Automatic Data Capture and Process Automation - Datalogic**

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