EN

SimPad PLUS
Link Box PLUS

Important Product Information

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helping save lives

Read these instructions thoroughly before connecting the equipment to the power source. Observe all warnings, precautions and instructions on the SimPad PLUS, in the User Guide and in this Important Product Information booklet. Retain this booklet for future reference.

These declarations also apply when using the following manikins in conjunction with SimPad PLUS system:

- MegaCode Kelly Advanced
- Megacode Kelly Basic ECG Only
- Megacode Kid Advanced
- Megacode Kid Basic ECG Only
- Nursing Anne
- Nursing Kid
- Nursing Baby
- Resusci Anne QCPR
- Resusci Baby QCPR
- Resusci Anne Simulator
- Resusci Anne Advanced Skill Trainer
- Premature Anne
- SimMan ALS

⚠ Warnings and Cautions

A Warning states a condition, hazard, or unsafe practice that can result in serious personal injury or death.

A Caution states a condition, hazard, or unsafe practice that can result in minor personal injury or damage to the manikin.

Operating Conditions

Water and Moisture

⚠ Cautions

- *Do not operate the device under or near water - for example near a bathtub, kitchen sink, or laundry tub, in a wet basement, near a swimming pool or in other areas with high humidity.*
- *Never install jacks for communication cables in wet locations.*
- *Do not operate the product with wet hands.*

Lightning

Never use this device, or connect/ disconnect communication cables or power cables during lightning storms.

Dust

Do not operate the device in areas with a high concentration of dust.

Cleaning and Maintenance

Cleaning

- Unplug the device from communication lines, mains power outlet or any power source before cleaning or polishing.
- Do not use liquid cleaners or aerosol cleaners. Use a lint-free cloth lightly moistened with water for cleaning the exterior of the device.

Servicing

Refer all servicing to qualified service personnel.

⚠ Warnings

- *Do not attempt to service the device yourself. Opening or removing covers may expose you to dangerous voltages or other hazards, and will void the warranty.*

WiFi Connections

Please ensure that your settings of the device adhere to any regional restrictions on the use of WiFi channels.

Accessories

- Use only accessories specified by the manufacturer, or sold with the apparatus.
- The RJ-45 jack should not be used for telephone line connection.

Internal Battery Pack in SimPad PLUS

⚠ Cautions

- *Use only the SimPad battery with SimPad PLUS.*
- *Do not expose to high temperatures, such as in direct sunlight or in a car parked in the sun.*
- *Only charge SimPad PLUS using the supplied battery charger or a recommended charging device that can charge the battery.*
- *Dispose of used battery pack promptly and according to local legislations.*
- *Do not dispose of in water.*

⚠ Warnings

- *Do not disassemble, crush, puncture, or short external contacts and do not allow metal objects to come into contact with the battery terminals.*
- *Do not try to repair the battery, it may cause an explosion.*
- *Do not incinerate or dispose of in fire, the battery may explode or release toxic materials.*
- *Risk of explosion if battery is replaced by an incorrect type.*
- *If the internal battery pack in SimPad PLUS is mishandled, it can burst, cause a fire or even chemical burns.*

Power Connection and Hazardous Voltage

⚠ Cautions

- *Never attempt to open this product, or any peripherals connected to it, if this action requires a tool.*
- *If any parts of the product have visual damage, never attempt to connect main power, or any other power source, before consulting service personnel.*
- *Route the power cord to avoid it being walked on or pinched by items placed upon or against it. Pay particular attention to the plugs, receptacles and the point where the cord exits from the device.*
- *Do not tug the power cord.*

⚠ Warnings

- *The product or its accessories may have a hazardous voltage inside.*
- *The product should always be powered from an earthed power outlet.*
- *If the provided plug does not fit into your outlet, consult an electrician.*

US

Federal Communications Commission (FCC) Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

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.
- Consult the dealer or an experienced radio/TV technician for help.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

SimPad PLUS
FCC ID : QHQ-20430150

Link Box PLUS
FCC ID : QHQ-20430250

⚠ Cautions

- *This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter*
- *Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.*

The use of shielded I/O cables is required when connecting this equipment to any and all optional peripheral or host devices. Failure to do so may violate FCC rules.

For Portable Device Usage (<20cm from body/Specific Absorption Rate (SAR) needed))

Radiation Exposure Statement:

This device meets the government's requirements for exposure to radio waves.

This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the FCC of the U.S. Government.

The exposure standard for wireless device employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.

For Country Code Selection Usage (WLAN Devices)

Notes

- *The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.*

- *Changes or modifications not covered in this manual must be approved in writing by the manufacturer's Regulatory Engineering Department. Changes or modifications made without written approval may void the user's authority to operate this equipment*

Canada

Industry Canada Rules

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 interference, and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Canadian ICES-003 Statement

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

(1) This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment.
(2) This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter, except tested built-in radios

(1) Cet équipement est conforme aux limites d'exposition aux rayonnements définies par la norme IC RSS-102 pour un environnement non contrôlé.
(2) Cet appareil et son ou ses antenne(s) ne doivent pas être placés à proximité d'un autre émetteur ou d'une autre antenne, exception faites des radios intégrées qui ont été testées.

The County Code Selection feature is disabled for products marketed in the US/ Canada.
La fonction de sélection du code de pays est désactivée pour les produits distribués aux États-Unis ou au Canada.

SimPad PLUS
IC ID: 20263-20430150

Link Box PLUS
IC ID: 20263-20430250

EU

Radio and Telecommunication Terminal Equipment (R&TTE) Directive

This product is in compliance with the essential requirements and other relevant provisions of EU Council directive 1999/5/EC.

Symbol Glossary

CE	CE Mark
Li-Ion	Li-Ion batteries should be recycled.
	Dispose of in accordance with your country's recommendations
	Australian Radiocommunications and EMC Compliance Mark
c UL us LISTED E205446 I.T.E.	UL Listed
FC	FCC Declaration of Conformity label
	Korea Certification
	Japanese MIC Certification
	Chinese Compulsory Certificate (CCC)
VCCI	Japanese Voluntary Control Council for Interference by Information Technology Equipment (VCCI)
	This Class 2 radio apparatus product employs a frequency band that is not harmonised throughout the European Community. Restrictions on the use of the apparatus may exist in one or more member states.
SN	Serial number
	Warning/Caution

IP Classification IP32

WEEE

This appliance is marked according to the European directive 2012/19/EC on Waste Electrical and Electronic Equipment (WEEE).

By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

The symbol on the product, or on the documents accompanying the product, indicates that this appliance may not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. Disposal must be carried out in accordance with local environmental regulations for waste disposal.

For more detailed information about treatment, recovery and recycling of this product, please contact your local city office, your household waste disposal service or Laerdal representative.

Warranty

Refer to the Laerdal Global Warranty for terms and conditions. For more information visit www.laerdal.com.

SimPad PLUS Specifications	
Operating temperature	0 °C to 35 °C (32 °F to 95 °F), Humidity 5 to 90% RH non-condensing
Storage temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Size	158 x 126 x 25 mm (6.22 x 4.96 x 0.98 in)
Operating Altitude	5000 m Maximum
Weight	450 g (1lb)
LCD display	High Resolution Color LCD display, 5.7 in, 480 x 640 pixels
Battery type	Li-Ion 3.7 V, capacity: 16 Wh
Battery time	3 - 4 hours continuous use with 50% display brightness
Battery charging	DC input 12V 0.7A max. USB OTG input, 5V 500 mA max
Charging time	10 – 80%, approximately 50% / hour from DC input 80% - 100%, 1 hour
Communication	WiFi 802.11 a/b/g/n 2.4G + 5GHz, Link Box PLUS Only: MIMO Bluetooth v4.0
SimPad PLUS Connections	
DC input	12V DC, 3.33 A minimum. (for power adapter*), or 7.2V DC, 4.4A (for battery)
Ethernet	RJ45 connector
USB	USB on the go input/output
Audio	3.5 mm audio jack with TRRS input. Microphone on sleeve (compatible with iPhone headset)
Link Box PLUS	
Operating temperature	0 °C to 45 °C (32 °F to 113 °F), Humidity 5 to 90% RH non-condensing
Size	140 x 90 x 30 mm (5.51 in x 3.54 in x 1.18 in)
Operating Altitude	3500 m Maximum
Weight	200 g (0.44 lb)
Communication	WiFi 802.11 b/g (2.4 - 5.0 GHz) Bluetooth
Ethernet	10/100 MB

*This product is intended to be supplied by a Listed Power Adapter. Contact Laerdal for further assistance with purchasing the power source.

Link Box PLUS Connections	
DC input	12V DC, 3.33 A minimum. (for power adapter**), or 7.2V DC, 4.4A (for battery)
Ethernet	RJ45 connector
Future	Connector for future use
Manikin	Power and signals to manikin. Pulse, sounds etc
Battery #1	Connector for Laerdal Li-Ion Battery
Blood Pressure	Cuff pressure input: 0 - 300 mm Hg
USB	USB A input / output
Audio in	3.5 mm jack with TRS input. Line in or microphone level
Audio out	3.5 mm jack with TRS output. Line out level
Battery #2	Connector for Laerdal Li-Ion Battery
Li-Ion Battery	
Battery type	Li-Ion, 4 cells
Cell type	LIC 18650-22PC
Voltage	7.2 V nominal
Capacity	4.4 Ah typical (32 Wh)
Size	98 x 78 x 28.1 mm (3.86" x 3.07" x 1.11")
Weight	270 g (0.6 lb) approximately
Battery Charging	
Charging voltage input	9 - 15V DC, 1.6 A max
Charging method	Constant Current + Constant Voltage
Constant current	1.33A typ.
Expected cycle life	700 cycles for ≥ 1400mAh (cell)
Charging time:	0 - 80%: 30% per hour 80% - 100%: 1 hour
Charging Indicator	1. The charging indicator is only active when there is a charging voltage present 2. Charging: Steady yellow light 3. Charged: Steady green light

**This product is intended to be used with a Listed Power Adapter or DC power source marked "L.P.S.". Contact Laerdal for further assistance with purchasing the power source.

For SimPad PLUS FCC ID: QHQ-20430150

Radiation Exposure Statement:

This device meets the government’s requirements for exposure to radio waves.

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

The exposure standard for wireless device employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. *Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.

For Link Box PLUS FCC ID: QHQ-20430250

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

For SimPad PLUS IC: 20263-20430150

Radiation Exposure Statement:

The product complies with the Canada portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

Déclaration d'exposition aux radiations:

Le produit est conforme aux limites d'exposition pour les appareils portables RF pour les Etats-Unis et le Canada établies pour un environnement non contrôlé.

Le produit est sûr pour un fonctionnement tel que décrit dans ce manuel. La réduction aux expositions RF peut être augmentée si l'appareil peut être conservé aussi loin que possible du corps de l'utilisateur ou que le dispositif est réglé sur la puissance de sortie la plus faible si une telle fonction est disponible.

For Link Box PLUS IC: 20263-20430250

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

For SimPad PLUS IC: 20263-20430150

For Link Box PLUS IC: 20263-20430250

Caution :

1) 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;
2) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and
3) the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.
4) the worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in Section 6.2.2(3) shall be clearly indicated.
5) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Avertissement:

1) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
2) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5250-5350 MHz et 5470-5725 MHz doit se conformer à la limite de p.i.r.e.;
3) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5725-5825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.
4) les pires angles d'inclinaison nécessaires pour rester conforme à l'exigence de la p.i.r.e. applicable au masque d'élévation, et énoncée à la section 6.2.2 3), doivent être clairement indiqués.
5) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d.,

qu’ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

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