

# ingenico

## Link/2500 LE Link/2500i LE

### User Guide



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# 1. Introduction

We hope that you will be fully satisfied with your new terminal Link 2500 (I). This terminal is available in different models. Please select by yourself in this documentation items related to your model.

Read this guide to understand and make the best use of your terminal. It presents you the necessary information about use, installation, maintenance, safety and security recommendations.



## WARRANTY / SECURITY

Use only the power supply included with the product to ensure best performance and safety. Maintenance should only be provided by Ingenico authorized technician. Failure to comply with these instructions will void the manufacturer's responsibility.



This symbol indicates an important Warning.



This symbol indicates a piece of advice.

## 2.Presentation

### 2.1 Content of the box

#### 2.1.1 Terminal

- Link/2500LE terminal unit



- A battery pack disconnected (except slim and Integration version)



- User guide

- USB Cable



#### ADVICE

Keep the packaging. It must be re-used whenever the terminal is shipped.

## 2.2 Overview of the Link/2500 LE



Terminal unit



Touch or Dual head version



Integration Version (Link/2500i LE)

2"4 LCD Display  
(Touch panel in option)

Contactless  
reader

Magnetic  
card reader  
(second head  
in option)

Smart card reader



**Compartment where are located (except slim and Integration version):**

- the battery pack
- the modules SAM1/SIM1 & SAM2/SIM2



**Compartment where are located for Dual magnetic head version :**



	Standard	Slim version	Integration version	Touch version	Dual Head version
<b>Weight</b>	155g	121g	128g	165g	168g
<b>Dimensions (L x w x h)</b>	129x70x17mm	129x70x13mm	129x70x14mm	129x70x18,4mm	129x70x19,4mm
<b>Electrical mains network</b>	100-240VAC / 50-60 Hz - Class II equipment				
<b>Connections on terminal</b>	USB C connector				



## 2.3 Keyboard details and functionality



Some keys can have other functions according to the applications that are in the terminal.



The functions key accesses the different application menus

The red key cancels the procedure in progress

The yellow key cancels the last character

The green key validates input selections and information. It is also used to switch on the terminal

## 2.4 Touch panel (option)

The Link/2500 device could be equipped with touch panel that allows you capture functions and menus by your finger or using a stylus.



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## 2.5 Dual magnetic head (option)

The Link/2500LE device could be equipped with a second magnetic head.



## 2.6 Link/2500i LE Integration version (option)



The Link/2500i LE device could be equipped with a rear connector to be used with another device such as smart phone.




## 3. Use of the terminal

### 3.1 Switching off the terminal

If the battery is empty and the terminal in use is removed from its base, the terminal automatically shuts off.

It may also be switch off by pressing simultaneously  and  (yellow key) for one second.

In order to restart the terminal, press  on the keyboard.

## 3.2 Reading card

### Magnetic stripe card

The card can be read either from right to left or left to right, with the stripe facing the terminal. Use a regular movement in order to ensure a reliable card reading.

### Option Dual magnetic head version

The card be read either from right to left or left to right, with the strip either facing or backing the terminal. Use a regular movement in order to ensure a reliable card reading.



### Smart card

- **Card reader** : insert the card horizontally with the chip facing upwards and leave in position throughout the transaction.



### Contactless

- Bring the card firmly up to the active zone. Keep the card close to the reader during the transaction
- The 4 virtual LEDs are displayed during the transaction.

The terminal behavior for the cardholder may depend on :

- The terminal environment
- Local usage (language...)



## 4. Installation

### 4.1 Recommendation

#### Location of the Link/2500LE

The terminal should be placed far from any very hot zones, protected from vibrations, dust, damp and electromagnetic radiation (computer screen, anti-theft barrier etc.).

#### Operating conditions (battery discharging)

Ambient temperature	from -10°C to +50°C
Max relative humidity	85% at +40°C

#### Battery charging conditions

Ambient temperature	from +0°C to +40°C
---------------------	--------------------

#### Storage conditions

Ambient temperature	from -20°C to +55°C
Max relative humidity	85% at +55°C

## 4.2 USB Terminal connections

### 4.2.1 USB type C

- There is an USB connector (USB type C) on the right side of the Link/2500LE Wireless terminal (see below picture). This connector manages Host and Slave connexions.
- The terminal supports USB Keys with FAT16 or FAT32
- The USB Key has to be used with an USB adapter (refers to accessories section)



**USB type C**

Connector used for PC travel charger, USB Key, etc...

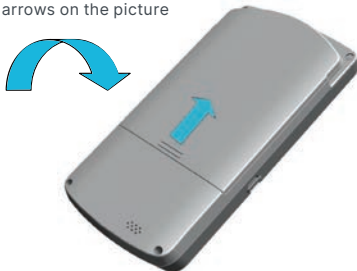
## 4.3 Opening trap door



### **CAUTION**

Switch off the terminal before opening the trapdoor.

- Turn the terminal and unclip the trapdoor by pushing on the clip with as shown with the arrows on the picture





- **Dual magnetic head option :** Turn the terminal and unclip the trapdoor by pushing on the clip with as shown with the arrows on the picture.

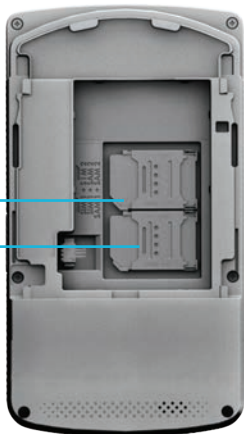
## 4.4 SAMs & SIMs

The connector modules security SAM/SIM is located inside the terminal, in a closed compartment. SAM and SIM location depend of the product. There is 3 possibilities : SIM1/SIM2 or SIM1/SAM2 or SAM1/SAM2.

- SAMs and SIMs are identified by the engraved marks on the lower housing
- When introducing a SAM/SIM in its slot, be sure to put the cut corner as indicated on the engraved marks

**SAM 2 Connector  
(Dual SIM terminals)**

**SAM 1 Connector  
(Dual SIM terminals)**



## 4.5 Battery

### 4.5.1 Main characteristics

<b>Characteristics</b>	Charge power supply 1.0A
LI-Ion 1200 mAh LI-Ion 600 mAh (for Slim and integration version)	80% capacity in 1h; full capacity in 1.5 hours

\* The battery capacity depends on the model of terminal and its use

### 4.5.2 Installing the battery (except for Slim and Integration Version)



#### WARNING

Check that the terminal is not connected to the main electric network.

- Turn your terminal and unclip the battery trapdoor by pushing on the button as shown on the picture (for Dual magnetic head option see section 4\_3)
- Disengage the trapdoor
- Take the battery pack included in the box
- Locate the battery pack connector beside the battery compartment
- Plug the battery pack connector according to the connector locating system and (as shown on picture). Verify that it locks.



- Place the battery pack in its compartment.
- Close the battery compartment trapdoor.

**Battery compartment**



### 4.5.3 Charging the battery

- When does the battery need to be charged?
  - / On initial start-up, charge the battery for 4 hours under the environmental conditions stated above
  - / When used with a terminal power supply : connect the power supply to Link/2500LE USB C connector.
- How does the battery need to be charged?
  - / The environment in which the charge takes place influences battery lifetime and autonomy (number of transactions)
  - The optimal conditions are as follows :
    - / Charging away from any external heat source (radiator, sun, enclosed area...)
    - / The optimal temperature is between +15°C and +25°C
- How can the battery be charged?

#### Using the terminal power supply

- / Connect the terminal power supply unit to the terminal type C connector located on the right side of the terminal.
- / The tolerance of the output power supply is between 6Vdc and 4.75Vdc
- / Connect the power supply unit to the power supply mains network
- / Check to see if the battery symbol is flashing or moving(=battery charging)

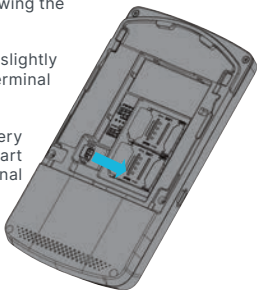


## 4.5.4 Changing the battery (except Slim and Integration version)



It is imperative to use a battery authorized by Ingenico. There is danger of explosion if battery used is not approved by Ingenico.

- Turn it off by pressing simultaneously  and  (yellow key) for about one second
- Remove the battery trapdoor (see section 4.5.2 “installing battery”)
- Lift the battery and remove it from its compartment
- Carefully disconnect battery, following the instructions below.
- Extract the connector by pulling it slightly (arrow) to bring it away from the terminal housing.
- Inform the terminal that battery will be replaced (\*). Do not start the terminal or connecting terminal power supply without battery.
- Connect and install the new battery by following the instructions in section 4.5.2 “Installing battery”
- Close the battery trapdoor and charge the new battery. See section “Charging the Battery»
- In order to preserve the environment, dispose used battery in compliance with current country recycling legislation.



(\*)The terminal memorizes that there is no battery simply by powering up. It will then correctly perform-full recharge with the next battery.



The battery disconnection must be exceptional. Battery connector durability: up to 30 mating cycles.

## 5.Recommendations

### 5.1 Safety

#### Powering down the Link/2500 LE

Disconnect the Link/2500LE power supply block adapter from the electrical mains network.

#### Lithium cell, Lithium Button Battery

The Link/2500 is fitted with a lithium battery (except slim and Integration version) and a lithium cell button battery which are not accessible to the user. Only a qualified technician may be authorized to open the unit and change these components.

For Switzerland annex 2.15 of SR 814.81 applies for batteries.



#### WARNING

- When replacing the battery, use only a battery approved by Ingenico.
- Scrapping by heating, burning, punching or crushing the battery may cause explosion.
- Maintaining a battery in a very high environment temperature may cause explosion or leakage of flammable liquid or gas.
- A battery subject to extremely low air pressure may cause explosion or leakage of flammable liquid or gas.

#### SIM1(SAM1)/SIM2(SAM2) readers' compartment

The trapdoor for battery, SIM1(SAM1)/SIM2(SAM2), readers located underneath the terminal, must be in place during the normal operation of the terminal. See sections «Removal of SAM1/SAM2/SIM, modules» as well as «Connecting the battery».

#### On airplanes

Your handset must be switched off by removing the battery pack. Remove the battery from the terminal when on an airplane. Non-compliance with these safety rules may result in legal action and/or a ban on later access to cellular network services.

#### Explosion areas

Certain regulations restrict the use of radio equipment in chemical plants, fuel depots and any site where blasting is carried out. You are urged to comply with these regulations. The terminal shall be protected by a specially fitted and certified cover enabling use in proximity to a fuel pump.

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## Electronic health appliances

Your handset is a radio transmitter which may interfere with health appliances, such as hearing aids, pacemaker, hospital equipment, etc. Your doctor or the equipment manufacturer will be able to provide you with appropriate advice.

## Frequency bands

<b>Frequencies</b>	<b>Wi-Fi</b> : 2412-2472MHz; 5150-5250MHz; 5250-5350MHz; 5470-5725MHz; 5725-5850MHz; 5470-5725MHz; 5725-5850MHz <b>BT</b> : 2402-2480 MHz; <b>NFC</b> : 13.56MHz
<b>RF-Output Power :</b>	<b>Wi-Fi 2.4G Band</b> : 13.07dBm(802.11b);12.74dBm (802.11g); 12.79dBm(802.11n20); 12.90dBm(802.11n40); <b>5G Band1</b> : 11.92dBm(802.11a), 12.23dBm(802.11n20); 11.88dBm(802.11n40); <b>5G Band2</b> : 10.96dBm(802.11a); 10.92dBm (802.11n20);11.45dBm(802.11n40); <b>5G Band3</b> : 11.64dBm(802.11a); 11.60dBm(802.11n20);11.32dBm(802.11n40); <b>BT3.0</b> : 1.75dBm <b>NFC</b> : 19.29dBuA/m@3m ( EIRP/Conducted)

## 5.2 Security of your terminal

Your device fulfils current applicable PCI PTS security requirements. Upon receipt of your terminal you should check for signs of tampering of the equipment. It is strongly advised that these checks are performed regularly after receipt. You should check, for example: that the keypad is firmly in place; that there is no evidence of unusual wires that have been connected to any ports on your terminal or associated equipment, the chip card reader or any other part of your terminal. Such checks would provide warning of any unauthorised modifications to your terminal, and other suspicious behaviour of individuals that have access to your terminal. Your terminal detects any "tampered state". In this state the terminal will repeatedly flash the message "Alert Irruption!" and further use of the terminal will not be possible. If you observe the "Alert Irruption!" message, you should contact the terminal helpdesk immediately.

You are strongly advised to ensure that privileged access to your terminal is only granted to staff that have been independently verified as being trustworthy.

The terminal must never be put in or left at a location where it could be stolen or replaced by another device.



### CAUTION

Positioning of the terminal on check stand must be in such a way to make cardholder PIN (Personal Identification Number) spying infeasible.

Positioning of in-store security cameras such way that the PIN-entry keypad is not visible.

NEVER ask the customer to divulge their PIN Code. Customers should be advised to ensure that they are not being overlooked when entering their PIN Code.

## 6.Environment (WEEE, Batteries and Packaging)

This product is labeled in accordance with European Directives 2012/19/UE concerning Waste Electrical and Electronic Equipment (WEEE) and 2006/66/EC concerning Batteries and Accumulators. Those provisions are requiring producers and manufacturers to become liable for take-back, treatment and recycling upon end of life of equipment and batteries.



The associated symbol means that WEEE and waste batteries must not be thrown away but collected separately and recycled.

Ingenico Terminals ensures that efficient collection and recycling schemes are set-up for WEEE and batteries according to the local regulation of your country. Please contact your retailers for more detailed information about the compliance solution in place for disposing of your old product and used batteries.

Packaging waste must also be collected separately to assure a proper disposal and recycling.

Please note that proper recycling of the electrical and electronic equipment and waste batteries will ensure safety of human health and environment.

## 7. FCC/ISED Compliance

### 7.1 Federal Communications Commission (FCC) Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

#### 15.21

**CAUTION** : This equipment may not be modified, altered, or changed in any way without signed written permission from "Ingenico Terminals". Unauthorized modification may void the equipment authorization from the FCC and will void the "Ingenico Terminals" warranty.

### 15.105(b)

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.

### 15.19 (a) (3)

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 of the device.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment could be installed and operated with minimum distance of 0 cm between the radiator and your body.  
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter

## 7.2 ISED Statement.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(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.

Under ISED regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by ISED. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication. Le présent appareil est conforme aux CNR d'ISED 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.

Conformément à la réglementation d'ISED, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par ISED. Dans le but de réduire les risques de brouillage radioélectrique à l'intention d'autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment could be installed and operated with minimum distance of 0 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement peut-être installé et utilisé avec un minimum de 0 cm de distance entre la source de rayonnement et votre corps. Ce transmetteur ne doit pas être placé au même endroit ou utilisé simultanément avec un autre transmetteur ou antenne.

To reduce the potential for harmful interference to co-channel mobile satellite systems, this device operating in the band 5150 - 5250 MHz is for indoor use only.

Afin de réduire le risque d'interférence nuisible aux systèmes par satellite mobiles co-canaux, cet appareil fonctionnant dans la bande 5 150 - 5 250 MHz est destiné à une utilisation en intérieur uniquement.

## 8. Marking



The CE marking is the manufacturer's declaration that the product meets the requirements of the applicable EC directives. The CE mark is a mandatory conformity marking for certain products sold within the European Economic Area (EEA).



Waste of Electrical and Electronic Equipment (WEEE) symbol indicates that when the end-user wishes to discard this product, it must be sent to separate collection facilities for recovery and recycling. By separating this product from other household-type waste, the volume of waste sent to incinerators or land-fills will be reduced and natural resources will thus be conserved.



Power charge symbol



USB symbol



This logo indicates that the product operates with a continuous voltage. This symbol is followed by the ratings (voltage and current for instance)



Mark indicating a power supply meets the level VI requirements.



Double insulated or class 2 electrical appliances are products that have been designed in a way so as not to require a safety connection to electrical earth (These products must NOT have a safety connection to Earth).



Indoor use symbol.



This logo indicates that the product operates with an alternative voltage. This symbol is followed by the ratings (voltage and current for instance).



## 9. Troubleshooting

The terminal does not turn on

- Check the battery (is it discharged, is it connected?)  
*A full discharged battery can take long charging time to recover*
- Connect terminal to terminal power supply

Cards are not read

- Check that the magnetic card is swiped correctly (with magnetic band on terminal side).
- Swipe again the card with the magnetic stripe movement constant and rapid
- Verify that the magnetic strip is not damaged, grooved or cracked
- Make sure you have inserted correctly the smart card into the smart card reader and removed the card only after the transaction is performed.

# NOTES

# NOTES

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## Your contact



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