

Lane 5000 User Guide



www.ingenico.com

13 rue Pagès, 92150 Suresnes – France / (T) +33 (0)1 58 01 80 00 Ingenico - SA au capital de 47 656 332 / 317 218 758 RCS Nanterre



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1. Introduction

Thank you for choosing an Ingenico payment terminal Lane5000 LE.

We recommend you to read carefully this user guide: it gives you the necessary information about safety precautions, unpacking, installation and maintenance of your terminal.



WARRANTY / SECURITY

To benefit from the guarantee-related product, and to respect the security, we ask you to use only the Ingenico power supply entrusting maintenance operations only to an authorized person.

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.Unpacking

According to the model, the following items are included in the packaging box (including optional accessories):



The box may also include the following items depending on your working configuration:

- Cable (specific to your connectivity requirements)
- Power supply unit and power cord
- A stylus and its holder
 - Screws to fix the main cable and the trap door



CAUTION

The power supply unit provided with your equipment is designed for it. It is certified with the Lane/5000. Do not use any other power supply.



ADVICE

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



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The installation guide

3.Recommendations

3.1 Safety

Power on/Power down - Emergency stop

To power on or power down the terminal, connect or disconnect the power supply from the electric outlet.

Power supply unit



CAUTION Only use the power s

Only use the power supply AC/DC provided with Lane/5000 (8VDC 2A, 8VDC 3A, 12VDC 2,5A) or the power provided by a cash register limited power source (LPS).

Authorized power supply units :

Power Supply Unit Supplier	Туре	Supplier reference	Electrical characteristics	Ingenico part number
PHIHONG TECHNOLOGY	Wallplug	PSC16K- 080L6IN-R	8VDC 2A Class VI	296274659
Co. Ltd		PSC16S- 080L6IN-R		296263490
PHIHONG TECHNOLOGY Co. Ltd	Desktop	AM24W- 080B-R	8VDC 3A Class VI	296276207
KUANTECH INCORPORA- TED COMPANY	Desktop	KSA-32A- 080300M2	8VDC 3A Class VI	296276207



CAUTION

Use only the power supply specified for this product and certified for the country of use. If the power supply is not provided with the product, please contact your reseller.

Desktop Power Supply units have to be connected to the mains with one of these cables.

Power cord 189609046 (European plug)

CAUTION



Lithium battery cell

The terminal is fitted with a lithium battery cell which is not accessible to the user. Only a qualified technician is authorized to open the unit and change this component. Risk of explosion if the battery is replaced by an incorrect type. Dispose of used battery according to the instructions

Electrical power supply network

The electrical outlet must meet the following criteria:





Must meet standards and regulations in the country of use.

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.

Bottom side compartment trapdoor

Located under the terminal, it must be in place during normal operation of the device

3.2 Security of your terminal (tampering attempt detection)

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

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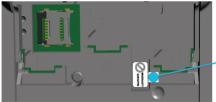


chip card reader or any other part of your terminal. Such checks would provide warning of any unauthorised modifications to your terminal, and other suspicious behaviour of individuals that have access to your terminal.

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.



Warranty label (under the trapdoor)



WARNING

If the warranty label is torn or removed, the warranty will be void.

CAUTION

Positioning of the Lane/5000 on check stand must be in such a way to make cardholder PIN (Personal Identification Number) spying infeasible.

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Installing device on an adjustable stand must be in such a way that consumers can swivel the terminal sideways and/or tilt it forwards/backwards to a position that makes visual observation of the PIN-entry process difficult.

Positioning of in-store security cameras such 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

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3.3 Main Characteristics

3.3.1 Terminal

Processor	Application & Crypto processor	Cortex 32bit - 160 Mhz	•
Memory	Internal External	Up to 512 MB Flash, 512 MB RAM MicroSD up to 32GB	Option
OS		Telium Tetra OS	
SAM		3	
Cards readers	Magstripe Smart card Contactless	ISO 1/2/3, 500K lifespan EMV Level 1, 500K lifespan EMV Level 1 compliant	
Display	Color	3.5» backlit LCD, HVGA (480 × 320 pixels)	
Touch screen	Resistive Capacitive	Finger & stylus (300k lifespan signature) Finger & stylus (1000k lifespan signature)	• Option
Keypad		15 keys, raised Marking, backlit	•
Audio	Buzzer Audio jack Speaker	Stereo Mono	Option Option
Video			
Data capture	Camera	VGA 0,5M	
Terminal connectivity	USB	Ethernet 10/100 base T	
Terminal connection	USB Serial	USB Host 2nd USB Host USB Slave 1 R232	Option

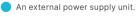


Power supply	Powered USB Powered Ethernet External power supply	12V (USB retail) 12V PoE 802.3af compliant	Option Option
Terminal size		191,88×116,39×48,47	•
Weight		350 g (12.3 oz)	
Environment	Operation Temperature Storage Temperature Operation Humidity	0°C to 45°C (32°F to 113°F) -20°C to +55°C (-4°F to 131°F) 85% non-condensing at +40°C (104°F)	•
Stand Mounting		Universal Payment Mount	Option
Security		PCI V6 PTS 6.x Online & Offline ready	•

The terminal is intended for internal use only.

3.3.2 Power characteristics

The Lane/5000 can be powered by several ways:



- By POE (Power over Ethernet)
- By USB

POE (Power over Ethernet)

The power sourcing equipment must be compliant with IEEE802.3af standard, class 0 which means 12.95W max. POE implementation in the Lane 5000 can support both mode A and mode B.



3.3.3 Terminal Connectivity

USB	High speed USB Device in the single IDMI connector
Ethernet	10/100 Base T Ethernet is available on the Lane/5000. It is recommanded to use TCP Protocol
RS232	It is a 2 wire interface on the Lane/5000 (Rx/Tx). It can run up to 115200bps

4.Installation

4.1 Positioning the terminal

Install the terminal on a flat surface, with an easy access to an electrical outlet. Place the terminal away from any heat source and protected from dust, vibrations and electromagnetic radiations (away from video terminals, PC, anti-shoplifting barriers ...). The terminal is exclusively made for indoor use.

The Lane/5000 device may be mounted on a flat surface, wall, or customer stand.

The terminal should not be installed higher than 2m above the ground.



CAUTION

Do not place the Lane/5000 device on a PC monitor, adjacent to an electronically active security tag deactivation system, or near other sources of magnetic fields.

The Lane/5000 device must be at least 30 centimeters (12 inches) away from an electronically active type of security tag deactivation pad.

An electronically active system sends out a powerful and potentially disruptive signal to deactivate the security tag. If the Lane/5000 device is placed too close to the system's pad, or placed above the pad, the product may not work properly.

A passive system is a permanent magnet type that does not send out a signal. This type should not affect the Lane/5000 device.

Operating conditions

Ambient temperature	from 0°C to +45°C
Max relative humidity	85% RH non-condensing at +40°C
Max altitude	2000 m
Storage conditions	
Storage conditions	from -20°C to +55°C (-4°F to 131°F)

4.2 Connections

Here are all the connections on the terminal. The SAMs and the Micro SD.



Front view of the Audio Jack

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4.3 Installing the Terminal

4.3.1 Installing SAM (Secure access module, optional)



CAUTION

Before starting, switch off the terminal by disconnecting the cable.

Perform the following operations:

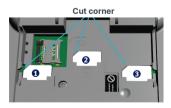
Open the trapdoor

/Unclip the trapdoor by pushing down on the clip ① with your finger as shown on the figure hereafter.

/Then lift the trapdoor to remove it.



Insert the SAM Card into the slot marked **0**, **2** or **8**. Take care to ensure that the SAM Card is inserted in the correct manner. The cut corner must be positioned as indicated on the figure below.





Close down side trapdoor

To close the trapdoor, put the trapdoor onto the bottom casing, and then push it upward to clip it.



CAUTION

Do not use any tools when installing or removing the SAM Card.

4.3.2 Installing MicroSD Card (optional)



CAUTION

Before starting, switch off the terminal by disconnecting the cable.

Perform the following operations:



/Unclip the trapdoor by pushing down on the clip 1 with your finger as shown on the figure hereafter.

/Then lift the trapdoor to remove it.



Slide the metallic part on the left and lift it up to open the card holder, marked (SD)

Insert completely the MicroSD Card into the slot as indicated on the figure. The contacts muct be positioned down side

The contacts must be positioned down side.

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Close down the card holder and push it to the right until it clicks shut.



Close down side trapdoor.

Put the trapdoor onto the bottom casing, and then push it upward to clip it.

4.3.3 Connecting the terminal to the host



CAUTION

Connecting must be made when the terminal is powered off.



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Flip the terminal. There is one single port on the back for power and communications.

Connect the cable on this port of the Lane/5000.

Connect the other end to the power supply unit.

Plug the power supply into the mains.



WARNING

The main port at the back must not be used to connect a standard video HDMI cable. Only connect cables validated for the Lane/5000 by Ingenico.

Note: screws can be added by the customer to hold more firmly the trapdoor and the connector (refer to their locations on the figure above).

The terminal can be connected to the host by several ways, with optional cables:

High speed USB device

Ethernet



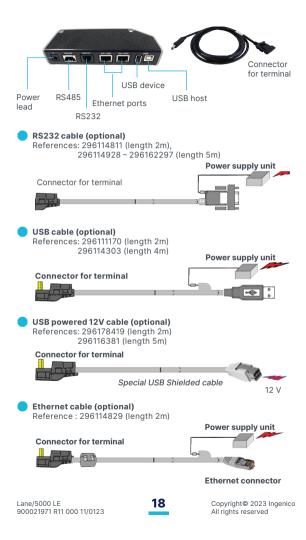
Most of the cables used with iSC and iPP ranges are compatible with the Lane/5000. We advise to check with your reseller their compatibility if you plan to replace an iSC or an iPP by a Lane/5000.

Following are some examples of accessories that can be used to connect the Lane/5000. This list is not exhaustive. Please contact your reseller for more information.

Com Box kit installation (optional) Reference: 296148891

This installation kit includes a communication cable (ref. 296141785) to connect the terminal to the Com Box, which dispatches on standard communication connectors:

- /2 USB ports (1 Host, 1 Device)
- /1 RS485 serial link (not usable on Lane/5000)
- /1 RS232 serial link
- /2 Ethernet ports
- /1 power lead



4.4 USB port (optional)

There is an A type USB connector on the terminal, located on the rear side, below the contactless antenna (see picture hereafter).

Open the rubber trap to access it.

This port manages Host connections, to connect an USB flash drive or another device.



4.5 Stylus Pen (optional)

The stylus pen and its holder must be installed on the left side of the terminal.

Remove the adhesive protection, insert the pin of the holder inside the Kensington hole, and press firmly in place.

A magnet in the holder keeps the stylus in position.

Use the stylus type corresponding to the screen type (resistive or capacitive)

Part numbers: 296174247 - for resistive stylus kit (grey Soft Grip)

296180055 - for capacitive stylus kit (RED Soft Grip)

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4.6 Stand pole trap door (optional)

The stand pole trap door has to be used for installation on an Universal Payment Mounting (UMP) stand pole.

Perform the following operations:



Open the trapdoor

/Unclip the trapdoor by pushing down on the clip 1 with your finger as shown on the figure hereafter.

/Then lift the trapdoor to remove it.



/Put the stand pole trap door on the bottom casing, and the push it upward to clip it.

/Fix it with the screw CBZ M2.5X8 (Ingenico PN: 192014928).



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5.Daily use 5.1 Card reading

5.1.1 Swiping a card

- Insert the card manually in the reader, magnetic stripe facing the main body of the terminal, and slide the card from the rear to the front in a continuous motion for best results.
- When sliding the card through the reader, make sure that the magnetic stripe on the card is facing the Lane/5000 display screen (see Swiping a Magnetic Stripe Card).



Swipe the card with constant speed, neither too slowly nor too fast, to maximize the reading efficiency

5.1.2 Inserting a smart card

Chip cards should be inserted into your terminal as illustrated with the chip facing up and into the card reader.



5.1.3 Reading a contactless card

- Bring the card to the active zone above the contactless logo (at about 1cm).
- Keep the card close to the contactless logo during the transaction.



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The contactless status is provided by virtual lights highlighted on the upper side of the LCD screen.

When a contactless transaction is started the first (left hand) status light will be lit steadily: this indicates that the contactless is in use but a card is not being read.

When a contactless card is presented to the contactless active zone during a transaction the second, third and fourth status lights will be lit in turn. The card read is successful when all four status lights are lit and a confirmation tone can be heard.



CAUTION

Do not stick any label onto the contactless active zone. It can decrease contactless efficiency.



CAUTION

Avoid metallic parts around the contactless area.

5.2 Keyboard details and functionality



The red key cancels the procedure in progress

The vellow key cancels the last character

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

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5.3 Signature capture (optional)

The signature capture is handled with the optional stylus.

Make sure that the correct stylus type (resistive or capacitive) is used with the corresponding touchscreen type, as a resistive stylus is not working with a capacitive screen.



5.4 Audio jack (optional)

The audio jack $\widehat{oldsymbol{ heta}}$ is located next to the smart card reader.

This option is not designed to play music, but to facilitate the use of the Lane/5000.

The audio connector is a standard 3.5mm Audio jack, (impedance is 32 ohms)



audio connector

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5.5 Camera (optional)

The camera is located next to the contactless reader.



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6.Maintenance



CAUTION

Before making any operations of maintenance in the terminal, make sure that the power supply is disconnected.

6.1 Cleaning of the terminal

Guidelines for the proper cleaning of Ingenico Payment Terminals are as follows :

Ingenico recommends using a soft cloth very slightly impregnated with soapy water to clean the outside of the terminal.

It is recommended to use cloth pre impregnated for a better control of the quantity of liquid applied on the device. An excessive application of liquid may possibly generate some functional problem.

Hydroalcoholic solution can only be used when on a pre-impregnated cloth.

Some hydroalcoholic solution may include isopropyl alcohol. It can be used on every part of the device if isopropyl alcohol concentration is below 20%.

Do not :

- Do not clean the electrical connections.
- Do not spray, pour or coat any liquid, disinfectant or cleaners directly on the payment terminal.
- The list might not be limited to the following chemical agents, but do not use solvents, bleach, hydrogen peroxide, thinner, trichloroethylene, or ketone-based solvents, Ether, Thymol based agent, detergents or abrasive products as they may damage the plastic or electrical contacts.

Alcohol cleaning solutions (isopropyl solution 70%) can not be used on the plastic display lenses.

Avoid excessive wiping, which might cause damage.

Do not get moisture into any openings nor use aerosol sprays.

Avoid exposing the terminal to the direct rays of the sun.

Avoid exposing the terminals to UV-C lamps as it could degrade the cosmetic or create functional damage on the terminal".

Do not put anything into the slot of the smart card reader





Please note : While cleaning as per the instructions above has no impact on the performances or functions of our terminal, a very frequent cleaning may the cosmetic aspect of some plastic parts used into our devices; such cosmetic wear is not covered by the standard INGENICO warranty conditions.

6.2 Transport and storage

Use the original packaging for storage or returning the unit.

Disconnect all cables from the terminal during the transport.

6.3 Troubleshooting

Device is not working

- When sliding the card through the reader, make sure that the magnetic stripe on the card is facing the Lane/5000 display screen (see Swiping a Magnetic Stripe Card section 5.1.1)
- Make sure that the Lane/5000 connector is fully inserted into the back of the device.
- Restart the device.

If you have another working Lane/5000 device, swap the devices to determine if the problem is with the device, cable, POS, or power supply.

If the Lane/5000 device is directly connected to a host, reset the host by turning it off and back on again.

Magnetic Card Reader Does Not Work Properly

Swipe the card at a faster or middle steady speed.

Inspect the magnetic stripe on the card to make sure it is not damaged or badly worn.

Security tag deactivation system could disturb the magnetic card reader

To determine if the problem is with the card :

a. If your host device has a magnetic stripe reader, try swiping the card there.

b. If you have another working Lane/5000 device, try swiping the card there.

Smart Card Reader Does Not Work Properly

Make sure you have inserted correctly the smart card into the smart card reader and removed the card only after the transaction

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MicroSD Card Reader Does Not Work Properly

- Make sure you have inserted correctly the microSD card into the card reader.
- Check that the card capacity is not higher than 32GB.

Micro SD hotplug is not recomended. Try to reboot the Lane/5000

Stylus Does Not Work Properly

Make sure you use the correct stylus version corresponding to the screen type. A resistive stylus will not work on a capacitive screen.



WARNING

Changes or modifications to this device not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

6.4 Environment (WEEE, Batteries and Packaging)

This product is labelled 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 takeback, 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 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 resellers 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.

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WARNING ABOUT BATTERIES



- Disposing of a battery in a fire or in a hot oven, or the mechanical crushing or cutting of a battery, is likely to cause an explosion.

- Keeping a battery in a very high temperature environment can cause an explosion or the leakage of flammable liquid or gas.

 A battery subjected to extremely low air pressure may cause an explosion or the leakage of flammable liquid or gas.

7.Standards

The CE marking indicates that the terminal complies with harmonized standards and requirements of European Directives on:



the protection of the health and the safety of the user and any other person.

the protection requirements with respect to electromagnetic compatibility.

RoHS (Restriction of Hazardous Substances)



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).



This TÜV symbol shows consumers at a glance that a product has been examined by neutral experts and that there are no safety concerns.



The UL mark appears on end products and complete components suitable for factory and field installation. All of the products carrying these marks are coveredby our Pollow-Up Services program to determine that products continue to be manufactured in compliance with UL's safety requirements.





The RCM mark will be the only mark to indicate compliance with the Australian Communications and Media Authority's (ACMA) regulatory arrangements for telecommunications, radio, EMC and electromagnetic energy (EME).



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).

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



Indoor use symbol.



Mark indicating a power supply meets the Level VI requirements.



India's Compulsory Registration Scheme (CRS) for Electronic Products.



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



The Electrical Appliance and Material Safety Law applies to enterprises that manufacture or import products in Japan.



China Compulsory Certification (CCC) is similar to other certifications for product quality standardization-such as the European CE system.

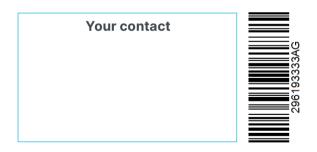


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www.ingenico.com

13 rue Pagès, 92150 Suresnes – France / (T) +33 (0)1 58 01 80 00 Ingenico - SA au capital de 47 656 332 / 317 218 758 RCS Nanterre