ingenico

AXIUM RX7000

User Guide

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1. Introduction

Thank you for choosing an Ingenico payment terminal.
We recommend that you read this user guide carefully: it gives you the necessary information about safety precautions, unpacking, installation and maintenance of your terminal.

The product should be used indoor only.

WARRANTY / SECURITY

To benefit from the guarantee-related product, and to respect the security, we ask you to use only the recommended power supply.
Maintenance operations should only be provided by an 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.

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2. Unpacking

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

- The terminal

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

- The user guide
- The stylus
- The cable for connectivity
- The power supply unit and cable

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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.

CAUTION
Only use the power supply recommended with AXIUM RX7000.

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 be installed near the equipment and easily accessible.
- 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.

Connection of headset on audio jack

CAUTION
An excessive acoustic pressure of headset can involve deafness!

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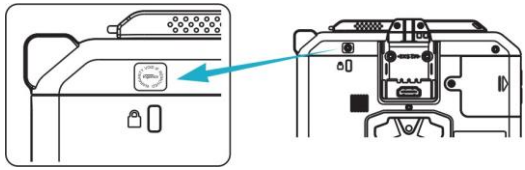
WARNING
We recommend to the customer to provide guidance to the cardholder as to avoid having his card close to any magnets on the device since the card may be damaged. There is one magnet in the stylus and another in its holder.

3.2 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 unauthorized modifications to your terminal, and other suspicious behavior 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 as being trustworthy.

Warranty label (on the bottom of the terminal)



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

CAUTION
Positioning of the AXIUM RX7000 on check stand must be in such a way to make cardholder PIN (Personal Identification Number) spying infeasible.
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.

3.3 Main Characteristics

3.3.1 Terminal

Weight (Poids, Gewicht)	468g(16.5oz)
Size (dimensions, Maße)	154.6mm x 162.9mm x 43.0mm
Display	5.5" HD (1280 x 720 pixels)
Touchscreen	Capacitive

Storage conditions

Ambient temperature	-20°C, +70°C
Max relative humidity	90% at +55°C

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Operating conditions

Ambient temperature	from -10°C to +40°C
Max relative humidity	90% RH non-condensing at +40°C
Max altitude	2000m

3.3.2 Power characteristics

Power supply
AXIUM RX7000 works at voltages between 8VDC and 14VDC.
The AXIUM RX7000 is powered only through the IDMI single connector by using compatible:

- External power supply unit
- POE Box

POE (Power over Ethernet)
The power sourcing equipment must be compliant with IEEE802.3af standard, class 0 which means 12.95W max.

WARNING
Only use the power supply recommended with AXIUM RX7000.
The use of a power supply with apparently similar voltage/current characteristics may damage your terminal.

Power consumption in different modes

Mode	RX7000 Power (W)
Idle mode-backlight on and brightness is reduced after 30s	1.92
Idle mode-backlight on and brightness 100%	2.88
Typical-smartcard and contactless in test-backlight on	4.8
Maximum (including peripheral load of 2.5W)	7.8

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3.3.3 Terminal Connectivity

USB host	High speed USB Host in the single connector
USB device	High speed USB Device in the single connector
Ethernet	10/100 Base T Ethernet is available on the AXIUM RX7000. It is recommended to use TCP Protocol
RS232	It is a 2 wires interface on the AXIUM RX7000 (Rx/Tx). It can run up to 115200bps

3.3.4 WLAN (2.4 GHz / 5 GHz)

Standard	802.11 a/b/g/n
Frequency band 2.4 GHz	DTS band 2400 MHz to 2483.5 MHz
Type of modulation	BPSK, QPSK, 16 – QAM, 64 – QAM
Number of channels	13 (20 MHz BW) / 9 (40 MHz BW)
Frequency band 5 GHz	5150 MHz to 5250 MHz; 5250 MHz to 5350 MHz; 5470 MHz to 5700 MHz; 5725 MHz to 5850 MHz

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Type of modulation	802.11b : CCK 802.11 g/n : OFDM /64-QAM,16-QAM,QPSK,BPSK 802.11a : OFDM /64-QAM,16-QAM,QPSK,BPSK
Number of channels	2.4GHz:Ch1 ~ Ch13 5.18~5.35GHz:Ch36 ~ Ch64 5.5~5.7GHz:Ch100 ~ Ch140 5.745~5.825GHz:Ch149 ~ Ch165
Max output power	2.4G WiFi:18.03dBm(802.11b), 19.30dBm(802.11g), 18.26dBm(802.11n ht20) 5.2G WiFi:10.56 dBm(802.11a), 12.55dBm(802.11n ht20) 5.3G WiFi:10.65 dBm(802.11a), 13.65dBm(802.11n ht20) 5.6G WiFi:10.46 dBm(802.11a), 14.04dBm(802.11n ht20) 5.8G WiFi:11.11 dBm(802.11a), 13.92dBm(802.11n ht20)

3.3.5 BLUETOOTH

Standard	BDR, EDR(2,3Mbps), LE(1,2Mbps)
Frequency band	2402 MHz to 2480 MHz
Type of modulation	GFSK, π/4-DQPSK, 8DPSK
Number of channels	79 channels for classic,40 channels for BLE
Max output power	Bluetooth: 11dBm, BLE: 9.11dBm

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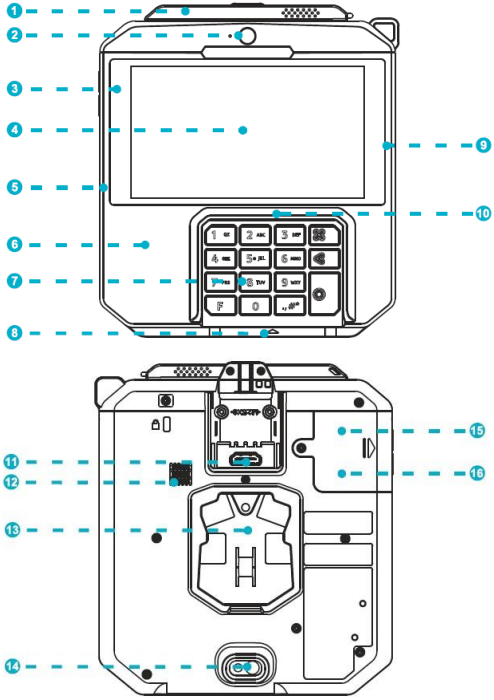
3.3.6 CONTACTLESS

Operating Frequency Band (RF)	RF ID: 13.56MHz(TX/RX)
Max Of Transmit Power	RF ID: 12.08±3dBμA/m @3m

3.4 Functional description



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1. Stylus (Optional)
2. Front Camera
3. Volume key
4. 5.5-inch touch screen
5. 3.5mm Audio Jack
6. Contactless Reader
7. Keypad
8. Smartcard Reader
9. Magnetic Stripe Reader
10. Skimming detection
11. IDMI connector
12. Speaker
13. Stand fixation (UPM)
14. Rear Camera
15. Micro SD Card (optional)
16. SAM Card 1 & 2

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4. Installation & Connections

4.1 Positioning the terminals

Place the terminal 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 AXIUM RX7000 device may be mounted on a flat surface, wall, or customer stand.

CAUTION
Do not place the AXIUM RX7000 device on a PC monitor, adjacent to an electronically active security tag deactivation system, or near other sources of magnetic fields.

- The AXIUM RX7000 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 AXIUM RX7000 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 AXIUM RX7000 device.

4.2 Inserting SAM (Secure access module) and Micro SD

CAUTION
Before starting, switch off the terminal by disconnecting the power supply.

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- Perform the following operations:

/ Unscrew the cover and remove it
/ Access to SAM and Micro SD is now possible.
/ Insert the SAM Card into the slot marked (1), (2). Take care to ensure that the SAM Card is inserted in the correct manner. The cut corner must be positioned as indicated in the slot.
/ Slide back the cover and screw it tight.

Illustration of the SAM Card positioning:

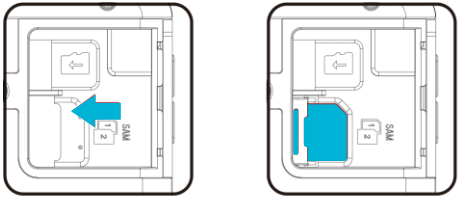
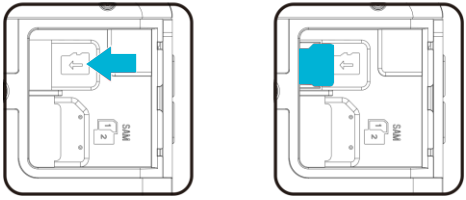


Illustration of the micro-SD Card positioning:



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

WARNING
During this operation, it is necessary to be in an ESD protected environment. As this is not very easy, it is recommended to make this operation using ESD shoes for example.

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4.3 Connecting the terminal to the host

CAUTION
Connecting must be made when power supply unit is not plugged in the cable.

- Flip the terminal. There is one port on the back for power and communications (IDMI connector).
- Connect the cable on the terminal.
- Add 2 screws (M2.5X8) to hold firmly the cables.
- Connect the other end to the power supply unit and a Host (PC / cash register...).
- Plug the power supply into the mains.

WARNING
The main port at the back must not be used to connect an HDMI video cable. Only connect cables provided by Ingenico.

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

- High speed USB device
- High speed USB host
- Ethernet
- RS232

We advise to check with your reseller their compatibility if you plan to replace a Lane/7000 by an AXIUM RX7000. Please consult the list of compatible cables.

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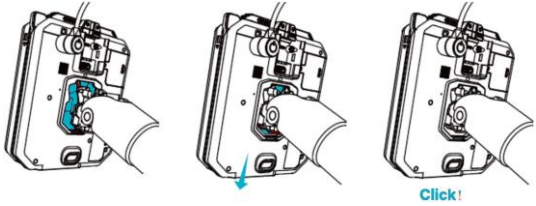
4.4 Setting the AXIUM RX7000 on the standpole adaptor

Install the terminal on a flat surface is not possible on the AXIUM RX7000 as is. It is designed to be fitted on a standpole.
A specific pattern by Ingenico (UPM) has been developed to fit the AXIUM RX7000.

To fit the AXIUM RX7000 to the standpole, slide down the AXIUM RX7000 until a click sound:



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The AXIUM RX7000 is now ready to use:

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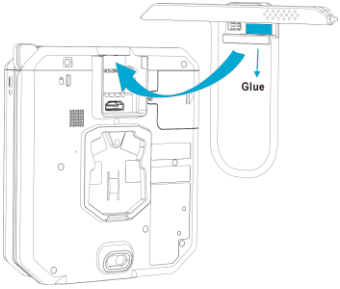
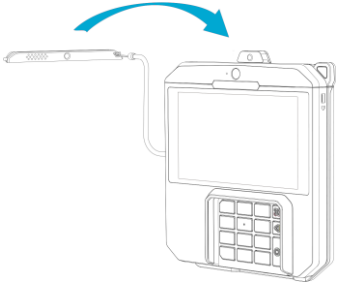
4.5 Fixing the stylus on AXIUM RX7000 (optional).



Use the adhesive tape of holder to fix it on the AXIUM RX7000.

There is a magnet in the stylus, and it can be fixed on the holder.



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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.

5.1.2 Swiping a smart card

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

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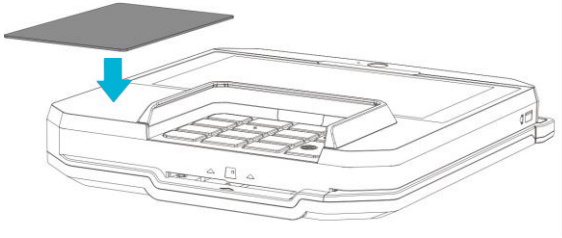
5.1.3 Reading a contactless card

- 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. Your contactless terminal provides four contactless status lights located above the contactless logo.
- When a contactless transaction is started the first (left hand) status light will be lit steadily; this indicates that the contactless is in using 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 seriously contactless efficiency.

CAUTION
Avoid metallic parts around the contactless area.

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5.2 Signature capture

The signature capture is done with a stylus and a capacitive touchscreen

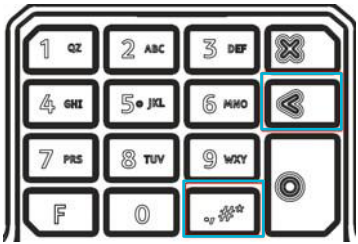
5.3 Audio

The speaker is available, there is also an audio jack. When headphones are plugged in, there is no sound from the speaker.

- The audio jack is located on the left of the terminal.
- This option is not designed to play music, but to facilitate the use by visually impaired people.
- The jack is 3.5mm and the volume key is only used to control the volume of headset.

5.4 Reboot AXIUM RX7000

There is no power key on AXIUM RX7000. We can use Key combination to reboot AXIUM RX7000.
We can press the ".,#*" and "yellow cancel" keys at the same time, and AXIUM RX7000 will reboot.
As follows:



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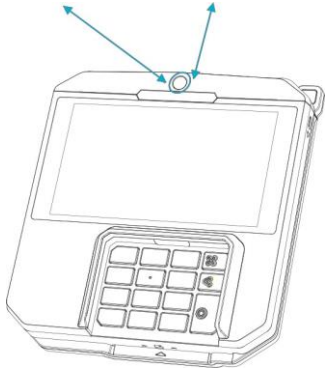
5.5 Camera

5.5.1 Front camera

- Front camera is used to face photography.

Front camera face photography



5.6 Rear camera (optional)

- Rear camera is used to scanning.

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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

First, unplug all the wires from the terminal. Good rules for proper cleaning of the terminal are:

- Do not clean the electrical connections.
- Do not use in any case, solvents, detergents, or abrasive products: those materials might damage the plastic or electrical contacts.
- Avoid exposing the terminal to the direct rays of the sun.
- Do not put anything into the slot of the smart card reader

6.2 Transport and storage

- Use the original packaging for storage or returning the unit. Disconnect all cables from the terminal during the transport.

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7. Standard

CE MARKING

The CE marking indicates AXIUM RX7000 complies with the requirements of European Directive 2014/53/EU on Radio Equipment for:

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

And complies with harmonized standards, as well as RoHS Directive 2011/65/EU and its amendment directives.

Federal Communications Commission (FCC) Statement

15.21
You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

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.

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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.

Industry Canada (IC) Statement.

This device complies with Industry Canada licence-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.

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
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.

Les dispositifs fonctionnant dans la bande de 5 150 à 5 250 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

Environment (WEEE, Batteries and packaging)
This product is labeled in accordance with European Directives 2012/19/EU concerning Waste Electrical and Electronic Equipment (WEEE) and 2013/56/EU 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.

BATTERIES
If your product contains batteries, they must be disposed of at appropriate collection points.

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THE PRODUCT

The crossed-out waste bin stuck on the product or its accessories means that the product belongs to the family of electrical and electronic equipment, and waste batteries must not be thrown away but collected separately and recycles.

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.
In this way you can participate in the re-use and upgrading of Electrical and Electronic Equipment Waste, which can have an effect on the environment and human health.

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).

The cCSAus marking indicates the product has been certified by an authorized certify body for the Canada and US electrical safety certification.

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.

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

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NOTES

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