



# **NURIT 8000**

**Wireless  
Palmtop Solution**

*Installation Manual*



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## Foreword

Thank you for purchasing the NURIT 8000 Wireless Palmtop Solution. You now own one of the most advanced electronic point-of-sale (POS) terminals manufactured today.

This manual provides basic installation instructions. To fully utilize the features of your NURIT 8000, and for general safety purposes, it is recommended that you familiarize yourself with this manual, the terminal, and any peripheral equipment or accessories.

It is recommended that you store this manual in a safe place for future reference.

### *Note*

- All graphic images in this manual are for illustrative purposes only.
- Different models of this terminal may exist and may vary in appearance according to country of use or particular customer requirements.
- The basic installation procedure is the same for most units.
- The operation of the terminal is application-dependent.

## Document Conventions

Warning	Failure to follow specific procedures and practices may result in personal injury
Caution	Failure to follow specific procedures and practices may result in damage to the NURIT device or other equipment
Note	Helpful hints and other important information about the use of the NURIT device

DRAFT



## Table of Contents

Foreword . . . . .	iii
Document Conventions . . . . .	iii
1. Product Regulatory Information . . . . .	1
2. General Safety Instructions . . . . .	4
Radio Frequency Energy Emission . . . . .	6
Safety Precautions for Medical Devices . . . . .	7
Pacemakers . . . . .	8
Other Medical Devices . . . . .	8
3. Initial Setup . . . . .	9
Contents Checklist . . . . .	10
Selecting a Point-Of-Sale Location . . . . .	11
Wireless LAN (Wi-Fi) Terminals . . . . .	12
4. Specifications . . . . .	13
5. Optional Accessories . . . . .	14
6. General Features . . . . .	16
7. Removing and Replacing the Battery-SAM-SIM-SD/MMC Compartment Cover . . . . .	19
8. Installing the Battery . . . . .	21
Battery Maintenance . . . . .	21
9. Connecting the NURIT 8000 to an AC Power Outlet . . . . .	23
Battery Charge Status . . . . .	23
10. Installing the External Modem . . . . .	24
11. Connecting the Car Adapter . . . . .	25
12. Loading Paper in the Printer . . . . .	26
Removing the Paper Roll from the Printer . . . . .	28
13. Installing the Keypad Privacy Shield . . . . .	30
14. Installing a SAM, SIM, or SD/MMC Card . . . . .	31
SAM, SIM, and SD/MMC Card Configurations . . . . .	32
Installing a SAM or SIM Card . . . . .	32



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**NURIT 8000**

Installing an SD/MMC Card . . . . .	34
15. Connecting Peripheral Devices . . . . .	36
16. Connecting a Cellular Headset . . . . .	37
17. Care and Maintenance . . . . .	38
Maintenance Recommendations . . . . .	38
Cleaning the NURIT 8000 . . . . .	38
Cleaning the Printer . . . . .	38
Technical Assistance . . . . .	39
Shipping the NURIT 8000 . . . . .	39
18. Troubleshooting . . . . .	40
Appendix A: Using the Magnetic Card Reader . . . . .	44
Appendix B: Using the Smart Card Reader . . . . .	45
Installation Notes . . . . .	46
Contact Information . . . . .	48

DRAFT



## List of Figures

Figure 3-1	Secure Device Label . . . . .	9
Figure 3-2	NURIT 8000 - Box Contents. . . . .	10
Figure 5-1	NURIT 8000 - Optional Accessories. . . . .	14
Figure 6-1	NURIT 8000 - General Features-Top . . . . .	17
Figure 6-2	NURIT 8000 - General Features-Bottom . . . . .	18
Figure 7-1	Opening the Battery-SAM-SIM-SD/MMC Compartment Cover . . . . .	19
Figure 7-2	Replacing the battery-SAM-SIM-SD/MMC Compartment Cover . . . . .	20
Figure 8-1	Installing the Battery . . . . .	21
Figure 9-1	AC Power Connection . . . . .	23
Figure 10-1	External Modem Installation . . . . .	24
Figure 11-1	Car Adapter Connection . . . . .	25
Figure 12-1	Opening the Paper Compartment . . . . .	26
Figure 12-2	Unrolling the Paper Roll . . . . .	27
Figure 12-3	Inserting a Paper Roll . . . . .	27
Figure 12-4	Closing the Paper Compartment . . . . .	28
Figure 12-5	Removing the Paper Roll . . . . .	29
Figure 13-1	Keypad Privacy Shield Installation . . . . .	30
Figure 14-1	SAM, SIM, and SD/MMC Cards Configurations . . . . .	32
Figure 14-2	SAM or SIM Cardholder Locking-Clasp . . . . .	33
Figure 14-3	SAM or SIM Card Installation . . . . .	33
Figure 14-4	SD/MMC Card. . . . .	34
Figure 14-5	Inserting the SD/MMC Card. . . . .	34
Figure 14-6	Removing the SD/MMC Card . . . . .	35
Figure 15-1	Peripheral Device Connection . . . . .	36
Figure 16-1	Cellular Headset Connection . . . . .	37
Figure A-1	Using the Magnetic Card Reader . . . . .	44
Figure B-1	Using the Smart Card Reader . . . . .	45

DRAFT



NURIT 8000



## 1. Product Regulatory Information

### *Note*

The following product regulatory information and compliance statements apply to all models of the NURIT 8000.

### *Caution*

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

### FCC Compliance Statement



Manufacturer: VeriFone, Inc.  
Model: NURIT 8000

### FCC Part 15 Requirements

This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is installed and operated in a commercial environment.

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.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.



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## NURIT 8000

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

Connection of peripherals to this unit requires the use of grounded, shielded cables to ensure compliance with the class B limits.

### FCC Part 24 Requirements

This device may contain a radio transceiver module, (FCC ID number is located on the bottom of the terminal), operating under Part 24 of the FCC rules in a licensed part of the radio spectrum. Qualified personnel must perform service or repairs to the radio portion of this device. Any unauthorized modification to the radio module, shielding, or antenna system may void the user's authority to operate this device.

This device has been tested and meets RF exposure guidelines for hand held operation pursuant to FCC OET Bulletin 65 Supplement C ed. 01-01, IEEE 1528/D1.2 (2003) and Industry Canada RSS-102 (1999).

### In Canada

This digital apparatus does not exceed the class B limits for radio noise emissions from digital apparatuses set forth in the Radio Interference Regulations of the Canadian Department of Communications.

Cet appareil digital n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils de la classe B, déterminée par la Réglementation d'Interférence Radio du Ministère Canadien des Communications.

IC: 4804A-N8000SSQ

NURIT 8000



### EU Directives Compliance Statement



This product complies with the requirements of applicable EU Council Directives.

*Note*

Disposal of this product or of any of its components must be performed in full compliance with all EU and/or local directives and regulations. For more information, contact your local VeriFone representative or authorized VeriFone distributor.

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NURIT 8000

## 2. General Safety Instructions

### *Warning*

Failure to observe these instructions may result in severe personal injury or damage to the NURIT 8000 or other equipment.

### *Note*

These safety instructions are based in general on those provided by Underwriters Laboratories (UL) Inc. U.S.A.

When using the NURIT 8000 or any associated device, the following basic safety precautions should always be observed to reduce the risk of fire, electric shock, or personal injury.

- Read and make sure you understand all instructions.
- Follow all warnings and instructions marked on the device and in this manual.
- Disconnect the device from the power supply and any peripherals before cleaning.
- Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning and/or a soft brush.
- Do not use the device near water, especially when using the AC/DC Power Adapter or external modem.
- Never spill any liquid on the device.
- Place the device in a stable position on a solid surface. When operated hand-held, grasp the device securely. Serious damage may result if the device falls.
- The optimal operational position for the terminal is hand-held at an angle of approximately 30°. The terminal is also designed for optimal tabletop usage. Keep the terminal a short distance from your body.
- Do not cover slots and openings of the device. They may be provided for ventilation and protection against overheating. Never place the device near radiators, or in a place where proper ventilation is not provided.
- Do not place objects on the power cord. Install the device where no one can step on the cord.



- Use only the power source as marked on the device. If you are not sure of the type of the power supplied to your location, consult your representative or local power company.
- Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.
- Never push objects into the device through slots (other than those specifically intended for the stylus, magnetic stripe or Smart Cards, or electronic cards), as this may result in fire or electric shock.
- To reduce the risk of electric shock, do not disassemble any of the equipment or accessories referred to in this manual. If required, take the equipment to a qualified service representative. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock.
- Take care when installing an internal battery. If installed incorrectly, it may explode. Use only a VeriFone supplied battery. Discard used batteries according to local regulations.
- Disconnect the device from the power supply and any peripherals and refer to qualified service personnel under the following conditions:
  - The power supply cable or plug is damaged or frayed.
  - Liquid has been spilled into the device.
  - The device has been exposed to rain or water.
  - The device does not work normally, when following the operating instructions.
  - The device has been dropped or damaged.
  - The device exhibits a distinct change in performance.
- When using the NURIT 8000 optional docking station and/or external modem during thunderstorms, disconnect the telephone line, if possible. There may be a remote risk of electric shock from lightning.
- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Use caution when installing or modifying telephone lines.



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## NURIT 8000

- Never touch non-insulated telephone wires or equipment unless the telephone line has been disconnected at the network interface.
- When in the vicinity of a gas leak, do not use the NURIT 8000, a standalone telephone or a telephone connected to a NURIT 8000 docking station to report the leak.
- Do not use the NURIT 8000 in an area of potential explosive atmosphere, such as fuel or chemical storage or transfer facilities, or in any area where you would be advised to turn off a vehicle's engine.
- Do not replace the battery or charge the NURIT 8000 in an area of potential explosive atmosphere.
- Do not use the NURIT 8000 in a known blasting area.
- Do not place the NURIT 8000 in the area over a vehicle-equipped air bag.
- If the battery has been removed, ensure that no metal objects come in contact with its electrical contacts.
- The NURIT 8000 is designed for use with a built-in internal antenna. Do not open the device with the intent of tampering with the antenna system. Doing so may damage the unit and violate FCC (Ministry of Communications) regulations.

### Radio Frequency Energy Emission

Your NURIT 8000 may contain a transmitter and receiver that emit radio frequency (RF) energy. The actual frequency range used by the NURIT 8000 is radio-modem dependent according to the specific model. Digital modulation techniques are used.

During radio communication, the local radio system handling the actual communication controls the actual power transmission output level. This output level may typically vary (relative to the distance between the user location and the cell transmission sites).

RF energy may affect some electronic systems. Consult the specific device manufacturer (or airline crew for possible airborne operation) regarding permission to use this device while airborne and associated problems. It is currently known that use of all radio-type devices is prohibited while airborne.

In August 1996, the Federal Communications Commission (FCC) of the U.S. adopted an updated safety standard for



human exposure to radio frequency electromagnetic energy emitted by FCC regulated transmitters. The design of this device complies with the FCC guidelines and those standards.

To maintain compliance with FCC RF exposure guidelines, if you wear a device on your body, use VeriFone supplied or approved carrying case, holster, or other body-worn accessory.

If you do not use a body-worn accessory, ensure the antenna is at least 1 cm (0.394 in) from your body when transmitting. Use of non-approved accessories may violate FCC RF exposure guidelines.

***Warning***

Use only in the normal position. Avoid unnecessary contact with the antenna when the device is switched on.

***Note***

- Use only VeriFone-approved accessories and batteries.
- Only qualified service personnel may install or repair your device.
- When used properly, the design of this handheld wireless terminal complies with U.S., Canadian, European, and other standards for protection from public exposure to RF magnetic signals.
- This device has been tested and meets RF exposure guidelines for hand held operation pursuant to FCC OET Bulletin 65 Supplement C ed. 01-01, IEEE 1528/D1.2 (2003) and Industry Canada RSS-102 (1999).

### **Safety Precautions for Medical Devices**

For those persons using a pacemaker or other medical device, please read the following important safety notes:

- Though most electronic equipment and critical medical devices are shielded against radio-frequency signals, it is important to realize the possibilities of potential interference and to know the standard precautions that may be taken.



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NURIT 8000

### **Pacemakers**

Industry standards recommend a minimum separation of 15 cm (6 in) between a wireless phone-type device and a pacemaker to prevent any potential problems.

Individuals using a pacemaker should:

- Always keep the NURIT 8000 terminal more than 15 cm (6 in) from the pacemaker when using the unit for cellular wireless communication or when performing an online transaction.
- Turn off the NURIT 8000 terminal immediately and disconnect it from the power supply if you suspect any problem of interference.

### **Other Medical Devices**

Consult the manufacturer of your medical device to determine its level of shielding. Depending on the proximity to certain equipment, you may be asked not to use your NURIT terminal or one of its accessories.



NURIT 8000



### 3. Initial Setup

#### **Caution**

The box of a secure NURIT device should be sealed with a Secure Device label. If the Secure Device label on the box was damaged or missing, this could be an indication of device tampering and may affect the validity of the warranty for the device. Notify your VeriFone service provider.



**IMPORTANT:**  
VERIFY THAT THE BOX  
AND LABEL ARE INTACT  
BEFORE OPENING

Figure 3-1 Secure Device Label

#### **Note**

The size, appearance and precise wording of the Secure Device label may vary according to the particular service provider of the device.

#### **Caution**

- Carefully inspect the contents of the box for any damaged or missing components. Do not use a NURIT device that shows any signs of damage.
- VeriFone has taken all measures to provide you with a complete device. If shipping damage is evident, file a claim with the shipping company. Notify your VeriFone service provider concerning this damage, and if any components are missing.



### Contents Checklist

The following items should be found inside the box:

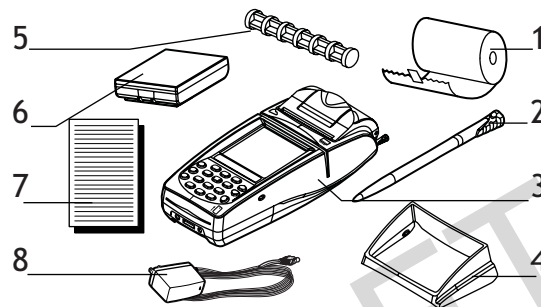


Figure 3-2 NURIT 8000 - Box Contents

1 Thermal paper roll	2 Touch screen stylus
3 NURIT 8000 terminal	4 Keypad privacy shield (optional)
5 Paper roll spindle	6 Lithium-Ion battery
7 Documentation	8 AC/DC Power Adapter (boxed)

**Note**

Any one or more of the included accessories may be already attached to the terminal.

**Note**

The contents of the documentation pack may vary depending on specific customer documentation requirements.

**Note**

Depending on the particular model of the NURIT 8000, the external modem or the car adapter may also be included in the contents of the box. See "Optional Accessories" on page 14.

NURIT 8000



**Note**

Before using the NURIT 8000, remove the thin transparent plastic membrane that covers the LCD screen.

**Selecting a Point-Of-Sale Location**

- When not operated from its hand-held position, place the NURIT 8000 on a flat table or countertop close to the power outlet and any peripherals.
- Maintain good ventilation around the terminal. Provide for at least 22 cm (8.5 in) of clear space around the terminal in its fixed operating location.
- Do not cover the terminal.

The NURIT 8000 is designed to be operated in the following locations:

- Indoors, using the AC/DC Power Adapter, optional docking station or optional external modem.
- Outdoors, powered only by the built-in battery.
- In a vehicle, using the optional car adapter.

**Caution**

Under no circumstances should the NURIT 8000 be powered or charged outdoors using its AC/DC adapter or docking station.

**Warning**

Do not locate the terminal where it is exposed to the following:

- Devices that radiate excessive electrical noise or voltage fluctuations, such as air conditioners, fans, electric motors, neon signs, or high-frequency security devices.
- Water containers, such as a sink, a laundry tub or a pool.
- Areas of excessive moisture, heat, oil, dust or debris.
- Direct sunlight or objects that radiate heat.
- Metal partitions or such obstructions that may disrupt radio transmission or reception if your terminal is used as a wireless device.



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NURIT 8000

### Wireless LAN (Wi-Fi) Terminals

Some NURIT terminals are equipped with transceivers that can access Wireless Local Area Networks (WLAN), which are often used for short-range wireless communications in home and office environments, retail stores, restaurants, and gasoline stations. The terminals commonly connect to the WLAN via a Wi-Fi access point or repeater.

Several types of WLAN communication standards exist. NURIT WLAN terminals are equipped with transceivers that comply with the IEEE 802.11b (Wi-Fi) standard.

- Verify that all the Wi-Fi access points and repeaters comply with this standard.
- Locate the access point or repeater as close as possible to the area where the NURIT WLAN terminals are to be operated. (Follow manufacturer-supplied installation instructions and guidelines of the Wi-Fi access points or repeaters.)
- If the NURIT WLAN terminals are used over a defined area, such as within a restaurant or retail store, the Wi-Fi access point or repeater should be located as close as possible to the center of this area.
- If the area where the NURIT WLAN terminals are used exceeds the maximum range for Wi-Fi reception, install additional access points or repeaters as required.
- Do not locate the Wi-Fi access point or repeater where metal objects or electrical appliances may obstruct communication with the terminals.

NURIT 8000



## 4. Specifications

<i>Specification</i>	<i>Details</i>
Power	<ul style="list-style-type: none"><li>Terminal: 8.4 VDC at 1.0 A</li><li>AC/DC Adapter (Safety Approved)</li><li>Input: 100-240 VAC at 50/60 Hz (0.8 A)</li><li>Output: 8.4 VDC at 1.0 A</li></ul>
Dimensions	<ul style="list-style-type: none"><li>Height: 59 mm (2.32 in)</li><li>Width: 92 mm (3.62 in)</li><li>Depth: 210 mm (8.27 in)</li></ul>
Paper Roll	<ul style="list-style-type: none"><li>57 mm x 38 mm (2.25 in x 1.5 in)</li><li>10.5 mm (0.4 in) core diameter</li></ul>
Weight	<ul style="list-style-type: none"><li>Terminal: 625 g (22.05 oz)</li><li>Including battery and paper roll</li><li>Shipping: 800 g (28.2 oz)</li><li>Not including documentation</li></ul>
Environmental Requirements	<ul style="list-style-type: none"><li>Operating temperature: 0° C to +45° C (+32° F to +113° F)</li><li>Storage temperature: -20° C to +60° C (-4° F to +140° F)</li><li>Relative humidity: 5%-95% non-condensing</li></ul>

### *Note*

Specifications are subject to change without notice following technological improvement of the device and its components.



NURIT 8000

## 5. Optional Accessories

### **Caution**

Connection of any accessory that is not explicitly approved by VeriFone may cause damage and thus void the Limited Warranty of this equipment.

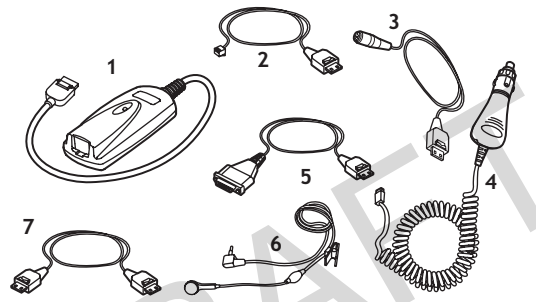


Figure 5-1 NURIT 8000 - Optional Accessories

1 External modem	2 Barcode adapter
3 Keyboard emulation cable	4 Car adapter
5 PC-terminal cable	6 Cellular headset
7 Terminal-terminal cable	

### **Note**

Availability of the optional accessories may vary according to customer requirements. Consult your authorized VeriFone representative or service provider for information regarding availability of current or future optional accessories.

NURIT 8000



<i>Accessory</i>	<i>Details</i>
Standard RS-232 Barcode Reader Adapter	<ul style="list-style-type: none"><li>Connects to an RS-232 barcode reader</li></ul>
External Modem	<ul style="list-style-type: none"><li>Up to 14.4 kbps, 33.6 kbps or 56 kbps telephone line modem</li><li>Implements synchronous or asynchronous, HDLC, TCP/IP protocols</li><li>Supports FastConnect connectivity</li><li>May be supplied with the terminal as a standard accessory (model-dependent)</li></ul>
Keyboard Emulation Barcode Reader Adapter	<ul style="list-style-type: none"><li>Enables connection of a PC keyboard or barcode reader to the terminal</li><li>Facilitates the entry of catalog items and other data</li></ul>
PC-Terminal Cable	<ul style="list-style-type: none"><li>Cable used for downloading software applications to the terminal</li><li>Connects to an RS-232 COM port on the PC</li></ul>
Car Adapter	<ul style="list-style-type: none"><li>Connects to standard 12 V vehicle electrical power socket</li><li>Used to power the NURIT 8000 and optional Docking Station and to charge their battery</li><li>May be supplied with the terminal as a standard accessory (model-dependent)</li></ul>
Cellular Headset Cable	<ul style="list-style-type: none"><li>Hands-free headset.</li><li>2.5 mm plug.</li><li>Not supplied by VeriFone. Contact your cellular representative for purchasing details.</li></ul>
Terminal-Terminal Interconnection Cable	<ul style="list-style-type: none"><li>Enables peer-to-peer software updating</li></ul> <p><b>Note:</b> For security reasons, terminal-terminal software updating is not available for terminals with Secure Download enabled.</p>



NURIT 8000

## 6. General Features

The NURIT 8000 includes the following features:

<i>Feature</i>	<i>Description</i>
LCD Display	<ul style="list-style-type: none"><li>Graphical LCD display of general operational prompts and messages</li><li>Black and white</li><li>128x128 pixels</li></ul>
Touch Screen	<ul style="list-style-type: none"><li>Application-dependent touch screen</li></ul>
Stylus	<ul style="list-style-type: none"><li>Touch screen stylus</li><li>Integrated stylus storage slot</li></ul>
Keypad	<ul style="list-style-type: none"><li>10-key telephone-style keypad section</li><li>8 function and special keys</li></ul>
Keypad Privacy Shield	<ul style="list-style-type: none"><li>Detachable privacy shield (optional)</li></ul>
Smart Card Reader	<ul style="list-style-type: none"><li>Integrated, front-entry Smart Card reader</li></ul>
Magnetic Card Reader	<ul style="list-style-type: none"><li>Integrated, bi-directional reader for magnetic stripe cards</li></ul>
SAM Cards	<ul style="list-style-type: none"><li>Up to two SAM cards</li><li>Note: Configuration is model-dependent</li></ul>
SD/MMC Card	<ul style="list-style-type: none"><li>Up to one SD/MMC card</li><li>Note: Configuration is model-dependent</li></ul>
SIM Card	<ul style="list-style-type: none"><li>Up to one SIM card.</li><li>SIM card is needed for GSM/GPRS wireless communication technology</li><li>Note: Configuration is model-dependent</li></ul>
Thermal Printer	<ul style="list-style-type: none"><li>Integrated printer uses thermal paper</li></ul>
Connectors	<ul style="list-style-type: none"><li>Power connector</li><li>Data port</li><li>Headset jack</li></ul>
Battery	<ul style="list-style-type: none"><li>Smart Lithium-Ion battery</li><li>Supplies 7.4 VDC at 1800 mAH (minimum)</li><li>Fully recharges within three hours (80% charge capacity within one hour)</li></ul>



NURIT 8000



<i>Feature</i>	<i>Description</i>
Radio	<ul style="list-style-type: none"><li>• Antenna located under paper-roll, with power supply</li></ul> Choice of: <ul style="list-style-type: none"><li>• GSM/GPRS</li><li>• CDMA</li><li>• WLAN 802.11b/g (WPA2 Security)</li></ul> Note: Radio is model-dependent

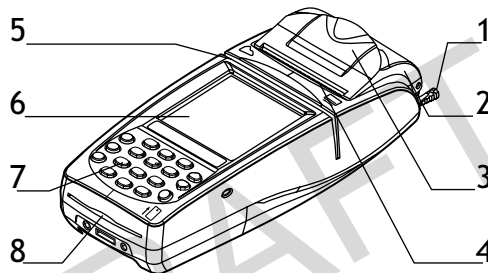


Figure 6-1 NURIT 8000 - General Features-Top

1 Stylus	2 Paper compartment cover
3 Paper compartment cover release latch	4 Paper tear bar
5 Magnetic card reader	6 LCD display/touch screen
7 Keypad	8 Smart Card reader



NURIT 8000

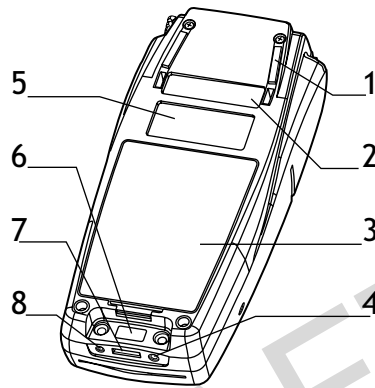


Figure 6-2 NURIT 8000 - General Features-Bottom

1 Rubber stop	2 Model/barcode serial number label
3 Battery-SAM-SIM-SD/MMC cover	4 Power connector
5 Compliance label	6 Docking station infrared connection
7 Data connector	8 Audio headset connector



## 7. Removing and Replacing the Battery-SAM-SIM-SD/MMC Compartment Cover

To remove the battery-SAM-SIM-SD/MMC compartment cover:

1. Disconnect the AC/DC Power Adapter from the electrical power outlet.
2. Carefully turn the NURIT 8000 face down or place it on a soft, smooth surface, so as not to damage the LCD display.
3. Steady the unit with one hand.
4. With your other hand, use your thumb to press in and lift the compartment cover locking tab.
5. Remove the battery/SAM-SD/MMC compartment cover.

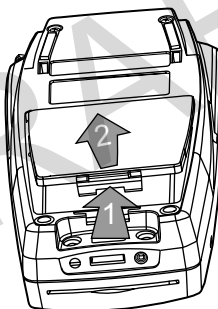


Figure 7-1 Opening the Battery-SAM-SIM-SD/MMC Compartment Cover

To replace the battery-SAM-SIM-SD/MMC compartment cover:

1. Insert the two hinge tabs of the battery-SAM-SIM-SD/MMC compartment cover into the tab slots at the back of the battery-SAM-SIM-SD/MMC compartment.



NURIT 8000

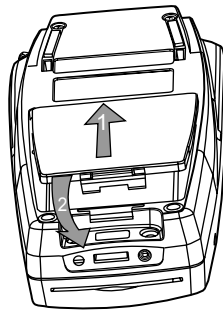


Figure 7-2 Replacing the battery-SAM-SIM-SD/MMC  
Compartment Cover

- 
- 1 Cover locking tab
  2. Lower and push the compartment cover until the cover snaps into place.



## 8. Installing the Battery

To install the battery:

1. Remove the battery-SAM-SIM-SD/MMC compartment cover, as described in "Removing and Replacing the Battery-SAM-SIM-SD/MMC Compartment Cover" on page 19.
2. Hold the battery, verifying that the side with the metal contacts are facing downwards and that the rounded edge is facing towards the back of the compartment.
3. While holding the battery at a 30° angle, slide the two tabs on the front of the battery into the slots on the front wall of the compartment.
4. Push the back of the battery down, until it snaps into place.
5. Replace the battery-SAM-SIM-SD/MMC compartment cover, as illustrated in Figure 7-2 on page 20.

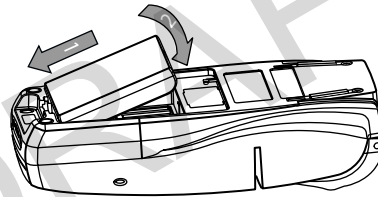


Figure 8-1 Installing the Battery

To remove the battery:

1. Remove the battery-SAM-SIM-SD/MMC compartment cover, as described in "Removing and Replacing the Battery-SAM-SIM-SD/MMC Compartment Cover" on page 19.
2. Insert your fingernail into the groove at the back of the battery and lift the battery, snapping the battery out of place.
3. Lift and remove the battery.

### Battery Maintenance

- The supplied high-performance, smart Lithium-Ion battery provides 7.4 VDC at 1800 mA (minimum) capacity.



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## NURIT 8000

- When fully discharged, the battery fully recharges within three hours while installed in the terminal. An 80% charge capacity is reached within one hour.
- The terminal can be connected to an AC/DC power supply indefinitely without causing damage to the battery.

### *Caution*

When using the VeriFone-supplied AC/DC Power Adapter, the Lithium-Ion battery must be installed in the terminal.

- In typical use, the life span of the battery exceeds 500 charge cycles, after which, operating time decreases slowly.
- The battery has a self-discharge rate. It loses approximately 1% of its charge per day when not in use.
- Replace the battery when the charge capacity is too weak for normal operation.
- Remove the battery from the terminal if you do not intend to use your NURIT 8000 for an extended period of time.

### *Warning*

Do not dispose of the NURIT 8000 Lithium-Ion smart battery in a fire. Lithium-Ion batteries must be recycled or disposed of properly. Do not dispose of Lithium-Ion batteries in municipal waste sites.

### *Note*

Extreme temperatures degrade the battery performance. Do not store the battery in temperatures below -20° C (4° F) or above 60° C (140° F).



## 9. Connecting the NURIT 8000 to an AC Power Outlet

You can connect the NURIT 8000 to an AC power outlet using the VeriFone-supplied AC/DC Power Adapter.

To connect the NURIT 8000 to an AC power outlet:

1. Connect the plug of the AC/DC Power Adapter cable to power connector on the front panel of the NURIT 8000.
2. Connect the AC/DC Power Adapter cable to an AC power outlet.

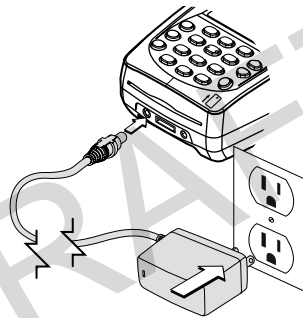


Figure 9-1 AC Power Connection

### Battery Charge Status

The LED indicator on the AC/DC Power Adapter and the Car Adapter lights according to the charge status:

<i>Indicator</i>	<i>Charge Status</i>
Red	The battery is charging (less than 80% charged)
Green	The battery is charging (80% or more charged)
No light	The battery is fully charged or the charger is disconnected from the AC power outlet



NURIT 8000

## 10. Installing the External Modem

You can use the optional external high-speed modem to download applications and parameters to the NURIT 8000 via a standard telephone line.

To install the external modem:

1. Insert the modem's data plug into the data port on the front panel of the NURIT 8000.
2. Connect a standard telephone line cord from the modem to a standard RJ-11 type modular telephone line outlet.

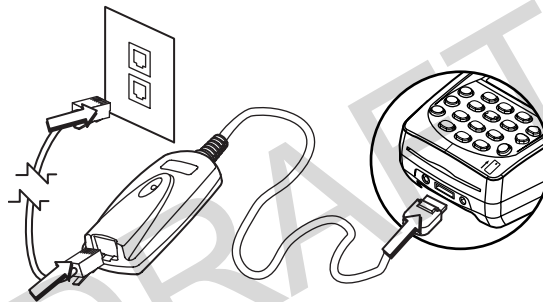


Figure 10-1 External Modem Installation





## 11. Connecting the Car Adapter

You can use the car adapter to provide power to the NURIT 8000 and to charge the installed Lithium-Ion battery.

To install the Car Adapter:

1. Connect the plug of the car adapter cable to the 3-pin power jack on the front panel of the NURIT 8000.
2. Plug the car adapter into the vehicle's electrical power socket.

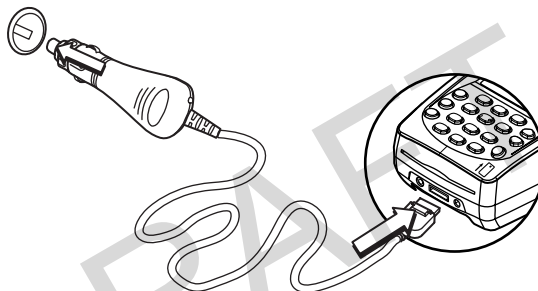


Figure 11-1 Car Adapter Connection

### *Note*

The LED indicator on the car adapter lights to indicate the charge status of the battery, as described in "Battery Charge Status" on page 20.

To remove the car adapter:

1. Unplug the car adapter from the vehicle's electrical power socket.
2. Unplug the car adapter battery charger cable from the 3-pin power jack on the front panel of the NURIT 8000.



## 12. Loading Paper in the Printer

### **Caution**

The printer of this device uses thermal paper only. Use of low-quality paper may damage the printer and/or cause it to malfunction. For further details regarding printer paper, contact your VeriFone representative or service provider.

To load a roll of thermal paper in the printer:

1. Place the terminal on a flat, stable surface.
2. Insert two fingers into the recess on the paper compartment cover, beneath the release latch.
3. Pull the latch up until the cover unlocks.
4. Lift the paper compartment cover until it is fully open.

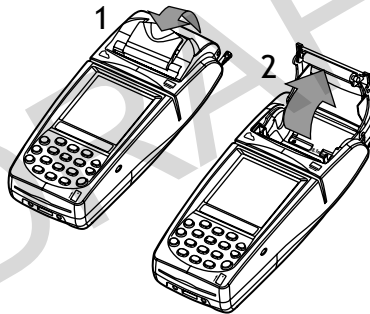


Figure 12-1 Opening the Paper Compartment

- |   |                           |   |                                     |
|---|---------------------------|---|-------------------------------------|
| 1 | Lifting the release latch | 2 | Opening the paper compartment cover |
|---|---------------------------|---|-------------------------------------|

5. Remove the tape strip from a new paper roll.
6. Unroll approximately 5 cm (2 in) of paper to facilitate the loading process.

NURIT 8000

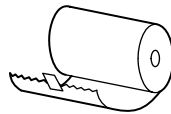


Figure 12-2 Unrolling the Paper Roll

7. Hold the paper roll with the unrolled end on the underside.
8. Insert the spindle into the center of the paper roll.
9. Lower the paper roll and spindle into the paper compartment.

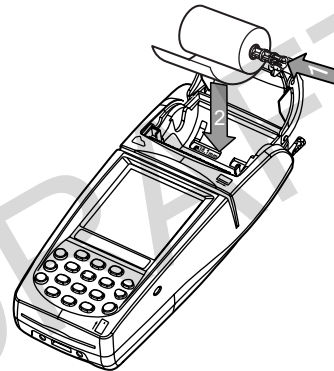


Figure 12-3 Inserting a Paper Roll

10. Pull the unrolled end of the paper approximately 2.5 cm (1 in) out of the paper compartment, ensuring that the paper feeds from the underside of the roll.
11. Close the latch on the top of the paper compartment cover.
12. Press down firmly on the paper compartment cover, until it snaps into place.



NURIT 8000



Figure 12-4 Closing the Paper Compartment

### Removing the Paper Roll from the Printer

To remove an empty roll of thermal paper from the printer:

1. Place the terminal on a flat, stable surface.
2. Insert two fingers into the recess on the paper compartment cover, beneath the release latch.
3. Pull the latch up until the cover unlocks.
4. Lift the paper compartment cover until it is fully open, as illustrated in Figure 12-1 "Opening the Paper Compartment" on page 26.
5. Lift the paper roll with its spindle out of the paper compartment.

NURIT 8000



Figure 12-5 Removing the Paper Roll

6. Pull the spindle out of the paper roll.



### 13. Installing the Keypad Privacy Shield

To install the keypad privacy shield:

1. Place the terminal on a flat, stable surface, or hold it securely in one hand.
2. Position the tabs on the inner front sides of the keypad privacy shield over the indentations on each side of the terminal.
3. Press down the keypad privacy shield until it snaps into place.

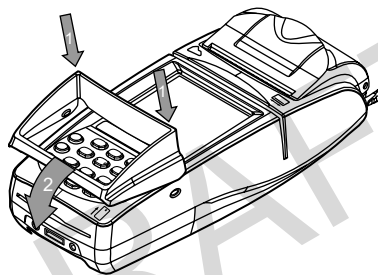


Figure 13-1 Keypad Privacy Shield Installation

**Note**

Failing to install or removing the keypad privacy shield may render the terminal non-compliant with ISO 9564 for PIN protection and may violate card association requirements for PIN Entry Devices.

To remove the keypad privacy shield:

1. Place the terminal on a flat, stable surface, or hold it securely in one hand.
2. Grasp the keypad privacy shield and pull it away from the terminal.



## 14. Installing a SAM, SIM, or SD/MMC Card

Depending on the particular model, you can install a variety of electronic memory or processing cards in the NURIT 8000. These cards include the following:

- Up to two (2) SAM (Secure Access Module) cards can be installed in SAM cardholders 1 and 2, located in the NURIT 8000's Battery-SAM-SIM-SD/MMC compartment. SAM cards may be used to hold encryption keys, identify the terminal or merchant to the host, process applications, or a variety of other uses.
- A SIM (Subscriber Identity Module) card identifies the mobile terminal in a GSM or GPRS network.
- SD (Secure Digital) or MMC (Multi-Media Card) cards hold data, such as price lists and offline transaction information.

The diagrams below illustrate the possible configurations of SIM, SAM, and SD/MMC cards in the NURIT 8000.

### *Note*

A SIM card must be installed when using a model of the NURIT 8000 that implements GSM or GPRS wireless communications technology.

### *Caution*

The contacts on the SAM, SIM, and SD/MMC cards and cardholders can be easily damaged. Do not bend or scratch when installing or removing a card.



### SAM, SIM, and SD/MMC Card Configurations

The configuration of the SAM, SIM, and SD/MMC cards are model dependent, based off of what has been enabled of your model of the terminal. If one or more of the slots are disabled in your model, the slot is inaccessible.

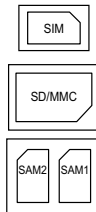


Figure 14-1 SAM, SIM, and SD/MMC Cards Configurations

Card Slot	Availability
SAM	<ul style="list-style-type: none"><li>• 2 SAM slots, labelled SAM1 and SAM2</li><li>• Card configuration may be: 0/1/2</li></ul>
SIM	<ul style="list-style-type: none"><li>• 1 SIM card slot, accessible only if your terminal model is GPRS enabled</li><li>• Card configuration may be: 0/1</li></ul>
SD/MMC	<ul style="list-style-type: none"><li>• 1 SD/MMC card slot</li><li>• Card configuration may be: 0/1</li></ul>

### Installing a SAM or SIM Card

To install a SAM or SIM card:

1. Remove the battery-SAM-SIM-SD/MMC compartment cover, as described in "Removing and Replacing the Battery-SAM-SIM-SD/MMC Compartment Cover" on page 19.
2. If necessary, remove the battery, as described on page 21.
3. Slide the SAM or SIM cardholder locking-clasp in the direction indicated by the engraved arrow to the OPEN position.



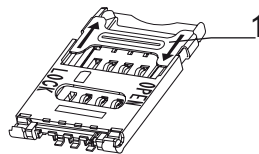


Figure 14-2 SAM or SIM Cardholder Locking-Clasp

1 Locking clasp

4. Lift the cardholder on its hinge to an upright position.
5. Hold the SAM or SIM card so that its chip side is facing down towards the contacts on the reader.
6. Insert the end closest to the chip on the SAM or SIM card into the cardholder.

**Note**

Make sure that you first slide the end closest to the chip on the card into the grooves of the holder.

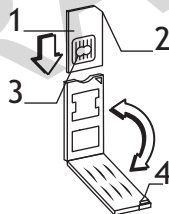


Figure 14-3 SAM or SIM Card Installation

1 SAM or SIM card	2 Beveled corner
3 Metal contact	4 Triangular protrusion

7. Close the SAM or SIM cardholder.
8. Lock the cardholder by sliding the cardholder locking clasp in the direction indicated by the engraved arrow to the LOCK position.
9. If necessary, replace the battery, as described on page 21.



10. Replace the battery-SAM-SIM-SD/MMC cover, as described on page 21.

### Installing an SD/MMC Card

To install an SD/MMC card:

1. Remove the battery-SAM-SIM-SD/MMC compartment cover, as described in "Removing and Replacing the Battery-SAM-SIM-SD/MMC Compartment Cover" on page 19.
2. If necessary, remove the battery, as described on page 21.
3. Hold the SD/MMC card directly above the SD/MMC card slot, with the metal contacts facing down and the narrow edge with the beveled corner pointing towards the slot opening.

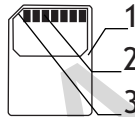


Figure 14-4 SD/MMC Card

1	SD/MMC card	2	Metal contacts
3	Beveled corner		

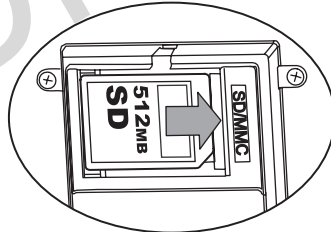


Figure 14-5 Inserting the SD/MMC Card

4. Lower the SD/MMC card into position.
5. Press down on the SD/MMC card while sliding it into the slot, until the card snaps into place.



6. If necessary, replace the battery, as described on page 21.
7. Replace the battery-SAM-SIM-SD/MMC cover, as described on page 21.

**To remove an SD/MMC card:**

1. Remove the battery-SAM-SIM-SD/MMC compartment cover, as described in "Removing and Replacing the Battery-SAM-SIM-SD/MMC Compartment Cover" on page 19.
2. If necessary, remove the battery, as described on page 21.
3. With one hand press down on the SD/MMC locking tab, while sliding the card out with your other hand.

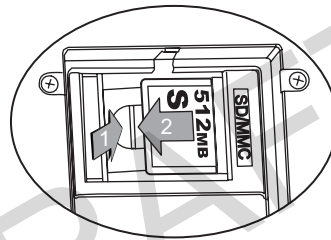


Figure 14-6 Removing the SD/MMC Card

4. Remove the SD/MMC card.
5. If necessary, replace the battery, as described on page 21.
6. Replace the battery-SAM-SIM-SD/MMC cover, as described on page 21.



NURIT 8000

## 15. Connecting Peripheral Devices

You can connect a variety of optional peripheral devices to the NURIT 8000.

### *Note*

Peripheral devices may require special adapter cables to connect to the NURIT 8000. Certain peripheral devices may also require an external power supply. Refer to the specific product documentation of the peripheral devices or contact your local VeriFone representative or service provider for further details.

To connect a peripheral device to the NURIT 8000:

1. Connect the peripheral device to the appropriate end of the adapter cable (see "Optional Accessories" on page 14).
2. Insert the other end of the adapter cable into the data port on the front panel of the NURIT 8000.

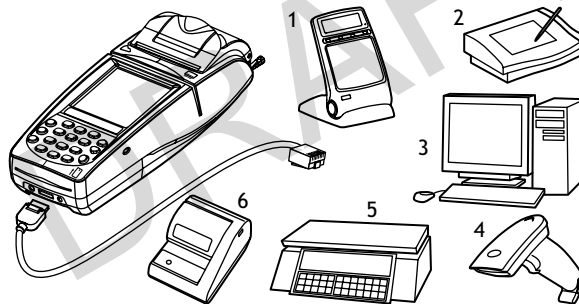


Figure 15-1 Peripheral Device Connection

1 Contactless card reader	2 Signature capture device
3 PC	4 Barcode reader
5 Electronic scale	6 Check reader

NURIT 8000



## 16. Connecting a Cellular Headset

You can use a standard cellular headset with NURIT 8000 models that support cellular telephone communication.

### *Note*

A cellular headset is not provided by VeriFone. A standard cellular headset is sufficient for use with the NURIT 8000.

To use the cellular headset:

1. Insert the plug on the headset cable into the headset jack on the front panel of the NURIT 8000.
2. Place the earpiece on the headset cable in your ear.

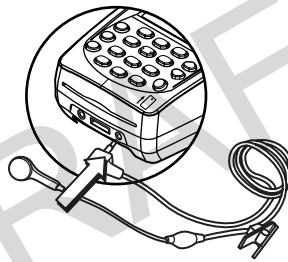


Figure 16-1 Cellular Headset Connection

### *Note*

When disconnecting the cellular headset, grasp the plug on the headset cable. Do not pull the cable to disconnect the cellular headset.



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NURIT 8000

## 17. Care and Maintenance

### Maintenance Recommendations

The NURIT 8000 has been designed to give you long and trouble-free service with minimal operator care.

#### *Caution*

Never use thinners, benzene, or synthetic cleansers as they may distort or damage the plastic and critical parts.

#### *Caution*

Opening a secure model of the NURIT 8000 will automatically result in erasure of all secret encryption keys and will render the terminal inoperable.

### Cleaning the NURIT 8000

To clean the NURIT 8000:

- Gently wipe off dirt from the body of the PIN pad with a soft, damp, lint-free cloth. A very mild dishwashing detergent can be used to dampen the cloth.
- Alcohol or alcohol-based cleansers may also be used for stains that are more difficult.
- If available, a low-pressured blower can be used to remove dirt accumulated around the keypad buttons and the LCD screen.
- When necessary, gently wipe the screen with a soft cloth or eyeglass lens wiper.

### Cleaning the Printer

To clean the printer:

1. Disconnect the terminal from the power supply.
2. Open the paper roll compartment cover.
3. Carefully lift the paper roll and remove any excess pieces of paper or dirt that might be lodged in the compartment. If available, use a low-pressure compressed air gun.
4. Replace the paper roll.
5. Close the paper roll compartment cover.

NURIT 8000



### Technical Assistance

Contact your VeriFone representative or service provider for technical assistance and ordering information regarding specific components or accessories.

### Shipping the NURIT 8000

In exceptional circumstances, you may be required to ship your NURIT 8000 to a servicing facility.

To ship the NURIT 8000:

1. Carefully pack the NURIT 8000, preferably in the original box.
2. Attach a postage-paid letter to the outside of the package detailing the complaint.
3. Send the package prepaid and adequately insured.

#### *Note*

Notify your VeriFone representative or service provider before shipment. Shipment must be to an authorized representative or service center only. Products sent to other locations will be returned at the owner's expense. Contact your representative for the correct address.



NURIT 8000

## 18. Troubleshooting

The NURIT 8000 has been designed for trouble-free operation. However, minor problems may occur during installation and use.

This section briefly describes how to troubleshoot some possible common problems that may arise during the normal operation of the NURIT 8000.

Before requesting service for the terminal, read this section to find a possible remedy for the problem. If you are still unable to solve the problem, contact a service representative.

Do not try to solve the problem by opening the terminal.

### **Caution**

Turn off the NURIT 8000 or disconnect it from the power supply before connecting or disconnecting any peripheral device.

#### The terminal appears to have no power

1. Verify that the AC/DC Power Adapter is fully plugged into the AC power outlet and that its barrel connector mates properly with the terminal power jack.
2. Verify that voltage is reaching the AC power outlet by connecting a different device to this outlet. If you suspect any type of problem at this electrical outlet, contact a certified electrician for a professional inspection.
3. Press and hold down the 'ON' key for three (3) seconds.
4. Verify that the battery is securely installed and sufficiently charged.
5. If possible, try to operate the NURIT 8000 with a different VeriFone supplied AC/DC Power Adapter.
6. Connect the NURIT 8000 to a different AC power outlet.
7. Try to adjust the LCD screen contrast settings, using the designated, model-dependent key combination.
8. If the problem persists, contact an authorized service representative.





**Transactions cannot be completed successfully**

1. Try to perform the transaction using a different magnetic or Smart Card (model-dependent).
2. Make sure you have inserted or swiped the card in the proper manner.
3. Attempt to complete several transactions manually using the terminal keypad instead of using customer cards. If all these transactions are completed successfully, contact an authorized service representative.
4. If a manually performed transaction is not completed successfully, verify that the wireless transmission quality is sufficient to complete the transaction. Try changing your location to obtain improved transmission quality.
5. If the problem persists, contact an authorized service representative.

**Wireless communication is disrupted or cannot be established**

1. Try moving the terminal to a more open operating area. An enclosed area degrades the quality of wireless reception and transmission.
2. Verify that the SIM card being used for wireless communication is installed correctly and is not damaged or malfunctioning.
3. In general, the angle of operation does not affect terminal performance. However, for optimal usage, hold the terminal at an angle not exceeding 30°.
4. If the problem persists, contact an authorized service representative.

**Operation with a peripheral device is not successful**

1. Verify that the peripheral device is properly connected to the terminal.
2. Try to verify whether the peripheral device is functioning properly.
3. Replace the cable or the adapter cable being used with the peripheral device.
4. If the problem persists, contact an authorized service representative.

**The printer does not function properly**

1. Recharge or replace the battery.
2. If the problem persists, connect the terminal to the AC power outlet using the AC/DC Power Adapter.
3. Verify that the AC/DC Power Adapter is connected properly to the AC power outlet and that its barrel plug mates with the power jack on the front panel of the terminal. Verify that the LCD display is lit.
4. Verify that the paper roll compartment cover is fully and securely closed.
5. Open the paper roll compartment cover and check whether the paper roll has been used up. If it has, replace the thermal paper roll.
6. Verify the paper roll and spindle are correctly installed.
7. Verify that the paper has been fed to the printer from the bottom of the paper roll.
8. Verify that the paper is not jammed or damaged. If it is, reload the paper.
9. If the problem persists, contact an authorized service representative.



The printer continues to operate when out of paper
<ol style="list-style-type: none"><li>1. Verify that the paper sensor of the printer mechanism (inside the paper roll compartment) is not blocked by paper or debris.</li><li>2. If the problem persists, contact an authorized service representative.</li></ol>

The magnetic card reader does not function properly
<ol style="list-style-type: none"><li>1. Verify that the card has been swiped with its magnetic stripe at the bottom and facing the user. See Figure A-1 on page 42.</li><li>2. Swipe the magnetic card in the opposite direction.</li><li>3. If possible, try using a different magnetic card.</li><li>4. If the problem persists, contact an authorized service representative.</li></ol>

The Smart Card reader does not function properly
<ol style="list-style-type: none"><li>1. Verify that the chip end of the Smart Card is fully inserted with chip side up. See Figure B-1 on page 43.</li><li>2. If possible, try using a different Smart Card.</li><li>3. If the problem persists, contact an authorized service representative.</li></ol>



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NURIT 8000

## Appendix A: Using the Magnetic Card Reader

A magnetic card reader is located between the terminal's LCD touch screen and the release button of the paper roll compartment cover.

To use the magnetic card reader:

1. Grasp the card so that its magnetic stripe is facing you.
2. Place the card into one end of the card reader slot.
3. Swipe the card in a smooth continuous manner in either direction (left-to-right or right-to-left).

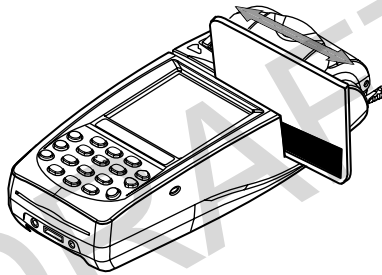


Figure A-1 Using the Magnetic Card Reader

NURIT 8000



## Appendix B: Using the Smart Card Reader

To use the Smart Card reader:

1. Hold the Smart Card with the metal chip facing upward and directed toward the opening of the Smart Card reader at the front of the NURIT 8000.
2. Insert the card into the Smart Card reader slot.

### *Note*

For guidance, a pictogram near the card slot indicates how to insert the Smart Card into the Smart Card reader. In addition, insertion direction arrows may be engraved or inscribed on the Smart Card.

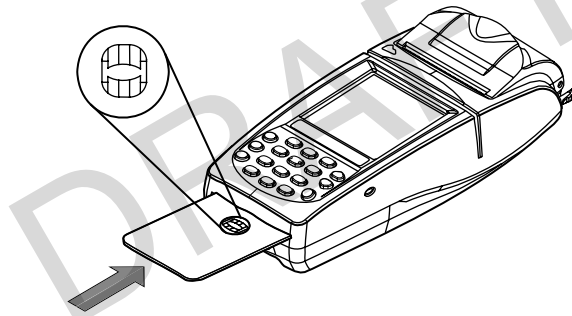


Figure B-1 Using the Smart Card Reader

3. Remove the card when prompted by the terminal, depending on the specific application being used.



NURIT 8000



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NURIT 8000

## Contact Information

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