



# NURIT 8210

## Handover Payment Terminal

### *Installation Manual*



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#### **Catalog Number**

DOC111EN01-C

#### **Print Date**

March, 2006



## Foreword

Thank you for purchasing the NURIT 8210 Handover Payment Solution with built-in PIN pad. You now own one of the most advanced, versatile, secure, and convenient electronic point-of-sale (POS) terminals manufactured today.

This manual provides basic installation instructions. To fully utilize the features of your NURIT 8210, and for general safety purposes, it is recommended that you familiarize yourself with this manual, the terminal and any peripheral equipment or accessories.

### *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. Although the operation of the terminal is application-dependent, basic installation procedures are the same for most units.

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

## 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.



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## 1. Product Regulatory Information

### 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: Lipman Electronic Engineering Ltd.  
Model: NURIT 8210

#### FCC 47 CFR, Part 15, Subpart B, Class B Compliance:

This equipment has been tested and has been found to comply with the limits for Class B digital devices, pursuant to Part 15 of the FCC Rules.

#### FCC 47 CFR, Part 15:2003, Subpart B, Class B; ICES-003:2004 Issue 4, Class B

Operation is subject to the following conditions:

- (1) This device may not cause harmful interference
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Class B limits are designed to provide reasonable protection against harmful interference in a residential installation.

However, there is no guarantee that interference will not occur in a particular installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference to radio communications.



If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance 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 dealer or an experienced technician for help.

### FCC Part 68 Requirements

The FCC has established rules permitting this device to be directly connected to the telephone network. Standardized jacks are used for these connections. This equipment should not be used on party or coin lines.

If this device is malfunctioning, it may be causing harm to the telephone network; this device should be disconnected until the source of the problem can be determined and until repair has been made. If this is not done, the telephone company may temporarily disconnect service.

The telephone company may make changes in its technical operations and procedures; if such changes affect the compatibility or use of this device, the telephone company is required to give adequate notice of the changes. You will be advised to file a complaint with the FCC.

If the telephone company requests information on what equipment is connected to their lines, inform them of:

- The telephone number to which this terminal is connected
- The ringer equivalence number: 00B
- The USOC jack required: RJ-11C
- The FCC Registration number: US: LEEMM00MOD1

The Ringer Equivalence Number (REN) is used to determine how many devices can be connected to your telephone line. In most areas, the sum of the RENs of all devices on any one line should not exceed five (5). If too many devices are attached, they may not ring properly.



### 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.

### EU Directives Compliance Statement



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

- TBR 21:1998
- EN 55022: 1998 + A1:2000+A2:2003 class B,
- EN 61000-3-2: 2000, EN 61000-3-3:1995+A1: 2001,
- EN55024:1998+A1:2001+A2:2003
- EN60950-1:2001



## 2. General Safety Instructions

### Note

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

When using the NURIT 8210 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.
- Never spill any liquid on the device.
- Place the device in a stable position on a solid surface. Serious damage may result if the device falls.
- 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.
- Use only the power source as marked on the device. If you are not sure of the type of power supplied to your location, consult your dealer or local power company.
- Do not place objects on the power cord. Install the device where no one can step on the cord.
- 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 magnetic stripe or smart cards, SD/MMC cards, or SAM 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.
- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch non-insulated telephone wires or equipment unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.
- When in the vicinity of a gas leak, do not use the POS terminal, a standalone telephone or a telephone connected to a POS terminal or docking station to report the leak.
- 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.

**Warning**

Use only the Lipman supplied AC/DC Power Adapter to power the NURIT 8210.

**Warning**

- Do not use your NURIT 8210 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 use the NURIT 8210 in a known blasting area.

**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.
- 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 the NURIT 8210 or one of its accessories.



### 3. Specifications

Specification	Details
Power	<ul style="list-style-type: none"> <li>Terminal: 14.5-20 VDC at 1.5 A</li> <li>AC/DC Switching Adapter Input: 100-240 VAC at 50/60 Hz (0.8 A) Output: 16 VDC at 1.5 A</li> <li>The AC/DC Adapter must be approved by the relevant authorities in the country where the equipment is sold.</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>Height: 85 mm (3.35 in)</li> <li>Width: 105 mm (4.1 in)</li> <li>Depth: 255 mm (10 in)</li> </ul>
Paper Roll	<ul style="list-style-type: none"> <li>57 mm x 50 mm (2.25 in x 2 in)</li> </ul>
Weight (approximate)	<ul style="list-style-type: none"> <li>Terminal: 780 g (1 lb 11.5 oz)</li> <li>Shipping: 1535 g (3 lb 10 oz) (not including documentation pack)</li> </ul>
Modem Communication Rate	<ul style="list-style-type: none"> <li>56 kbps (maximum)</li> </ul>
Environmental Requirements	<ul style="list-style-type: none"> <li>Operating temperature: -15°C to +55°C (+5°F to +131°F)</li> <li>Storage temperature: -20°C to +70°C (-4°F to +158°F)</li> <li>Relative humidity: Up to 95% non-condensing</li> </ul>
Approvals (partial list)	<ul style="list-style-type: none"> <li>EMV Levels 1 and 2</li> <li>FCC Part 15 Class B and FCC Part 68</li> <li>CE</li> </ul>

#### Note

Specifications are subject to change without notice due to changes to the device and its components. The above specifications may differ between models of the NURIT 8210.



### 4. 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 Lipman distributor.



Figure 4-1 NURIT Secure Device Label

#### Note

The size, appearance and precise wording of the Secure Device label may vary according to the particular distributor 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.
- Lipman 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 Lipman distributor concerning this damage, and if any components are missing.





## Contents Checklist

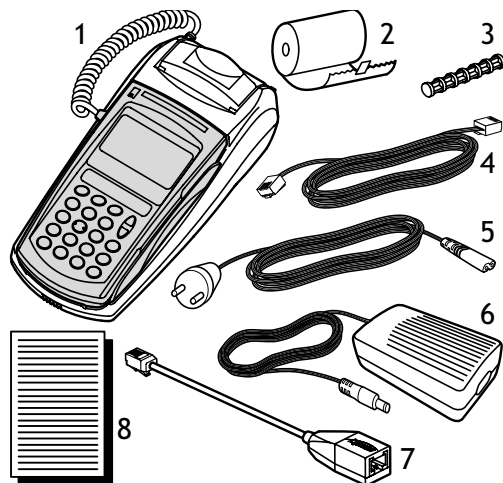


Figure 4-2 NURIT 8210 - Box Contents

NURIT 8210	
1 including the Base Unit and the Customer Interface Unit	2 Thermal Paper Roll
3 Paper Roll Spindle	4 Telephone Line Cable
5 AC Power Cable (boxed)	6 AC/DC Power Adapter (boxed)
7 Ethernet Adapter Cable (model dependent)	8 Documentation Pack

### 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.

## Selecting a Point-of-Sale Location

### 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.

### Caution

The NURIT 8210 should not be operated or powered outdoors.

- Place the NURIT 8210 on a flat table or countertop close to the power supply, telephone connection, and any required peripheral devices.
- Do not cover the terminal.
- Maintain at least 22 cm (9 in) of clear space around the terminal in its fixed operating location, in order to assure good ventilation.
- Select a location that allows the Customer Interface Unit to be handed to the cardholder without stretching the interconnection cable more than 2 meters (6 ft. 4 in.) from the Base Unit.

**Caution**

Overextending the cable may cause damage to the terminal.

**Note**

When the NURIT 8210 is used as a PIN entry device:

- The customer should be able to obstruct visual observation of the PIN entry with his/her body and hand.
- The cardholder must be clearly instructed to obstruct visual observation of the PIN entry with his/her body and hand.

Failure to comply with these conditions may render the terminal non-compliant with ISO 9564 for PIN protection and may violate card association requirements for PIN entry devices.

**Note**

Before using the NURIT 8210, remove the thin transparent plastic membrane that covers the LCD screen.

**Note**

Do not use a NURIT 8210 that shows any signs of damage.



## 5. Optional Accessories

The NURIT 8210 package may include additional optional accessories packed in its box or boxed separately.

Accessory	Details
Ethernet Adapter Cable	<ul style="list-style-type: none"><li>• Connects an RJ-45 Ethernet cable (10/100/1000base-T) to the terminal</li><li>• Connects to the TEL connector on the terminal connections panel</li></ul>
PC-to-Terminal Download Cable	<ul style="list-style-type: none"><li>• Cable used for downloading software applications to the terminal</li><li>• Connects to an RS-232 port on a PC</li></ul>
Terminal-to-Terminal Interconnection Cable	<ul style="list-style-type: none"><li>• Enables peer-to-peer software updating</li><li>• Uses standard RS-232 cross cable with RJ-45 connectors on both ends</li></ul> <p><b>Note:</b> For security reasons, terminal-terminal software updating is not available for terminals with Secure Download enabled.</p>

**Caution**

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

**Note**

Consult your authorized Lipman representative for information regarding availability of current or future optional accessories.



## 6. General Features

The NURIT 8210 includes the following features:

Feature	Description
Base Unit	<ul style="list-style-type: none"> <li>Base Unit with thermal printer and connectors</li> </ul>
Customer Interface Unit	<ul style="list-style-type: none"> <li>POS terminal with internal PIN pad</li> <li>Includes all customer interfaces: magnetic and Smart Card readers, keypad, and LCD display</li> </ul>
LCD Display	<ul style="list-style-type: none"> <li>Graphical LCD display of general operational prompts and messages</li> <li>Black and white with backlight</li> <li>128 x 64 pixels, 63 x 35 mm</li> </ul>
Keypad	20 keys comprised of: <ul style="list-style-type: none"> <li>10-key telephone-style keypad</li> <li>10 function and special keys</li> </ul>
Smart Card Reader	Integrated, top-entry, EMV-compliant Smart Card reader
Magnetic Card Reader	Integrated, bi-directional 2-track or 3-track magnetic stripe card reader (model dependent)
Thermal Printer	<ul style="list-style-type: none"> <li>Quiet and fast integrated printer</li> <li>Easy-load mechanism</li> </ul>
SAM and SD/MMC Cards Compartments	<ul style="list-style-type: none"> <li>Compartment in the Customer Interface Unit holds up to two SAM cards</li> <li>Compartment in the Base Unit holds up to two SAM cards and one SD/MMC card</li> </ul>
Power and Communication Connectors	<ul style="list-style-type: none"> <li>PWR (Power) Connector</li> <li>COM1 and COM2 RS-232 Connectors</li> <li>TEL Connector (RJ-11)               <ul style="list-style-type: none"> <li>External Telephone</li> <li>RS-485 LAN (model dependent)</li> <li>10BaseT Ethernet LAN via Ethernet Connector Cable (model dependent)</li> </ul> </li> <li>LINE Connector (RJ-11)</li> <li>SPK (speaker or headphone) Connector</li> </ul>

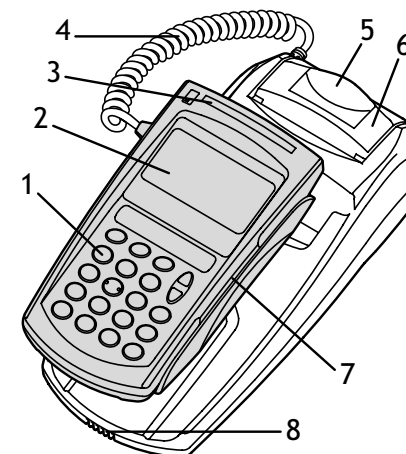


Figure 6-1 NURIT 8210 - Front View

1 Keypad	2 LCD Display
3 Smart Card Slot	4 Interconnection Cable
5 Paper Compartment Release Latch	6 Paper Compartment Cover
7 Magnetic Stripe Card Slot	8 Speaker

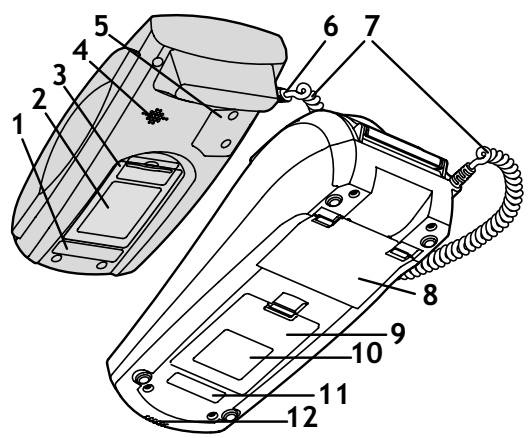


Figure 6-2 NURIT 8210 - Bottom View

1	Model/Serial Number Barcode Label	2	Compliance Label
3	SAM Cards Compartment Cover	4	Buzzer
5	Cable Cover	6	Cable Fastener
7	Interconnection Cable	8	Connections Panel Cover
9	Electronic Cards Compartment Cover	10	Compliance Label
11	Model/Serial Number Barcode Label	12	Speaker

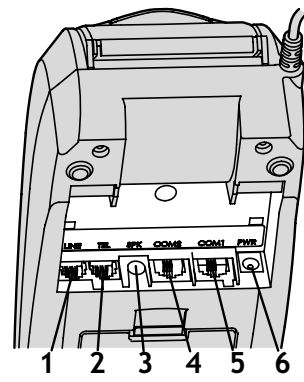


Figure 6-3 NURIT 8210 - Connections Panel

1	LINE Telephone Line Connector	2	TEL External Telephone/ RS-485 LAN/Ethernet LAN Connector (model dependent)
3	SPK External Speaker or Headphone Connector	4	COM2 Peripheral Connector
5	COM1 Peripheral Connector	6	PWR Power Connector



## 7. Placing the Customer Interface Unit onto the Base Unit

### To place the Customer Interface Unit onto the Base Unit:

- Lower the Customer Interface Unit face up onto the Base Unit, assuring that its top end with the Smart Card slot is closest to the printer.

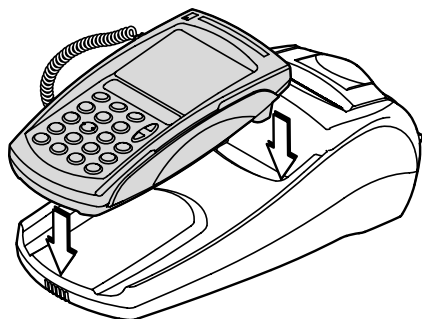


Figure 7-1 Placing the Customer Interface Unit onto the Base Unit

#### Note

When placing the Customer Interface Unit, ensure that the interconnection cable does not obstruct the recess in the Base Unit.



## 8. Removing and Replacing the Connections Panel Cover

The connections panel on the NURIT 8210 is located on the bottom of the Base Unit, behind a plastic cover. This cover must be removed before you can connect the terminal to the power supply, telephone line, or peripheral devices.

### To remove the connections panel cover:

- Remove the Customer Interface Unit from the Base Unit and place it on a stable surface.
- Turn the Base Unit over and place it face down on a flat, stable surface, with the connections panel facing away from you.
- On the connections panel cover, place a finger in each of the recessed areas adjacent to the two locking tabs.

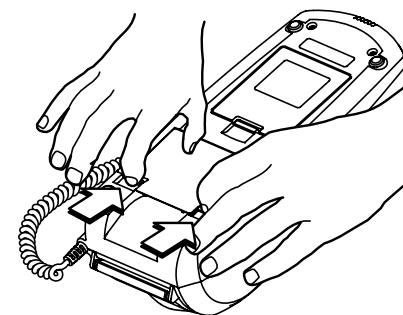


Figure 8-1 Opening the Cover Locking Tabs

- Pull the locking tabs towards you and lift the cover, exposing the terminal's connectors.

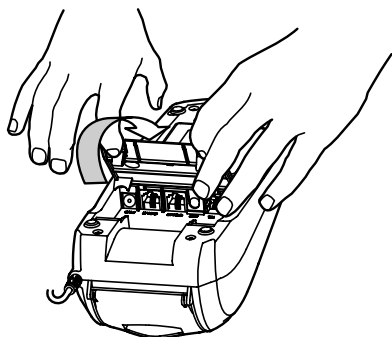


Figure 8-2 Removing the Connections Panel Cover

**To replace the connections panel cover:**

1. Insert the hinge tabs on the edge of the cover into the hinge slots, located above the connectors.

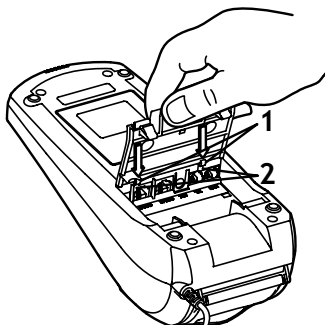


Figure 8-3 Positioning the Connections Panel Cover

- |                    |               |
|--------------------|---------------|
| 1 Cover Hinge tabs | 2 Hinge Slots |
|--------------------|---------------|

2. Lower the cover and press down until it snaps into place.

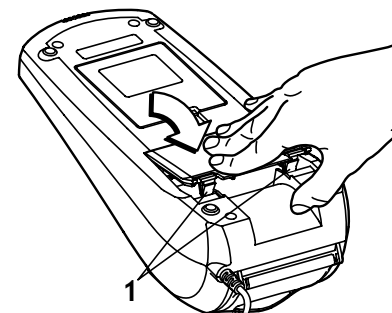


Figure 8-4 Closing the Connections Panel Cover

- |  |
|--|
| 1 Connections panel cover locking tabs |
|--|



## 9. Connecting to an AC Electrical Power Outlet

To connect the NURIT 8210 to the AC power outlet:

1. Remove the connections panel cover from the bottom of the Base Unit, as described in “Removing and Replacing the Connections Panel Cover” on page 18.
2. Connect the plug of the AC electrical power cable to the oval power jack on the AC/DC Power Adapter.
3. Connect the circular barrel plug of the AC/DC Power Adapter cable to the **PWR** connector on the connections panel.

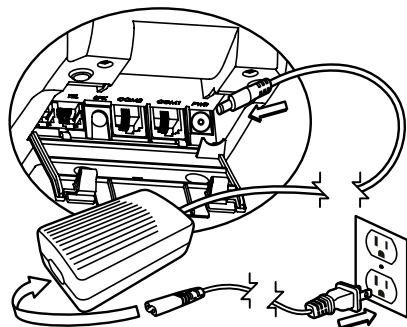


Figure 9-1 NURIT 8210 - AC Electrical Power Connection

4. Connect the other end of the AC electrical power cable to an AC electrical power outlet.

### Warning

Use only the Lipman supplied AC/DC Power Adapter to power the NURIT 8210.

### Warning

Do not plug the AC/DC Power Adapter into an outdoor electrical power outlet.



### Note

It is recommended that you install a power surge arrestor at the power outlet to prevent possible damage caused by electrical spikes or local lightning strikes.



## 10. Connecting to a Telephone Line

The NURIT 8210 communicates over standard telephone lines, using a built-in high-speed modem.

### To connect the NURIT 8210 to a telephone line:

1. Disconnect the AC/DC Power Adapter from the electrical power outlet and remove the connections panel cover, as described in “Removing and Replacing the Connections Panel Cover” on page 18.
2. Connect one end of the Lipman supplied telephone cable to the RJ-11 **LINE** connector on the connections panel.
3. Connect the other end of the telephone cable to a standard RJ-11 type modular telephone line outlet.

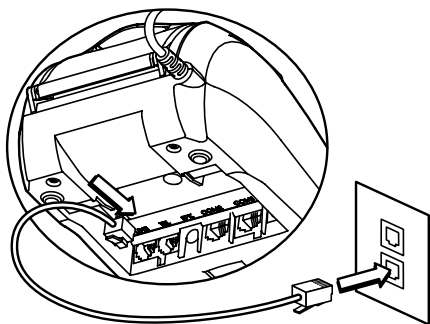


Figure 10-1 NURIT 8210 - Telephone Line Connection

4. Reconnect the AC/DC Power Adapter to the electrical power outlet and replace the connections panel cover.

#### Note

It is recommended that you use a dedicated telephone line with the NURIT 8210.

#### Note

Use only the telephone cable shipped with the terminal. Using a different telephone cable may cause the terminal to malfunction.



## Telephone Outlet Types

The following types of telephone outlets are common:

- **Modular**  
This is the most common type of telephone outlet used. Plug the supplied telephone cord from the terminal into a standard modular telephone jack. If you do not have one, contact your local telephone company or a qualified telephone technician.
- **4-Prong Jack**  
You must purchase a special adapter for use with a 4-prong jack. This adapter plugs into the 4-prong jack and the telephone line cord plugs into the adapter.
- **Hard-wired**  
You must purchase a special modular jack adapter for this direct-type hard-wire connection that replaces older connecting blocks. Contact your local telephone company or a qualified telephone technician for correct information on color-coded connections.





## 11. Connecting an External Telephone

The NURIT 8210 can share a telephone line with a voice telephone or fax machine. This type of connection requires connection of the telephone to the terminal and the terminal to the wall outlet.

### To connect an external telephone to the NURIT 8210:

1. Disconnect the AC/DC Power Adapter from the electrical power outlet.
2. Remove the connections panel cover, as described in “Removing and Replacing the Connections Panel Cover” on page 18.
3. Connect one end of a standard telephone cable to the RJ-11 connector on the telephone or fax machine.
4. Connect the other end of the telephone cable to the **TEL** connector on the connections panel.

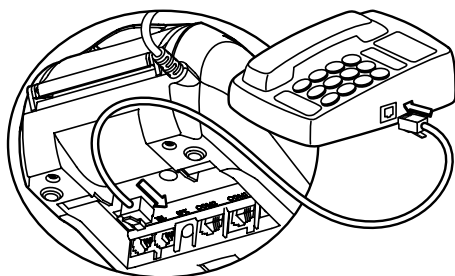


Figure 11-1 NURIT 8210 - External Telephone Connection

5. Reconnect the AC/DC Power Adapter to the electrical power outlet.



## 12. Connecting to a LAN

Some models of the NURIT 8210 can be connected to a Local Area Network (LAN) in addition to an analog telephone line. Depending on the specific model, the NURIT 8210 can be connected to either an RS-485 LAN or a 10BaseT Ethernet LAN.

### Connecting to an Ethernet LAN

#### To connect the NURIT 8210 to an Ethernet LAN:

1. Disconnect the AC/DC Power Adapter from the electrical power outlet.
2. Remove the connections panel cover, as described in “Removing and Replacing the Connections Panel Cover” on page 18.
3. Connect the Ethernet Adapter Cable to the **TEL** connector on the connections panel.
4. Connect the other end of the Ethernet Adapter Cable to one end of the network cable.
5. Connect the other end of the network cable to a network wall outlet, switch, or other compatible network device.

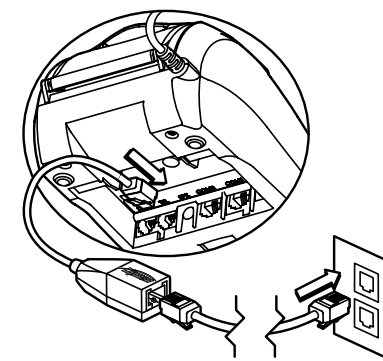


Figure 12-1 NURIT 8210 - Ethernet LAN Connection

6. Replace the connections panel cover.
7. Reconnect the AC/DC Power Adapter to the electrical power outlet.



## Connecting to an RS-485 LAN

To connect the NURIT 8210 to an RS-485 LAN:

1. Disconnect the AC/DC Power Adapter from the electrical power outlet.
2. Remove the connections panel cover, as described in “Removing and Replacing the Connections Panel Cover” on page 18.
3. Connect the network cable to the TEL connector on the connections panel.
4. Connect the other end of the network cable to a network wall outlet, switch, or other compatible network device.

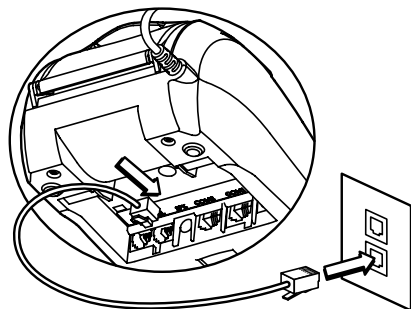


Figure 12-2 NURIT 8210 - RS-485 LAN Connection

5. Replace the connections panel cover.
6. Reconnect the AC/DC Power Adapter to the electrical power outlet.



## 13. Connecting External Speakers or Headphones

The NURIT 8210 includes a speaker connector for external speakers or headphones, enabling applications that use voice prompts and sounds.

To connect external speakers or headphones to the NURIT 8210:

1. Disconnect the AC/DC Power Adapter from the electrical power outlet.
2. Remove the connections panel cover, as described in “Removing and Replacing the Connections Panel Cover” on page 18.
3. Connect the external speaker or headphone plug to the SPK connector on the connections panel.
4. If the external speakers receive their power from an electrical power outlet, connect them to a power supply.

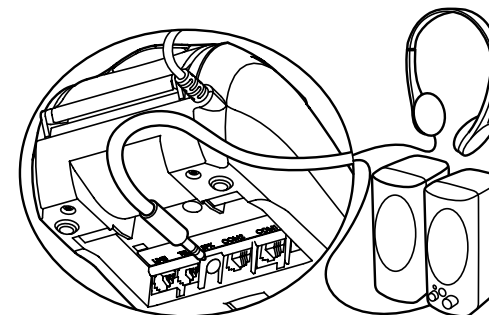


Figure 13-1 NURIT 8210 - External Speakers and Headphones Connection

5. Reconnect the AC/DC Power Adapter to the electrical power outlet.



## 14. Connecting Peripheral Devices

You can connect a variety of optional RS-232-compatible peripheral devices to the NURIT 8210.

### Caution

You can connect to up to two external peripheral devices to the NURIT 8210. Consult with your Lipman distributor for information about the peripheral devices that you can connect to your specific model.

### Note

Peripheral devices may require special adapter cables for their connection to the NURIT 8210. In addition, certain peripheral devices require an external power supply. Refer to the product documentation of the specific peripheral devices, or contact your local Lipman representative for further details.

### To connect an RS-232 peripheral device to the NURIT 8210.

1. Disconnect the AC/DC Power Adapter from the electrical power outlet.
2. Remove the connections panel cover, as described in “Removing and Replacing the Connections Panel Cover” on page 18.
3. Connect a peripheral device to one end of its adapter cable.
4. Connect the other end of the adapter cable to either the **COM1** or **COM2** connector on the connections panel.
5. Replace the connections panel cover, as described on page 19.
6. Reconnect the AC/DC Power Adapter to the electrical power outlet.

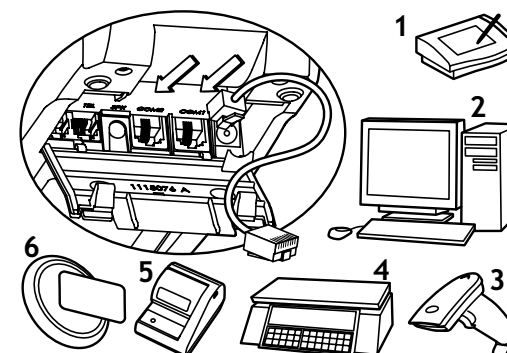


Figure 14-1 NURIT 8210 - Peripheral Device Connection

1	Signature Capture Device	2	PC
3	Barcode Reader	4	Electronic Scale
5	Check Reader	6	Contactless Reader



## 15. 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 Lipman representative.

#### 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.

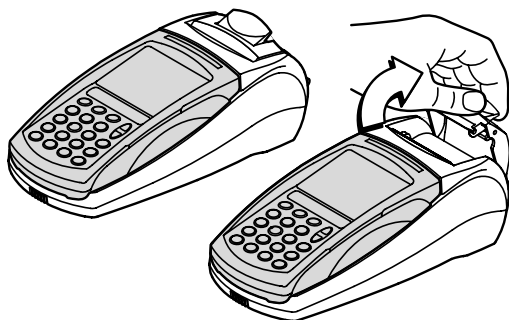


Figure 15-1 Opening the Paper Compartment

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

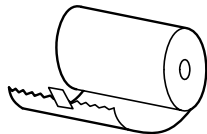


Figure 15-2 Unrolling the Paper Roll



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.

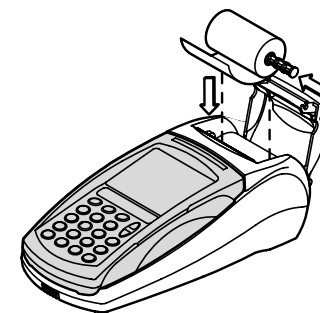


Figure 15-3 Inserting a Paper Roll

10. Pull the unrolled end of the paper approximately 2.5 cm (1 inch) out of the paper compartment, ensuring that the paper feeds from the underside of the roll.
11. Close the paper compartment cover and press down firmly until it snaps into place.

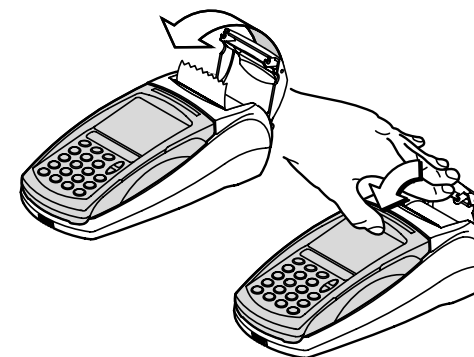


Figure 15-4 Closing the Paper Compartment



## 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 15-1 “Opening the Paper Compartment”** on **page 31**.
5. Lift the paper roll with its spindle out of the paper compartment.

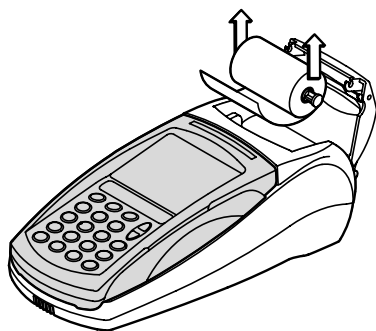


Figure 15-5 Removing the Paper Roll

6. Pull the spindle out of the paper roll.



## 16. Installing Electronic Cards

Depending on the particular model, up to two SAM cards and an SD/MMC memory card can be installed in the Base Unit, and an additional two SAM cards in the Customer Interface Unit.

### Caution

Do not bend or scratch the contacts of the SAM cardholders when installing or removing cards.

## Installing Cards in the Customer Interface Unit

To install a SAM card in the Customer Interface Unit:

1. Remove the Customer Interface Unit from the Base Unit and place it face down on a soft, smooth surface so as not to damage the LCD display.
2. Release the cards compartment cover by pressing and lifting its locking tab.

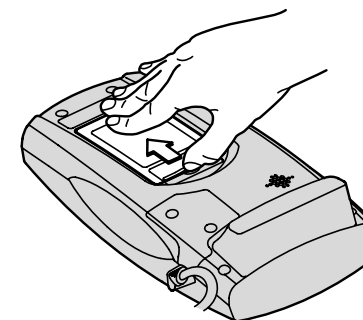


Figure 16-1 Releasing the Cards Compartment Cover

3. Lift the cover and detach it from the terminal.

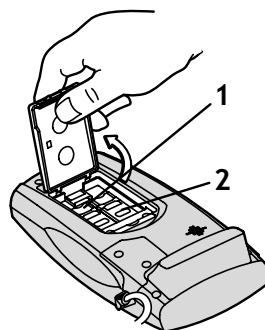


Figure 16-2 Opening the Cards Compartment

- |                    |                    |
|--------------------|--------------------|
| 1 SAM 2 Cardholder | 2 SAM 1 Cardholder |
|--------------------|--------------------|

- Slide the locking-clasp in the direction indicated by the engraved arrow to the **OPEN** position.

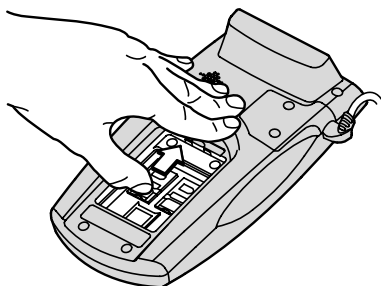


Figure 16-3 Sliding the Cardholder Locking-Clasp

- Lift the cardholder on its hinge to a vertical position.
- Hold the SAM card vertically, with the beveled corner at the top edge and the metallic contacts facing towards the contacts on the reader.
- Slide the SAM card into the cardholder

#### Note

Insert first the end of the SAM card closest to the chip and furthest from the beveled corner.

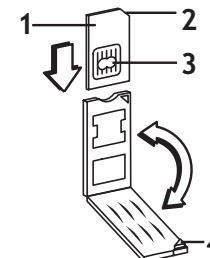


Figure 16-4 Inserting a SAM Card

- |                  |                         |
|------------------|-------------------------|
| 1 SAM Card       | 2 Beveled Corner        |
| 3 Metal Contacts | 4 Triangular Protrusion |

- Lower the SAM cardholder onto its base.  
Check that the corner of the SAM card is not obstructed by the triangular protrusion at the corner of the cardholder base.
- Lock the SAM cardholder by sliding the cardholder locking clasp to the **LOCK** position.

#### To replace the cards compartment cover:

- Insert the two hinges of the cards compartment cover into the hinge slots on the edge of the cards compartment.

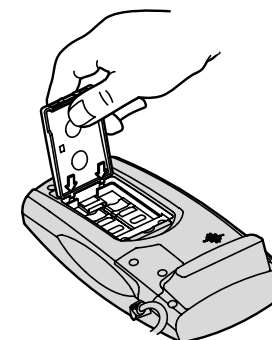


Figure 16-5 Replacing the Cards Compartment Cover



2. Close the compartment cover and press down until the locking tab snaps into place.
3. If the model of the NURIT 8210 includes a void label, apply the label over the recessed rectangle around the cover's locking tab.

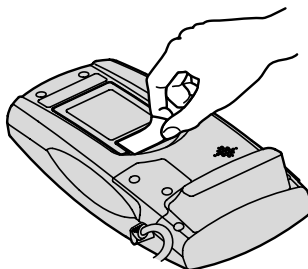


Figure 16-6 Applying the Void Label

## Installing Electronic Cards in the Base Unit

### To install a SAM card in the Base Unit:

1. Remove the Customer Interface Unit from the Base Unit and place the Base Unit face down on a smooth surface.
2. Release the cards compartment cover by pressing and lifting its locking tab.

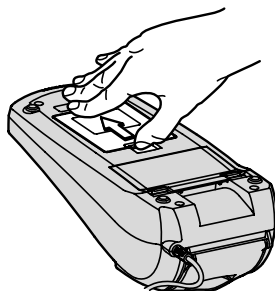


Figure 16-7 Releasing the Compartment Cover

3. Lift the cards compartment cover on its hinge and detach it from the Base Unit.

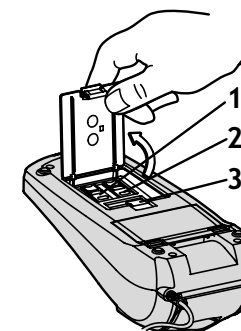


Figure 16-8 Opening the Cards Compartment

1 SAM 4 Cardholder	2 SAM 3 Cardholder
3 SD/MMC Memory Card Slot	

4. Install the SAM card, as described in “Installing Cards in the Customer Interface Unit” on page 34.

### To install an SD/MMC memory card in the Base Unit:

1. Remove the Customer Interface Unit from the Base Unit and place the Base Unit face down on a soft, smooth surface.
2. Release the cards compartment cover by pressing and lifting its locking tab.
3. Lift the cards compartment cover on its hinge and detach it from the Base Unit.
4. Hold the SD/MMC card directly above the SD/MMC card slot, with the metal contacts facing down and the beveled corner pointing towards the slot opening.

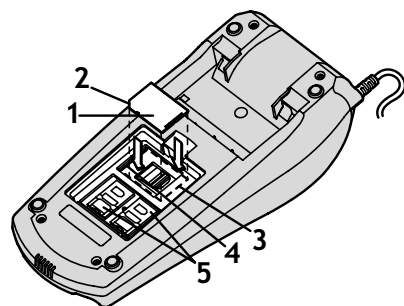


Figure 16-9 Positioning the SD/MMC Card

- |                    |                     |
|--------------------|---------------------|
| 1 SD/MMC Card      | 2 Bevelled Corner   |
| 3 SD/MMC Card Slot | 4 Card Slot Opening |
| 5 SAM Cardholders  |                     |
- Lower the SD/MMC card into position.
  - Press down on the SD/MMC card while sliding it into the slot.

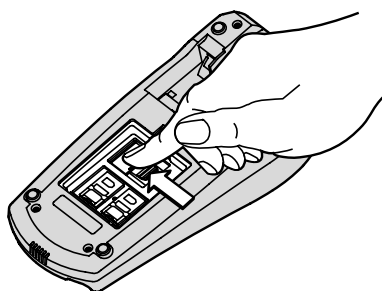


Figure 16-10 Inserting the SD/MMC Card

**To Remove the SD/MMC Card:**

- Press down on the positioning tab adjacent to the SD/MMC card.
- While holding down the tab with one finger, slide the SD/MMC card out of its slot with another finger, over the fastening tab.

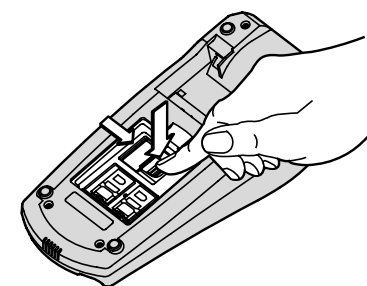


Figure 16-11 Removing the SD/MMC Card

- Remove the SD/MMC card from the cards compartment.

**To replace the electronic cards compartment cover in the Base Unit:**

- Insert the two hinges of the electronic cards compartment cover into the hinge slots on the edge of the electronic cards compartment.

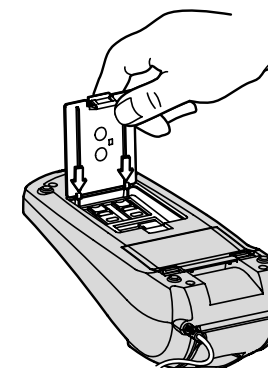


Figure 16-12 Replacing the Electronic Cards Compartment Cover

- Close the compartment cover and press down until the locking tab snaps into place.
- If the model of the NURIT 8210 includes a void label, apply the label over the compartment cover locking tab.



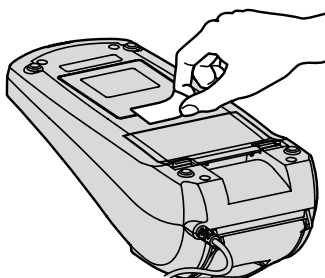


Figure 16-13 Applying the Void Label



## 17. General Care and Maintenance

The NURIT 8210 has been designed to give you long and trouble-free service with minimal operator care.

### Maintenance Recommendations

#### To maintain the NURIT 8210 in proper working condition:

- Keep the terminal dry and in the cleanest possible working and storage environment.
- Do not store the terminal in extremely hot or cold areas.
- Do not open the AC/DC Power Adapter.
- Do not shake or drop the terminal.
- Do not attempt to open the terminal or any of its components, other than the paper compartment, the electronic cards compartment, or to replace the Base Unit.

#### **Caution**

- Never open the terminal for any reason.
- There are no user serviceable parts or components in the NURIT 8210.
- Opening or disassembling the terminal in any way not specifically instructed in this manual will automatically erase all secret encryption keys and will render the terminal inoperable.
- Opening the NURIT 8210 terminal will void any warranty and security certification. It may also result in irreversible damage to the terminal's electronic circuitry.



## Cleaning the NURIT 8210

### To clean the NURIT 8210:

- Gently wipe off dirt from the body of the terminal 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 within the paper roll compartment.
- If possible, use a lens blower to remove dust and dirt from the LCD screen.
- When necessary, gently wipe the screen with a soft cloth or eyeglass lens wiper.

#### Caution

- Never use abrasive compounds or solvents, thinners, benzene or synthetic cleansers as they may distort or damage the plastic and critical parts.
- Never clean the keypad with liquids. Use only a lightly dampened cloth or soft brush.
- Never rub or strongly press on the LCD display.

### To clean the printer:

1. Disconnect the AC/DC Power Adapter from the electrical power outlet.
2. Remove the paper roll from its compartment, as described in “**Removing the Paper Roll from the Printer**” on **page 33**.
3. Remove any excess pieces of paper or debris that may be lodged in the paper compartment.  
If available, use a low-pressure compressed air gun.
4. Replace the paper roll, as described in “**Loading Paper in the Printer**” on **page 31**.



## Shipping the NURIT 8210

In exceptional circumstances, you may be required to ship your NURIT 8210 to a servicing facility.

### To ship the NURIT 8210:

1. Carefully pack the NURIT 8210, preferably in the original box.
2. Attach a postage-paid letter to the outside of the package detailing the complaint and including the following information:
  - Serial Number (displayed on the bottom of the terminal)
  - Date of Purchase
  - Name of Dealer
  - Address of Dealer
3. Send the package prepaid and adequately insured.

#### Note

Notify a Lipman representative before shipping the NURIT 8210. Shipment must be to an authorized dealer or service center only. Contact your Lipman dealer for the correct address.

## Technical Assistance

Contact your Lipman representative for technical assistance and ordering information regarding specific components or accessories.



## 18. Troubleshooting

The NURIT 8210 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 8210.

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 yourself.

### Caution

Always disconnect the NURIT 8210 from the AC electrical power source 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 electrical power outlet and that its barrel connector mates properly with the terminal's **PWR** connector on the connections panel.
2. Verify that voltage is reaching the AC electrical power outlet by connecting a different device to this outlet. If you suspect any type of problem at this outlet, contact a certified electrician for a professional inspection.
3. If possible, try to operate the NURIT 8210 with a different Lipman supplied AC/DC Power Adapter.
4. Connect the AC/DC Power Adapter to a different AC electrical power outlet.
5. Try adjusting the LCD display contrast settings, using the designated, model-dependent key combination.
6. If the problem persists, contact an authorized service representative.



#### Transactions cannot be completed successfully

1. Try to perform the transaction using a different magnetic stripe card 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 the problem persists, contact an authorized service representative.

#### The magnetic card reader does not function properly

1. Verify that the card has been swiped with its magnetic stripe at the bottom and facing left. See **Figure A-1 "Using the Magnetic Card Reader"** on page 49.
2. Swipe the magnetic card in the opposite direction.
3. If possible, try using a different magnetic card.
4. If the problem persists, contact an authorized service representative.

#### The Smart Card reader does not function properly

1. Verify that the chip end of the Smart Card is fully inserted with chip side facing you. See **Figure B-1 "Using the Smart Card Reader"** on page 50.
2. If possible, try using a different Smart Card.
3. 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 to connect the peripheral device to the terminal.
4. If the problem persists, contact an authorized service representative.

**The printer does not function properly**

1. Verify that the AC/DC Power Adapter is properly connected and that the LCD display is lit.
2. Verify that the paper compartment cover is fully and securely closed.
3. Verify that there is a paper roll in the paper compartment and it has not been used up. If there is no paper or the roll is used up, replace the paper, as described in **“Loading Paper in the Printer”** on **page 31**.
4. Verify that the paper roll is correctly installed in the paper compartment.

**Note**

The printer uses only thermal paper.

5. Verify that the paper has been fed to the printer from the underside of the paper roll.
6. Pull the paper manually from the printer to verify that it is not jammed or damaged. If it is jammed, reload the paper roll, as described in **“Loading Paper in the Printer”** on **page 31**.
7. If the problem persists, contact an authorized service representative.

**The printer continues to operate when out of paper**

1. Remove the paper roll from its compartment, as described in **“Removing the Paper Roll from the Printer”** on **page 33**.
2. Clean any debris from the paper compartment, verifying that the paper sensor of the printer mechanism is not blocked by a torn piece of paper or debris.
3. If the problem persists, contact a service representative.



## Appendix A: Using the Magnetic Card Reader

### To use the magnetic card reader:

1. Hold the card with the magnetic stripe facing left, and positioned towards the bottom of the card.
2. Insert the card into the top end of the magnetic card reader slot located on the right side of the terminal.
3. Swipe the card in a smooth, continuous movement, all the way through the slot.



Figure A-1 Using the Magnetic Card Reader

1 Magnetic Stripe                      2 Magnetic Card Reader Slot

### Note

It is recommended that you swipe the card from top to bottom, though the magnetic card reader supports bi-directional swiping of cards.



## Appendix B: Using the Smart Card Reader

The EMV-compatible Smart Card reader is located at the top of the Customer Interface Unit.

### To use the Smart Card reader:

1. Hold the Smart Card vertically, with the metal chip facing towards you and directed down.
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.

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

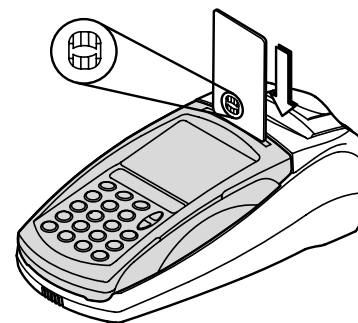


Figure B-1 Using the Smart Card Reader



## Installation Notes

[illegible]

## Contact Information

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