

**V210**

*Installation Guide*



V210 Installation Guide  
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**CONTENTS**

|                                               |          |
|-----------------------------------------------|----------|
| <b>PREFACE</b>                                | <b>5</b> |
| Audience                                      | 5        |
| Organization                                  | 5        |
| Related Documentation                         | 5        |
| Guide Conventions                             | 5        |
| Acronym Definitions                           | 6        |
| <br><b>CHAPTER 1</b>                          |          |
| <b>Device Overview</b>                        |          |
| V210 Device Functionalities                   | 10       |
| V210 Bases                                    | 11       |
| V210 Charging Base                            | 11       |
| V210 Full-Feature Base with Modem             | 12       |
| Features and Benefits                         | 13       |
| Exceptional Ease of Use and Ergonomics        | 13       |
| Security                                      | 13       |
| <br><b>CHAPTER 2</b>                          |          |
| <b>Device Setup</b>                           |          |
| Device Location                               | 15       |
| Environmental Factors                         | 16       |
| Electrical Considerations                     | 16       |
| Contactless Considerations                    | 16       |
| PIN Protection Measures                       | 16       |
| Inside the Shipping Carton                    | 17       |
| Unpacking the Shipping Carton                 | 17       |
| MSAM Card                                     | 18       |
| Opening Card Compartment                      | 18       |
| Changing or Installing MSAMs                  | 18       |
| SIM Card                                      | 19       |
| Loading Paper Roll in the Device              | 20       |
| Power Supply                                  | 21       |
| Cable Connections                             | 22       |
| Cable Connections Using the Full-Feature Base | 23       |
| Using the Smart Card Reader                   | 24       |
| Using the Magnetic Stripe Card Reader         | 25       |
| CTLS Transaction                              | 25       |
| Optional Accessories                          | 26       |
| Full-Feature Base                             | 26       |
| Charging Base                                 | 26       |
| Periodic Inspection                           | 26       |
| <br><b>CHAPTER 3</b>                          |          |
| <b>Specifications</b>                         |          |
| V210 Terminal                                 | 29       |
| Unit Power Requirements                       | 29       |
| Temperature                                   | 29       |
| Humidity                                      | 29       |
| External Dimensions                           | 29       |

|                         |                                         |    |
|-------------------------|-----------------------------------------|----|
|                         | Weight . . . . .                        | 29 |
|                         | Processor . . . . .                     | 29 |
|                         | Display . . . . .                       | 29 |
|                         | Magnetic Card Reader . . . . .          | 29 |
|                         | Primary Smart Card . . . . .            | 29 |
|                         | SAM Card Reader. . . . .                | 29 |
|                         | Battery Pack . . . . .                  | 30 |
|                         | Security . . . . .                      | 30 |
|                         | V210 Bases . . . . .                    | 30 |
|                         | Unit Power Requirements . . . . .       | 30 |
|                         | Temperature . . . . .                   | 30 |
|                         | Humidity . . . . .                      | 30 |
|                         | Security . . . . .                      | 30 |
| <b>CHAPTER 4</b>        |                                         |    |
| <b>Troubleshooting</b>  | Display Panel Does Not Work . . . . .   | 31 |
| <b>Guidelines</b>       | Keypad Does Not Respond . . . . .       | 31 |
|                         | Transactions Fail to Process . . . . .  | 31 |
| <b>CHAPTER 5</b>        |                                         |    |
| <b>Verifone Service</b> | Returning a Device for Service. . . . . | 33 |
| <b>and Support</b>      | Accessories and Documentation . . . . . | 35 |
|                         | Cables. . . . .                         | 35 |
|                         | Power Supply . . . . .                  | 35 |
|                         | Accessories. . . . .                    | 35 |
|                         | Documentation . . . . .                 | 35 |
| <b>APPENDIX A</b>       | Caution and Warning Messages . . . . .  | 37 |

This guide is the primary source of information for setting up and installing V210 device.

NOTE



Verifone ships variants of V210 devices for different markets. Your unit may have different options or accessories described in this section.

Audience

This guide is intended for the users involved in V210 device installation.

Organization

This guide is organized as follows:

[Chapter 1, Device Overview](#). Provides an overview of a V210 device.

[Chapter 2, Device Setup](#). Explains how to set up V210 device.

[Chapter 3, Specifications](#). Provides the power requirements and dimensions of V210 device.

[Chapter 4, Troubleshooting Guidelines](#). Provides troubleshooting guidelines to self asses when you encounter a problem during the installation. .

[Chapter 5, Verifone Service and Support](#). Provides information on how to contact your local Verifone representative or service provider. It also provides information on how to order accessories or documentation from Verifone.

[Appendix A, Caution and Warning Messages](#). Provides the UL/cUL certification-compliant translations of all Warning and Caution messages in this installation guide.

|                       |                                                                        |               |  |
|-----------------------|------------------------------------------------------------------------|---------------|--|
| Related Documentation | To learn more about the V210 device, refer to the following documents: |               |  |
|                       | <i>V210 Certifications and Regulations</i>                             | DOC183-001-EN |  |
|                       | <i>V210 Quick Installation Guide</i>                                   | DOC183-002-EN |  |
|                       | <i>V210 Base Full Function Quick Installation Guide</i>                | DOC183-004-EN |  |
|                       | <i>V210 Base Charging Quick Installation Guide</i>                     | DOC183-005-EN |  |

Guide Conventions

This section describes the conventions and acronyms used in this guide.

Various conventions are used to help you quickly identify special formatting. Table 1 describes these conventions and provides examples of their use.

**Table 1 Document Conventions**

| Convention                                                                                           | Meaning                                                                     | Example                                                                        |
|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Blue                                                                                                 | Text in blue indicates terms that are cross-references.                     | See <a href="#">Guide Conventions</a> .                                        |
| <i>Italics</i>                                                                                       | Italic typeface indicates book titles or emphasis.                          | You <i>must</i> not use this unit underwater.                                  |
| <b>NOTE</b><br>     | The pencil icon is used to highlight important information.                 | RS-232-type devices do not work on the communication port.                     |
| <b>CAUTION</b><br>  | The caution symbol indicates hardware or software failure, or loss of data. | The device is not waterproof or dustproof and is intended for indoor use only. |
| <b>WARNING</b><br> | The lightning symbol is used as a warning when bodily injury might occur.   | Due to risk of shock do not use the unit near water.                           |

**Acronym Definitions** Various acronyms are used in place of the full definition. Table 2 presents the acronyms and their definitions.

**Table 2 Acronym Definitions**

| Acronym | Definitions                                                                                                                                                                          |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3DES    | Triple Data Encryption Algorithm                                                                                                                                                     |
| AC      | Alternating Current                                                                                                                                                                  |
| ANSI    | American National Standards Institute                                                                                                                                                |
| cUL     | Underwriters' Laboratories of Canada                                                                                                                                                 |
| DC      | Direct Current                                                                                                                                                                       |
| DUKPT   | Derived Unique Key Per Transaction Method as defined in the VISA's <i>POS Equipment Requirement: PIN processing and Data Authentication</i> , International Version 1.0, August 1988 |
| ECR     | Electronic Cash Register                                                                                                                                                             |
| EMV     | Europay, MasterCard, and Visa                                                                                                                                                        |
| ISO     | International Organization for Standardization                                                                                                                                       |
| MRA     | Merchandise Return Authorization                                                                                                                                                     |
| MSAM    | Multiple Secure Access Module                                                                                                                                                        |
| LAN     | Local Area Network                                                                                                                                                                   |
| LCD     | Liquid Crystal Display                                                                                                                                                               |
| LED     | Light-Emitting Diode                                                                                                                                                                 |
| PED     | PIN Entry Device                                                                                                                                                                     |

**Table 2**      **Acronym Definitions** (continued)

| Acronym | Definitions                    |
|---------|--------------------------------|
| PIN     | Personal Identification Number |
| POS     | Point-of-Sale                  |
| RS-232  | Recommend Standard number 232  |
| SAM     | Secure Access Module           |
| UL      | Underwriters Laboratories      |
| USB     | Universal Serial Bus           |
| VPN     | Verifone Part Number           |



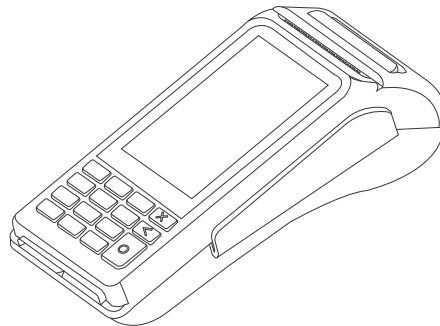
## Device Overview

This chapter provides an overview of V210 device and base.

The V210 is a consumer-facing portable device. The product's design is equally appealing as a handheld PINpad and robust enough to look and function appropriately in a fixed mount setting.

The V210 can utilize over-the-air connectivity, facilitating mobile telephony technology for sending and receiving data, using existing operator-provided 2G, Wi-Fi, Bluetooth, or 4G connectivity.

This guide provides an introduction and basic setup procedures for V210 terminals.



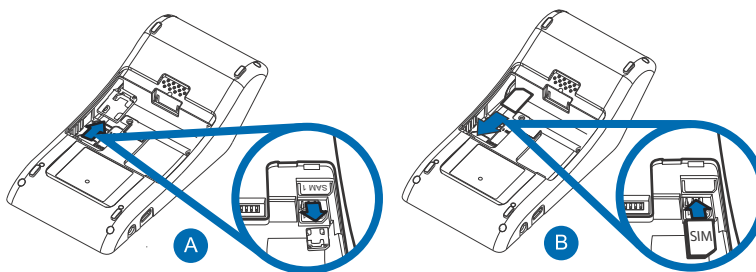
**Figure 1 V210 Device**

The V210 device has the following features:

- Capacitive touch **LCD display** and **CTLS** tap area
- **Smart card** reader
- **Magnetic card** reader
- Integrated thermal **printer**
- Secure keypad supporting 3x5 matrix containing 0-9, \*, #, Cancel, Backspace/Clear, and Enter keys.
  - Dual-function Backspace/Clear key.
  - Customer-entry for Cancel and Enter keys.

## V210 Device Functionalities

The V210 device has the SIM/MSAM slots as shown in the following illustration.



**Figure 2** V210 Underside Compartment View

- Single **SIM/SAM** slot to support stored-value card programs or other merchant card requirements
- Single **SIM Card** compartment
- Battery

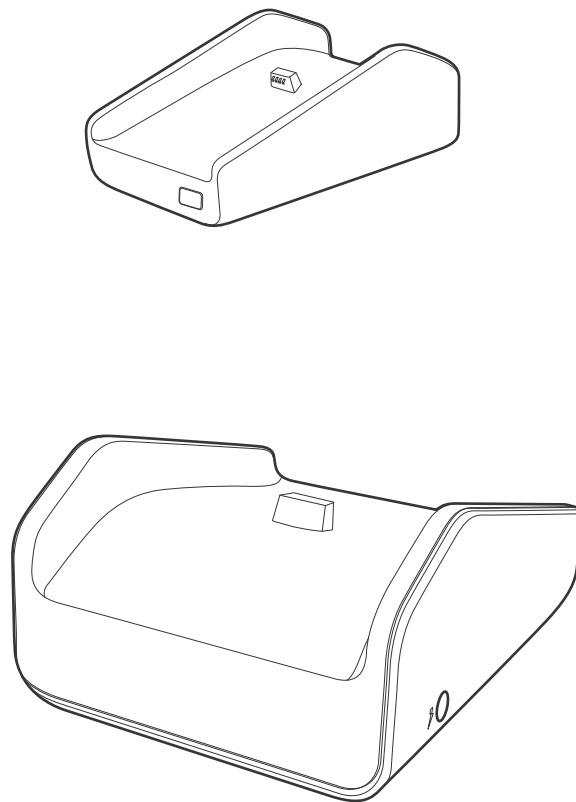
## V210 Bases

The V210 Base provides a stable mounted platform for the V210 terminal. The Base comes in three variants:

- V210 Charging Base
- V210 Full-Feature Base with Modem
- V210 Full-Feature Base without Modem

### V210 Charging Base

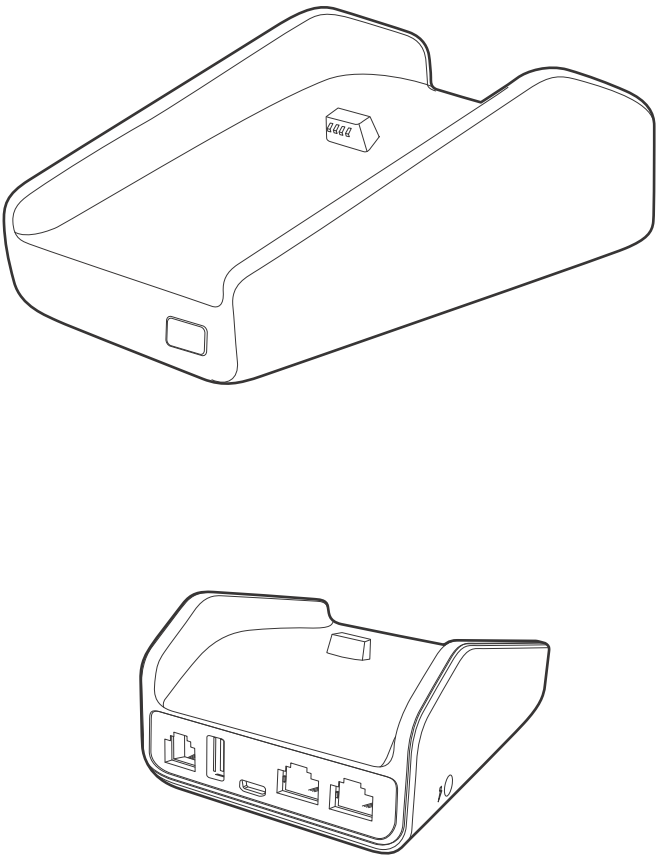
The Charging Base supports charging only with no communication functionality. The Charging Base accommodates and supplies power to the V210 and V210 Plus portable terminals.



**Figure 3** V210 Charging Base, Front and Rear View

**V210 Full-Feature Base with Modem**

The FF Base supports any failover communication via dial up and Ethernet connections for V210. The failover will be supported in all network interfaces available in a terminal. The Full-Feature Base supports several connectivity options and provides serial connection for peripherals (like ECR, check reader, barcode reader, etc.). The USB host port is for maintenance purposes and supports a USB flash drive.



**Figure 4      V210 FF Base, Front and Rear View**

The FF Base supports a minimum of seven simultaneous terminal connections via Bluetooth (BT) as well as the following:

| Cable         | Configuration                                                                                    |
|---------------|--------------------------------------------------------------------------------------------------|
| Ethernet port | RJ-45 socket (for connecting PINPad to LAN infrastructure)                                       |
| RS232 port    | RS-232 socket (for connecting PINPad to LAN infrastructure), MOD-8 socket, Mini USB & DC-in jack |
| USB ports     | Mini USB and type A USB                                                                          |

## Features and Benefits

Following are the features and benefits.

### Exceptional Ease of Use and Ergonomics

- Touch screen enables easy menu control and signature capture.
- Battery-powered for mobility and portable operation.
- Integrated thermal printer for fast transaction processing.
- Large, hard-rubber keys provide improved tactile feedback.
- 3.5" capacitive touch screen display.
- LTE M1 (LAC Only)
- 2G capability
- 4G functionality
- WiFi- and Bluetooth-capable.
- Intuitive keypad interface simplify training and reduce support requests.
- Using the Full-Feature Base, connects with most POS payment terminals, PCs, and ECRs.
- Supports payment transactions in a variety of payment environments.
- Rugged and reliable design absorbs hard knocks found at point-of-sale counters.
- Sleek and stylish shape occupies minimal counter space.
- Bold, ergonomic design fits comfortably in the palm of a hand.
- Optional Charging or Full-Feature Bases expand functionality while providing a stable, battery-charging platform.

#### NOTE



Verifone ships variants of V210 devices for different markets. Your unit may have different options or accessories with bases like: Base Interface or Charging Base or Full Featured Bases.

### Security

- Offers a choice of Master/Session or DUKPT key-management methods to protect PIN-based transactions.
- Offers secure, reliable PIN input for expanding range of PIN-based transactions.
- PCI 6.0-compliant for secure solutions, meeting the PED standard.
- Meets ISO and ANSI standards for PIN encryption, key management, and MAC.
- Key injection simplified and secured with Verifone's SecureKit key loading software.

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**NOTE**

Verifone ships variants of V210 devices for different markets. Your unit may have different options or accessories.

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## Device Setup

This chapter describes the setup procedure for the V210 and charging base, in the following sections:

- Selecting Location
- PIN Protection Measures
- Unpacking Shipping Carton
- MSAM Card
- Power Supply
- Cable Connections
- Using the Smart Card Reader
- Using the Magnetic Stripe Card Reader
- Contactless Transactions
- Optional Accessories

---

### NOTE



Verifone ships variants of the V210 terminal for different markets. Your terminal may have a different configuration, a different memory, a different radio, and may or may not have.

---

## Device Location

Use the following guidelines to select the best location for the V210 device.

### To Select a Location

Choose a location convenient for both merchant and client:

- Far from heavy metal objects,
- A flat support surface such as a countertop or a table,
- Near a power outlet and the terminal or computer that connects to the V210.

---

### WARNING



For safety, do not string cables or cords across a walkway.

---

## Environmental Factors

- Do not use the unit where there is high heat, dust, humidity, moisture, or caustic chemicals or oils.
- Keep the unit away from direct sunlight and anything that radiates heat, such as a stove or a motor.

## Electrical Considerations

- Avoid using this product during electrical storms.
- Do not use the V210 unit near water or in moist conditions.
- Disconnect the device from its POS terminal before cleaning.



Due to risk of electrical shock or terminal damage, do not use the terminal near water, including a bathtub, wash bowl, kitchen sink or laundry tub, in a wet basement, or near a swimming pool. Avoid using this product during electrical storms. Avoid locations near electrical appliances or other devices that cause excessive voltage fluctuations or emit electrical noise (for example, air conditioners, neon signs, high frequency or magnetic security devices, or electric motors).

## Contactless Considerations

Avoid having metallic objects in proximity of the contactless antenna. If you need to mount the terminal to vertical or inclined surfaces, use a flat, non-metallic mounting plate.



Using an enclosed metal frame or mount may negatively affect contactless performance.

## PIN Protection Measures

The V210 and V210 Plus are handover devices. Always exercise extreme caution when conducting transactions, especially during PIN entry:

- Hand the terminal directly to the cardholder for PIN entry.
- Encourage the cardholder to hold the terminal close to avoid others from seeing the information being entered.

Verifone also recommends instructing the cardholder regarding safe PIN-entry. This can be done with a combination of:

- Signage on the PED
- Prompts on the display, possibly with a click-through screen
- Literature at the point of sale
- A logo for safe PIN-entry process.

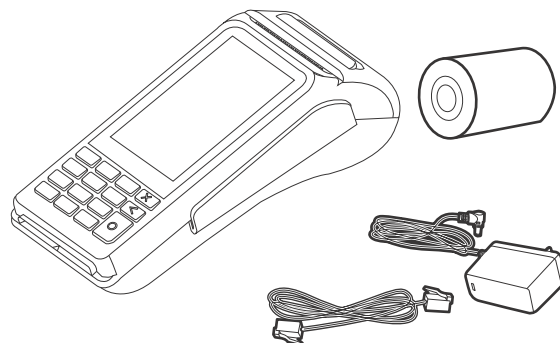
## Inside the Shipping Carton

Open the shipping carton and carefully inspect its contents for possible tampering or shipping damage. The device is a secure product. Tampering causes it to cease to function or to operate in an unsecured manner.

### Unpacking the Shipping Carton

To unpack the shipping carton:

- 1** Carefully inspect the shipping carton and its contents for possible tampering or damage.
- 2** Validate the authenticity of the sender by verifying the shipping tracking number and other information located on the product order paperwork.
- 3** Remove and inspect the following items:
  - V210 device
  - Power Pack
  - Printer paper roll (Verifone ships variants of the V210 terminal which may or may not have a paper roll).
- 4** Refer to [Accessories and Documentation](#) for more information on V210 related accessories.



**Figure 5 V210 Box Contents**



This device is a secure product and any tampering can cause it to cease to function or operate in an unsecured manner.

- 5** Remove all plastic wrapping from the device and components.
- 6** Remove the clear protective film from the display.
- 7** Inspect the terminal for possible tampering. See how to identify signs of tampering in section Periodic Inspection.

- 8 Save the shipping carton and packing material for future repacking or moving of the device.



Do not use a tampered or damaged device. This device comes equipped with tamper-evident labels. If a label or component appears damaged, please notify the shipping company and your Verifone service provider immediately.

## MSAM Card

When you first receive your V210 device, you may need to install or replace the multiple security access module (MSAM) and Subscriber Identity Module (SIM) cards.

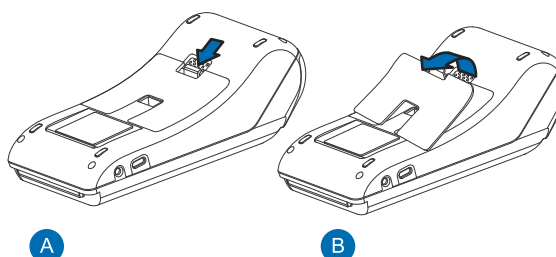


Observe standard precautions in handling electrostatically sensitive devices. Electrostatic discharges can damage the equipment. Verifone recommends using a grounded anti-static wrist strap.

## Opening Card Compartment

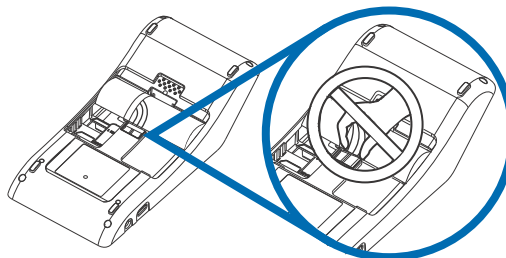
Use the following steps to get access to the SIM1 and SIM2/SAM card compartment:

- 1 Place the terminal face down on a soft and clean surface to protect the display from scratches.
- 2 Push down the locking tab and swing out the compartment cover.



**Figure 6** Opening Rear Compartment

- 3 Do not remove the battery while accessing MSAM and SIM.



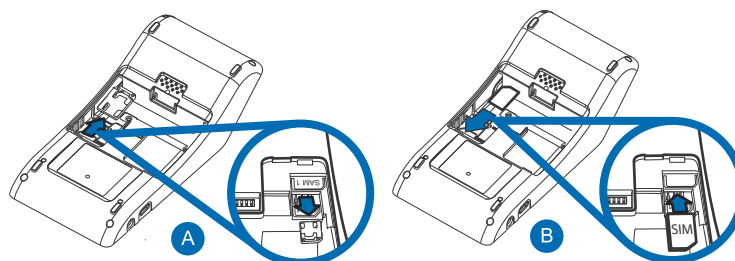
**Figure 7** Battery Removal

## Changing or Installing MSAMs

To change or install MSAM cards:

- 1 Use steps 1 to 3 of [Opening Card Compartment](#) to get to the MSAM cardholder.

- 2 Remove the old card, if any, and install the MSAM card by carefully sliding it into the slot (with the gold contacts facing downward) until fully inserted.



**Figure 8** Insert Mini MSAM

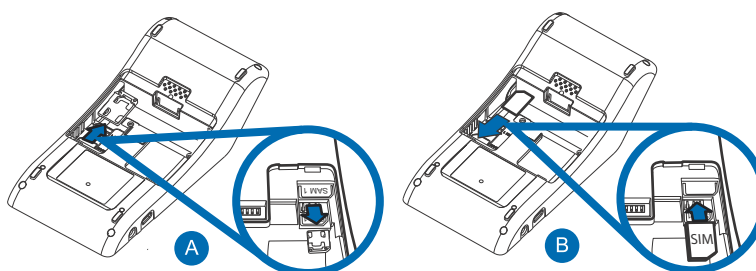
**NOTE**



Insert the card with the card's gold contacts facing away from you, toward the unit.

**SIM Card** To change or install SIM cards:

- 1 Use steps 1 to 3 of [Opening Card Compartment](#) to get to the SIM cardholder.
- 2 Remove Micro SIM Adaptor as step A and insert Micro SIM (if it is not Nano SIM) as Step B.



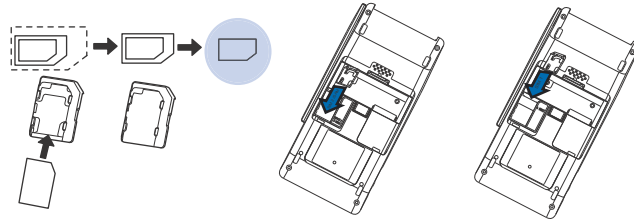
**Figure 9** Removing and Inserting the Mini SIM Adaptor

**NOTE**



Insert the card with the card's gold contacts facing away from you, toward the unit.

- 3 Insert Nano SIM in Micro SIM Adaptor and install the Micro SIM Adaptor by carefully sliding it into the slot (with the gold contacts facing downward) until fully inserted.

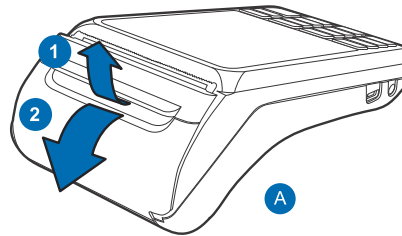


**Figure 10** Inserting the Nano SIM in Micro SIM Adaptor

## Loading Paper Roll in the Device

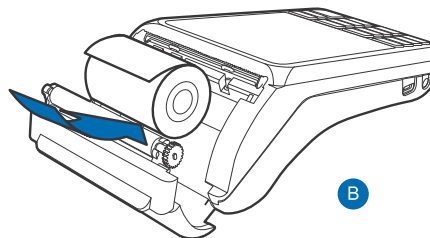
Use the following steps to load a roll of 57mm x 40mm thermal printer paper into the compartment.

- 1 Unlock the paper compartment by pulling up the latch and swinging the door downwards.



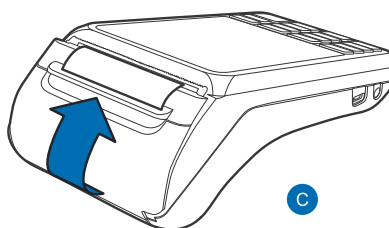
**Figure 11** Opening Printer Paper Door

- 2 Load the paper roll as shown in Figure 12, with the edge of the paper on the top of the roll.



**Figure 12** Procedure for Loading Paper Roll

- 3 Pull a length of paper up over the serrated cutter and close the compartment door.



**Figure 13 Closing Printer Door**



Before processing transactions in battery mode, make sure you have more than 10% battery life. Do not risk losing transaction data or printing capabilities, connect the terminal to the power pack if battery level is below 10%.

## Power Supply

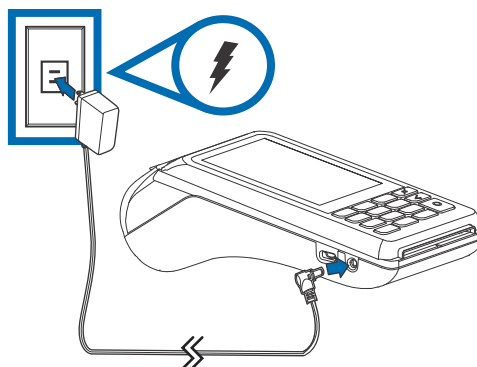
Not all configurations and device contexts require the use of a power supply – Verifone ships power supply with the terminal as required.

Contact your Verifone representative If you have changed the context in which the terminal is used or have questions about which power supply should be used.



Using an incorrectly rated power supply can damage the unit or cause it not to work properly. Use only Verifone power pack (see [Verifone Service and Support](#) for detailed power supply specifications). Following are the PSUs for different regions: PWR475-010-01-B (US), PWR474-002-06-A (Brazil), PWR475-010-02-B (EU), PWR475-010-03-B (Saudi Arabia).

Disconnect the power pack cord from the power outlet before connecting a power supply. Connect and route all cables between the terminal, ECR, and PC before plugging the power pack cord into a wall outlet or surge protector.



**Figure 14** Connecting the Power Pack



**WARNING**

Do not plug the power pack into an outdoor outlet or operate the terminal outdoors. Disconnecting power during a transaction can cause transaction data files not yet stored in memory to be lost.



**NOTE**

Verifone recommends installing a power surge protector to protect against possible damage caused by lightning strikes and electrical surges.

When the terminal has power and an application is loaded, the application starts after the initial Verifone copyright screen and displays a unique copyright screen. If no application is loaded, **DOWNLOAD NEEDED** appears on the display after the initial Verifone copyright screen.

## Cable Connections

You can connect the V210 to peripherals using the Full-Function Base.

- [Cable Connections Using the Full-Feature Base](#)



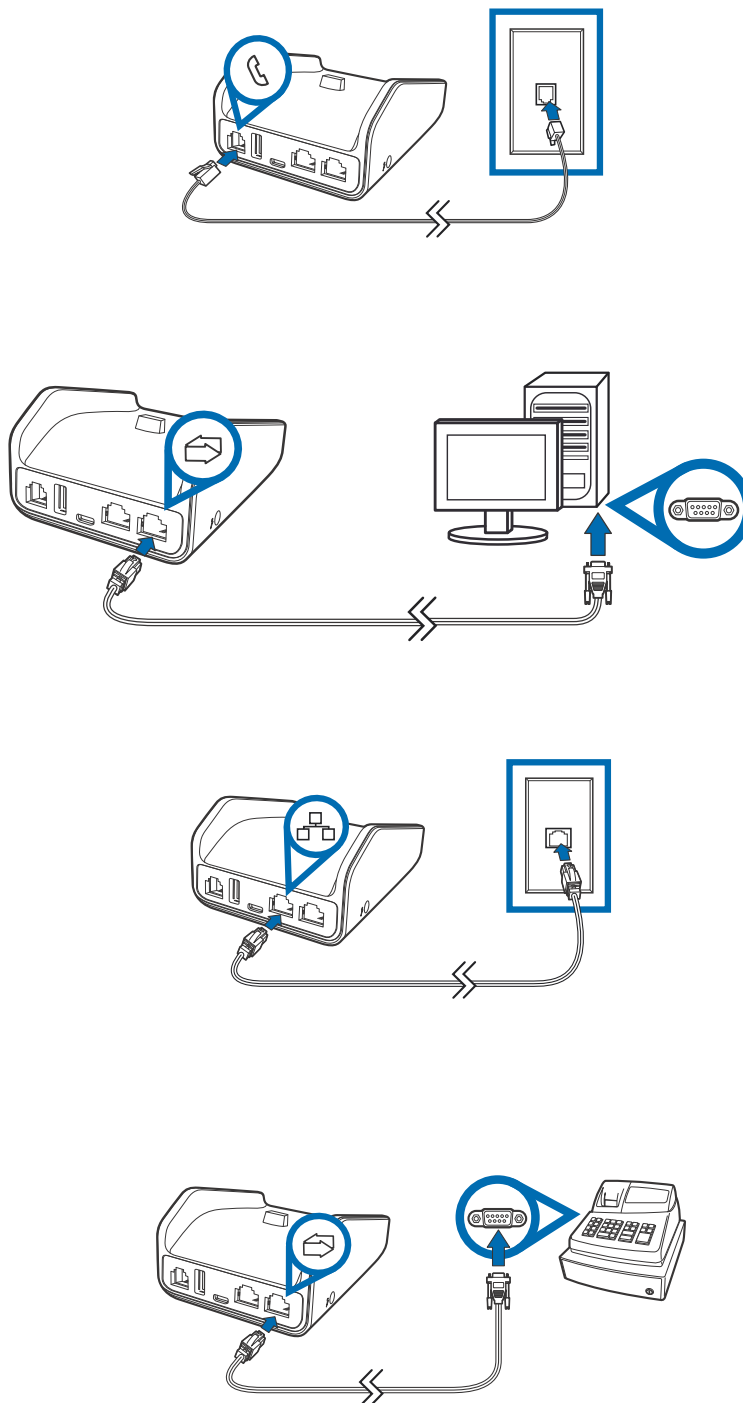
**WARNING**

Turn off or unplug the terminal when connecting or disconnecting the device to avoid device memory corruption and data loss.

Refer to the controlling device instructions for any terminal-specific warnings.

## Cable Connections Using the Full- Feature Base

To connect the terminal to other devices via Ethernet, RS-232, and USB, use the V210 Full-Feature (FF) Base. The FF Base provides a standard RJ-45 LAN socket, RS-232 port, a mini-USB port. The V210 terminal must be docked on the base to utilize cable connectivity



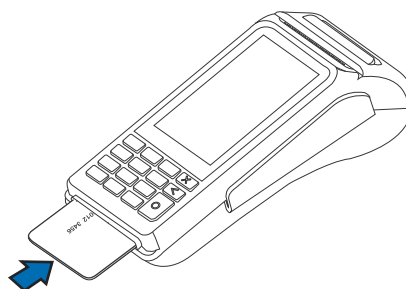
**Figure 15** Full-Feature Base Peripheral Connections

The Full-Feature Base **features** the following:

| Cable         | Configuration                                                                                      |
|---------------|----------------------------------------------------------------------------------------------------|
| Ethernet port | RJ-45 socket (for connecting PINPad to LAN infrastructure)                                         |
| RS232 port    | RS232 socket (for connecting PINPad to LAN infrastructure),<br>MOD-8 socket, Mini USB & DC-in jack |
| USB ports     | Mini USB and type A USB                                                                            |

## Using the Smart Card Reader

The smart card transaction procedure can vary depending on the application. Verify the proper procedure with your application provider before performing a smart card transaction.



**Figure 16** Using the Smart Card Reader

### Conducting a Smart Card Transaction

To conduct a smart card transaction:

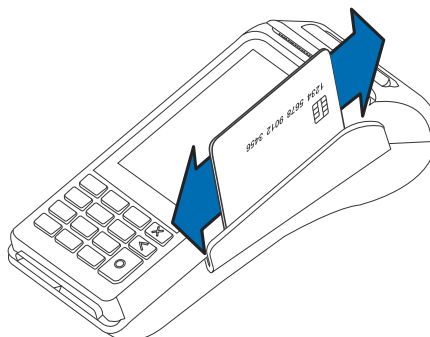
- 1 Position the smart card with the gold contacts facing upward.
- 2 Insert the card into the smart card reader slot in a smooth, continuous motion until it seats firmly.
- 3 Remove the card when the display indicates the transaction is completed.



Leave the smart card in the card reader until the transaction is completed. Premature removal can void the transaction.

## Using the Magnetic Stripe Card Reader

The V210 has a magnetic card reader that uses a triple track stripe reader. This gives the unit greater reliability over a wide range of swipe speeds and operating environments.



**Figure 17** Using the Magnetic Stripe Card Reader

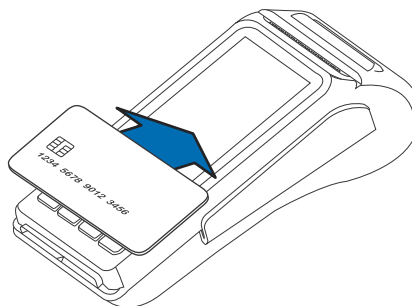
### Conducting a Credit/Debit Card Transaction

To conduct a credit or debit card transaction:

- 1 Position a magnetic card with the stripe facing the keypad.
- 2 Swipe it through the magnetic card reader.

## CTLS Transaction

The V210 supports contactless transactions through an integrated contactless module. The terminal only becomes active for contactless smart card transactions when initialized by an application.



**Figure 18** Contactless Transaction

### Performing Contactless Transactions

To perform a contactless smart card transaction:

- 1 Gently tap the card onto or hold the card (within 4 cm) against the surface of the display where the contactless logo appears.
- 2 An activated LED visual on the display accompanied by a short beeping sound indicates a successful transaction.

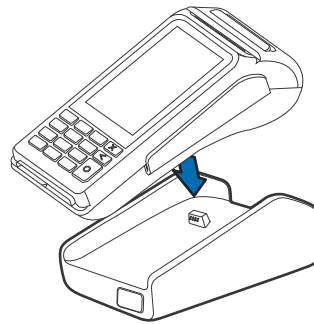
See [Contactless Considerations](#) for more information.

## Optional Accessories

These accessories can be used to further enhance the device's functionality. See [Accessories and Documentation](#) for additional information.

### Full-Feature Base

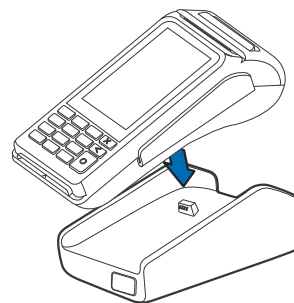
The Full-Feature Base with Modem(M183-S02-01) or FF Base without Modem(M183-S02-02) and charging base(M183-S02-00) provides Bluetooth (BT) v4.2 as well as All BT v4.1 features. It also supplies power, Dial up, Ethernet, USB Host and USB Device, plus powered RS232 connection. See [Cable Connections Using the Full-Feature Base](#).



**Figure 19 V210 Docking with Full-Feature Base**

### Charging Base

The Charging Base (M183-S02-00) provides a stable dock plus power charging for the V210 terminal.



**Figure 20 V210 Docking with Charging Base**

## Periodic Inspection

- Periodically inspect the terminal for possible tampering. Signs of tampering include:
- Overlays in the PIN pad area

- Wires protruding out of the device
- Foreign objects inserted into the smart card slot or magnetic stripe slot
- Any bumps in the casing below the mag stripe slot and any noticeable additional mag stripe head from the side
- Signs of damage to the tamper-evident labels
- A Tamper Warning message on the device display.

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**NOTE**



If any device is found in tamper state, please remove it immediately from service. Keep it available for potential forensic investigation and notify your company security officer and your local Verifone representative or service provider. To contact Verifone, refer to [Verifone Service and Support](#).

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# Specifications

This chapter discusses power requirements, dimensions, and other specifications of the V210 terminal and bases.

## V210 Terminal

Refer to the following specifications for the V210 terminal:

|                         |                                                                                                                                                               |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Unit Power Requirements | <div>V210 devices have the following power requirements:</div> <ul style="list-style-type: none"><li>Operating Power: 5 V DC, 1A</li></ul>                    |
| Temperature             | <ul style="list-style-type: none"><li>Operating temperature: 0° to 50° C (32° to 122° F)</li><li>Storage temperature: -20° to 60° C (-4° to 140° F)</li></ul> |
| Humidity                | <ul style="list-style-type: none"><li>Relative humidity: 5% to 90% (RH non-condensing)</li></ul>                                                              |
| External Dimensions     | <ul style="list-style-type: none"><li>Length: 172.90 mm (6.8 in)</li><li>Width: 81.60 mm (3.21 in)</li><li>Depth: 58.74 mm (2.31 in)</li></ul>                |
| Communication           | <ul style="list-style-type: none"><li>BT 4.2 BLE (Bluetooth Low Energy)</li><li>WiFi 2.4GHz/5GHz (A/B/G/N)</li></ul>                                          |
| Weight                  | <ul style="list-style-type: none"><li>Unit weight: 367 g (12.94 oz)</li></ul>                                                                                 |
| Processor               | <ul style="list-style-type: none"><li>ARM Cortex A9 32-bit processor</li></ul>                                                                                |
| Display                 | <ul style="list-style-type: none"><li>3.5" portrait mode transmissive TFT 320 (RGB) x 480 (HVGA)</li></ul>                                                    |
| Magnetic Card Reader    | <ul style="list-style-type: none"><li>Triple track (tracks 1, 2, 3), high coercivity, bi-directional</li></ul>                                                |
| Primary Smart Card      | <ul style="list-style-type: none"><li>ISO 7816-3, 1.8 V, 3 V, 5 V</li><li>Synchronous and Asynchronous cards</li><li>EMV Approved</li></ul>                   |

**SAM Card Reader**

- One Security Access Module (SAM)

**Battery Pack**

- Rating: 9.1 Wh (3.7 V DC, 3100 mAh)
- Meets IEEE1725 requirements

**Security**

- 3DES encryption, Master/Session and DUKPT key management
- VeriShield file authentication
- PCI PED 6.0 approved

**V210 Bases****Charging Base**

- Provides terminal charging on a mounted stand

**Full-Feature Base**

- Aside from charging, the FF Base provides:
  - Bluetooth
  - 10/100M Ethernet
  - 56K modem
  - Powered RS-232
  - LE Secure feature of BT v4.2 + All BT v4.1 feature
  - USB host
  - USB device

**Unit Power Requirements**

- Operating Power: 5 V DC, 2.2 A (FF Base)  
5 V DC 2.2A (Charging Base)

**Temperature**

- Operating temperature: -5° to 50° C (23° to 122° F)
- Storage temperature: -20° to 60° C (-4° to 140° F)

**Humidity**

- Relative humidity: 5% to 95% (RH non-condensing)

**Security**

- PCI 6.0 Compliant.



### Troubleshooting Guidelines

This chapter lists typical malfunctions that may occur while operating a V210 device and the appropriate corrective action. If the problem persists – even after performing the outlined guidelines, or if the problem is not described, contact your local Verifone representative for assistance.

#### NOTE



The V210 device uses a tamper-evident case and contains no user-serviceable parts. Do not, under any circumstance, attempt to disassemble the unit. Perform only those adjustments or repairs specified in this guide. For all other services, contact your local Verifone service provider. Service conducted by parties other than authorized Verifone representatives may void any warranty.

#### Display Panel Does Not Work

Use the following steps to check the display panel:

- 1 Check all the cable connections.
- 2 Check the controlling device's AC outlet to be sure the outlet is supplying sufficient power. Substitute the controlling device's power pack with another power pack.
- 3 The controlling device's application program might not be loaded correctly. Download the application program and try again.
- 4 If the problem persists, contact your local Verifone representative.

#### Keypad Does Not Respond

Use the following steps to check the keypad:

- 1 Check the display panel. If there are no characters, or the wrong characters are displayed, refer to [Display Panel Does Not Work](#).
- 2 If the problem persists, contact your local Verifone representative.

#### Transactions Fail to Process

There are several possible reasons why the unit may not be processing transactions. Use the following steps to troubleshoot failures.

##### Check Magnetic Card Reader

- Perform a test transaction using one or more different magnetic stripe cards to ensure the problem is not a defective card.
- Ensure that you are swiping cards properly (see [Using the Magnetic Stripe Card Reader](#)).
- Process a transaction manually using the keypad instead of the card reader. If the manual transaction works, the problem may be a defective card reader.

- If the problem persists, contact your local Verifone representative.

**Check Smart Card Reader**

- Perform a test transaction using several different smart cards to ensure the problem is not a defective card.
- Ensure that the card is inserted correctly (see [Using the Magnetic Stripe Card Reader](#)).
- Ensure the MSAM card is properly inserted in the slot and are properly secured (see [MSAM Card](#)).
- If the problem persists, contact your local Verifone representative.

## Verifone Service and Support

The V210 device has no user-serviceable parts. Unless otherwise instructed, do not, under any circumstances, attempt any service, adjustments, or repairs on the unit. Disconnect the device before cleaning.

To clean the unit, periodically use a clean cloth, slightly dampened with water and a drop or two of mild soap. For stubborn stains, use alcohol or an alcohol-based cleaner. For best results, use a Verifone Cleaning Kit (refer to [Accessories and Documentation](#)).



Never use thinner, trichloroethylene, or ketone-based solvents – they can deteriorate plastic or rubber parts.

Because the V210 can be damaged by liquid, do not spray cleaners or other solutions directly onto the keypad or display. Always apply the cleaner to a cloth before cleaning the device.

For V210 equipment failures that cannot be resolved by your help desk or service department, contact one of the following hotlines for product service and repair information:

- USA – Verifone Service and Support Group, 1-800-Verifone (837-4366), Monday - Friday, 8 A.M. - 8 P.M., Eastern time
- International – Contact your Verifone representative

### Returning a Device for Service

Before returning V210 unit to Verifone, you must obtain a Merchandise Return Authorization (MRA) number. The following procedure describes how to return one or more V210 for repair or replacement (U.S. customers only).

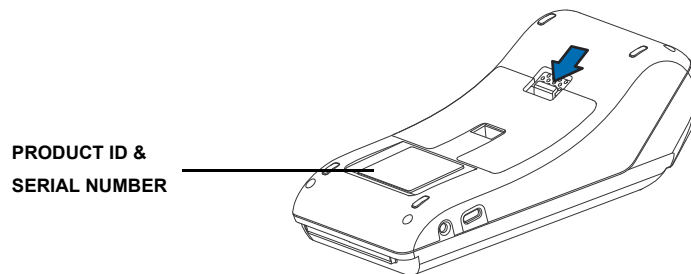
#### NOTE



Customers outside the United States are advised to contact their local Verifone representative for assistance regarding service, return, or replacement of devices and accessories.

- 1 Get the following information from the printed labels at the back of each V210 to be returned:
  - Product ID, including the model and part number. For example, "M183-xxx-xx-xxx-x"

- Serial number (S/N xxx-xxx-xxx)



**Figure 21 Product ID and Serial Number Location**

- 2** Obtain the MRA number(s) by completing one of the following:
  - a** Call Verifone toll-free within the United States at 1-800-Verifone and follow the automated menu options.
    - Select the MRA option from the automated message. The MRA department is open Monday to Friday, 8 A.M.–8 P.M., Eastern Time.
    - Give the MRA representative the information you gathered in Step 1. If the list of serial numbers is long, you can fax the list, along with the information gathered in Step 1, to the MRA department at 727-953-4172 (U.S.).
  - b** Address a fax to “Verifone MRA Dept.” with the model and part number(s)
    - Include a telephone number where you can be reached and your fax number.
  - c** Complete the Inquiry Contact Form at <https://www.verifone.com/en/us/contact-us>.
    - Address the Subject box with to “Verifone MRA Dept.”
    - Reference the model and part number in the Note box.



**NOTE**

One MRA number must be issued for each V210 unit you return to Verifone, even if you are returning several of the same model.

- 3** Describe the problem(s).
- 4** Provide the shipping address where the repaired or replacement unit must be returned.
- 5** Keep a record of the following items:
  - Assigned MRA number(s).
  - The serial number assigned to the V210 device (located at the bottom of the unit).

- Shipping documentation, such as air bill numbers, used to trace the shipment.
- Model(s) returned (model numbers are located on the bottom of the unit).

## Accessories and Documentation

Verifone produces accessories and documentation for the V210. When ordering, please refer to the part number in the left column.

- Verifone online store [www.estore.verifone.com](http://www.estore.verifone.com)
- USA – Verifone Customer Development Center, 800-Verifone (837-4366), Monday - Friday, 7 A.M. - 8 P.M., Eastern time
- International – Contact your Verifone representative

**Cables** Contact your local Verifone distributor to determine which cable fits your needs.

|                 |                                                       |
|-----------------|-------------------------------------------------------|
| CBL282-031-XX-A | RS-232 cable (DB9). Powered from +12 V DC adaptor.    |
| CBL282-036-XX-A | RS-232 cable (RJ45). Powered from Countertop (+12 V). |
| CBL282-006-01-B | Cable, VX 820 Ethernet/RS232, Dongle 1.0 m            |

## Power Supply

|                                |                     |
|--------------------------------|---------------------|
| PWR474-002-XX-A                | DC power pack(V210) |
| PWR475-010-XX-A                |                     |
| PWR475-010-01-B (US)           |                     |
| PWR474-002-06-A (Brazil)       |                     |
| PWR475-010-02-B (EU)           |                     |
| PWR475-010-03-B (Saudi Arabia) |                     |

## Accessories

|          |                       |
|----------|-----------------------|
| 02746-01 | Verifone Cleaning Kit |
|----------|-----------------------|

## Documentation

|               |                                     |
|---------------|-------------------------------------|
| DOC183-001-EN | V210 Certifications and Regulations |
| DOC183-002-EN | V210 Quick Installation Guide       |





## Caution and Warning Messages

Products with UL/cUL certification should include French translations of Caution and Warning notices. The following table lists all notices found in the document, their location, and the equivalent French translations.

**Table 3 Caution and Warning Messages**

| Notice  | Chapter | Page     | English Text                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | French Text                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------|---------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Warning | Setup   | page 15  | For safety, do not string cables or cords across a walkway.                                                                                                                                                                                                                                                                                                                                                                                                                                            | <i>Par mesure de sécurité, ne pas les câbles de chaîne ou de cordons à travers une passerelle.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Caution | Setup   | page 16  | This unit is not waterproof or dustproof and is intended for indoor use only. Any damage to the unit from exposure to rain or dust can void any warranty.                                                                                                                                                                                                                                                                                                                                              | <i>Cet appareil n'est pas étanche ou à la poussière, et est destiné à une utilisation en intérieur. Tout dommage à l'unité de l'exposition à la pluie ou à la poussière peut annuler la garantie.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Caution | Setup   | page 16, | Using an enclosed metal frame or mount may negatively affect contactless performance.                                                                                                                                                                                                                                                                                                                                                                                                                  | <i>L'utilisation d'un cadre métallique fermé ou de montage peut affecter négativement contact performance.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Warning | Setup   | page 16  | Due to risk of electrical shock or terminal damage, do not use the terminal near water, including a bathtub, wash bowl, kitchen sink or laundry tub, in a wet basement, or near a swimming pool. Also, avoid using this product during electrical storms. Avoid locations near electrical appliances or other devices that cause excessive voltage fluctuations or emit electrical noise (for example, air conditioners, neon signs, high frequency or magnetic security devices, or electric motors). | <i>Du fait d'un risque d'électrocution ou d'une détérioration du terminal, ne pas utiliser cet équipement près d'une source d'eau, par exemple près d'une baignoire, d'un lavabo, d'un évier de cuisine ou d'un bac de lavage, dans un sous-sol humide ou à proximité d'une piscine. De même, éviter d'utiliser ce produit lors des orages provoquant des coupures électriques. Éviter de placer le terminal à proximité d'appareils électriques ou autres unités pouvant entraîner des fluctuations de tension importantes ou des interférences électriques, tels que les climatiseurs, enseignes au néon, dispositifs de sécurité à haute fréquence ou équipements électriques.</i> |
| Caution | Setup   | page 17  | This device is a secure product and any tampering can cause it to cease to function or operate in an unsecured manner.                                                                                                                                                                                                                                                                                                                                                                                 | <i>Cet appareil est un produit sûr et toute manipulation peut l'amener à cesser de fonctionner ou fonctionner de manière non sécurisée.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

**Table 3**      **Caution and Warning Messages** (continued)

| Notice  | Chapter | Page    | English Text                                                                                                                                                                                                                                                   | French Text                                                                                                                                                                                                                                                                                  |
|---------|---------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Warning | Setup   | page 15 | Do not use a unit that has been tampered with or otherwise damaged. This unit comes equipped with tamper-evident label. If a label or component appears damaged, immediately notify the shipping company and your Verifone representative or service provider. | <i>Ne pas utiliser un appareil qui a été altéré ou endommagé. Cet appareil est équipé d'étiquette d'inviolabilité. Si une étiquette ou d'un composant semble être endommagé, en aviser immédiatement la compagnie maritime et votre représentant Verifone ou prestataire de services.</i>    |
| Caution | Setup   | page 18 | Observe standard precautions in handling electrostatically sensitive devices. Electrostatic discharges can damage the equipment. Verifone recommends using a grounded anti-static wrist strap.                                                                 | <i>Respecter les précautions standard dans la manipulation d'appareils sensibles aux décharges électrostatiques. Les décharges électrostatiques peuvent endommager le matériel. Verifone recommande d'utiliser un bracelet anti-statique à la terre.</i>                                     |
| Caution | Setup   | page 21 | Using an incorrectly rated power supply can damage the unit or cause it not to work properly. Use only a power pack with VPN PWR474-002-01-A.                                                                                                                  | <i>L'utilisation d'une alimentation incorrecte peut endommager l'appareil ou ne pas fonctionner correctement. Utilisez uniquement un bloc d'alimentation avec VPN PWR474-002-01-A.</i>                                                                                                       |
| Caution | Setup   | page 22 | Do not plug the power pack into an outdoor outlet or operate the terminal outdoors. Disconnecting power during a transaction can cause transaction data files not yet stored in memory to be lost.                                                             | <i>Ne branchez pas le bloc d'alimentation dans une prise extérieure ou n'utilisez pas le terminal à l'extérieur. La déconnexion de l'alimentation pendant une transaction peut entraîner la perte des fichiers de données de transaction qui ne sont pas encore stockés dans la mémoire.</i> |
| Warning | Setup   | page 22 | Turn off or unplug the terminal when connecting or disconnecting the device to avoid device memory corruption and data loss. Refer to the controlling device instructions for any terminal-specific warnings.                                                  | <i>Éteignez ou débranchez le terminal pour connecter ou déconnecter le dispositif pour éviter la corruption de la mémoire de l'appareil et la perte de données. Reportez-vous aux instructions de l'appareil de contrôle pour tous les avertissements spécifiques au terminal.</i>           |

**Table 3**      **Caution and Warning Messages** (continued)

| Notice  | Chapter             | Page    | English Text                                                                                                                                                                                                                                                                                               | French Text                                                                                                                                                                                                                                                                                                                                                                               |
|---------|---------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Caution | Setup               | page 24 | Leave the smart card in the card reader until the transaction is completed. Premature removal can void the transaction.                                                                                                                                                                                    | <i>Laissez la carte à puce dans le lecteur de carte jusqu'à ce que la transaction soit terminée. Le retrait prématuré peut annuler la transaction.</i>                                                                                                                                                                                                                                    |
| Caution | Service and Support | page 33 | Never use thinner, trichloroethylene, or ketone-based solvents – they can deteriorate plastic or rubber parts. Because this device can be damaged by liquid, do not spray cleaners or other solutions directly onto the keypad or display. Always apply the cleaner to a cloth before cleaning the device. | <i>N'utilisez jamais de diluant, le trichloréthylène ou des solvants cétoniques - ils peuvent détériorer les pièces en plastique ou en caoutchouc. Parce que cet appareil peut être endommagé par un liquide, ne pas vaporiser de nettoyage ou d'autres solutions directement sur le clavier ou l'écran. Toujours appliquer le nettoyant sur un chiffon avant de nettoyer l'appareil.</i> |





Verifone, Inc.  
1-800-Verifone  
[www.verifone.com](http://www.verifone.com)

# V210

## *Installation Guide*

